



MILLER CENTER
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WELL WITHIN REACH

America's New Transportation Agenda

David R. Goode National Transportation Policy Conference

*Norman Y. Mineta and Samuel K. Skinner, Conference Co-Chairs
and former Secretaries of Transportation*

Jeffrey N. Shane, Conference Director



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Faulkner House, home to the Miller
Center of Public Affairs

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LETTER *from* GERALD L. BALILES, DIRECTOR

Charlottesville, Virginia, October 2010

On behalf of the Miller Center of Public Affairs, I thank you for your interest in this report. Transportation infrastructure systems determine the ability to move people, goods, and services quickly and efficiently, and are essential to growth and economic stability. America's federal transportation programs suffer from the absence of steady, adequate funding and consistent, logical planning. Existing structures fall into disrepair, plans for new construction fail to adequately address the problems that they intend

to fix, interconnectedness between various modes of transportation is not optimized, and millions of hours of productivity are lost and billions of tons of gasoline burned as citizens wait at a standstill.

We are a nation in need of fresh strategic thinking about our federal transportation programs. The time to re-envision the enabling legislation for the new generation of federal transportation systems is upon us, and the opportunity to demonstrate strategic long-term thinking should not be lost.

The importance of bringing new ideas to bear on our transportation challenge has been recognized for many years. Each of the last several Administrations, both Republican and Democratic, has attempted in its own way to advance thoughtful new approaches to addressing America's transportation requirements, but the problem remains essentially unsolved. Just last month, the Obama Administration announced its own proposals for upgrading our transportation infrastructure, although it is too soon to make predictions about their prospects for success.

The need for reform is thus well-established. Furthermore, SAFETEA-LU and Vision 100 Century of Aviation Reauthorization Act's expirations and the re-examination of the country's federal transportation laws and programs that will take place imminently make it a critical time for informed, forward-looking, credible discussion and study of future transportation policy. With that thought in mind, the Miller Center hosted a policy conference to encourage discussions and formulate a comprehensive set of proposals for the reauthorization of America's transportation programs.

The inaugural David R. Goode National Transportation Policy Conference, entitled *Toward a New Transportation Agenda for America*, was convened at the Miller Center of Public Affairs at the University of Virginia in Charlottesville, Virginia in September 2009. Former Secretaries of Transportation Samuel K. Skinner and Norman Y. Mineta





The final session dedicated to the formulation of recommendations was led by panel moderators from previous sessions.

provided insight, guidance, and leadership as the Conference Co-Chairs. Conference participants included representatives from all modes of transportation and government agencies at the local, state and national level. Current and former transportation policymakers were present, and attendees also represented a wide array of academic, environmental, and business interests. We were delighted with the caliber of the people who attended as well as the informed discourse and the signs of consensus-building evident at the close of the conference.

Secretaries Mineta and Skinner, Miller Center Visiting Fellow and former USDOT Under Secretary for Policy Jeffrey N. Shane, and Miller Center staff distilled the proposals stemming from the conference discussions into the following set of recommendations. They were formulated with the guiding principle that they can be adopted without a complete overhaul of the traditional structure of the legislation in mind. They are predicated on the conviction that, unless federal transportation law and policy address the country's current needs in a more relevant, more effective, and sustainable way, deficiencies in our transportation system will seriously compromise both the near-term prospects for economic recovery and our long-term economic productivity.

This volume contains the full result of that work. We believe it provides a credible agenda to guide the legislative process and offers lasting value to the discussion of the future of our transportation systems. We hope these recommendations built on past scholarship and bipartisan discussion warrant the full consideration and prompt action of policymakers. Finally, I wish to offer great thanks to Mr. David Goode, a member of the Miller Center's Governing Council and a national thought leader in transportation, for endowing this and future conferences on transportation policy at the Miller Center.

Sergio L. Balil

LETTER *from* THE CO-CHAIRS

In 1956 President Dwight D. Eisenhower's State of the Union Address urged continued progress for the Federal Aid Highway Program, stating that "only in this way can industry efficiently gear itself to the job ahead. Only in this way can the required planning and engineering be accomplished without the confusion and waste unavoidable in a piecemeal approach."

Only ten years later, President Lyndon Johnson not only emphasized the essential nature of the transportation system but also its inadequacies in remarks on the creation of the Department of Transportation, which he authorized to unify the various agencies charged with the management of transportation systems:

"Our system of transportation is the greatest of any country in the world. But we must face facts. We must be realistic. We must know—and we must have the courage to let our people know—that our system is no longer adequate. During the next two decades, the demand for transportation in this country is going to more than double. But we are already falling far behind with the demand as it is. Our lifeline is tangled. Today we are confronted by traffic jams. Today we are confronted by commuter crises, by crowded airports, by crowded air lanes, by screeching airplanes, by archaic equipment, by safety abuses, and roads that scar our Nation's beauty."

Now, in 2010 the Eisenhower National System of Interstate and Defense Highways has grown to nearly 50,000 miles of limited-access interstates, making it the largest highway system in the world and largest public works project in history. Thousands more miles are operating through other modes of transportation including railroads, aviation, and maritime travel. Collectively, these various networks provide the means for moving close to 300 million citizens as well as all of the related freight, goods and services that our vital country demands. However, the Interstate Highway System and all modes of transportation must have the benefit of a new vision and regain financial stability following the rapid, and at times disjointed, growth of demand and dwindling of funding. A lack of capital continues to critically hinder plans for the maintenance of existing systems as well as the successful introduction and integration of new systems. Bottlenecks cripple our productivity, and transitioning among modes of transportation remains a convoluted and inefficient process nationwide, with some major cities being the few exceptions. Concerns about the environmental impact of these inefficiencies further highlight the need for systems that offer quick, interconnected and efficient means for transportation. The call to action by Presidents Eisenhower and Johnson can only be echoed with more urgency today. The upcoming reauthorization of SAFETEA-LU offers a most propitious time to re-examine the national transportation agenda and enact a plan that will

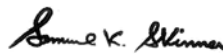
encourage the nation's growth and vitality.

We accepted the Miller Center's invitation to serve as Co-Chairs of the David R. Goode National Transportation Policy Conference because of our sincere belief that maintaining and innovating the nation's transportation infrastructure systems is an issue of central importance. Furthermore, we wanted to lead the assembly of esteemed experts that gathered to identify and agree upon a practical solution to help future Executive and Legislative Branch leaders, as well as local and state governments, deal with the issue. Our guiding principles in working on this project were the need for bipartisan, practical and surmountable steps to optimize planning for a national transportation system that connected regions all over the country.

The conference this past year in Charlottesville drew upon the collective experiences of over eighty transportation experts, as well as previous studies of the issue undertaken by the Brookings Institution, the Bipartisan Policy Center, and two national commissions established under SAFETEA-LU. Our conference's intent was to build upon existing scholarship and canvas the various opinions to identify the best and most practical solutions to be incorporated in SAFETEA-LU legislation. Finally, we reviewed and studied much of the history, financing and other background literature on this subject. In subsequent meetings, a select group of participants worked to refine those proposed solutions into a polished report that could be presented to Congress and the current Administration.

Our aim was to issue a report that should be relied upon by future leaders and furnish them the recommendations for reform that are both essential and achievable to ensure that we make the change necessary to ensure a strong economy for future generations.

On behalf of the David R. Goode National Transportation Policy Conference Participants:



Mineta



Skinner



EXECUTIVE SUMMARY

“The Department of Transportation will have a mammoth task—to untangle, to coordinate, and to build the national transportation system for America that America is deserving of.”

PRESIDENT LYNDON B. JOHNSON
OCTOBER 15, 1966



Conference Leadership from top left-right: Conference Director and former USDOT Under Secretary for Policy Jeff Shane, former Senator Slade Gorton, Miller Center Governing Council Chair Eugene Fife, Keynote Speaker Congressman Richard Gephardt, Miller Center Director Governor Gerald Baliles, Miller Center Governing Council Member David Goode, Former Secretary of Transportation Sam Skinner, former Secretary of Transportation Norman Mineta, and Staff Director Heather Mullins Crislip

Transportation systems are the backbone of America: They keep our nation strong and moving. But we have not been taking good care of this resource. Lacking a coherent vision for our transportation future and chronically short of resources, we defer new investments, fail to plan, and allow existing systems to fall into disrepair.

This shortsightedness and underinvestment—at the planning level and on our nation’s roads, rails, airports and waterways—costs the country dearly. It compromises our productivity and ability to compete internationally; transportation users pay for the system’s inefficiencies in lost time, money and safety. Rural areas are cut off from economic opportunities and even urbanites suffer from inadequate public transportation options. Meanwhile, transportation-related pollution exacts a heavy toll on our environment and public health.

Stakeholders in the transportation community have recognized these costs. It is time to rethink existing systems for the 21st century and create an agenda for enacting change. Significant reforms and improvements are well within our reach.

The Miller Center assembled a highly distinguished group of transportation policy experts, all of whom have dedicated significant time and energy to developing solutions for the funding and planning challenges that confront our transportation system. Bringing these individuals together through the David R. Goode National Transportation Policy Conference, the Miller Center of Public Affairs at the University of Virginia sought to build on their work and identify the most practical, implementable, and politically viable ideas among them.

Our group of invited participants included over 80 experts representing a wide array of transportation interests. They included current and former Department of Transportation officials, policymakers at the state and national levels, researchers, and community plan-

ners, as well as representatives from the trucking, rail and aviation associations and business interests. Former Secretaries of Transportation Norman Mineta and Samuel Skinner led the group, and former Under Secretary of Transportation for Policy Jeffrey Shane served as our Conference Director.

Updating and bringing innovation to our national transportation system would have a number of payoffs:

Winning in the Global Marketplace. Our chief trading partners are making significant investments in their transportation infrastructure; America must do the same to remain competitive.

Investment in Expanded Transportation Options, Including High Speed Rail and Other Innovations. Congestion on roads and in the air can be eased by high-speed rail, especially in high population areas and busy travel corridors.

Funding Mechanisms that Get the Incentives Right. Funding for the Interstate Highway System was intended to come from drivers, but the current fuel tax no longer creates a direct link between charges and use. We must return to a “pay as you go” system.

More efficient and reliable air travel. The technology to improve flight reliability and safety through new operations and systems exists. We must implement those systems without delay.

Less Time Wasted in Traffic. New technologies can also improve surface transportation flow, which means less time on the road and less aggravation, not to mention lower pollution and fuel expenditures.

Lower Long-Term Costs to U.S. Taxpayers and to the Economy as a Whole. Congestion and inefficiency experienced at the personal level translate to significant impacts on a national level. To reduce these impacts, our transportation systems need increased and sustained funding.

These payoffs cannot be achieved without significant changes. The ten recommendations that emerged from the discussions at the David R. Goode Conference span a wide range of transportation-related issues. They are outlined in the “Recommendations and Call to Action” section beginning on page 15 of this report. The emphasis throughout was on long-term, sustainable changes instead of short-term “stop-gap” measures. Participants wanted to avoid the fragmentation that so often exacerbates our transportation challenges—thus, their recommendations extend across different transportation modes and issues. The objective was to identify a whole agenda that legislators and policy makers could refer to in crafting new policies for keeping America’s roads, skies, rails and waterways well-funded, in good repair, and functioning with optimal efficiency and safety. These recommendations include:

1. Stop the bleeding: Congress must address the immediate crisis in transportation funding (found on page 28).

2. Beyond the gas tax: Innovative thinking is needed to develop the next generation of user fees. Specifically, future funding mechanisms should not depend primarily on fos-

sil-fuel consumption—which the government is actively seeking to discourage through a number of other policies—to keep up with transportation investment needs (found on page 31).

3. Jobs for the future, not just today: Future stimulus spending should be directed to those transportation projects that will deliver the greatest returns in terms of future U.S. competitiveness, economic growth, and jobs. Building a foundation for sustained prosperity and long-term job creation is more important than boosting short-term employment in road construction (found on page 34).

4. Pass the power, please: Clarify decision-making power and enhance the effectiveness of states, localities, and metropolitan planning organizations (found on page 35).

5. Adopt a capital budget: The federal government should adopt accounting methods that (A) recognize expenditures on transportation infrastructure as investments (rather than consumption) and (B) take into account future returns on those investments (found on page 38).

6. Connect the dots: Adopt an integrated approach to transportation planning that includes freight and goods movement and stresses intermodal connectivity (found on page 38).

7. Getting Americans home in time for dinner: Find more effective ways of reducing urban congestion (found on page 40).

8. It's all about leverage: Encourage public-private partnerships while also improving oversight of such partnerships (found on page 44).

9. Deliver transportation investments on time: Reform project planning, review, and permitting processes to speed actual implementation (found on page 45).

10. Build a foundation for informed policy: Better and more timely data are essential to measure progress toward defined goals and objectives and to improve the performance of the nation's transportation systems (found on page 46).

This report is organized as follows: Section 1 introduces the issues that need to be addressed. Section 2 offers proposed solutions to those issues. Additional detail about the conference itself—including session topics and panelists—can then be found in the final sections of the report. Many ideas and suggestions were discussed in panel sessions that deserve continued attention beyond the principal thrust of this report.

It is our hope that the collective thought, expertise and attention applied to the crafting of these recommendations will add direction and focus to the task of revitalizing our national transportation systems.

Gerald L. Baliles
Director, Miller Center of Public Affairs
Former Governor of Virginia

Jeffrey N. Shane
Conference Director
Partner, Hogan Lovells
Former Under Secretary for Policy, USDOT



INTRODUCTION

“Together, the uniting forces of our communication and transportation systems are dynamic elements in the very name we bear—United States. Without them, we would be a mere alliance of many separate parts.”

PRESIDENT DWIGHT D. EISENHOWER
FEBRUARY 22, 1955

Four years ago, Americans celebrated the fiftieth anniversary of the Interstate Highway System—one of the proudest achievements of twentieth century America. Our pride has been tempered, however, by conspicuous evidence of our transportation system's steady deterioration across all modes, and its diminishing capacity to support America's economic growth. Before the onset of the recession, bottlenecks in all transport modes had begun to compromise both the quality of people's lives and America's global competitiveness. Today, the transportation system's deficiencies will almost certainly impede the pace of economic recovery.

A system launched with a bold and historic vision is now characterized by pork and political opportunism. Financing models that once served America well are no longer sustainable. Stimulus funding will add capacity in some communities and will bring other elements of the system into a state of better repair, but will not provide the efficient, scalable, state-of-the-art transportation system necessary to drive future economic growth. What's needed is nothing less than a fundamental overhaul of America's transportation policies and programs.

While these conclusions have been the subject of a broad consensus among transportation experts for some time, Congress has been unwilling to treat transportation program reform as a front-burner issue. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which authorized the nation's surface transportation programs, was signed into law in 2005—two years late. Although it expired on September 30, 2009, the Obama Administration has sought to delay the next reauthorization by at least 18 months. The Vision 100 Century of Aviation Reauthorization Act, the enabling legislation for America's federal aviation programs, expired at the end of September 2007 but has not yet been replaced. Congress is thus three years late in reauthorizing America's aviation programs at a time when more stable and predictable funding for the "NextGen" modernization of our air traffic management system is critically needed. Absent a catalyst, the Administration and Congress seem unlikely to address reform in a meaningful way. Indeed, the availability of new, off-budget stimulus funding—albeit representing less than 7 percent of the stimulus \$787 billion package—may well reduce the near-term pressure for reform and make it even less likely that the country will make the hard decisions we need to make.

This recent history, while disappointing, creates an opportunity. It would be fitting for the Obama Administration and Congress to devote substantial attention to a re-examination of the country's federal transportation laws and programs and to make vital

A system launched with a bold and historic vision is now characterized by pork and political opportunism.

Financing models that once served America well are no longer sustainable.



decisions that will determine not only the quality of transportation in America for generations to come, but the success of our economy. Thanks to a rare confluence of factors, there has never been a more auspicious time for a serious, high-level policy discussion of the future of the U.S. transportation system. The factors are:

- the visibility that transportation infrastructure has achieved on the national policy agenda as a familiar feature of the economic stimulus initiative;
- the opportunities for fresh strategic thinking afforded by a financial crisis of historic proportions;
- the pressure to reduce fossil fuel consumption as the most important response to the challenge of climate change, and the implications for a transportation system long predicated on federal and state taxes on gasoline; and
- the need to rewrite the enabling legislation for all of our federal transportation programs.

Through the conduct of a carefully organized policy conference of recognized experts, the Miller Center has worked to engender, at a critical time, the kind of fresh thinking about the financing, governance, and management of America's transportation infrastructure that is so badly needed.

That thinking is reflected in the recommendations proposed by the Miller Center in this report. Drawing on previous work and the collective wisdom of our invited guests, and with Washington's thinking about a new paradigm beginning in earnest, it is our hope that this report will underscore the urgency of America's transportation challenges and the importance of developing at long last achievable solutions will sustain America's growth and prosperity over the long term.



RECOMMENDATIONS AND CALL TO ACTION

"No sector is more important to the American economy than transportation. ... As world trade grows even larger, as we continue our leadership in an increasingly global society, we will become even more dependent on transportation than we are today."

