



Chapter 1

Why Was This Commission Created?

Congressional Mandate

The National Surface Transportation Policy and Revenue Study Commission was established under Section 1909 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU). This legislation, signed by President George W. Bush on August 10, 2005, is the latest in a series of

reauthorizations of the major Federal grant-in-aid surface transportation programs.

In laying out the parameters for the Commission, Section 1909 noted that “it is in the National interest to preserve and enhance the surface transportation system to meet the needs of the United States for the 21st century.”

Among other things, the Commission was required to:

(A) Conduct a comprehensive study of—

(I) the current condition and future needs of the surface transportation system;

(II) short-term sources of Highway Trust Fund revenues;

(III) long-term alternatives to replace or supplement the fuel tax as the principal revenue source to support the Highway Trust Fund, including new or alternate sources of revenue;

(IV) revenue sources to fund the needs of the surface transportation system over at least the 30-year period beginning on the date of enactment of this Act, including new or alternate sources of revenue;

(V) revenues flowing into the Highway Trust Fund under laws in existence on the date of

enactment of this Act, including individual components of the overall flow of the revenues; and

(VI) whether the amount of revenues described in subclause (V) is likely to increase, decrease, or remain constant absent any change in law, taking into consideration the impact of possible changes in public vehicular choice, fuel use, and travel alternatives that could be expected to reduce or increase revenues into the Highway Trust Fund;

(B) Develop a conceptual plan, with alternative approaches, to ensure that the surface transportation system will continue to serve the needs of the United States, including specific recommendations regarding design and operational standards, Federal policies, and legislative changes... (See Volume III for full statutory language)



The conceptual plan would be developed after an examination of various dimensions of the Nation's surface transportation network, now and in 15, 30, and 50 years. These dimensions include the physical condition of bridges and pavement; operational characteristics and performance; the potential for expansion, upgrades, and other improvements to the surface transportation system; alternatives for addressing environmental concerns; and current and future capabilities for conducting system-wide real-time performance data collection and analysis, traffic monitoring for the highway system, operations and management.

The original submission deadline for the report was July 1, 2007. The Commission requested an extension due to the scope of its mandate, and the Congressional authorizing committees recognized the need to extend the deadline to December 31, 2007, a provision included in HR 6233 and HR 5689. The Commission will expire six months after its report is submitted to Congress.

How Did the Commission Satisfy This Mandate?

The Commission implemented a workplan built around several distinctive tracks: public outreach, technical analysis, and the logistics and physical production of the report.

Outreach. The Commission implemented a program that solicited widespread input from the public in addition to the hearings required by Section 1909. A Blue Ribbon Panel of Transportation Experts was established to provide the Commission with recommendations and additional insight. This panel included 77 experts from different levels of government, the private sector, and research and academic institutions. To further expand its knowledge base, the



The Commission heard testimony from a diverse group of witnesses, but several overall themes emerged. First, the Commission heard that the Federal government needs to play a continued role in the Nation's transportation system. Many witnesses wanted a larger, more aggressive Federal role. At the same time, there was an overwhelming consensus that this role must be focused on core activities, and that Federal regulations must be reformed to deliver projects more efficiently. Second, there must be far greater investment at all levels of government. Third, the corrosive impact of congestion on the Nation's economy and quality of life cannot be underestimated. Witnesses from every part of the United States described a transportation system increasingly paralyzed by gridlock. Over and over, witnesses expressed particular frustration with the lack of focus in dealing with freight congestion.

Commission held field hearings in ten cities: Dallas, Portland (Oregon), Memphis, New York, Las Vegas, Los Angeles, Atlanta, Washington, D.C., Minneapolis, and Chicago. During these hearings, 231 witnesses testified about a wide range of topics covering all surface transportation modes. The hearings often included tours of facilities, or discussion of issues unique to certain parts of the country. Several of these field hearings were cosponsored with major transportation stakeholder groups.

The Commission met in public and executive session in Washington, D.C., 12 times during the course of its activities, and heard from 62 expert witnesses during these sessions. Individual Commissioners regularly participated in conferences and meetings to solicit input from key transportation stakeholders, and provided interviews to the media.



