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Introduction

The U.S. Transportation system is intrinsically linked to the economic health and security of the nation. As both an employer and consumer of goods and services, transportation contributes significantly to the economy and is a key element in the production of every other product and service. Approximately 11 percent of the U.S. Gross Domestic Product, nearly $777 billion in 1995, is attributable to transportation. Transportation is an important source of employment, accounting for as many as one in ten full-time employees in the United States -- over 12 million men and women are employed providing various transportation services or manufacturing transportation-related equipment. National security and defense needs are also met through mobility of military supplies and personnel in peacetime, readiness for defense mobilization in time of national emergency, and restoration of vital transportation links after disasters. Economic growth and security are dependent on having a well-functioning, interconnected transportation system.

The Department of Transportation Strategic Plan provides a comprehensive vision for advancing the nation's complex and vital transportation system into the 21st Century. The plan sets forth a strategy for DOT for Fiscal Years (FYs) 1997 through 2002, setting broad goals, targeting outcomes and identifying key challenges. The Department of Transportation Performance Plan is a companion piece to the DOT Strategic Plan and to the DOT Fiscal Year 1999 Budget Request. The Performance Plan defines those performance indicators and goals we will use to mark our progress towards the strategic goals found in the DOT Strategic Plan. By linking these goals to the budget, it describes one fiscal year's effort within DOT and shows how this effort fits into the long-range plan for the Department and the U.S. transportation system. Actual performance against the goals in this plan will be measured, evaluated, and made public in the annual Department of Transportation Performance Report to follow the fiscal year.

Overview of the DOT Strategic Plan

The DOT Strategic Plan sets forth the overall direction, vision, and mission of the Department--the Strategic Plan covering this Performance Plan is dated September 1997 and covers the years 1997 through 2002. The Strategic Plan cites as the document's basic authority the Department's enabling legislation from 1966. Section 101 of Title 49, United States Code, describes the DOT purpose as follows:

> *"The national objectives of general welfare, economic growth and stability, and 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 those and other national objectives, including the efficient use and conservation of the resources of the United States."*

The Secretary of Transportation has articulated his vision of how the Department will carry out its purpose. This is captured in the Strategic Plan as a statement to be used by all Department

employees in framing their approach to the DOT mission. The Strategic Plan also provides a mission statement to describe the underlying purpose for every activity and initiative the Department undertakes, and it identifies five Strategic Goals that capture the most important outcomes influenced by the Department's programs:

VISION STATEMENT

"A visionary and vigilant Department of Transportation leading the way to transportation excellence in the 21st Century."

MISSION STATEMENT

"Serve America by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future."

DOT STRATEGIC GOALS

Safety - Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

Mobility - Shape America's future by ensuring a transportation system that is accessible, integrated, efficient, and offers flexibility of choices.

Economic Growth and Trade - Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

Human and Natural Environment - Protect and enhance communities and the natural environment affected by transportation.

National Security - Advance the nation's vital security interests in support of national strategies such as the National Security Strategy and National Drug Control Strategy by ensuring that the transportation system is secure and available for defense mobility and that our borders are safe from illegal intrusion.

The Strategic Plan identifies two important new areas of emphasis in our pursuit of our strategic goals: our determination to become ONE DOT capable of acting as an integrated, purposeful leader to optimize transportation efficiency and effectiveness; and a realization that transportation is about more than concrete, asphalt, and steel -- that it is about providing opportunity for people, giving them mobility and choices.

The ultimate purpose of ONE DOT is to build a transportation system that is international in reach, intermodal in form, intelligent in character, and inclusive in nature. Under the leadership of ONE DOT, people and goods will move quickly, safely and at less cost. To achieve these objectives, we will direct our energy to ensuring DOT's organizational structure and operating practices are redesigned to support them. The Strategic Plan sets out the Corporate Management Strategies we intend to follow to become ONE DOT.

This Performance Plan focuses principally on DOT's five strategic goal areas and the resources that are on the "front line" to achieve results -- safety inspectors, air traffic controllers, capital grant dollars, for example. But many of our activities at DOT are internal ones -- financial management, procurement, personnel, for example -- without which the Department could not operate or hope to achieve its goals. The corporate management strategies section of this plan focuses on staff and support activities, discussing this important area of performance.

In recognition that transportation is about providing opportunity for people, the Strategic Plan includes specific people-oriented outcome goals under each of our strategic goals. While, to achieve our goals, we must often focus on the transportation system itself and its operations, the Strategic Plan will remind us that, ultimately, that system is intended to serve the American people.

DOT Organization

The Department will achieve its Strategic Goals through its leadership role in U.S. transportation policy, operations, investment, and research. DOT will exercise this leadership through its existing organization. DOT employs about 100,000 civilian and military people across the country. It includes ten operating administrations and bureaus, each with its own management and organizational structure, as well as the Office of the Secretary of Transportation and the Transportation Administrative Service Center.

Federal Aviation Administration	National Highway Traffic Safety Administration
Federal Highway Administration	Research and Special Programs Administration
Federal Railroad Administration	St. Lawrence Seaway Development Corporation
Federal Transit Administration	United States Coast Guard
Maritime Administration	Bureau of Transportation Statistics

The Surface Transportation Board, while formally a part of DOT, is decisionally independent by law and is not subject to the direction of the Department.

Resources, Strategies, and Performance Goals

How We Align our Budget with our Strategic Goals: The budgeted resources of DOT support a range of DOT strategic goals. This illustrates a fundamental strength of DOT--that existing capacity delivers public value in multiple areas. In this sense the Department emulates business practice. In the commercial sector, an enterprise strives to create additional profit making

opportunities from existing operational capacity. In the public sector, DOT strives to use existing infrastructure and capacity to create additional public value. By design, a dollar spent on transportation infrastructure may also advance safety, mobility, economic growth, the mitigation of harmful impacts, or national security. Because of this, the program activities found in the DOT Program and Financing (P&F) schedules are both *consolidated* and *dissaggregate*d in order to align with strategic and performance goals. Multiple program activities sometimes support multiple goals. The sections that follow group budget program activities by common areas of influence on DOT Strategic Goals. The structure is centered around the five Strategic goals of the DOT Strategic Plan: Safety, Mobility, Economic Growth and Trade, and National Security.

How We Present Our Means and Strategies: For each aggregated area of budget activity focusing on a strategic area of effort, we present both a brief synopsis of ongoing means and strategies as well as special initiatives and focus in FY 1999. Our discussion of means and strategies is not meant to duplicate the budgets of our operating administrations, but rather to provide a top-level map of key activities that are planned in strategic goal areas. Also discussed under means and strategies are significant capital assets, cross-cutting efforts with other agencies, efficiency and effectiveness strategies, and proposed legislation and regulations. Tax expenditures are a significant tool by which the Federal government encourages transportation investment but do not represent a key tool of intervention by DOT. Rather, they are controlled by Treasury and are therefore not discussed.

Our Performance Indicators and Goals: Performance indicators must communicate the overall progress of the Department, while simultaneously communicating relevant and challenging goals to individual operating administrations and program managers. This is a difficult balance to reach for an agency whose responsibilities range from aviation to pipelines to ships at sea. Still, there are a variety of measures which can be developed for our nation's transportation system.

- Condition measures can describe the system itself.
- Usage measures describe the process of converting the system to outcomes (movement of people and goods).
- Capacity measures describe the readiness of the system for the nation's use (mobility and national defense). Service measures can describe any of several characteristics of access -- timeliness, reliability, availability, etc.
- Measures of unwanted outcomes describe vitally important characteristics as well, such as crash or pollution indicators.

We have tried where possible to select performance measures that address key activity in each area of DOT work. When considered along with external factors and information revealed in program evaluations, these measurements provide valuable insight into the performance of DOT programs. These measures, and the discussion of means and strategies under each, are not meant to illustrate every activity and performance indicator in the Department. This Performance Plan is necessarily a top level depiction of managing for results within DOT. It is meant to be read in conjunction with the budgets of the individual operating administrations, which provide more detailed and program specific performance measures and budget justification.

STRATEGIC GOAL: SAFETY

Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

OUTCOMES:

Progress in achieving the Department's safety strategic goal will be measured at the end of FY 1999 against a previous baseline year[1] for the following outcome areas:

Outcome Goal	DOT-Wide Indicator
1. Reduce the number of transportation-related deaths.	▸ Total number of transportation-related fatalities, with a CY 1995 baseline of 44,407.
2. Reduce the number and severity of transportation-related injuries.	▸ Total number of transportation-related injuries, with a CY 1995 baseline of 3,494,965.
3. Reduce the rate of transportation-related fatalities per passenger-mile-traveled and per ton-mile of total freight shipped (or vehicle miles traveled).	▸ Total number of transportation-related fatalities per 100 million passenger-miles-traveled, with a CY 1995 baseline of 1.026. ▸ Total number of transportation-related fatalities per 100 million ton-miles shipped, with a CY 1995 baseline of 0.168.
4. Reduce the rate and severity of transportation-related injuries per passenger-mile-traveled and per ton-mile (or vehicle miles traveled).	▸ Total number of transportation-related injuries per 100 million passenger-miles-traveled, with a CY 1995 baseline of 81.606. ▸ Total number of transportation-related injuries per 100 million ton-miles shipped, with a CY 1995 baseline of 3.620.
5. Reduce the dollar loss from high-consequence, reportable transportation incidents.	▸ Dollar value of property damage related to transportation. Data is only partially available. We will report 1999 results against a baseline to be established this year.
6. Reduce the number of reportable transportation incidents and their related economic costs.	▸ Total number of reported transportation incidents, with a CY 1995 baseline of 6,732,003.

The baselines above combine modal data for fatalities, injuries, and incidents to provide an indication of the total societal cost of the undesired outcomes of transportation. Annual safety performance goals for individual modes are provided later in this section.

[1]Appendix I contains detailed information about how these baselines were developed. Revised 1995 baselines became available February 1998.

HOW WE WILL ACHIEVE OUR STRATEGIC GOAL:

DOT programs impact safety through a number of common interventions and actions: direct operations (such as air traffic control, or vessel traffic services), infrastructure investment (such as safer highway design and materials), rulemaking (such as equipment or training standards), compliance (enforcement and partnering to achieve standards), technology (fostering new materials and technologies to enhance safety), and education (such as consumer awareness, and campaigns to influence personal behavior). Some of these interventions and actions reside entirely within the Federal government, but most involve significant partnering with state and local authorities and with the transportation industry. The results of our interventions and actions are also subject to any number of external factors -- growing transportation use being a pre-dominant one. While fatalities and injuries will always be the primary measure of safety for DOT, program-level measures in the operating administrations provide a complementary measure of our efforts. The Federal activity common to all programs and measures is *leadership*. DOT provides national leadership in transportation safety, integrating the efforts of all partners to advance our common goal -- to minimize the cost to society of transportation-related fatalities, injuries, and incidents.

DOT programs designed to impact safety are funded in several operating administration budgets. The budgeted program activities of separate modal administrations can be aggregated into six general areas of safety intervention and action: highway, aviation, maritime, rail, transit, and pipeline & hazardous materials. For example, budgeted program activities in NHTSA, FHWA, and FRA all work closely together to advance common goals and measures in highway safety.

1. HIGHWAY SAFETY

The program activities, means and strategies, and annual performance measures used to advance highway safety reflect the efforts of NHTSA, FHWA, and FRA. The DOT Joint Program Office (JPO), funded under FHWA, provides coordination where modal programs involving advanced technology enhance intermodal safety.

While the transit-related efforts of FTA are not discussed in this section, they provide a vital contribution to the highway safety goals. The risk associated with transit travel is considerably less than that associated with highway travel. Transit program initiatives in accessibility and availability provide a realistic alternative to automobile transportation, and to the extent that transit attracts commuters from the highways it contributes significantly to the overall public health and safety.

HIGHWAY RELATED PROGRAM ACTIVITIES:

NHTSA	Estimated FY 1999 Obligations (Millions):
Operations and Research	
Safety performance standards	17
Safety assurance	21

	Highway safety programs	62	
	Research and analysis	66	
	Office of the Administrator	4	
	General administration	3	
Highway Traffic Safety Grants			
	Section 402 formula grants	167	
	Section 410 grants	39	
	National driver register	2	
	Occupant protection	20	
	Drugged driving incentive	5	
FHWA			
Federal -Aid Highways Program			
	Surface transportation program	5,608	*
	National highway program	4,257	*
	Interstate maintenance	4,271	*
	Interstate reimbursement	969	*
	Bridge program	2,556	*
	Flexible highway infrastructure safety	509	
	Integrated safety planning	50	
	Intelligent transportation systems	96	*
	ITS/ITI incentive deployment	100	*
	Federal lands highways	512	*
	FHWA research and technology	126	*
	Woodrow Wilson Memorial Bridge	180	*
	Research and technology	174	*
	Minimum allocation	692	*
State Infrastructure Banks		150	*
Transportation Infrastructure Credit Enhancement		100	*
National Motor Carrier Safety Program			
	Motor carrier grants	99	
	Administration and research	1	
Miscellaneous Trust Funds		8	*
Miscellaneous Highway Trust Funds			
	Highway Safety Improvement Demonstration	1	
	Climbing Lane and Safety Demonstration Project	1	
FRA			
Railroad Safety			
	Federal enforcement	46	*
	Safety regulation and program administration	13	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

HIGHWAY RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - Through the efforts of NHTSA and FHWA, DOT sets vehicle and promotes highway infrastructure safety standards, tests vehicle and equipment compliance, investigates defects, conducts research in technology and human factors relating to safety, maintains data on transportation incidents, injuries, and fatalities, and develops and enforces safety regulations on commercial motor vehicles. NHTSA and FHWA also partner with states to promote education, legislation, enforcement programs, and infrastructure improvement through grants and technical assistance. NHTSA enlists medical and health community support for Federal and state focus on the public health implications of highway fatalities and injuries, as well as the resulting national economic impact. FRA joins with NHTSA and FHWA in addressing crashes at highway-rail grade crossings.

Special initiatives and focus for FY 1999 -

- Expand to $58M the grant-assisted education and enforcement projects targeting seat belt use and aggressive driving in support of the Presidential Initiative to Increase Seat Belt Use Nationwide.
- Expand to $2M the President's "Drugs, Driving, and Youth" partnership with states, including demonstration projects in pre-driver licensure drug testing.
- Use demonstration projects and incentive grants to introduce new strategies in states with higher-than-average alcohol-related fatalities.
- Continue research, funded at $3.5M, for the Partnership for a New Generation of Vehicles (PNGV) to develop vehicle characteristics that will not compromise overall crash safety.
- Expand new vehicle crash testing to assess depowered airbag and light truck standards.
- Research to obtain safety improvements in traffic control devices and pedestrian accommodations, highway design tools and driver fatigue.
- Expand the number of Safe Community demonstration sites, funded at $2.8M, which are used to help communities identify their own safety and injury "problem spots" and take corrective action through best practices.
- Initiate at least four cooperative agreements with industry and stakeholder groups to build Intelligent Vehicle Initiative test bed platforms for light, commercial, transit and specialty vehicles.
- Ensure the states prepare FY 1999 performance-based Commercial Vehicle Safety Plans.
- Upgrade intelligent transportation systems/commercial vehicle operations international border operational tests and automate new border crossing sites.
- Update 23 U.S.C. 402 Safety Agreements with Federal land managing agencies.
- Develop a joint partnership effort between FHWA, NHTSA, Bureau of Indian Affairs, and various Tribal governments to support the Native American Injury Prevention Coalition Program as it addresses the high number of fatality and injury incidents on Indian reservations.
- Expand technology transfer activities focused at prevention of run-off-road crashes.
- Work with states, helping them conduct self-assessments and improve their safety management processes, including data support systems.

Cross-cutting areas with other agencies - With the Department of Defense, NHTSA has established a partnership to create the National Transportation Biomechanics Research Center. FHWA works with the Naval Research Lab on sign retroreflectivity and driver fatigue. The Department of Labor collaborates with both agencies for the federal employee seat belt program and work zone traffic control. NHTSA and FHWA work with the National Science Foundation on a speed limit program and roadway infrastructure safety issues. The Consumer Product Safety Commission (CPSC) and NHTSA work together on several issues, most notably bicycle helmet use. NHTSA also has a Statement of Commitment on safety issues with the Department of Education. The DOT plays an important part in FEMA's Federal Interagency Committee on Emergency Medical Services.

NHTSA and HHS work together extensively through the Healthy People 2000/2010 program, a Memorandum of Understanding (MOU) on injury prevention, and an MOU on Emergency Medical Services. The Department of Interior's Bureau of Indian Affairs and Indian Health Service work with FHWA and NHTSA on various traffic safety outreach initiatives. Specific activities include the implementation of a Tribal Safe Community program and the Native American Injury Prevention Coalition Program. NHTSA is also working with NASA to research advanced air bag deployment. The National Transportation Safety Board and DOT share information on highway crash investigations. NHTSA's work, such as its "Drugs, Driving, and Youth" initiative is supportive of the National Drug Control Strategy goal of preventing drug use among America's youth.

Efficiency and effectiveness strategies and activities - To enhance customer service feedback, FHWA will use the National Quality Initiative to assess the general public's satisfaction with the nation's surface transportation systems and identify the public's priorities for improvement.

To improve safety management processes, DOT will use partnerships with Federal, state and local agencies. DOT will work with its partners to implement Road Safety Audits and Safe Communities at the local level, increasing the involvement of communities and citizens in identifying and implementing safety practices.

Using performance-based grant management, the Section 402 and the Motor Carrier Safety Assistance Programs will work in 1999 to increase state accountability and flexibility in management of grant funds. The states and DOT are partnering to achieve bottom-line safety improvements, which can be assessed against benchmarks identified by the state. NEXTEA proposes the continuation of the Section 402 state and community formula grant program and implementation of four incentive grant programs under the "umbrella" of the Section 402 program. These are: 1) alcohol incentive grants; 2) occupant protection incentive grants; 3) drugged driving incentive grants; and 4) highway safety data incentive grants.

DOT uses marketing to educate the public on their role in affecting highway safety and encouraging safe, appropriate behavior. DOT works with state and local authorities, safety groups, and the private sector to deliver the message of ongoing outreach campaigns such as

Read Your Road, Listen to the Signs, Red Light Running, No Zone, Vince and Larry® (the crash test dummies), Safe and Sober quarterly planners, and Patterns for Life. In order to ensure that motor vehicle related safety defects are promptly addressed, the Auto Safety Hotline must receive reports of potential defects. In 1999, an outreach program will be developed in cooperation with state motor vehicle agencies and insurance companies to increase consumer awareness of the Hotline.

Legislation and regulations - These means and strategies assume that legislation for a surface transportation reauthorization is passed by Congress in FY 1998. Key regulatory efforts in FY 1999:

- Revise existing standards on head impact and side impact to harmonize with the European standards (NHTSA)
- Determine the feasibility of establishing an offset frontal crash standard (also working with the Europeans for harmonization; NHTSA)
- Assess the safety of new electronic braking systems (instead of conventional air brake systems) for heavy trucks (NHTSA)
- Implement new performance based regulations for the Motor Carrier Program which are expected to be issued in 1998, and educate users of the new rules (FHWA).
- Revise the Manual for Uniform Traffic Control Devices (FHWA).

HIGHWAY INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The rate of highway-related fatalities per 100 million vehicle miles traveled (VMT).**
1999 Goal: **1.6 in CY 1999.**

Baseline: 1.7 in CY 1996.
Data: NHTSA Fatality Analysis Reporting System (FARS), and FHWA Highway Performance Monitoring System using States' data
Comment: This performance measure reflects joint NHTSA, FHWA, and FRA efforts. FARS contains data on a census of fatal traffic crashes within the 50 states, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must result in the death of an occupant of a vehicle or a non-motorist within 30 days of the crash.

Indicator: **The number of alcohol-related highway fatalities.**
1999 Goal: **Reduce the number of alcohol-related highway fatalities in CY 1999 to at or below the CY 1996 baseline.**
10 Year Goal: **Reduce the number of alcohol-related highway fatalities to 11,000 by CY 2005.**

Baseline: 17,126 in CY 1996.
Data: NHTSA Fatality Analysis Reporting System (FARS)
Comment: This performance measure reflects a key NHTSA initiative aimed at reducing highway-related fatalities. Alcohol related fatalities are a contributing factor in approximately 40 percent of highway fatalities in the U.S.

Indicator: **The percentage of front seat occupants using seat belts.**
1999 Goal: **Increase seat belt use rate to 80 percent by CY 1999 from the 1996 baseline.**
2005 Goal: **Increase seat belt use rate to 90 percent by CY 2005 from the 1996 baseline**.

Baseline: 68 percent in CY 1996.

Data: State data.
Comment: This performance measure reflects a key Presidential initiative aimed at reducing highway-related fatalities. Seat belt use is a key element in reducing overall highway-related fatalities and injuries. To calculate the national belt use rate, the rates from each state's most recent survey is weighted by that state's proportion of the total U.S. population. State safety belt surveys differ in design. However, at least 29 states, comprising over 70 percent of the U.S. population, conduct probability-based observational surveys. The remaining states conduct surveys that are based on convenience samples.