PRESIDENT GEORGE H. W. BUSH
MARCH 8, 1990



“Our transportation system has not emerged from a single drawing board, on which the needs and capacities of our economy were all charted. It could not have done so, for it grew along with the country itself—now restlessly expanding, now consolidating, as opportunity grew bright or dim. Thus investment and service innovations responded to special needs. Research and development were sporadic, sometimes inconsistent, and largely oriented towards the promotion of a particular means of transportation. As a result, America today lacks a coordinated transportation system that permits travelers and goods to move conveniently and efficiently from one means of transportation to another, using the best characteristics of each. . . . The result is waste—of human and economic resources—and of the taxpayers’ dollar.

We have abided this waste too long.

We must not permit it to continue. . .

Modern transportation can be the rapid conduit of economic growth—or a bottleneck.

It can bring jobs and loved ones and recreation closer to every family—or it can bring instead sudden and purposeless death.

It can improve every man’s standard of living—or multiply the cost of all he buys.

It can be a convenience, a pleasure, the passport to new horizons of the mind and spirit—or it can frustrate and impede and delay.

The choice is ours to make.”

—PRESIDENT LYNDON B. JOHNSON

MARCH 2, 1966

America's Transportation Challenge

Since our founding, the United States has been a nation on the move. From the great westward expansion of the 1800s to the completion of the first transcontinental railroad in 1869, the construction of the Interstate Highway System a century later, the advent of the mass-produced automobile, and the emergence of a modern commercial airline industry, mobility has been central to American ideals and identity—and to American prosperity. Today, some 4 million miles of roads, 600,000 highway bridges, 117,000 miles of rail, 11,000 miles of transit lines, 19,000 airports, 300 ports, and 26,000 miles of commercially navigable waterways connect the country's diverse and far-flung regions to each other and to an increasingly fluid and interdependent global marketplace.¹ Much of the backbone of this network was built in the decades after World War II, when the nation embarked on a series of major investments in transportation infrastructure. Not coincidentally, the same post-war era saw enormous gains in productivity, wealth, and industrial capacity. These gains catapulted the United States to a position of global pre-eminence that has lasted to this day.

The central question before the American people now is how to sustain our legacy of leadership—in economic opportunity, technological innovation, and quality of life—for a new century that presents daunting social, economic, and environmental challenges. Though transportation is obviously only one of many daunting challenges that America faces today,

it remains an exceptionally important one. Without investing adequately in transportation to refresh our models for funding and managing our system, America is in danger of losing its competitive edge. The ability to move people and goods flexibly, efficiently, and cost-effectively is as critical as ever. It is essential not only to maintaining U.S. global competitiveness, but to nurturing a dynamic and adaptable workforce, growing local and regional economies, supporting livable communities, and reducing the environmental and national security liabilities of our continued dependence on petroleum fuels for nearly all our transportation needs. The task is two-fold: to maintain and improve existing infrastructure and systems, which are increasingly overloaded and inadequately maintained, while also investing in the new systems and technologies that will be needed to meet the mobility needs of the future.

Most Americans, of course, understand our nation's transportation challenges in much more concrete and immediate terms. For working parents, it's about having a commute that allows them to be home in time for dinner. For others, it's about access to

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Building on a Sound Foundation

Four reports, in particular, have helped inform the conclusions and recommendations put forward here: (1) *Performance Driven: A New Vision for U.S. Transportation Policy*, a 2009 report by the National Transportation Policy Project of the Bipartisan Policy Center; (2) *A Bridge to Somewhere: Rethinking American Transportation for the 21st Century*, issued by the Brookings Institution in 2008; (3) *Transportation for Tomorrow*, a report issued in 2007 by the National Surface Transportation Policy and Revenue Study Commission; and (4) *Paying Our Way: A New Framework for Transportation Finance*, a report issued in 2009 by the National Surface Transportation Infrastructure Financing Commission.



safe, convenient, and affordable transportation alternatives when owning or driving one's own vehicle isn't an option. For business owners, it's about being able to move products or deliver services quickly and cost-effectively enough to stay profitable. And for some families the challenge is as simple, and as stark, as not having to choose between putting gas

The fact is that real people interact with our transportation systems—and live with the consequences of current shortcomings—every day. Yet the frustrations they experience as individual users are rarely channeled into a clear, collective call for action.

in the car or food on the table. The fact is that real people interact with our transportation systems—and live with the consequences of current shortcomings—every day. Yet the frustrations they experience as individual users are rarely channeled into a clear, collective call for action. Even major system failures—a deadly bridge collapse or a malfunction in the air traffic control system that shuts down air travel over large regions of the country—usually bring at most fleeting attention to our nation's larger transportation problems.

Meanwhile, with all levels of government under extreme budget pressure, the tendency will be to defer even the most basic transportation investments. As we discuss in

Steve Lockwood, a Principal Consultant at PB, served as a panelist in a discussion on urban congestion.



Steve
Lockwood

our recommendations, estimates of the average annual gap between current sources of funding for transportation infrastructure and funding needs to maintain and improve the system range from our \$134 billion to \$262 billion per year for roughly the next quarter century (specifically, 2008–2035). And chronic underfunding, especially to maintain existing infrastructure, exposes the system over time to “elegant degradation”—an engineering term that refers to the slow deterioration of machines when they are subjected to constant, repetitive stress. In these cases, the weakening of the system may not be obvious until some important component breaks down completely—at which point the costs of fixing the problem often far exceed the resources that would have been required to avoid failure in the first place.

A large number of transportation projects around the country have, of course, received accelerated funding in recent months as a result of the economic stimulus legislation passed in 2009. But this uptick in federal investment is likely to be temporary, especially in the context of growing concern about the ballooning national debt. Thus, finding adequate resources to meet longer-term transportation needs remains a significant concern. With growing consensus that the existing Highway Trust Fund (HTF)

mechanism is inadequate, moreover, there is also growing interest in new funding mechanisms—such as user fees—that could not only deliver more stable revenue streams, but would better align public and private incentives for more efficient use of existing transportation systems. Winning public support for these types of reforms, however, will require policy makers to unite behind a compelling vision for U.S. transportation policy in the 21st century, while also providing a clearer articulation of the federal role in realizing that vision.

Winning public support for these types of reforms, however, will require policy makers to unite behind a compelling vision for U.S. transportation policy in the 21st century, while also providing a clearer articulation of the federal role in realizing that vision.

Ironically, the temporary surge in transportation funding attributable to the economic stimulus legislation—while less than 7 percent of total stimulus funding—apparently has created the illusion that, for the moment at least, Congress can postpone the prescribed deadlines for authorizing our most fundamental surface and aviation transportation infrastructure programs. The deadline for reauthorizing our aviation programs came three years ago, but Congress has yet to pass a new law. A vital “NextGen” overhaul of our air traffic management system—announced eight years ago—is moving far too slowly as a result. The deadline for reauthorizing our surface transportation programs passed one year ago, but many observers believe that there won’t be a new law until after the next Presidential election—despite a growing consensus that the Highway Trust Fund is no longer a sustainable model for road funding at the federal level.



Former USDOT Assistant Secretary for Policy Tyler Duvall contributes to the discussion on funding sources and structure with fellow panelists Kathy Ruffalo and Peter Ruane.

Given the conspicuous inadequacy of traditional programs to sustain a robust economic future for America, this legislative procrastination comes at the worst possible time.

America requires a new vision for transportation. While our needs have changed in the last 50 years, our national models for selecting, prioritizing, coordinating, and funding transportation investments have not. Fitful attempts to introduce reforms have produced incremental improvements, but have largely fallen short of achieving systemic change. This report takes a fresh look at current challenges and constraints and outlines several specific recommendations for a new approach to U.S. transportation policy. Throughout, it builds on insights and proposals developed in other recent efforts to grapple with the issue of transportation reform.

There is no dearth of fresh, sensible, and achievable recommendations for the reinvigoration of our vital transportation programs. Until and unless Washington attaches a more urgent priority to the transportation imperative, however, all of these reports will have been wasted exercises.



A Barrier to Future Economic Growth

The United States, which once invested prodigiously in transportation infrastructure, has for more than a generation now leaned ever more heavily on assets built in a previous era. New investments have not sufficed to adequately maintain existing infrastructure, much less to develop the additional capacity and cutting-edge technologies needed to improve the performance of the overall transportation system in the face of growing demand.

This approach has already had consequences: the amount of time and money lost to traffic congestion in major U.S. metropolitan areas keeps increasing and many transportation facilities are worn, overloaded, and inefficient. The result is a system that is too often aggravating and costly to its users: it is at best, highly susceptible to large-scale disruptions when even small things go wrong and, at worst, subject to catastrophic and occasionally deadly failures. Meanwhile, the nation's dependence on polluting fuel, much of it imported from overseas, continues to grow; scarce public resources are used to build projects of dubious value while critical bottlenecks go unaddressed; and traditional planning processes remain fragmented and focused on building more roads rather than fostering livable communities.

Longer term, one of the more worrisome consequences of staying the current course involves the potential loss of international competitiveness. To compete with emerging economic powerhouses like China, the United

Longer term, one of the more worrisome consequences of staying the current course involves the potential loss of international competitiveness.

States will need to become more efficient. This includes making new investments in transportation infrastructure. As a percentage of GDP, China presently spends about twice as much on capital investment compared to the United States. To some extent this reflects the fact that China is at an earlier stage in its overall economic development, and needs to develop basic infrastructure—something that the United States completed decades ago. Nevertheless, the disparity in transportation investment as a percent of GDP is large and shows the United States—at 0.6 percent—lagging well behind major trading partners such as Russia (1.4 percent), central and Eastern Europe (1.3 percent), and Western Europe (1.85 percent).²

Clearly, transportation and economic vitality are closely connected. Proximity to strategic transportation links is often a key consideration when businesses make decisions about where to locate their operations. Transportation also has an enormous direct impact on quality of life: as much as any other single element in economic development, it affects people's ability to access jobs, services, recreation, shopping, and other activities. As the Government Accounting Office (GAO) wrote in a 2008 report, "strong productivity

gains in the U.S. economy hinge, in part, on transportation networks working efficiently.” The primary focus of the GAO report was freight mobility, but its findings can be taken as a cautionary note about the importance of the transportation system writ large. With almost 27 percent of the nation’s economic output “totally dependent on international trade,” it is difficult to overstate the economic importance of the nation’s transportation system.³

A 21st Century Transportation System for the United States Is Well Within Reach

From the pioneering railway construction of the 1800s to the ambitious interstate highway construction of the 1900s and more recent proposals to develop high-speed rail, Americans have always responded to bold visions for their transportation future. But in a time of severe budget constraints, mounting national debt, and general mistrust of government, winning support for—and financing—bold visions will not be easy. At a minimum, it will require clarity about the overarching objectives of federal transportation policy and an increased emphasis on efficiency, performance, and cost-effectiveness across all transportation programs. More generally, it will require an approach to transportation spending that emphasizes performance and return on investment—and that is correspondingly less driven by short-term political considerations and earmarks, which have proliferated in recent highway bills. Americans have rallied in pursuit of a transformative transportation agenda in the past; as a nation, we are inventive and resourceful enough to do so again. Realizing such an agenda would have a number of pay-offs—the most important of these benefits are briefly discussed below.

Payoff #1: Winning in the Global Marketplace

The United States can’t compete successfully in the 21st century with a 20th century transportation infrastructure—especially when its chief trading partners, including not only the advanced economies of Western Europe and Southeast Asia but also rapidly developing countries like China, are making significant investments in cutting-edge transportation technologies and systems. Transportation efficiency has a direct impact on Americans’ standard of living and on the cost of goods and services delivered by U.S. firms and businesses. To ensure that future transportation policy serves to strengthen the nation’s long-term economic competitiveness, the federal government should develop cost or efficiency metrics that can be used to evaluate and prioritize transportation investments and track progress. Over time, this approach will enable American producers to compete more successfully abroad. It will also reduce the cost of goods sold domestically, allowing American families to stretch their dollars farther at home.



Payoff #2: Investment in Expanded Transportation Options, Including High-Speed Rail and Other Innovations

High-speed rail has the potential to provide a fast, efficient, and integrated alternative to driving and flying, thereby enhancing passenger connectivity in the most populated travel corridors in the country. It also can ease the pressure on air travel networks nationally by reducing traffic through some of the nation's busiest airports. For example, it has been estimated that 40 percent of the delays in U.S. air traffic today emanate out of airports in the New York City area. A greater number of travel options for short trips will serve to increase capacity and improve the quality of transportation services generally, especially along the northeastern seaboard and in other high-density corridors.

Payoff #3: Funding Mechanisms that Get the Incentives Right

The Interstate Highway System was built with the premise that users of roadways would pay for them. As originally conceived, the Highway Trust Fund (HTF) achieved this linkage by using a fuel tax to generate revenues for highway construction and maintenance. This made sense as long as fuel use was closely aligned with road use and as long as the revenues raised by the fuel tax were adequate to meet highway funding needs. Increasingly, however, that is no longer the case. The level of the fuel tax has not kept pace with funding needs, and the overall funding gap can be expected to grow as the average

fuel economy of the American vehicle fleet improves. To cover the shortfall, Congress has had to divert general funds to the HTF, exacerbating the overall federal budget deficit. Many proponents of transportation reform have concluded that the best approach to ensure adequate funding and re-align incentives for road use is to return to a pay-as-you-go system. This means taxing road use (instead of fuel consumption) via a vehicle-miles-traveled (VMT) tax. As discussed at greater length in subsequent sections, the technology exists to implement such a tax in ways that also address privacy and regional equity concerns. Moreover, a VMT-based system could be designed to advance other public policy goals, such as incentivizing travel at different times of day or differentiating among types of vehicles based on their emissions performance or the amount of wear they impose on highways. In short, the technology exists to design funding mechanisms that are not only more rational, but that also create the market signals needed to address important transportation externalities.

Payoff #4: More Efficient and Reliable Air Travel

Recent technology advances hold promise for improving the efficiency and reliability of air travel in the United States. In particular, a new satellite-based air traffic control system, “Next Gen,” under development by the Federal Aviation Administration (FAA) has the potential to improve safety, support better decision-making in the face of adverse weather conditions, allow faster turnaround for airplane arrivals and departures, reduce emissions by eliminating circuitous flying, and increase the capacity of the nation’s airways. The FAA estimates that by 2018 it will reduce total flight delays by 21 percent and provide \$22 billion in cumulative benefits to the traveling public. What’s lacking thus far is a stable and reliable source of funding for a transition to and sustained operation of the new system.

Payoff #5: Less Time Wasted in Traffic

Many people view traffic conditions much like they view the weather: as something they need to know about, but have little or no control over. Unfortunately, nearly all major metropolitan areas of the United States suffer severe traffic congestion and the lost productivity, wasted time, added pollution, higher fuel expenditures, and daily aggravation that come with it. Transportation investments and policy reforms—including improvements that make existing infrastructure work better, incentives for shifting travel to off-peak hours, and access to a greater array of transportation options—could alleviate chronic congestion problems in many large metropolitan areas and, in doing so, generate substantial economic, environmental, and quality-of-life benefits.



Conference Co-Chair Sam Skinner, Conference Director Jeff Shane, and former Secretary of Transportation Mary Peters review the recommendations at the Miller Center's Washington, D.C. office.

Payoff #6: Lower Long-Term Costs to U.S. Taxpayers and to the Economy as a Whole

Congestion and inefficiency, as we have already noted, impose high costs on people's time and quality of life. But while these costs are easily perceived at an individual level, their aggregate impact on the economy and on the interconnectedness and vitality of our civil society is often less widely appreciated. The fact is that failure to adequately maintain and invest in our transportation systems means not only gridlocked roads and deteriorating bridges in the near term, but a steady erosion of the social and economic foundations for American prosperity in the long run. Avoiding this outcome means government, and ultimately taxpayers, need to be willing to invest more in transportation, not just for one year or a few, but on a sustained basis over time. Making this case won't be easy, especially in the context of a fiscal environment that looks dire for the foreseeable future. Policymakers and the public will need to understand that investments in transportation infrastructure—provided these investments are wisely chosen and effectively implemented—will have long-term benefits that more than justify their near-term costs.

Specific Recommendations

This section outlines a set of policy recommendations aimed at securing the benefits and addressing the challenges described in previous sections. Our proposals reflect insights and results from the Miller Center’s conference; they are also consistent with the policy directions Congress has begun to explore in recent reauthorizations of the federal highway bill and with recommendations made by other expert and stakeholder groups. Throughout, our aim has been to develop recommendations that are, first, specific enough to be actionable (without being overly prescriptive) and second, bold enough to bring about real reform while still being politically viable, understandable to the broader public, and pragmatically achievable. We believe these objectives are well within reach.



1. Stop the bleeding

Congress must address the immediate crisis in transportation funding.

Revenues from the federal gas tax are no longer sufficient to meet, on a continuing basis, the obligations of the Highway Trust Fund (HTF). As a result, Congress has had to provide for multi-billion dollar infusions from the U.S. government’s general fund to shore up the HTF. Realistically, the private sector is unlikely to make up this shortfall. Much of the HTF’s obligation involves rehabilitating or maintaining existing transportation assets, which are unlikely to attract private investment seeking a return on invested capital.

