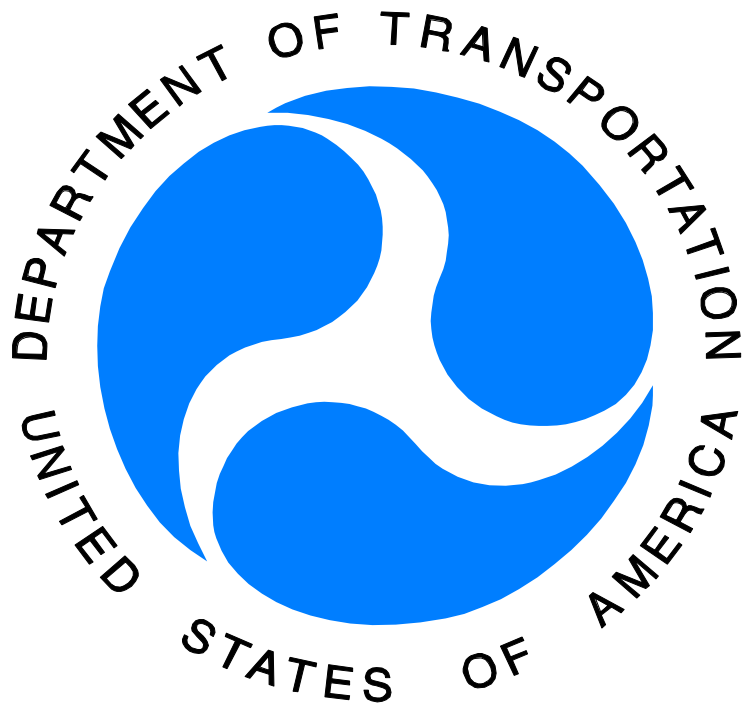


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U.S. Department of Transportation

DRAFT Strategic Plan for Fiscal Years 2003-2008

“Safer, Simpler, Smarter Transportation Solutions”

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THE SECRETARY'S VISION

Safer, Simpler, Smarter Transportation Solutions

Leadership, effective management and commitment to the highest standards of public service characterized Transportation Secretary Norman Y. Mineta's response to the tragic events of 9/11 and to the aftershocks of those events. Secretary Mineta tapped into the professionalism and ingenuity of the Department of Transportation (DOT) Team to succeed in addressing these unprecedented challenges.

Now Secretary Mineta is calling upon the DOT Team to be architects of the future and redefine our core mission in light of future challenges to transportation. DOT's core mission emphasizes the national interest in safe and efficient transportation. The Department of Transportation Act of 1966 calls for "...*the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost....*"

This core mission is valid today and will be valid well into the future even with a global economy where anything can be made anywhere and sold everywhere else around the world. Today, multinational manufacturers source inputs from international suppliers, bring these inputs to production facilities, assemble them and ship them to customers around the globe. Competitive international trade depends on transportation.

Transportation is an integrated network consisting of publicly and privately owned and operated equipment, infrastructure and logistics systems. Increasingly the equipment – cars, trucks, trains, ships, airplanes and pipelines - uses information technology to ensure that the person or good being moved arrives at the right place at the right time. Similarly the infrastructure - highways, port facilities, airports, railway and transit stations – is connected by communication and information networks. Improvements in logistics systems that are sparked by information technology - such as navigation equipment, air traffic control systems, and tracking systems - increase not only the efficiency but also the safety of transportation. The Nation's economic growth and prosperity are dependent upon the synergies of our transportation and information networks.

Developing a strategic Vision for the Department of Transportation is essential if we are to achieve our core mission in light of the challenges inherent in a global context where expectations for the movement of people and goods are propelled by information technology. Americans will require even safer and more efficient domestic and international transportation to support their daily lives, to underpin the economy and to connect the United States to rest of the world.

Secretary Mineta has called for a safer, simpler and smarter Federal transportation system for the benefit of all Americans. *Safer* because we will place greater emphasis on saving lives and reducing accidents than ever before. *Simpler* because we will

improve the management of our resources by consolidating and streamlining programs. And *Smarter* because we will focus on improving efficiency, achieving results and increasing accountability. We will be pioneers in transportation pursuing best practices and breaking the mold to achieve results that benefit the taxpayers.

Over the past year, we have been using these principles as our guide in developing ideas for the reauthorization of Federal surface and air transportation programs to ensure that they will successfully address our Nation's future needs. In addition to these two major pieces of legislation, this Administration is working to achieve significant reform in intercity passenger rail and to address maritime transportation issues with greater focus and substance.

This unique confluence of events gives the Bush Administration the opportunity, for the first time in history, to work with Congress in bringing about important changes in all modes of transportation — at the same time — thus delivering on the promise of safer, more efficient transportation at home and abroad.

Safety

Secretary Mineta's top priority is improving the safety of the Nation's transportation system. President Bush has challenged this Department to develop creative ways to reduce the number of fatalities on the Nation's highways. Secretary Mineta has accepted this challenge and, as a safety advocate, has established a goal to reduce the highway fatality rate to not more than 1.0 per 100 million vehicle miles traveled by 2008 from 1.7 per 100 million vehicle miles traveled in 1996.

The need to improve safety on our highways is clear. In 2002, over 42 thousand people were killed in traffic accidents. While alcohol remains the single largest contributing factor to fatal crashes, claiming, over 17,000 lives, about 25 percent of Americans (or about 70 million people) still do not use safety belts when driving or riding in motor vehicles. Finally, 12 percent of people killed in motor vehicle incidents are involved in crashes with large trucks. Secretary Mineta's central strategies for reducing transportation fatalities and injuries on our highways are to reduce alcohol-impaired driving, increase safety belt use and ensure that commercial vehicles are meeting the highest possible safety standards.

Secretary Mineta's Vision for aviation safety has several key elements and it extends to aviation here in the U.S. and internationally. Aviation safety begins with a proactive approach by using hard data to detect problems and disturbing trends; taking the actions that will achieve the greatest benefits in preventing accidents; using technology where it brings the greatest safety benefits and constantly questioning the status quo. Secretary Mineta's goal is to reduce the commercial aviation accident rate by 80 percent by 2007 and the Department is on track to achieve that goal. The DOT Team is committed to *Safer Skies* at home and abroad.

Mobility

Congestion is clearly a growing threat to our economic well being. Indeed, the U.S. Chamber of Commerce has said it is one of the biggest problems facing our economy today. Transportation congestion and bottlenecks damage air quality, slow commerce, increase energy consumption and threaten our quality of life causing Americans to waste significant time and money. Traffic congestion now costs motorists in our Nation's top urban areas about \$68 billion a year in wasted time and fuel. These costs do not include the added expense incurred by businesses and their customers when goods and materials are not delivered in a timely fashion. Without public transit, the congestion cost would be \$19 billion higher.¹

In 2000, aviation delays attributable to air traffic congestion cost passengers, shippers, and the industry an estimated record \$6.5 billion, not including costs to other sectors of the economy. The tragic events of 9/11 coupled with the economic downturn have depressed air traffic levels. The most optimistic predictions are for air travel and activity at air traffic facilities to return to pre 9/11 levels between 2005 and 2006. However, the mix of air traffic is expected to be more complex. There will be more small regional and business jets that use the same airspace and runways but require greater separation from the larger jets. This increased growth and complexity will require more capacity in the air traffic control system and at certain airports.

Clearly, the time has come for more effective solutions. Secretary Mineta has called for these solutions to be part of a comprehensive approach to congestion relief that involves creativity and leadership in making needed improvements to every mode of transportation.

Strategic expansion of our system capacity and other solutions are needed to address our growing mobility needs. We will accelerate the application of technology to improve operations for the most efficient use of existing facilities, maintain the infrastructure and inform travelers of dangerous conditions and alternative routes. We will further empower state and local decision-making because local transportation problems are best solved locally. We will work to develop a reliable and financially viable intercity passenger rail network, which is an essential element of the Nation's transportation system. Finally, we will explore ways to develop a robust, domestic short sea and waterway shipping system to alleviate congestion. Nationwide, growth in port container traffic is expected to double by 2020. Our Nation's coastal and waterway shipping system is underutilized and it could provide a practical, safe and efficient means of transporting freight.

Congestion cannot be relieved, however, without significant investment in the transportation infrastructure. As we have seen in Europe and elsewhere around the world, the private sector can play a huge role in infrastructure investments. For the most part, that has not been true in the United States. The Bush Administration hopes to change that. We will seek ways to expand and improve current Federal innovative finance programs. Figuring out how to finance new transportation infrastructure will

¹ Source: FTA

take time and creative thinking on the part of many public and private sector players. The revenue streams that are the foundation of any innovative financing strategy are there: individuals and businesses will pay for improved efficiency in every sector of the economy, and transportation is no different.

An integral aspect of mobility is accessibility. To be inclusive, transportation must be accessible to all Americans, including low income, elderly and persons with disabilities. Transportation connects each of us to vitally important aspects of our lives: work, education, family, friends, recreation, health, and commerce. Many of the 37 million Americans who live below the poverty line rely on transit as their only means of transportation. As former recipients of Federal aid move from welfare to work, transit will offer the critical link that makes employment possible and the American workforce stronger. Accessible public transportation is critical to 24 million Americans with disabilities and the increasing elderly population who can no longer drive. It is our obligation to ensure that transportation is not only safe and efficient, but is also accessible to all. Where barriers to accessibility exist, we will seek to eliminate them. When planning for the future, accessibility will be part of our Vision. We will strive to give more freedom and choice to travelers and shippers. Mobility is the right of every American.

Global Connectivity

Secretary Mineta's Vision of the future acknowledges the vital importance of global connectivity in transportation. Transportation systems within and among Nations are lifelines to the future, to freer trade and accelerated economic growth, to greater cultural exchange and to the expansion of democracy around the world. Our increasingly globalized economy hinges on efficient supply chains and just-in-time manufacturing. Transportation is critical to both. With leaner inventories, companies must rely on transportation that enables them to conduct business in the most cost-effective, competitive way.

International trade and travel have become an increasingly important part of the transportation picture. In 2001, over 1.6 billion tons of international freight, valued at \$1.9 trillion, moved to and from the U.S. accounting for over 10 percent of the nearly 16 billion tons of freight that moved on the Nation's transportation system. That same year, over 19 million containers were used to transport imports into the U.S., six million by ocean vessels and 13 million by truck and rail from Canada and Mexico, illustrating the importance of efficient freight flows. Competitive international trade depends on transportation.

On the leading edge of international cooperation is commercial aviation which has grown 70-fold since the first jet airliner flew five decades ago, growth unmatched by any other mode of transportation over that period. Recent statistics show that over 1.6 billion passengers travel by air for business and recreation each year. This figure is expected to grow to 2.3 billion passengers annually by the end of the decade.

Increasing globalization of the American economy will also put pressure on the capacity of our ports and borders. By the year 2020, U.S. foreign trade in goods is expected to grow by more than half its current tonnage. Major congestion that now occurs in and around marine ports and terminals at specific points and times will increase. DOT must have new policies and programs in place to be prepared for this projected increase in trade.

Secretary Mineta will employ four key strategies to address global connectivity in transport. We will continue to liberalize aviation markets around the world; expand the capacity and efficiency of our freight transportation system; improve intermodal linkages; and ensure efficient trade movements at border crossings. In the future, America will need a fully integrated domestic transportation system as well as safe and efficient connections to the rest of the world.

Environmental Stewardship

Current trends in transportation are exerting pressure on environmental resources worldwide. In the U.S., commercial and personal travel has grown substantially in recent years and will continue to increase in the future. For example, annual vehicle miles traveled (VMT) on our Nation's highways have almost quadrupled since 1960 and have far outstripped the growth in lane-miles. Increased travel boosts transportation's energy consumption, creating challenges in terms of supply. Energy consumption is also tied to greenhouse gas production, an emerging concern for the transportation sector, which produces 26.8 percent of the greenhouse gases emitted in the U.S. and is increasing emissions faster than any other sector. Although transportation emissions of nearly all air pollutants are at their lowest levels in 30 years, and the use of public transportation contributes to the reduction in air emissions from cars and trucks, continued growth in travel has caused a slight increase in nitrogen oxide emissions and continues to challenge efforts to reduce air pollutant emissions.

Americans want solutions to our transportation problems but they want solutions that are consistent with sound environmental planning. Environmental streamlining and stewardship offer a new way of doing business that brings together the timely delivery of transportation projects with the protection of the environment. It is a rejection of the false choice often presented between adding transportation capacity and protecting our environment. Context-sensitive solutions are an effort to get all of the players to work together to ensure that transportation decisions are fully respectful of communities and of environmental resources.

In the coming years, DOT will balance the need for a safe and efficient transportation network with the importance of preserving environmental quality but in a more efficient manner. Secretary Mineta's central strategy for achieving balance will be to consolidate and streamline our programs and improve system performance. We will accelerate the review of all vital transportation projects, consistent with the requirements of environmental law and our responsibilities to be good stewards of the environment. The time required to complete environmentally sound projects will be reduced, consistent with our goal of *Smarter* transportation solutions.