The Commission also developed a public World Wide Web site, www.transportationfortomorrow.org, which included testimony from the field hearings and public sessions, as well as key information about the Commission's work. The Web site included a comment form that allowed the public to submit comments and suggestions for the record.

Technical Analysis. The Commission supplemented the insights from invited experts and witnesses with extensive analyses on key issues impacting the future surface transportation system. Commission staff prepared more than 100 briefing papers at the request of the Commissioners, which can be found in Volume III. The Blue Ribbon Panel of Transportation Experts was invited to review these papers.

The bulk of the Commission's analysis was conducted by staff, furnished by the U.S. Department of Transportation, who studied the impacts of potential policy changes on performance and investment requirements under different sets of assumptions. Staff developed scenarios to determine the effectiveness and cost of various strategies that could deal with challenges to a well-performing surface transportation system. Staff also developed a Base Case, which assumed the current mix of investments and technologies. The scenarios involved making maximum use of operational strategies to improve performance; implementing strategies to reduce energy consumption and travel demand; providing greater mobility and intercity connectivity; separating passengers from freight transportation in key highway and rail corridors; and making maximum use of technology to improve performance and safety. These strategies were evaluated at several different investment levels, ranging from the level that could be sustained at current tax rates (adjusted for inflation) to the level at which all cost-beneficial improvements could be made.

Why is Transportation Important?

The Nation's surface transportation system is a network of public and private elements—highways, railroads, transit routes, ports, and waterways—that interact to provide service for the American people. The American economy works, in large measure, because shippers, manufacturers, and service providers have a transportation system that provides many ways to access labor and move raw materials and finished products. Individuals are able to travel to work places, shopping, educational institutions, recreation, medical care, and other locations critical to their quality of life.

For much of the past half-century, a grid of highways, railroads, waterways, and transit lines provided an unparalleled fluidity of movement. The mobility offered by the surface transportation network gave Americans an unequalled degree of choice and freedom. The transportation network broadened opportunity, eliminating barriers and sustaining the most pluralistic society in world history.

Unfortunately, the strong and dynamic American surface transportation system is becoming a thing of the past. The Nation's infrastructure may have appeared resilient to change in the 1970s and 1980s, but more recent forces have overwhelmed





the system and threatened its basic functionality. Congestion was once just a nuisance. Today, gridlock is a way of life, and it has greatly eroded the quality of our transportation network.

By the middle of the Twenty-First Century, social and economic forces will have altered the United States in ways that were unimaginable just 50 years ago. The Nation's population will swell to 420 million people.¹ That is the equivalent of 11 new Los Angeles metropolitan areas spread out on a transportation grid already strained by congestion and disrepair. Many researchers believe this population growth will be accompanied by a doubling of the country's Gross Domestic Product (GDP), which is highly correlated with transportation demand.

“We have a shared responsibility with the public sector to ensure there is a fair commerce system and a national investment policy and strategy for transportation infrastructure that keeps America a secure and competitive place to manufacture products, deliver services, and to work and live.”

– Ken Andrews, Dow Corporation, at the Commission's New York field hearing.

To accommodate the tremendous pressures on its infrastructure network, the Nation must renew its commitment to developing a world-class transportation system. The vision adopted by this Commission is that *the United States will create and sustain the preeminent surface transportation system in the world.* Understanding the seven central roles that transportation plays can help today's leaders build a transportation system for tomorrow.

Making Goods More Convenient and Accessible

Transportation has made goods convenient to households and businesses in every corner of the Nation. Because of improved transportation, vegetables and fruit from California can arrive fresh on dinner tables in New York City. There are products in our stores and in our homes that come from places unheard of a half-century ago. Hospitals have medicine and medical equipment ready at a moment's notice because the transportation system can bring them right into our neighborhoods.

Unfortunately, the Nation's transportation systems can no longer move these goods as efficiently as possible. Congestion not only delays the shipment of these goods, but it increases costs to businesses—and ultimately consumers—as trucks and railroad cars are slowed at chokepoints.