In recent years, two separate commissions impaneled by Congress⁴ to examine this issue concluded that it would be necessary to increase federal-highway user fees to generate the funds needed to maintain the federal highway network. For example, the National Surface Transportation Infrastructure Financing Commission, in its 2009 report *Paying Our Way: A New Framework for Transportation* cites estimates of the average annual gap between current sources of funding for transportation infrastructure and future needs. Estimates of the total shortfall—at all levels of government—just for maintaining the current system range from \$134 billion to \$194 billion per year for the period 2008 to 2035. If the goal is to improve existing transportation systems, the shortfall is even larger: \$189–\$262 billion per year over the same time period, according to different studies. If one looks just at the federal share of support for transportation, estimates of the average annual funding shortfall range from \$60 to \$87 billion per year for maintaining the system and \$85–\$118 billion for improving the system. Cumulatively, the federal funding gap alone, according to the 2009 *Paying Our Way* report, can be expected to total \$400 billion for the period 2010–2015 and \$2.3 trillion for the period 2010–2035. These are daunting figures, to say the least.

In the near term, raising more revenues for transportation could be done most readily through the financing mechanisms that are already in place, primarily the federal



Pierce Homer, Virginia's Transportation Secretary, welcomed participants to the conference on behalf of Governor Tim Kaine.

gas tax and a few fees associated with heavy-duty vehicles. The gasoline tax, which has been in place for 56 years, was last increased in 1993. It has lost more than a third of its purchasing power since then, resulting in chronic under-funding of the HTF and the need for general fund bailouts. Because it is established and familiar, both the National Surface Transportation Policy and Revenue Commission and the National Surface Transportation Infrastructure Financing Commission identified the gas tax as a natural instrument for increasing revenues in the short term. Of course, it has been suggested that over a longer period of time, a substantially higher fuel tax (increases as high as 54 percent have been proposed by some) would create incentives for higher mileage or alternative-fuel vehicles. While this might be desirable from a number of other policy perspectives (notably as a way to address environmental and energy security concerns), it is politically unfeasible and would dampen the net increase in revenues generated by the fuel tax. Given the magnitude and projected growth of the perennial shortfall, further thought is needed to address the long-term funding challenge.

Fortunately, recent efforts to identify and explore alternative funding mechanisms have already begun to point to some promising options. The National Surface Transportation Infrastructure Financing Commission, for example, evaluated 30 possible federal revenue options and an additional seven state and local revenue options in

its report. Taking into account a range of factors, including revenue streams generated, ease of administration and implementation, economic efficiency and impact, and equity considerations, the Commission ranked these options as “strong”, “moderate”, “weak”, or “not applicable/seriously flawed.” The options in the “strong” category included a VMT fee, various types of transportation-related taxes (including specifically taxes on fuel, car-

The suggestion that there be a moratorium on new transportation construction in favor of first maintaining our existing infrastructure can no longer be dismissed.

bon, truck/trailers, and heavy-vehicle use), customs duties, vehicle registration fees, container fees, and tariffs on imported oil. The “strong” option for raising revenue at the state or local level, among those evaluated for this analysis, was facility-level tolling and pricing. Clearly, more debate and analysis would be needed to advance any of these concepts, but they provide at least a starting point for weighing our long-term transportation funding challenges

and options.

In the meantime, many observers believe that Congress must act quickly to address immediate needs through a combination of increased fuel taxes and user fees and general fund transfers. Failure to do so would mean abdicating an extremely important area of

The Oregon Road User Fee Pilot Program

In November 2007, the Oregon Department of Transportation concluded its Road User Pilot Fee Study with positive results. The 12-month study was undertaken to test the feasibility of a system to collect congestion charges that would directly connect fees to use of the road system by switching from a gas tax to a user fee.

As noted in the final report, “the pilot program showed that, using existing technology in new ways, a mileage fee could be implemented to replace the gas tax as the principal revenue source for road funding. At the conclusion of the pilot program, 91 percent of pilot program participants said that they would agree to continue paying the mileage fee in lieu of the gas tax if the program were extended statewide.”

The program included 285 volunteer vehicles, 299 motorists and two service stations in Portland. Cars were outfitted with devices that allowed gas stations to track their mileage when drivers filled up at a gas station. The concept had to satisfy a number of requirements set forth by the task force, including compatibility with existing technology, the institution of administrative processes to smooth transition from the gas tax, and feasibility of making the change without too much difficulty for the driver.

federal obligation and responsibility. It would also be short-sighted, since allowing critical transportation infrastructure to deteriorate in the near term is likely to increase overall costs in the long run. The suggestion that there be a moratorium on new transportation construction in favor of first maintaining our existing infrastructure can no longer be dismissed. The logic is simple: if available resources are inadequate to maintain the systems we've already built, then we certainly should not be developing more systems that we cannot sustain. In other words, our national dollars should be directed first to protecting and maintaining past investments.

2. Beyond the gas tax



Innovative thinking is needed to develop the next generation of user fees. Specifically, future funding mechanisms should not depend primarily on fossil-fuel consumption—which the government is actively seeking to discourage through a number of other policies—to keep up with transportation investment needs.

There is a broad consensus that federal highway maintenance and investment needs should continue to be funded through a user-pay system. However, for the reasons discussed above, new and more sustainable user-based revenue-raising mechanisms are needed. Implementing and fine-tuning such mechanisms must be undertaken gradu-

Working within those mandates, the Oregon study showed that the fee could be phased in gradually alongside the gas tax, allowing non-equipped vehicles to continue paying the gas tax while equipped vehicles could pay the mileage fee. It also demonstrated the ability to integrate with two main existing systems: the service station point-of-sale (POS) system and the current system of gas tax collection by the state.

Privacy can be protected since the transmitter only tracks mileage driven, not specific information about vehicle point locations or trip data, and the transition would place minimal burden on businesses since the technology is easily automated and integrated.

The report's conclusion ultimately left the decision to pursue additional development and testing up to the Oregon Department of Transportation, stating that "ODOT must work with world class technology firms and the automobile manufacturers to refine the on-vehicle technology and work with the fuel distribution industry to insure the ease of mileage fee transactions at the fuel pump. Further, ODOT must expand the concept to include home fueling collections and multi-state integration. ODOT must also develop cost estimates for full implementation, which could occur within the next 10 years."

Gov. Ted Kulongoski included \$10 million in his fiscal 2010 budget to expand the pilot program.

ally to allow ample time for research and development, building public and stakeholder support, and refining the necessary technology. Congress should adopt legislation laying out a clear plan for transitioning, over the next decade, from the per-gallon fuel tax to a highway-use fee based on vehicle-miles traveled (VMT).

This approach would restore the original intent of the HTF: that users fund the transportation system in proportion to their use of it. In addition, VMT fees could generate significant revenues. A fee of just one penny per mile would equal the revenue currently collected by the fuel tax; a fee of two cents per mile would generate the revenue necessary to support an appropriate level of investment over the long term. Because of these two features, many policy analysts view the VMT fee as a clear first choice compared to other new highway funding mechanisms that have been proposed or considered.

As a first step in the transition to a VMT fee, resources are needed to support collaborative research at the state and regional levels with the aim of analyzing and developing solutions to a number of issues:

- **Privacy concerns.** The public is likely to have significant privacy concerns about any government system that collects information on citizens' physical movements—indeed this is often among the first objections raised in connection with a VMT-based user-fee system. In reality, the infringement on personal privacy need not exceed that already associated with other technological conveniences such as cell phones and credit cards. Nevertheless, privacy concerns must be explicitly and transparently addressed from the outset so as not to risk investing in the development of an approach that ultimately fails the test of public acceptance.
- **Technology.** Technologies for implementing a VMT fee, from odometer add-ons to adaptations of existing interstate toll systems, are available now or are in the concept development stage. It may be reasonable to expect prototypes of VMT technology to proliferate until further policy issues and implementation details are decided. Undoubtedly, however, a critical factor in choosing among potentially viable technologies will be their ability to balance privacy protections for users with the need for sufficient data integrity to support fair and accurate implementation of a VMT fee.
- **Criteria for freight transport and buses.** Heavy vehicles have a greater impact on transportation infrastructure than do passenger vehicles. A VMT fee system should be designed to recognize these differences by imposing charges that fairly capture the differences in wear and tear on infrastructure associated with different vehicle types.
- **Pricing that captures the externalities of different transportation choices.** Ideally, a direct VMT fee can be used to generate incentives for more efficient use of the transportation system—in other words, it can capture the undesirable externalities that arise from inefficient use of the system. Thus, for example, fees could be designed to discour-

Conference Co-Chair Sam Skinner and former
U.S. Senator from Washington Slade Gorton.



Samuel K.
Skinner

age travel during peak congestion hours. To the extent that better pricing promotes more efficient use of the transportation system, it can also advance other important public policy objectives, such as reducing fuel consumption and transportation-related pollutant emissions.

- **Index user fees to price inflation.** Given the perennial political difficulty of raising government revenues, any new user-based transportation funding mechanism should be designed to ensure that price inflation over time does not erode its ability to provide adequate resources for future system needs. This objective can be achieved in a straightforward manner by building in an automatic fee escalator tied to changes in the consumer price index or some other recognized measure of inflation.
- **Sell the change.** Political champions are needed to build public support for any major change in the nation's approach to funding transportation investments. This means educating political leaders and their constituents alike about the VMT-fee approach—why it is necessary, what makes it preferable to other potential funding mechanisms, and how it will be implemented. To ensure that people understand and are comfortable with the concept and operation of a VMT fee well in advance, the federal government should fund and publicize pilot programs while also conducting outreach to key stakeholder groups and the general public.
- **Work out the division of revenues and other implementation issues between states.** Recognizing that there are significant benefits to regional coordination and cooperation, states and other stakeholders have begun to investigate how a VMT fee would work for interstate travel and how revenues generated would be apportioned across states. These multi-state investigations should be actively supported at the federal level since they could address or remove many obstacles to implementing a VMT-based funding system nationwide.

3. Jobs for the future, not just today



Future stimulus spending should be directed to those transportation projects that will deliver the greatest returns in terms of future U.S. competitiveness, economic growth, and jobs. Building a foundation for sustained prosperity and long-term job creation is more important than boosting short-term employment in road construction.

The focus of public investment at this critical time for our nation's economy should not be solely on short-term job creation. Many "shovel ready" projects that were funded under the 2009 American Recovery and Reform Act (ARRA) have been slow to make use of stimulus funds and frustration about the correspondingly sluggish pace of job creation has been running high. Meanwhile, other "game-changing" investments—such as investments in transit, high-speed rail, HOV lanes, and improved interchanges—could have larger long-term effects on our economy. Investments in transportation must be approached as investments in the nation's long-term economic health, not primarily as

short-term fixes for unemployment or other problems.

Government spending on infrastructure projects has, of course, frequently been used as a vehicle for short-term job creation in times of economic recession. In fact, the U.S. House of Representatives passed legislation at the end of 2009 which would have required unspent or repaid bank bailout money to be used for a second round of stimulus spending—much of it focused on immediate road maintenance and repaving projects. However, this bill faces opposition in the Senate. Given that less than 7 percent of ARRA funds were allocated to transportation, significant opportunities for investment remain in this area. Congress should show leadership in directing any remaining or additional stimulus funds to those investments that do most to strengthen the foundation for long-term economic growth.

4. Pass the power, please



Clarify federal decision-making power and enhance the decision-making power of states, localities, and metropolitan planning organizations (MPOs).

The need for transformative investment often doesn't resonate as a national crisis because the failures of the system tend to be perceived locally. Current processes for planning and financing transportation programs and infrastructure are not well aligned with the ways that people experience or think about transportation problems. When federal dollars travel through invisible channels to fund projects that have primarily local impacts, the broader public often fails to see government playing a significant or effective role. And when progress toward addressing a local transportation problem is slow or lacking, local communities may lose "investor confidence" in the system. Finding support for transportation initiatives is generally easiest when the link between an expenditure or investment and the benefits it provides is immediate and clear.

Issues of federalism—that is, the proper division of responsibilities and authority between states and the federal government—date back to the founding of the republic. They have always been especially relevant for transportation policy. At this particular crossroads in our nation's history, the question arises again: Do we choose to view transportation in the United States as the province of a loose alliance

of state and regional systems, or do we assert the need for a robust federal program? Many at the Miller Center conference observed that the federal interest in transportation policy continues to be significant and certainly has not diminished since the construction of the Interstate Highway System. On the contrary, the national interest in transportation has come to encompass a broader array of issues beyond merely facilitating interstate com-

Finding support for transportation initiatives is generally easiest when the link between an expenditure or investment and the benefits it provides is immediate and clear.



merce, such as national defense, public safety, and environmental and energy policy.

Importantly, however, a policy that recognizes the federal interest and that articulates national-level policy objectives accordingly can still be pursued in ways that leave the planning and implementation details to state and local officials whenever possible. In that case, taxpayers still have a strong interest in ensuring that state and local governments are accountable for their use of federal transportation dollars. In sum, however we define the scope of the federal government's involvement in transportation planning and investment, all stakeholders and the public as a whole will benefit from a clear articulation of federal goals and interests, along with a clearer delineation of federal responsibilities relative to those of states, counties, and local government.

Indeed, it may be worth considering a new paradigm that explicitly distinguishes the federal "role" from the federal "interest." Not everywhere there is a federal interest is there also an appropriate federal role. Given that federal resources are unlikely to be sufficient to address every need in which there is a potential federal interest, Congress should reassess its core national priorities for transportation and then limit the federal role to supporting those priorities. That would mean ending federal participation in programs that fall outside identified national priorities. For example, the National Surface Transportation Policy and Revenue Study Commission has suggested re-focusing the federal role on a limited set of priorities for a national multi-modal transportation network, where those

priorities include assuring that infrastructure is in a good state of repair, promoting efficient goods movement, enhancing mobility in metropolitan areas, improving regional connectivity, assuring passenger safety, and reducing adverse environmental impacts.

Consistent with this approach, Congress should decide how much money should be reserved to federal decision-makers to pursue core national priorities and distribute the remainder to states by formula. States, in turn, should then have greater flexibility to spend their share of federal dollars. Our assumption here is that the Equity Bonus Program would continue to provide the basis for distributing federal highway funds to states. That program is designed to address disparities between states in terms of the amount of federal fuel taxes they collect relative to the amount of fuel tax or VMT revenue they receive back from the federal government.

At the same time, it will be important to improve transparency and accountability in transportation spending, while also delineating more clearly the different responsibilities of local governments, Metropolitan Planning Organizations (MPO), states, and the federal government. Where clarity about these responsibilities is lacking, nobody “owns” the problem and problems tend to go unsolved. For example, so many parties are usually involved in metropolitan transportation planning (including state departments of transportation, local land use officials, MPOs, and transit agencies) that there is often great public confusion about which party is responsible for addressing congestion problems. As a consequence, efforts to remedy these problems have a tendency to devolve into elaborate finger-pointing exercises. The system would be better served by building local capacity to solve local problems, while leaving states and regional entities to address the issues they are best constituted to handle.

Where clarity about these responsibilities is lacking, nobody “owns” the problem and problems tend to go unsolved.

In some cases, shifting responsibility to a new entity may necessitate additional changes to ensure that decision-makers remain accountable to the public. For example, if states transfer programmatic power to MPOs, this may be viewed as giving too much spending authority to an entity that is not fully accountable to voters (since the composition of MPO governing boards can vary by location). Legislation to reauthorize the federal highway bill that was introduced by Representative James Oberstar, Chairman of the House Committee on Transportation and Infrastructure, in early 2010 would have addressed this issue by requiring voting representation on MPO boards to reflect the relative population of cities and counties within the MPO.⁵

5. Adopt a capital budget

The federal government should adopt accounting methods that (A) recognize expen-



ditures on transportation infrastructure as investments (rather than consumption) and (B) take into account future returns on those investments.

No major enterprise in America operates without a capital budget. And no business operates without considering the returns it can expect from different capital investments over time. A careful evaluation of expected risks and returns is essential when businesses need to choose and prioritize among competing investment opportunities. The same logic applies when capital investments involve public (as opposed to private) funds: To make sound use of society's collective resources, money spent on infrastructure and other capital assets must be evaluated as an investment and distinguished from short-term consumption.

Adopting new federal accounting methods for transportation infrastructure investments can begin immediately and does not require reform of the Budget Enforcement Act. Specifically, the Office of Management and Budget (OMB) should score the anticipated return on investment when it evaluates transportation spending proposals. This is an incremental step, but it would allow the government to begin evaluating projects based on their long-term benefits and to prioritize those projects that deliver the largest future returns. Reform is needed because the cost-benefit methodologies currently employed by OMB do not accurately factor in the long-term benefits provided by transportation infrastructure. For example, if a community wishes to establish a new transit line, the current federal process asks the community to map certain benefit-cost benchmarks. However, communities often lack the means to appropriately monetize the full array of benefits from these types of projects. (Such benefits could include reduced congestion, more efficient goods movement, and improved access to jobs and housing, among others.)

Ultimately, the U.S. government should embrace deeper reform by looking to other governments that budget separately for operations versus investments. Identifying and implementing "best practice" budgeting procedures would represent a major step toward putting our nation's transportation spending on more sound and stable footing.

6. Connect the dots

Adopt an integrated approach to transportation planning that includes freight and goods movement and stresses intermodal connectivity.