Indicator: The rate of highway-related injuries per 100 million vehicle miles traveled (VMT).
1999 Goal: 131 in CY 1999.

Baseline: 141 in CY 1996.
Data: NHTSA General Estimates System (GES) and FHWA Highway Performance Monitoring System, both using states' data.
Comment: This performance measure reflects joint NHTSA, FHWA, and FRA efforts. GES data are obtained from a nationally representative probability sample selected from all police-reported crashes. Although various sources suggest that about half the motor vehicle crashes in the country are not reported to police, the majority of these unreported crashes involve only minor property damage and no significant personal injury. By restricting attention to police-reported crashes, the GES concentrates on those crashes of greatest concern to the highway safety community and the general public.

2. AVIATION SAFETY

The program activities, means and strategies, and annual performance measures to be employed in advancing aviation and commercial space transportation safety reflect the efforts of the FAA.

AVIATION RELATED PROGRAM ACTIVITIES:

FAA	Estimated FY 1999 Obligations (Millions):	
Operations		
Air traffic services	4,382	*
Regulation and certification	635	
Airports	50	*
Research & acquisitions	94	*
Commercial space transportation	6	*
Grants-in-aid for Airports	*1,700*	*
Facilities and Equipment		
Engineering, development, test and evaluation	424	*
Procurement and modernization of ATC facilities and equipment	980	*
Procurement and modernization of non-ATC facilities and equipment	165	*
Research, Engineering and Development		
System development and infrastructure	17	*
Capacity and air traffic management technology	117	*
Communications, navigation, & surveillance	19	*
Weather	12	*
Airport technology	7	

Aircraft safety technology	35	
System security technology	55	*
Human factors and aviation medicine	22	
Innovative/cooperative research	2	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

AVIATION RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FAA manages and supports the operations, facilities, and equipment that provide the air traffic services of the National Airspace System (NAS). FAA also develops necessary regulations, sets technical standards, inspects compliance, investigates accidents and other events, and certifies procedures, equipment, and people. FAA licenses commercial space launches and the operation of commercial and state-sponsored launch sites. FAA also conducts research to improve aerospace system safety, and provides grants for airport development in safety related areas.

Special initiatives and focus for FY 1999 - FAA initiatives in FY 1999 focus on keeping pace with growth in aviation while advancing aviation safety. A detailed discussion of planned initiatives and measures can be found in the FAA budget. The following are highlights:

- Increase the number of air traffic controllers by 185 for a total of 17,985 in 1999, increase the number of field maintenance technicians by 150, and increase the number of safety inspectors and certification staff by 45.
- Bring on-line and make operational air traffic control (ATC) equipment and aeronautical navigation equipment now being delivered as a part of the modernization of the ATC system.
- Modernize ATC facilities, most significantly through the standard terminal automation replacement system for terminal radar approach control facilities, and the Display System Replacement for the enroute centers. The Display System Replacement upgrades controller work stations used in enroute center, increasing the ability to handle demand safely.
- Deploy airport surface detection equipment (ASDE) to provide radar surveillance of aircraft and airport service vehicles at selected airports. This equipment will improve the ability of airport traffic control towers to direct and move surface traffic safely during periods of low or no visibility in fog, rain, and snow.
- Complement ASDE equipment with airport movement area safety system (AMASS) equipment, a runway accident prevention system that better enables tower controllers to detect and prevent runway incursions and accidents.
- Install terminal Doppler weather radar (TDWR) systems that detect microbursts, gust fronts, wind shifts, and precipitation. Windshear, and particularly microbursts, are abrupt and dangerous shifts in wind direction or velocity that can endanger landing or departing aircraft. This budget also funds the procurement and installation of low level windshear alert systems (LLWAS), which provides similar, though less comprehensive, windshear detection.
- Target runway incursion reduction, cockpit technology, and general aviation and vertical

flight technologies. Planned work will reduce the risk of mid-air collisions through sustainment of Traffic Alert and Collision Avoidance System (TCAS) capabilities and improve safe airport operations by continuing development of low cost surface detection systems.

- Develop Flight 2000 -- a real-world integrated test of the advanced NAS technology known as "free flight". Free flight exploits satellite navigation and aeronautical data links to permit increased autonomy in aircraft routing. Flight 2000 will test these technologies and associated procedures, verifying and validating projected safety and system efficiency improvements.
- Develop new forecast models to predict weather events such as in-flight icing, thunderstorms, fog, low ceiling, visibility, and in-flight turbulence. Such improvements will contribute directly to aviation safety, as weather is cited as a causal factor in a significant number of aircraft accidents.
- Research structural safety and maintenance and repair, propulsion and fuel systems, flight safety, atmospheric hazards, aircraft catastrophic failure prevention, aging aircraft, and aviation safety risk analysis.
- Work towards the goal of ensuring that critical human factors issues are addressed in the acquisition and integration of 100 percent of new and modified aviation systems. In FY 1999, specific research will focus on eliminating human error, assuring operationally effective cockpit and ground based air traffic control systems, and improved training for aircrew, controllers, and maintenance technicians.

Capital assets/capital planning - Two key capital asset projects related to aviation safety in FY 1999 include:

- Display System Replacement (DSR) - This capital acquisition will restore the reliability and performance of a critical subsystem of the enroute air traffic control automation system to preclude future major outages of air traffic control services. Increased system reliability decreases the possibility of errors and deviations that can contribute to aviation accidents.
- Standard Terminal Automation Replacement System (STARS) - STARS will replace capacity-constrained older technology with a fully digital system which can safety accommodate projected growth.

Cross-cutting areas with other agencies - To advance its performance goals, FAA works in partnership with the private sector, other nations, and other Federal agencies to advance aviation safety. The National Plan for Civil Aviation Human Factors is a collaborative effort by FAA, the Department of Defense, NASA, the aviation community, and others. Implementing recommendations of the White House Commission on Aviation Safety and Security is a coordinated effort among at least a dozen agencies, including the FBI, the Department of State, the National Transportation Safety Board, and the Postal Service. The FAA and the National Transportation Safety Board (NTSB) work closely together during an accident investigation. In commercial space transportation, FAA works closely with DOD, NASA, state agencies, and the private sector to develop improvements in launch vehicle technology to serve commercial needs and to build new or improved space launch infrastructure to serve the U.S. commercial space transportation industry.

DOT (FAA), NASA, DOD, industry, and universities are joining in the *Aviation Safety Research Alliance* to provide the technology to reduce the fatal aviation accident rate by a factor of five in 10 years and a factor of 10 in 20 years -- a target in alignment with FAA's performance goal.

Efficiency and effectiveness strategies and activities - Both the National Performance Review (NPR) and the FAA Reauthorization Act require faster FAA regulatory processing as well as the ongoing review of regulations to determine unusually burdensome rules. The White House Commission on Aviation Safety and Security highlighted the need to reengineer the FAA's regulatory and certification programs, which are key to achieving a Federal goal of reducing the rate of fatal aviation accidents by 80 percent within 10 years. To meet the White House Commission and the Reauthorization Act recommendations, FAA is engaged in an extensive effort to reengineer and accelerate the regulatory process. In 1998 the reengineered rulemaking process is being implemented. In FY 1999 FAA will put into place measures for timeliness, quality, and efficiency.

Legislation and regulations - The FAA's regulatory program for FY 1999 will include significant aviation safety rulemaking initiatives to address aging aircraft issues and to update repair station regulations to reflect changes in repair station business practices, aircraft maintenance practices, and advances in aircraft technology.

AVIATION INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The number of fatal aviation accidents per 100,000 departures.**
2007 Goal: **Reduce the number of fatal aviation accidents per 100,000 departures 80 percent by 2007 from the baseline being determined.**

Baseline: Historical data on aviation fatal accident rates for 1994-1996 (three most recent years available; see comment below) by aircraft type. Revised baseline will be determined in FY 1998.

Data: National Transportation Safety Board (NTSB)

Comment: Aviation is somewhat unique in that measuring numbers or rates of passenger fatalities is not as appropriate a measure as the fatal accident rate for aircraft. This goal, then, provides a measure of progress toward meeting goals identified in the 1997 DOT Strategic Plan. A direct result of reducing aviation accidents is the reduction of fatalities/injuries. Three years of historical data are provided to give some perspective on the aviation fatal accident trends:

	1994	1995	1996
U.S. Air Carrier Fatal Accidents per 100,000 aircraft departures	0.049	0.035	0.058
U.S. Air Carrier Fatal Accidents per 100M aircraft miles flown	0.070	0.050	0.090
Commuter Air Carrier Fatal Accidents per 100,000 aircraft departures	0.078	0.062	0.032
Commuter Air Carrier Fatal Accidents per 100M aircraft miles flown	0.500	0.350	0.160

Selecting a single year for the baseline is inappropriate, especially within an aircraft type, because of yearly fluctuation (see data). FAA is developing an appropriate formal baseline based on a three year moving average method and will be transitioning to this baseline within FY 1998. Once the FAA Strategic Plan and the focused safety agenda have been vetted with the aviation community and the general public, the baselines for these measures will be announced, and the plan will be amended accordingly. This performance goal aligns with the Aviation Safety Research Alliance initiative of Transportation Science and Technology Strategy, published in September 1997.

Indicator: **The total number of runway incursions.**
1999 Goal: **Reduce the total number of runway incursions by 15% from the CY 1997 baseline.**

Baseline:
- Surface Errors in CY 1997 - 95
- Pilot Deviations CY 1997 - 150
- Vehicle/Pedestrian Deviations in CY 1997 - 73
- Runway Incursion Total for CY 1997 - 318

Data: FAA

Comment: Indicator is an intermediate outcome measure that supports improving aviation safety. FAA goals are to reduce surface errors by 10 percent, pilot deviations by 20 percent, and vehicle/pedestrian deviations by 10 percent in order to achieve a total runway incursion reduction of 15 percent.

Indicator: **The number of operational errors and pilot deviations per 100,000 operations.**
1999 Goal: **Pilot deviation rate:** **0.099 in FY 1999**
Operational error rate: **0.496 in FY 1999**

Baseline:
- Pilot deviation rate: 0.108 in FY 1994
- Operational error rate: 0.541 in FY 1994

Data: FAA operational error and operational deviation report.

Comment: This intermediate outcome performance measure reflects a key area of FAA emphasis that will contribute to improving overall aviation safety. Operational error involves two or more aircraft coming closer than prescribed minimum separation as the result of controller action. Pilot deviation involves less than prescribed separation between aircraft and airspace boundaries. Operational errors and deviations elevate the risk of aviation accidents occurring.

3. MARITIME SAFETY

The program activities, means and strategies, and annual performance measures to be employed in advancing marine safety reflect the efforts of the USCG. Activities of the SLSDC and MARAD also contribute to these goals.

MARITIME RELATED PROGRAM ACTIVITIES:

USCG	Estimated FY 1999 Obligations (Millions):	
Operations		
Search and Rescue	343	
Aids to navigation	464	*
Marine safety	402	
Acquisition, Construction, and Improvements		
Search and Rescue	55	
Aids to navigation	136	*
Marine safety	41	
Research, Development, Test, and Evaluation		
Search and Rescue	3	
Aids to navigation	3	*
Marine safety	5	
State recreational boating safety programs	55	

SLSDC	
Public Enterprise Funds (All Program Activities)	13 *

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - The USCG develops necessary safety regulations and standards; inspects for compliance; investigates incidents; licenses mariners; provides navigation systems; provides vessel traffic services (for select U.S. ports), and conducts research and development to advance maritime safety. The USCG also responds to protect life and property at sea and provides technical and grant assistance for state programs in search and rescue and boating safety. The Coast Guard also maintains a volunteer force -- the CG Auxiliary -- to cost effectively advance recreational boating safety through courtesy examinations and training. The SLSDC and USCG ensure the safe operation of the U.S. portion of the St. Lawrence Seaway.

Special initiatives and focus for FY 1999 -

- Improve rescue efficiency and effectiveness by acquiring more capable cutters, boats, systems, and facilities.
- Complete development of a risk management guide, in conjunction with the Passenger Vessel Association, that assists operators in addressing safety problems.
- Reduce the influence of human error on maritime casualties through the successful "Prevention through People" program.
- Improve mariner knowledge and skills by implementing Standards for Training Certification and Watchkeeping, a more effective system of requirements.
- Partner with industry groups such as the Passenger Vessel Association to further explore causal factors of maritime casualties.
- Conduct public service initiatives including the National Boating Under the Influence Campaign and the Annual Safe Boating Campaign in cooperation with states, the insurance industry, and boating associations to promote personal floatation device use and improve boater behavior, skills, and knowledge.
- Increase enforcement of boating under the influence statutes, and promote lowering the alcohol intoxication threshold to .08% for adults, and to a zero tolerance level for minors.
- Conduct research and development to improve search planning, including improvements to search theory models, analysis of current and wind variability, and night search tactics and sensor performance.
- Conduct research and development to improve waterways management, including the development of the Port Operations Information for Safety and Efficiency (POISE) system that will improve transmission of key vessel traffic information.

Capital assets/capital planning -Highlights:

- Seagoing Buoytender Replacement - Fund two vessels.
- The 47 foot motor lifeboat to replace the aging 44 foot motor lifeboat.

- The 87 foot coastal patrol boats to replace the aging 82 foot patrol boats.
- The Deepwater Capability Replacement Analysis, which will look for the best mix of capital assets to replace aging cutters and equipment.
- New response and surveillance aircraft navigation systems, new aircraft sensors, and response and surveillance aircraft engine replacement.
- The implementation of the National Distress System Modernization project, which will create a fully integrated system that permits distress, safety, law enforcement interaction between the Coast Guard and mariners.
- The development of the Ports and Waterways Safety System (PAWSS), an advanced system that contributes to the safe movement of vessel traffic in busy waterways.

Cross Cutting areas with other agencies - The attainment of performance goals in maritime safety involves active dialogue and coordination with other Federal, state, and local government authorities. Emergency response efforts and educational programs in maritime and recreational boating safety are coordinated with state and local authorities. The USCG works with the Department of Labor/OSHA in vessel health standards, as well as with the National Transportation Safety Board (NTSB) in the investigation of the causes of marine accidents. Active work in industry/trade group partnerships is also key to advancing safety.

Efficiency and effectiveness strategies and activities - In 1999, the Coast Guard will partner with state governments, industry, and trade groups to improve mariner knowledge and skills. Partnerships include the Passenger Vessel Association, American Waterways Operators, American Petroleum Institute, U.S. Chamber of Shipping, and International Council of Cruise Lines. Linked to these partnerships is the Coast Guard's "Prevention through People" initiative, which identifies human causal factors in accidents and focuses on the education of mariners and industry to reduce these causal factors rather than on employing more regulations.

To improve efficiency, the Coast Guard will implement the Alternative Compliance Program (ACP) to shift inspection responsibilities to classification societies such as the American Bureau of Shipping, which already conduct inspection for insurance and business purposes.

To eliminate redundancies, the Coast Guard plans to close Marine Safety Detachment Concord, CA, which is no longer needed due to the Concord Naval Weapons Station's ability to move material in containers which do not need the same level of supervision. The Coast Guard will realign the Container Inspection Program for hazardous material. The capability to carry out inspections has been generated in other agencies including Customs, Agriculture, Defense, and the National Cargo Bureau, allowing the Coast Guard to target inspections on strategic ports.

Legislation and Regulations - Proposed legislation (NEXTEA) would authorize mandatory funds from motor boat fuel tax receipts for the Boating Safety Grants.

While the Coast Guard relies on Federal and state regulations to enforce safety standards and promote education, its principal focus in 1999 is its "prevention through people"program, which seeks to correct root causes of problems without reliance on regulations and enforcement.

Where regulatory efforts are planned, highlights include:

- Rules for towing vessel safety that will improve fire suppression and anchoring operations, and ensure that operators have the proper training and qualifications to handle a tug and tow.
- Rules to require onboard High Capacity Passenger Vessel Response Plans for emergency situations.
- Revision of regatta participant and spectator safety regulations to eliminate unnecessary and obsolete requirements.
- Revision of drawbridge regulations to ensure safe intermodal operations.
- Rulemaking regarding propeller injury prevention aboard rental boats, aimed at examining the number and nature of injures sustained from vessel propellers in order to determine the need Federal or State regulation of these vessels.

MARITIME INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The number of recreational boating fatalities.**
1999 Goal: **Reduce the number to 720 fatalities or less in FY 1999.**

Baseline: 800 fatalities in FY 1993.
Data: CG Boating Accident Report database.
Comments: The interim performance measure tracks total number of recreational boating fatalities. To best assess the impacts of Federal, state, and local interventions, this number would be divided by hours of exposure to boating to yield a measure of risk. The baseline shown was the most recent data available when this 10% reduction goal was set. Refinement to this measure is underway.

Indicator: **The number of fatalities from maritime casualties per 100,000 workers.**
1999 Goal: **Reduce the rate to 42 fatalities/100,000 workers or less in FY 1999.**

Baseline: 52 fatalities/100,000 workers in FY 1993.
Data: CG Marine Safety Information System, which gets data from USCG field investigations. Owners and operators are required to report fatalities to the USCG. Maritime employment estimates based on data provided by National Marine Fisheries Service (NMFS), Bureau of Labor Statistics (BLS), and Mineral Management Service (MMS).
Comments: Employment estimates have fluctuated significantly from year to year. BLS statisticians indicate that substantial estimating error exists, particularly in the fishing industry. The Coast Guard is working within this range of data fluctuation to set a goal that represents a statistically significant improvement. Baseline used in setting the performance goal was established by a regression curve obtained from several years of data. The FY 1993 datum was the most recent available at the time this 20% reduction goal was set. Data has fluctuated in the intervening years; the FY 1996 rate was 43 fatalities/100,000 workers.

Indicator: **Percentage of mariners reported in life-threatening danger that are rescued.**
1999 Goal: **Save 93% or more in FY 1999.**

Baseline: 93% saved in FY 1996.
Data: CG Search and Rescue Marine Information System (SARMIS)
Comments: The Coast Guard strives to save all lives possible. Data is obtained from the CG Search and Rescue Marine Information System. Program managers believe the data collection system slightly understates the number of lives lost. Thus, the denominator of the measure is understated, which produces a percentage of lives saved that may be higher than the actual percentage. The system is currently being updated to improve accuracy and reliability. Past data is also skewed upward by a

surge of migrants interdicted at sea. Without migrant cases, the data drops slightly. FY 1994 - FY 1996 data is currently being validated to remove discrepancies. This goal measures Coast Guard rescue response activities. Other goals cover Coast Guard prevention activities.

4. RAIL SAFETY

The program activities, means and strategies, and annual performance measures to be employed in advancing rail safety reflect the efforts of the FRA. FRA efforts to improve safety at highway-rail grade crossings also influence highway and transit safety.

RAIL RELATED PROGRAM ACTIVITIES:

FRA	Estimated FY 1999 Obligations (Millions):
Railroad Safety	
Federal enforcement	46
Automated track inspection program	3
Safety Regulation and program administration	13
Railroad Research & Development	
Equipment, operations, & hazardous materials	6
Track, structures, and train control	7
Safety of high speed ground transportation	5
Administration	2
Nationwide Differential GPS	
Differential GPS	2
Positive train control initiatives	1

RAIL RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FRA sets and enforces safety standards, investigates major train accidents, assists the rail industry in training its workforce on safety laws, and educates the public on the dangers associated with railroads. FRA also conducts research in technology and human factors (e.g., fatigue counter-measures) relating to safety, and promotes infrastructure improvements through grants to the National Railroad Passenger Corporation (Amtrak).

Special initiatives and focus in FY 1999 -

- Advance new Positive Train Control (PTC) systems, using National Differential Global Positioning System (NDGPS) as the source of location information. For FY 1999, FRA will invest $3 million—along with $5.5 million from FHWA—for the enabling infrastructure.
- Expand the successful Safety Assurance and Compliance Program (SACP), the efficient examination process which supplements FRA's traditional site-specific safety inspections.
- Expand the Railroad Safety Advisory Committees, the Technical Resolution Committees, training, database management, and information technology in support of FRA's mission and field personnel.

- Prevent highway-rail crossing and trespass fatalities through public awareness programs. FY 1999 funds will be used to continue the successful *Always Expect A Train* national, public-awareness campaign on rail-highway crossing safety and trespass prevention.

Cross-cutting areas with other agencies - FRA will continue to work with the Department of Justice on the *Moving Kids Safely* program, the Department of Defense on high-speed rail R&D, and the Department of the Interior on the *Rails-to-Trails* program. FRA will coordinate other safety-related efforts with the National Transportation Safety Board and the Federal Emergency Management Agency.

Efficiency and effectiveness strategies and activities - In FY 1999, FRA will expand a pilot project to allocate inspection resources in a more cost-effective manner using data-based color cartography mapping. The maps provide a quick reference for inspectors on where railroad activity occurs and the volume of activity at a site. This knowledge assists the inspectors in their daily inspection planning. It also assists managers in the planning and allocation of resources nationwide.

