

**PANEL IV: MEETING THE NEEDS**  
*(Thursday, November 16<sup>th</sup> 10:15 – 11:45 a.m.)*

- **DR. C. MICHAEL WALTON, PH.D.,** Chairman, American Road and Transportation Builders Association
- **JAMES TAYLOR,** Principal, Mercator Advisors, LLC
- **THOMAS J. MADISON, JR.,** Commissioner, New York State Department of Transportation
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**DR. C. MICHAEL WALTON, PH.D.**  
**Chairman**  
**American Road and Transportation Builders**  
**Association**

## **PANEL IV: MEETING THE NEEDS**

**DR. C. MICHAEL WALTON, PH.D.**

**Chairman**

**American Road and Transportation Builders Association**

Dr. C. Michael Walton is a Professor for Transportation Engineering Civil, Architectural and Environmental Engineering, Ernest H. Cockrell Centennial Chair in Engineering at the University of Texas at Austin. Dr. Walton researches intelligent transportation systems and intermodal freight logistics in addition to transportation systems engineering, planning, operations and policy analysis. He has published more than 200 articles and reports, and has presented more than 250 technical lectures, presentations and keynote addresses.

Dr. Walton is a member of the National Academy of Engineering, the nation's highest honor for engineering professionals. Some of his research interests are: transportation system engineering, planning, economics, and policy analysis, intelligent transportation systems, intermodal/combined transport, commercial vehicle operations, and institutional arrangements.

**American Road and Transportation Builders Association  
Chairman Dr. C. Michael Walton**

**Summary of Written Testimony before the  
National Surface Transportation and Policy Revenue Study Commission**

- I. Meeting the Nation's Surface Transportation Needs
  - Short- and long-term needs require equal attention
  - No easy answers from a political or policy perspective
- II. Macro Transportation Infrastructure Challenges
  - Demographics associated with U.S. population reaching 300 million and transportation impacts
  - Growing freight demands
  - Transportation role in emergency preparedness
- III. Appropriate Federal Role in Surface Transportation Policy
  - Constitutional foundation through the regulation of interstate commerce
  - The case for a holistic approach to meeting the nation's transportation needs
  - Review of the 2002 Commodity Flow Study—empirical evidence of state interdependence through a national transportation network
  - Realistic assessment of proposals to devolve the federal highway and transit programs
- IV. Short-Term Challenges and Solutions
  - Highway Trust Fund financial crisis
    - Highway Account balance
    - Shortage of revenues for reauthorization of SAFETEA-LU in 2009
  - Surface transportation needs far exceed available revenues
  - Review of options to address these challenges
  - ARTBA recommendations
- V. Long-Term Challenges and Solutions
  - Need to re-establish a federal mission in surface transportation policy
  - Movement of freight and emergency preparedness are current voids in transportation policy for which the federal government is uniquely qualified to play a leadership role
  - New proposed national freight initiative
    - Relationship to existing programs
    - Program goals
    - Program structure
    - Financing mechanism
- VI. Conclusion
  - U.S. surface transportation network at a crossroad
  - New paradigm in transportation policy needed



**American Road and Transportation Builders Association  
Chairman Dr. C. Michael Walton**

**Testimony before the  
National Surface Transportation and Policy Revenue Study  
Commission**

**Meeting the Nation's Surface Transportation Needs**

**November 16, 2006**

Good morning, Vice Chairman Schenendorf and other members of the Commission. My name is Michael Walton and I am a professor of engineering and hold the Ernest H. Cockrell Centennial Chair in Engineering at the University of Texas at Austin. I am also the 2006 chairman of the American Road and Transportation Builders Association (ARTBA).

ARTBA, which celebrated its 100<sup>th</sup> anniversary in 2002, has over 5,000 member firms and member public agencies from across the nation. They belong to ARTBA because they support strong federal investment in transportation improvement programs to meet the needs and demands of the American public and business community. The industry we represent generates more than \$200 billion annually in U.S. economic activity and sustains 2.5 million American jobs.

Thank you for the opportunity to appear before this field hearing of the National Surface Transportation Policy and Revenue Study Commission to address the critical topic of how to meet the nation's surface transportation needs. While SAFETEA-LU directed the Commission to undertake a broad program of work, the topic of this panel is the fundamental question you have been charged with answering. At the outset of this discussion, it is important to identify two key parameters for my remarks:

- We must differentiate between meeting the nation's short- and long-term needs and it is essential that both these scenarios be addressed today and in the Commission's final report to Congress.
- There are no easy answers, political or otherwise, that will produce meaningful improvements to the nation's surface transportation network.

**Transportation Infrastructure Challenges**

Throughout the Commission's deliberations to date, you have been exposed to vast amounts of information detailing the challenges facing the U.S. and its transportation system. While I do not

feel compelled to attempt to further convince the Commission of the magnitude of your task, I would like to highlight a recent event that I believe provides appropriate context for this discussion.

The U.S. population officially hit 300 million at 7:46 a.m. E.D.T. one month ago today when the Census Bureau's population clock rolled over to that figure. It represented a 50 percent increase since 1968, when the population stood at 200 million.

During that same time, the number of:

- homes in the U.S. has grown from 67 million to 124 million—a 77 percent increase;
- American jobs has grown from 68 million to 134 million—an 88 percent jump;
- licensed drivers has almost doubled from 107 million to 199 million; and
- Vehicle miles traveled on the nation's highways has almost tripled, from one trillion to three trillion; while **the number of lane miles of highway capacity has only grown only 12 percent.**

What are the impacts of this growth on America's transportation network?

- The number of vehicles traveling every day on each lane-mile of road in the U.S. has grown from 371 vehicles in 1968 to 1,015 vehicles today; and
- As such, it is no surprise the average traveler in the U.S. today spends 48 hours per year, or six full working days, in traffic delays. By comparison, in 1968, travelers spent less than 16 hours per year in traffic delays.

The Census Bureau projects the U.S. population will hit 400 million people by 2043.

Between now and 2043 based on current highway investment and usage trends, **U.S. highway capacity will only grow nine percent, but traffic levels will swell by 135 percent to more than seven trillion vehicle miles traveled annually.** As a result, the **average motorist can expect to spend 160 hours stuck in traffic delays, or the equivalent of four weeks each year—a 112 hour per year increase in lost time from the current level.**

In addition to the unacceptable toll the nation's severe surface transportation capacity shortage imposes on personal mobility and the quality of life of individual citizens, the movement of freight and national emergency preparedness also are greatly impeded by inadequate transportation capacity.

“The nation is entering the early stages of a freight transportation crisis,” says the opening paragraph of a recent report from the Federal Highway Administration (FHWA). The report, “An Initial Assessment of Freight Bottlenecks on Highways,” says that bottlenecks are causing trucks more than 243 million hours of delay annually, costing nearly \$8 billion. “If the U. S. economy grows at a conservative annual rate of 2.5 to 3 percent over the next 20 years, domestic freight tonnage will almost double and the volume of freight moving through the largest international gateways may triple or quadruple,” says the FHWA report. “Without new strategies to increase capacity, congestion at freight bottlenecks on highways may impose an unacceptably high cost on the nation's economy and productivity.”

Over the last six years, several disastrous events have occurred in the U.S. that have further highlighted the importance of a reliable and efficient national transportation network. Prior to the terrorist attacks on New York City and Washington, D.C., in 2001, and the evacuation of Gulf Coast states following Hurricanes Katrina and Rita in 2005, the role of transportation infrastructure in emergency preparedness efforts was often overlooked. That mentality changed after these events. While there are a great many operational strategies that can be employed during times of crisis to make the movement of people and freight more efficient, adequate capacity is also essential to ensure citizens can leave and responders can access impacted areas. This reality further reinforces the need to address the nation's surface transportation capacity crisis.

### **Appropriate Federal Role**

Incumbent in the effort to answer the question of how to address the nation's surface transportation needs is an understanding of the role for various sectors with responsibility and ownership of this system. As the Commission is charged with making recommendations to Congress about what federal policy and financing changes are necessary in pursuit of this goal, it is important to define the appropriate role for the federal government in addressing the nation's surface transportation challenges.