We will implement Executive Order 13274, “Environmental Stewardship and Transportation Infrastructure Project Reviews,” signed by President Bush to speed up decision making on vital airport, highway, transit and intermodal transportation projects, while safeguarding the environment. As specified in the Executive Order, we have created an executive-level Federal task force, chaired by Secretary Mineta, which will expedite priority projects and improve procedures that apply to all projects. Executive Order 13274 means environmentally sound projects will no longer be delayed unnecessarily by inefficient review procedures. We will respect environmental requirements, but we will address those requirements more efficiently.

In addition to implementing the President’s Executive Order, we are pursuing a wide range of other initiatives designed to lessen transportation’s impact on the environment. For example, we are looking carefully at how we can reform the Corporate Average Fuel Economy (CAFE) standards to encourage vehicle manufacturers to improve the fuel efficiency of their products.

Security

President Bush has directed DOT and the Department of Homeland Security (DHS) to work together to design a world-class transportation security system that will prevent terrorists from ever again using transportation as a weapon against us. As defenders of the homeland, we understand the urgency in securing our transportation facilities from terrorist attack as well as from foreign and domestic criminal enterprise. We also recognize that our transportation system must remain a vital link for mobilizing our armed forces for military contingencies and for supporting civilian emergency response.

Secretary Mineta has called upon the DOT Team to remember that the first task of our Department is to keep our national transportation system operating during an emergency situation and to keep Americans who use it as safe and secure as possible. We will work closely with DHS, and with our State, local government and private sector partners to elevate security levels not only for aviation, but also for our railways, highways, waterways, transit systems, and pipelines. The Department’s Maritime Administration is responsible for maintaining the Nation’s Ready Reserve Fleet of vessels that can be called into action in time of war. We will ensure that the Nation’s military needs in the maritime sector are fully met during times of crisis. We will exploit the opportunities presented by our regulatory enforcement activities when they expose security risks in the transport of goods or people. We are dedicated to accomplishing our crucial transportation missions and will work to keep transportation operating safely and efficiently even during emergency situations.

Organizational Excellence and the President’s Management Agenda

As the Chief Executive Officer of the best managed Department in the Federal government, Secretary Mineta understands that we cannot achieve our strategic objectives without a culture of continuous improvement. The Secretary supports the President’s Management Agenda (PMA) and has directed the DOT Team to implement it fully throughout the Department. Three principles guided the President’s Vision for

government reform: government should be citizen centered, results oriented and market based, promoting innovation through competition. The PMA contains five mutually reinforcing goals that the DOT Team is integrating into its corporate culture in striving for continuous management improvement:

- Strategic Management of Human Capital;
- Budget and Performance Integration;
- Competitive Sourcing;
- Expanded E-Government; and
- Improved Financial Management.

To make DOT the most desirable place to work in the Federal government and the internationally recognized focal point for transportation core competencies, we must face a number of challenges in the years ahead. Most critically, we must attract the best and the brightest people to our workforce and inspire a new generation of innovators and pioneers in transportation careers. Secretary Mineta's Vision calls for DOT to become the employer of choice not only within the transportation enterprise but also within the Federal government.

Conclusion

Americans have built a vast and highly productive network of transportation assets based on the strengths of individual modes – air, marine, highway, transit and rail. Now, our challenge is to become architects of the future blending these separate constituencies into a single, fully coordinated system – one that connects and integrates the individual modes in a manner that is at once safe, economically efficient, equitable, and environmentally sound. The American people require the safest and the most efficient transportation system we can provide. The quality of our lives, the shape of our communities, and the productivity of our economy depend on our success in meeting this goal.

TRANSPORTATION AT HOME AND ABROAD

In the years ahead, our Nation will require an even safer, more equitable and more efficient transportation system to connect citizens, businesses and governments here and abroad. As the backbone of the U.S. economy, transportation comprises 11 percent of the gross domestic product, approximately \$1.1 trillion annually. It accounts for 19 percent of spending by the average American household – as much as for food and health care combined – and is second only to spending on housing.

The U.S. transportation system provides over 4.9 trillion passenger miles of travel and 3.8 trillion ton miles of domestic freight generated by 281 million people, 7.1 million business establishments, and 88 thousand units of government. The system includes 3.9 million miles of public roads, and 1.6 million miles of oil and natural gas pipelines. There are networks consisting of 122,000 miles of major railroads, 26,000 miles of commercially navigable waterways, and over 5 thousand public-use airports. This vast system also includes 800 public transit operators in 417 urbanized areas, 300 transit systems serving rural areas and 4,000 transit agencies that provide mobility to elderly and disabled individuals. The transit systems operate 154,244 transit vehicles, 10,572 miles of rail track and 2,825 rail stations. In addition, the system includes 321 ports on the coasts, Great Lakes, and inland waterways. In 2001, the highway system carried over 2.7 trillion vehicle-miles of travel, the rail system carried over 500 million rail freight train miles, and 21 million trips on Amtrak trains. More than 9.1 billion trips were made on public transit, and 630 million passengers boarded airplanes.

International trade and travel have become an increasingly important part of the transportation picture. Over 1.6 billion tons of international freight, valued at \$1.9 trillion, moved to and from the U.S. in 2001, accounting for over 10 percent of the nearly 16 billion tons of freight that moved on the Nation's transportation system. Over 19 million containers were used to transport imports into the U.S. in 2001, six million by ocean vessels and 13 million by truck and rail from Canada and Mexico, illustrating the challenge of maintaining transportation security while facilitating efficient freight flows. International freight volumes at these levels represent a significant source of stress for U.S. domestic transportation. A total of 366 million inbound and outbound trips were also made between the United States and other countries in 2000, compared to 315 million trips in 1990 with same day travel between the U.S. and Canada or Mexico accounting for the majority of these trips.

Transportation is a strategic investment that is essential to strengthening the American economy for the fresh challenges and opportunities of the 21st Century. In the future, America will need a fully integrated domestic transportation system as well as safe and efficient connections to the rest of the world.

THE U.S. DEPARTMENT OF TRANSPORTATION

The U.S. Department of Transportation (DOT) occupies a leadership role in the global transportation network. The people of DOT are 59,700 strong, dedicated to improving transportation in the U.S. and around the world by making it safer, simpler and smarter. *Safer* - because we will place a greater emphasis than ever before on saving lives and reducing accidents. *Simpler* - because we will consolidate and streamline our programs. And *Smarter* - because we will focus on efficiency, achieving results and increasing accountability.

DOT's mission, as stated in Section 101 of Title 49 United States Code, is as follows:

The national objectives of general welfare, economic growth and stability, and the security of the United States require the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost consistent with these and other national objectives, including the efficient use and conservation of the resources of the United States.

Since its first official day of operation in 1967, DOT's transportation programs have evolved to meet the economic and security demands of the Nation.² The Bush Administration has proposed a \$54.2 billion investment in our National transportation network in fiscal year 2004, an investment in the Nation's future.

Today DOT is comprised of the Office of the Secretary, the Surface Transportation Board,³ the Office of the Inspector General and 10 operating administrations:

Federal Aviation Administration
Federal Highway Administration
Federal Motor Carrier Safety Administration
Federal Railroad Administration
Federal Transit Administration
Maritime Administration
National Highway Traffic Safety Administration
Research and Special Programs Administration
Saint Lawrence Seaway Development Corporation
Bureau of Transportation Statistics

² A summary of the legislative authorities that direct DOT's various missions and programs is in Appendix A and a schedule for the reauthorization of DOT's programs is in Appendix B.

³ With passage of the Interstate Commerce Commission Termination Act (P.L. 104-88, December 29, 1995), Congress established the Surface Transportation Board within DOT, effective January 1, 1996. While formally part of DOT, the Board is decisionally independent of DOT and by law "...not responsible to or subject to the supervision or direction...of any other part of the Department of Transportation." (49 U.S.C. 703(c).

VALUES STATEMENT

Professionalism

As accountable public servants, we exemplify the highest standards of excellence, integrity, courtesy and respect in the work environment.

Teamwork

We support each other, respect differences in people and ideas, and work together in ONE DOT fashion.

Customer Focus

We strive to understand and meet the needs of our customers through service, innovation and creativity. We are dedicated to delivering results that matter to the American people.

DOT'S RESPONSE TO 9/11

As we plan for transportation's future, we must acknowledge the extraordinary events of the past two years. In many ways, we are a changed, more agile and more mature organization. We are proud to have succeeded in accomplishing one of the most daunting tasks ever to confront a federal agency – to keep this Nation's transportation moving in spite of the brutal attacks of September 11, 2001. Our response to 9/11 illustrates our core values and why we are considered the best-managed department in the Federal government.

Personal courage and self-sacrifice were found at every level of DOT — not only on 9/11, but also in the weeks and months that followed. Individuals made split-second decisions that changed the course of history and saved untold thousands of American lives. It is hard to overstate the difference that the people of DOT have made to America and to the world.

Our colleagues at the Federal Aviation Administration were among the first to respond to the hijackings. They participated in the first ever grounding of all flights in and around the U.S., working to land flights safely and thwart other hijackings. The Coast Guard was among the first to reach the scene in New York Harbor. They began to work with hundreds of others, evacuating over a half a million people from lower Manhattan in an unprecedented partnership with Merchant Mariners, New York Fire and Police Departments and many others. In Washington, D.C., people from every part of DOT organized emergency task forces on that very day.

On November 19, 2001, President Bush signed a new law that created the Transportation Security Administration (TSA) within DOT. In an unprecedented effort, the people of DOT created a leading edge agency that combined world-class security with world-class customer service. TSA is charged with developing heightened security procedures across every mode of transportation, including rail, highways, transit, maritime, and pipelines.

For the people of DOT, there was even more change to come. On June 18, 2002, President Bush transmitted to Congress proposed legislation to create a new Cabinet Department of Homeland Security (DHS). The President noted that homeland security responsibilities were scattered across 100 different federal agencies, resulting in a lack of accountability and responsiveness. Under the President's plan, more than half of the new agency's personnel and budget would come from two organizations that were part of DOT — the Coast Guard and the TSA. In March 2003, the TSA and the Coast Guard left DOT to join the DHS.

As this transition process unfolds, all Americans should be assured that we at DOT will remain sharply focused on our primary mission — to advance safer, simpler and smarter transportation solutions. The pages that follow present Secretary Mineta's direction for addressing the transportation challenges of the future.

SAFETY STRATEGIC OBJECTIVE

“Enhance public health and safety by working toward the elimination of transportation-related deaths and injuries”

Outcomes

- 1) Reduction in transportation-related deaths
- 2) Reduction in transportation-related injuries

Strategies

Improving the safety of the Nation’s transportation system is one of the highest priorities of the Bush Administration and the top priority of DOT Secretary Norman Y. Mineta. President Bush has said that what counts is reducing the number of people who die on the Nation’s highways each year. Secretary Mineta has accepted this challenge and has urged the entire DOT team to become safety advocates dedicated to saving lives and reducing transportation-related injuries. The Secretary has established a goal to reduce the highway fatality rate to not more than 1.0 per 100 million vehicle miles traveled by 2008 from 1.7 per 100 million vehicle miles traveled in 1996. Secretary Mineta’s central strategies for reducing transportation fatalities and injuries are to reduce in alcohol-impaired driving, increase safety belt use and improve the safety of commercial vehicle operations.

Secretary Mineta’s Vision for aviation safety extends to *Safer Skies* here in the U.S. and around the world. Aviation safety begins with a proactive approach by using hard data to detect problems and disturbing trends; taking the actions that will achieve the greatest benefits in preventing accidents; using technology where it brings the greatest safety benefits and constantly questioning the status quo. Secretary Mineta’s goal is to reduce the commercial aviation accident rate by 80 percent by 2007 and the Department is on track to achieve that goal. The DOT Team is committed to *Safer Skies* at home and abroad.

The resources and programs listed in DOT’s Annual Performance Plans and budgets are necessary to achieve the outcomes of reductions in transportation-related fatalities and injuries and execute the strategies presented below. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the strategies presented below extends from the present through fiscal year 2008. Each strategy supports our safety outcomes.

Leadership

- 1) Propose legislation to streamline and consolidate surface transportation safety grant programs.

- 2) Propose legislation to reduce collisions at highway rail crossings and address related issues.⁴
- 3) Collaborate with stakeholders on the development, implementation, enforcement and evaluation of safety countermeasures and programs that promote safe behavior and practices in all modes of transportation.
- 4) Collaborate with safety advocates and other stakeholders to design incentives for improving safety including financial inducements, third-party or self-certification of safety compliance for private and commercial operators, and partnerships to accelerate deployment of safety technologies.
- 5) Develop, promote and enforce performance-based, national and international safety standards and regulations that allow innovation while improving safety levels.
- 6) Coordinate maritime safety policies with the Department of Homeland Security/Coast Guard.