Improving International Competitiveness

Transportation links the United States to the global economy. The rate by which international trade is growing is staggering. Since 1970, imports to the United States have tripled and exports have doubled, when measured against the value of the GDP. The volume of new cargo moving along our freight corridors will continue to increase. For





During its visit to the Ports of Los Angeles and Long Beach, the Commission learned about operational improvements that have improved freight movement in one of the Nation's most congested regions. Port operators have expanded the operating hours for truck gates, while also levying charges during peak times. Port operators have also adopted "virtual" container yards and reservation systems to eliminate queues of drayage trucks, and they have increased the use of on-dock intermodal rail yards to eliminate the need for some truck drays.

example, between 2000 and 2008, the world's ocean-going fleet capacity is expected to grow at an annual rate of nearly 10 percent. Currently, more than 1,000 new container ships are being built in the world's shipyards.² In addition, the complexion of that trade has recently changed. While the countries of Western Europe remain strong trading partners, commerce with Canada, Japan, Mexico, and rapidly growing Asian nations such as China and India is increasing.

As commerce grows with faraway countries, the distance that shipments must travel between origin and destination also increases. This makes it even more important to move cargo efficiently through seaports and along freight corridors. The Nation's top 20 international freight gateways move more than \$2.6 trillion worth of goods, and they are all located in fast-growing urban areas. As development occurs around these freight gateways, trucks and railroads must deal with increased traffic. Freight also must be moved safely and securely, with minimum adverse impacts on the environment and public health. The location of the Nation's ports in urbanized areas creates special challenges with regard to protecting the health and safety of the public.

Developing Markets Within the United States

Transportation opens up new markets. In the Nineteenth Century, waterways and railroads allowed entrepreneurs to access isolated places in the South and West. During the Twentieth Century, paved roads and Interstate highways extended low-cost automobile and truck transportation across the entire continent. Transit extended the reach of cities by allowing people to commute to central cities along trolley and rail lines.

“Strong, efficient transportation systems are a vital component in global competitiveness...there is a need for a strong federal role in setting the goals for the Nation's transportation system...to ensure a comprehensive, multi-modal, and coordinated approach to transportation.”

– Maggie Walsh, President, Chicago Chapter of the Women's Transportation Seminar, at the Commission's Chicago field hearing.

Today, new trade corridors are transforming undeveloped parts of the country. In the ten years after the enactment of the North American Free Trade Agreement (NAFTA), the International Trade Administration estimates that total trade more than doubled between the United States and its immediate neighbors, Canada and Mexico.³ Trade generates development in addition to jobs in manufacturing plants and distribution centers along these corridors. People move to communities where there are jobs, so the growth of these communities leads to new housing developments, shopping centers, schools, and hospitals.



Enhancing Personal Mobility

Transportation determines personal mobility. Many of the Nation's social, governmental, and legal principles were built around the concept of mobility. Freedom of movement has been a defining theme in American history. The United States prides itself as a country of mobility, where people can not only choose where they work, live, and visit, but may do so without the barriers often found in other countries. The Nation's surface transportation system must complement this way of life.

Today, traffic congestion restricts the mobility of much of this country's population. Congestion affects Americans in communities throughout the country, large and small, and is often as severe on weekends as it is during weekday commutes. With the anticipated steep increase in our population, the impacts will be beyond anything we have yet experienced.

Mobility is a key factor in our quality of life. For example, reducing congestion would give parents more time with their children, save fuel, and provide people with more choice when they decide where to live, work, and raise a family. The concept of mobility does not just mean traveling in a congestion-free environment. It also means that the system is accessible to all users, including the disabled, senior citizens, low income individuals, and persons without access to a car. An important element of mobility is the concept of choice: Americans want to have a menu of options from which to choose as they travel from origin to destination.

Supporting National Defense and Homeland Security

Transportation is key to National defense and homeland security. No one can fully predict the

challenges associated with the Nation's defense, but the past provides clear evidence that an efficient surface transportation system forms the backbone for military mobilization. The Nation's highways, railroads, airports and seaports must accommodate the flow of material "from factory to foxhole." During Operations Desert Storm and Desert Shield in the early 1990s, more than 3.5 million tons of material was moved on the road and rail networks throughout the United States.⁴

When mobilizing for an emergency, the U.S. Department of Defense emphasizes speed, precision, and accuracy. The Nation's surface transportation network must reflect these characteristics. At the same time, the Nation's tradition of mobility creates a special challenge for those charged with maintaining its security. Americans expect they will be able to travel throughout the country with relative ease. Fluid movement within the country makes its communities and infrastructure more vulnerable.