Legislation and regulations - Although FRA's Safety Assurance and Compliance Program has produced significant safety results through its partnering initiatives and systemic safety reviews, FRA continues to rely also on traditional rulemaking to ensure safety throughout America's rail system. Areas of regulatory effort planned in FY 1999:

- Passenger equipment safety standards - Final Rule scheduled for early FY 1999.
- Emergency preparedness for rail passenger service - Final Rule early FY 1999.
- Audible warnings at highway-rail grade crossings (whistle ban) - Final Rule early FY 1999.

Proposed technical standards for Positive Train Control (PTC) are being reviewed by the Rail Safety Advisory Committee. Possible rulemaking could occur in FY 1999.

RAIL INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The number of rail-related fatalities per million train-miles.**
1999 Goal: **Reduce the rate to 1.57 in CY 1999.**
2002 Goal: **Reduce the rate to 1.47 in CY 2002.**

Baseline: 1.71 in CY 1995.
Data: FRA Accident/Incident Bulletin (data from required industry reports).
Comment: Rate of rail-related fatalities is an outcome indicator used in managing railroad safety. Injury data, provided by rail industry, is tracked at the modal level.

Indicator: **The number rail-related crashes per million train-miles.**
1999 Goal: **Reduce the rate to 3.44 in CY 1999.**
2002 Goal: **Reduce the rate to 3.09 by the end of CY 2002.**

Baseline: 3.91 in CY 1995.
Data: FRA Accident/Incident Bulletin (data from required industry reports).
Comment: Rate of rail-related crashes is an outcome indicator used in managing railroad safety. Rail safety statistics frequently use the term "accident," which is the same as "crash" in this indicator.

Indicator: **The rate of highway-rail grade crossing crashes.**
1999 Goal: **Reduce the rate to 2.40 in CY 1999.**
2002 Goal: **Reduce the rate to 2.06 by the end of CY 2002.**

Baseline: 2.85 in CY 1995.
Data: FRA Accident/Incident Bulletin; FRA Highway-Rail Crossing Accident/Incident and Inventory Bulletin (FRA data from required industry reports). FHWA *Highway Statistics.*
Comment: The combination of highway-rail grade crossing and trespasser fatalities account for over 90 % of all rail-related fatalities, making this a key index of success. The rate of crashes is the total highway-rail grade crossing crashes divided by the multiplication of million train-miles and trillion vehicle-miles-traveled. This denominator provides a sense of the multiplicative effects of train miles and vehicle-miles on exposure. Rail safety statistics frequently use the term "accident," which is the same as "crash" in this indicator.

Indicator: **The rate of rail-related trespasser fatalities.**
1999 Goal: **Reduce the rate to 2.58 in CY 1999.**
2002 Goal: **Reduce the rate to 2.41 by the end of CY 2002.**

Baseline: 2.81 in CY 1995
Data: FRA Accident/Incident Bulletin; FRA Trespasser Bulletin; and U.S. Census Bureau. (FRA data from required industry reports).
Comment: The combination of highway-rail grade crossing and trespasser fatalities account for over 90 % of all rail-related fatalities, making this an important index of success. The rate of trespasser fatalities is the total number of trespasser fatalities (excluding highway-rail grade crossings) divided by million train-miles, divided by the U.S. population in billions.

5. TRANSIT SAFETY

The program activities, means and strategies, and annual performance measures to be employed in advancing transit safety reflect the efforts of the FTA. Transit Safety is also advanced by work with FRA in positive train control, and by work with FRA and FHWA in reducing at-grade rail crossing crashes.

TRANSIT RELATED PROGRAM ACTIVITIES:

FTA	Estimated FY 1999 Obligations (Millions):	
Formula Grants (Urban and non-urban)	355	*
Major Capital Investments	1,204	*
Washington Metropolitan Area Transit Authority	50	*
Transit Planning and Research	92	*
Administrative Expenses	48	*
Formula Programs		
Urbanized area formula	3,411	*
Non-urbanized area formula	135	*
Elderly and disabled	63	*
Access to jobs and training	100	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

TRANSIT RELATED MEANS AND STRATEGIES:

Ongoing means and strategies- FTA administers grants to maintain and improve the condition of the transit infrastructure (vehicles, tracks, and facilities), thereby improving system safety and performance. FTA partners with states, local transit authorities, and the transit industry to develop technology, provide training, and supply technical assistance that advances safety. For states mandated to provide safety and security oversight for rail systems, FTA provides guidance on best practices and how to assess safety plans. FTA conducts research on the safe handling of alternative fuels and alternative fuel facilities. It also maintains the Safety Management Information Statistics (SAMIS) safety and security database . These and other efforts provide transit officials with access to expert advice through referrals to other industry experts, up-to-date information for assessing system safety and capital requirements, and standards for safer "next generation" vehicles. The FTA provides oversight and monitors compliance with its drug and alcohol testing rules. Finally FTA, through the Transportation Safety Institute, supports over 200 courses of transit safety and security, including fatigue awareness (recommended by the National Transportation Safety Board).

Special Initiatives and focus for FY 1999 -

- Provide training for over 4,000 transit professionals on technical and management topics, such as system security, rail system safety, emergency management planning, industrial safety, alternative fuels, bus and rail accident investigation, train-the-trainer, and fatigue awareness.
- Update and revise key modules of training courses to reflect safety training needs of transit operators and advancement in the state-of-the-practice safety standards.
- Update drug and alcohol implementation guidelines based on changes to the rules.
- Enhance the safety and security database to include alternative fuels (compressed hydrogen) accident data analysis.
- Provide transit safety technology recommendations for the Olympics 2002 in Salt Lake City.

Cross-cutting areas with other agencies - FTA's work in monitoring compliance with drug and alcohol testing rules is supportive of the National Drug Control Strategy goal of reducing the health and social costs of drug use.

TRANSIT INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The number of transit fatalities per 100 million transit passenger miles.**
1999 Goal: **Reduce the rate to 0.7 fatalities or less per 100 million transit passenger miles in CY 1999.**

Baseline:	0.8 fatalities per 100 million transit passenger miles in CY 1995
Data:	National Transit Data Base
Comment:	Data in this indicator includes both riders and employees fatalities. Fatality is defined as transit caused death from collisions, personal casualties, fire, derailments, or buses going off the road.

Indicator: **The number of transit injuries per 100 million transit passenger miles.**
1999 Goal: **Reduce the rate to 157 or less per 100 million transit passenger miles in CY 1999.**

Baseline: 161 transit related injuries per 100 million transit passenger miles in CY 1995
Data: National Transit Data Base
Comment: Data includes both riders and employee injuries. Injury is defined as any physical damage or harm to a person requiring medical treatment caused by a transit collision, personal casualty, fire, derailment, or bus going off the road.

6. PIPELINE & HAZARDOUS MATERIALS TRANSPORTATION

The program activities, means and strategies, and annual performance measures to be employed in advancing pipeline and hazardous materials transportation safety reflect the efforts of RSPA as well as the other modes. RSPA is responsible for oversight of the nation's natural gas and hazardous liquid pipelines and RSPA is responsible for issuing hazardous material regulations on behalf of DOT. Enforcement of those regulations is accomplished within the various modes.

PIPELINE & HAZARDOUS MATERIALS PROGRAM ACTIVITIES:

RSPA	Estimated FY 1999 Obligations (Millions):	
Research and Special Programs		
Hazardous materials safety	16	
Research and technology	4	
Program and administration support	9	
Pipeline Safety		
Operations	15	
Research and development	2	
Grants	15	
Trust Fund Share of Pipeline Safety	3	*
Emergency Preparedness Grants	14	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

PIPELINE AND HAZARDOUS MATERIALS MEANS AND STRATEGIES:

Ongoing means and strategies - RSPA develops safety regulations and standards for the transportation of hazardous materials (classifying, handling, and packaging); maintains the nation's largest database of hazardous materials information and incidents; conducts compliance inspections; provides special permits and approvals to support shippers needs; conducts hazardous materials research; and provides training, technical and grant assistance for state, territories and Indian tribes to supplement programs in hazardous materials emergency preparedness. RSPA also develops safety regulations and standards for oil and natural gas pipelines. RSPA reviews operator incident response plans and exercises and provides technical and grant assistance to state to conduct inspections and improve pipeline safety.

Special initiatives and focus in FY 1999 -

- Increase the number of compliance inspections conducted, particularly inspections of shippers who offer hazardous materials for air transportation.
- Expand outreach and work with Federal, state and local enforcement personnel to target enforcement activities in high risk areas and reduce the number of incidents.
- Expand emergency preparedness programs in states, which assist in reducing both the number of incidents and their safety impacts.
- Test, in partnership with industry, a comprehensive and systematic evaluation of the pipeline life cycle to identify potential sources of risk that may not otherwise be discovered under the current regulatory process. Risk management considers the likelihood and the consequences of any accident. Companies consider a range of alternatives for controlling risks and allocating resources within a structured process that RSPA can approve and monitor with state input.
- Collaborate with industry on R&D efforts, with potential work in stress corrosion cracking, improved leak detection, damage prevention techniques, mapping technologies and other information management systems, and assessing the impact of natural disasters.

Cross-cutting areas with other agencies - In hazardous material safety, RSPA works extensively with other agencies in harmonizing hazardous materials regulations and in information sharing. Active coordination involves: Department of State, Organization for Economic Cooperation and Development, Environmental Protection Agency, Department of Labor-Occupational Safety and Health Administration, Consumer Product Safety Commission, Department of Health and Human Services/Food and Drug Administration, the United States Treasury, Nuclear Regulatory Commission, and the Department of Agriculture. RSPA also coordinates shipper/carrier inspections with the United States Treasury, and the Nuclear Regulatory Commission.

In pipeline safety, RSPA's works in concert with other agencies to advance safety goals. These include: the Department of Energy (DOE)/Oak Ridge National Laboratory (ORNL) to provide field engineering support; the Federal Energy Regulatory Commission (FERC), DOE, and the U.S. Geological Survey (USGS) in an effort to develop a National Pipeline Mapping System (NPMS); MMS on oversight of offshore pipelines; Department of Labor (DOL)/Occupational Health and Safety Administration (OSHA), EPA, DOE, MMS and Coast Guard on risk management performance measures.

In emergency preparedness grants, RSPA works with Department of Energy, the Environmental Protection Agency, the Federal Emergency Management Agency, the Department of Defense, and the state, territories, and Indian tribes to strengthen training and planning for emergency response involving hazardous materials.

Efficiency and effectiveness strategies and activities - RSPA focuses on customer service through its Hazardous Materials Information Center, which assists shippers, carriers, packaging manufacturers, enforcement personnel, and others in their understanding of requirements in order to maximize voluntary compliance. The Center also staffs the statutory mandated toll-free

number for transporters of hazardous materials, and others, to report possible violations of the HMR or any order or regulation issued under Federal hazardous materials transportation law.

Legislation and regulations - In the Emergency Preparedness Grants Program, DOT intends to propose rulemaking to increase the annual level of funding under the registration program from $7.4 million to $14.3 million to substantially increase emergency preparedness grants funds to states to more closely meet the needs of the emergency response community. DOT also intends to support its hazardous materials reauthorization proposal that would allow up to 25% of the grant funds to be used to provide compliance assistance to small businesses, addressing one of the biggest safety issues--undeclared shipments of hazardous materials.

PIPELINE & HAZARDOUS MATERIALS INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Number of natural gas transmission pipeline failures and hazardous liquid pipeline failures.**
1999 Goal: **4,778 natural gas transmission pipeline failures in FY 1999.**
207 hazardous liquid pipeline failures in FY 1999.

Baseline: 4,906 natural gas transmission pipeline failures (leaks) in FY 1994.
243 hazardous liquid pipeline failures in FY 1994.
Data: RSPA/Office of Pipeline Safety.
Comment: This intermediate performance goal tracks with human and economic losses from pipeline incidents. It provides a leading indicator of overall system integrity and thus safety, where pipeline related fatalities, injuries and economic consequences may result. Goal was set based on 1994 baseline. Trends in 1995 and 1996 data have been downward, but with year to year fluctuation. The Performance Report will assess this trend line in reporting on this goal.

Indicator: **Number of incidents in all types of pipelines caused by outside force damage.**
1999 Goal: **137 incidents in all types of pipelines (distribution, transmission and hazardous liquid) in FY 1999.**

Baseline: 147 incidents in all types of pipelines caused by outside force damage in FY 1995.
Data: RSPA/Office of Pipeline Safety.
Comment: This intermediate performance measure tracks with economic losses for the most common cause of pipeline damage--outside force caused by excavation and other sources. The measure also provides an leading indicator of injuries and fatalities by tracking a more common incident that can precede personal injury or death. Goal was set based on 1995 baseline. Trends in 1996 and 1997 data have been downward, but with year to year fluctuation. The Performance Report will assess this trend line in reporting on this goal.

Indicator: **Number of serious reportable hazardous materials transportation incidents.**
1999 Goal: **426 in FY 1999.**

Baseline: 448 in FY 1996.
Data: RSPA's Hazardous Materials Information System (HMIS)
Comment: This intermediate performance goal provides a sensitive leading indicator for fatalities and injuries, since serious incidents include those that result in a fatality, major injury (for most purposes, an injury resulting in hospitalization), closure of a major transportation artery or facility, evacuation of six or more persons, or a vehicle accident or derailment.

STRATEGIC GOAL: MOBILITY

Shape America's future by ensuring a transportation system that is accessible, integrated, efficient, and offers flexibility of choices.

OUTCOMES:

Progress in achieving the Department's strategic goal of mobility will be measured at the end of FY 1999 against the following outcome areas:

Outcome Goal	Performance Indicator
1. Improve the structural integrity of the transportation system.	▸ Percent of National Highway System pavement with acceptable ride quality. ▸ Percent deficient bridges on the National Highway System. ▸ Percent of airport runway pavements in satisfactory condition. ▸ Percent availability of marine aids to navigation. ▸ Percent availability of locks and related navigation facilities of the St. Lawrence Seaway. ▸ Average age of bus and rail transit fleet.
2. Balance new physical capacity with the operational efficiency of the nation's transportation infrastructure.	▸ Assessment of integration for Intelligent Transportation Systems (ITS) in metropolitan areas. ▸ System capacity attributable to airport infrastructure at the 50 busiest airports. ▸ Number of intercity and commuter trains scheduled in congested segments of Washington DC/Boston corridor. ▸ Amtrak customer satisfaction index (CSI).
3. Increase intermodal physical, information, and service connectivity.	▸ Number of identified impediments to the flow of commerce through ports and terminals.
4. Increase access to the transportation system for the movement of all people and freight.	▸ Percent of transit facilities that are Americans with Disabilities Act compliant. ▸ Number of aviation landing approaches using GPS technology.
5. Provide preventive measures and expeditious response to natural and man made disasters in partnership with other agencies to ensure that we provide for the rapid recovery of the transportation system.	▸ Percent of disaster relief supplies arriving within a specified time.

HOW WE WILL ACHIEVE OUR STRATEGIC GOAL:

DOT's program activities impact mobility through a number of common interventions and actions: direct operations (such as air traffic control or vessel traffic services), infrastructure investment (funding for the National Highway System, grants for transit improvement, grants for airport improvements), rulemaking (where the adoption of new standards improves the efficiency of transportation), technology (fostering new materials and technologies to enhance mobility), and education (such as public awareness of transportation alternatives and campaigns to influence personal behavior). Some of these interventions and actions reside entirely within the Federal government, but most involve significant partnering with State and local authorities and with the transportation industry. This is particularly true in infrastructure improvement, where most planning, project selection, and work is accomplished at the State and local levels. The Federal activity common to all programs is *leadership*. DOT provides national leadership in mobility, integrating the efforts of all partners to advance our common goal -- ensuring a transportation system that is accessible, integrated, efficient, and offers flexibility of choices.

Some of the annual performance goals shown under "Economic Growth and Trade" can be considered mobility goals as well. For example, reducing transport time and improving service reliability have as much to do with *getting people where they need to go* as with economic growth and competitiveness. Both strategic goal areas depend on efficiency.

DOT programs designed to advance mobility are funded in each of several operating administration budgets. At the same time, the Department is committed to the concept of ONE DOT, as further outlined in the section on Corporate Management Strategies, and to a balanced transportation system, as outlined in our NEXTEA proposal. For the purposes of presenting the existing budget structure, the program activities of separate modal administrations can be aggregated into six general areas of mobility intervention and action: highway, aviation, maritime, rail, transit, and disaster response.

1. HIGHWAY MOBILITY

The program activity, means and strategies, and annual performance measures used to advance highway mobility reflect the efforts of FHWA. The intelligent transportation systems (ITS) Joint Program Office (JPO), funded under FHWA, provides coordination across modal programs to enhance transportation efficiency. This discussion assumes that legislation for surface transportation reauthorization is passed by Congress. The flexibilities inherent in NEXTEA are a powerful enabler for efficient local use of Federal funding. This flexibility, however, means the funding below, while integral to highway infrastructure performance goals, may also be used to advance other performance goals within highways or relating to transit mobility or the environment. The link between these resources and the highway performance goals must be considered in that context.

HIGHWAY RELATED PROGRAM ACTIVITIES:

FHWA	Estimated FY 1999 Obligations (millions):	
Federal -Aid Highways Program		
Surface transportation program	5,608	
National highway system	4,257	
Interstate maintenance	4,271	
Interstate system reimbursement	969	
Bridge program	2,556	
Congestion mitigation/air quality improvement	1,260	*
Flexible highway infrastructure safety	509	*
Integrated safety fund	50	*
Intelligent transportation systems	96	
Intelligent transportation incentive deployment	100	
Federal lands highways	512	
FHWA research and technology	126	
Woodrow Wilson Bridge	180	
Appalachian highways	290	*
Research and technology	174	
Contract programs	23	
Other programs	104	
Emergency Relief Program	100	
Minimum allocation	692	
Demonstration projects	414	
State Infrastructure Banks	150	
Transportation Infrastructure Credit Enhancement	100	*
Miscellaneous Appropriations (All Program Activities)	72	
Miscellaneous Trust Funds	8	
Miscellaneous Highway Trust Funds		
Intermodal urban demonstration project	4	
Urban Highway corridor bicycle study	1	
Highway projects	26	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

HIGHWAY RELATED MEANS AND STRATEGIES:

Ongoing means and strategies: FHWA partners with state and other authorities to promote infrastructure development and improvement through direct funding, grants and technical assistance. The ITS Joint Program Office (JPO) coordinates intermodal efforts as a part of the intelligent transportation systems (ITS) program. FHWA ensures efficient emergency response and restoration of damaged transportation infrastructure due to natural disasters or catastrophic events. FHWA also provides infrastructure support on federal lands.

Special initiatives and focus for FY 1999 -

- Advance work in Intelligent Transportation Systems (ITS), which is developing intelligent vehicles and infrastructure to improve highway safety and increase highway efficiency *without* building new lanes and roads. Specifically, we will implement ITS customer service programs in 30 additional targeted metropolitan and 10 additional rural areas to help them deploy properly integrated systems that use the National ITS Architecture and ITS Standards.
- Implement a service plan program that transfers the leadership for ITS deployment from headquarters to the field.
- Conduct the "Find-it and Fix-it" research program, which uses non-destructive evaluation methods to find problems with highway structures, such as bridges, and uses high-performance materials to fix these problems.
- Continue development and begin implementation of SUPERPAVE, a comprehensive system for the design of asphalt concrete mixtures tailored to the unique performance requirements dictated by the traffic, environment, and the structural characteristics of a given site that will result in higher performing, longer lasting pavements.
- Conduct research in: 1) construction and contracting methods that will accelerate construction and maintenance; 2) high-performing maintenance and repair materials, methods, and equipment; and 3) materials and methods to minimize delays due to winter maintenance activities.

Efficiency and effectiveness strategies and activities - FHWA will expand creative financing programs that have shown promise in advancing infrastructure investment and improving highway mobility. In FY 1999 this will include $150 million to expand the State Infrastructure Bank program, which enables states to underwrite bonds, enhance credit, and make loans. $100 million is also proposed for the new Transportation Infrastructure Credit Enhancement Program to provide grants to assist in funding nationally significant transportation projects that otherwise might be delayed or not constructed because of their size and the uncertainty over timing of revenues.

Cross-cutting areas with other agencies - FHWA/Federal Lands Highway is working with Federal land managing agencies (Bureau of Indian Affairs, Forest Service, National Park Service) to update road and bridge inventories, and develop improved program stewardship procedures. RSPA and FHWA coordinate work with the Federal departments and agencies who are signatory to the Federal Response Plan, and work closely with the Federal Emergency Management Agency (FEMA) in responding to natural and man-made disasters.

HIGHWAY RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator:	**Percent of kilometers (miles) on the National Highway System that meet pavement performance standards for acceptable ride quality (International Roughness Index less than or equal to 2.68 m/km (170 in/mi)).**
1999 Goal:	**Increase the percentage to 91.5% in FY 1999**
2008 Goal:	**Increase the percentage to 93% by FY 2008.**

Baseline: 91.1% in FY 1996.
Data: Highway Performance Monitoring System (HPMS)
Comment: Pavement condition affects traffic speed, vehicle operating cost, and safety. Improved condition makes travel safer and more efficient. The goal for FY 1999 will be influenced by previous years' funding, and by the funding and activity of State and local authorities. Increasing vehicle miles traveled will accelerate the deterioration of pavement, making this goal a challenge to achieve.