Building Expertise

- 7) Conduct, support and publish research in all modes on safety enhancing technologies and on topics related to safety such as human performance, differing cultural norms, behavior, and unsafe trends.
- 8) Work with stakeholders to develop intermodal safety standards and comprehensive highway safety plans.
- 9) Develop, promote and support public education and information activities that advance safe behavior, safe operations, and best safety practices in all modes of transportation.
- 10) Provide training and technical assistance to industry and other levels of government on safety issues and safety management practices.
- 11) Become the employer of choice for individuals seeking careers in transportation safety by providing job opportunities, internships, training and rotational assignments in safety core competencies.

Technology

- 12) Work with stakeholders to build safety into the transportation infrastructure and into operational procedures through research, planning, design, engineering, incentives, and incorporation of safety enhancing technologies.
- 13) Mitigate the consequences of safety incidents through more effective response, technology, and coordination with private transportation providers and state and local government.
- 14) Capitalize on secure, advanced technology to provide information to the public in languages and formats they understand on the benefits of safe behavior and practices in all modes of transportation.

⁴ Federal Railroad Safety Improvement Act (at OMB)

- 15) Increase the implementation of infrastructure and operational improvements focused on enhancing the ability of drivers to remain on the roadway, reducing the adverse consequences of roadway departure, improving intersection safety and protecting pedestrians in the roadway environment.

Management Challenges

Safety is Secretary Mineta's top priority and he has directed the DOT Team to address the safety management challenges outlined by the General Accounting Office (GAO) and DOT's Office of the Inspector General (OIG).⁵ Safety is of concern to the GAO because of the limited progress in recent years in improving safety on our Nation's roads, where 94 percent of all accidental fatalities occur; in general aviation, where 87 percent of all aviation fatalities occur; and in commercial aviation, where accidents have the potential for catastrophic loss of life. Both OIG and GAO cite improvement in transportation safety as one of the Department's most pressing challenges.

OIG commended the aviation industry and the FAA at the end of 2002 for a very safe year in aviation. Operational errors decreased by 11 percent and runway incursions decreased by 17 percent over their FY 2001 levels. However, the OIG has stated that FAA needs to reduce operational errors and runway incursions because at least three serious operational errors and one serious runway incursion occur, on average, every ten days. The OIG noted that operational errors and runway incursions will become more frequent as air traffic returns to growth patterns expected between 2005 and 2007.

Operational Errors

The OIG noted that operational errors in FY 2002 were down to 1,061 from an all-time high of almost 1,200 in FY 2001. The OIG stated that FAA needs to ensure training for air traffic controllers who make errors and reexamine its new error severity rating system to be sure it accurately reflects the safety risk of reported errors.

The FAA has acknowledged that operational errors are a serious aviation safety concern and will address them as follows:

Milestone: Develop and implement a three-year plan for operational error prevention.

Runway Incursions

The OIG noted that runway incursions and close calls were reduced in FY 2002. On average, one runway incursion occurs per day and one close call occurs every ten days. To reduce these averages, FAA needs to follow through on its plans to train pilots to avoid runway incursions and use technology to warn pilots and controllers of potential accidents.

⁵ Throughout this Strategic Plan the language used to describe each challenge is essentially the language used by the OIG in its Top Management Challenges, issued January 21, 2003 and by the GAO in its January 2003, Performance and Accountability Series.

The FAA has acknowledged the need to reduce runway incursions and close calls and will address them as follows:

- Milestone:** Create and accomplish a regional runway safety plan for each FAA region, including special emphasis programs tailored to specific operational and geographic needs.

Safety Belt Use

The OIG has stated that there was no credible basis to forecast increases in safety belt use in excess of the recent trend of one percentage point per year unless additional States enact and enforce primary safety belt laws. NHTSA estimates that raising safety belt use from the current 75 percent mark to 85 percent would save 4,600 lives annually. The most effective means of increasing safety belt use is enactment and enforcement of primary safety belt laws that allow police to cite drivers for not wearing safety belts.

NHTSA has acknowledged the importance of increasing safety belt use and has developed an agenda for fiscal years 2003 – 2008 that includes the following milestones:

- Milestone:** Support the States in enforcement of primary safety belt laws.
- Milestone:** Continue to encourage the use of Occupant Protection Selective Traffic Enforcement Programs in the States.

TREAD Act

The OIG has called for continued implementation of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act to improve highway safety. While NHTSA has made significant progress in implementing TREAD through 11 final rulemakings over the last two years, four rulemaking are not yet completed. Two of the remaining four rules, one pertaining to child restraints and one pertaining to new tire standards, appear controversial and have not met their statutory deadlines.

NHTSA has acknowledged the importance of implementation of the TREAD Act and has developed an agenda that includes the following milestones:

- Milestone:** Complete four final rules concerning: Sales of Replaced Tires, Certification Label, Endurance and Resistance Standards for Tires and Improving the Safety of Child Restraints.
- Milestone:** Improve data and data systems that support defect investigation and research.

Highway Safety at the Southern Border

Trade between Mexico and the U.S., as measured by dollar value, may double by 2008, magnifying cross border traffic and safety issues. The OIG has stated that the key to a successful oversight program will be effective use of safety inspection resources and implementation of procedures. OIG recommended FMCSA reevaluate its overall resource requirements for the U.S.-Mexico border as the number of Mexican motor carriers receiving authority to operate long haul vehicles in the U.S. increases. OIG noted the need for better Federal and state inspector access to current, accurate, and timely information on drivers, vehicles, and motor carriers.

FMCSA has acknowledged these motor carrier safety concerns and will address them through the following milestones:

Milestone: FMCSA will sustain staff, facilities, data systems and equipment to extend safety compliance and enforcement operations to include Mexican carriers operating in the U.S. in FY 2003.

Milestone: FMCSA plans to establish performance measures and conduct an evaluation in FY 2007 to assess the effectiveness of border safety audits on highway safety.

Commercial Drivers License Program

The OIG recognizes the FMCSA must strive for improved credibility and integrity in the Commercial Driver's License (CDL) program. Fraudulent testing and licensing of commercial drivers compromises highway safety and necessitates expensive driver retesting on the state level. FMCSA needs to strengthen and clarify the Federal CDL standards and require states to monitor driver examiners to counter fraudulent licensing

FMCSA has acknowledged the importance of credibility and integrity in the CDL program and will address this issue through the following milestones:

Milestone: FMCSA will conduct reviews of state CDL programs to determine compliance with regulatory requirements through a repeating triennial cycle with 17 states reviewed each year from 2003 through 2005.

Milestone: FMCSA will provide CDL programs and incentive grants to support improvements in state CDL programs and address deficiencies identified in compliance reviews and OIG audits.

Milestone: FMCSA will conduct a baseline evaluation of the CDL program in fiscal 2005.

Crash Causation

In its January 2003 Performance and Accountability Series, (GAO) noted that while commercial trucks represent only four percent of all registered vehicles, they are involved in 12 percent of all crashes resulting in fatalities. GAO further noted that efforts to determine how its actions will reduce the number of large truck-related fatalities have been limited because DOT does not have a good understanding of the causes of large truck crashes.

FMCSA has acknowledged the importance of understanding the causes of large truck crashes and will address this issue through a Congressionally mandated study benchmarked by the following milestones:

Milestone: FMCSA and NHTSA will complete data collection for a Large Truck Crash Causation Study and produce a preliminary database of serious truck crash investigations in FY 2003, and complete data collection for a Bus Crash Causation Study in FY 2005.

Milestone: FMCSA expects to complete the Large Truck study in FY 2004.

Perspective and Outlook

America's transportation network must provide for the safe movement of people and goods. However, it will be difficult to reach improved safety levels because of increased demand for transportation services and greater diversity in terms of vehicles, goods and operators. For example, in highway safety, vehicle miles traveled (VMT) will increase and lead to more opportunities for accidents. Human diversity will also create new challenges, such as language comprehension and differing cultural norms that could impede some safety efforts. The driving population will include a greater proportion of elderly and non-native speakers, raising the percentage of drivers in higher risk categories.

An increased volume of diverse goods, including radioactive materials, could lead to greater exposure to potentially catastrophic accidents. On-road vehicles have diversified, and vehicle designs may compromise vehicle compatibility and intensify risks to smaller vehicles. Expected growth in goods movement will result in greater numbers of large trucks on the highways potentially increasing the number and severity of crashes as the mix of vehicles becomes more varied.

Mitigating these factors will be improvements in car technology, both in terms of crash-avoidance and crash-worthiness. Finally, as driver distractions such as mobile phones, in-vehicle entertainment, and navigation services become more prevalent in both commercial and private vehicles, driver inattention raises the risk for a growing number of accidents. In aviation, DOT will have to adapt to changing needs in a variety of areas as the industry adjusts to new security requirements and changes in demand. DOT must work with stakeholders to ensure that information, information technologies, and analytical techniques appropriate to identifying and resolving resultant safety issues are adapted or developed, made available, and used.

External Factors

The external factors presented below could affect our ability to achieve our safety outcomes: reductions in transportation-related fatalities and injuries. We are unable to predict the interactions among these factors and have therefore presented both positive and negative safety consequences

Expansion and integration of the telecommunications and e-commerce industry sectors with transportation systems raises new challenges related primarily to unsafe user practices such as use of cell phones and other office and personal devices while driving. However these technologies can contribute to safety by alerting responders to the location of crashes and vehicles in distress.

Adaptation of new materials, alternative fuels, and consumer electronics to transportation systems offers the potential to reduce the number and severity of safety-related incidents. It also raises possible new concerns related to safety-worthiness of system designs.

Increased technological complexity of transportation systems offers the potential to reduce the frequency of serious transportation incidents, but because it may be more difficult to operate complex systems, incidents attributable to human operator error could increase.

Growing involvement and influence of state and local governments, private industry, and communities in safety policy implementation increases the opportunity for safety gains, but also increases the number of stakeholders who must collaborate and cooperate making it more difficult to gain consensus.

Emergence of transnational corporations and globalization of markets raises concerns about maintaining safety standards in system design and use internationally, and will stimulate demand for further harmonization of international safety standards related to system design and use as well as operator training.

Increasing public concern for safety could stimulate increased government oversight, public and private investment in safety design and practices, and a societal shift toward safer behaviors and attitudes.

Consumer demands for environmentally compatible designs and practices may contribute to safety or, in some cases, may compromise safety in transportation systems.

The aging of the U.S. population must be taken into account when designing and building new vehicles and infrastructure. The elderly population will present special needs and risks that must be addressed.

A changing ethnic mix in the population will introduce new barriers, such as language and differing cultural norms, to achieving better transportation safety practices among the traveling public and in commercial transportation.

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

Consistent with Secretary Mineta's emphasis on a *Smarter* DOT committed to accountability and results, we will measure progress in reducing transportation fatalities and injuries with safety performance measures fully developed in DOT's Annual Performance Plans and Reports for fiscal years 2003-2008. DOT's Annual Performance Plans and Reports contain details on the scope, source, limitations and statistical issues for each performance measure. Table 1 below presents a crosswalk between safety outcomes and candidate safety performance measures.

Table 1. Safety Outcomes and Candidate Performance Measures

Outcomes	Candidate Performance Measures
<p>Reduction in transportation-related deaths</p> <p>Reduction in transportation-related injuries</p>	<p><u>Highway Safety</u> Highway fatality rate Large truck-related fatality rate Alcohol-related fatality rate Percentage of front occupants using safety belts Percentage of States with Comprehensive Strategic Highway Safety Plans</p> <p><u>Aviation Safety</u> Commercial air carrier fatal accident rate Number of general aviation fatal accidents Number of highest severity operational errors Number of highest risk runway incursions</p> <p><u>Rail Safety</u> Train accident and highway rail incident rate Rail-related fatality rate Train accident rate Grade crossing accident rate</p> <p><u>Transit Safety</u> Transit fatality rate Transit injury rate</p> <p><u>Pipeline Safety</u> Number of incidents for natural gas and hazardous liquid pipelines</p> <p><u>Hazardous Materials Safety</u> Number of serious hazardous materials transportation incidents</p>

MOBILITY STRATEGIC OBJECTIVE

*“Advance accessible, efficient, intermodal transportation
for the movement of people and goods”*

Outcomes

- 1) Improved infrastructure in all modes
- 2) Reduced congestion in all modes
- 3) Increased reliability throughout the system
- 4) Increased access for all Americans

Strategies

DOT’s mobility strategies target improvements in access and efficiency throughout the U.S. transportation network. Transportation congestion and bottlenecks hurt air quality, slow commerce, increase energy consumption and threaten our quality of life. They waste significant time and money and have a negative impact on productivity. Traffic congestion is a growing threat to our economy and costs motorists in our top urban areas about \$68 billion a year in wasted time and fuel.