While there is growing—and justifiable—support for policies and funding to move people by rail, the movement of freight and goods is an area of transportation policy that offers potentially enormous efficiency gains and is ripe for reform. Better planning and investments in state-of-the-art freight transport facilities and systems would result in a more efficient supply chain and reduce business costs. Beyond the long-term economic benefits, there would be additional environmental and social benefits, including reduced pollution and reduced congestion on roadways that are also used by passenger vehicles. We've embarked upon an historic



Anne Canby and Lillian Borrone discuss fostering a multi-modal system.

investment in high speed rail, but where freight movements are inefficient they inevitably have the effect of displacing passenger capacity. This is especially the case at intermodal hubs, such as airports, ports, and other transport nodes where freight is transferred from one type of carrier to another. Bulk freight could be moved more efficiently through most of these transfer points by applying a combination of better technology and thoughtful planning. A discretionary program to deal with major freight bottlenecks should be funded by the users that would reap the most benefit from system improvements. Moreover, the business community has signaled that it is ready for a discussion about increased diesel taxes if those taxes are used to fund needed improvements to freight transport systems. What improvements would be funded and how decision makers would provide accountability are important questions that need to be discussed.

A renewed emphasis on intermodalism and connectivity should guide U.S. transportation policy more broadly.

Meanwhile, a renewed emphasis on intermodalism and connectivity should guide U.S. transportation policy more broadly. Whether this is best accomplished by having an Undersecretary for Intermodalism within the U.S. Department of Transportation, as Congressman Oberstar's bill proposes, or by simply vesting responsibility to facilitate intermodal projects in the existing DOT program structure, remains to be seen. It

is important to note that current law already requires attention to intermodalism. Title 49 of the U.S. Code contains a statement of intermodal policy, and it does not require reauthorization. To the extent that the nation has fallen short in this area it reflects a failure of execution, not intent. Going forward it will be necessary to plan and implement projects that maximize the use of different transport modes in those applications where they have a clear edge over other options. At the same time it will be necessary to better integrate different modes of transport—for people and goods—and to improve intermodal connections.

7. Getting Americans home in time for dinner



Find more effective ways of reducing urban congestion.

Urban congestion costs America dearly. Even those individuals who do not regularly suffer delayed commutes bear the burden of congestion in the form of higher prices for goods and services and lower economic

Transportation and Transportation Policy in the United States: A Short History

Transportation was vital to the viability and prosperity of the United States from the outset—and its importance only increased as the nation grew to encompass vast areas of land and a large, diverse, and always mobile population. For much of the nineteenth and early twentieth century, railroads provided the chief means to efficiently link different regions of the country and move people and goods over long distances. Indeed, the completion of the first trans-continental railroad in 1869 stands out as one of the most important technological feats of the 19th century and a pivotal event in the settlement and development of the American heartland.

The first person to cross the continental United States by car was Dr. H. Nelson Jackson in 1903. In a 20-horsepower Winton, traveling over long sections of unpaved road, the trip took 65 days. Sixteen years later, a young Army lieutenant named Dwight D. Eisenhower led an 81-vehicle convoy from Washington to San Francisco. They traveled only a few miles on actual pavement—part of the stretch that would eventually be called the Lincoln Highway. The rest of the trip was a difficult, muddy slog over mud, dirt, and sand, and like Jackson's earlier trip it took two months to complete. Indeed, not until the late 1930s did it become possible to travel coast to coast on a paved road. By 1938, when President Roosevelt signed the Federal Aid Highway Act and asked the Bureau of Public Roads to study eight possible super-highway corridors, the era of the automobile had arrived.

growth. Efforts to quantify this burden often produce surprisingly large results. Recent estimates published in the Texas Transportation Institute's 2009 *Urban Mobility Report* give some sense of the magnitude of the problem:

- The total cost of wasted fuel and lost productivity for U.S. drivers that are stuck in traffic reached \$87.2 billion in 2007. This figure amounts to \$750 for every U.S. driver. While the cost of traffic congestion probably declined in 2008 and 2009 due to the economic crisis, that decline is not predicted to be permanent.
- The amount of fuel wasted nationally due to traffic congestion topped 2.8 billion gallons in 2007. This estimate amounts to three weeks worth of average gasoline consumption for every U.S. driver.
- The cumulative amount of time wasted in idling traffic totaled 4.2 billion hours for all U.S. drivers in 2007. This amounts to nearly one full work (or vacation) week for every traveler.⁶

There is no easy or comprehensive solution to this problem—the most economically

In 1956, 37 years after his own cross-country drive, President Eisenhower launched the construction of the Interstate Highway System, thereby opening a new chapter in the history of U.S. transportation. Largely completed by 1992 and currently comprising some 47,000 miles of road, the U.S. Interstate System is the largest highway network in the world and ranks as one of the most ambitious public works projects ever undertaken. Meanwhile, much of U.S. transportation policy continues to be governed by the institutional arrangements and funding mechanisms established under the 1956 Federal-Aid Highway Act. Subsequent legislation—notably the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), the 1998 Transportation Equity Act for the 21st Century (TEA-21), and the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU)—have introduced incremental reforms generally aimed at returning more Highway Trust Fund revenues to states and localities, giving those states and localities a larger role in transportation planning, and increasing the funds available for public transit and other non-highway investments.

Nevertheless, it has become increasingly apparent—not only to experts and stakeholders, but also to the broader public—that more fundamental change is needed to ensure “a fast, safe, efficient, accessible, and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.” That was the mission assigned to the U.S. Department of Transportation when it was created in 1967. What has changed four decades later is not the goal so much as the tools and policies needed to achieve it.

productive and desirable places to live and work in the United States are always going to be crowded and therefore prone to traffic congestion. Nevertheless, transportation policies that focus on congestion and deliver appropriate incentives can ease the problem and provide substantial benefits. Congress should set aside funds to support programs specifically targeted to reducing urban congestion. This would include research to develop and implement better traffic management practices as well as other policies—such as zoning practices—that would reduce congestion and promote more efficient use of existing transportation systems. It is worth noting that such incentives could be coordinated with performance measures, such as the performance measures required to be implemented by MPOs larger than 1 million people under the Oberstar bill. (These measures are discussed at greater length in a later recommendation, but examples include

Too often, even small interruptions in the flow of traffic snowball rapidly into major congestion events.

available housing supply for all income levels, land-use patterns that support a reduction in single-occupant vehicle trips, and livable communities.)

At the same time, metropolitan areas need better access to resources to alleviate urban congestion. The Metropolitan Mobility and

Access Program (MMA) and the Projects of National Significance (PNS) program outlined in the Oberstar bill provide MPOs with direct programming authority and eliminate the role of state DOTs entirely. Many involved in our discussions support an approach that promotes greater investment in congested metro areas but that does not exclude state DOTs. To create an “urban congestion set-aside,” each state could be required to use a defined portion of its HTF formula grant money to reduce urban congestion. Funds from the set-aside could be directed to other purposes only after the state had reduced urban congestion to some pre-defined threshold. Set-aside funds could be used for public transit investments, provided those investments can be expected to reduce traffic on area roads and thereby alleviate congestion.

While congestion is a regular occurrence in many urban areas during peak commuting hours, when the number of vehicles on the road simply exceeds road capacity, congestion also occurs during off-peak hours as a result of accidents, poor weather, or other unpredictable events. Too often, even small interruptions in the flow of traffic snowball rapidly into major congestion events. This kind of non-peak congestion can be addressed through improved weather and accident responses and more sophisticated system management. (It is interesting to note that, by comparison to roads, other types of public infrastructure—such as water, sewer, and electricity systems—are often managed more carefully, on a real-time basis.) The technology exists to do better. For example, the U.S. government has negotiated to permanently reserve a portion of the electromagnetic spectrum (5.9 GHz) for “dedicated short-range communications” or DSRC. DSRC is the essential technology needed to implement intelligent transportation systems (ITS).⁷ It



is already widely used for electronic toll collection today, but the potential exists for many more sophisticated applications of this technology. In years to come this could include cooperative adaptive cruise control and forward collision warning; wireless multi-modal communication systems that allow information to flow between vehicles, infrastructure, and passengers' personal communication devices;⁸ data collection programs that deliver real-time traffic information; systems to warn drivers of approaching emergency vehicles; and more. Given the substantial benefits that could be achieved through applications of these technologies—not only in terms of reduced congestion and improved efficiency, but also in terms of safety—every effort should be made to accelerate their development and deployment.

Creating communities conducive to walking and alternative modes of transportation, especially in dense metropolitan areas, should be an important goal of transportation policy at all levels of government. A variety of instruments can be used to advance that goal. Some of them, such as zoning ordinances, incorporation issues, subdivision ordinances, protocols for local or state takeovers of privately built streets and trails, and permitting procedures to connect private facilities to public networks, are available exclusively to localities. Zoning, in particular, is critically important as a means of promoting investment in existing infrastructure, nurturing livable communities, and reducing congestion in many places. Incentives can help prompt local governments to alter land-use

patterns in ways that reduce the burden on rural transportation systems. States can create such incentives using discretionary funds. In addition, grants can be used to encourage a variety of initiatives linked to land-use changes, such as the use of mixed-use zoning to reduce traffic or compact zoning to reduce the need for new infrastructure. Grants can also be used to finance transportation improvements, such as enhancing connections between local street networks so as to reduce local traffic on major highways. Federal agencies, such as DOT, the Department of Housing and Urban Development (HUD), and the Environmental Protection Agency (EPA) should also partner to issue discretionary grants for metropolitan areas interested in making wiser land-use decisions and implementing smart growth programs. Incentives are likely to be more effective than mandates in fostering changes to current policy and practice. Finally, as a matter of policy and planning, the term “affordable housing” must be re-defined to include transportation costs.

Finally, a more expansive vision is also needed in the realm of multi-state corridor planning, which encompasses freight movement as well as intercity and high-speed passenger rail. Some participants suggested that national programs should be open to and supportive of transportation initiatives that go beyond existing MPO or state boundaries. The Oberstar bill, for example, would allow multi-state freight corridors to participate in planning and development processes.



8. It's all about leverage

Encourage public-private partnerships while also improving oversight of such partnerships.

Resolving the controversy over private equity contributions to the transport system is essential to meet the nation's pressing transportation challenges, as is recognizing the appropriate role of public-private partnerships (PPPs) in taking on those challenges. In general, many believe private-sector participation should be encouraged, but within an agreed public policy framework. The USDOT has launched a major campaign to promote greater reliance on tolls and other user fees to fund the highway system; in addition, the agency has broadened its support of PPPs to finance and implement transportation projects. Congress has likewise authorized a variety of programs designed to encourage innovative approaches to the financing, construction, and management of highway facilities. Other programs aimed at encouraging communities to explore more effective ways to improve transportation efficiency and reduce congestion have been developed by the USDOT and by the Federal Highway Administration using existing administrative authority. All of this activity is encouraging but it would be premature to conclude that PPPs are on track to play a steadily larger role in transportation funding in the years to come.

This is because program restrictions, severely limited funding, and an abiding skepticism toward direct private-sector involvement on the part of many politicians at all levels

of government impose practical constraints on what can be accomplished through PPPs in the near term. In this context, it is important to recognize that private investment in transportation infrastructure will not replace the need for public investment and that efforts to expand the private-sector role should not distract from efforts to grapple with immediate funding gaps while developing new public funding mechanisms. PPPs require that the private capital is repaid with an adequate return, in practical terms this generally means there is a toll. PPPs are not likely to be well-suited in any case as a means of financing certain kinds of projects, such as deferred maintenance, most public transit extensions that require operating subsidy, and new road capacity in sparsely populated areas. Meeting these kinds of needs will almost certainly continue to require public investment.

That being said, it remains the strong view of most conference participants that every available mechanism must be utilized in the most productive manner to address our nation's daunting transportation challenges. PPPs need to emerge from the laboratory of pilot programs to play a much larger role as a core element of America's transport investment strategy. Projects underway—including experience from the Heartland Corridor and from other projects in Virginia, the Indiana Toll Road and Chicago Skyway have provided valuable lessons regarding how to provide effective oversight of PPPs and what criteria should be used to determine when a PPP approach would be appropriate. Most importantly, there must be clear benefits to the public over the long term. Proposals for PPPs, for example, must demonstrate that financing costs will be lower with the private entity than they would otherwise be for the public taking into account the costs to the government of overseeing the contract. They must also provide for adequate mechanisms to ensure that the public can continue to exercise an appropriate degree of control over public assets.

PPPs need to emerge from the laboratory of pilot programs to play a much larger role as a core element of America's transport investment strategy.



9. Deliver transportation investments on time

Reform project planning, review, and permitting processes to speed actual implementation

Just as the nation's roads and highways are often slowed by congestion, the process of planning, winning approval for, and finally implementing transportation projects is often stymied by gridlock among the many federal, state, and local agencies involved. In fact, private-sector builders and contractors in the transportation sector often view deficiencies in these agencies and processes as the biggest obstacle to meeting infrastructure needs.⁹ Provisions included in Title VI of SAFETEA-LU in 2005 represented a first step toward recognizing and addressing the administrative delays commonly associated with current planning processes for highway and transit investment. The next

reauthorization legislation should take additional steps to address causes of delay in the later stages of project delivery.

Such reforms must be made with care, of course, since proposals to streamline the project vetting process are often perceived—with some justification in certain cases—as attempts to circumvent or shorten proper environmental review. One approach is to simply establish a set of hard deadlines for agencies to meet their obligations with respect to issuing findings or permits. Many localities are reporting that the deadlines imposed in connection with the use of stimulus money were effective in getting ARRA resources out the door quickly. There is also room to reduce inefficiencies and redundancies in the current regulatory framework for approving and implementing many transportation projects. That framework typically involves multiple agencies at multiple levels of government, which too often do not coordinate effectively or work together efficiently.

Successful examples of this type of reform can be found in initiatives such as the recent Transportation Investment Generating Economic Recovery (TIGER) program, which distributed \$1.5 billion in ARRA funds for transportation projects directly to localities based on merit. This program was designed to focus more funding directly on metropolitan areas and thereby provide more reliable support for public transportation. It attracted numerous cross-cutting, multi-modal projects and provided useful lessons for how to select successful projects and how to measure transportation expenditures against resulting benefits.

Finally, opportunities exist for reviewing the appropriate role of federal, state, and local governments; reducing the federal role; and moving project review and approval processes closer to the communities that will benefit. This will give the parties with the strongest interest in timely project delivery a greater ability to move the process along in a responsible but also time-efficient manner.



10. Build a foundation for informed policy

Better and more timely data are essential to measure progress toward defined goals and objectives and to improve the performance of the nation's transportation systems.

The nation's transportation systems are falling short, but to win support for expending new resources to improve them the federal government needs to be able to demonstrate that it can produce results. Transportation results take time. The timeline for design, construction, and to assess accountability is measured in decades. To succeed, clarity about the government's goals and objectives must be accompanied by an enhanced ability to verify progress toward those goals. Better and more timely data are essential, not only to make policies, programs, and implementing agencies more accountable, but to shift to a more outcome-oriented system.

As a first step in this direction, it will be necessary to define rigorous and quantifiable—but also transparent and understandable—performance metrics by which progress

Table One: Proposed Performance Measures (PM) for MPOs in the Oberstar Bill

MPO population <1,000,000	MPO population >1,000,000
• Congestion • Safety • Emissions • Energy consumption • Consistency with land use plans	PMs shown to left plus: • Land use patterns supporting reduced single occupant auto trips • Housing supply for all income levels • Impacts on farmland and natural resources • Greenhouse gas emissions • Water and energy conservation • Livability of communities

Source: See Endnote 10.

toward defined transportation objectives can be measured. Defining performance metrics will simultaneously serve to clarify data needs. Since any comprehensive, long-term transportation agenda must serve multiple public interests—including, for example, environmental protection, energy security, and economic competitiveness, as well as more familiar objectives such as increased mobility, transportation efficiency, and safety—multiple performance metrics will be needed. The recent Oberstar bill proposes several metrics for measuring MPO performance (see Table 1); these can provide a useful starting point for discussion.

As that discussion progresses it will be important to recognize that while metrics for some kinds of policy objectives are relatively easy to define, others present inescapable difficulties. Moreover, no set of performance metrics is likely to capture all of the nuances that might be of potential interest. Rather, the overarching goal must be to establish a set of measures adequate to give the American people—who are ultimately the largest shareholders in and users of the nation’s transportation infrastructure—confidence that their continued investments are delivering results. In addition, pragmatic considerations dictate that whatever performance metrics are selected they must be metrics that can be calculated using data that states and localities can collect at reasonable cost and in a consistent and reasonably accurate way. Given current resource constraints, it is probably unrealistic to impose performance metrics that would require major investments in new sensor systems

The overarching goal must be to establish a set of measures adequate to give the American people—who are ultimately the largest shareholders in and users of the nation’s transportation infrastructure—confidence that their continued investments are delivering results.

or other technologies—at least in the near term. Research and development efforts to reduce the costs of such systems, on the other hand, may be warranted in the interests of making it feasible to apply more sophisticated performance metrics in the future.

In sum, there is an enormous need for better data relating to both personal travel and freight transport. The DOT's Bureau of Transportation Statistics should endeavor to supply more detailed data, especially with regard to metropolitan and regional flows, as part of a full-scale review of needs and reinvigoration of its programs. In addition, further work is needed to upgrade current analytical methods and models so that available data are more useful and accessible to agencies involved in planning processes.