The U.S. Constitution provides a foundation for the federal role in surface transportation policy by giving Congress the responsibility of regulating commerce among the states and with other nations. A national, coordinated system of well-maintained highways and bridges with intermodal linkages must exist in support of interstate commerce and commercial export. The Constitution also requires the federal government to provide for the national defense. To meet this responsibility, the federal government must ensure that efficient transportation facilities are available to expedite emergency military and industrial mobilizations and support civil defense needs and activities.

In addition to this Constitutional direction, there are functional aspects to this question. Webster's New World Diction defines holistic as "an organic or integrated whole [that] has a reality independent of and greater than the sum of its parts." This definition is the embodiment of what a national transportation system must be and underscores the need for the federal government to ensure a holistic approach to the nation's transportation challenges is implemented.

The value of one state's roadway network or one city's public transportation system is greatly diluted if it is viewed in isolation. Integrating these facilities into a national transportation network, however, can facilitate economic growth for a region, provide citizens with unimpeded mobility, and ensures national objectives, such as public safety, are addressed. For example, a major metropolitan area with a successful public transportation system achieves more than just mobility for users of that system. Freight shipments to and from this area by highway are also greatly enhanced by the reduced roadway congestion facilitated by a successful public transportation system. As a result, businesses in that area and across the nation are more productive due to the opening of this market that is realized because of a local transportation solution.

This reality is further quantified by the Commodity Flow Study produced by the Bureau of Transportation Statistics and the U.S. Census Bureau. According to the 2002 edition of this report, the latest data available, \$6.2 trillion of product shipments, or 74.3 percent, of the \$8.4 billion value of all product shipments in the U.S. in 2002 was carried by trucks over the nation's highways. In addition, \$1.1 trillion or 12.8 percent of the value of shipments went by private courier or the U.S. Postal Service, or by a combination of truck and water or truck and rail. In all, then, more than 87 percent of the value of shipments involved truck transportation on the nation's highways.

Comparing the 1997 and 2002 Commodity Flow Surveys, the fastest growing mode for shipping products was truck transportation. The value of shipments by truck grew 26.3 percent during that 5-year period, compared to 15.6 percent for air freight, 17.9 percent by water, and an actual decline of 2.5 percent for shipments by rail.

**Of the \$6.2 trillion of product shipments by truck, only \$2.8 trillion or 44.4 percent remained in the same state where they originated. The other \$3.5 trillion or 55.6 percent was shipped to destinations in other states. For the average state, then, shippers depend more on highways in other states than in their own.**

**Shippers in some states are far more dependent than average on highways in other states. For example, in Arkansas, Delaware, Indiana, Iowa, Mississippi, New Hampshire, Rhode Island, South Carolina, Tennessee, and West Virginia, more than 70 percent of the value of product shipments by truck go out of state. For another 16 states, the value of truck shipments that depend on out-of-state highways exceeds 60 percent. This includes such large states as New Jersey, Wisconsin, Ohio, Oklahoma, Pennsylvania, Georgia and Missouri.**

Despite this clear economic interdependence among the states, some continue to suggest the federal role in building and maintaining the nation's highway network should be in large part, or entirely, turned over to the states. These "devolution" proposals are grounded in perceived equity concerns and fail to recognize the value each state receives from being able to ship its products reliably and efficiently beyond its own borders.

Under a devolution proposal, such as legislation introduced in 2006 by U.S. Senator Jim DeMint (R-S.C.), the federal motor fuels tax would be reduced or repealed entirely. While a handful of states have laws that would require an automatic increase in their own state gas tax commensurate with any decrease in the federal motor fuels tax, the vast majority of states would be required to pass separate legislation generating new revenues for surface transportation investment or face a cut in overall surface transportation funding. It should be noted the federal government on average over the last two decades has accounted for 43 percent of highway capital funding and provided almost 40 percent of transit capital expenditures in 2004. As such, maintaining current surface transportation investment levels under a devolution scenario would require the average state to increase its own state gas tax by 18.4 cents per gallon or develop some other mechanism to generate an equivalent level of investment. The alternative would be a patchwork of state transportation systems with varying levels of performance on key segments.



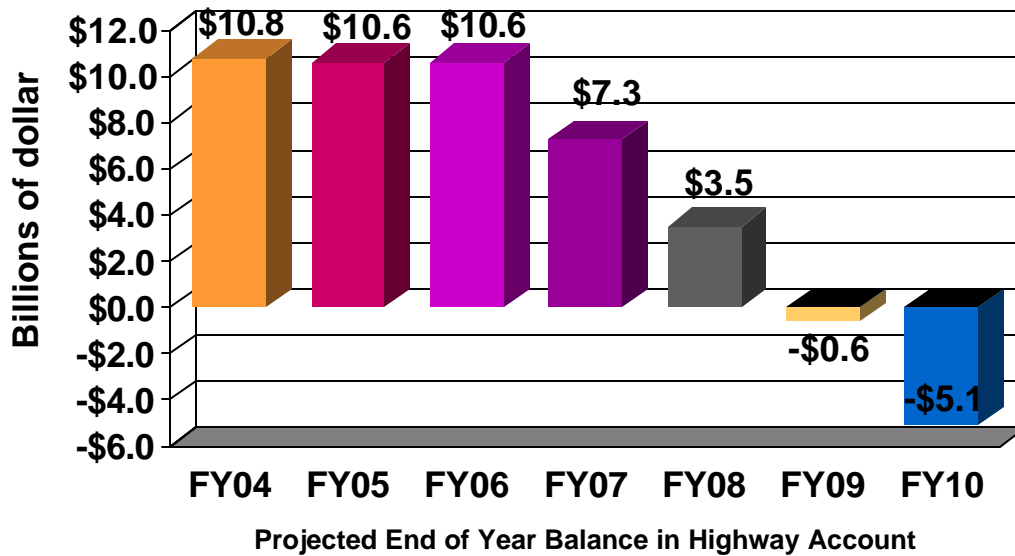
In summary, the United States has a national economy that will only function efficiently with a holistic national transportation system. Individual states do not compete with China or the European Union and it is not the responsibility of individual states to ensure mobility beyond their borders. These are clear federal responsibilities and only through federal leadership will the benefits of our nation's surface transportation network be maximized. Continuing and enhancing the federal government's responsibility for the development and maintenance of the nation's surface transportation network, therefore, is essential for ensuring a comprehensive and effective approach to addressing the nation's transportation challenges.

### **Short-Term Challenges and Solutions**

With the need for a strong federal surface transportation commitment clearly established, it is appropriate to begin defining the nature of those challenges and potential solutions. As I mentioned at the beginning of my testimony, it is important to differentiate between short- and long-term challenges. The short-term challenges facing the federal surface transportation program are twofold: a rapidly declining Highway Trust Fund balance; and surface transportation infrastructure needs that far exceed available revenues.

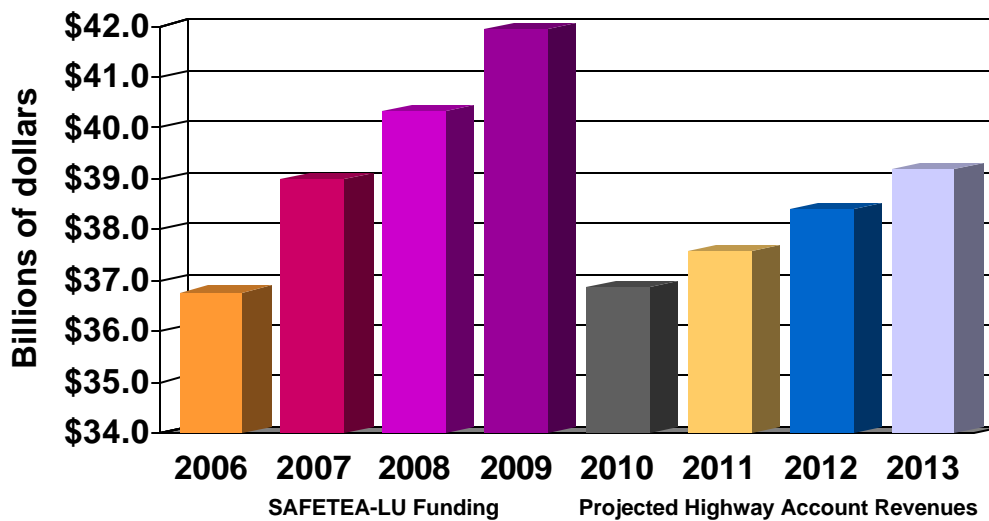
The Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 finances its highway and transit investments by utilizing all current cash flows into the Highway Trust Fund and drawing down the trust fund's unexpended cash balance. The Highway Trust Fund balance is expected to be depleted by the expiration of SAFETEA-LU in FY 2009, if not before. The Bush Administration's FY 2007 budget submission to Congress estimated that by the end of FY 2009 the balance in the Highway Trust Fund's Highway Account would be negative \$2.3 billion. The Administration's FY 2007 budget mid-session review, released in July, however, included a somewhat improved Highway Account balance estimate of negative \$600 million by the end of FY 2009. Figure 1 below demonstrates this situation over the life of SAFETEA-LU. It should be noted the Highway Trust Fund's Mass Transit Account balance is projected to remain positive throughout the life of SAFETEA-LU, but it is estimated to be negative in FY 2010 under the current financing structure. While a potential negative balance in the Highway Account may need to be addressed, it is not the most serious short-term trust fund financing challenge.