Indicator: Percent deficient (structurally deficient or functionally obsolete) bridges on the National Highway System (NHS).
1999 Goal: Less than 24.3% in CY 1999
2008 Goal: Less than 20% in 2008

Baseline: 25.8% in FY 1996.
Data: National Bridge Inventory (NBI)
Comment: Deficient bridges are an impediment to efficient travel when they are closed to traffic over a certain weight or act as traffic bottlenecks. The goal set for FY 1999 will be influenced by previous years' funding, and by funding and activity of State and local authorities. The aging of bridge structure (particularly those on the Interstate System) and accelerating deterioration of bridges due to increased truck volumes and vehicle loadings may make this goal a challenge to achieve.

Indicator: Assessment of integration for Intelligent Transportation Systems (ITS)
Goal: Increase the level of integration in six metropolitan areas by 20 % in FY 1999.

Baseline: Survey of ITS integration in 1997.
Data: DOT Joint Program Office.
Comment: This measure tracks a key element of program effectiveness in ITS. While various types of ITS technologies are now available to State and local authorities, the piecemeal purchase and implementation of component technologies will limit their effectiveness in improving the reliability of transportation. This assessment of integration provides a baseline methodology that may be expanded to other areas. It provides a leading indicator of the potential effectiveness of ITS deployment and should foretell improved reliability of transportation and reduced congestion.

2. AVIATION MOBILITY

The program activity, means and strategies, and annual performance measures to be employed in advancing aviation mobility reflect the efforts of the FAA and OST. For FAA, the means and strategies detailed in support of aviation safety are also linked to aviation mobility -- we seek to improve the safe movement of people and goods through integrated processes.

AVIATION RELATED PROGRAM ACTIVITIES:

FAA	Estimated FY 1999 Obligations (Millions):	
Operations		
Air traffic services	4,382	
Regulation and certification	635	*
Airports	50	
Research and acquisitions	94	
Commercial space transportation	6	*

	Grants-in-aid for Airports	1,700	*
	Facilities and Equipment		
	Engineering, development, test and evaluation	424	
	Procurement and modernization of ATC facilities and equipment	980	*
	Procurement and modernization of non-ATC facilities/equipment	165	*
	Mission support	279	
	Research, Engineering and Development		
	System development and infrastructure	17	
	Capacity and air traffic management technology	117	
	Communications, navigation, & surveillance	19	
	Weather	12	
OST			
	Essential Air Services and RAIF	50	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

AVIATION RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FAA manages and supports the operations, facilities, and equipment that provide the air traffic services of the NAS. FAA also continues to provide leadership and support necessary to plan, develop and maintain a system of airports in the U.S. that efficiently transport people and goods by air. FAA further develops and validates technologies, systems, designs, and procedures that directly support DOT's goal of improving mobility through an efficient and safe aviation and space transportation system. The Office of the Secretary (OST) manages the Department's major rural transportation program through its Essential Air Service authority. Access by rural citizens to aviation hubs provides support for DOT's goal of improving mobility, through an efficient, safe and broadly based aviation system.

Special initiatives and focus for FY 1999 - FY 1999 funding will help the FAA accommodate strong demands for aviation services, modernize automation and communications technology and systems, deal with aging facilities, and prepare the NAS for expanding aviation demands into the 21st century. Highlights include:

- Increase the number of controllers by 185 and the number of field maintenance technicians by 150. Both staffing increases are necessary to keep pace with aviation growth.
- Continue the modernization of the air traffic control system, bringing on line air traffic control and aeronautical navigation equipment to upgrade the NAS infrastructure. Critical initiatives to improve user access to the aviation system include the development and publishing of approaches that use Global Positioning System (GPS) satellite navigation.
- Improve information services, permitting FAA to respond more quickly to direct service requests even while these requests are expected to grow in numbers over the years.
- Support the Standard Terminal Automation Replacement System (STARS) for terminal radar approach control facilities and the Display System Replacement (DSR) for enroute centers. These systems will significantly improve the FAA's ability to increase efficiency and

expand the NAS capacity.

- Develop and exploit Global Positioning System (GPS) satellite navigation. The FAA's Wide Area Augmentation System (WAAS) will provide accuracy and integrity information on GPS satellites to allow GPS use for aerial navigation. This will improve both the efficiency of the NAS and, equally important, user access to the nation's airports during conditions that require precision navigation system and instrument approaches.
- Develop the NAS infrastructure management system (NIMS). NIMS will provide the necessary capabilities needed to manage the NAS infrastructure to meet customer service requirements in a cost-effective manner. The FAA will use NIMS to institute a pro-active maintenance strategy based on trend analysis, resources available, and NAS traffic requirements.
- Develop the integrated terminal weather system (ITWS) to link all relevant weather data available in the terminal area, including data down-linked from aircraft and automatically provide near-term weather information and predictions. Weather is responsible for approximately two thirds of delays in the NAS with large impacts at major hub airports.
- Address year 2000 computer problems. A significant number of FAA computer based systems will be affected by the year 2000 date change, potentially including the air traffic system, radar systems, safety related programs, administrative resource systems, local and side area networks, and desktop applications.
- Implement Flight 2000, a pilot of the free flight concept. Free flight is the opportunity to fly anywhere, anytime by the best route as judged by the user, subject only to the safety restriction that one aircraft not fly too close to another.
- Advance research programs in satellite navigation, data link communications, and automatic dependent surveillance are critical technologies required for meeting the FAA goals in increasing system flexibility, reducing the amount of extra flight miles associated with ATC preferred routes, increased user access, and increasing the percentage of flight segments flown off of ATC preferred routes.
- Advance weather research to develop new algorithms and models to predict accurately the timing, location, and severity of weather events such as in-flight icing, thunderstorms, fog, low ceiling and visibility, in-flight turbulence, snow, and high winds.
- Develop the surface movement advisor (SMA) to enhance the NAS air traffic management systems by providing controllers, airline ramp managers, and airfield operators with unprecedented advisory and information sharing. This will help minimize congestion and reduce delays on the airport surface.

Capital assets/capital planning - Two key initiatives are:

- The Flight 2000 evaluation program is a key element of NAS modernization and is intended to provide early demonstration of the new technological capabilities in a live air traffic control environment.
- The Wide Area Augmentation System (WAAS) supports the FAA's mission to provide the required integrity, accuracy and reliability for the Global Positioning System (GPS) navigation and landing capability.

Cross-cutting areas with other agencies - The Flight 2000 demonstration project is based on the principle that government, unions, and industry must share in the development of the "free flight" era global transportation system. Partners include Department of Defense, the National Aeronautical and Space Administration, the U.S. Coast Guard, unions, and the aviation industry. FAA must also work with the international community, such as through the International Civil Aviation Organization (ICAO), to achieve global consensus on modernizing and improving the efficiency of the global aerospace system. Additionally, the surface movement advisor (SMA) research and development program is being conducted in close partnership with NASA through the inter-agency air traffic management integrated product team, a joint research and technology development program managed cooperatively by the FAA and NASA.

Efficiency and effectiveness strategies and activities - The FAA's new acquisition management system incorporates a life cycle approach to managing NAS acquisitions. Under the new system, FAA is establishing performance, cost, and schedule baselines and developing methods to measure those baselines to ensure programs remain within budget, are delivered on time, and perform as expected. To evaluate the relationship between communities served and the type and frequency of subsidized air service, as well as the benefits of this service, OST will undertake a program evaluation of the essential air service program in 2000.

AVIATION RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Percent of runway pavements in satisfactory condition.**
1999 Goal: **Maintain 93 percent in FY 1999.**

Baseline: 93 % in FY 1996.
Data: FAA Transportation System Center (TSC) Database (Airport Safety Data Record).
Comment: Runway pavement condition is classified through standard methodology as good, fair, or poor. Optimal investment is achieved when 93% of runway pavements are in satisfactory (good or fair) condition.

Indicator: **System capacity attributable to airport infrastructure at the 50 busiest airports.**
1999 Goal: **Increase by 0.5 percent annually from the baseline year of 1998.**

Baseline: Capacity at the 50 busiest airports, to be developed in 1998.
Data: FAA
Comment: Investment in airport infrastructure contributes to system capacity along with other investments in air and ground traffic systems. This measure will track airfield capacity at the 50 busiest airports and cross reference delay statistics for those airports.

Indicator: **Number of available landing approaches using GPS technology.**
1999 Goal: **Increase the number by 500 in FY 1999.**

Baseline: 500 were published in FY 1997
Data: FAA
Comment: Output measure that closely relates to aviator access to airports. FAA will increase access to the nation's airports during Instrument Flight Reference (IFR) weather conditions by publishing GPS landing approach procedures. GPS procedures will provide aviators with more accurate and reliable course guidance and will provide them with better access to airports in adverse weather conditions. This goal addresses GPS non-precision landing approaches.

3. MARITIME MOBILITY

The program activity, means and strategies, and annual performance measures to be employed in advancing marine mobility reflect the efforts of the MARAD and the USCG.

MARITIME RELATED PROGRAM ACTIVITIES:

	Estimated FY 1999 Obligations (Millions):	
USCG		
Operating Expenses		
Aids to navigation	464	
Marine safety	402	*
Ice operations	74	*
Acquisition, Construction, & Improvements		
Aids to navigation	136	
Marine safety	41	*
Ice operations	40	*
Research, Development, Test, & Evaluation		
Aids to navigation	3	
Marine safety	5	*
Ice operations	1	*
MARAD		
Operations and Training		
MARAD Operations	31	*
SLSDC		
Public Enterprise Funds (All Program Activities)	13	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - The USCG provides navigation systems for U.S. waterways; maintains an Aids to Navigation (ATON) servicing fleet and infrastructure to support a network of over 50,000 floating and fixed aids to navigation; and operates Vessel Traffic Services (VTS) in 8 U.S. ports. Additionally, the USCG regulates the construction, maintenance, and operation of railroad and highway bridges across navigable waters, and administers the Truman-Hobbs Act, which involves altering or removing bridges that obstruct navigation.

MARAD engages in partnerships with industry and other government organizations to reduce barriers to intermodal transportation through the adoption of national/international standards. Further, MARAD, USCG, FHWA, FRA, and the U.S. Army Corps of Engineers foster private-public partnerships to identify and develop infrastructure improvements to move freight more efficiently, including improvements in navigation channels and landside access routes to ports and intermodal freight transport systems.

The Saint Lawrence Seaway Development Corporation oversees and manages the U.S. portion of the Seaway, planning and executing capital investments to ensure maximum availability to users and the long-term reliability of the U.S. navigational facilities.

Special initiatives and focus in FY 1999 -

- Modernize marine communications to create a fully integrated system that improves distress and safety communications and improves the management of traffic on our waterways.
- Establish a Vessel Traffic Service (VTS) in New Orleans as a part of a larger Ports and Waterways Safety System (PAWSS) initiative. PAWSS provides an analysis framework with which to consider the needs of ports and determine where a VTS or alternative solution is required, and what is the most effective design for the traffic system that will best meet local mobility and safety needs.
- Develop the Port Operations Information for Safety and Efficiency (POISE) project which will improve the transmission of key vessel traffic information.
- Continue the program of altering or removing bridges determined to be obstructions to navigation. Consistent with the proposed NEXTEA, alteration of obstructive highway and railroad bridges will be eligible for funding from the Federal-aid Highway program.
- Commence projects to install, replace, and realign navigational aids in Chesapeake Bay and Houston Ship Channels in coordination with Army Corps of Engineers channel dredging projects.
- Conduct Phase III of implementing the coastal Differential Global Positioning System (DGPS) service. FY 1999 funds support the adjustment of coastal coverage to ensure that the final configuration of transmitters provides navigational services to all critical waterways. Full capability implementation of the Differential Global Positioning System (DGPS) for marine navigation will make extremely accurate electronic positioning information available to all mariners in the harbors and rivers of the continental U.S., Puerto Rico, Hawaii, and Alaska.
- MARAD will establish criteria and select targeted connectors that will be part of the DOT Assessment of the Conditions and Performance of NHS Intermodal Connectors, conduct industry outreach, and carry out field visits to assess intermodal connector infrastructure requirements.

Capital assets/capital programming - Highlights include:

- Seagoing Buoytender Replacement - Fund two vessels.
- Stern Loading Buoy Boat Replacement Project
- Ports & Waterways Safety System (PAWSS)
- Phase III of Marine Differential GPS implementation

Cross-cutting areas with other agencies - MARAD is working with DOD and the commercial sector to: (1) investigate technologies and infrastructure opportunities which will improve inland freight transfer and lead to an efficient connection between ports and land transportation to serve both commercial and military logistics requirements and (2) establish goals and carry out demonstration projects that integrate both the military and commercial requirements for strategic port planning and design to create terminal facilities based on a “dual use” concept.

MARAD is also actively working with the Intermodal Association of North America, the American Association of Port Authorities, the American Waterways Operators, the USCG, FHWA, and the U.S. Army Corps of Engineers (ACOE) to identify inadequate road access to ports, and to streamline the dredging process to reduce constraints to water and landside access. The Coast Guard works extensively with the ACOE in marking channels maintained by the Corps.

The USCG coordinates its program work and performance measures with other agencies and industry groups through partnerships such as the Interagency Committee for Waterways Management to encourage joint problem solving to advance the efficient movement of freight, including improvements to waterways.

Efficiency and effectiveness strategies and activities - USCG continue replacement of the aging buoy tender fleet with new vessels that use advanced technology and reduced manning to provide essential navigation services with less resources.

Legislation and regulations - The Coast Guard will pursue regulations to improve the aids to navigation system by consolidating and eliminating differences between the Uniform State Waterway Marking System and the U.S. Aids to Navigation System.

MARITIME RELATED MOBILITY INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The percentage of total operating days that marine aids to navigation are available for use on U.S. navigable waters.**
1999 Goal: **99.7% in FY 1999.**

Baseline: 98.74% in FY 1997.
Data: U.S. Coast Guard.
Comment: This is an interim measure pending development of a more direct outcome measure. While aid availability is not a true outcome measure, it does bear on the level of mobility through navigable waterways. The measure is influenced by program effort, reliability of equipment, and personnel performance. This measure tends to overstate the system-wide discrepancy time of the aids to navigation: a single aid outage usually does not degrade a waterway's entire aid system, and vessels are still able to transit. Complete system outages are rare, and usually result from severe weather incidents such as hurricanes. The goal of 99.7% availability lies well above traditional levels of performance, which have ranged between approximately 98.2% and 99.2% for the last four years. Future measures may center more directly on movement of commerce, or accident prevention.

Indicator: **Number of land and waterside impediments to flow of commerce through ports and terminals**
1999 Goal: **Reduce the number. Specific goal to be developed.**

Baseline: Under development; will be complete in FY 1998.
Data: State DOTs, Metropolitan Planning Organizations, port authorities, and U.S. Army Corps of Engineers
Comment: Primary baseline data (1998) will be developed from survey material collected by various national organizations such as the American Association of Port Authorities, the Intermodal Association of North America, and the Inland Rivers Ports and Terminals, Inc. Measure focuses on physical impediments (e.g., congested truck routes, roadway turning radii, weight-restricted bridges, rail-

highway crossings, inadequate clearances for double-stack rail service, vessel draft restrictions, etc.) Future refinements will also look at regulatory and institutional impediments. This intermodal performance goal will be influenced by program activity of MARAD, USCG, and FHWA, and FRA.

Indicator: **Days of availability of locks and related navigation facilities as a percentage all days the St. Lawrence Seaway is open during the navigation season.**

1999 Goal: **99% in FY 1999.**

Baseline: 97% average from CY 1993 to CY 1997.
Data: SLSDC
Comment: Downtime for weather conditions is included as non-availability of the system. The SLSDC influences this measure through capital planning, investment, maintenance, and operations. Data is gathered by SLSDC and confidence in its validity is high.

4. RAIL MOBILITY

The program activity, means and strategies, and annual performance measures to be employed in advancing rail mobility reflect the efforts of FRA.

RAIL RELATED PROGRAM ACTIVITIES

FRA	Estimated FY 1999 Obligations (Millions):	
Capital Grants to the National Railroad Passenger Corporation		
Capital Grants	409	
Northeast Corridor Improvement Project	200	
NY Penn Station	12	
Rhode Island Rail Development	10	
Next Generation High Speed Rail		
Technology development	12	
Administration	1	
Railroad Research and Development		
Research and development facilities	1	
Nationwide Differential GPS	3	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

RAIL RELATED MEANS AND STRATEGIES:

Ongoing means and strategies- FRA will support the National Railroad Passenger Corporation (Amtrak) as it progresses towards operating self-sufficiency, develop technologies to support high-speed rail, and conduct research and development to support the safe expansion of capacity and improve the performance of the U.S. rail system. FRA is also engaged in the preparation of comprehensive Transportation Plans for the Northeast Corridor (NEC) with Amtrak, commuter operators, state Departments of Transportation and freight

railroads. These Plans will continue to analyze capital investment options to insure that intercity passenger trains achieve trip time goals established by legislation, while at the same time adding capacity to allow for continued growth in commuter operations.

Special initiatives and focus in FY 1999 -

- Support construction of an overhead catenary system and power supply sources between New Haven, CT and Boston, MA (160 miles), a critical infrastructure improvement supporting trip-time reduction. When completed in late 1999 Amtrak will introduce high-speed electrified operation from Washington to Boston, a distance of 456 miles.
- Develop agreements with transit operators and State departments of transportation to jointly fund projects to improve both Amtrak and commuter rail performance. For example, New Jersey Transit and Amtrak have agreed to increase capacity in FY 1999 through signal system upgrades in the congested areas of Northern New Jersey. Other jointly funded projects are planned in Maryland, New York, Connecticut, Rhode Island, and Massachusetts.
- Invest in the National Differential Global Positioning System (NDGPS) initiative. The same technologies -- digital data link communications, DGPS positioning, and onboard computers -- that permit Positive Train Control (PTC) systems to improve railroad safety also hold the promise of improved railroad efficiency and productivity.

Efficiency and Effectiveness strategies and activities - FRA analyzes and reports on measures of Amtrak's overall financial performance relative to Amtrak's Strategic Business Plan, budget targets and prior-year levels. By projecting Amtrak's year-end cash position FRA assesses the likelihood and size of cash shortfalls. Recommending effective revenue raising and cost cutting options to the Department's representative on the Amtrak Board of Directors, and working with Amtrak to prepare alternative actions if targets are not met, are other activities.

RAIL RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Amtrak customer satisfaction index (CSI)**
1999 Goal: **87 in FY 1999**

Baseline: 84 in 1997
Data: Amtrak customer surveys
Comment: Customer satisfaction captures the outcome of Federal capital investment in passenger rail mobility -- the index components include on-time performance, comfort, ride quality, and equipment condition. CSI provides a leading indicator of passenger demand and revenues, providing an indication of Amtrak's progress towards operating self sufficiency (a key desired outcome of Federal capital investment).

Indicator: **Number of intercity and commuter trains scheduled along most congested segments of the Washington-Boston Corridor.**
1999 Goal: **Amtrak and New Jersey Transit (NJT) will complete reconfiguration of selected interlockings.**
2005 Goal: **10% Increase by 2005, to 365 trains/day.**

Baseline: 332 trains/day between Newark, NJ, and Hunter Interlocking, NJ in FY 1995.
Data: Published timetables

Comment: Indicator is a key outcome measure of how well existing physical capacity can be managed to support increased operational efficiency. Achieving the goal will require cooperation among Amtrak, New Jersey Transit, and state DOT's. FY 2005 goal is to safely increase the number of trains above the baseline and to report on progress. 1999 goal is a mean-type goal for completing one key component of this program.

5. TRANSIT MOBILITY

The program activity, means and strategies, and annual performance measures to be employed in advancing rail mobility reflect the efforts of FTA. This discussion assumes that NEXTEA legislation is passed by Congress. The flexibilities inherent in NEXTEA are a powerful enabler for efficient local use of Federal funding. This flexibility, however, means the funding previously discussed under highways may also be used to advance performance goals relating to transit or the environment.

TRANSIT RELATED PROGRAM ACTIVITIES:

FTA	Estimated FY 1999 Obligations (Millions):
Formula Programs	
Urbanized Area Formula	3,411
Non-Urbanized Area Formula	135
Elderly and Disabled	63
Access to Jobs & Training	100
Major Capital Investments	1,204
Formula Grants (Urban and non-urban)	355
Transit Planning and Research	86
Washington Metro	50

TRANSIT RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FTA partners with State and local agencies and transit authorities to promote infrastructure investment, maintenance policies, and transit operational decisions that advance the mobility of people. FTA provides and oversees Federal transit investment to improve and maintain the condition of transit fleets and facilities and to encourage transit stops within acceptable walking distance (3/4 mile). Infrastructure investment also improves efficiency, expands capacity, addresses elderly and handicapped accessibility needs, and promotes the introduction of transit service to non-metropolitan areas without transit. The DOT Joint Program Office (JPO), funded under FHWA, provides coordination of Intelligent Transportation Systems (ITS) technologies as a part of the Advanced Public Transportation Systems program.