Improving mobility in light of increasing travel and trade must be done through a comprehensive approach that involves creativity and leadership in making improvements to all modes of transportation and to the administration of federal programs. The DOT team headed by Secretary Mineta is serving President Bush well by changing the way business gets done. We must be pioneers in transportation to tackle and solve the thorny challenges that impact mobility. Strategic expansion of our system capacity and other creative solutions are needed to address our growing mobility needs.

An integral aspect of mobility is accessibility: transportation must be accessible to all Americans, including those with low incomes, the elderly and persons with disabilities. It is our obligation to ensure that transportation is not only safe and efficient, but that it is also accessible to all. Where barriers to accessibility exist, we will seek to eliminate them.

The resources and programs listed in DOT’s Annual Performance Plans and budgets are necessary to achieve our mobility outcomes and execute our strategies. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the strategies presented below extends from the present through fiscal year 2008.

Leadership

- 1) Work with Congress and stakeholders to reauthorize surface and aviation programs, propose legislation to reform intercity passenger rail and address maritime transportation issues. (Supports all outcomes)
- 2) In response to the transfer of Coast Guard to the Department of Homeland Security, rationalize DOT oversight over maritime commerce and industrial activities between the Maritime Administration and the St. Lawrence Seaway Development Corporation. (Supports all outcomes)

- 3) Promote more efficient use of the Nation's rail system by supporting investment in technology and the expansion of rail capacity through direct loans or loan guarantees. (Supports all outcomes)
- 4) Work with stakeholders to plan for civilian and military use of transportation vehicles and infrastructure. (Supports all outcomes)
- 5) Work with our transportation partners to create incentives to shift to more efficient transportation modes. (Supports all outcomes)
- 6) Work with industry, state and local government to mitigate the impacts to efficient transportation caused by planned and unforeseen events. (Supports all outcomes)
- 7) Work with stakeholders in all modes to increase system capacity where required and effectively operate the system to its highest level of efficiency without sacrificing safety. (Supports all outcomes)

Building Expertise

- 8) Provide consumer information, investigate complaints and conduct reviews to ensure that the American public is economically safeguarded in the movement of their personal goods and in their travel. (Supports outcomes #3 and #4)
- 9) Become the employer of choice for individuals seeking careers in the planning, design, engineering, management and financing of transportation infrastructure in all modes by providing job opportunities, internships, training and rotational assignments in mobility core competencies. (Supports all outcomes)
- 10) Provide technical assistance and training to improve transportation planning and effective management and operation of the system. (Supports all outcomes)

Technology

- 11) Exploit web-enabled and other secure information technologies to update contingency planning; to speed response and restoration actions; to communicate emerging mobility issues; and to share information on best practices in improving mobility in all modes. (Supports all outcomes)
- 12) Streamline grant processing throughout DOT using secure web enabled technology to support transactions and provide technical assistance. (Supports all outcomes)
- 13) Examine ways to encourage cargo movements by water through the development of barge and fast vessel technologies to bring new capacity to our intermodal transportation system. (Supports outcomes #2 and #3)
- 14) In consultation with our public and private sector partners, conduct research and expedite the deployment of technologies as well as innovative operation and service concepts that improve the reliability and efficiency of the system, and the durability of the infrastructure. (Supports all outcomes)

Management Challenges

The strategies outlined above represent the Department's approach to the mobility performance challenges we will face in the future. However, achieving progress is contingent upon our ability to meet the mobility management challenges outlined by the OIG and the GAO, as discussed below. The language that describes each challenge is essentially that used by the OIG and the GAO in their reports.

Aviation Mobility

The OIG recognized the downturn in air traffic volume as an opportunity to address future capacity concerns in an efficient and timely manner. FAA needs to address the uncertainty regarding the airlines' ability to purchase and install new technologies (estimated at \$11 billion) called for in the Operational Evolution Plan, as the decline in airline revenue since early 2001 may reduce their ability to equip with new systems. The OIG stated that FAA should be strategically positioned – through a combination of new runways, better air traffic management technology, and greater use of non-hub airports – for a rebound in demand for air travel. FAA must continue to make major modifications to the Operational Evolution Plan and achieve a balance in the use of Airport Improvement Program (AIP) Grant and Passenger Facility Charges (PFC) to ensure both adequate capacity and high security.

The FAA has acknowledged these concerns and will address them through their new strategic plan that will focus capacity investments on leverage points with the most significant national impacts.

Airline Industry Competition

The GAO has stated that airline industry competition and service have mobility and economic consequences for consumers. Airlines' restructuring and consolidation will significantly affect the industry's competitive landscape. The GAO further states that industry consolidation raises critical public policy issues, such as greater potential barriers to carriers that want to enter markets, less competition in key markets, and greater risk of travel disruption as a result of labor disputes. Small communities face higher fares and reduced services as airlines continue to reduce their market presence. The GAO states that these actions will increase pressure on the Essential Air Service (EAS) program.

The Office of the Secretary and FAA have acknowledged the importance of airline industry competition and service to small communities and are working to bring about improvements in both areas. For example, during the past two years DOT has reviewed competition plans and plan updates submitted by 38 medium and large hub airports to ensure that those airports provide access to airport gates and other facilities on reasonable terms to requesting air carriers and that the airports adopt practices and procedures, such as gate-use monitoring and gate availability notification, that are critical for removing barriers to competitive airline service. Additionally, DOT is conducting two studies investigating opportunities to improve airport utilization and efficiency of operations. One study seeks to understand the extent to which airport

capacity is available at secondary airports, how such capacity could be used more effectively to reduce air traffic congestion at large airports, and whether existing federal laws and regulations should be modified to make it easier for secondary airports to grow and expand. The other study is examining the application of market-based incentives, such as peak-period pricing, as a means of improving airport utilization and reducing travel delays. With respect to the EAS program, the budget for fiscal 2004 proposes significant changes to the program to target subsidies to the small communities where they are most needed, require local support through matching funds, and broaden the program to provide transportation alternatives where alternate airports are within reasonable driving ranges. DOT will further address the challenges of airline competition and small community service through the following milestones for fiscal years 2003 to 2008.

Milestone: In fiscal 2003, propose legislative changes to improve efficiency and effectiveness of the EAS program.⁶

Milestone: In fiscal 2004, based on completed studies of secondary airports and market-based incentives, determine whether existing federal laws and regulations should be modified and the specific modifications necessary to promote improvements in airport efficiency and capacity utilization.

Amtrak

The OIG and GAO have noted that intercity passenger rail plays a vital role in surface transportation and call upon DOT and Amtrak to develop alternatives to preserve commuter and intercity services in the event of cessation of service due to system shutdown. GAO calls for DOT to provide a framework for determining the role and level of investment for intercity passenger rail.

The Office of the Secretary and the Federal Railroad Administration have acknowledged the importance of intercity passenger rail as a component of our Nation's transportation infrastructure. More significantly, Secretary Mineta has set out five principles that need to be part of any successful reform of intercity passenger rail service:

- Create a system driven by sound economics;
- Require Amtrak transition to a pure operating company;
- Introduce carefully managed competition to provide higher quality rail service at reasonable prices;
- Establish a long-term partnership between States and the Federal government to support intercity passenger rail service; and
- Create an effective public partnership, after a reasonable transition, to manage the capital assets of the Northeast Corridor.

DOT has been discussing these principles with stakeholders and will work with the 108th Congress to translate these principles into legislation.

⁶ Proposed in DOT FY 2004 budget request.

Investments in Surface Infrastructure

Investments in surface infrastructure represent a major part of DOT's role in maintaining the transportation system. OIG has found that DOT could get better value for its investment dollars by operating more efficiently through oversight of major projects. OIG noted that meeting this challenge will require FHWA to ensure that major projects are delivered on time and on budget. This includes delegating more contract-level responsibility to the states, improving state practices in oversight, making use of project management tools, and modernizing FHWA staffing structure to meet oversight needs. OIG also recommends strengthening sanctions, increasing scrutiny, providing specialized training at the state level, and allowing monetary recoveries to be returned to the affected state for use in fraud prevention programs.

FHWA has acknowledged this challenge and will provide an agency-wide balance between project and program oversight; evaluate the adequacy of skill sets within the FHWA staff working on project oversight; support efforts to detect and prevent fraud; assure that major projects are delivered on time, within budget, safely and with highest quality; and advance the principles of Transportation Asset Management (TAM). FHWA will demonstrate progress in meeting this challenge over the next five years through the following milestones:

Milestone: FHWA will develop an oversight program that monitors the effective use of all funds, which at a minimum includes areas related to financial integrity and project delivery. Risk assessment tools will be the foundation for the program.

Milestone: FHWA will use established core competencies, which include technical and non-technical skill sets to recruit, select and train major project oversight managers.

Milestone: FHWA will focus on a best practice approach to prevent fraud by working closely with our major project oversight managers and the OIG investigative staff. In addition, FHWA will co-host annual fraud conferences and support the AASHTO TRNS*PORT program that identifies abuse in bid rigging and other things.

Milestone: FHWA will issue major project management plan templates and associated guidance as well as cost estimating standards.

Milestone: FHWA will assist State Departments of Transportation in developing and deploying TAM plans.

New Starts Program

The GAO notes infrastructure concerns with respect to the FTA New Starts Program. The GAO stated that the program would likely have a very limited ability to fund new projects under the next authorization due to the number of projects that are or are soon to be approved. GAO recommends that FTA facilitate a clearer prioritization of projects by rating them "recommended" and "highly recommended."

FTA has acknowledged this challenge and will demonstrate progress in meeting it by developing milestones after surface transportation reauthorization has been signed into law.

Transportation Workforce Development

The GAO has highlighted the nationwide shortfall in human capital with the requisite skills to meet transportation's changing needs throughout the Nation. The GAO stated that DOT's leadership and active involvement are essential to coordinate a strategic response by promoting agreement among high-level stakeholders on successful performance by transportation agencies and the competencies these agencies will need to achieve this performance and information sharing on best practices, lessons learned, human capital research, and benchmarking against other industries and countries that face issues related to an aging workforce.

The Office of the Secretary and the Operating Administrations have acknowledged this challenge and, working in partnership with transportation providers, will demonstrate progress in meeting it through the following milestones;

- Milestone:* Establish a strong DOT leadership role for transportation workforce development, training and education as a convener for the transportation industry.
- Milestone:* Establish partnerships throughout the transportation industry and the education community for transportation workforce development.
- Milestone:* Assure that young people are attracted to the transportation jobs of the future.

Perspective and Outlook

Shifting demographic and economic patterns present new challenges in transportation mobility. Mobility needs are expected to strain the system's capacity in the near future but at different times and in different ways depending on the mode. Population, a key driver in demand for transportation services, is projected to increase by over 3 million people per year. Much of the population growth is expected to be concentrated in urban regions, resulting in congestion on roads within cities and suburbs. Passenger vehicle travel on public roads is expected to grow by 24.7 percent and passenger travel on transit systems is expected to increase by 17.2 percent between 2000-2010.

Changes in population structure will also change demand for transportation services. The population will become increasingly elderly and more diverse, creating unfamiliar accessibility and equity issues. Baby Boomers begin to reach 65 in 2010 increasing the need for responsive transit services and improved road safety features, such as enhanced signage. The increase in the proportion of elderly and persons with disabilities will require creative alternatives to traditional individual transportation.

The increased mobility needs of the population are likely to conflict with the increased mobility needs of commerce. The commerce focus will continue to shift from physical economic centers operating from stock inventory to a more service-oriented market in

which in-time, custom orders and electronic economic centers demand more reliable, efficient transportation.

We have moved into a world where economic productivity is tightly linked to transportation efficiency. Growth in e-commerce and the increased emphasis on reliable delivery will put more commercial traffic on the road, aggravating conflicts between private and commercial mobility. Increasing globalization of the American economy will pressure capacity around our ports and borders. Over one billion tons of import and export trade cargo is moved by water. Another billion tons of cargo is carried in domestic waterborne movements, which serves over 90 percent of the U.S. population. By the year 2020, U.S. foreign trade in goods may grow by more than half its current tonnage, and inland waterway traffic will increase as well. Major congestion occurs in and around marine ports and terminals at specific points and times. This includes loading and discharging cargo as ships arrive and depart terminal areas, which is complicated by peak travel times in and around urban areas for freight. To date, we do not have a mechanism that will determine the magnitude of congestion in these multi-layered situations.

In 2000, aviation delays attributable to air traffic congestion cost passengers, shippers, and the industry an estimated record \$6.5 billion, not including costs to other sectors of the economy. The tragic events of 9/11 coupled with the economic downturn have depressed air traffic levels. The most optimistic predictions are for air travel and activity at FAA air traffic facilities to return to pre 9/11 levels between 2005 and 2006. However, the mix of air traffic is expected to be more complex. There will be more small regional and business jets that use the same airspace and runways but require greater separation from the larger jets. This increased growth and complexity will require more capacity in the air traffic control system and at certain airports.

External Factors

The external factors presented below could affect our ability to achieve our mobility outcomes: improved infrastructure, reduced congestion, increased reliability and increased access to transportation services. We are unable to predict the interactions among these factors and have therefore presented both positive and negative consequences

Cyclical and long-term changes in economic activity have a strong impact on the level of personal travel and shipment of goods. Economic growth increases travel and trade putting pressure on capacity but economic downturns decrease travel and trade at the margins.