**Figure 1**



In SAFETEA-LU’s final year, Highway Trust Fund Highway Account revenue collections are projected to be \$36.7 billion; the guaranteed federal highway investment for that fiscal year is \$41.2 billion. As such, an immediate \$4.5 billion in new annual revenues would be necessary just to maintain FY 2009 highway investment levels in FY 2010, with even greater resources being needed to maintain purchasing power and address documented highway and bridge needs. Figure 2 below clearly demonstrates the differential between SAFETEA-LU highway investment and future revenues.

**Figure 2**



The combination of no Highway Trust Fund balance to further draw down and a major differential between FY 2009 spending and FY 2009 revenues will force policy makers to choose among a series of unappealing options at the onset of the next reauthorization of the federal surface transportation programs: cut federal highway investment by \$4.5 billion in FY 2010; abandon the relationship between Highway Trust Fund revenues and spending by transferring funds from other areas of the federal budget to the surface transportation programs; or increase Highway Trust Fund revenues.

As we discuss the clear challenge presented by the Highway Trust Fund's looming cash crisis, we should not lose site of the fact that annual federal highway and transit investment is well below currently documented system needs. I recognize a major component of the Commission's work to date and in the near future will be a true quantification of these needs and ARTBA looks forward to working with the Commission to develop this analysis. For purposes of discussion, I would point out a recent analysis of the highway and public transportation capital needs by the U.S. Chamber of Commerce concluded an additional \$23 billion in federal investment is necessary each year to simply maintain current conditions and congestion levels on these systems. ARTBA has long believed these metrics should serve as the minimum federal investment targets.

There are a number of financing options available to Commission members and federal policy makers to address these challenges. Among these are:

- Increasing the federal motor fuels tax and other Highway Trust Fund revenue sources—the motor fuels tax has been proven to be the most effective, reliable and equitable means of financing surface transportation improvements. It could also be implemented very rapidly as the collection and expenditure mechanisms are already in place. While increasing Highway Trust Fund user fees is considered by some to be politically difficult, ARTBA believes it is the logical, first choice and simply a matter of political will.
- Tolling/Privatization—tolls and private capital contribute about 4.5 percent annually to the total revenue pool currently available for U.S. highway program investments. Much of this revenue is used for debt service. While there is potential to expand the application of tolling in the U.S. and to attract even more private capital to highway investments, objective research suggests these methods alone cannot realistically be anticipated to raise the amount of revenue necessary to substantially close the existing highway capital investment gap. As such, while they should be promoted and encouraged, they should not be overemphasized as solution to meeting future funding needs. It is also imperative that revenues realized by public entities through the sale of concessions be reinvested only in transportation infrastructure programs.
- Eliminate all Highway Trust Fund Exemptions—certain entities are provided exemptions from paying federal motor fuels taxes. According to the U.S. Department of Treasury, these exemptions collectively amount to \$1.2 billion per year in foregone HTF revenues. As such, eliminating these exemptions would generate over \$7 billion in new HTF revenues to finance highway and public transportation improvements during the life of the next reauthorization bill.
- Debt Financing—mechanisms by which federal tax exempt or tax credit bonds are issued with the proceeds from these sales targeted exclusively for transportation infrastructure projects are a viable opportunity to generate new federal resources. These proposals,

however, must be carefully crafted and include several specific components to ensure their success. During the SAFETEA-LU debate, however, debt financing proposals were opposed by the U.S Treasury Department on the grounds of interfering with existing Treasury bond issuances.

- General Fund Transfers—some have suggested dedicating federal general fund dollars to fund surface transportation improvements. This proposal would eliminate the user fee financing structure of the current system and is not realistic due to the increasing federal deficit and high demand for domestic discretionary revenues throughout the federal budget.

Mr. Vice Chairman, as I stated at the beginning of my testimony, there are no easy answers to the nation's transportation challenges. As Commissioners review the short-term options available to generate the revenues clearly needed to prevent dramatic highway investment cuts and meaningfully address the needs of the nation's surface transportation network, there are no alternatives without political difficulties. That said, not all of the available options would achieve these goals. The central decision for the Commission and for policymakers involved in the next reauthorization bill will be between choosing alternatives that meet the nation's transportation needs or alternatives that are politically acceptable.

ARTBA believes an immediate increase in the federal motor fuels tax must be enacted as the foundation for beginning to address the nation's surface transportation infrastructure needs in the short term. Based on ARTBA's analysis of the 2004 U.S. Department of Transportation's Conditions and Performance Report, a total fuels tax increase of between 12 and 13 cents per gallon would be necessary to maintain the current physical conditions and system performance of the nation's highway and transit network—this amount would decrease if a fuels tax increase is combined with other alternatives to support highway and transit improvements. We also believe the federal motor fuels tax should be linked to the Consumer Price Index to ensure the purchasing power of this revenue stream is maintained in the future.

ARTBA also recommends the current Highway Trust Fund exemptions be eliminated. This proposal was supported in the Bush Administration's FY 2006 budget and included in the Senate version of the 2005 highway and transit reauthorization bill. Enactment of this recommendation prior to the reauthorization of SAFETEA-LU would provide revenues to stabilize the Highway Trust Fund's Highway Account balance until a comprehensive financing structure could be debated in the 2009 reauthorization of SAFETEA-LU.

Furthermore, ARTBA believes the federal government should continue to promote the use of toll financing and encourage private sector capital to further enter the U.S. transportation construction market. As it is difficult to estimate the level of transportation improvements these two options could support in the short-term, they should be viewed in the appropriate context as supplements to the core highway and transit programs.

ARTBA urges the commission to proceed with a composite of recommendations to address our short-term transportation challenges. By pursuing a multi-pronged approach, the level of reliance on any one of the available options would be kept to reasonable and attainable levels. These options would also generate meaningful improvements and provide an opportunity for the

nation's transportation system to operate in a sustainable and efficient manner while a long-term transportation financing mechanism is implemented.

### **Long-term Challenges and Solutions**

To ensure the long-term political viability of the federal surface transportation program, it is essential that a clear federal mission be articulated. In the 1950s, the federal government embarked on a major initiative to build the Interstate Highway System. This objective transcended parochial concerns of individual states and provided a clear sense to the public about the value of their financial contributions to a national transportation system. Unfortunately, in recent years the federal objective in surface transportation policy has been perceived to be less directed—even though the “Commodity Flow” studies demonstrate the absolute necessity of the current federal investment programs.

ARTBA initiated a SAFETEA-LU Reauthorization Task Force in September 2005—approximately one month after SAFETEA-LU was enacted. One of the fundamental tasks of this group has been to address the specific question of how to strengthen the federal role in federal surface transportation policy.

A consistent theme in the last three federal surface transportation program reauthorization bills has been increased flexibility for states. While the importance of giving states and localities the tools and autonomy to meet their unique needs cannot be argued, this has come at the expense of a clear federal mission in transportation policy. A handful of new programs have been established in the last two reauthorization bills that attempt to address truly national objectives. These attempts at bolstering the federal role in transportation, however, have been significantly underfunded and diluted by the perennial fight over highway funding formula returns.