Special initiatives and focus for FY 1999 -

- Meet requirements of active Full Funding Grant Agreements for new or extended fixed guideway projects in 14 metropolitan areas.
- Help meet infrastructure needs in order to assist transit operators in meeting the requirements of the Americans with Disabilities Act (ADA) and to help metropolitan areas meet the Clean Air Act.
- Conduct ADA compliance assessments at 80 key rail stations which were self-certified as compliant with ADA requirements.
- Provide technical assistance for the Salt Lake City, 2002 Winter Olympics, to allow the maximum integration of the transit components of the Intelligent Transportation System (ITS) program and accelerate the planning needed.
- Develop enhanced travel modeling procedures through the Travel Model Improvement Program (TMIP), working with FHWA and the Environmental Protection Agency.
- Address planning needs associated with job access, "welfare-to-work" market identification, service provisions, financing, institutional arrangements and education.
- Complete operational tests of stored-value bank cards, regional fleet management, and demand response fleet operations.

Cross-cutting areas with other agencies - The development of enhanced travel modeling through the Travel Model Improvement Program (TMIP) is done in cooperation with FHWA, OST, and EPA. Mobility for the disabled, elderly and low income passengers is enhanced by collaborating with such agencies as the Department of Health and Human Services, Education, Agriculture, and Labor to assist in developing innovative transportation strategies for services provided by their programs. Welfare to Work efforts expand the number of partners that FTA and OST work with in ensuring transportation access, to include the Department of Housing and Urban Development. Also FTA conducts human services coordination demonstrations and supports the activities of the DOT-HHS Coordinating Council.

TRANSIT RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator:	**Average age of bus and rail fleets in years.**
2002 Goal:	**Achieve Motor Bus average age of 7.6 years or lower in CY 2002 while sustaining or expanding service.** **Maintain Rapid Rail average age at 19.3 years in CY 2002 while sustaining or expanding service.**
Baseline:	Motor Bus 8.1 years in CY 1995 Rapid Rail 19.3 years CY 1995
Data:	National Transit Database
Comment:	These capital investment goals have 2002 target for FY 1999 resources due to the time required to purchase and deploy equipment. DOT is initiating an effort in FY 1998 to collect data on the condition of transit vehicles. Until data on condition is available, DOT will use average age as a surrogate measure. Older transit vehicles provide less reliable service and comfort to passengers, and are less energy and pollution efficient. Older transit vehicles also have higher maintenance costs, so average age is a proxy for operating costs. The five-year trend line in age of rail fleet increased between 1991 and 1995; average bus age has been somewhat stable. The DOT goal is to maintain the average rail fleet age and achieve a lower average bus age.

Indicator:	**Percentage of transit facilities and fleet that are compliant with the Americans with Disabilities Act (ADA).**
1999 Goal:	**37 percent of key rail stations will be accessible in 1999.** **73 percent of bus fleet will be fully accessible (lift or wheelchair equipped) in 1999.**
Future Goal:	**100 per cent of 690 key rail stations in 33 rail systems will be ADA accessible by 2005.** **100 per cent of the bus fleet will be accessible (lift or wheelchair equipped) by 2002.**
Baseline:	19 percent of key rail stations were ADA accessible in CY 1996 63 percent of the bus fleet was ADA accessible in CY 1996
Data:	FTA.
Comment:	Accessibility for bus fleet means that vehicles are lift or wheel chair ramp equipped. FTA will influence the goal through Federal transit infrastructure investment, which speeds the rate at which transit operators can transition to ADA compliant facilities and equipment.

6. DISASTER RESPONSE

Individual modes coordinate Federal assistance in repairing infrastructure after disasters or disruption of the transportation system, most notably FHWA. For this discussion, the program activity, means and strategies, and annual performance measures used to disaster response reflect the activities of RSPA and FHWA.

EMERGENCY RESPONSE PROGRAM ACTIVITIES

RSPA Estimated FY 1999 Obligations (Millions):	
Research and Special Programs	
Emergency Transportation	1
FHWA	
Federal-aid Highways Program	
Emergency Relief Program	100

EMERGENCY RESPONSE RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - RSPA coordinates Federal support to restore the transportation system after emergencies, providing assessment, analysis, procurement of services, and establishment of alternative transportation means. This is accomplished through DOT Regional Emergency Transportation Coordinators (RETCO) and the Regional Emergency Transportation Representatives (RETREP). FHWA ensures efficient emergency response and restoration of damaged transportation infrastructure due to natural disasters or catastrophic events.

Special initiatives and focus in FY 1999 -

- RSPA will provide training exercises to response teams in 1999
- RSPA will develop recovery and damage mitigation measures as components of crisis management, since each affect the transportation system infrastructure and the delivery of goods and services to disaster areas.

- FHWA will train field staff and states to use the laptop computer-based Damage Survey Report (DSR) system, which will speed the processing of highway damage survey and repair estimates as result of earthquakes, hurricanes, floods, other natural disasters or other emergencies

Cross-cutting areas with other agencies - RSPA and FHWA coordinate work with the Federal departments and agencies who are signatory to the Federal Response Plan, to ensure that 80 percent of relief supplies arrive on time for disasters occurring in FY 1999. FEMA, the overall coordinator of Federal disaster response, is continually striving to improve the delivery time for relief goods and services. Cross-cutting efforts with FEMA will help advance the governmentwide goal for speeding aid to disaster victims.

EMERGENCY RESPONSE INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator:	**Percent of disaster relief supplies into the disaster area arriving within a specified time (to be developed with partners).**
1999 Goal:	**80% of relief supplies within time criteria for disasters occurring in FY 1999.**
Data:	RSPA/Office of Emergency Transportation (OET), FEMA Emergency Support Teams, and Emergency Support Function 1- Transportation, in FEMA Disaster Field Offices. Performance standard for a time standards will be jointly determined.
Baseline:	To be developed in 1998.
Comment:	Indicator is the desired outcome of the DOT Disaster Transportation Management System (DTMS) and its Movement Control Center (MCC). Performance will depend on frequency, severity, and duration of the disaster responses.

STRATEGIC GOAL: ECONOMIC GROWTH AND TRADE

Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

OUTCOMES:

Progress in achieving the Department's economic growth and trade strategic goal will be measured at the end of FY 1999 against the following outcome areas:

Outcome Goal	Performance Indicator
1. Reduce the real economic cost of transportation, taking into account changes in the efficiency and quality of transportation services.	▸ Transportation portion of GDP. ▸ Expenditure on passenger transportation per passenger-mile. ▸ Expenditure on freight transportation per ton-mile. *See text.*
2. Ensure that improvements in transportation which advance America's economic growth and trade are done in a cost-effective manner consistent with the President's Executive Order on the cost-effectiveness of infrastructure investment.	▸ Benefit-cost and life-cycle cost analysis conducted by operating administrations. *See text.*
3. Reduce the average time for delivery of people, goods, and services to their destinations	▸ Hours of highway delay per 1000 vehicle-miles-traveled. ▸ Percent of flight operations safely flown off ATC preferred routes. ▸ Total transit revenue hours of service with 15 minute or less service frequency. ▸ Amtrak trip-time between New York and Boston.
4. Improve the reliability of the delivery of people, goods, and services to their destinations.	▸ National Airspace System volume and equipment related delays per 100,000 flight operations. ▸ Percent of Amtrak trains arriving on-time. ▸ Percent of critical waterways closed during open shipping season.
5. Reduce trade barriers, support economic deregulation, and promote competition in domestic and international markets in transportation-related services.	▸ Number of city-pairs with integrated air service and the total volume of air passenger traffic between countries.
6. Improve the U.S. international competitive position by facilitating the export of domestic transportation goods and services.	▸ Gross tons of commercial vessels under construction in U.S. shipyards.

Outcome Goal	Performance Indicator
7. Accelerate desirable, sustainable, and cost-beneficial regional and local economic development through major transportation investments.	▸ Benefit-cost and life-cycle cost analysis conducted by operating administrations. *See text.*
8. Increase the education and public awareness of individuals in transportation-related fields.	▸ Number of transportation related degrees awarded by university programs sponsored by DOT. ▸ Number of students reached by the Garrett A. Morgan Technology and Transportation Futures program.
9. Expand opportunities and promote economic growth for all businesses, especially by encouraging and assisting small, women-owned, Native American and disadvantaged businesses to participate in DOT and DOT-assisted contracts and grants.	▸ Percent of dollar value DOT contracts awarded to women-owned businesses, in accordance with statutory goal.
10. Increase the nation's economic growth and trade through wise, cost-effective transportation investments.	▸ Transportation portion of GDP. ▸ Expenditure on passenger transportation per passenger-mile. ▸ Expenditure on freight transportation per ton-mile. *See text.*

HOW WE WILL ACHIEVE OUR GOAL:

DOT's program activities impact our nation's competitiveness and prosperity through a number of common interventions and actions: direct operations (such as efficient air traffic control or vessel traffic services), infrastructure investment (funding for the National Highway System, grants for transit improvement, and grants for airport improvements), rulemaking (such as the allocation of airport slots or the elimination of trade barriers), technology (fostering new materials and technologies to enhance the efficiency and flexibility of transportation options), loan guarantees (such as to foster shipyard and shipbuilding growth) and education (advancing transportation-related education and public awareness). Some of these interventions and actions reside entirely within the Federal government, but most involve significant partnering with State and local authorities and with the transportation industry. The Federal activity common to all programs is *leadership*. DOT provides national leadership in guiding transportation's contribution to economic growth and trade, integrating the efforts of all partners to advance our common goal -- advancing America's economic growth and competitiveness through efficient and flexible transportation.

THE REAL ECONOMIC COST OF TRANSPORTATION AND ITS CONTRIBUTION TO OUR ECONOMY

The DOT outcome goals to *reduce the real economic cost of transportation* and *increase the nation's economic growth and trade through investments* are not associated with annual performance goals. This is because these economic outcomes, while important to track and

understand, are not the measures that we presently use to manage for results. These two strategic outcomes describe the results of our transportation system as a whole. They capture the broad impact of transportation nationally, taking into account both private and public expenditures. These are ultimate outcome goals for transportation, and DOT recognizes that there are neither indicators nor data that are currently perfect or complete. By placing these challenging outcomes in its strategic plan, the Department signals to its customers that the link between government expenditure on transportation and the economic vitality of the nation are integral.

Mobility -- accessible, integrated, efficient, and flexible transportation -- is the fundamental enabler of economic growth and trade and is the principal way that DOT can influence the true economic cost of transportation. In measuring mobility, however, we focus on physical measures, such as condition, capacity, or efficiency. The ultimate economic importance of transportation can be measured in two common ways:

- *As the share of transportation-related final demand in GDP*. This reflects the value of all goods and services, regardless of industry origin, delivered to final demand. From 1990 to 1995, this has been about 11% of GDP. While we monitor this number, it can not be used alone as an indicator for management. DOT may influence improved efficiencies that lower the costs of transportation services, but it's share of GDP may go either up or down depending on how people trade-off between transportation consumption and other consumption (such as spending on food or housing) as income increases.

- *As the share of GDP based on value-added origination.* This reflects contribution of transportation to the value of production of GDP, that is, the value of transportation used by all industries in production plus the value of transportation services delivered to final demand. This indicator provides a better picture of the ultimate outcome of transportation from a production perspective. However, it is currently undercounted because much of the transportation activities performed by non-transportation industries are not counted as transportation in the system.

To address the undercounting in the latter measure, BTS is engaged, jointly with the Department of Commerce's Bureau of Economic Analysis, in developing a Transportation Satellite Account (TSA). This account, when established, will contribute to DOT's understanding of the contribution of transportation to the nation's economy, and will help us better understand its real economic cost and the returns of transportation infrastructure investment.

While these economic outcome goals will be tracked and reported at the strategic level, they do not represent indicators or goals which DOT will use to manage its programs. The DOT interventions that most directly influence transportation's role in our economic growth are those captured under mobility, where this plan provides annual performance goals which we will use to manage our vital programs.

COST EFFECTIVE TRANSPORTATION INVESTMENT

DOT outcome goals to *ensure that improvements in transportation are done in a cost-effective manner* and to *accelerate economic development through major transportation investments* principally apply to the following DOT operating administrations: FHWA (Federal-aid highways), FRA (Amtrak capital assistance and the Northeast Corridor Improvement Program), FTA (Formula and discretionary capital grants and the Washington Metropolitan Area Transit Authority grants), FAA (Airport grants, and Facilities and Equipment) and USCG (bridge alteration and aids to navigation).

Cost-effective transportation investment is a process goal for these organizational components. Each have developed plans for assessing the life-cycle cost and benefit-cost of their investments. Cost-effectiveness analysis will be managed at the modal level, where reports of assessments are available. Highlights follow:

FHWA and *FTA* use the biennial Conditions and Performance Report to document the condition of highways, bridges, and transit to develop programs for Federal investment. Potential investments are analyzed using performance models to incorporate benefit-cost analysis and simulate the most cost effective mix of investment. FHWA and FTA have also set out a policy on Life-Cycle Cost Analysis (LCCA), describing good practices to be used by grant recipients. The FHWA has further developed LCCA training and technical assistance for States. The same software used in analyzing investment/performance relationships for the Department's Conditions and Performance Report will be made available to the states for program planning and evaluation. For transit new start discretionary capital grants, demand exceeds available funds and the project selection process incorporates analysis of benefit-cost and other economic factors.

FRA evaluates Amtrak benefit-cost analyses justifying major initiatives (including equipment acquisitions) prior to inclusion in capital appropriations requests. In the Northeast Corridor, studies precede investments in replacement of older facilities, applying benefit-cost analysis and developing rehabilitation schedules.

FTA uses the biennial Conditions and Performance Report to document the condition of transit infrastructure and capital stock and to target necessary investment. In discretionary capital grants, demand exceeds available funds and the project selection process incorporates analysis of benefit-cost and other economic factors.

FAA airport grant applications are prioritized by a project ranking system that applies benefit-cost analysis to priority capacity projects. Facilities and equipment investments assesses capital projects benefits as a part of capital investment planning.

USCG incorporates benefit-cost analysis into its models for developing and prioritizing bridge alteration projects under the Truman-Hobbs Act. The Coast Guard develops navigation infrastructure projects in conjunction with benefit-cost analyses conducted by the U.S. Army Corps of Engineers for their waterway projects.

OUR PROGRAMS THAT INFLUENCE ECONOMIC GROWTH AND TRADE

The six remaining strategic outcome goals under economic growth and trade are influenced by program activities found in each of several operating administration budgets. These program activities are aggregated into six general areas influencing transportation and the economy: highway, aviation (including *efficiency* and *competition*), maritime (including *efficient movement* and *competition*), rail, transit, and DOT-wide (including *education* and *economic opportunity*).

Infrastructure investment is a key factor in reducing the time and improving the reliability of transportation. The performance goals for timeliness and reliability that follow also support the program activities, means, and strategies discussed in the previous section on mobility.

1. HIGHWAY

The program activity, means and strategies, and annual performance measures used to improve highway transportation reliability and timeliness reflect the efforts of FHWA. This discussion assumes that legislation for surface transportation reauthorization is passed by Congress.

HIGHWAY RELATED PROGRAM ACTIVITIES:

FHWA	Estimated FY 1999 Obligations (millions):	
Federal -Aid Highways Program		
Surface Transportation Program	5,608	*
National Highway System	4,257	*
Interstate Maintenance	4,271	*
Interstate System Reimbursement	969	*
Bridge Program	2,556	*
Congestion Mitigation/air quality improvement	1,260	*
Flexible highway infrastructure safety	509	*
Integrated safety fund	50	*
Intelligent Transportation Systems	96	*
ITS/ITI incentive development	100	*
Federal lands highways	512	*
FWHA research and technology	126	*
Woodrow Wilson Memorial Bridge	180	*
Border Gateway Crossing Pilot Program	90	
Appalachian highways	290	
Research and technology	174	*
Other Programs	104	*
Minimum Allocation	692	*
State Infrastructure Banks	150	*
Transportation Infrastructure Credit Enhancement	100	

* Primary activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

HIGHWAY RELATED MEANS AND STRATEGIES:

Ongoing strategies and activities - FHWA partners with state and other authorities to promote infrastructure development and improvement through direct funding, grants and technical assistance. The DOT Joint Program Office coordinates work on Intelligent Transportation Systems (ITS) and other cross-modal initiatives designed to reduce highway congestions and improve safety.

Special initiatives and focus in FY 1999 -

- Initiate the Border Gateway Crossing Pilot Program, funded at $90M. The pilot program will develop and implement coordinated, comprehensive border crossing plans and programs, thus promoting the efficient and safe use of border crossings within defined international gateways.
- Work with State and local agencies and other stakeholders to identify possible improvements to NHS intermodal connectors.
- Implement strategies that will improve the integration of ITS technologies across jurisdictional and modal boundaries.
- Complete testing of motor carrier safety information and exchange partnerships at four border crossing sites in cooperation with the Department of Treasury.

Cross-cutting areas with other agencies - The FHWA's Office of Motor Carriers is lead on an International Board Clearance Planning & Deployment Committee that is ensuring that all government-run border crossing projects and ITS projects are compatible with one another. This committee includes representatives from the U.S. Customs Bureau, the U.S. Bureau of Immigration and Naturalization, and the governments of Canada and Mexico. The Office of Motor Carriers supervises six testing centers along the Mexican and Canadian borders evaluating ITS technology in processing people and goods at international crossings. FTA is a partner in this project. FHWA and FTA are also working with the U.S. Department of State and the Mexican government to complete a binational study of trade flows and planned infrastructure improvements along the U.S./Mexico border.

HIGHWAY RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Hours of delay per 1000 vehicle-miles of travel on Federal-aid highways.**
Goal: **A reduction in FY 1999.**

Baseline:	Baseline to be developed in FY 1998.
Data:	Highway Performance Monitoring System (HPMS)
Comment:	Baseline data for this indicator, developed from HPMS data, will be available by April 1998. The Condition and Performance Report has traditionally reported volume/service-flow (V/SF) as the single indicator of system performance. V/SF is limited because it only addresses peak-hour and disregards total hours of congestion. As congestion increases, V/SF tends to stabilize, while hours of congestion continue to increase, leading to erroneous conclusions. For 1997, the C&P Report augments V/SF with daily vehicle miles-of-travel per lane-mile (DVMT/L-M), a better measure of overall density of highway use. This interim step allows us to transition to a true measure of overall vehicle delay. Delay is considered the single most informative measure of congestion, impacting user costs, emissions, accidents, and productivity measures.

2A. AVIATION - Efficiency

The budget program activity, means and strategies, and annual performance measures to be employed in advancing aviation performance reflect the efforts of the FAA. It is important to realize that the Federal Aviation Reauthorization Act of 1996 sought to eliminate a perceived dual mandate of regulating safety and promoting aviation by focusing FAA on its safety mission. FAA, then, focuses its efforts on ensuring the safety, security, and efficiency of U.S. aviation as part of the Nation's overall transportation system. The means and strategies detailed for aviation safety are linked to aviation mobility and to advancing system reliability and efficiency-- we seek to improve the safe movement of people and goods through integrated processes. This section highlights particular FY 1999 activities that will enhance the efficiency of the NAS.

AVIATION RELATED BUDGET PROGRAM ACTIVITIES:

FAA	Estimated FY 1999 Obligations (Millions):	
Operations		
Air Traffic Services	4,382	*
Airports	50	*
Research & Acquisition	94	*
Commercial Space Transportation	6	
Facilities and Engineering		
Procurement and Modernization of ATC F&E	980	*
F&E Mission Support	279	*
Research, Evaluation, And Development		
System Development and Infrastructure	17	*
Capacity & Air Traffic Management Technology	117	*
Communications, Navigation & Surveillance	19	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail

AVIATION RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FAA manages and supports the operations, facilities, and equipment that provide the air traffic services of the NAS. FAA also continues to provide leadership and support necessary to plan, develop and maintain a system of airports in the U.S. that efficiently transports people and goods by air. FAA further develops and validates technologies, systems, designs, and procedures that directly support an efficient and safe aviation and space transportation system.

Special initiatives and focus for FY 1999 - FY 1999 funding and initiatives discussed previously under safety and mobility have the additional impact of improving aviation reliability and reducing travel and shipping time. The following efficiency initiatives in 1999 will have particular impact in this area:

- Continue the modernization of the air traffic control system, bringing on line air traffic control and aeronautical navigation equipment to upgrade the NAS infrastructure.
- Reduce the amount of extra flight plan miles associated with air traffic control preferred routes, and increase the percentage of flight segments safely flown off of FAA preferred routes. ATC preferred routes are an important tool that help air traffic controllers organize traffic flows around major airports. Managing them more efficiently reduces flight plan miles and thus potentially the overall cost of air transportation.
- Develop and implement an integrated space and air traffic management system to address space vehicle travel to, from, and within space in addition to aircraft travel within airspace.
- Develop and exploit Global Positioning System (GPS) satellite navigation. The FAA's Wide Area Augmentation System (WAAS) will provide accuracy and integrity information on GPS satellites to allow GPS use for aerial navigation.
- Implement Flight 2000, a pilot of the free flight concept. Free flight is the opportunity to fly anywhere, anytime by the best route as judged by the user, subject only to the safety restriction that one aircraft not fly too close to another.

Capital assets/capital planning - Investments in capital assets are the same as detailed in aviation safety and mobility.