Endnotes

- 1 GAO, Surface Transportation Programs: Proposals Highlight Key Issues and Challenges in Restructuring the Programs, GAO-08-843R (Washington, D.C.: July 29, 2008).
- 2 Figures are for investment in inland transportation infrastructure as a percent of GDP in the year 2003. For sources, see www.internationaltransportforum.org/shorttermtrends/.
- 3 National Chamber Foundation. The Future Highway and Public Transportation Finance Study. 2003.
- 4 The two commissions impaneled were: National Surface Transportation Policy and Revenue Study Commission, "Transportation for Tomorrow", 2008. (www.transportationfortomorrow.org/final_report/) and National Surface Transportation Infrastructure Financing Commission, "Paying Our Way: A New Framework for Transportation Finance", 2009. (http://financecommission.dot.gov/Documents/NSTIF_Commission_Final_Report_Advance%20Copy_Feb09.pdf)
- 5 Fischer, J.W., Kirk, R.S., Mallett, W.J., Peterman, D.R., Frittelli, J., Luther, L., and McCarthy, J.E. Surface Transportation Reauthorization Legislation in the 111th Congress: Summary of Selected Major Provisions. Congressional Research Service, Washington, DC, 2009. www.itsa.org/itsa/files/pdf/ReauthMajorProvisions.pdf.
- 6 Texas Transportation Institute 2009 Mobility Report. (<http://mobility.tamu.edu/ums/report/>)
- 7 An initiative to develop this concept, known as Intelldrive, has been launched by the U.S. DOT. Information is available at: www.intelldriveusa.org.
- 8 Information on the Virginia projects is available at www.virginiadot.org/ctb/resources/Agenda_Item6_Heartland_CTB_Update_Dec2006_short.pdf and www.virginiadot.org/business/pppta-ActiveProjects.asp. Information on the Indiana Toll Road is available at www.fhwa.dot.gov/ipd/case_studies/in_indianatoll.htm.
- 9 www.kpmg.com/SiteCollectionDocuments/Frontline-Views-from-Infrastructure-Providers.pdf.
- 10 U.S. House of Representatives, Committee on Transportation and Infrastructure. The Surface Transportation Authorization Act of 2009: A Blueprint for Investment and Reform. Presented by J.L. Oberstar, J.L. Mica, P.A. DeFazio, and J.J. Duncan, Jr. Washington, DC, 2009. www.ampo.org/assets/816_blueprint.pdf.



CONFERENCE NOTES

“Our transportation system has not emerged from a single drawing board, on which the needs and capacities of our economy were all charted. . . . The result is waste—of human and economic resources—and of the taxpayers’ dollar. We have abided this waste too long. We must not permit it to continue.”

PRESIDENT LYNDON B. JOHNSON
MARCH 2, 1966

Conference Charge

Secretary Norman Y. Mineta

Conference Co-Chair; Former Secretary of Transportation

Secretary Samuel K. Skinner

Conference Co-Chair; Former Secretary of Transportation

We stand at an important moment. We must choose to make an investment in a prosperous future for our country. America faces a critically important quest for new funding sources for infrastructure improvements and requires forward-thinking planning to ensure our resources are maximized. Without a transformed funding mechanism, and an accompanying increase in investment, our infrastructure will continue to decay. Legislative and public policy options should be used to develop a transportation agenda that brings greater emphasis to the challenges and importance of transportation to the public. We call upon the assembled great minds consider the following challenges as we work to make our system better.

Without a transformed funding mechanism, and an accompanying increase in investment, our infrastructure will continue to decay.

There is a significant threat to the funding system that has served us well in the past: the gas tax. As vehicles are more fuel efficient and are powered by sources other than gasoline, the gas tax has become an imperfect and unreliable funding method.

Regardless of what the new funding sources are, the fact remains that the transportation needs are about twice the funds currently generated. We must also revise the funding formula to be a more fair and equitable distribution to the states.

Elected and public officials must work to ensure that public private partnerships are both encouraged and successful.

We must promote intermodalism by encouraging use of sequential transportation modes, and we must focus on how to move freight and cargo more efficiently to maintain our competitiveness.

Americans will all benefit if we alleviate urban congestion, and we must think anew about this issue because progress pays tremendous economic and quality of life dividends.

Congress must promote energy independence, smart growth, and transit oriented development. New planning models have to ensure that transportation is better and easier and doesn't force people into their cars.

This is a great agenda, and there are great minds here, unleash your capabilities and think big.

Welcome Session

September 9, 2009

Review of the history of national transportation commissions and major policy studies

Panel Description

Although there is widespread agreement on the need for a more efficient and interconnected transportation system, establishing the best means for improving the system has proven more difficult. A number of commissions have been impaneled recently to study the issue, with varying conclusions. The introductory session of the David R. Goode National Transportation Policy Conference included a presentation reviewing the current state of thinking about how best to forge a new approach to transportation in America. The session reviewed transportation policy development to date and the recent proposals by the National Surface Transportation Policy and Revenue Study Commission, the National Surface Transportation Infrastructure Financing Commission, the Brookings Institution's *A Bridge to Somewhere: Rethinking American Transportation for the 21st Century*, and the National Bipartisan Policy Center's *Performance Driven: A New Vision for U.S. Transportation Policy*.

Panel Participants

- **Panel Moderator: Jeffrey Shane**, Conference Director & Visiting Fellow; Partner, Hogan Lovells; Former Under Secretary for Policy, USDOT
- **Robert Atkinson**, Chair, National Surface Transportation Infrastructure Financing Commission (NSTIFC); Founder & President, Information Technology and Innovation Foundation
- **Emil Frankel**, Director of Transportation Policy, Bipartisan Policy Center; Former Assistant Secretary for Transportation Policy, USDOT
- **Robert Puentes**, Senior Fellow in the Metropolitan Policy Program, Brookings Institution; Former Director of Infrastructure Programs, Intelligent Transportation Society of America
- **Jack Schenendorf**, Vice-Chairman, National Surface Transportation Policy and Revenue Study Commission (NSTPRSC); Of Counsel, Covington & Burling LLP

Panel Summary

The opening panel reinforced that a great deal of quality work and thought has taken place in re-visioning the future of transportation policy and planning. These reports have engendered a quality debate in the community that we all hope will affect both the reauthorization debate as well as the larger reform effort.

There was consensus that Congress would not likely take up the reauthorization debate until 2010 at the earliest, though it will likely not be a full 18 month delay, as is currently being asserted by the Administration and Senate. A one year delay, while undesirable, seems likely.

There was a discussion of what we really mean by modality neutrality or “mode neutral” funding. How do you both evaluate and fund transportation projects without regard to their mode, but still advocate and operate under a “user pays” concept. How do you get users to pay for projects they won’t necessarily use? Another complicated funding and prioritization issue is the current emphasis on high speed rail, which effectively has a set-aside. High speed rail is being separately considered from other transportation investments, and not subjected to the accountability tests that are the emerging consensus.

Most of the reports are fairly characterized as “federal-centric.” This prompted a discussion of the proper division of labor between the states and the federal government for transportation, and whether Congress should devolve any of the programs to the states.

There is both the need to raise money immediately, and also to transition in the longer term to a Vehicle Miles Traveled based system. We also have the lingering question of how to best distribute the proceeds from a VMT between the modes.

A narrower federal government focus on projects of regional and national significance could align oversight and funding better.

All of the reports acknowledge that our current methods of financing are unsustainable. In particular, the Financing Commission’s report clearly provides an exposition of the range of financing solutions. There is both the need to raise money immediately, and also to transition in the longer term to a Vehicle Miles Traveled based system. We also have the lingering question of how to best distribute the proceeds from a VMT between the modes.

The need for a system that promotes efficiency through better intermodal connections and planning is clear, but there are differences in the recommendations for how to get there. The National Transportation Policy Project report calls for better intermodal coordination within the U.S. Department of Transportation. Chairman Oberstar’s bill would create a new Under Secretary for Intermodalism. Some believe that intermodal coordination is already the whole point behind the creation of the Department of Transportation, and that meaningful intermodal coordination can occur without a fundamental restructuring of the Department’s enabling legislation and oversight committee structure.

Day 1

September 10, 2009

Reconsidering the Current Paradigm

Panel Description

The panel utilized the expertise of the highly regarded individuals that agreed to serve as panel moderators for the rest of the Conference and examined critically the current framework for transportation planning and investment in the United States. While the need for reform has been the subject of a broad consensus among transportation policy thinkers for some time, and despite the growing prominence of transport infrastructure as a central element in the stimulus effort, Congress has been unwilling to treat transportation program reform as a front-burner issue. With that backdrop this panel reviewed substantive areas in need of reform:

- Funding Sources and Structure
- Addressing Urban Congestion
- Moving Freight and Cargo
- Fostering a Truly Multi-Modal System

Additionally the panel reflected on other areas ripe for systematic change:

- Could capital budgeting practices, as are utilized by other governments and the private sector, help the federal government to more appropriately plan for and assess the economic benefits of infrastructure investments?
- Shouldn't the budget process require decision makers from the Executive Branch and Congress to pay sufficient attention to the long-term consequences of budget decisions? Doesn't the current process result in inefficient allocation among capital expenditures and shortchange the maintenance of existing assets?
- What is the ideal division of labor between federal and state governments on transportation planning and investment?
- What is the potential role of private capital, possible shifts from federal to state taxes, and the designation of funds once received?

Panel Participants

- *Panel Moderator:* **JayEtta Hecker**, Senior Fellow, Bipartisan Policy Center; Former Director, Physical Infrastructure Team, U.S. Government Accountability Office
- **Mort Downey**, Senior Advisor, Parsons Brinckerhoff, Inc.; Former Deputy Secretary of Transportation
- **Steve Heminger**, Executive Director, Bay Area Metro Transportation Commission; Member, NSTPRSC

- **Craig Lentzsch**, Former President & CEO, Coach America Holdings, Inc. and Greyhound Lines, Inc; Member, NSTIFC
- **Robert Martinez**, Vice President, Business Development, Norfolk Southern Corporation; Former Associate Deputy Secretary of Transportation and Director of the Office of Intermodalism

Panel Summary

While there is a fair amount of agreement around the basic issues of transportation reform, that hasn't translated into action. There are a number of issues that stand in the way of reform.

We must reframe the federal, state and local partnership. Central to that shift is the question: How do we define the national interest? Is it still the national highway system, does it expand to ports, freight rail and intermodal connectors? The panel discussed areas where we need a collapsed and focused national system and others where we need a broader more expanded definition.

What are the best ways to build consensus, and get the Congress and the public to understand the impact of unfocused policy? Where is the outrage over the lack of progress? There is the possibility that the public does get the problem, and simply doesn't care. On every measure—safety, congestion, freight movement, sustainability—the nation is

There is a crisis both in how we fund our transportation system, and in the chronic underfunding of the system. The public has supported tax increases when those funding mechanisms are tied to a specific result or a specific project.

doing poorly, and that doesn't inspire confidence from the public. A clear vision would deliver more support and confidence. The vision for the interstate highway system was simple and coherent and is difficult to replicate in the complicated issues that confront us. What transportation advocates often face now is a complete lack of vision and an abundance of parochialism.

There is a crisis both in how we fund our transportation system, and in the chronic underfunding of the system. The public has supported tax increases when those funding mechanisms are tied to a specific result or a specific project. The gas tax was originally sold to the public as a "covenant" that would be used for general maintenance. Since then, on the state and federal level, lawmakers have used transportation funds for non-transportation expenses undermining support for the tax. In addition to needing a new financing mechanism, we also need more revenue. Debt-financing is no substitute for raising taxes the old-fashioned way. Additional public financing is necessary, but unlikely, until reformers restore confidence in the transportation system. One possibility is the National Infrastructure Bank which could depoliticize and prioritize major national interest capital expenditures, and fill in the gaps in the financial marketplace for projects that are difficult to finance.



Moderator JayEtta Hecker and panelists Mort Downey, Steve Heminger, Craig Lentzsch, and Robert Martinez review substantive areas in need of reform during one conference session.

We've embarked upon an historic investment in high speed rail. Eight billion was provided by the stimulus package and \$5 billion from the appropriations bill for high speed rail. With a reasonable amount of money we can do good things with existing freight rail infrastructure, very high speed will require a separate network for high speed rail. There will be a need for ongoing subsidies for this service, for example liability issues need to be covered for private companies running passenger rail on freight rail infrastructure and there will likely need to be compensatory for the private railroads, as passenger rail may not offer much in the way of profits.

As a final analogy: congestion is to modern America what the breadline was to the Soviet Union. Like the Soviets did with bread, we consistently under-price the use of highways which leads to (incentivized) over-use of our system (or lines to get cheap bread in the Soviet example). The National Surface Transportation Infrastructure Financing Commission believes and makes the case that a user-charged system is the long-term answer. It ties into a whole host of issues, like balancing the interests between urban and rural, or developing performance measures.

KEYNOTE ADDRESS BY RICHARD GEPHARDT

Former House Majority Leader; President and CEO of Gephardt Government Affairs; Former Member of Congress

The Miller Center was very grateful to welcome former Speaker of the House Richard Gephardt to address the Conference as a keynote speaker. Congressman Gephardt has long been an advocate for transportation spending, and also for reforming our government budgeting procedures so that investment spending, such as transportation infrastructure, is valued higher in federal government budgeting practices.

Congressman Gephardt discussed several themes in his keynote address. Transportation policy is important because it radiates into nearly every other critical public policy issue of our day. The competence of our infrastructure is critical to the economy, our global

“Most people think of infrastructure as kind of a convenience issue. Some people will talk about it being part of public safety, which it obviously is. A lot of people would relate it to the economy. People understand, I think, that having competent public infrastructure helps the economy.”

—RICHARD GEPHARDT, ADDRESSING THE CONFERENCE, SEPT. 10, 2009

competitiveness, and jobs for Americans. There is a distinct need for more investment in infrastructure. We need more money, both public money from all levels and private dollars. User fees to collect resources are more feasible and implementable with new technology.

Infrastructure occupies a special place in our political landscape, it is the easiest issue on which to get bipartisan consensus because it’s physical, visible, and desired, ideally showing a direct connection between the money and the result. Congress gets done only what has to get done, and puts off whatever they can. To achieve results in this area there has to be a sense of urgency, and

the urgency here is rooted in those areas that transportation radiates out into: providing jobs, addressing climate change, increasing public safety and ensuring economic progress. With a modest, moderate, sensible proposal with some urgency, progress can be made.

The United States would be well served to develop a federal capital budget for infrastructure. This is an old idea, but now may be the time to get a consensus. The basic premise is that the government would operate based on accrual accounting instead of cash accounting. This is a widely accepted private practice, there’s not a company in America that doesn’t operate under a capital budget. Our concern about budget deficits is real, however, if we don’t value investments differently than consumption our economy will never reach its full potential and revenues will lag behind.

Former House Majority Leader Richard Gephardt addresses prospective changes in the transportation budgeting process in a keynote address.





"Funding Source and Structure" panelists: Tyler Duvall, Pete Ruane, Kathy Ruffalo, Gary Allen, Craig Lentzsch

September 10, 2009

Breakout Session: Funding Sources And Structure

Description

This panel focused on the role of federal and state governments and their funding of transportation investments. In light of current fiscal challenges and the impending move away from fossil fuels as the energy source for motorized vehicles, the group examined potential options for assuring more adequate investments in the future, using transportation infrastructure investment in other industrialized nations and the recent proposals by the National Surface Transportation Policy and Revenue Study Commission and the National Surface Transportation Infrastructure Financing Commission, among others, as models for closer investigation.

Participants

- *Panel Moderator:* **Craig Lentzsch**, Former President & CEO, Coach America Holdings, Inc. and Greyhound Lines, Inc; Member, NSTIFC
- **Gary Allen**, Chief of Technology, Research & Innovation, VDOT
- **Tyler Duvall**, Senior Advisor, McKinsey & Company; Former Acting Under Secretary

Transitioning to the VMT Tax: The Netherlands

In an effort to combat congestion and cut emissions, the Netherlands announced a move from a purchase and annual tax to a kilometers traveled tax that will take effect in 2012. Passengers will be charged a fee of €0.03 per kilometer— or about \$0.07 per mile—with higher charges incurred for traveling during peak times or congested roads. Fees will be calculated by a GPS system installed in the vehicle that sends time, hour, and destination to a billing agency.

Larger vehicles will be charged a higher rate, and public transportation will be exempt.

Substitution of a VMT tax for a purchase and road tax is expected to make new car prices drop as much as 25%. The annual road tax totals more than €600 (\$900) for a mid-sized car.

According to government calculations, nearly 6 out of 10 drivers would benefit—fatal accidents should fall 7 percent, and carbon emissions from road travel would be cut by 10 percent. Traffic was estimated to drop 15 percent and rush-hour congestion would be halved when drivers begin getting regular bills.

Tax revenue is expected to remain the same, although opponents argue that it will cost more than €1 billion in tax income each year and place a heavy burden on business drivers.