The ability to move freight efficiently and securely and respond rapidly to national emergencies is largely dependent on the adequacy of the nation's surface transportation infrastructure network. It is imperative to recognize, however, these are true national challenges that require national solutions. In both freight movement and emergency preparedness, a systemic approach must be taken that transcends the borders of individual states or regions. While freight movement and emergency preparedness represent their own distinct challenges, developing an infrastructure network that allows the reliable movement of freight would provide the transportation capacity and redundancy necessary for effective responses to national emergencies.

There is currently no national strategy to facilitate the efficient and secure movement of freight and the scope of this challenge is beyond the ability of an individual state or local planning authority to address. While several programs have been created that are related to this challenge, such as SAFETEA-LU's trade corridor and projects of regional and national significance programs, they do not provide the comprehensive approach necessary to deliver a national freight movement system that will allow the U.S. to retain and improve its global competitiveness.

As such, ARTBA strongly recommends revising the structure of the federal surface transportation program to consist of two separate, but equally important components:

- The current highway and transit programs must be significantly better funded through the existing user fee structure and reformed to address future safety and mobility priorities. They should focus attention and resources on upgrading and protecting the nation's enormous past investments in surface transportation infrastructure.
- The federal government must initiate a new program, funded with new, "fire-walled" freight-related user fee mechanisms, that over the next 25 years that will greatly expand the capacity of the nation's intermodal transportation network. Its centerpiece will be the initiation of a well-funded "Critical Commerce Corridors Program" (3C) aimed at improving U.S. freight movement and emergency response capabilities.

The first component of this new federal structure was largely addressed in my earlier testimony which identified specific methods to allow the current federal highway and transit programs to be better funded and more effective in the short-term. As the goals and structure of the current federal surface transportation program are well understood, I would like to elaborate on the proposed new 3C initiative.

The goals of this new program would be to provide: superior military and emergency transport capabilities; enhanced provision of goods and services that powers the economy and provides American citizens with increased discretionary income due to reduction in transportation costs; and a superior U.S. position in the global business environment. We envision the structure of this program being centered around a set of roadways or other surface transportation facilities that have been deemed in need of upgrading or expansion to ensure the movement of freight. The responsibility for the identification of these segments of the surface transportation network should be given to a federal official or entity with expertise in transportation infrastructure and freight logistics. Once these critical corridors have been identified, the federal government, in coordination with state departments of transportation, should begin the process of funding the improvements necessary to ease the flow of freight.

The "3C Program" should be funded separately from—and differently than—the current Federal-aid Highway Program. It should be user fee funded. Rather than being dependent on current excises, the "3C Program" will draw financial support from a combination of new user fees imposed on the shipment of freight and developed by the U.S. Secretary of Transportation. Such fees could include: annual federal automobile and truck registration fees that are weight-based; a federal freight transaction fee paid by businesses moving freight by truck; national freight transfer station entrance/use fees; federal customs fees; or imposition of federally-endorsed tolls where appropriate and realistic. To ease the acceptance of these fees by the freight community, it is imperative for the fee structure to be equitable and commensurate with the value derived from the more efficient movement of freight.

It is also essential the funding for this initiative be "firewalled" from existing Highway Trust Fund revenues to emphasize the need to address both the national issue of freight movement and the critical regional and local priorities targeted by the core federal highway and transit programs. This segmentation of financing sources would also assure shippers paying the new freight dependent user fees that these revenues would be exclusively dedicated to projects that benefit their direct interest.

The result of this type of initiative would be a national strategy to dealing with the growing challenge of efficiently moving freight. This is a challenge that is about more than congestion, bottlenecks and delayed deliveries. It is about securing America's place in the global competitive market. Other countries with aggressive economic objectives recognize the need for a strong transportation infrastructure foundation. For example, China is dramatically upgrading its highway infrastructure with the goal of connecting all 31 provinces. If we fail to address this challenge in a meaningful way, our position as world economic leader may be at risk.

Admittedly, this proposal will require transportation planners and stakeholders to accept a dramatically different version of the federal surface transportation program. We also recognize any proposal that calls for increased financial contributions from system users will be met with resistance from some. These concerns, however, pale when compared to the more fundamental question of "Is the status quo working?" Any reasonable analysis should lead to the conclusion that something different must be done.

### **New Paradigm Needed**

Mr. Vice Chairman, other member of the Commission, our nation's surface transportation infrastructure network is at a crossroads. We are facing major transportation challenges in the short- and long-term. Existing financing mechanisms are failing to keep pace with growing demands not because they represent an outdated or ineffective model, but because of purely political externalities. The hard reality remains that, no matter how it is structured, a solution to the nation's surface transportation challenges must include additional investment. Transportation infrastructure improvements cost money and the longer they are delayed, the more they will ultimately cost.

The nation's transportation challenges, however, are not insurmountable. We must utilize all available options to meet these needs and we must do so in a holistic manner that recognizes our surface transportation infrastructure network is a true system of interrelated pieces. In keeping with this requirement, the federal government must play a leadership role, not only in promoting alternatives, but in delivering tangible resources and direction to meet the nation's surface transportation needs.

I commend each of you for devoting your time, energy and expertise to this monumentally important task. On behalf of all members of the American Road and Transportation Builders Association, we stand ready to assist you in fulfilling your mission.

Thank you again for the opportunity to appear before you today. I would be happy to answer any questions you may have regarding my testimony.

**JAMES TAYLOR**  
**Principal**  
**Mercator Advisors, LLC**



## **PANEL IV: MEETING THE NEEDS**

**JAMES TAYLOR**  
**Principal**  
**Mercator Advisors, LLC**

Mr. Taylor is a Principal with Mercator's New York office. His area of expertise is developing financing strategies for new transportation facilities that are supported primarily by user fees.

Mr. Taylor was one of the lead investment bankers on the 1995 revenue bond financing for the E-470 Toll Road Project in Denver, Colorado – a transaction recognized by Institutional Investor magazine as a “Project Finance Deal of the Year.” He also helped develop and implement the financing strategy for the private consortium that was selected by the Port Authority of New York and New Jersey to develop, construct and operate a new international air passenger terminal at Kennedy International Airport. He has served as a lead investment banker for two not-for-profit organizations created to construct and operate toll facilities and has structured debt financings for private toll road owners in Virginia, Texas, and California.

Prior to joining Mercator Advisors in 2006, Mr. Taylor worked as an investment banker for a total of 19 years in the Public Finance Departments of Bear Stearns, Lehman Brothers, and Smith Barney.

He graduated from the Massachusetts Institute of Technology and received a Master of Public Policy degree from the Kennedy School of Government at Harvard University.

**Statement of**

**James T. Taylor II  
Principal, Mercator Advisors LLC**

**National Surface Transportation Policy and Revenue Study Commission  
New York City Field Hearing  
November 16, 2006**

**“Meeting the Needs”**

Members of the Commission:

My name is Jim Taylor and I am a Principal of Mercator Advisors LLC. Mercator helps project sponsors map out strategies for leveraging public and private sector resources for major infrastructure projects and capital programs.

Prior to joining Mercator, I worked as an investment banker for 19 years and had the opportunity to structure debt financings for several major projects developed through public-private partnerships, including many start-up toll road facilities and the international air passenger terminal at Kennedy International Airport. I also served as a member of the Transportation Research Board committee that produced the report "The Fuel Tax and Alternatives for Transportation Funding" referenced in your authorizing legislation.

My prepared comments today focus on one of the questions posed to this panel: What is the case for continued federal funding of transportation infrastructure?

Given the magnitude of the investment needs in the surface transportation area, one could argue that there really is no viable alternative to continued federal support in the short term. According to the National Chamber Foundation, an additional \$500 billion may be needed through 2015 just to maintain the condition and performance of the nation's existing highway and transit systems. There may be some who believe that it is time for state and local governments to assume more responsibility for transportation, but if Congress can't muster the political will needed to raise motor fuel taxes, one has to question whether 50 state

legislatures will rise to the occasion, impose a net increase in gasoline taxes (or provide other funding), and then dedicate the resources to maintaining and reconstructing existing federal-aid infrastructure.