AVIATION RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **The number of volume and equipment related delays per 100,000 flight operations.**
1999 Goal: **Reduce the number to 30.7 or less.**

Baseline: 36.9 in FY 1994
Data: FAA.
Comment: Indicator is outcome measure that supports reduced time in transit and reliability of scheduled arrival times. This indicator also measures annual progress in aviation mobility.

Indicator: **Percentage of flight segments safely flown off Air Traffic Control preferred routes.**
1999 Goal: **Increase to over 80% in FY 1999.**

Baseline: 75 % in FY 1996
Data: FAA.
Comment: Indicator is an intermediate outcome measure that supports reduced time in transit and fuel savings for aircraft, improving the efficiency of the system. This indicator also measures annual progress in aviation mobility.

Indicator: **Percentage of flight operations arriving on time for the largest U.S. air carriers.**
1999 Goal: **Indicator is monitored only.**

Baseline: 78.6% in CY 1995
Data: DOT/OST *Air Travel Consumer Report*
Comment: On-time arrival is an intermediate outcome measure for overall aviation reliability. Trend in on-time arrival has been downward since 1991. DOT partially influences this indicator through reducing NAS equipment and volume related delays. A large portion of this indicator, however, is influenced by factors outside DOT control. This indicator also measures annual progress in aviation mobility.

2B. AVIATION - Competition

The program activity, means and strategies, and annual performance measures to be employed in advancing aviation deregulation and competition reflect the efforts of the Office of the Secretary of Transportation.

AVIATION COMPETITION RELATED BUDGET PROGRAM ACTIVITIES:

OST	Estimated FY 1999 Obligations (Millions):
Salaries and expenses	62 *

* Primary activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

AVIATION RELATED MEANS AND STRATEGIES FOR MOBILITY:

Ongoing means and strategies - OST provides leadership and support necessary to encourage, develop and maintain a system of aviation networks in the U.S. that efficiently transport people and goods by air. OST also supports operations that provide the access to domestic and international aviation networks throughout all 50 states.

Special initiatives and focus for FY 1999 -

- Negotiate international agreements to extend the U.S. “open-skies” policy, improving market access and enhancing competition.
- Implement new statutory authority in "exceptional circumstances," to grant landing slots in both New York and Chicago to support competition. These slots are being used to support new carrier entrants, international operations, and improved service to rural communities.
- Implement a domestic policy statement, currently under development, that will serve as the underpinning for determining unfair competitive practices against new entrants and smaller carriers.
- Develop improved aviation market data systems for the purpose of analyzing aviation policy issues.

Cross-cutting areas with other agencies - OST works with the international community through the International Civil Aviation Organization (ICAO) to encourage other countries to reduce government intervention in the aviation market, and cooperates in ICAO programs such as facilitation (expediting boarder clearance formalities for passengers and cargo) and aviation statistics. OST also implements on a daily basis its partnerships with the Department of State, Department of Justice and the National Economic Council concerning international aviation issues.

Legislation and regulations - OST issues a variety of economic orders concerning policy issues, new routes, slot allocations at high density airports, and airline economic licenses. No specific

activity of note is planned in 1999, other than ongoing processes. Most regulatory orders are available through the Department's internet site.

AVIATION INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Number of city-pairs with integrated service and the total volume of passenger traffic between countries.**

1999 Goal: **Increase by 50 percent the number of city-pairs with integrated service along with a 15 percent increase in passenger traffic over the base year of 1994.**

Baseline: 1994 city-pairs and passenger traffic for countries with which "Open Skies" and liberalized agreements were subsequently signed.

Data: DOT (OST-X).

Comment: The Department issued its International Air Transportation Policy Statement in 1995. This marked the beginning of real progress in achieving open and competitive international aviation agreements. "Open Skies" and liberalized agreements have been signed in 1995, 1996, 1997, and more are anticipated in 1998 and 1999. Each agreement represents a step toward a deregulated international aviation market which brings with it increased service, lower fares, and enhanced opportunity for economic growth. The key factor is not how many agreements are signed in one particular year, but whether new markets and more customers are receiving competitive service. Two important outcomes measures are new city-pairs with integrated service and an overall increase in passenger traffic.

3A. MARITIME - Efficient Movement

The program activity, means and strategies, and annual performance measures used to improve maritime transportation reliability, timeliness, and all season movement reflect the efforts of USCG. The budget, means, and strategies used to improve this performance are linked closely to the previous discussion of mobility. This section will outline initiatives relating to moving commerce efficiently -- a major economic mission of the Coast Guard.

MARITIME RELATED PROGRAM ACTIVITIES:

USCG	Estimated FY 1999 Obligations (Millions):	
Operating Expenses		
Aids to Navigation	464	*
Ice Operations	74	
Acquisition, Construction, & Improvements		
Aids to Navigation	136	*
Ice Operations	40	
Research, Development, Test, & Evaluation		
Aids to Navigation	3	*
Ice Operations	1	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing Means and Strategies - The USCG conducts a domestic ice operations program to free vessels beset in ice, establish and maintain ice-free tracks, and escort commercial vessels through ice in the Great Lakes, and the Northeast. This action speeds the movement of goods and improves the reliability of commerce. Through icebreaking, certain vital industries are able to avoid more expensive transportation modes and costly overstocking of needed materials to carry them through the ice season. The USCG also provides aids to navigation which improve the speed and reliability of vessel movement.

Special initiatives and focus for FY 1999 -

- Install, replace, and realign aids to navigation infrastructure, including the replacement of ice damaged aids to navigation and providing navigation aids to mark Army Corps of Engineer improved waterways. Federal investment in aids to navigation infrastructure complements local investment in waterways and port facilities, maximizing economic benefits.

Capital assets/capital planning - Highlights in 1999 include the seagoing buoytender replacement, which are built with icebreaking capability. The USCG will also conduct Phase III of implementing the Differential Global Positioning System (DGPS) in the maritime arena. FY 1999 funds support attainment of full operational capability. DGPS provides a highly accurate navigation system that will allow users to minimize errors in navigation, and move goods and people in a more cost effective manner.

Cross-cutting areas with other agencies - The U.S. and Canada operate under a cooperative agreement to meet icebreaking requirements in the Great Lakes and Saint Lawrence Seaway.

Efficiency and effectiveness strategies and activities - In order to more effectively use its resources year round, the Coast Guard carries out icebreaking using a mix of capital assets that also conduct aids to navigation missions outside of the ice season. The Coast Guard will also lay up the icebreaking tug Morro Bay. Current workload does not justify its operation.

MARITIME RELATED PERFORMANCE GOALS:

Indicator: **Percentage of critical waterways closed during the open shipping season.**
1999 Goal: **0% of waterways closed for more than 2 days in average severity winters or more than 8 days in severe winters.**

Baseline: 0% in FY 1996.
Data: USCG and Army Corps of Engineers.
Comment: This goal reflects the Coast Guard's contribution to mobility and reliable commerce from domestic ice breaking. Seven waterways have been identified as critical to Great Lakes icebreaking based on historical ice conditions, volume of traffic, and potential for flooding due to ice dams on rivers. Winter conditions are defined by a severity index (-6.2 or milder defines average severity; more than -6.2 defines severe). FY 1996 was a severe winter. Data for FY 1996 reflects initial measurement methodology; further data capture refinements will be developed.

3B. MARITIME - Competition

The program activity, means and strategies, and annual performance measures used to improve maritime industry competition reflect the efforts of MARAD.

MARITIME RELATED PROGRAM ACTIVITIES

MARAD	Estimated FY 1999 Obligations (Millions):
Maritime Guaranteed Loan (Title XI) Program	
Subsidy	26
Administrative Expenses	4
Ocean Freight Differential	24
Federal Ship Financing Fund (All program activities)[1]	19

[1]The Federal Ship Financing Fund is used to underwrite Title XI guarantees issued prior to the Credit Reform Act. No new commitments are projected for this fund.

MARINE RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - MARAD's Maritime Guaranteed Loan (Title XI) program helps to improve the U.S. shipbuilding competitiveness globally and to meet our national security needs. Since 1994, this program has guaranteed 296 ship construction projects and 6 shipyard modernization projects, together totaling over $2.1 billion. Nearly 40% of the amount guaranteed has been for eligible export vessels. Continued financing of shipyard modernization projects through the Title XI program will directly aid in furthering the transition of U.S. shipyards from military to commercial shipbuilding.

Special initiatives and focus in FY 1999 -

- Provide loan guarantees totaling an estimated $520 million, using a new budget investment of $16 million along with a carryover of $10 million. Demand for Title XI financing is expected to be especially strong in the developing market for construction of passenger ferry boats as well as the next generation offshore oil drilling and related energy equipment. Construction in these functional areas will enable the U.S. shipyards to continue to develop their expertise in these niche markets while increasing export sales as well.

Cross-cutting areas with other agencies - MARAD coordinates closely with the Office of the U.S. Trade Representative (USTR) and the Department of State in their efforts to enact legislation implementing the Organization for Economic Cooperation and Development (OECD) Agreement to end shipbuilding subsidies and to open the international market for U.S. shipyards. These efforts also entail continued discussions with the parties to the OECD Agreement.

MARAD also works closely with the Department of Defense (DOD) to assist the shipbuilding industry in competing in the international marketplace with competitive ship designs, market strategies and modern shipbuilding processes and procedures through the MARITECH research

and development program, which is funded by DOD through the Defense Advanced Research Projects Agency (DARPA). MARAD also cooperates with DOD to obtain its concurrence when approving Title XI loan guarantees for ships constructed for export.

Further, MARAD coordinates with the USCG in developing commercial shipbuilding standards for consideration in national and international standards-writing bodies. The adoption of consensus standards internationally enhances U.S. shipyard competitiveness by assuring that all shipyards, domestic and foreign, are constructing ships in accordance with common regulations. MARAD also actively cooperates with the Department of Commerce in planning U.S. industry participation in international shipbuilding expositions.

MARINE RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Gross tons (GT) of commercial vessels under construction in U.S. shipyards.**
1999 Goal: **Attain a 2% annual growth.**

Baseline: 500,000 GT preliminary estimate for FY 1998.
Data: MARAD Shipyard Survey Data.
Comment: Indicator provides an outcome measure of volume of U.S. commercial shipbuilding; export and domestic shares of the orderbook will be reported in the Annual Performance Report. Indicator is influenced by market recognition of improved shipyard productivity and by MARAD-provided loan guarantees, along with other external market factors. Significant increases in demand for new construction of vessels with relatively low gross tons (e.g., offshore equipment and power barges) or those not measured in gross tons (i.e, drill rigs) may impact achievement of the goal. Baseline is a preliminary estimate for end of year 1998, based on scheduled deliveries and anticipated new orders. Baseline will be adjusted for actual end of year 1998 data in the Performance Report.

4. RAIL

The program activity, means and strategies, and annual performance measures used to improve rail transportation reliability and timeliness reflect the efforts of FRA. Commercial rail owns both right-of-way and operating systems, and the market governs reliability improvement and time reduction. For passenger rail (Amtrak), the budget, means, and strategies used to reduce the time of arrival of passengers and improve reliability of transport are linked closely to the previous discussion of mobility. This section will outline select initiatives and measures that specifically advance Amtrak performance.

RAIL RELATED BUDGET PROGRAM ACTIVITIES:

FRA	Estimated FY 1999 Obligations (Millions):	
Capital Grants to the National Railroad Passenger Corporation		
General Capital	409	*
Northeast Corridor Improvement Project	200	*
NY Penn Station	12	*
Rhode Island Rail Development	10	*

Nationwide Differential GPS	3	*
Next Generation High Speed Rail		
Technology development	12	*
Administration	1	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

RAIL RELATED MEANS AND STRATEGIES:

Ongoing means and strategies- FRA will support the National Railroad Passenger Corporation (Amtrak) as it progresses towards operating self-sufficiency, and develop technologies to support high-speed rail. More specifically, FRA is engaged in the preparation of comprehensive Transportation Plans for the Northeast Corridor (NEC) with Amtrak, commuter operators, state Departments of Transportation and freight railroads. These Plans will insure that intercity passenger trains achieve trip time goals established by legislation, while at the same time adding capacity to allow for continued growth in commuter operations.

Special initiatives and focus in FY 1999 - FY 1999 funding and initiatives discussed previously under mobility have the additional impact of improving passenger rail reliability and reducing travel time. The following initiatives in 1999 will have particular impact in this area:

- Support construction of an overhead catenary system and power supply sources between New Haven, CT and Boston, MA (160 miles), a critical infrastructure improvement supporting trip-time reduction. When completed in late 1999 Amtrak will introduce high-speed electrified operation from Washington to Boston, a distance of 456 miles.
- Increase track capacity and overhead clearances between Providence and Davisville, RI for double stack container trains serving the Quonset Point Marine Terminal. This work will permit more direct and timely freight access to the terminal. Rhode Island DOT is providing one-half the $110 million project budget and has full management responsibility. The means type goal for this project will be to achieve unrestricted movement of oversize cars in 2001.

RAIL RELATED PERFORMANCE GOALS:

Indicator: **Percentage (system wide) of Amtrak trains arriving on time.**
Goal: **87% in 1999**

Baseline: 76% in CY 1995
Data: Amtrak, *National Railroad Passenger Corporation Annual Report*
Comment: On-time arrival is an intermediate outcome measure for overall reliability. Trend in on-time arrival has fluctuated prior to 1995, due in part to Midwestern floods. DOT influences this indicator through capital investment.

Indicator: **Amtrak trip time between Boston and New York City, along the Northeast Corridor.**
2000 Goal: **Reduce to 3 hours in FY 2000**.

Baseline: 4 hours 45 minutes in FY 1997
Data: Amtrak

Comment: Indicator is outcome measure of Amtrak's most significant infrastructure investment program -- the Northeast Corridor. The FY 2000 goal reflects FY 1999 resources as well as previous fiscal year expenditures. The targeted trip time is set for achievement in early FY 2000, and as such initial results will be reported in the March 2000 Performance Report covering FY 1999 activities.

5. TRANSIT

The program activity, means and strategies, and annual performance measures used to improve transit reliability and timeliness reflect the efforts of FTA.

TRANSIT RELATED PROGRAM ACTIVITIES

FTA	Estimated FY 1999 Obligations (Millions):	
Formula Programs		
Urbanized Area Formula	3,411	*
Non-Urbanized Area Formula	135	*
Elderly and Disabled	63	*
Access to Jobs & Training	100	*
Major Capital Investments	1,204	*
Formula Grants (Urban and nonurban)	355	*
Transit Planning and Research	86	*
Washington Metro	50	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

TRANSIT RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FTA will provide investment in transportation infrastructure and technologies to address changing travel demands, improve the reliability of equipment, reduce travel time, and reduce the real cost of transit. FTA will invest in infrastructure to improve intermodal connections and reduce delays due to intermodal transfers. These actions will advance efficiency of transit and help support the economic growth in areas served.

Special initiatives and focus for FY 1999 - FY 1999 funding and initiatives discussed in previously under mobility have the additional impact of improving transit reliability and reducing travel time. The following initiatives in 1999 will have particular impact in this area:

- Meet requirements of Full Funding Grant Agreements for new or extended fixed guideway projects in 14 metropolitan areas.
- Provide technical assistance to encourage and develop the use of innovative financing techniques and provide assistance in support of the State infrastructure banks (SIBs).
- Provide Job Access/Welfare Reform Challenges grants for pilot projects to document successful planning and coordination of transportation services that meet the needs of welfare recipients to reach jobs and training.
- Demonstrate deployment of intelligent transportation systems (ITS) in normal transportation

operations. Encourage ITS use because of the demonstrated benefits of one-time performance, reduced dwell times, shorter headways, and operating and maintenance cost savings.

- As a part of the Departmental Africa initiative, develop an international bus resale program for used transit buses and conduct research on the demand for used transit buses in the international marketplace.

TRANSIT RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Total transit revenue vehicle hours of service (rail and non-rail).**
2002 Goal: **At or above 196 million in CY 2002**.

Baseline: 183 million revenue vehicle hours in CY 1995.
Data: National Transit Database.
Comment: FTA is developing a subset of data for this goal to reflect the transit revenue vehicle hours with a service frequency of 15 minutes or less. This indicator, which will be established in FY 1998, will allow FTA to assess the availability of high quality transit service (service that is timely and reliable). This goal is closely related to goals for livable communities. Goal is set for 2002 due to time delay in realizing the benefits current capital investments.

6A. DOT-WIDE - Education

The program activity, means and strategies, and annual performance measures used to improve transportation education reflect the efforts of RSPA and all DOT organizational elements, which contribute to the Garrett A. Morgan Technology and Transportation Futures Program.

DOT-WIDE RELATED PROGRAM ACTIVITIES

RSPA	Estimated FY 1999 Obligations (Millions):	
Research and Technology[1]	18	*
Program Support[2]	0.2	

[1]Reimbursable Authority from FHWA and FTA.
[2]Garrett A. Morgan Technology and Transportation Futures Program.

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

DOT-WIDE MEANS AND STRATEGIES:

Ongoing means and strategies - RSPA is the lead operating administration within DOT for the Garrett A. Morgan Technology and Transportation Futures Program, an education outreach program targeted at students of all ages. This program is accomplished through a broadreaching DOT effort that involves every operating administration and OST office. RSPA also oversees the University Grants program, which provides funding grants for transportation related studies across the nations. Reauthorization of this program is anticipated during FY 1998.

New or enhanced means and strategies - The University Grants program will set out new focus and initiatives following its anticipated reauthorization in FY 1998. In support of the Garrett A. Morgan Technology and Transportation Futures Program, 1999 activities will:

- Increase the base of non-DOT persons, companies, educational institutions, and associations that are committed to supporting the program.
- Improve the database of these supporters, using it as means to communicate and better document the progress of the educational outreach effort. The database will also be used for setting up a strategy session for all persons interested in working on the program and for communicating with those persons.

Cross-cutting areas with other agencies - RSPA coordinates the Garrett A. Morgan program with the Department of Education and the Department of Labor.

DOT-WIDE INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Number of transportation-related graduate degrees awarded by university programs receiving DOT funding to advance transportation education.**
1999 Goal: **An incremental step towards 2002 goal, with at least 4,200 students enrolled in transportation-related degree programs.**
2002 Goal: **5% increase in the number of graduate degrees awarded.**

Baseline: 4,000 graduate degrees awarded in 1998 (preliminary estimate).
Data: Performance information submitted by university recipients.
Comment: DOT's goal of increasing the number of students attracted into transportation is furthered by an increase in the number of students graduating with advanced degrees in areas related to transportation. Master's-degree programs customarily take a minimum of two years to complete; PhD programs often take four or more. The first wave of students eligible to receive graduate degrees with funding awarded in 1998 will complete their studies by the year 2002. In order to meet the 2002 Goal, a minimum enrollment of at least 4,200 would need to be maintained. Because enrollments fluctuate as students enter, leave, or transfer programs, however, the goal will ultimately be measured by degrees awarded. The baseline is an estimate for planning purposes. RSPA plans to require each applicant for 1998 grants to document its own individual baseline as part of its grant application. An exact program-wide baseline will be established by adding together the individual baselines of all applicants receiving grants in that year.

Indicator: **Number of students reached by the Garrett A. Morgan Technology and Transportation Futures Program.**
1999 Goal: **300,000 additional students by the end of CY 1999.**
2000 Goal: **Reach 1 million students total by the end of CY 2000.**

Baseline: 0 in CY 1996.
Data: Responses from partners engaged in the program.
Comment: We will reach students of all ages through specific activities, such as internships, job shadowing, career days, video conferences, classroom visits, teacher externships and web site visits, that inform them of the opportunities available in the transportation field and ensure they have the skills and knowledge required for transportation jobs. We will develop a database to count the number of students participating in the program, using report forms submitted by our employees and our partners. By leveraging our resources with those of our partners in the transportation and education communities, our goal is to reach 1 million students by the end of CY 2000 (100,000 in CY 1997; 200,000 in CY 1998; 350,000 in CY 1999, and 350,000 in CY 2000).

6B. DOT-WIDE - Economic Opportunity

The program activity, means and strategies, and annual performance measures used to expand economic opportunities reflect the efforts of the Office of the Secretary of Transportation, as well as the individual operating administrations.

DOT-WIDE PROGRAM ACTIVITIES

OST	Estimated FY 1999 Obligations (Millions):
Minority Business Outreach	3
MBRC Loan Subsidy and Admin	2
MBRC Loan Financing Account	15

DOT-WIDE MEANS AND STRATEGIES:

Ongoing means and strategies - The Office of Small and Disadvantaged Business Utilization (OSDBU) collaborates with business partners in the DOT Operating Administrations, the Small Business Administration, and counterpart Federal Agencies to expand contract and business growth opportunities for small, disadvantaged, women-owned, and Native American businesses. This includes fostering competition among OSDBU service providers to maximize delivery and quality of program services. OSDBU also partners with the private sector, including large and small businesses, to inform and promote the hiring of former welfare recipients under the Welfare to Work Initiative.

New or enhanced means and strategies - OSDBU will:

- Reengineer DOT's Women Business Program to help achieve the statutory five percent woman business enterprise goal.
- Streamline the small business procurement process to expand 8 (a) and women-owned business contracting opportunities.