The tax will increase every year until 2018 and could be adjusted if it fails to change traffic patterns. The transition is expected to serve as a model for other countries considering the transition. Already, London and Singapore have enacted congestion charges to manage traffic in their busy city centers. The Netherlands currently has one of the most burdened road networks in Europe.

http://wsdotfederalfunding.blogspot.com/2009/11/netherlands-goes-where-lahood-cant-vmt_26.html

for Policy and Assistant Secretary for Policy, USDOT

- **Pete Ruane**, President and CEO, ARTBA; Vice-Chairman, Americans for Transportation Mobility; Co-Chair, Transportation Construction Coalition
- **Kathy Ruffalo**, President, Ruffalo & Associates LLC; key drafter and negotiator, SAFETEA-LU; Member, NSTIFC

Summary

Overarching questions about the federal government's role in the nation's transportation system and the means for raising revenue to support that system dominated the conversation during this panel. The first part of the session was dedicated to defining the federal government's role in transportation. Panelists widely agreed that the federal interest relates to the support of a network facilitating interstate commerce, national

defense, and safety. However, in the current system the states make the actual capital decisions and have responsibility for the operation and maintenance of the infrastructure. This approach adds some complexity to the process, since many highways have regional impact and many transit systems transcend the ability of individual states or major metropolitan areas to support them and the state and local MPO are the key decision makers allocating money to specific projects. Accountability was identified as an issue when both levels of government may be involved in a project without much delineation between their responsibilities. Some panelists favored federal/state interactions where the federal government set goals and determines priorities and then cedes primary responsibility to state and local governments to actually run programs. Some states and state projects have shown that the states can respond more quickly to needs. Others identified a counter-productive trend in state and federal relationship where an increase in federal dollars led to a corresponding decrease in state funding levels.

The focus then shifted away from defining state and federal responsibilities to funding. The panel suggested that simple, user-based mechanisms that make sense to the public are the preferred approaches and therefore primarily addressed two funding mechanisms: implementation of a VMT and the continued use of the gas tax. Many

Others identified a counter-productive trend in state and federal relationship where an increase in federal dollars led to a corresponding decrease in state funding levels.

people opposed the continued use of the gas tax, citing that improved technology and fuel efficiency compromised its ability to raise revenues for transportation improvements. Opponents of the fuel tax also argued that it offered an unfair advantage to those people able to buy more fuel-efficient (and typically, more expensive) vehicles, thus placing an increasing tax burden to those members of society least able to afford it. However, in the short-term,

increasing the fuel tax was considered an inexpensive, viable stop-gap measure to generate funds while agencies gather data and test systems to transition to a possible VMT tax.

Many supported the VMT tax as good option but expressed skepticism about its implementation. The degree of ease that a VMT could be presently implemented was also a source of debate, with some arguing that studies show ways to easily implement it while others believe it is not ready and it would face public opposition. Many expressed concern about determining fees and collecting revenues accurately, while others worried about technical aspects of installing mileage-tracking devices and collecting that aggregated data. There was a consensus that, while it is definitely a good option, more research and testing of a VMT is essential.

Lastly, throughout the discussion, people emphasized the importance of public education and creating a story or message that would be used to garner the support of user fees by the general public and enable the politicians to garner the will to set appropriate fee levels, although an appropriately compelling story or message was not proposed.



"Addressing Urban Congestion" panelists:
Douglas Foy, Steve Heminger, Steve
Lockwood, Adrian Moore, Ron Sims

Breakout Session: Addressing Urban Congestion

Description

Cited in most surveys and by most commentators as the single most pressing transportation problem, urban congestion extracts huge costs in terms of the quality of life, air quality, and lost economic productivity. This session explored ways in which governmental programs might be redesigned to attack this problem more effectively, while also trying to determine how much subsidy the public is willing to provide to these efforts. In particular, the panel discussed ways of achieving an optimal balance of highway and transit investments.

Participants

- *Panel Moderator:* **Steve Heminger**, Executive Director of the Bay Area Metro Transportation Commission; Member, NSTPRSC
- **Douglas Foy**, President & Founder, Serrafix; Former Secretary of Commonwealth Development, State of Massachusetts
- **Steve Lockwood**, Principal Consultant, PB Consult; Senior Federal Highway Administration policy officer; Former Director, Transportation 2020 Coalition
- **Adrian Moore**, Vice President of Research, Reason Foundation; Member, NSTIFC

- **Ron Sims**, Deputy Secretary, U.S. Department of Housing & Urban Development; Former Executive for the King County, WA

Summary

Initially, panelists devoted time defining congestion and asking whether there was “good” and “bad” congestions. The panelists widely agreed on the distinction between good and bad congestion, with good being linked to high levels of economic activity. Congestion was also characterized as an important indicator of underpriced roads in a given area or the need of the government to expand infrastructure. Congestion was further defined to include “recurring peak-period congestion” related to economic activity of some sort, which accounts for more than half of existing congestion, and “non-recurring” congestion occurring as the result of accidents, poor weather and construction. Regardless, congestion was recognized as an economic cost, and one that needs to be minimized through accurate pricing, smart technologies, and strategic planning.

Conversation then turned to issues of pricing of the national highway system and zoning and land-use development as contributing factors to the bottlenecks in cities. Debate about whether or not the US government could appropriately price the use of roads and capacity of cities and the effect of that pricing on urban congestion occupied a lot of the discussion. Those in favor of increasing pricing argued that an increased capacity of public transportation and accurate pricing could help with urban sprawl. Many advocated that pricing generated through tolls, HOV lanes, and parking in urban areas must be done carefully, while still expressing some doubt that an institution dedicated to accurate pricing would garner enough public confidence to pass the initiatives it may present.

Land-use issues were defined as another area with congestion implications and one in need of coordination across federal agencies, including the EPA, CDC, and DOT, since the federal government typically handles interstate roads and structure, while the local government is charged with zoning issues. Lowering the density of zones contributes to sprawl, and panelists agreed that it federal entities needed to collaborate and define metrics capable of measuring zoning trends. The decoupling of GDP and VMT—it reduces the energy intensity of the transportation system, but it still may not help with liberalized zoning policies—was one potential solution met with some interest in the deliberations.

The panel closed with discussions of land-use policy and its effect on congestion. The consensus was that governments need to approach the problem in concert with other agencies and groups, especially those relating to residential housing and zoning.



Innovation in our Cities: American Cities and Congestion Pricing

San Francisco

Officials in San Francisco announced in January 2009 that they were considering adopting congestion prices for drivers entering highly trafficked and congested areas of the city. The San Francisco County Transportation Authority planned to examine various options with one million dollars in federal funds received, and the plan may mirror similar plans charging drivers to enter the central parts of London, Singapore and Stockholm. Final study results are expected later this year. San Francisco would become the first American city to charge cars a fee to enter certain neighborhoods at certain times if approved.

Source: "San Francisco Studies Fees to Ease Traffic" NY Times- Malia Wallan. January 3, 2009.

Denver

Colorado State Representative Joe Rice and Senator Dan Gibbs in January sponsored a bill proposing a two-year study on a VMT tax to be followed by implementation of a pilot program in 2011. The two sponsored the bill as a possible alternative or supplement to the fuel tax.

"A gas tax is a declining revenue source," Rice told the Legislature's Committee on Job Creation and Economic Growth in mid-January, as quoted by the Denver Business Journal. "I don't think reinforcing the gas tax is fair, and it's a bad idea. VMT is charging based on actual use of the vehicles."

Last January, Governor Bill Ritter impaneled a Blue Ribbon Transportation Commission dedicated to the study of the state's revenue system and identification of alternatives that favored a pilot project around VMT.

Source: www.colorado.gov/governor/blue-ribbon-transportation-panel.html

SEPTEMBER 10

Breakout Session: Moving Freight and Cargo

Description

Despite its vital importance to an economy that depends on efficient trade, infrastructure decisions affecting goods and cargo movement remain at a secondary level within the transportation policy community. This panel explored how to gain appropriate levels of public and private investment, legislative and policy options for ensuring the availability of a more productive freight system, whether returning to greater regulation would serve the public interest, and how we can bring greater understanding of the importance and challenges of transportation to the public.

Participants

- *Panel Moderator:* **Mort Downey**, Senior Advisor, Parsons Brinckerhoff, Inc.; Former Deputy Secretary of Transportation
- **Bill DeWitt**, Associate Dean, Loeb-Sullivan School, Maine Maritime Academy; Former Professor of the Practice, Logistics, Transportation & Supply Chain Management, Robert H. Smith School of Business
- **Quintin Kendall**, Resident Vice President of State Government Affairs, CSX Corporation; former Chief of Staff, US Dept. of Transportation
- **Dan Keen**, Vice President, Policy Analysis, American Association of Railroads
- **Tim Lynch**, Senior Vice President, Federation Relations and Strategic Planning, American Trucking Association; Former President & CEO, Motor Freight Carriers Association

Summary

Railroads and highways—as the primary means for moving surface cargo in the United States—were the focus of this conversation. Although the specific means of transport may vary, the group looked at how we must transport freight to and from international ports and other destinations in a way that ensures efficiency and competitiveness. Planning, funding and increasing capacity were again identified as important game-changers, although their meaning for trucking and in railroads will vary. The need for full engagement of the different players/stakeholders in the business of moving freight—shippers, carriers and others involved in logistics—to work in a coordinated manner was probably the number one priority for the audience and panelists in this session.

On the trucking side, the conversation centered around logistics and pricing. Logistically, the companies need to control transport to and from international ports and the panelists spent a lot of time discussing what's needed for road access and staging in order to optimize that entire process. Many favored a shift from planning transporta-



"Moving Freight and Cargo" panelists: Mort Downey, Bill DeWitt, Dan Keen, Quintin Kendall, Tim Lynch

tion investments on a state-to-state basis to instead focusing on movement via corridors. Concern was expressed about the trend toward private investment in roads, with a call for pricing structures recognizing the concept of public utilities used in the infrastructure side and ensuring a balanced approach as these facilities are used for freight purposes. Some asserted the need for new data metrics that would better account for the multi-modal nature of freight movement. The movement of bushel of grain from a farm in Nebraska that is trucked to a rail head, then moved to the river on a barge down to New Orleans where it is loaded on a ship was an example of multimodalism already occurring in freight shipment and the importance of understanding the entire end-to-end movement. Finally, the trucking industry's willingness to pay higher fuel taxes—assuming there was some corresponding benefit to the increase— demonstrates that they are in a slightly different position than many other transportation users.

For railroads, the group made a distinction between two types of rail: freight rail and passenger rail. Both must be supported without sacrificing one for the other. Like trucking, the assembled group called for increased capacity and bemoaned the lack of funding or interest in extending the rail system. Some speculated that railroads are unwilling to invest their own funds to build additional rail capacity unless there is a guarantee of long-term usage, and they wish to see public investment in the cases where public benefits are provided. Even when approved, building new terminals and facilities can experience many

delays due to reviews and public opposition. Another option—regulating the railroads—would cut into productivity and profits that, by and large, are reinvested into the system.

When concluding the session, audience members widely agreed that it was hard to create a compelling message around freight. Policies that focus on the use of rail to move goods and people must be pursued, and trucking organizations must engage in useful advocacy and find useful measures by which we can judge the quality of freight movement and its importance to the economy.

Breakout Session: Fostering A Truly Multi-Modal System

Description

Fostering a “multi-modal” transportation system continues to be cited as a priority, yet the diversity of our systems and the connections between them are deemed inadequate. How do we address the divisions created by stovepiped funding between modes to allow for resources to flow between different modes of transportation?

Participants

- *Panel Moderator:* **Robert Martinez**, Vice President, Business Development, Norfolk Southern Corporation; Former Associate Deputy Secretary of Transportation and Director of the Office of Intermodalism
- **Lillian Borrone**, Chair, Eno Transportation Foundation; Former Assistant Executive Director of the Port Authority of New Jersey and New York
- **Anne Canby**, President, Surface Transportation Policy Partnership; Former Secretary of Transportation for Delaware
- **Mark Gerchick**, Principal & Co-Founder, Gerchick-Murphy Associates; Former Deputy Assistant Secretary of Transportation and Acting Assistant Secretary for Aviation and International Affairs, USDOT
- **Greg Principato**, President, Airports Council International-North America; Former Executive Director, National Commission to Ensure a Strong Competitive Airline Industry

Summary

Defined as a “network of networks” or the means for moving both people and freight by interconnecting different systems, multi-modalism was recognized as an important key in improving existing transportation systems. It was also identified as a key means for improving our economic competitiveness and growth against countries focusing on exports and spending money to make their transportation systems inter-modal. Panelists and the audience widely agreed that the current “silo-ed” system limited capac-



"Fostering a Truly Multi-Modal System" panelists: Greg Principato, Lillian Borrone, Anne Canby, Robert Martinez, Mark Gerchick

ity, restricted transportation options for people, exacerbated energy and environmental issues, and impeded the creation of a continuous system among the various transportation networks. Co-modality, the use of different modes on their own and in combination to reach an optimal and sustainable use, was also identified as a key goal. Defining the federal role and identifying sources of funding were considered the obstacles.

More deliberate planning was considered critical in the development of future, multi-modal system framework. Institutional partnerships, such as the Canada Gateway, and pilot programs offered possible avenues for institutionalizing "multi-modalism" thinking, since they encourage collaboration with other sectors and the opportunity to build density. On the other hand, the participants viewed existing state and federal structure and a lack of investment across modes as barriers. Some proposed a more encompassing role for state DOTs, the introduction of user fees, and increasing cross-modal analysis to encourage people to identify opportunities for multi-modalism in the planning and building stages of new projects. Other ideas designed to encourage modal neutrality would be the building of a single analytic process on any transportation investment going to be made and putting together a regional, multi-modal program that formed a model for the new authorization process.

Mention of user fees as a potential solution brought up a corollary concern about how aviation fits into the notion of multi-modalism. It is viewed by some as a unique

mode, where the tradition of “user pays” is strong, funding stovepipes are closely guarded, deregulation is an ongoing concern, and oversight occurs almost exclusively on the federal level. Since trips to the airport almost always necessitate another mode of transportation, some viewed it as already fundamentally inter-modal. The idea of diverting funds raised through aviation fees to other transportation modes raised concerns since the majority of airports are capable of producing the revenue they need to take care of their own infrastructure. Instead, representatives of the aviation industry proposed focusing on barriers such as current laws, other regulations, and financial aspects that create the same obstacles in aviation that they do in the other transportation modes.

Finally, much of the discussion focused on the messaging used to create solid public policy that would encourage and incentivize the use of any transportation mode that is reputable, safe, and appropriately funded. A message identifying areas of contention, showing their cost in economic, social and cultural terms, and then applying funding to show improvements was one that many agreed would encourage public support. Freight was cited as one example of this process. It became a device around which the industry could pull people into once it was positioned as a relationship or a foundation common among many. The session ended with a return to multi-modalism as a broad goal, as well as a warning against a “one-size-fits-all” approach.

NOVEMBER 30

Deliberative Session

Immediately following the September conference, conference leadership worked to identify areas of consensus and formulate a set of recommendations stemming from the conversation that took place at the Miller Center. Many of the original transportation conference participants—in addition to esteemed newcomer and former Secretary of Transportation Mary E. Peters—attended a deliberative session in late November at the Miller Center’s Washington D.C. office where those recommendations were reviewed and feedback from the group was solicited.

Secretary Peters began the conversation by responding to our draft recommendations and stating her own thoughts regarding transportation reform. She emphasized the need to focus on systemic reform instead of reauthorization, since reauthorization includes the same players and process, and presumably, the same product. Reform offers a new path necessary when there is a lack of investor confidence in the status quo. She mentioned the public opposition to fuel taxes and general distrust in how money is spent. When there is an absence of noticeable improvement it proves this distrust, especially when local initiatives with clear deliverables have been passed. She suggested creating a “catchphrase” that would really drive home the message of how transportation inefficiencies not only

impact daily life but also larger, national issues related to the economy, environment, and national security, among others.

With regards to the specific recommendations included in this report, she responded in the following ways:

- On the subject of urban congestion, Secretary Peters recommended that the report should not only quantify the costs associated with congestion but link it to a negative effect or specific problem.
- She agreed with the conference's emphasis on multimodalism, and used the Northeastern Corridor as an example of an area that could benefit significantly from the integration of all modes of transportation able to operate in this area. She noted that 40% of all aviation delays emanated from New York City, although alternate forms of transportation like high speed rail (due to dense population) and shipping freight by sea (due to positioning on seaboard) could help to distribute operations among modes and alleviate those problems.
- Protecting the public interest is essential and so public-private partnerships must operate in such a way that oversight does not necessary mean wide, overarching federal programs.
- Finally, she agreed with the focus on outcome and the need for data, objectives and goals to provide accountability in any future transportation agenda.

NATIONAL DISCUSSION AND DEBATE SERIES

Held at the National Governors Association Winter 2009 Meeting

Resolution: *"Government at all levels must work together to create a comprehensive infrastructure policy in concert with national energy, environmental, and economic priorities."*

The Miller Center debuted our second season of the National Discussion and Debate Series with a dialogue on developing national infrastructure policy. Held at the National Governors Association Winter Meeting in Washington, DC, the discussion focused on the resolution above.



Governors Edward Rendell and Arnold Schwarzenegger, JayEtta Hecker of the Bipartisan Policy Center, and Douglas Foy, Massachusetts' former Secretary of Commonwealth Development and President of the Serrafix Corporation participated in the discussion. Robert MacNeil, former co-anchor of the MacNeil/Lehrer NewsHour, moderated the session.

Governor Rendell opened by calling President Obama's stimulus package a

good first step in addressing infrastructure challenges—but it’s “barely 5 percent” of what infrastructure experts say is needed. Governor Schwarzenegger added that an estimated \$250 billion is needed annually to handle infrastructure needs. Governor Rendell asserted that any infrastructure policy must come with four conditions: accountability, environmental sustainability, proper funding sources and a clear selection process that takes politicians and politics out of the process.