Even if one ignores the practical issue of how we address short-term needs, it seems reasonable to suggest that the federal government should at least continue to play a significant role in preserving and enhancing the capital assets it has already helped to create, namely the interstates and other roads in the National Highway System. With the federal budget deficits and fierce competition for limited federal resources though, even that premise has been questioned.

So where does that leave us? For many, the answer is to create a bold new vision for the federal surface transportation program that will inspire the type of broad-based political support generated 50 years ago for construction of the interstate highway program. Establishing a new mission statement for a federal agency in order to justify or rationalize further funding is not new - NASA was in a similar position after the loss of the Space Shuttle *Columbia* - but it is important to recognize that with regard to transportation infrastructure in the U.S., the federal government does not then implement the game plan. State, regional and local governments decide when, where and how improvements will be made. Concepts like "unleashing the private sector" and "harnessing the power of the marketplace to reduce traffic congestion" will be empty rhetoric if those entities do not support the federal objectives or lack the resources to carry them out.

Any vision for America's transportation future has to be built upon a realistic assessment of where we are today, not just an idealistic view of where we want to be 25 or 50 years from now. That means acknowledging that the federal-aid concept adopted in 1916 and the Highway Trust Fund approach implemented in 1956 are not "broken" and that they have, in fact, served us well.

In order to make significant progress on developing alternative funding sources and mainstreaming innovative finance strategies, we need to fix what we have first. As an

investment banker, I had to tell numerous clients that their projects were not financially viable. In many of those cases, it was because of deficiencies in the existing transportation network. Express toll lanes don't work if they also have to cover the cost of improving the adjacent general purpose lanes. Truck tollways offer little value if they simply rush the users to the next bottleneck. By improving existing infrastructure, we can strengthen local economies and build public confidence in government - two important factors in any project financing initiative.

There are several other areas related to financing and project development where I believe that the federal government can make significant contributions, but in the interest of time and clarity, I will conclude with this:

Everyone understands how difficult it will be to convince Congress to increase fuel taxes, but we can't afford to abandon that effort and let people think that it will be possible to address critical mobility needs if we don't first protect our investment in existing infrastructure. Strengthening the federal-state partnership and providing a dedicated, predictable, source of funding for the federal share of baseline investment needs, is the best way to foster an environment where innovation and creativity can truly blossom.

**THOMAS J. MADISON, JR.**  
**Commissioner**  
**New York State Department of Transportation**

## **PANEL IV: MEETING THE NEEDS**

**THOMAS J. MADISON, JR.**  
**Commissioner**  
**New York State Department of Transportation**

Thomas J. Madison, Jr. is Commissioner of the New York State Department of Transportation (NYSDOT). As Commissioner, he is statutorily charged with chairing or participating in several transportation related boards and authorities. These include the New York State Public Transportation Safety Board, the Metropolitan Transportation Authority (MTA) Capital Program Review Board, and the Governor's Traffic Safety Committee (GTSC), among others.

Commissioner Madison brings to the Department 15 years of experience in both the public and private sectors. Prior to joining NYSDOT, Commissioner Madison served as the Governor's principal advisor on transportation issues both as Assistant Secretary for Transportation and Deputy Secretary to the Governor. In both roles, Madison oversaw the executive management of New York State transportation agencies and authorities, including NYSDOT, the State Thruway and Bridge Authorities, and all upstate regional transit, port and bridge authorities.

Commissioner Madison was previously Deputy County Executive for Broome County, New York, where he provided executive management for the municipal government.

Commissioner Madison is a graduate of SUNY Geneseo, and holds a Bachelor of Arts degree in political science with a minor in international relations.

**Testimony of Thomas J. Madison Jr., Commissioner  
New York State Department of Transportation  
Before the  
National Surface Transportation Policy and Revenue Study Commission  
New York, NY  
November 16, 2006**

I would like to thank the commission for holding an early hearing in New York and the Northeast, where the need for an integrated, multimodal transportation system is so apparent.

The Northeast has the nation's oldest transportation infrastructure, which is heavily used for passenger and freight travel. Our modes of transportation are complex, interrelated, and heavily utilized. We have congestion not only on our highways, but also on our subways and buses, rail freight and intercity passenger lines, airports and seaports. We in the Northeast need federal transportation policy that will help us operate, maintain, restore, build and integrate the transportation infrastructure demanded by our customers and necessary for our region and nation to compete in the global economy.

Speaking for New York specifically, our state is a microcosm of the nation's transportation network. Our transportation network serves the largest metropolitan region in the nation as well as very rural areas, and provides key connections to New England, Canada, the rest of the nation, and the rest of the world. Our network also is multimodal. New York State's transportation system includes 240,000 lane miles of highway and 17,400 bridges. It also includes 130 public transit systems, a 4,800-mile rail network, 485 public and private aviation facilities, and 12 major public and private ports. New York State's system carries 136.7 billion vehicle miles of travel annually and provides more than 2.5 billion transit passenger trips each year (more than one-third of the nation's transit ridership). It also is the origin or destination of fully one-third of the nation's intercity passenger rail riders, and it serves more than 35 million ferry passengers and 40 million air travelers each year. New York's system also moves more than 150 million tons of freight each year through its rail and port facilities.

New York's financial issues are not unique, though they are large on the national scale. We are undertaking the most robust capital investment program in our state's history, investing \$38 billion between 2005 and 2010, and we invest more than \$2.8 billion annually in transit and highway operations and maintenance. Yet our system needs, including basic capital investments and a number of large mega projects, are estimated to cost at least \$70 billion more than our current investment. This figure does not fully account for the looming infrastructure needs that will occur as the system ages, nor the need to modernize and to operate our system using the latest technologies.

Today, I would like to provide some insights on how federal policy can better meet the transportation challenges facing my state and the nation over the next several decades.

## **I. National Transportation Policy**

### **Need for a National Transportation Vision**

The creation of the National Surface Transportation Policy and Revenue Study Commission in SAFETEA-LU presents a once-in-a-generation opportunity to develop a new national policy to guide transportation planning and investment through the first half of the 21<sup>st</sup> Century. The last comprehensive national policy was developed in the late 1970s, more than 25 years ago. With the completion of the interstate highway system, a rapidly aging infrastructure, and changes in the demands on transportation from the global economy, a new multimodal national transportation policy is needed now.

This commission should seize this opportunity to develop and to recommend a new transportation policy that will carry our nation into the future. The policy should be multimodal, should promote seamless integrated transportation and should emphasize increased federal involvement in those parts of the system that support the national economy.

Promoting “equity” in the distribution of federal transportation funding has been the hallmark of the last two surface transportation reauthorization bills. In fact, so much of the focus has been on this so-called “equity” that it now represents the largest funding category in the federal highway program, accounting for nearly one-quarter of all apportionments – larger than the National Highway System, Interstate Maintenance or Highway Bridge Replacement and Rehabilitation programs. Redistribution of funds is NOT a visionary role for federal transportation policy, and in fact, it penalizes states like New York that invest heavily in transit systems and minimize gasoline consumption. It also has the negative impact of pitting one region of the nation against the other by redistributing the funds, not to where the needs are, but to where those funds are collected. The nation needs a strong focused policy that addresses system needs. If returning gasoline taxes to states is the federal policy role of the future, then states would be better served to keep their gas taxes and to eliminate the federal strings.

### **Establishing a Bold New Transportation Vision**

There needs to be a bold new vision for the surface transportation system of the future. Fifty years ago, the nation rallied behind the vision of a continuous system of interstate highways that would connect the nation, would stimulate the economy, would improve the quality of life and would provide security and mobility. The tenets of that vision are still compelling. Transportation is important to everyone, every day. But the vision can no longer be achieved through a program aimed primarily at one mode. The system of the future must provide seamless connections between modes and operators so that travelers and shippers can conveniently and reliably complete trips to meet individual and business needs. The surface transportation system of the future should be:

“An interconnected surface transportation system, funded at an appropriate level, maintained and preserved in accordance with sound asset management principles,



efficiently operated using the latest available technology and expanded, where appropriate, that will:

- Enhance the United States' competitiveness in a global economy;
- Meet the growing travel demand of an increasing population and expanding economy;
- Provide personal mobility and safety;
- Ensure that the system continues to provide access and connectivity to all areas of the country;
- Ensure environmental sustainability;
- Promote integrated land use; and
- Support national defense and homeland security.