Cross-cutting areas with other agencies - OSDBU partners with program counterparts in the DOT Operating Administrations, Small Business Administration, Office of Management and Budget, and other Federal Agencies to expand contract and business growth opportunities for small, disadvantaged, women-owned, and Native American businesses.

DOT-WIDE RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Percent of dollars awarded to women-owned business in DOT contracts and subcontracts**.
1999 Goal: **Award 5% of dollar value of DOT contracts to women-owned business.**

Baseline: Awarded 3.9% of value of contracts in FY 1997.
Data: DOT Contract Information System (CIS).
Comment: Beginning with FY 1996, there has been a statutory five percent governmentwide goal for contract awards to WOB. DOT will make every effort to meet this statutory mandate.

STRATEGIC GOAL: HUMAN AND NATURAL ENVIRONMENT

Protect and enhance communities and the natural environment affected by transportation.

OUTCOMES:

Progress in achieving the Department's human and natural environment strategic goal will be measured at the end of FY 1999 against the following outcome areas:

Outcome Goal	Performance Indicators
1. Improve the sustainability and livability of communities through investments in transportation facilities.	▸ People living within .25 miles of transit stops offering service frequency of 15 minutes or less.
2. Reduce the amount of transportation-related pollutants and greenhouse gases released into the environment.	▸ Mobile source emissions. ▸ Rate of oil spills by maritime sources. ▸ Average quantity of liquid hazardous material spilled from pipeline. ▸ Average quantity of liquid hazardous materials spilled from all modes except pipeline.
3. Improve the natural environment and communities affected by DOT-owned facilities and equipment.	▸ Percentage of DOT facilities identified for clean-up that need no further action.
4. Reduce the adverse effects of siting, construction and operation of transportation facilities on the natural environment and communities, particularly disadvantaged communities.	▸ Number of residents exposed to significant aircraft noise (65dB or higher). ▸ Ratio of wetland replacement resulting from Federal-aid highway projects. ▸ Time to resolve environmental justice complaints.
5. Improve the condition of our living marine resources.	▸ Observed compliance with Federal fisheries regulations.

HOW WE WILL ACHIEVE OUR STRATEGIC GOAL:

Transportation makes our communities more livable, enhancing the quality of our lives and our environment. However, transportation generates undesired consequences too, such as pollution, congestion, and the use of valuable land. DOT's objective is to advance the benefits of transportation while minimizing its negative impacts on our environment. DOT's programs impact our human and natural environment through a number of common interventions and actions: infrastructure investment (such as community focused transit development, investments in low-emission transit vehicles, and the creation of meaningful alternatives to auto use, such as transit, walking paths and bikeways), rulemaking (such as standards and regulations to reduce spills of transported material), compliance (enforcement and partnering to achieve standards), technology (fostering new materials and technologies to limit aircraft noise and lower vehicle

emissions), and education (such as consumer awareness, and campaigns to influence personal behavior). Another key program area is directly controlled by DOT -- the mitigation of environmental impacts caused by DOT-owned facilities and equipment. In all areas, DOT provides leadership across a range of programs that impact our environment, partnering with State and local communities to advance common goals.

DOT programs designed to impact our human and natural environment are funded in each of several operating administration budgets. These can be aggregated into five major areas of environmental intervention and action: highway & transit, aviation, maritime (including pollution reduction and living marine resource protection), pipeline & hazardous materials, and DOT-wide (including facility clean-up and environmental justice).

1. HIGHWAY & TRANSIT

The program activity, means and strategies, and annual performance measures used to advance the highway and transit aspects of the human and natural environment reflect the efforts of FHWA, FTA, and NHTSA.

HIGHWAYS & TRANSIT RELATED BUDGET PROGRAM ACTIVITIES:

FHWA	Estimated FY 1999 Obligations (Millions):		
	Federal-Aid Highways Programs		
	Surface transportation program	5,608	*
	National highway program	4,257	*
	Interstate maintenance	4,271	*
	Interstate system reimbursement	969	*
	Bridge program	2,556	*
	Congestion Mitigation/Air Quality improvement	1,260	
	Flexible highway infrastructure safety	509	*
	Integrated safety planning	50	*
	Intelligent transportation systems	96	*
	ITS/ITI incentive development	100	*
	Federal lands highways	512	*
	FHWA research and technology	126	*
	Research and technology	174	*
	Minimum allocation	692	*
	State Infrastructure Banks	150	*
	Transportation Infrastructure Credit Enhancement	100	*
	Miscellaneous trust funds	8	*
NHTSA			
	Operations and Research		
	Research and analysis	66	*
	Highway safety programs	62	*
FTA			
	Formula Programs (All programs)	3,709	*

Major Capital Investments	1,204	*
Formula Grants (urban and nonurban)	355	*
Transit Planning and Research	92	*
Washington Metro	50	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

HIGHWAY & TRANSIT RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FHWA/FTA will partner with states, Metropolitan Planning Organizations, urban centers, and communities to strengthen the links between transit, highway, and communities, as reflected in sustainable transportation and land use decisions, improved options for transportation, and reduced environmental impacts. Livable Communities activities stress planned and designed, community-oriented, and customer friendly transportation facilities and services. For FTA, a key supporting activity will be ongoing capital investment in transit infra-structure. FHWA implements and oversees the Congestion Mitigation and Air Quality Improvement (CMAQ) Program, which targets transportation investment to reduce mobile source emissions and reduce congestion. FHWA supports research on transportation and air quality analysis, develops/provides information on effective approaches to improve air quality, and evaluates emissions impacts and cost-effectiveness of transportation strategies. NHTSA's Partnership for a New Generation of Vehicles (PNGV) initiative advances our understanding of the relationship between vehicle design characteristics, vehicle crash-worthiness, and occupant protection. This will ensure that the increased fuel efficiency and reduced emissions of PNGV developed vehicles are achieved without compromising safety. FHWA also works to mitigate the environmental impacts of highway siting and improve wetlands habitats.

Special initiatives and focus for FY 1999 - In 1999 FHWA and NHTSA will:

- Complete the evaluation of the three pilot public education campaigns on transportation and air quality conducted in 1998 and initiate a full-scale roll-out of the campaign in an additional 5 sites.
- Conduct preliminary research on potential impacts of the revised National Ambient Air Quality Standards on mobile source emissions.
- Monitor nationwide implementation of the conformity regulation and address conformity issues in a timely fashion to assist State and local efforts to meet conformity requirements and clean air goals.
- Emphasize safe pedestrian and bicycle use through the Secretary's "Partnership for a Walkable America"
- Implement a pilot research program with the Washington State DOT to establish a wetland mitigation planning and implementation program on a watershed basis.
- Support R&D to continue the development of the new wetlands evaluation technique, the Hydrogeomorphic or HGM assessment method in cooperation with U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers.
- Coordinate and support, in cooperation with the Department of Energy a joint partnership to advance transportation vehicle technologies, environmental technologies, and related

infrastructure with an emphasis on medium and heavy-duty trucks, buses, and trains. Develop a plan for focusing the research to achieve the maximum value for the investment.

To advance the livability of communities and reduce mobile source emissions, FTA will:

- Document and demonstrate best practices in community involvement in transportation planning and in the design of transit facilities and services that are fully integrated into the livable communities.
- Provide technical assistance to localities in the earliest stages of project planning and design on community-sensitive decision making.
- Complete prototype construction and field test the Advanced Technology Transit Bus (ATTB), which promises to reduce emissions and fuel use. Project involves no additional FY 1999 funding.
- Complete development of fuel cell propulsion systems for buses.
- Develop, in conjunction with the transit industry and EPA, a hybrid electric transit bus emissions testing protocol.
- Complete system integration of existing hybrid electric vehicle (HEV) technology for deployment and technology sharing with local transit providers.

Cross-cutting areas with other agencies - Transportation, housing, economic development, and environmental decisions are highly interrelated and are best planned as part of a comprehensive process. FHWA/FTA will continue to work with other Federal agencies, including the Environmental Protection Agency and the Department of Housing and Urban Development, on sustainable development issues.

FHWA will continue to work closely with EPA to ensure that the mobile source emission goal is met. DOT efforts complement the governmentwide goals for achieving National Ambient Air Quality Standards. These cooperative efforts include the launching of the Transportation and Air Quality public education initiative which is jointly funded by FHWA and EPA; continuing to implement the transportation conformity regulation and the CMAQ Program; and conducting research on various strategies that target the reduction of mobile source emissions. FHWA also coordinates wetlands programs and research initiatives with the Environmental Protection Agency and the Departments of Interior, Army, and Agriculture.

Legislation and regulations - These means and strategies assume that NEXTEA legislation will be passed by Congress. Surface program work in enhancing our communities is strongly influenced by this legislation, which will permit flexible uses of funding to achieve goals.

HIGHWAYS & TRANSIT RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: Mobile source emissions in short tons.
1999 Goal: An annual reduction of 1% in transportation related emissions from the 1996 baseline, for a total of 1.9 million short tons by FY 1999.

Baseline: 65.9 million short tons of mobile source emissions in 1996. This figure is the sum of mobile source emissions of carbon monoxide, hydrocarbons, nitrogen oxides, and PM-10 as reported in the latest Trends Report (January 1998)

Data: National Air Quality and Emissions Trends Report, published annually by EPA
Comment: Revised National Ambient Air Quality Standards will begin to phase in during FY 2000, so goal may need to be modified. This indicator does not address greenhouse gases directly. Variation is anticipated in reaching a 1% annual reduction goal, and progress will be assessed in the annual performance report when emissions data become available from EPA for the intermediate years. The emissions data are reported in a 2-year time lag.

Indicator: Ratio of wetland replacement resulting from Federal-aid highway projects.
1999 Goal: 1.5 acres to 1.

Baseline: No net loss (at least 1 to 1 replacement) in recent years.
Data: Regional FHWA offices.
Comment: This measure captures the effectiveness of replacing wetlands areas coincident with Federal aid projects. It measures progress toward our objective of enhancing the environment through careful planning for highway projects and thoughtful implementation of effective mitigation for unavoidable impacts

Indicator: Number of people within .25 miles of transit stops with services frequency of 15 minutes or less.
1999 Goal: An increase. CY 2002 target to be developed.

Data: To be developed in 1998.
Baseline: FTA developed Geographic Information System.
Comment: One measure of livable communities is access to high-quality mass transit service, which is defined as persons being within .25 miles of transit which has a service frequency of 15 minutes or less. The amount of transit service provided is one indicator of the degree to which transit is contributing to livable communities and environmental benefits. While this measure is expected to be refined, livable communities benefits depend on transit's ability to serve as a realistic desirable alternative to the automobile for travel and to influence development patterns in a way which results in shorter trips and more walking trips. FTA is developing a geographic information system (GIS) using data on high-quality transit service.

2. AVIATION

The program activity, means and strategies, and annual performance measures used to advance the aviation aspects of the human and natural environment reflect the efforts of the FAA.

AVIATION RELATED PROGRAM ACTIVITIES

FAA	Estimated FY 1999 Obligations (Millions):	
Operations		
Airports	50	*
Grants-in-aid for Airports	1,700	*
Facilities and Equipment		
Procurement and modernization of ATC facilities	980	*
Procurement and modernization of non-ATC facilities	165	*
Research, Engineering, and Development		
Environment and energy	4	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

AVIATION RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - The FAA provides grants-in-aid for the mitigation of the noise impacts of aviation, such as soundproofing of residential and public buildings, and relocation assistance. The FAA also conducts research into the reduction of aviation noise.

Special initiatives and focus in FY 1999 - In FY 1999, FAA will:

- Administer the grant-in-Aid program to make funds available for projects mitigating the impacts of air transportation on communities.
- Conduct research into noise modeling and noise reduction.

Legislation and regulations - The Aviation Rulemaking Advisory Committee (ARAC) has been tasked to harmonize 14 CFR part 36 (noise standards) and applicable provisions of 14 CFR part 21 (certification procedures) with their corresponding European Joint Aviation Requirements (JAR). ARAC also was asked to consider recommending a process whereby subsequently ICAO Annex 16 changes are properly incorporated into 14 CFR part 36 and JAR 36. We anticipate receiving ARAC's recommendations in FY 1999.

AVIATION RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Number of residents exposed to significant aircraft noise (Decibel Noise Level of 65 dB or greater).**

1999 Goal: **Reduce the number of people exposed to significant aircraft noise by at least 60 percent from the 1995 baseline**

Baseline: Estimated number exposed in 1995 of approximately 1.7 million.
Data: FAA estimate based on computer model.
Comment: The improvement will result from the transition to quieter airplanes, operational procedures, and compatible land use initiatives at specific airports.

3A. MARITIME - Pollution Reduction

The budget program activity, means and strategies, and annual performance measures used to reduce transportation-related pollutants in our water reflect the efforts of the USCG.

MARITIME RELATED BUDGET PROGRAM ACTIVITIES:

USCG	Estimated FY 1999 Obligations (Millions):	
Operating Expenses		
Search and Rescue	343	*
Aids to navigation	464	*
Marine safety	402	*
Marine environmental protection	305	
Acquisition, Construction, & Improvements		
Search and Rescue	55	*
Aids to navigation	136	*

Marine safety	41	*
Marine environmental protection	50	
Research, Development, Test, & Evaluation		
Search and Rescue	3	*
Aids to navigation	3	*
Marine safety	5	*
Marine environmental protection	3	
Oil Spill Recovery		
Emergency Fund	50	
Payment of Claims	10	
Prince William Sound OSI	1	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies*:* - The USCG develops construction and operating standards for the waterborne shipment of goods that help prevent the accidental release of these goods into the environment; conducts over 50,000 inspections annually to ensure that US and foreign vessels and waterside facilities are maintained and operated in a proper manner; and responds to oil and chemical spills to mitigate the environmental impact, using both regional staff and National Strike Teams. The USCG enforces regulations such as MARPOL regulations on dumping of refuse and sewage from vessels at sea. The USCG also works internationally to reduce the number of marine accidents through improved safety and standards for commercial vessels and crew, and supports research to reduce the risk of maritime pollution and improve the safe transportation of goods by water.

Special initiatives and focus for FY 1999 -

- Continue a public education program called Sea Partners, which promotes the importance of a clean environment.
- Modernize maritime distress communications to create a fully integrated system that permits better pollution response coordination between mariners, USCG and other agencies.
- Establish Vessel Traffic Service in New Orleans as part of the Ports and Waterways Safety System (PAWSS), reducing the risk of pollution stemming from collisions or groundings.

Capital assets/Capital Planning - Highlights include:

- Seagoing Buoytender Replacement - Fund two vessels (with built in oil recovery capability)
- Ports & Waterways Safety System (PAWSS)
- National Distress System Modernization

Cross-cutting areas with other agencies - The USCG co-chairs the National Response Committee and jointly operates the National Response Center with the EPA. The USCG and EPA closely coordinate pollution response efforts, with the Coast Guard taking the lead on incidents that affect inland navigable and coastal waters.

The USCG partners with industry trade groups to identify causal factors of incidents and works to reduce the impact these factors have on pollution incidents. The Coast Guard also participates in the Ship Structure Committee (SSC) . The SSC sponsors, manages and coordinates research of five U.S. federal agencies, one Canadian federal agency, and one classification society to improve the design, material, construction, maintenance and inspection of ship hull structures. The application of this research will make it less likely that vessels will suffer hull failures that lead to the release of oil or chemicals into the environment.

Efficiency and effectiveness strategies and activities - Significant efficiencies are gained from the USCG's new ocean going buoy tenders, which carry built-in oil skimming equipment enabling effective and efficient removal of oil discharged into the water. The USCG will also employ the "Prevention through People" philosophy to identify key human causal factors in pollution incidents and focus on education of mariners and industry to reduce these factors and related pollution without increasing the resources dedicated to enforcement or response. As highlighted under safety, the Coast Guard will also realign its Container Inspection Program for Hazardous materials to take advantage of the inspection capability of other agencies and organizations.

Legislation and Regulations - Highlights of regulatory activity planned in 1999 include:

- Implementation of provisions of the Oil Pollution Act of 1990 that require tank vessel and facilities carrying/transferring bulk hazardous substances to develop and operate in accordance with an approved response plan.
- Implementation of regulations to establish a barge numbering system to allow identification of barge owners and help prevent abandoned barges that become pollution hazards.

MARINE RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Gallons of oil spilled into the water by marine sources per million gallons shipped.**
1999 Goal: **6.21 in FY 1993**

Baseline:	7.76 in FY 1993. (The baseline used to set this performance goal was established by a regression curve using several years of data. The FY 1993 data point is a selected year on the curve.)
Data:	U.S. Coast Guard and U.S. Army Corps of Engineers
Comment:	Oil is used as an indicator of all maritime pollution. Indicator excludes spills over one million gallons as they are rare and skew the data and the picture of underlying risk.

3B. MARITIME - Living Marine Resource Protection

The program activity, means and strategies, and annual performance measures used to advance living marine resource protection reflect the efforts of the USCG.

MARITIME RELATED PROGRAM ACTIVITIES

USCG	Estimated FY 1999 Obligations (Millions):	
Operating Expenses		
Enforcement of Laws and Treaties	1,115	*

Acquisition, Construction, & Improvements		
Enforcement of Laws and Treaties	122	*
Research, Development, Test, & Evaluation		
Enforcement of Laws and Treaties	2	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - The Coast Guard enforces all applicable federal laws and regulations over, on, and under the high seas and waters related to the preservation of marine resources.

Special initiatives and focus for FY 1999 -

- Improve its tactical effectiveness by employing new sensor systems and a new satellite communications upgrade.

Capital assets/capital planning - Highlights include:

- Conversion of the USS EDENTON to a USCG cutter for use in fisheries enforcement in Alaskan and Pacific Northwest waters.

Cross-cutting areas with other agencies --- The USCG coordinates fisheries enforcement with the Department of Commerce/National Marine Fisheries Service. NMFS establishes fisheries management plans, and conducts primary shoreside enforcement of regulations. The Coast Guard provides input to the management plans and conducts at-sea enforcement of regulations. Coast Guard actions in fisheries enforcement, with the related performance goal, contribute to overall NMFS performance goals for the health of the entire marine resource stock. The Coast Guard also participates in the Aquatic Nuisance Species Task Force which seeks to protect natural resources from harm by invasive species. Other members include NOAA, EPA, USDA, and the Army Corps of Engineers.

Legislation and Regulations - Highlights of regulatory activity planned in 1999 include:

- Pursue regulations regarding ballast water management practices for ships, including ships claiming no ballast on board, that will help protect native living marine resources from harm by invasive species.

MARITIME RELATED INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Observed rate of compliance with Federal fisheries regulations.**
1999 Goal: **Maintain a 95% compliance rate or better in FY 1999.**

Baseline: 95% in FY 1996
Data: U.S. Coast Guard Planning and Assessment System.
Comment: The Coast Guard closely coordinates with the National Marine Fisheries Service (NMFS) to achieve the common outcome of improving and sustaining the health of our living marine resources. In this partnership, NMFS develops biologically-effective living marine resource management

plans, and establishes regulations that guide the enforcement of these plans. The Coast Guard assists in developing the regulations and is the primary agency for carrying out at-sea enforcement activities. This indicator is an interim measure that gauges Coast Guard enforcement performance; it seeks to measures the reduction in regulation violations due to Coast Guard activity. This measure supports the NMFS performance objectives "Maintain all stocks known to be healthy at levels that support the maximum sustainable yield" and "Increase observed compliance with spatial and temporal regulations for fisheries." The Coast Guard is working with NMFS to develop cross cutting goals in FY 1998 that will measure success in achieving the outcome of improved living marine resources. The Coast Guard data is collected from field units through the Coast Guard Planning and Assessment System; it is validated by program managers.

4. PIPELINE & HAZARDOUS MATERIALS

The program activity, means and strategies, and annual performance measures used to advance the pipeline and hazardous materials transportation aspects of the human and natural environment reflect the efforts of the RSPA.

PIPELINE AND HAZARDOUS MATERIALS BUDGET PROGRAM ACTIVITIES:

RSPA	FY 1999 Obligations (Millions):	
Research and Special Programs		
Hazardous materials safety	16	*
Research and technology	4	*
Pipeline Safety		
Operations	15	*
Research and Development	2	*
Grants	15	*
Trust Fund Share of Pipeline Safety	3	
Emergency Preparedness Grants	14	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

PIPELINE & HAZARDOUS MATERIALS MEANS AND STRATEGIES:

Ongoing means and strategies - RSPA develops necessary regulations and standards for the transportation of hazardous materials (classifying, handling, and packaging); maintains the nation's largest database of hazardous materials information and incidents; conducts compliance inspections; provides special permits and approvals to support shipper needs; supports training and outreach; conducts hazardous materials research; and provides training, technical and grant assistance for states, territories and Indian tribes to supplement programs in hazardous materials emergency preparedness. RSPA also develops regulations and standards for oil and natural gas pipelines; maintains a damage prevention program to inform excavators and citizens about locating pipelines at excavation sites; and conducts research to improve inspection technology and pipeline related practices. RSPA reviews operator incident response plans and exercises, and provides technical and grant assistance to states to conduct inspections and improve pipeline integrity.