E-commerce and web enabled business affect the nature of business-to-business transactions, the location of warehousing, shopping and travel, and traffic in residential areas because of increased freight deliveries to homes and businesses. Transportation reliability and efficiency become more important.

Improvements in the fuel efficiency of the automobile fleet, whether through new technologies such as hybrids, market-driven responses to increased gasoline prices, or

changes in consumer preferences for smaller vehicles, would decrease gasoline use associated with a given level of travel, leading to reduced user-based revenues that fund DOT programs.

The development, adoption, and acceptance of intelligent transportation and navigation technologies may increase the carrying capacity of existing road networks and reduce the variability of travel times due to incidents.

With the increasing population share of elderly persons and ethnic minorities will come increasing political power of these groups. To the extent that the mobility needs and desires of these groups differ from the current population mix, government transportation priorities may be altered. The aging of the population, urban sprawl and accessibility to jobs and services will increase the need for delivering efficient, affordable and accessible transport.

Changes in the nature of economic activity will affect the forces of agglomeration and urbanization that hold cities together, resulting in possible changes in the size and geographic distribution of urban areas placing new demands on personal travel and commerce.

Environmental concerns may preclude or limit additions to or expansions of the existing transportation network, leading to increased travel times and user costs.

Reducing greenhouse gas emissions likely requires reducing the use of fossil fuels, requiring some combination of decreased travel or increased commuter choice and transit access, improved vehicle fuel efficiency, or alternative propulsion technologies.

Changes in urban land use preferences by residents and firms will affect future urban growth patterns and the type of transportation infrastructure and vehicles necessary to serve such patterns.

Regionalization of transportation systems will provide different population groups and new stakeholders greater involvement in planning and increased access to those systems perhaps making it more difficult to reach consensus on transportation plans.

Concerns about safe driving by young and elderly drivers may lead to greater restrictions on drivers' license privileges, requiring more public transit (including demand responsive services) and opportunities for walking and bicycling to provide for the mobility needs of these groups.

Accessibility and meeting the physical and service needs for all the population is a transportation challenge that will involve serving multiple generation households, families with children, persons with disabilities, the retired and the elderly.

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

Consistent with Secretary Mineta's emphasis on a *Smarter* DOT, focused on accountability and achieving results that benefit the taxpayers and the Nation, we will measure progress in achieving our mobility outcomes through performance measures fully developed in DOT's Annual Performance Plans and Reports for fiscal years 2003-2008. DOT's Annual Performance Plans and Reports contain information on the scope,

source, limitations and statistical issues for each performance measure. Table 2 below presents a crosswalk between mobility outcomes and candidate performance measures.

Table 2. Mobility Outcomes and Candidate Performance Measures

Outcomes	Candidate Performance Measures
Improved infrastructure in all modes	<u>Improved Infrastructure</u> Percent of travel on the NHS meeting pavement performance standards for acceptable ride Percent of deficient deck area on NHS bridges Average condition of transit motor bus fleet Average condition of rail vehicle fleet
Reduced congestion in all modes	<u>Reduced Congestion</u> Percent of total annual urban area travel that occurs in congested conditions Percent of urban area peak travel time attributable to congestion Number of metropolitan areas where integrated ITS infrastructure is deployed Average annual percent change in transit passenger miles, adjusted for employment levels Passenger miles traveled by transit
Increased reliability throughout the system	<u>Increased reliability</u> Percent of flights arriving on time Average annual hours of extra travel time due to delays in urban areas Large hub airport efficiency rate Average daily large hub airport arrival capacity
Increased access for all Americans	Percentage of days that the St. Lawrence Seaway is available for shipping <u>Increased Access</u> Percent of bus fleets ADA compliant Percent of rail stations ADA compliant Number of employment sites made accessible through Job Access and Reverse Commute grants

GLOBAL CONNECTIVITY STRATEGIC OBJECTIVE

“Facilitate a more efficient domestic and global transportation system that enables economic growth and development”

Outcomes

- 1) Reduced barriers to trade in transportation goods and services
- 2) More efficient movement of cargo throughout the supply chain
- 3) Enhanced international competitiveness of U.S. transport providers and manufacturers
- 4) Harmonized and standardized regulatory and facilitation requirements
- 5) The most competitive, cost effective and efficient environment for passenger travel
- 6) Expanded opportunities for all businesses, especially small, women-owned and disadvantaged businesses

Strategies

Secretary Mineta’s Vision of the future would be incomplete without recognition of the vital importance of global connectivity in transportation. Transportation systems within and among nations are lifelines to economic growth, to freer trade, and to greater cultural exchange. Our globalized economy hinges on efficient supply chains and just-in-time manufacturing. Transportation is critical to both. With leaner inventories, companies depend on transportation being efficient enough to give them a competitive edge.

We are in a world where economic productivity is tightly linked to transportation efficiency. Multinational manufacturers source inputs from international suppliers, bring these inputs to production facilities, assemble them and ship them to customers around the globe. Competitive international trade depends on transportation.

A domestic and international intermodal approach is central to DOT’s role in promoting global connectivity. For the \$8 trillion freight industry, efficient connections between modes and efficient travel in each mode are essential to the competitive position of U.S. products in global markets.⁷ For example, increasing globalization of the American economy will pressure capacity around our ports and borders. By the year 2020, U.S. foreign trade in goods may grow by more than half its current tonnage. Major congestion occurs in and around marine ports and terminals at specific points and times.

⁷ GAO Major Management Challenges and Program Risks – Department of Transportation.

This includes loading and discharging cargo as ships arrive and depart terminal areas, which is complicated by peak travel times in urban areas for freight.

Secretary Mineta's Vision calls for DOT to be pioneers in transportation, breaking the mold to play a visionary role in facilitating a strong, interconnected global transportation system vital for continued economic growth in the U.S. The Secretary's strategies to address transportation in the global economy have two synergistic thrusts. One is directed toward opening international transportation markets and the other is directed toward the improvement of essential, intermodal transportation linkages. Both are needed to achieve the outcomes that will yield better global connectivity and a more competitive, cost effective marketplace.

The resources and programs listed in DOT's Annual Performance Plans and budgets are necessary to achieve our global connectivity outcomes and execute our strategies. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the strategies presented below extends from the present through fiscal 2008.

Leadership

- 1) Work with our trading partners to seek further liberalization of international transportation markets. (Supports all outcomes)
- 2) Participate in international organizations at the ministerial and working levels to resolve issues related to global transportation. (Supports all outcomes)
- 3) Provide technical assistance to foreign transportation stakeholders with support from various international development agencies. (Supports outcomes #2, #4, #5 and #6)
- 4) Encourage and facilitate intermodal transportation planning worldwide. (Supports outcomes #2, #3, #5 and #6)
- 5) Advocate greater access to global capital markets for U.S. companies in the transportation sector. (Supports outcomes #1, #3, #5 and #6)
- 6) Where desirable, advocate worldwide adoption of harmonized standards and regulations. (Supports outcomes #3, #4 and #6)

Building Expertise

- 7) Support and conduct research on issues concerning the intersection of passenger and freight transportation. (Supports outcomes #2, #4, and #5)
- 8) Invest in the capabilities of the Department's international program staff by recruiting a multilingual transportation workforce and developing core competencies in subjects related to international transportation. (Supports all outcomes)

Technology

- 9) Accelerate the use of technologies such as Intelligent Transportation Systems (ITS) that reduce travel time delays at key intermodal transfer points, in

significant corridors and at international border crossings. (Supports outcomes #2, #3, #4, #5 and # 6)

- 10) Implement secure, advanced technology to expand communications with global constituents. (Supports all outcomes)

Management Challenge

The strategies outlined above represent the Department's approach to the global connectivity challenges we will face in the future. However, achieving progress is contingent upon our ability to meet the crucial intermodal management challenge outlined by the GAO.

Intermodalism

The GAO has stated that intermodal connections such as multimodal passenger terminals and roads that link freight terminals and major highways are among the transportation system's weakest links. The GAO emphasizes that the projected growth in freight volume of up to 70 percent in the next 20 years, and the projected growth in passenger travel of up to 25 percent by 2010, will lead to increased congestion and decreased mobility. GAO calls on the DOT to address this challenge through an increased emphasis on intermodalism, intermodal planning and investment, and faster, more efficient modal linkages

DOT has acknowledged this challenge and will demonstrate progress in meeting it by developing milestones after surface and aviation transportation reauthorizations have been signed into law.

Perspective and Outlook

This strategic plan addresses the growing importance of transportation in the global economy and focuses on connectivity within the U.S. and abroad. The international movement of people and goods supports trade, economic growth, cultural exchange, and the expansion of democracy around the world. DOT has participated with the European Union in an annual forum to find ways to cooperate by applying ITS technology to improve both freight movement and security. DOT is active in numerous international transport organizations such as the Asia Pacific Economic Cooperation, the Western Hemisphere Transportation Initiative, the Africa Transportation Initiative, NAFTA, the GATS negotiations and others. DOT also participates in the development of standards on facilitation and regulations, as well as freight data exchange and technology devices within organizations such as the International Maritime Organization, the International Civil Aviation Organization, the International Standards Organization, the International Telecommunications Union, the United Nations Center for Trade Facilitation and Electronic Business, the World Customs Organization, the International Electrotechnical Commission and other global organizations dedicated to improving transportation.

Globalization of the American economy will increase pressure on our ports and borders. Waterborne trade provides a vivid illustration. Over the first quarter of the 21st Century, total U.S. waterborne trade is expected to increase by 47 percent, from 2.1 billion metric tons (BMT) in 2000 to 3.1 BMT by 2025. Eighty two percent of this growth will come

from the continuing boom in U.S. waterborne foreign trade and three-quarters will come from imports.

Within the hemisphere, there are international transportation issues on our northern and southern borders. DOT's St. Lawrence Seaway Development Corporation will coordinate its activities with its Canadian counterpart through an unique binational arrangement requiring 24 hour, year round attention. Canada and the U.S. cooperate in developing rules and regulations, day-to-day operations, ship inspections, traffic management, safety and environmental programs, and trade development programs concerning the Seaway.

With respect to our southern border, trade between Mexico and the U.S., as measured by dollar value, may double by 2008, magnifying cross border traffic, safety, environmental, security and capacity issues. The two Nations will collaboratively address these transportation issues to facilitate personal travel and the flow of commerce and cooperatively implement the transportation provisions of the smart border accords.

DOT's international profile in aviation is increasing with aviation safety as one of our most important exports. FAA is broadening our network of partnerships with civil aviation authorities, and is promoting relationships with regional safety organizations.

A domestic and international intermodal approach is central to DOT's role in promoting global connectivity. The evolution of technology will build new international transportation networks. For the \$8 trillion freight industry, efficient connections between modes and efficient travel within each mode are essential to the competitive position of U.S. products in global markets.⁸ DOT will work to better understand the movement of freight, secure financing for intermodal connectors, and improve systems management and the application of technology to intermodal connections. DOT will play an important role in maintaining the strong, interconnected global transportation system vital for economic growth in the U.S.

External Factors

International trade and travel are expected to play an increasingly significant part of DOT's work. The factors presented below are likely to influence our ability to achieve our global connectivity outcomes.

The globalization of commerce requires an efficient transportation system and is key to whether U.S. businesses will be competitive in the global marketplace. A loss of public support for global trade and the public transportation investments and activities that facilitate global trade would decrease the competitiveness of U.S. business in the global marketplace.

Investment in domestic and international transportation systems is central to survival in the global marketplace. Given the important role that transportation plays in commerce and tourism, if there is not greater private sector investment and improved coordination of public-private sector investment in domestic and international

⁸ GAO Major Management Challenges and Program Risks – Department of Transportation.

intermodal transportation connections, U.S. businesses will not be competitive in the global marketplace.

Continuing deregulation as well as horizontal integration of the global transportation system across all modes of transport will be important in developing and sustaining a transportation system that supports global economic activity. Transportation has become part of supply chain management by allowing time compression, reliable delivery, just in time inventory control, and customization.

The evolution of technology will build new global transportation networks. The development and adoption of IT, navigation and other technologies will reflect two mutually reinforcing trends that build global networks of R&D, production, and marketing: (1) expanding international trade, foreign direct investment, and corporate alliances, and (2) converging technological capabilities across National boundaries.

E-commerce and National competitiveness will drive the need for greater collaboration between the public and private sectors to ensure the integration and deployment of new technologies into the transportation system.

The extension of current information and communication technologies will provide universal access to a National Information Infrastructure (NII) regardless of the information's physical location. It will support the reduction of transportation cost and trip time variance and improved transportation timeliness.

The changing regulatory climate is shifting toward minimizing National regulations, reducing international barriers to trade, harmonizing international transportation regulations, and developing standards of facilitation. This shift supports the reduction of transportation cost, trip time variance and improved transportation timeliness.