The surface transportation system of the future should accommodate the flow of people and goods using an interconnected system of highways, rail stations and rail service, intercity bus stations and intercity bus service, transit services, waterways, ports of entry, passenger and freight intermodal facilities, pedestrian and bicycle facilities, ferryboat and private-sector services.

The surface transportation policy of the future should support not only a sound transportation system but a wide variety of transportation choices.”

In New York State, we just released our transportation vision for the future in *Strategies for a New Age: New York State's Transportation Master Plan for 2030*. Our plan focuses on five priority result areas that align well with the national vision we propose – mobility and reliability, safety, security, environmental sustainability and economic competitiveness. We also established a very similar vision for seamless transportation. In New York, we are already working toward the vision we propose for the nation.

## **II. Strengthen the Federal Role**

Realizing a bold vision will require a stronger federal role. Transportation is an asset, not a liability. It must be recognized and promoted for the economic lifeline it is, and funded appropriately to continue to meet the nation's needs. The federal role should include:

- Promoting and marketing the importance of the transportation system to customers, stakeholders and legislators;
- Supporting a multimodal national transportation system;
- Ensuring maintenance and operation of the existing multimodal network; and
- Funding needs at ports of entry that provide the connections between the nation and the rest of the world.

### **Promoting and Marketing the Transportation System**

Our transportation network is literally the lifeblood of the economy. We rely on transportation to deliver the goods we consume and to provide access and connections to

family, work and the rest of the world. It is so much a part of our everyday life that we rarely think about it, yet to lose it would be intolerable. The events of September 11, 2001 showed just how critical a sound interconnected transportation network is. Passengers were stranded without access to the airlines and insufficient national passenger rail service to meet the unexpected demand. More than a day of delay at the borders began to cause factory shutdowns, as businesses relying on just-in-time deliveries could no longer operate.

There needs to be a federal role in promoting and marketing the importance of transportation – of ensuring continued support from our customers, stakeholders and legislators. The federal role should include the development and implementation of a continuous public-awareness campaign designed to underscore the benefits derived from a well-maintained, safe and secure transportation system to the economy, the environment and the day-to-day quality of life. The public needs to be better educated in the value of preserving and maintaining what we have, as well as modernizing and expanding into new services. This will help justify increased investment in the future.

### **Supporting a Multimodal National Transportation System**

Today, there is a well established federal-state partnership for highways, transit and aviation. This partnership should be continued. In addition, the federal government needs to establish a strong role in rail transportation, to support and restore a national rail and intercity bus network and to support all modes of transportation to the extent they provide benefits to the nation.

### **Ensure Maintenance and Operation of the Existing Multimodal Transportation System**

In realizing a bold new vision, we cannot lose sight of the system we already have. We must recognize that we can not build our way out of congestion, and that our existing system will continue to meet the vast majority of transportation demand. To do this, our nation's existing, heavily used transportation system must be maintained in a safe, usable condition, and must be operated as efficiently as possible, using the latest technologies, before any major national capacity expansion program is initiated.

Constructing the interstate highway system was the primary federal transportation policy of the last half century. This national asset is now 50 years old, with many components of the system at or near the end of their useful lives. It will require significant resources over the next 20 years to reconstruct this system. As the interstate highway system is a national asset and provides national connectivity and mobility, there is a national role in maintaining, modernizing and optimizing the system. Reconstruction can be a time not only to restore the infrastructure, but to expand opportunities for the future (e.g., acquiring additional rights-of-way for future transit or transportation investments) and to maximize effectiveness with new and emerging technologies.

I urge the commission to consider recommending a new federal interstate highway reconstruction program that will make it a federal priority to rehabilitate the existing interstate system. This program should provide funding to states for needed modernization of the interstate network in a similar manner to the original interstate highway construction program, based on the cost to complete the necessary work. This will ensure that the prior federal investment in the interstate system is maintained and that this system of highways continues to serve national economic and defense needs far into the 21<sup>st</sup> century.

Here in New York, our highway system is mature and not likely to see significant expansion, yet congestion is expected to grow, especially downstate. It is predicted that over the next 20 years, truck traffic will nearly double in New York State, while our vehicle miles traveled will grow to more than the 180 billion.

But we also must recognize that our transportation system is broader than the interstate highways. Other infrastructure, particularly in the Northeast, also is aging and in need of rehabilitation and modernization. For example, New York City's subway system just celebrated its 100<sup>th</sup> birthday, and the rehabilitation and modernization needs of this vast and vital system are enormous. As an example, the tunnels under the East River into Penn Station will require hundreds of millions of dollars to address state-of-good repair, safety and security needs. These century-old tunnels, which serve Amtrak, Long Island Railroad and New Jersey Transit, were not designed to modern equipment, ventilation and evacuation standards.

The subway system in New York City also is facing congestion, and needs expansion in key locations. Projects, such as the Second Avenue Subway and the Long Island Railroad East Side Access project, will cut travel time and/or provide congestion relief to about 350,000 transit riders every weekday.

Many of the freight rail lines in the Northeast were originally constructed in the 1800s as a series of lines owned and operated by private companies. They were not designed to be operated as an integrated system. As a result, for business reasons, parts of this system were abandoned or removed. Today, there is a significant need to upgrade, to realign or to expand this network to meet the freight needs of a global economy. There is a national role in assisting the private railroads in modernizing the rail infrastructure to ensure that freight growth is balanced between modes and not disproportionately shifted to our nation's highways.

Similarly, the Northeast Corridor (NEC), the rail line stretching from Washington, D.C., to Boston, is a key intercity passenger transportation link that requires tremendous resources to bring it to a state-of-good-repair. The loss of this key facility would generate intolerable congestion along the already stressed I-95 corridor and the area's airspace. Given the critical nature of the NEC to the Northeast network, there should be a federal role in bringing this facility to a state of good repair.

## **Increased Federal Role at Ports of Entry**

Transportation supports a global economy. Increased federal support for infrastructure improvements at major ports of entry for trade and travel is critical to our nation's ability to compete in the global economy. This includes the major seaports, airports and international border crossings that carry global trade to/from the U.S. Here in New York City, the impact of global trade is evident. JFK International Airport ranked first in the nation in a 2004 ranking of all U.S. freight gateways with \$125 billion in shipments. The Port Authority of New York and New Jersey (PANYNJ) handled 4.8 million TEUs (twenty foot equivalent units) in 2005 – third-largest in the U.S. after Los Angeles and Long Beach. Of all the U.S. trade by vessel and air (\$1,773 billion), 16 percent (\$283 billion) moves through the New York-New Jersey region. This trade does not stay within the New York City metropolitan area. It travels throughout the region, the country and around the world. About half of the international cargo at PANYNJ originates from or is destined for locations beyond the 26 county PANYNJ region. Similarly, nearly one-quarter of all U.S. Canadian trade (the largest bilateral trading relationship in the world) passes through New York State's northern and western ports of entry. Nearly 80 percent of this trade either originates in or is destined for states outside of New York.

The federal government should bear a share of the cost of maintaining and improving transportation access through these facilities in relation to the benefits that accrue to the national economy. Localities should not be solely responsible for the cost of infrastructure at these ports of entry. While the impacts are local, much of the benefit of this trade is received elsewhere. Gateway projects can cost hundreds of millions, even billions of dollars. To expect states to fund these improvements through existing resources is unrealistic. There is a national role in funding national benefits.

## **III. Meeting the Needs**

It is clear that meeting transportation funding needs will not be easy. Traditional mechanisms of government finance are constrained. Gasoline-based taxes, the hallmark of highway funding over the last 50 years, will not be sufficient to sustain growing highway and transportation needs in the future. In fact, the solvency of the Highway Trust Fund will need to be addressed before the end of the current federal authorization, SAFETEA-LU. Answers will need to be both immediate and long-term.