Governor Schwarzenegger cited the importance of alternative transportation. “Our infrastructure in this country is like that of a developing country, rather than a developed one,” he said. “Our trains go the same speed today as they were 100 years ago, so where’s the progress?” Mr. Foy advocated for better planning through coordination among agencies, repairing existing structures and systems, and giving equal attention to all forms of transportation, rather than referring to “alternative transportation.” Referring to any type of transportation but roads as “alternative transportation,” Foy said, “is like referring to a woman as ‘an alternative man.’”

Governor Schwarzenegger suggested that officials need a “sexier word than infrastructure” and a way of marketing the issue that helps people to understand how infrastructure issues affect them: for instance, the difference traffic issues make in their lives, or how important it is to have a functioning levee system in place in their communities before a storm “that makes Katrina look small” comes.

We must create a national transportation and infrastructure policy, argued JayEtta Hecker, who formerly oversaw physical infrastructure issues at the U.S. Government Accountability Office. She criticized the notion perpetuated by the stimulus plan that the federal government can come up with the funding to cope with the large infrastructure issues, because it puts off the notion of strategic planning. Inefficiencies and a lack of planning are detrimental to addressing the issues, she said. “It’s not about fixing potholes, but about optimizing performance.” Ms. Hecker also offered that efficient technology use was a better indicator than job creation of good investment. “The measure of jobs is the worst possible indicator of good, strategic investment and planning,” she said. Ideally, she reasoned, federal money should go to states with conditions that reward performance benchmarks.

During closing remarks, Foy argued that all levels of government should be involved in infrastructure policy and funding, and that their reasoning must be clear to the American people. Schwarzenegger stated that just as America was able to envision and implement landing on the moon, it must have a vision for these challenges as well. Hecker suggested re-examining the federal-state relationship in relation to infrastructure spending and investment, and Rendell advocated addressing the situation as urgently as possible.



APPENDICES

“For the very size of our transportation requirements—rising step-by-step with the growth of our population and industry—demands that we respond with new institutions, new programs of research, new efforts to make our vehicles safe as well as swift.”

PRESIDENT LYNDON B. JOHNSON
MARCH 2, 1966

APPENDIX ONE: CONFERENCE AGENDA

As distributed to participants

Welcome Session • Wednesday, September 9, 2009

The afternoon and evening events will take place in the Boar's Head Inn Pavillion.

Welcome

- **Governor Gerald L. Baliles**, Director, Miller Center; Former Governor of Virginia
- **Secretary Norman Y. Mineta**, Conference Co-Chair; Former Secretary of Transportation
- **Secretary Samuel K. Skinner**, Conference Co-Chair; Former Secretary of Transportation

Introductory History of National Transportation Commissions

This introductory session will include a presentation reviewing the current state of thinking about how best to forge a new approach to transportation in America, with clear attribution of alternative approaches to the organizations or legislators advocating them.

- Panel Moderator: **Jeffrey Shane**, Conference Director & Visiting Fellow; Partner, Hogan Lovells; Former Under Secretary for Policy, USDOT
- **Robert Atkinson**, Chair, National Surface Transportation Infrastructure Financing Commission (NSTIFC); Founder & President, Information Technology and Innovation Foundation
- **Emil Frankel**, Director of Transportation Policy, Bipartisan Policy Center; Former Assistant Secretary for Transportation Policy, USDOT
- **Robert Puentes**, Senior Fellow in the Metropolitan Policy Program, Brookings Institution; Former Director of Infrastructure Programs, Intelligent Transportation Society of America
- **Jack Schenendorf**, Of Counsel, Covington & Burling LLP; Vice-Chairman, National Surface Transportation Policy and Revenue Study Commission (NSTPRSC)

Cocktail Reception

Seated dinner, remarks, and presentation of the Miller Center's Presidential Recording Program research on the founding of our national transportation system

- **Governor Gerald L. Baliles**, Director, Miller Center; Former Governor of Virginia
- **Senator Slade Gorton**, Of Counsel, K&L Gates ; Former United States Senator (R-WA); Member, Miller Center Governing Council
- **David Coleman**, Chair, Miller Center Presidential Recordings Program; Associate Professor, University of Virginia

Governor Baliles will offer a brief introduction to the Miller Center and its mission as a National Meeting Place.

Senator Gorton will offer remarks on national transportation policy goals, planning, and reform.

Scholars from the Miller Center's Presidential Recordings Program will present highlights from the President Lyndon B. Johnson recordings related to the 1966-67 creation of the Department of Transportation. Between 1940 and 1973, six American presidents from both political parties secretly recorded just under 5,000 hours of their meetings and telephone conversations, and the Miller Center has a staff of scholars and students dedicated to making these remarkable historical sources accessible to the public.

Day One • Thursday, September 10, 2009

The day's events will take place at the Miller Center of Public Affairs. Shuttles will transport participants between the Boar's Head Inn and Miller Center at the beginning and end of the day.

Arrival and Continental Breakfast (Forum Ante Room)

Introductory Remarks and Conference Charge (Forum Room)

- **Secretary Norman Y. Mineta**, Conference Co-Chair; Former Secretary of Transportation
- **Secretary Samuel K. Skinner**, Conference Co-Chair; Former Secretary of Transportation
- **Governor Gerald L. Baliles**, Director, Miller Center; Former Governor of Virginia

Reconsidering the Current Paradigm (Forum Room)

This panel will review the substantive areas in need of reform that will be considered in the afternoon's breakout sessions and reflect on other areas ripe for systematic change.

- *Panel Moderator:* **JayEtta Hecker**, Senior Fellow, Bipartisan Policy Center; Former Director, Physical Infrastructure Team, U.S. Government Accountability Office
- **Mort Downey**, Senior Advisor, Parsons Brinckerhoff, Inc.; Former Deputy Secretary of Transportation
- **Steve Heminger**, Executive Director, Bay Area Metro Transportation Commission; Member, NSTPRSC
- **Craig Lentzsch**, Former President & CEO, Coach America Holdings, Inc. and Greyhound Lines, Inc; Member, NSTIFC
- **Robert Martinez**, Vice President, Business Development, Norfolk Southern Corporation; Former Associate Deputy Secretary of Transportation and Director of the Office of Intermodalism

Keynote Address (Forum Room)

Congressman Dick Gephardt, Former House Majority & Minority Leader; Former Member of Congress

Break & Buffet Lunch (Forum Ante Room)

Seating will be available in the Loggia and the back patio of Faulkner House.

Break Out Session A: Funding Sources and Structure (Forum Room)

This panel will examine the ways in which the federal and state governments currently fund transportation investments and—in light of current fiscal challenges and the impending move away from fossil fuels as the energy source for motorized vehicles—review potential options for assuring more adequate investments in the future. The panel also will survey the technological advances that can provide us with better solutions.

- *Panel Moderator:* **Craig Lentzsch**, Former President & CEO, Coach America Holdings, Inc. and Greyhound Lines, Inc; Member, NSTIFC
- **Gary Allen**, Chief of Technology, Research & Innovation, VDOT
- **Tyler Duvall**, Senior Advisor, McKinsey & Company; Former Acting Under Secretary for Policy and Assistant Secretary for Policy, USDOT
- **Pete Ruane**, President and CEO, ARTBA; Vice-Chairman, Americans for Transportation Mobility; Co-Chair, Transportation Construction Coalition
- **Kathy Ruffalo**, President, Ruffalo & Associates LLC; key drafter and negotiator, SAFETEA-LU; Member, NSTIFC

Break Out Session B: Addressing Urban Congestion (Scripps Library)

Urban congestion extracts huge costs in terms of the quality of life, air quality, and lost economic productivity. This session will explore how governmental programs might be redesigned to attack this problem more effectively and how much subsidy the public is willing to provide to these efforts.

- *Panel Moderator:* **Steve Heminger**, Executive Director of the Bay Area Metro Transportation Commission; Member, NSTPRSC
- **Douglas Foy**, President & Founder, Serrafix; Former Secretary of Commonwealth Development, State of Massachusetts
- **Steve Lockwood**, Principal Consultant, PB Consult; senior Federal Highway Administration policy officer; Former Director, Transportation 2020 Coalition
- **Adrian Moore**, Vice President of Research, Reason Foundation; Member, NSTIFC
- **Ron Sims**, Deputy Secretary, U.S. Department of Housing & Urban Development; Former Executive for the King County, WA

Break Out Session C: Moving Freight and Cargo (Scripps Library)

Despite its vital importance to an economy that depends on efficient trade, goods, and cargo movement remains a stepchild within the transportation policy community. This panel will explore how to gain appropriate levels of public and private investment, legislative and policy options for ensuring the availability of a more productive freight system, whether returning to greater regulation would serve the public interest, and how we can bring greater understanding of the importance and challenges of transportation to the public.

- *Panel Moderator:* **Mort Downey**, Senior Advisor, Parsons Brinckerhoff, Inc.; Former Deputy Secretary of Transportation
- **Bill DeWitt**, Associate Dean, Loeb-Sullivan School, Maine Maritime Academy; Former Professor of the Practice, Logistics, Transportation & Supply Chain Management, Robert H. Smith School of Business
- **Quintin Kendall**, Resident Vice President of State Government Affairs, CSX Corporation; former Chief of Staff, US Department of Transportation
- **Dan Keen**, Vice President, Policy Analysis, American Association of Railroads
- **Tim Lynch**, Senior Vice President, Federation Relations and Strategic Planning, American Trucking Association; Former President & CEO, Motor Freight Carriers Association

Break Out Session D: Fostering a Truly Multi-Modal System (Forum Room)

Fostering a “multi-modal” transportation system continues to be cited as a priority, yet the diversity of our systems and the connections between them are deemed inadequate. How do we address the divisions created by stovepiped funding between modes to allow for resources to flow between different modes of transportation?

- *Panel Moderator:* **Robert Martinez**, Vice President, Business Development, Norfolk Southern Corporation; Former Associate Deputy Secretary of Transportation and Director of the Office of Intermodalism
- **Lillian Borrone**, Chairman, Eno Transportation Foundation; Former Assistant Executive Director of the Port Authority of New Jersey and New York
- **Anne Canby**, President, Surface Transportation Policy Partnership; Former Secretary of Transportation for Delaware
- **Mark Gerchick**, Principal & Co-Founder, Gerchick-Murphy Associates; Former Deputy Assistant Secretary of Transportation and Acting Assistant Secretary for Aviation and International Affairs, USDOT
- **Greg Principato**, President, Airports Council International-North America; Former Executive Director, National Commission to Ensure a Strong Competitive Airline Industry

Day Two • Friday, September 11, 2009

The day's events will take place at the Miller Center of Public Affairs. Shuttles will transport participants between the Boar's Head Inn and Miller Center at the beginning and end of the day.

Introductory Remarks and Continental Breakfast (Forum Room)

- **Pierce R. Homer**, Virginia Secretary of Transportation; Former Deputy Secretary of Transportation, VDOT
- **Secretary Norman Y. Mineta**
- **Secretary Samuel K. Skinner**

Formulation of Recommendations and Call to Action (Forum Room)

Panel Chairs will review the recommendations and discussion that occurred in each panel the previous day and discuss generally what the Miller Center's recommendations should reflect, to be discussed by the committee as a whole

- **Moderator: Jeffrey Shane**
- **Mort Downey**
- **Steve Heminger**
- **Craig Lentzsch**
- **Robert Martinez**

The conference's final session will be organized as a facilitated and carefully structured open forum in which all participants will be encouraged to participate to develop a set of clear, credible, and achievable legislative and policy recommendations for new transportation authorization. Following the meeting, the Miller Center will develop a draft report of our recommendations, and once finalized, the report will be presented to appropriate leaders in the Congress and the Administration, to the editorial boards at major newspapers, and will be the subject of op-ed pieces by participants.

Where Do We Go from Here? A Roadmap to the Report; and Buffet Lunch (Forum Room)

- **Jeffrey Shane**, Conference Director & Visiting Fellow; Partner, Hogan Lovells; Former Under Secretary for Policy, USDOT
- **Governor Gerald L. Baliles**, Director, Miller Center; Former Governor of Virginia
- **Secretary Norman Y. Mineta**, Conference Co-Chair; Former Secretary of Transportation
- **Secretary Samuel K. Skinner**, Conference Co-Chair; Former Secretary of Transportation

APPENDIX TWO: PARTICIPANT BIOGRAPHIES

Conference Co-Chairs



Norman Mineta served as the U.S. Secretary of Transportation under President George W. Bush from 2001 to 2006. In that role, he guided the creation of the Transportation Security Administration, an agency with more than 65,000 employees and the largest mobilization of a new federal agency since World War II. He was appointed Secretary of Commerce under President William J. Clinton, and prior to that, he was vice president of Lockheed Martin, where he oversaw the first successful implementation of the EZ-Pass system in New York State. Secretary Mineta was a member of Congress representing San Jose, California, from 1975 to 1995 and a former Chairman of the Committee on Public Works and Transportation. Presently, he is the Vice Chairman of Hill & Knowlton, where he provides counsel and strategic advice to clients on a wide range of business and political issues, including transportation and national security.



Sam Skinner served as U.S. Secretary of Transportation under President George H.W. Bush from 1989 to 1991. As Secretary, Mr. Skinner was credited with numerous successes, including the development of the President's National Transportation Policy and the development and passage of landmark aviation and surface transportation legislation. He also was the former Chairman, President and Chief Executive Officer of USF Corporation, a former President of Commonwealth Edison Company and its holding company Unicom Corporation, and former Chairman of the Regional Transportation Authority of northeastern Illinois. Secretary Skinner also served as President George H.W. Bush's Chief of Staff. Presently, he is Of Counsel at Greenberg Traurig LLP, where he consults with clients in areas that include state and federal regulatory matters, governmental matters, transportation issues, and corporate governance.

Note: All biographies reflect the titles of the participants at the time of the conference. They are subject to change.

Conference Leadership



Jeff Shane previously held posts in the U.S. Department of Transportation as Under Secretary for Policy and Assistant Secretary for Policy and International Affairs. He was also Deputy Assistant Secretary of State for Transportation Affairs. He has been recognized for his role in forging an Open Skies aviation policy for the United States and focusing government attention on effective means for financing transportation infrastructure, as well as raising the visibility of intermodal freight movements and logistics on the national policy agenda, and devoting significant efforts to addressing the implications of climate change for the transport sector. At Hogan Lovells, he specializes in domestic and international transportation issues.



Gerald Baliles is Director of the University of Virginia's Miller Center of Public Affairs, a leading public policy institution at the University of Virginia. Founded in 1975, the Miller Center is a nonpartisan public policy institution devoted to studying, examining, and sharing information about American government and the Presidency, and promoting discourse and bipartisan consensus on issues of national and international policy. Governor Baliles previously served as a Virginia legislator, Attorney General and Governor (1986-1990). During his tenure as Governor, he served as Chairman of the National Governors Association and was widely recognized for placing a premium on improving transportation in Virginia. As a partner at the law firm of Hunton and Williams, he chaired the section on international law, and practiced aviation law, as well as chaired such national and regional entities as the Presidentially-appointed Commission on Airline Competitiveness, the Southern States Energy Board, the Chesapeake Bay Blue Ribbon Panel, the Education Quality Committee of the Southern Regional Education Board, the AGB Commission on Academic Presidency, and the AGB Commission on the State of the Presidency in Higher Education. He serves on the Boards of Altria and Norfolk Southern, served as Chairman of PBS for multiple terms, and has served on other civic and corporate Boards, including Newport News Shipbuilding, the Nature Conservancy in Virginia, and the Virginia Historical Society. He holds honorary degrees from eleven institutions of higher education.



Heather Mullins Crislip is a Visiting Fellow and served as the Staff Director of the David R. Goode National Transportation Conference at the Miller Center. She previously served as Chief of Staff to the Chancellor at the University of Hawai'i, where she oversaw all external and government relations and stewarded the institution through several large institutional reorganizations. Ms. Crislip also worked on a major reform of the financing of the K-12 system as staff to the Chair of the Senate Education Committee in the Hawai'i State Legislature. Before moving to Hawai'i, she was a Policy Assistant to the Mayor of New Haven, Connecticut, and Director of the regional Welfare to Work center during the implementation of welfare reform and the Workforce Investment Act.

Conference Panelists



Gary Allen is the Chief of Technology, Research & Innovation for the Virginia Department of Transportation. In that role, he oversees the Virginia Transportation Research Council, a nationally recognized engineering and scientific transportation research organization and a partnership of the Virginia Department of Transportation and the University of Virginia, as well as VDOT's Information Technology and Knowledge Management divisions.



Robert Atkinson is Chair of the National Surface Transportation Infrastructure Financing Commission and Founder and President of the Information Technology and Innovation Foundation, a Washington, DC-based technology policy think tank. He is also author of the State New Economy Index series and *The Past and Future Of America's Economy: Long Waves Of Innovation That Power Cycles Of Growth*. Mr. Atkinson previously served as Vice President of the Progressive Policy Institute and Director of its Technology & New Economy Project and former Project Director at the former Congressional Office of Technology Assessment.



Lillian Borrone serves as chairman of the Eno Transportation Foundation and, on the Board of Directors of STV, Inc. an engineering/architectural firm, and on the Boards of Horizon Healthcare Holding Company and Horizon Enterprise Group of Horizon Blue Cross and Blue Shield of New Jersey. She served as one of 16 Commissioners on the U.S. Commission on Ocean Policy and previously served as Assistant Executive Director of the Port Authority of New York and New Jersey,

where she advised on various policy issues including international trade development; real estate acquisition and disposition for maritime, aviation, and mixed-use development projects; and transportation capital project management priorities. At the Port Authority, Ms. Borrone also served as Director of the Port Commerce Department overseeing the Port Authority's vast marine terminals, waterfront development, and international relations responsibilities.