A transportation system that works will save lives in an emergency. Improvements to our transportation system have brought us more effective police, fire, and rescue services, making them more mobile; but their significance goes beyond what we experience in our everyday lives.





Recent natural disasters and terrorist attacks have proven the importance of an effective surface transportation system when responding to large-scale emergencies. The public transportation systems in New York City and Washington, D.C., performed this function admirably during the terrorist attacks of September 11, 2001.

The network must have the capability to accommodate police, fire and rescue vehicles at a moment's notice. The surface transportation system must also be able to accommodate evacuations. In a study of all types of incidents between 1990 and 2003, the U.S. Nuclear Regulatory Commission estimated that a large-scale evacuation of at least 1,000 people occurred every three weeks.

The National Response Plan formulated by the U.S. Department of Homeland Security recommends that most incidents be handled at the lowest jurisdictional level possible, closest to the emergency. That is why State and local planners are working to better coordinate homeland security operations. They are attempting to accommodate the movement of senior citizens, individuals with disabilities, and persons without cars, as well as using technology to improve the flow of traffic during emergencies.



Determining the Nation's Energy Use

Transportation is essential to another element of the Nation's long-term security: whether the country's economy can become less reliant on foreign oil. Some of the world's major petroleum exporting nations are currently hostile to the United State and/or located in often unstable parts of the world such as the Middle East and Africa. If these countries suddenly shut off their exports of petroleum to the United States, this action could cripple the Nation's economy and threaten its security.

Many leaders are also concerned about the future supply of petroleum. Much of the world's easily accessible petroleum reserves have already been tapped, and some experts believe that the world's supply will be exhausted by the end of the Twenty-First Century.

Automobiles and trucks consume more than two-thirds of the Nation's petroleum supply, which is used to manufacture gasoline and diesel fuel. While automakers have introduced more fuel-efficient vehicles over the past three decades, petroleum consumption continues to rise at an alarming rate.

By shifting highway users onto transit systems that require less per capita energy, public transportation can play an essential role in reducing petroleum consumption. There are other ways in which the amount of petroleum consumed by highway users may be minimized: ridesharing, teleworking, and increasing the use of non-motorized modes of transportation, such as bicycling and walking. Similar energy savings could be achieved by moving more goods by rail or water than by truck.

The nature of the Nation's surface transportation system will largely determine its energy use for decades to come. For this reason, many policymakers believe that designing a less energy-dependent transportation network is fundamental to the Nation's security.



Impacting Health and Safety

In addition to its many positive contributions to the country's economy and quality of life, the Nation's surface transportation network regrettably exacts a terrible toll in lost lives and damaged health. According to the National Highway Traffic Safety Administration, highway crashes are the leading cause of death for Americans aged 4 through 34.⁵ Additionally, the particulate and greenhouse gas emissions from the Nation's motor vehicle fleet are a growing public health concern.

The United States made impressive gains in reducing the number and rate of traffic fatalities during the early decades of the Interstate era, but that progress has stalled over the past decade. The growing amount of vehicle travel also threatens to overwhelm earlier regulatory gains in cleaning up the vehicles and fuels Americans use. In the interest of the health and safety of all Americans, the Federal transportation program must provide more vigorous leadership in this vital area of public policy.



Endnotes

- ¹ U.S. Department of Commerce, U.S. Census Bureau. Press Release. Washington, D.C.: March 18, 2004.
 - ² Research from Howe Robinson & Company Ltd., shipbrokers, October 2006.
 - ³ U.S. Department of Commerce, International Trade Administration. International Trade Update. Washington, D.C.: July/August 2006.
 - ⁴ U.S. Department of Transportation, Federal Highway Administration, Office of Operations Web Site, http://ops.fhwa.dot.gov/freight/freight_analysis/nhs_connectors/role_nhs_conn/role_sys_conn_3.htm.
 - ⁵ U.S. Department of Transportation, National Highway Traffic Safety Administration. *2004 Motor Vehicle Occupant Protection Facts*. Washington, D.C.: 2004.
-