## **Maximize Tools for Innovative Finance**

States will continue to need the assistance of the federal government in exploring and promoting all available innovative finance tools. This commission already has heard a great deal about public private partnerships. In New York, while we recognize that these arrangements alone will not answer our finance needs, we believe we need this option where it makes sense to deliver large, complicated projects faster and with greater customer focus, accessing the resources of the private sector. We continue to seek this broad authority from our legislature.

Other innovative financing techniques and flexibilities also may prove worthy of exploration. For example, here in New York, we successfully gained airline support to use passenger facility charges to help finance the Airtrain from JFK to Newark airports. Additional federal support for this or other ideas would be helpful.

### **Ensure Flexible Funding**

Today's federal transportation financial structure is complex and largely mode specific. Current modal silos should be reduced and flexibility increased to allow states to finance the type of transportation projects that best achieve increased mobility for people and goods, and/or allow for operations where such investments are more efficient than a capital improvement. Further, future sources should avoid such silos, and be flexible and multimodal. As with other federal programs, funds should be allocated based on needs and on the extent to which such investment will advance the national transportation agenda.

### **Expand and Diversify Transportation Revenue Sources**

Finally, it is clear that new sources of revenue for transportation infrastructure and operations must be tapped to meet the need for increased investment in public and private transportation facilities. Given the transportation system's critical support of the nation's economy, new revenue sources that capture and reinvest economic benefits should be pursued.

Transportation revenue should be diverse because the transportation solutions are diverse. The commission needs to consider reliable and sustainable funding alternatives that provide maximum flexibility to invest funds where they are most needed, regardless of mode, and where they will produce concrete results. Results may be achieved through investment in a new highway link, or a new rail service, or through improved operations using new technology, through a safety or maintenance strategy, through a demand management strategy, or something not yet considered. We need to be bold and creative in seeking revenue that appropriately funds the national benefits provided by transportation.

AASHTO, NCHRP and others are considering medium and long-term funding alternatives and sources. The results of these studies should be instructive in efforts to identify alternative revenue sources.

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Meeting the national multimodal transportation needs of the future will not be easy and will require many new strategies and bold ideas. This commission has the opportunity to establish these bold ideas and create a national transportation policy that will serve the nation for the next half century. I applaud the work of this broad-thinking commission and look forward to the results of your study.

# National Surface Transportation Policy and Revenue Study Commission



New York, New York  
November 16, 2006

Thomas J. Madison Jr., Commissioner  
New York State Department of  
Transportation

# Northeast's Infrastructure Issues

- The Northeast has the nation's oldest transportation system.
- Our system is complex, interrelated, and heavily utilized by passengers and freight.
- Congestion is growing rapidly on all modes.



# A Bold New Transportation Vision

- A Multimodal national transportation policy
- Needs-based federal funding distribution
- Integrated transportation planning and financing across all modes





# Strengthen the Federal Role

- Promote and market the importance of the nation's transportation system
- Expand federal partnerships to include all modes
- Maintain and operate the existing network
- Strengthen the federal role at border crossings, airports, and seaports



# Meeting the Needs

- Diversify our revenue sources and options
- Encourage the use of Innovative Financing
- Increase funding flexibility across modal silos

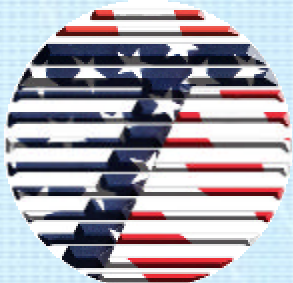


# Looking Ahead.....We Need:

- A Bold New Vision
- A Stronger Federal Partnership
- To Make Smart and Creative Investments
- To treat Infrastructure Investments as ASSETS, not Liabilities!



# National Surface Transportation Policy and Revenue Study Commission



Thomas J. Madison, Jr.  
Commissioner  
New York State Department of  
Transportation

**ROSS J. PEPE**  
**President**  
**Construction Industry Council of Westchester &**  
**Hudson Valley, Inc.**

## **PANEL IV: MEETING THE NEEDS**

**ROSS J. PEPE**

**President**

**Construction Industry Council of Westchester & Hudson Valley, Inc.**

Mr. Pepe has served as chief executive officer of New York State's largest regional construction industry trade association since its formation in 1978. For the past 18 years he is a member of the Department of Labor's Public Work Advisory Board by appointment of the Governor of New York State.

As a regional vice president and treasurer of the New York Roadway Improvement Coalition, Inc. Mr. Pepe has been instrumental in assisting state government undertake a \$35 billion, 5-year upgrading of the state's aging road, bridge and mass transit systems.

Currently Mr. Pepe serves on a special task force of the NYS Department of Transportation to develop guidelines and regulations for operations of heavy vehicles using divisible load permits to transport construction, fuel, refuse and similar materials over local, state and interstate highways. He is also a member of a bi-county citizen's committee representing Westchester and Rockland counties in New York State seeking a final solution for scheduled replacement of the Tappan Zee Bridge by 2015.

Good afternoon. My name is Ross Pepe. Thank you for the invitation to appear today before this important Commission. I am here on behalf of the New York Roadway Improvement Coalition (NYRIC). NYRIC consists of New York State associations and unions representing the heavy construction industry. Our members are those companies and unions that build the roads, bridges, tunnels, ports and infrastructure that makes New York the Empire State. Some of our members have been around for almost one hundred years. We were the contractors and workers who played a critical role in the ground zero clean-up.. While you will hear from planners, economists, and City and State officials, our testimony reflects decades of experience in what it takes to actually build the public works projects that this country so critically needs.

My remarks today will reflect NYRIC's overall perspective on the infrastructure challenges facing our nationwide transportation system. With the time I have, NYRIC intends to set forth a clear agenda for a strong federal role in the planning, execution and funding of the system for the next fifty years. We will be submitting for the record a more detailed summary of the actual projects and initiatives that are critical to not only our region, but the nation as a whole.

The Commission is to be commended for undertaking this important initiative and recognizing that our future is tied to a transportation system that will meet the needs of this country and region over the long term. By asking where our infrastructure should be in the next fifty years, you have set a framework for establishing a comprehensive agenda that links economic development with prioritized transportation planning and stable funding. These three goals must be the foundation of a new national plan to build the next century of great public works projects.

At the outset, we must recognize that today the idea of a federal agenda is largely defined by protecting or enhancing the economic prosperity of current Americans. A fifty year agenda acknowledges that the great transportation projects that built this nation, the Erie Canal, the

transcontinental railroads, the national highway system, our aviation network and maritime ports were not conceived for the current generation, but rather for generations to come.

Therefore, it is essential that this Commission assess, evaluate and recommend long term and financially secure funding mechanisms to address decades of construction plans. A nationwide agenda without a nationwide financial plan will only leave us with a sense that we can not build a better future - that it is only short term gain which drives national policy.

If we are to create a national agenda, secure financing must be the highest priority. As I am sure you will hear, there are a number of ideas and financing proposals which must be examined. As we have seen from the price volatility of gasoline, there is an opportunity to index a federal funding amount, based on a fairly moderate target that could help finance the agenda, without unduly burdening the economy. We must also look to user fees and congestion pricing, financial structures which send the right price signal to the user and encourages efficient use of our transportation system. At a minimum, we must ensure that the Highway Trust Fund is fully secured and funded. I am sure the Commission recognizes this essential challenge.

The role of the federal government in coordinating and funding our transportation agenda must also begin with recognizing our national economy is driven by certain key factors and transportation networks that, while local or regional in scope, are in fact vital to prosperity and mobility through out the country. I fully recognize the difficult role the Commission faces in hearing from all parts of the country on vital transportation needs. But, nonetheless, it is important to acknowledge that an "equitable" distribution and prioritization of federal funding and projects will not provide an equitable return to the nation in terms of economic development and congestion relief.

For this reason, the Commission must recognize that the northeast region, with both its population and economic importance to the country, is vital in setting long term goals. It is not a



“member item” to say that if the Northeast regional economy is choked with congestion and economic stagnation, then the overall economy will also stall. The message is that our transportation system links us all; let us ensure that those links are at their optimum where most needed. That is a federal agenda.