Anne Canby is President of the Surface Transportation Policy Partnership (STPP), a national advocacy coalition for transportation reform. Recognized nationally as a progressive leader in the transportation field for transforming a traditional highway agency into a multimodal mobility provider and as an advocate for integrating land-use and transportation planning. Ms. Canby was Delaware's transportation secretary from 1993 to 2001. She previously lead a consulting practice

focusing on institutional and management issues with particular emphasis on implementation of legislation in ISTEA. She also has served as Commissioner of the New Jersey Department of Transportation, Treasurer of the Massachusetts Bay Transportation Authority, and Deputy Assistant Secretary of the U. S. Department of Transportation.



Bill DeWitt is Associate Dean of the Loeb-Sullivan School of the School of International Business & Logistics at Maine Maritime Academy. Formerly, he was a Professor of the Practice, Logistics, Transportation & Supply Chain Management at Robert H. Smith School of Business with the University of Maryland. Prior to that position, he worked for more than twenty years at Burlington Northern Railroad in operations, strategic planning, marketing, and finally, as vice president of marketing and sales for the \$501 million forest products business unit.



Mort Downey is Senior Advisor to Parsons Brinckerhoff, Inc, where he provides strategic advice to the company and its clients on transportation issues. During the recent Obama Presidential Transition he was team leader for the Transportation Department Review team. Formerly, he was Deputy Secretary of Transportation in the U.S. Department of Transportation under President Bill Clinton. In that role, he was responsible for developing the agency's strategic and performance plans and had program responsibilities for operations, regulations and investments in land, sea, air and space transportation. He also managed the department's highly-regarded strategic planning process and doubled infrastructure funding over eight years while reducing departmental overhead staff. He previously served as Executive Director and Chief Financial Officer at the Metropolitan Transportation Authority in New York, the nation's largest independent public transportation authority.



Tyler Duvall is a Senior Advisor at McKinsey & Company. From 2005 to 2009, he was Acting Assistant Secretary and Deputy Assistant Secretary for Transportation Policy in the U.S Department of Transportation. In that role, he provided policy advice and strategic direction on such issues as transportation congestion and other surface transportation initiatives to the Secretary of Transportation. Mr. Duvall also has served as the Special Assistant to the Assistant Secretary for Transportation Policy and as an Associate in the Business and Finance Group at Hogan and Hartson, LLP.



Douglas Foy is the President and founder of Serrafix, a consulting firm working to transform America's energy profile. Serrafix works with dozens of cities, ranging from New York and Milwaukee to Cambridge, Massachusetts, and Charleston, South Carolina, in the development and implementation of large-scale energy efficiency and retrofit programs. It is also working with non-profit owners of national affordable housing portfolios to implement comprehensive energy efficiency improvements in their properties. Prior to found Serrafix, he served as the first Secretary of Commonwealth Development under Massachusetts Governor Mitt Romney, where he oversaw the agencies of Transportation, Housing, Environment, and Energy. Under his leadership, those agencies developed the Commonwealth's first comprehensive transportation plan emphasizing transit; the nation's most comprehensive climate action plan; and numerous programs, policies, and investments to promote sustainable development and smart growth. Prior to his time in government, Mr. Foy was the President of the Conservation Law Foundation.



Emil Frankel is Director of Transportation Policy for the Bipartisan Policy Center and an independent consultant on transportation policy and public management issues. From 2002 to 2005, he was Assistant Secretary for Transportation Policy of the United States Department of Transportation. Appointed by President George W. Bush, Mr. Frankel played a key role in the coordination and development of the Administration's proposal to reauthorize the Federal highway, transit, and highway safety programs. Prior to that appointment, he was Commissioner of the Connecticut Department of Transportation and Of Counsel to Day, Berry & Howard in the law firm's Stamford, Connecticut, office.



Mark Gerchick is a Principal and Co-Founder of Gerchick-Murphy Associates, the Washington D.C. aviation consulting firm. With recognized expertise in aviation policy and regulation, the firm has worked with major U.S. airlines and airports, and a range of other aviation interests, since 1998. Previously, Mr. Gerchick served as a senior government aviation official in the Clinton Administration—first as Chief Counsel of the Federal Aviation Administration (1993-95), then as Deputy Assistant Secretary of Transportation and Acting Assistant Secretary for Aviation and International Affairs (1995-1998). Prior to his government service, Mr. Gerchick was a partner in the Washington, D.C. office of the national law firm of Paul, Hastings, where his practice focused on antitrust and administrative law, and government-related litigation and counseling. Since his government service, Mr. Gerchick has served as Conference Chair of The American Bar Association Annual Forum on Air and Space Law, Senior Fellow of the Center for National Policy, Member of the Advisory Board of the International Aviation Law Institute, and Senior Vice President for Aviation Services at APCO Associates, and was invited to work with George Washington University's School of Business to develop an Aviation Management Certificate Program in 2004.



Jayetta Hecker is a Senior Fellow at the Bipartisan Policy Center, an Adjunct Fellow at the Rand Corporation, and an independent consultant working to advance public policies to improve the economic performance of U.S. transportation networks. From 1982 to 2008, she served in the U.S. Government Accountability Office as a senior executive, including Director of International Relations and Trade and Director of the Physical Infrastructure Team from 2000 to 2008. As head of the Physical Infrastructure Team, she was responsible for directing GAO work related to all transportation modes including federal highways, transit, freight and passenger rail, aviation, and maritime issues. She testified frequently before Congress and regularly spoke to professional associations and the media. Before joining GAO, she served as an economist

in multiple executive branch agencies, including the Regulatory Council of the Carter White House from 1979 to 1981.



Steve Heminger is the Executive Director of the Bay Area Metro Transportation Commission, the financing agency that allocates more than \$1 billion per year to finance bridge, highway, and transit construction projects in the nine-county San Francisco Bay Area. Mr. Heminger also served as a member of the National Surface Transportation Policy and Revenue Study Commission, convened to chart the future course for the federal transportation program.



Pierce Homer has served as Virginia's Secretary of Transportation under Governors Tim Kaine and Mark Warner. As Secretary, Mr. Homer oversees management and budgeting for the Departments of Transportation, Motor Vehicles, Aviation, and Rail and Public Transportation as well as for the Motor Vehicle Dealer Board and the Virginia Port Authority. He is Chairman of the Commonwealth Transportation Board and has served as Deputy Secretary of Transportation with functional oversight of the Virginia Department of Transportation, private partnership programs, and technology investments. He previously spent 15 years with the Prince William County government in several senior management positions, including Deputy County Executive with direct oversight of county agencies.



Dan Keen is Assistant Vice President—Policy Analysis with the Association of American Railroads. Among other duties, he is responsible for producing and disseminating position papers, background papers, and testimony on a wide variety of railroad economic and policy issues. Mr. Keen is also heavily involved in the compilation and distribution of statistical data on railroad financial and operational matters. He has been with the AAR since 1993. Previously, he was an economist with the National Machine Tool Builders Association and an analyst at the National Academy of Sciences.



Quintin Kendall serves as the Resident Vice President of State Government Affairs for CSX Transportation, Inc. Previously, he was the Deputy Assistant Secretary for Management and Budget at the U.S. Department of Transportation, where he was responsible for coordinating the Department's President's Management Agenda initiatives. He also served as USDOT's White House Liaison. In that role, he advised the Secretary on personnel matters and administered the employment process for presidential appointees. Mr. Kendall has also served as an aide to Virginia Governor James S. Gilmore, III and House Commerce Committee Chairman Thomas J. Bliley, Jr.



Craig Lentzsch serves on the National Surface Transportation Infrastructure Financing Commission. He is a former President and Chief Executive Officer of Coach America Holdings, Inc. and Greyhound Lines, Inc. At Greyhound, his responsibilities included Greyhound Canada and Laidlaw Public Transit with combined revenues reaching \$1.2 billion with 16,000 employees. Mr. Lentzsch was Vice Chairman and Executive Vice President of Greyhound from 1987 to 1989 and the Executive Vice President and Chief Financial Officer of Motor Coach Industries International, Inc., the largest manufacturer of intercity coaches and transit buses in North America, from 1992 to 1994. He is also a co-founder of BusLease, Inc., a founding director of the Intermodal Transportation Institute at the University of Denver, and a board member of Dynamex, Inc.



Steve Lockwood is a Principal Consultant at PB with special expertise in transportation-related institutional development and emerging asset and systems management issues for state governments and associations. He is the senior PB member of the study team for the Future of the Interstate System being developed for AASHTO and a parallel effort for the I-95 Corridor Coalition. Prior to joining PB, he was a senior Federal Highway Administration policy officer. Mr. Lockwood also spent two years as Director of the Transportation 2020 Coalition and over 15 years as a principal-in-charge or project manager for highway and transit planning and project development projects for a major international consulting firm. Mr. Lockwood was instrumental in the development of ISTEA and currently leads a Strategic Highway Research Program (SHRP) project on the relationship between state DOT "institutional architecture" and the effectiveness of their systems operations and management activities.



Tim Lynch is Senior Vice President of Federation Relations and Strategic Planning for the American Trucking Association. Previously, Mr. Lynch was President and CEO of the Motor Freight Carriers Association. He is a veteran trucking industry legislative and policy expert, and a member of the advisory panel to the Harvard Center For Risk Analysis, the Advisory Board of the University of Michigan Trucking Industry Program, and the Transportation Research Board's Ad Hoc Task Force on Truck Transportation Research.



Robert Martinez is the Vice President of Business Development at Norfolk Southern Corporation. During the first Bush Administration, he served at the U.S. Department of Transportation as Deputy Administrator for the Maritime Administration and was promoted by President George H. W. Bush to Associate Deputy Secretary of Transportation and Director of the Office of Intermodalism. He began working for Norfolk Southern in 1993 but left in 1994 to become Virginia's Secretary of Transportation under Governor George Allen. In that role, he had oversight over the Virginia Department of Transportation (highways), the Department of Rail and Public Transportation, the Virginia Department of Aviation, the Department of Motor Vehicles, and Virginia Port Authority.



Adrian Moore is Vice President of Research at Reason Foundation, a think tank advancing free market principles. In that role, he oversees all policy research and conducts his own research on topics such as privatization, government and regulatory reform, air quality, transportation and urban growth. He also served as a member of the National Surface Transportation Infrastructure Financing Commission (NSTIFC) from 2007 to 2009, and is currently serving on the California Public Infrastructure Advisory Commission. Mr. Moore is the co-author of *Mobility First: A New Vision for Transportation in a Globally Competitive 21st Century* and *Curb Rights: A Foundation for Free Enterprise in Urban Transit*.



Mary E. Peters served as the U.S. Secretary of Transportation under President George W. Bush from 2006 to 2009. She previously served as Arizona's Director of Transportation in 1998, and in 2001, she moved to Washington to work as the Administrator of the Federal Highway Administration. She also served as the Co-Vice Chairwoman of the National Surface Transportation Policy and Revenue Study Commission in 2006.



Greg Principato is the President of Airports Council International-North America (ACI-NA). Mr. Principato's involvement in aviation and transportation infrastructure spans more than twenty-five years and has included work on a wide variety of issues such as negotiation of a new air service agreement between the United States and Japan, the development of a new global standard for aircraft noise, the negotiation of an agreement between (then) US Air and its pilots, and the negotiation of an international airline alliance. In 1993, he served as Executive Director of the National Commission to Ensure a Strong Competitive Airline Industry, chaired by former Gov. Gerald Baliles, and prior to that, he worked on transportation infrastructure issues.



Robert Puentes is a Senior Fellow in the Metropolitan Policy Program at the Brookings Institution, where he is an expert on transportation and infrastructure, urban planning, growth management, suburban issues and housing. He has written a number of pieces that advocate integrated planning, as well as increased accountability, performance measurement and funding for transportation from the federal level. Prior to joining Brookings, he was the director of infrastructure programs at the Intelligent Transportation Society of America, a leading advocate for technologies that improve the safety, security and efficiency of the nation's surface transportation system.



Kathy Ruffalo is President of Ruffalo and Associates, LLC, a government affairs consulting firm in Washington, D.C. Ms. Ruffalo has 20 years of experience in the public policy arena at both federal and state levels of government. She served as a senior policy advisor to Idaho Governor Dirk Kempthorne, and in 2004, she was a key drafter and negotiator of SAFETEA-LU. From 1989 to 1999, she served as a senior advisor to the United States Environment and Public Works Committee and former Chairman Senator Max Baucus, with the primary responsibility for developing, drafting and negotiating federal transportation policy. She also served as a member of the National Surface Transportation Infrastructure Financing Commission.



Peter Ruane is the President and CEO of the American Road and Transportation Builders Association. He is also Vice Chairman of the U.S. Chamber-led Americans for Transportation Mobility, a broad-based coalition focused on major national transportation legislation, and a Co-Chair of the Transportation Construction Coalition, a permanent thirty member market-oriented construction trade association and labor coalition working on industry legislative and regulatory issues. Prior to joining ARTBA, he served as the President and CEO of the National Moving and Storage Association. Mr. Ruane also has served as Deputy Director of the Office of Economic Adjustment, Office of the Secretary of Defense and the President's Economic Adjustment Committee. In December 2000, he was appointed to serve on the Bush-Cheney Transportation Transition Team.



Jack Schenendorf is Of Counsel at Covington & Burling LLP, where his practice concentrates on transportation and legislation with a particular focus on legislative strategy, legislative procedure, and the federal budget process. He was appointed to the National Surface Transportation Policy and Revenue Study Commission and serves as Vice-Chairman. For nearly 25 years, Mr. Schenendorf served on the staff of the Committee on Transportation and Infrastructure of the U.S. House of Representatives. He was Chief of Staff from 1995 to 2001. He previously served on the Bush-Cheney Transition as Chief of the Transition Policy Team for the U.S. Department of Transportation and was responsible for reviewing all transportation policies and issues for the incoming Administration.



Ron Sims was unanimously confirmed by the U.S. Senate and sworn in as the Deputy Secretary for the U.S. Department of Housing and Urban Development in May 2009. As the second most senior official at HUD, he is responsible for managing the Department's day-to-day operations, a nearly \$40 billion annual operating budget, and the agency's 8,500 employees. He previously served as the Executive for the King County, Washington, the 13th largest county in the nation in a metropolitan area of 1.8 million residents and 39 cities including the cities of Seattle, Bellevue and Redmond. While serving three terms, Mr. Sims was nationally recognized for his work on transportation, homelessness, climate change, health care reform, urban development and affordable housing.

APPENDIX THREE: ACKNOWLEDGEMENTS

The Miller Center gratefully acknowledges the generous support of David Goode, whose endowment gift made this conference possible. The Miller Center similarly is indebted to the Conference Co-Chairs, Secretaries Norman Y. Mineta and Samuel K. Skinner, who provided invaluable leadership and expertise through this process. Conference Director Jeffrey N. Shane dedicated significant time and effort in the planning of the substantive events and led much of the second session, and we offer our sincere thanks for his willingness to take on this project in the midst of what was already a very busy professional life.

Former House Majority Leader Dick Gephardt, former Senator from Washington Slade Gorton, and Virginia's Secretary of Transportation Pierce Homer served as our notable speakers during the September conference. We thank them for their significant contributions to the conversation about the political considerations that must be addressed in any proposed reform measures. We were also very grateful for former Secretary of Transportation Mary E. Peters' participation and very valuable commentary in our second meeting.

Moderators and panelists were tasked with discussing certain issues and facilitating discussion about alternatives. Their skillful management of these sessions allowed for the development of new ideas and innovative thinking, and we sincerely thank them for their important contributions to this effort.

Similarly, the Virginia Transportation Research Council provided a background report that was instructive on important historical considerations and identified potential opportunities for change. This report was included in our briefing materials and provided an important basis for discussion during the conference. We thank them for the report, and for their continued assistance and advice in framing this conference report. Similarly, we extend our sincere gratitude to Don Phillips and Marika Tatsutani for their writing and editing contributions to the Recommendation Section. As note-takers, Jamelle Bouie, Monica Gray, Maria Li, Ashley McCormack and Zuri Linetsky provided important support during the conference in capturing the conversations underway and the emergence of recommendations from these sessions. We thank Tom Cogill for photographing the session and Anne Mathews for the design of this final report.

From the outset, the goal of this conference was to assemble a wide-ranging array of transportation experts and solicit their advice for constructing a new transportation agenda. The open format was designed to encourage a lively and informed exchange of ideas from the entire group, and we would like to express our deep gratitude to the more than eighty participants that contributed in this important effort.

Editors: Heather Crislip, Juliana Bush **Photographer:** Tom Cogill **Design:** Anne Hilton



The Miller Center of Public Affairs, founded in 1975, is a national nonpartisan center to research, reflect, and report on American government. In 2006, Gerald L. Baliles, former Virginia governor and former PBS chairman, became the Center's Director.

The Miller Center's more than 50 faculty and staff include two Bancroft Prize winners, and its programs range from analysis of the secret White House tapes of the 60s and 70s, to oral history study of each administration from Carter forward, to its National Discussion and Debate Series in partnership with MacNeil/Lehrer Productions, to its tradition of national commissions.



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