Trends such as the growth of the elderly population and their demand for leisure travel may require adaptation of vehicles and related transportation services in international transit and destinations.

The ability to improve transportation security internationally will impact personal travel and commerce. Terrorist attacks have been effective in reducing demand for travel. Unless travelers feel safe, they are unlikely to travel to international destinations.

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

Consistent with Secretary Mineta's emphasis on a *Smarter* DOT fully committed to accountability and results that benefit the taxpayers and the Nation, we will measure progress in achieving our global connectivity outcomes through performance measures fully developed in DOT's Annual Performance Plans and Reports for fiscal years 2003-2008. Our Annual Performance Plans and Reports contain details on the scope, source, limitations and statistical issues for each performance measure. Table 3 below presents a crosswalk between outcomes and candidate performance measures.

Table 3. Global Connectivity Outcomes and Candidate Performance Measures

Outcomes	Candidate Performance Measures
Reduced barriers to trade in transportation goods and services	<u>Reduced barriers</u> Number of passengers in international markets with open skies aviation agreements
More efficient movement of cargo throughout the international supply chain	<u>Efficient Cargo Movement</u> Travel time in freight significant corridors Border crossing delay
Enhanced international competitiveness of U.S. transport providers and manufacturers	TBD
Harmonized and standardized regulatory and facilitation requirements	TBD
The most competitive, cost effective and efficient environment for passenger travel	TBD
Expanded opportunities for all businesses especially women owned and disadvantaged businesses	<u>Expanded Opportunity</u> Percent of total dollar value of DOT direct contracts awarded to women owned businesses Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses

ENVIRONMENTAL STEWARDSHIP STRATEGIC OBJECTIVE

*“Promote transportation solutions that enhance communities
and protect the natural and built environment”*

Outcomes

- 1) Reduced pollution and other adverse environmental effects of transportation and transportation facilities
- 2) Implementation of President Bush’s Executive Order 13274, “Environmental Stewardship and Transportation Infrastructure Project Reviews”

Strategies

Current trends in transportation are exerting pressure on environmental resources worldwide. In the U.S., commercial and personal travel has grown substantially in recent years and will continue to increase in the future. Americans want solutions to transportation problems but they want solutions that are consistent with sound environmental planning.

Secretary Mineta’s Vision calls for a balance between environmental challenges and the need for a safe and efficient transportation network. Context-sensitive solutions are essential to get all of the players to work together to ensure that transportation decisions are fully respectful of communities and of environmental resources.

Secretary Mineta’s central strategy for achieving our environmental goals will be to work with our many stakeholders to successfully implement President Bush’s Executive Order 13274 concerning Environmental Stewardship. This Executive Order calls for a new way of doing business that brings together the timely delivery of transportation projects with the protection and enhancement of the environment. As pioneers in transportation, we will speed up the approval and completion of all vital transportation projects, consistent with the requirements of environmental law and our responsibilities to be good stewards of the environment.

The resources and programs listed in DOT’s Annual Performance Plans and budgets are necessary to achieve our environment outcomes and execute our strategies. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the strategies presented below extends from the present through fiscal 2008.

Leadership

- 1) Exercise leadership in implementing President Bush’s Executive Order 13274, “Environmental Stewardship and Transportation Infrastructure Project Reviews”
by:

- a. Expediting environmental reviews of high-priority transportation infrastructure projects, and
 - b. Advancing environmental stewardship through cooperative actions with project sponsors to promote protection and enhancement of the natural and human environment in the planning, development, operation, and maintenance of transportation facilities and services. (Supports both outcomes)
- 2) Work proactively with government, industry and public interest groups in the U.S. and internationally to set environmental policies and standards and enforce environmental laws pertaining to transportation. (Supports both outcomes)
 - 3) Support the President's Hydrogen Fuel Initiative through research on fuel distribution and delivery infrastructure, transportation of associated hazardous materials, and vehicle safety. (Supports outcome #1)
 - 4) Create incentives to avoid or mitigate the adverse environmental effects that can accompany transportation services and facilities. (Supports both outcomes)
 - 5) Encourage public involvement in the transportation planning process to improve the access of all Americans to transportation facilities and services. (Supports both outcomes)
 - 6) Work proactively with our transportation partners to seek integrated approaches to resolving transportation issues while giving full consideration to local environmental conditions. (Supports both outcomes)

Building Expertise

- 7) Foster dialogue, education and communication about transportation alternatives and choices that improve compatibility between transportation and communities and encourage consideration of the full range of transportation options, including pedestrian and bicycle travel, to address mobility and environmental challenges. (Supports both outcomes)
- 8) Support interdisciplinary research on connections among transportation, energy and the environment. (Supports both outcomes)
- 9) Publish timely information on best practices in mitigating transportation's impact on communities and the natural environment using secure Web-based technologies. (Supports both outcomes)
- 10) Collaborate with state and local emergency responders to simulate or exercise emergency response plans concerning environmental incidents in transportation. (Supports outcome #1)
- 11) Invest in the capabilities of the DOT workforce by hiring individuals with education and experience related to the nexus of transportation, energy and the environment such as urban and regional planning, economic development, environmental sciences and environmental law. (Supports all outcomes)

Technology

- 12) Adopt transportation policies and promote technologies that do not contribute to environmental degradation. (Supports both outcomes)
- 13) Collaborate with federal agencies and the private sector to support and conduct research in technologies that improve energy efficiency, foster the use of alternative fuels, and reduce vehicle emissions. (Supports outcome #1)
- 14) Improve DOT-owned or controlled facilities for the benefit of host communities by preventing pollution, recycling, using recycled products, and cleaning up contaminated facilities. (Supports outcome #1)
- 15) Work with our transportation partners to mitigate the adverse environmental effects that presently occur from existing transportation systems. (Supports outcome #1)

Management Challenges

There are no management challenges listed by the GAO or the OIG pertaining to the Environmental Stewardship Strategic Objective.

Perspective and Outlook

Current trends in transportation increase pressure on environmental resources and energy. Commercial and personal travel is expected to continue to increase. For example, annual vehicle miles traveled (VMT) on our Nation's highways has almost quadrupled since 1960 and is continuing to grow, increasing the strains on transportation infrastructure. For example, growth in VMT has far outstripped the growth in lane-miles, which have increased by only 10 percent since 1980.

Increased travel boosts transportation's energy consumption, creating challenges both in terms of supply and delivery via pipelines. Energy consumption is also tied to greenhouse gas (GHG) production, an emerging concern for the transportation sector, which produces 26.8 percent of the GHG's emitted in the U.S. and is increasing emissions faster than any other sector. Finally, although transportation emissions of nearly all air pollutants are at their lowest levels in 30 years, continued growth in travel has caused a slight increase in nitrogen oxide emissions and continues to challenge efforts to reduce air pollutant emissions.

The transportation sector faces several challenges in environmental stewardship in coming years. Many of the challenges stem from a growing and increasingly mobile population and from a growing economy. Population growth will place a greater strain on the Nation's transportation infrastructure, increase demand for energy; and increase the number of vehicles on the road, leading to air quality concerns. Suburban areas will likely absorb a disproportionate amount of the population growth, amplifying the growth effects and creating additional challenges with emissions, noise, and infrastructure.

Diffuse growth also requires new infrastructure and building new infrastructure may create land use conflicts and disrupt ecosystems.

The economy is a driver of demand for transportation. Periods of economic growth strain the capacity of the transportation system leading to calls for expansion of ports, highways and airports. Finally, climate change will likely prove a challenge to the transportation sector, both in terms of adapting to impacts on the transportation system and to mitigating transportation-related greenhouse gas emissions. While these issues will form the core challenge to integrating environmental stewardship and transportation in the near future, other, unforeseen issues may also be factors. DOT looks forward to addressing these challenges.

External Factors

The relationship between transportation and the environment will play an important part of DOT's work in the future. The factors presented below may determine our ability to achieve our environmental outcomes.

Global warming could become more severe posing a variety of impediments to existing and new transportation infrastructure as coastal levels, runoff and an increase in weather severity. The result could be increased public pressure to reduce emissions from transportation sources.

Transportation faces a significant challenge to control and minimize air, water, and noise pollution or it may encounter a public backlash that may impede system improvement. There may be non-air quality environmental and social impacts resulting from otherwise desirous advances in low-to no-emission transportation technologies (i.e., hybrid and fuel cell drive trains). With the advent of hybrids, air quality improves and people may drive more rather than less. With more driving may come increased pressure on land and water use, more congestion, and other adverse effects. Transportation planning should take this scenario into account.

Planning and development of transportation infrastructure that is resilient to environmentally caused damage (e.g. earthquakes, floods, etc.) is an increasing need and a new challenge. It will support the reduction of transportation cost and trip time variance and improved transportation timeliness.

Advances in fuel cells and blended fuel engines for automobiles could take mileage up to 70-80 miles per gallon by the end of the decade. The availability of ultra-clean, hydrogen fuel cells for cars whose only by-product will be water clean enough to drink should reduce transportation's contribution to global climate change.

Traffic congestion and air quality are becoming major challenges that require solutions not only for our largest metropolitan areas, but for mid-size cities as well. Cities that were once considered the most-desired places to live or for businesses to locate are now seeking ways to unclog their increasingly congested roadways and regain their quality of life.

The role of National government is changing with an ongoing shift away from top down centralized decision-making and a shift towards increased state and local control of transportation. These trends could reverse if significant climate changes or if a rise in protectionism between international regional trading blocks were to occur.

The changing regulatory climate appears to be shifting toward minimizing National regulations, reducing international barriers to trade, and harmonizing international transportation regulations. This shift may limit DOT's ability to regulate pollutants produced by transportation sources.

The forces of agglomeration and urbanization that hold cities together may be affected by the nature of economic activity, potentially resulting in changes in the size and geographic distribution of urban areas, development of economically integrated regions and an increase in exposure to risks in the transportation system.

Transportation infrastructure additions or expansions may be limited due to environmental concerns, leading to increased travel times and user costs.

Changing demographics in the immigrant and the elderly populations will introduce new cultural norms that will affect the way communities form, organize and use transportation.

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

Consistent with Secretary Mineta's emphasis on a *Smarter* DOT fully committed to accountability and results that benefit the taxpayers and the Nation, we will measure progress in achieving our environment outcomes through performance measures developed in DOT's Annual Performance Plans and Reports for fiscal years 2003-2008. DOT's Annual Performance Plans and Reports contain details on the scope, source, limitations and statistical issues for each performance measure. Table 4 below presents a crosswalk between outcomes and candidate performance measures.

SECURITY STRATEGIC OBJECTIVE

“Balance homeland and national security transportation requirements with the mobility needs of the Nation for personal travel and commerce”

Outcomes

- 1) Rapid recovery of transportation in all modes from intentional harm and natural disasters
- 2) The U.S. transportation system meets homeland and national security requirements

Strategies

President Bush has directed DOT and the Department of Homeland Security (DHS) to work together to design a world-class transportation security system that will prevent terrorists from ever again using our 21st Century technologies as weapons against us. Secretary Mineta’s Vision recognizes that we are defenders of the homeland and acknowledges the urgency in securing our transportation facilities, vehicles and information technology systems from terrorist attack as well as foreign and domestic criminal enterprise. It also recognizes that our transportation system must remain a vital link for mobilizing materials and our armed forces for military contingencies and for civilian emergency response.

Our strategies, presented below, outline how we will work with DHS, and with our state, local government and private sector partners, to assist in elevating security levels for aviation, railways, highways, waterways, transit systems, and pipelines while improving the safety and efficiency of the transportation network.

The resources and programs listed in DOT’s Annual Performance Plans and budgets are necessary to achieve our security outcomes and execute our strategies. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the strategies extends from the present through fiscal year 2008.