When the Commission looks to this region, there are four large networks that must be addressed: highway; mass transit; freight; and, international ports (aviation and maritime). Like the accident of history that makes the Northeast so important, it also makes these networks old and constrained. The lack of initiative and funding has left these critical systems in significant danger of over capacity, if not collapse.

First, in terms of the highway system for New York State, we are facing a funding deficit of enormous proportions. With NYRIC’s leadership, New Yorkers approved a \$2.9 billion Highway and Transit Transportation Bond Act last year; but, even with this amount, we are facing a significant funding short fall. Perhaps, most important to this Commission, is the future of the Tappan Zee Bridge. Once considered a secondary part of the network – a commuter linkage between northern suburbs – it is now a major connection for a growing regional economy that stretches from Boston to Buffalo. The New York State Department of Transportation, working with the Thruway Authority and Metro North Railroad have been reviewing various replacement options, none come cheap. From a low of \$4 billion to a high of \$12 billion, depending on the extent of mass transit included in this project, this bridge must be replaced. While innovative ideas such as public private partnerships may well address most of this cost, a federal role will likely be necessary to ensure the most beneficial and cost effective option with necessary safeguards and transparency moves forward or that toll rates not be so high as to economically preclude any mobility. Upstate New York faces a very similar challenge with the Buffalo Peace Bridge linking the growing eastern Canadian economy with Northwest New York. As this region grows, the Commission must begin to take into account the expansion of increasingly suburban locations for work destinations and the growth in intra-suburban commutation, requiring new

transit and freight distribution options. In short, New York State faces a transportation challenge with simply the network it has; to build for the next generation will require innovative public financing mechanism with a strong federal recognition that linkages like the Tappan Zee and the Peace Bridge must be part of an integrated federal strategy.

Second, in terms of mass transit, there is no system that does more to move people, improve the environment and create economic prosperity than the entire Metropolitan Transportation Authority's system. Today, we are on the verge of the most important system expansion since its inception. With much of the entire network at or over capacity, the time has come to construct the next generation of transit projects. From the Second Avenue Subway, to the extension of the No. 7 Train, East Side Access, a Third rail track on Long Island, a new passenger rail tunnel from New Jersey and a new Penn Station, the system as whole is in need of revitalization.

Understood from a nationwide economic perspective, there is little investment that would yield a higher return than these sets of projects. We must recognize the economic adage, "as goes New York, so goes the nation."

Third, freight distribution is perhaps our most vexing challenge. Today, America relies on the rest of the world to produce the things we use everyday. This economic transformation of the world's economy poses a whole new set of transportation problems for the country, and the New York region in particular. Again, just a couple of statistics to give you a sense of this challenge: the George Washington Bridge handles nearly 8.5 million truck trips a year and current regional truck volumes are expected to grow by 27 percent in the next twenty years. It is also estimated that congestion costs the region more than \$9 billion in economic activity every year. Clearly, without an aggressive solution to freight distribution and truck traffic, this region could find itself literally stuck in traffic. Here, again, the federal role can be significant. With congestion clogging the vital I-95 north/south corridor, federal regulation of short sea shipping can be encouraged to bring cargo north and south by smaller vessels from Miami to Boston, freeing much needed capacity on this network. Similarly, as Europe and Asia have demonstrated, barging networks

using local waterways are an integral goods movement strategy. Finally, the long sought rail freight tunnel, although costly, might well be necessary if the national goods distribution system is ever going to work efficiently. As I will detail later, technology must also begin to play a vital role in freight and truck distribution. These are national investments for mobility and economic development.

Last, like the freight distribution system, our aviation and maritime ports are undergoing a concurrent revolution, for it is these systems which are bringing the people and goods to this county. We are not competing with the rest of the world; we are working to keep up with the rest of the world. The numbers are staggering. As the world wide economy grows in Asia, India, and South America and still in Europe, the volume of goods coming into this country is growing exponentially. For the Port of New York and New Jersey alone, it is expected that container volume could grow to 12 million TEUs by 2020, up from 4 million today. With the West Coast Ports at capacity and the faster and more efficient all-water route from Asia through the Suez becoming increasingly competitive, cargo is seeking new east coast ports for landing. With a population of over 9 million people, goods will continue to pour into this region.

Unfortunately, moving these goods out of the port can not be solved with a single mega project like the Alameda Corridor. Given regional distribution patterns and urban density, it is not one project but a whole series of road and rail and warehouse projects that must be undertaken if the maritime port is to meet the needs of the nation. The Port Authority of New York and New Jersey has identified a whole series of projects for an inland port distribution network to efficiently link goods distribution with the consumer markets. The regional corridor project must include a multiplicity of road and rail separations; double stack clearance and dual tack rail expansion; and, the innovative use of technology to manage truck traffic in and out of the port. New York State has recognized that the Canadian ports and rail system must also be part of this corridor initiative, linking north and south in a series of system improvements. While local, all of these projects are nationwide in terms of value and scope.

Our Aviation system faces similar challenges in terms of capacity and expansion, for not just passengers but freight as well. Our regional aviation system had largely been built on the independent financing by the Port Authority of New York and New Jersey. Facing financial constraints, the Authority has undertaken a number of innovative public private partnerships: building an expanded international arrivals terminal in Kennedy Airport; three large terminal projects in Newark; and perhaps most importantly, the creation of the AirTrain system for Kennedy and Newark. But federal AIP funding has been critical as well. As the region now looks to further aviation expansion, perhaps even a new fourth airport, a delicate balance will need to be struck between the Port Authority's capacity to finance, private investment and federal funding. Without expansion of this regional system, the nation will cut itself off from the rest of the world.

In looking over the fifty year horizon, there will be many hard infrastructure projects that must be built. Nonetheless, the one dramatic economic transformation that will and must take place is the technology revolution in moving both people and freight. The sweeping technological innovations which have transformed other parts of our economy must now be integrated into our transportation system. And by this, I mean, a far more comprehensive and sophisticated federal agenda than simply the notion of an Intelligent Transportation System telling motorists of congestion problems. If we are to maximize the limited capacity of an already constrained system, which in many locations can not be expanded, we must create growth opportunities with new technology.

In many respects, we are only now seeing how technology can reshape transportation. GPS systems are becoming state of the art for goods distribution, not only nationwide, but world wide; universal bar coding on air and waterborne cargo is a standard business initiative; time of day delivery and warehouse systems are being developed throughout the worldwide commodity distribution network. All of these can be part of a significantly more efficient transportation

system. With a strong federal coordination role, ensuring that those who use the system are both paying for it and doing so efficiently can be realized.

As the federal government has already recognized, congestion or traffic management pricing and discreet user fees, must become part of our transportation system. And technology is the foundation for a potentially seamless system which can maximize capacity, increase mobility and allow for pricing of the system to ensure adequate funding. Given the need to implement such an initiative nationwide, this must be part of a federal agenda; a regional case by case agenda will only leave us with a partial solution.

This federal transportation technology agenda raises another critical need which can be addressed today, the need for a far stronger level of communication, coordination and implementation among the various federal, state and local transportation planning agencies. While transportation planning and coordination does appear at many local and state levels, there is a significant disconnect with the federal process both in terms of prioritization and funding. In light of the fact that there is not enough funding for the current projects, there must be a far more robust coordination of how these projects are prioritized and implemented. In short, we must ensure the projects that are going forward around the nation are the ones that provide the maximum return in terms of economic development and mobility.

In conclusion, the Commission is not without its challenges. As contractors who must build these projects, we know that it is with only clear eyed determination that priorities can be set, funding secured and projects built. To do so, the Commission must set a new tone for a federal agenda. As a nation, we can no longer afford to ignore these challenges and let short term political gains set the agenda. Built on a well articulated federal agenda, we can begin to develop a long term secure funding stream for the nation's vital projects. Our experience in New York has been when people know what they are paying for and see it built, they will support higher costs. The Commission must set forth a clear list of critical national projects. In moving forward, we

must take advantage of technological innovation to maximize transportation capacity. If that means a stronger federal role in terms of system utilization and funding then we must do so and do so in a fashion that balances nationwide needs with nationwide economic returns. Finally, the Commission must work to integrate all aspects of transportation planning into one system. We can no longer see our highway, rail, air and maritime systems as independent. It is time to take the nation's transportation system fully into the next century.