Leadership

- 1) Work closely with Coast Guard and TSA to establish an effective framework for working with the transportation industry to ensure future coordination of policies, regulations and programs. (Supports both outcomes)
- 2) As a member of the Transportation Security Oversight Board, review, ratify or disapprove of TSA proposed security regulations or security directives. (Supports outcome #2)
- 3) Maintain DOT responsibility for oversight of national security initiatives affecting the maritime transportation system within the Maritime Administration. (Supports both outcomes)

- 4) Coordinate transportation-related homeland and national security policy development and implementation with DHS and DOD. (Supports both outcomes)
- 5) Support and implement U.S. security strategies and plans related to transportation:
 - a. The National Security Strategy of the United States of America
 - b. The National Strategy to Secure Cyber Space
 - c. The National Strategy for Homeland Security (Supports both outcomes)
- 6) Develop, test and evaluate plans for movement of personnel and materiel from origin to destination during military contingencies and disaster response. (Supports both outcomes)
- 7) Work with Congress, the Department of Justice, DHS and other stakeholders to seek enactment of legislation to strengthen the Federal criminal laws related to terrorist attacks and other violence against railroads and mass transportation systems. (Supports both outcomes)⁹

Building Expertise

- 8) Support TSA in determining the best way to administer financial assistance for transportation security in all modes. (Supports outcome #2)
- 9) Work with transportation enforcement officials in all modes and at all levels of government to heighten awareness of suspected terrorists, illegal migrants, and drug smugglers and develop standard procedures for reporting such occurrences to appropriate authorities. (Supports outcome #2)
- 10) Maintain the resources and capacity to support national defense requirements and assist in disaster response and recovery efforts (Supports both outcomes)

Technology

- 11) Monitor the transportation system 24/7 to provide real-time reports and facilitate rapid response and recovery from disruptions to transportation throughout the Nation. (Supports outcome #1)
- 12) Implement cybersecurity programs to adequately protect DOT systems integrated with the national critical infrastructure. (Supports both outcomes)
- 13) Employ advancements in secure IT technology and communications to improve the accuracy, speed and simplicity of exchanging security, emergency response, and defense deployment information with federal, state and local governments and the private sector. (Supports both outcomes)
- 14) Work closely with DHS to foster awareness and acceptance of transportation security services by industry and users of diverse backgrounds by providing equitable, accessible and nondiscriminatory public notice, preparation and treatment. (Supports outcome #2)

⁹ Legislative proposal in executive clearance.

Management Challenge

DOT will work to improve security by utilizing the strategies outlined above and also by addressing the management challenge outlined by the General Accounting Office (GAO) and DOT's Office of the Inspector General (OIG).¹⁰

Forge a Close Working Relationship with DHS

OIG points out that although the new Department of Homeland Security (DHS) has primary responsibility in the transportation security arena, DOT will still play a vital role. The OIG has stated that DOT must establish an effective framework for working with the transportation industry and DHS on regulatory and programmatic security issues. The report calls for a balance in implementing, regulating, funding, and overseeing programs that benefit the traveling public, and highlights DOT's primary responsibility for the safe transport of hazardous materials. GAO also highlighted this issue, stating, "The Department of Transportation will need to forge a close working relationship with the new agency to effectively protect borders and ensure security of all modes of transportation."

The Department has acknowledged this challenge and has developed an agenda to meet its responsibilities. This agenda includes the following milestone:

Milestone: As a member of the Transportation Security Oversight Board, review, ratify or disapprove of TSA proposed security regulations or security directives.

Perspective and Outlook

On November 19, 2001, President Bush signed a new law that created the Transportation Security Administration (TSA) within DOT. In an unprecedented effort, the people of DOT created a leading edge agency that combined world-class security with world-class customer service. Formation of the Department of Homeland Security (DHS) began the transition of transportation security functions from DOT to the new Department. DOT is collaborating with DHS to ensure security throughout the transportation system. As plans to attack the transportation network persist, DOT will draw on its industry-wide expertise to help facilitate a transportation network that is safe, efficient and secure.

DOT will continue to protect the Nation's transportation system from natural disasters, work with the DHS on security matters and with the Department of Defense on transportation-related issues in support of National Security and implement

¹⁰ Throughout this Strategic Plan the language used to describe each challenge is essentially the language used by the OIG in its Top Management Challenges, issued January 21, 2003 and by the GAO in its January 2003, Performance and Accountability Series.

cybersecurity programs to adequately protect systems integrated with the National critical infrastructure.

External Factors

Many security concerns will impact transportation in the future. The factors presented below are likely to play a part in our ability to achieve our security outcomes.

Growth in volumes of people and goods moving across borders will make it increasingly difficult to detect and separate illegitimate from legitimate transportation activities. This means that interagency cooperation will be a greater necessity than ever before.

Large increases in the cost of fuel could stress portions of the transportation system such as aviation and potentially make lower cost, more frequently used modes such as public transit more likely targets for criminal and terrorist activity.

Combating the increasing sophistication of devices and techniques that terrorists and criminals may use to threaten or impinge upon the security of the U.S. transportation system and its lines of communication will require advances in technology and human vigilance.

More drugs, contraband and even people will be smuggled via commercial cargo containers. Technologies capable of tagging and tracking will be needed to facilitate real-time surveillance and scanning of carriers and cargoes to improve contraband detection in transport.

Nation states will provide the basic geopolitical framework, but boundaries will continue to blur with the emergence of novel economic and security relationships. Greater numbers of powerful non-state entities with diverse interests and communications via the Internet will influence the global community. Transportation will need to take into account these entities.

Improved intelligence and surveillance capabilities will yield increased, and timelier threat information. Private transportation providers and public authorities will need to maintain the flexibility and willingness to adjust security and transport procedures based on threat information.

The sharing of proprietary and sensitive security information between public authorities and industry officials will be increasingly important to meeting future transportation security challenges. DOT and industry will have to explore new, non-traditional approaches for sharing sensitive information, overcoming disclosure concerns presented by the Freedom of Information Act, and National security clearance limitations.

The ability to improve transportation security internationally will be dependent on the extent to which other countries collaborate with or impede U.S. assessments of their seaport and airport security.

Regional instabilities could lead to attacks on U.S. interests including transportation.

Increased involvement of organized terrorists and professional smugglers represent a significant change in the illegal migrant threat. With more resources at their disposal than individual migrants, terrorists and smugglers will employ more sophisticated techniques and the latest technology to avoid detection and thwart law enforcement efforts.

Public expectation for increased reliability throughput and reduced transportation times will need to be balanced with requirements for passenger and transportation system security.

Public tolerance of security measures in aviation is relatively higher due to the perceived threat to this mode, a history of attacks, and the infrequency of airline travel by most Americans as compared with other modes. Should threats to other modes of transportation increase, DOT and DHS will have the challenge of addressing a low public tolerance of additional security measures on a frequent, even daily, commuter basis.

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

Consistent with Secretary Mineta’s emphasis on a *Smarter* DOT fully committed to accountability and results, we will measure progress in achieving our security outcomes through performance measures fully developed in DOT’s Annual Performance Plans and Reports for fiscal years 2003-2008. DOT’s Annual Performance Plans and Reports contain details on the scope, source, limitations and statistical issues for each performance measure. Table 5 presents a crosswalk between outcomes and candidate performance measures.

Table 5. Security Outcomes and Candidate Performance Measures

Outcomes	Candidate Performance Measures
Rapid recovery of transportation in all modes from intentional harm and natural disasters	Performance measures will be situation specific
The National transportation system meets homeland and National security requirements	<u>Strategic Mobility</u> Percentage of DOD-required shipping capacity complete with crews available within mobilization timelines Percentage of DOD-designated commercial ports available for military use within DOD established readiness timelines

ORGANIZATIONAL EXCELLENCE OBJECTIVE

“Advance the Department’s ability to manage for results and achieve the goals of the President’s Management Agenda”

Outcomes

- 1) Achieved strategic management of human capital
- 2) Achieved competitive sourcing goals
- 3) Achieved financial performance goals
- 4) Achieved budget and performance integration goals
- 5) Achieved e-government goals

Strategies

As the Chief Executive Officer of the best managed Department in the Federal government, Secretary Mineta understands that we cannot achieve our strategic objectives without vision, leadership and a culture of continuous improvement. The Secretary has called on us to be leaders in pursuing best practices and achieving remarkable results that benefit the taxpayers and the Nation. Secretary Mineta’s central management strategy for achieving organizational improvement will be delivering the results outlined in this Strategic Plan and full implementation of the President’s Management Agenda (PMA).

To make DOT the most desirable place to work in the federal government and the internationally recognized focal point for transportation core competencies, we must face a number of challenges in the years ahead. Most critically, we must attract the best and the brightest people to our workforce and inspire a new generation of innovators and pioneers in transportation careers. Secretary Mineta’s Vision calls for DOT to become the employer of choice not only within the transportation enterprise but also within the Federal government.

The resources and programs listed in DOT’s Annual Performance Plans and budgets are necessary to achieve our organizational outcomes. Each year DOT reassesses its performance goals based on appropriations. The schedule for executing the organizational strategies presented below extends from the present through fiscal year 2008.

Leadership

- 1) Exert leadership throughout the Department by articulating a long-range Vision; setting clear strategic objectives; being accountable for achieving results; and maintaining a strong customer focus. (Supports all outcomes)

- 2) Utilize human capital in support of DOT's mission and strategic objectives, while empowering individual workers to realize their full potential. (Supports outcome #1)
 - a. Conduct workforce planning to identify mission-critical competencies and implement plans to close gaps through vigorous outreach and recruiting.
 - b. Sustain a learning environment that drives continuous improvement in performance through knowledge management, performance feedback, training, coaching and mentoring.
 - c. Foster a results-oriented workforce through performance management and awards systems that link individual/team/unit performance to organizational goals and results.
 - d. Use secure IT to automate, simplify and streamline processing of job applications and associated personnel information.
 - e. Continuously consult internal program staff, industry and other external sources (e.g., University Transportation Centers) to update the core competencies that will be needed by DOT in the future and modify vacancy announcements and position descriptions announcements to reflect these skill sets.
 - f. Implement a diversity management plan to sustain a workforce that represents the face of America in all occupations and at all grade levels.
- 3) Achieve organizational and economic efficiencies by competing commercial functions between public and private entities (Supports outcome #2)
- 4) Find the best business solutions to accomplish the Department's mission through world-class acquisition and grants business processes. (Supports outcomes #2, #4 and 5)
- 5) Develop and execute plans to improve the protection of DOT people, facilities and equipment from intentional harm and to perform the essential functions of the Department even when key facilities are temporarily unavailable or unusable due to natural disaster or intentional harm. (Supports all outcomes)

Building Expertise

- 6) Improve workforce equity by providing training, guidance, and service on conflict prevention, dispute resolution and anti-discrimination laws to all employees. (Supports outcome #1)
- 7) Provide accurate and timely financial information that links resources to results to program managers for their use in improving performance and accountability. (Supports outcomes #3 and #4)
- 8) Reduce delay in rulemaking proceedings by establishing Department-wide priorities and schedules, coordinating rulemaking actions, providing rulemaking process training and adopting best practices. (Supports all outcomes)

Technology

- 9) Integrate e-government concepts in mission performance (Supports outcome #5)
 - a. Undertake a rigorous analysis of the contribution of IT to each strategic objective to identify opportunities to support mission performance.
 - b. Leverage the Federal and Departmental Enterprise Architecture to improve services to citizens.
 - c. Expand the use of IT to enable faster, simpler and more efficient ways for citizens, state and local government, industry and other stakeholders to transact business with DOT.
 - d. Integrate effective IT security programs with critical business functions and systems to protect the confidentiality, integrity and availability of mission critical information.

Management Challenges

The strategies articulated above represent our approach to future performance challenges. Additionally, the GAO and the DOT OIG have identified organizational areas needing management attention.

DOT Human Capital

The GAO has noted that the need to address human capital is now a discrete challenge for DOT because of an impending wave of retirements. The GAO states that a shortfall of people and skills could compromise the transportation workforce and affect the economy, safety, and mobility of our Nation. Mirroring the GAO concern, the President's Management Agenda has set forth requirements for agencies to follow in addressing future human capital needs.

Both the President's Management Agenda and DOT have acknowledged the need to address human capital concerns. DOT will address these concerns through the following milestones:

Milestone: Operating Administrations will conduct workforce planning for mission critical occupations in FY 2003 that will identify current and future human capital needs, competencies required to meet these needs, and plans for addressing the gaps.

Milestone: DOT will implement a department-wide performance management system beginning in FY 2003 that aligns employee performance expectations with organizational goals and objectives, links awards and recognition to organizational goals, and addresses poor performance.

Milestone: To attract, acquire, and retain diverse, quality talent, DOT will have a uniform branding and marketing approach in place for the entire department by FY 2005.

FAA Human Capital

The GAO has stated that FAA has not yet implemented recommendations to develop a comprehensive human capital strategy to meet the impending need to hire and train new controllers. The GAO further stated that the FAA has not addressed the resources needed at its training academy or for on the job training to handle the large influx of new controllers.

The FAA has acknowledged the need to develop a human capital strategy and is developing a new strategic plan with increased emphasis on human capital management as a component of the President's Management Agenda and overall organizational excellence.

Milestone: Achieve progress towards a green rating in the strategic management of human capital by developing an FAA corporate human capital plan and expanding implementation of performance-based management systems, in support of the President's Management Agenda.

FAA Cost and Performance Management

The OIG calls for the FAA to operate more like a business with regard to cost-effectiveness and cost-controls in major acquisitions, in the light of projected declines in Aviation Trust Fund revenues. OIG outlined steps necessary for this improvement. FAA must contain increases in operating costs that are due to "personnel reform" and tighten accountability for agency-wide performance; reshape Air Traffic Control (ATC) into a performance-based organization; re-baseline costs and/or milestones for modernization projects; develop metrics to assess progress on major acquisitions and strengthen contract oversight. The GAO noted that FAA acquisition remains a high risk area in 2003 because critical systems are not yet in place and proven in operations since FAA has not completed efforts to address root causes of prior modernization problems.

The FAA has acknowledged the need to improve management of its costs and programs and will address these issues through the following milestones.

- Milestone:* Complete the implementation of labor distribution reporting by September 2003.
- Milestone:* Obtain a Clean Audit Opinion each year on FAA Financial Statements.
- Milestone:* Complete the implementation of the new DELPHI System.
- Milestone:* Complete the implementation of the Cost Accounting System in three lines of business.
- Milestone:* Incorporate air traffic actual labor distribution costs into the Cost Accounting System.
- Milestone:* Develop and implement a new FAA Strategic Plan that will improve management of FAA costs and programs through its Organizational Excellence goal.

Information Technology Security

OIG has stated that DOT's ability to meet the President's Management Agenda goal of better, wider spread use of information technology hinges on stronger computer security

and better information technology investment controls. As the GAO notes, securing DOT's information technology systems is critical due to the heavy use of technology in air traffic control.

DOT's Chief Information Officer (CIO) has acknowledged the need to strengthen its computer security DOT wide. During fiscal years 2003-2008, the CIO will lead intermodal efforts to ensure the security of our transportation information systems to make IT systems less vulnerable to attack and other service disruptions, including those caused by natural disasters. The primary goal is to ensure that the appropriate people, processes, and technology are in place to protect the confidentiality, integrity, and availability of all DOT IT assets as required by the Computer Security Act of 1987, the Federal Information Security Management Act, OMB Circular A-130, and National Institute of Standards and Technology guidance.

DOT has established an IT Security Program requiring that all systems be assessed to identify vulnerabilities; that vulnerabilities be evaluated and mitigated where justified; and, that systems be tested and certified as adequately protected. The CIO will implement and operate the Network Intrusion Detection Systems (IDS) architecture and plan for the rollout of the Public Key Infrastructure (PKI) and smart-card architecture. Program policy is managed by the Office of the CIO and is integrated throughout the Department through the DOT CIO Council and the IT Security Committee of the Council. During FY 2004 and 2005, the CIO will address the following:

- Milestone:* Completed standards for a DOT-wide PKI Infrastructure, Wireless, e-Authentication/e-Signature and smart card architecture to selected DOT organizations with interoperability with the Federal e-Authentication solution
- Milestone:* Certification and accreditation of DOT's IT assets;
- Milestone:* Protection of the majority of DOT mission critical systems by IDS;
- Milestone:* Periodic vulnerability scanning of all mission critical hosts to determine compliance security baselines established in FY 2003;
- Milestone:* New IT investments evaluated in the capital planning and control and enterprise architecture processes; and
- Milestone:* Best practices and lessons learned evaluated and their use by DOT organizations mandated.

Increasing Oversight of IT Investments Through the Capital Planning Process

The OIG has noted that while DOT is responsible for one of the largest IT investments among civilian agencies, the DOT CIO has little oversight over these investments: over 90 percent of these investments are controlled by the Operating Administrations. In 2002, DOT established an Investment Review Board, chaired by the Deputy Secretary to review major IT investment decisions.

The OIG stated that to ensure that the Board could influence major IT investment decisions, DOT needs to obtain explicit senior management support from the Operating Administrations, issue clear guidance to identify investments for review, and develop a system to implement decisions issued by the Board.

DOT's CIO has acknowledged the need to increase oversight of IT investments and will address this concern through the following milestones:

- Milestone: Oversee the IT Capital Planning and Investment Control process.
- Milestone: Ensure that proposed investments are consistent with and supported by the DOT Enterprise Architecture.
- Milestone: Participate in the FAA Acquisition Boards.
- Milestone: Review all DOT investments to ensure compliance with DOT policy and eGovernment strategies

Crosswalk between Outcomes in the Strategic Plan and Performance Measures in Annual Performance Plans and Reports

We will mark our progress in achieving the goals of the President's Management Agenda through performance measures fully developed in DOT's Annual Performance Plans and Reports for fiscal years 2003-2008. DOT's Annual Performance Plans and Reports contain details on the scope, source, limitations and statistical issues for each performance measure. Table 6 presents a crosswalk between outcomes and candidate performance measures.

Table 6. Organizational Excellence Outcomes and Candidate Performance Measures

Outcomes	Candidate Performance Measures
Achieved strategic management of human capital Achieved competitive sourcing goals Achieved financial performance goals Achieved budget and performance integration goals Achieved e-government goals	Measures of progress TBD

PROGRAM EVALUATION

Program evaluation is one of the three major elements of the Government Performance and Results Act (GPRA). The statute calls for agencies to use program evaluations to assess the manner and extent to which Federal programs achieve intended objectives. The statute further calls for agency Performance Plans to include a summary of the findings of program evaluations completed in the fiscal year covered in the report. Finally, the GPRA calls for a schedule for future program evaluations to be presented in Strategic Plans.

We present detailed descriptions of DOT's completed program evaluations in "The Department of Transportation Performance and Accountability Report for 2002."¹¹ The results of these completed evaluations informed development of the strategies developed to achieve strategic objectives and outcomes in this Strategic Plan. Table 7 below presents a schedule for future program evaluations at DOT.

¹¹<http://www.dot.gov/perfacc2002/toc.html>

Table 7. Program Evaluations for Fiscal Years 2003-2008

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Free Flight (FAA)		X	X				Combination	Evaluation of Free Flight Phase I tools' effectiveness in creating additional capacity, and in making more efficient use of existing capacity	2003
Innovative Finance Techniques (FHWA, FTA, and FRA in 2004 only)		X				X	Longitudinal & Cross-Sectional	Evaluation of specific techniques 2 to 4 years after implementation	2003-2005

Legend

Strategic Objective

- S Safety
- M Mobility
- G Global Integration
- E Environment
- S Security

- OE Organizational Excellence

Methodology

- Longitudinal Study of data points or data series before and after intervention
- Cross Sectional Study of different groups or sites at the same point in time
- Statistical Regression or other statistical analysis
- Combination Use of two or more complementary analytic techniques
- Management Process evaluation using objective measurement and analysis
- Cost-Benefit Comparison of a program's outputs or outcomes with the costs to produce them

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Compliance Review Impact Assessment Model (FMCSA)	X						Longitudinal	Refine and update model measuring effectiveness of motor carrier compliance reviews in reducing crashes	2003 refreshed annually
Roadside Inspection/Traffic Enforcement Analytical Model (FMCSA)	X						Longitudinal	Update model measuring safety impact of traffic enforcement and roadside inspections on motor carrier safety	2003 refreshed annually

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Chemical/Biological Agent Detection (FTA)					X		Combination	Evaluate the R&D of and use for chemical, biological and explosives detection systems in transportation systems	2003
Continuity of Operations Plans (RSPA)		X					Management Study	Obtaining government-wide information on the status of agencies' continuity of operations plans	2003
Hazmat Approvals Process (RSPA)	X					X	Management Study/ Cost Benefit	Efficiencies to shorten process time; use of eGov solutions	2004
Hazmat Grants Program (RSPA)	X					X	Cost Benefit/ Cross Sectional/ Management Study	Program effectiveness; Leverage value	2003
UTC Program (RSPA)	X	X				X	Management Study	Assess how effectively the UTC Program is meeting program objectives, and RSPA's effectiveness in managing the program	2003
Ship Disposal Program (MARAD)				X			Combination	Evaluate effectiveness of ship scrapping efforts	2004
CR Process Evaluation Phase II (FMCSA)	X					X	Management Study	Examine alternative approaches to achieving compliance	2004
Evaluation of State Motor Fuel Data (FHWA)		X	X			X	Management Study	Evaluate internal process for allocation of funding based on motor fuel data	2004

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Data Quality Reviews (BTS)						X	Combination	A selection of 5-7 assessments to improve the reliability, accuracy and relevance of DOT component agencies' data programs	2003-2008
Information Security (FAA)					X		Combination	Evaluate the effectiveness of FAA's IT and INFOSEC processes	2004
Hazmat Training/ Outreach (RSPA)	X						Longitudinal/ Cost Benefit/ Management Study	Evaluate a specific area of hazmat transportation compliance before and after a period of targeted outreach and compliance	2005
Equal Employment Opportunity Complaints Process (Office of Civil Rights)						X	Management Study	Evaluate DOT's EEO complaints processing procedures and practices (internal)	2004
Condition and Performance Report (FHWA)		X	X				Cost Benefit	Analyze highway, bridge, transit needs and investment requirements and examine issues pertaining to these requirements	Biannual 2004 2006 2008
ITS Deployment (FHWA)		X	X				Combination	Evaluate ITS deployment sites	2004
Assessment of Design-Build Contracting (FHWA)		X	X				Combination	Evaluate effectiveness of the design-build concept	2004

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Assessment of the Innovative Bridge Research and Construction Program (FHWA)		X					Combination	Evaluate the effectiveness of the IBRC Program on bridge longevity, cost, etc.	2004
Operations Investments by Local Government (FHWA)		X					Management Study	Assessment of local government investment strategies in ITS Operations	2005
Side Impact Protection (NHTSA)	X						Statistical (Crash Data)	Evaluate the fatality and injury reducing benefits, and costs of side impact protection implemented in passenger cars since model year 1994	2005
Hazmat Enforcement (RSPA)	X						Longitudinal/ Cost Benefit/ Management Study	Before/After comparison of awareness	2006
Alternative Dispute Resolution Process Evaluation (General Counsel)						X	Management Study	Follow up study to determine service quality, growth in use of alternative dispute resolution process, and cost-effectiveness	2005
Effectiveness of Planning Capacity Building Initiative Activities (FHWA)				X		X	Management Study	Evaluate the effectiveness of program activities in addressing customer needs e.g., providing timely services	2005
Title VI Complaints Process (Office of Civil Rights)						X	Management Study	Evaluate the processing of civil rights complaints filed against providers of federally-assisted transportation services (external)	2005

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Complete
	ξ	M	G	E	S				
Hazmat Air Transportation (FAA)	X						Combination	Review of safety effectiveness of FAA's hazmat safety program	2005
DOT R&D Strategic Plan Process (RSPA)						X	Management Study	Evaluate DOT's R&D strategic planning process, and effectiveness in implementing the DOT Research, Development and Technology Plan	2005
Bus Crash Causation Study (FMCSA)	X						Combination	Study of factors contributing to bus crashes	2005
Large Truck Crash Causation Study (FMCSA)	X						Combination	Comprehensive study to determine causal and contributing factors for crashes involving commercial motor vehicles	2005
Commercial Drivers License Evaluation (FMCSA)	X						Combination	Baseline evaluation of commercial drivers license program	2005
Grade Crossing Warning Device Installation Study (FRA)	X						Combination	Analyze the effectiveness of the various types of automatic warning devices in preventing highway-rail grade crossing collisions.	2005

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Objectives					O E	Methodology	Scope	FY Complete
	S	M	G	E	S				
Facility Security (FAA)					X		Combination	Review effectiveness of FAA's facility physical security program	2006
UTC Program (RSPA)	X	X				X	Management Study	Assess how effectively the UTC Program is meeting program objectives and requirements and the Department's effectiveness in managing the program	2006
Hazmat R&D (RSPA)	X					X	Cost Benefit/ Management Study	Evaluate the effectiveness of hazmat safety/security R&D	2007
New Entrant Safety Audit Evaluation (FMCSA)	X						Longitudinal	Examine operational performance, develop metrics, and assess new program impact.	2006
Public Education and Enforcement Railroad Safety (FRA)	X						Combination	Analyze the long term effectiveness of education and enforcement programs in preventing highway-rail collisions.	2006
Cost Allocation Study (FHWA)		X	X				Combination	Evaluates highway user charges based on equity and economic principles.	2006
Impact of FHWA Safety Goals and Objectives (FHWA)	X						Combination	Evaluate the effectiveness of strategies and initiatives to achieve the VF Safety objectives	2006
Consideration of Management and Operations in the Planning Process (FHWA)		X					Management Study	Assess the effectiveness of including operations as a planning factor in STIP/TIP development	2006

Table 7. Program Evaluations for Fiscal Years 2003-2008 (Continued)

Program Evaluation	Strategic Goals					O E	Methodology	Scope	FY Completed
	S	M	G	E	S				
Operational Error Programs (FAA)	X						Longitudinal	Evaluate program effectiveness designed to reduce operational errors	2007
NAFTA Border Safety Audit Evaluation (FMCSA)	X						Longitudinal	Establish performance measures and assess the effectiveness of new border safety audits on highway safety	2007
Safer Skies (FAA)	X		X				Combination	General Aviation – loss of control, survivability or aeronautical decision making interventions	2007
Advanced Air Bags (Phase 1) (NHTSA)	X						Statistical analysis of crash data	Evaluation of the crash performance, fatality-reducing benefits and costs of advanced air bag systems implemented in passenger cars and light trucks since model year 2003	2008
Aircraft Delay Reduction Program (FAA)		X					Cost-Benefit	Evaluate impacts, costs, and benefits of FAA's delay reduction program	2008