Special initiatives and focus in FY 1999 -

- Expand outreach and work with Federal, State and local enforcement personnel to target enforcement activities in high risk areas.
- Develop a national mapping system to inform us about the likelihood and consequence of pipeline accidents
- Test, in partnership with industry, a comprehensive and systematic evaluation of the pipeline life cycle to identify potential sources of risk that may not otherwise be discovered under the current regulatory process.
- Develop a national public education campaign on damage prevention.
- Build an environmental index of the most important areas to protect, identifying accident cause and consequences, monitoring major spills and remediations, and studying oil pipeline company integrity management operations.
- Increase emergency preparedness grants funds to States to help states reduce the impact of incidents and advance DOT annual performance goals.

Cross-cutting areas with other agencies - See crosscuts listed for pipeline and hazardous materials in the safety section. Additionally, RSPA works in concert with: The Environmental Protection Agency (EPA), Department of Commerce/National Oceanic and Atmospheric Administration (NOAA) and the Department of Agriculture (USDA) on defining unusually sensitive area and all fourteen National Response agencies in on all issues of spill response planning. RSPA also engages in a cooperative effort with Federal Emergency Management Administration (FEMA) on communication through ENET broadcasts.

Efficiency and effectiveness strategies and activities - The RSPA strategies discussed in safety also advance the effectiveness of pollution mitigation. Additionally, RSPA is working to put a wide area network in place to enable field access to hazardous materials data. A seamless information systems environment "smart system" will allow easy integration between national level data, field based local area network based data, and the National Pipeline Mapping Systems.

Legislation and Regulations - See pipeline and hazardous materials discussion found in the safety section.

PIPELINE & HAZARDOUS MATERIALS INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator:	**The average quantity of liquid hazardous materials released by pipeline to the environment per serious transportation incident.**
1999 Goal:	**Reduce the quantity by 2%, or 1,692 gallons, below the baseline.**
2008 Goal:	**Reduce the quantity by 20%, or 16,920 gallons, below the baseline.**
Baseline:	84,588 average gallons per incident in CY 1997.
Data:	RSPA's Hazardous Materials Information System (HMIS)
Comment:	Intermediate output goal that provides an indicator of consequence outcome. Serious pipeline incidents involving liquid hazardous materials are those that result in a fatality or injury (for most purposes, an injury resulting in medical treatment or hospitalization), or property damage equal to or greater than $250,000. Because of the magnitude and frequency of fluctuations in the historical data for this measure, a long term goal is preferential to a short-term goal in tracking performance. The baseline amount is the actual loss per incident for the most current year and is representative of trend line data. RSPA is also working to develop precursor measures.

Indicator: **The average quantity of liquid hazardous materials released by all modes (except pipeline) to the environment per serious transportation incident.**
1999 Goal: **Reduce the quantity by 4%, or 93 gallons, below the baseline.**
2008 Goal: **Reduce the quantity by 40%, or 925 gallons, below the baseline.**

Baseline: 2,313 average gallons, based on trend line analysis projection for CY 1996.
Data: RSPA's Hazardous Materials Information System (HMIS)
Comment: Intermediate output goal that provides an indicator of consequence outcome. Serious incidents involving liquid hazardous materials are those that result in a fatality, major injury (for most purposes, an injury resulting in hospitalization), closure of a major transportation artery or facility, evacuation of six (6) or more persons, or a vehicle accident or derailment. Because of the magnitude and frequency of fluctuations in the historical data for this measure, a long-term goal is preferential to a short-term goal in tracking performance. To address these fluctuations, and to eliminate outlier effects, the baseline amount is estimated and represents the most current year data fitted exponentially to establish a trend line. RSPA is also working to develop precursor measures.

5A. DOT-WIDE - Facility Clean-Up

The program activity, means and strategies, and annual performance measures used to advance the DOT facility clean-up reflect the efforts of the FRA, USCG, FHWA, and FAA. Coordination of measuring and reporting occurs within OST.

DOT-WIDE FACILITY CLEAN-UP RELATED PROGRAM ACTIVITIES:

		Estimated FY 1999 Obligations (Millions):	
USCG			
	Environmental Compliance and Restoration	21	
FAA			
	Facilities and Equipment		
	Procurement and modernization of ATC facilities	11	*
	Procurement and modernization of non-ATC facilities	17	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

DOT-WIDE FACILITY CLEAN-UP RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - DOT coordinates the clean-up of facilities in compliance with the Superfund Amendments and Reauthorization Act (SARA) cleanup process and the require-ments of the National Oil and Hazardous Substances Pollution Contingency Plan. Environ-mental Protection Agency guidelines are applied in conducting investigations and remediation work. A "worst first" prioritization system is used to address environmental cleanup require-ments. This system assigns the highest and most immediate priority to those facilities repre-senting the greatest potential hazard to the environment and public health. However, regulatory factors at the local, state, and Federal levels are also considered in the decision making process.

The USCG and FAA are responsible for the majority of sites DOT reports under SARA. The

Environmental Protection Agency (EPA) has determined that FHWA's site and one of FRA's sites require no further remedial action, however additional work is being completed to meet legal requirements imposed by States. The Department of Justice is representing the FRA for their other sites.

Special initiatives and focus for FY 1999 -

- USCG will continue clean-up work, with particular emphasis on vessel remediation, and at locations including Integrated Support Command Kodiak, AK; Support Center Elizabeth City, NC; and Air Station Cape Cod, MA. The Coast Guard will also conduct extensive compliance and pollution prevention programs and activities.
- FAA will continue mandatory clean up schedules for the Alaskan Region, the Aeronautical Center, and the Technical Center. Site environmental compliance assessments (ECAP) and remediation will continue at a range of other locations.
- New site cleanup strategies will be investigated. The DOT is currently assessing the benefits of phytoremediation, also known as rhizosphere technology. This technology consists of augmenting naturally occurring vegetation on the site by using selected plants and fertilizer. These plants break down petroleum and other types of contamination. This technology has great potential for remote sites which have no access to electrical power or other types of utilities.

Crosscutting areas with other agencies - The Department is currently partnering with the U.S. Army Corps of Engineers and the United States Air Force to develop data on phytoremediation and validate it as a viable cleanup methodology. The DOT is also working with and using information from the Strategic Environmental Research and Development Program (SERDP) for a potential new technology in metal remediation. SERDP is a joint agency function established by Congress to eliminate overlap and redundancy in federal agency environmental research. The DOT performance measure for this program is based on the EPA standards and is in line with governmentwide efforts under SARA.

DOT-WIDE FACILITY CLEAN-UP INDICATOR AND PERFORMANCE GOAL FOR FY 1999:

Indicator: **Number of DOT facilities categorized as No Further Remedial Action Planned (NFRAP) under the Superfund Amendments and Reauthorization Act (SARA).**
1999 Goal: **Increase to 80% the facilities categorized as NFRAP by FY 1999.**

Baseline: 75% of the facilities listed were categorized as NFRAP in FY 1996.
Data: Annual SARA Report to Congress
Comment: The primary criterion for NFRAP is a determination that the facility does not pose a significant threat to the public health or environment. NFRAP decisions may be reversed if future information reveals that additional remedial actions are warranted.

5B. DOT-WIDE - Environmental Justice

The program activity, means and strategies, and annual performance measures used to advance the environmental justice aspects of the human and natural environment reflect the efforts of all the modes, but principally the infrastructure investments of FHWA, FTA, and FAA.

Coordination, measurement, and reporting occur within the operating administrations. The Office of the Secretary coordinates overall environmental justice activities for DOT as well as cross-cutting activities with other executive branch agencies.

DOT-WIDE ENVIRONMENTAL JUSTICE RELATED PROGRAM ACTIVITIES

OST	Estimated FY 1999 Obligations (Millions):
Office of Civil Rights	7 *

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

DOT -WIDE ENVIRONMENTAL JUSTICE RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - DOT resolves and/or investigates environmental justice cases and complaints on a case-by-case basis. Environmental justice is the confluence of environmental and civil rights concerns, in which DOT seeks to avoid adverse environmental and health effects that disproportionally impact low income and minority populations.

Environmental justice covers not only infrastructure investment projects, but also permitting, licensing, and other acceptance of plans or approvals, such as wetlands, bridges over waterways (Coast Guard), noise (FAA, FHWA, FRA), water pollution, dredging and the National Defense Reserve Fleet (MARAD). Each operating administration within DOT is developing an Environmental Justice implementation strategy and plans to include such considerations in its project decision making. Each operating administration reviews, investigates, and makes determinations on environmental justice complaints, and reports results to OST.

Special initiatives and focus for FY 1999 -

- Add to Community Right to Know Act efforts and thereby expand public involvement; give people tools to protect their communities; help with the self-policing efforts; and create a more informed dialog among the public, advocacy groups, and state, local, and tribal partners.
- Improve environmental justice links in our websites.
- Work with Metropolitan Planning Organizations (MPOs) to add environmental justice to their regional transportation planning.

Cross-cutting areas with other agencies - DOT will work with other agencies to share expertise and resolve jurisdictional overlaps and duplications, principally through the Environmental Justice Interagency Working Group. DOT also works with the Department of Justice on legal guidance, the Council on Environmental Quality, the U.S. Army Corps of Engineers (on wetlands), U.S. Navy (MARAD joint interests in the National Defense Reserve Fleet and ports), the Department of Interior (on Native American issues and FAA national parks flyover issues), the Department of Energy (on hazardous materials rail transport thorough Indian Nations), the Department of Health and Human Services (on poverty statistics and minority health), and the Department of Housing and Urban Development on public transit issues.

Efficiency and effectiveness strategies and activities - DOT will work with geographic information systems (GISs) to help determine where affected populations live and make information available to stakeholders so they can avoid environmental justice site-location problems. DOT will strive to develop environmental justice measures based on existing data in order to avoid excessive costs.

DOT ENVIRONMENTAL JUSTICE INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Time to resolve Title VI-related environmental justice complaints.**
1999 Goal: **To improve upon the baseline of Title VI environmental justice complaint handling in DOT by 20%, measured in days from receipt to resolution.**

Baseline: To be determined through analysis of data in XTRAK, which is in the final development stages.
Data: Departmental External Civil Rights Case Tracking System (XTRAK)
Comment: This is an interim measure until DOT develops broader outcome measures. Case resolutions are actions which end or administratively close out complaints. These include such actions as withdrawals by complainants, resolutions achieved thorough alternative dispute resolution, findings of no violation, and negotiated settlements after discrimination findings under Title VI. Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin by recipients of federal financial assistance. For further development of environmental justice measures, DOT will rely in part on EPA to develop quality of life indicators. Difficulties include treating projects under development, communicating risk, evaluating cumulative impacts and impacts over time, project-by-project versus regional orientation, lack of federal statutory protections for low-income people, lack of environmental justice case law, finding the proximate cause of an environmental effect, and the subjective nature of human perceptions of health and environmental effects.

STRATEGIC GOAL: NATIONAL SECURITY

Advance the nation's vital security interests in support of national strategies such as the National Security Strategy and National Drug Control Strategy by ensuring that the transportation system is secure and available for defense mobility and that our borders are safe from illegal intrusion.

OUTCOMES:

Progress in achieving the Department's national security strategic goal will be at the end of FY 1999 in the following outcome areas:

Outcome Goal	Performance Indicator
1. Reduce the vulnerability and consequences of intentional harm to the transportation system and its users.	▸ Detection rate for weapons and explosives in airports.
2. Ensure readiness and capability of all modes of commercial transportation to meet national security needs.	▸ Intermodal capacity available. ▸ Merchant Mariners available for mobilization.
3. Ensure transportation physical and information infrastructure and technology are adequate to facilitate military logistics during mobility, training exercises, and mobilization.	▸ Percentage of strategic port facilities available when requested. ▸ Index of DOD satisfaction with highway defense mobility planning.
4. Maintain readiness of resources including operating forces and contingency resources owned, managed, or coordinated by DOT necessary to support the President's National Security Strategy and other security-related plans.	▸ Percent of Ready Reserve Force ships that are available in the time required and percentage of days they are mission-capable while under DOD control. ▸ Percent of designated Coast Guard units that meet required readiness level.
5. Reduce flow of illegal drugs and of illegal aliens entering the United States.	▸ Percent success rate of illegal drug smugglers in non-commercial maritime routes. ▸ Percent success rate of undocumented migrants by maritime routes.

HOW WE WILL ACHIEVE OUR STRATEGIC GOAL:

DOT's programs impact national security through a number of common interventions and actions: direct operations (such as operating vessels and conducting law enforcement), infrastructure investment (such as more secure facilities design and materials), rulemaking (such as equipment or training standards), compliance (enforcement and partnering to achieve standards), technology (fostering new materials and technologies to enhance security), and education (such as consumer awareness, and campaigns to influence personal behavior). Some of these interventions and actions reside entirely within the Federal government, but many

involve partnering with State and local authorities and with the transportation industry. In all cases DOT provides leadership in the unique areas in which we contribute to national security.

To achieve our national security strategic goal, we will continue our efforts to assess the risks to the nations's critical infrastructure from intentional harm, as outlined in the recommendations provided to DOT from the President's Commission on Critical Infrastructure Protection (PCCIP). Efforts will include security research and development, training and security awareness, and increased partnerships with both the private and public sectors to develop and implement security countermeasures. For the year 2000 and beyond, the Department expects to explore additional means, strategies, and measures that support the security of our transportation systems and the public.

DOT programs designed to impact our national security are funded in each of several operating administration budgets. These can be aggregated into three major areas of national security activity: highway, aviation, and maritime (including *defense readiness* and *law enforcement)*

1. HIGHWAY

The program activity, means and strategies, and annual performance measures used to advance the readiness of our highway system for defense mobility reflect the efforts of FHWA.

HIGHWAY RELATED PROGRAM ACTIVITIES:

FHWA	Estimated FY 1999 Obligations (Millions):	
Federal-Aid Highways Programs		
Surface Transportation Program	5,608	*
National Highway System	4,257	*
Interstate Maintenance	4,271	*
Interstate System Reimbursement	969	*
Bridge Program	2,556	*
Flexible highway infrastructure safety	509	*
Integrated safety planning	50	*
Intelligent transportation systems	96	*
ITS/ITI incentive development	100	*
FHWA research and technology	126	*
Research and technology	174	*
Minimum allocation	692	*
State Infrastructure Banks	150	*
Transportation Infrastructure Credit Enhancement	100	*
Miscellaneous Trust Funds	8	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

HIGHWAY RELATED MEANS AND STRATEGIES:

Ongoing strategies and activities - The FHWA works with the Department of Defense Military Traffic Management Command (MTMC) to improve routes on the Strategic Highway Corridor Network (STRAHNET) and STRAHNET connectors.

Special initiatives and focus for FY 1999 -

- Complete updates of State Emergency Highway Traffic Regulations in 25 States.
- Equip all FHWA field offices with modernized emergency communications equipment.

Cross-cutting areas with other agencies - The FHWA and the MTMC conduct periodic meetings to discuss the progress made in the implementation of the MTMC Coordination Action Plan. Annual reports will be prepared detailing the progress made in accomplishing the tasks described in the plan.

HIGHWAY INDICATORS AND PERFORMANCE GOALS FOR FY 1999:

Indicator: **Index of DOD satisfaction with defense mobility planning activities.**
1999 Goal: **To be developed in 1998.**

Baseline: Survey
Data: FHWA
Comment: The FHWA and the Military Traffic Management Command (MTMC) agreed to address a number of issues which were mutually determined to be of highest priority in national defense mobility coordination. The measure of success for this goal is appropriately their level of satisfaction with the resolution of these issues.

2. AVIATION

The program activity, means and strategies, and annual performance measures used to advance aviation security reflect the efforts of FAA.

AVIATION RELATED BUDGET PROGRAM ACTIVITIES:

FAA	Estimated FY 1999 Obligations (Millions):	
Operations		
Civil Aviation Security	129	
Grants-in-aid to Airports	1,700	*
Facilities and Equipment		
Procurement and modernization of ATC facilities	980	*
Procurement and modernization of non-ATC facilities	165	*
Research, Evaluation, and Development		
System Security Technology	55	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

AVIATION RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - FAA develops regulations; sets technical standards; inspects for compliance; investigates incidents; and provides intelligence analysis relating to aviation security. FAA also conducts airport vulnerability assessments and facility risk assessments, researches and develops aviation system security technology, and provides enforcement activity.
The FAA also provides the Aviation Insurance Program, which provides insurance coverage for aircraft operations that are deemed essential to the foreign policy interests of the U.S. when commercial insurance is unavailable on reasonable terms and conditions.

Special initiatives and focus for FY 1999 - FAA will continue implementation of the White House Commission on Aviation Safety and Security's recommendations, provisions of the Federal Aviation Reauthorization Act of 1996, and other initiatives to raise the baseline of domestic aviation security. In 1999, FAA will:

- Improve checked baggage screening by certifying and deploying explosives detection systems (EDS), trace detection devices, and operator assisted x-ray machines.
- Further implement automated passenger screening and positive passenger-baggage match.
- Improve screening checkpoints through better training and testing using advanced technologies, background checks for screeners, performance incentives, and better screening equipment and procedures.
- Improve access and movement control by precisely defining secure areas, refining challenge procedures, increasing accountability, and strengthening background checks and identification of persons authorized access.
- Improve security of cargo and mail on passenger aircraft by controlling shipments, developing advanced detection systems, increasing the proportion of known shippers, and strengthening and refining security programs for air freight forwarders.
- Ensure an identical level of protection for passengers on foreign carriers serving the U.S.
- Research, develop, test, certify, and deploy advanced security technologies and procedures including explosives detection, computer based training, threat image projection for testing screeners, and better airport design.
- Develop standards and procedures for safeguarding FAA facilities and information systems to protect employees and the National Airspace System.

Capital assets/capital planning - Highlights include acquisition of explosives detection systems, trace detection devices, improved carry-on baggage x-ray machines, and hardened baggage and cargo containers for passenger jets.

Cross cutting areas with other agencies - The FAA advances aviation security through close coordination with other Federal agencies. Joint efforts include conducting airport vulnerability assessments with the Federal Bureau of Investigation, sharing research and equipment with the U.S. Customs Service, and testing airmail security with the U.S. Postal Service. Also, the FAA works with intelligence-gathering organizations to gain and share intelligence on threats to civil aviation and provide specialized intelligence analysis in support of aviation security program management, both within the U.S. Government and in the private sector.

Legislation and Regulations - Regulatory activity planned in 1999 to support aviation security includes:

- Implementation of automated passenger profiling with the publication of the Computer Assisted Passenger Screening final rule.
- Publication of the final regulation to require the certification of screening companies to increase professionalism and improve screener performance.
- Implementation of a requirement for criminal background checks for security screeners at the airports through a final regulation expected to be published in 1998.
- Implementation of a provision of the Anti-terrorism and Effective Death Penalty Act of 1996 through a regulation requiring foreign air carriers to perform security measures identical to those U.S. carriers perform in operation to and from airports in the United States.

AVIATION SECURITY RELATED PERFORMANCE GOALS

Indicator: **Detection rate of simulated explosive devices and weapons.**
1999 Goal: **Increase the detection rate by an amount specified.**

Baseline: To be developed in 1998. Discussion of the baseline is protected under 14 C.F.R Part 191.
Data: FAA
Comment: This indicator tracks effectiveness of screening for significant security threats. Exact baselines and goals are under development and are not presented in this document.

3A. MARITIME -- Defense Readiness

The program activity, means and strategies, and annual performance measures used to advance our maritime defense readiness reflect the efforts of MARAD and USCG.

MARITIME RELATED PROGRAM ACTIVITIES:

MARAD	Estimated FY 1999 Obligations (Millions):	
Maritime Security Program	98	
Ocean Freight Differential	24	
Operations and Training		
U.S. Merchant Marine Academy	33	
State Maritime Schools	7	
MARAD Operations	31	
Maritime Guaranteed Loan (Title XI)	30	*
Ready Reserve Force (in DOD budget since 1996)	-	
USCG		
Operating Expenses		
Aids to navigation	464	*
Marine safety	402	*
Defense readiness	69	
Acquisition, Construction, & Improvements		
Aids to navigation	136	*

Marine safety	41	*
Defense readiness	9	
Research, Development, Test, & Evaluation		
Aids to navigation	3	*
Marine safety	5	*
Defense readiness	1	
Reserve Training (All Program Activities)	67	

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - MARAD has entered into sealift agreements with DOD and the industry to enhance defense mobility by using the best commercial sources. These agreements include the Maritime Security Program (MSP) and the Voluntary Intermodal Sealift Agreement (VISA). To meet the nation's national security needs for well qualified U.S. mariners, as well as to ensure the continual renewal of the maritime industry workforce, MARAD provides mariner training through the U.S. Merchant Marine Academy, State maritime schools, and additional training programs. MARAD also provides oversight, policy and guidance for the acquisition, maintenance, repair, operation and logistical support for the Ready Reserve Force (RRF). Operational and material readiness of the RRF will be maintained through the use of permanent, nucleus crews on board the ships, standardized maintenance and repair management practices and technical procedures, as well as cost-effective vessel activation for testing, fleet planning, logistics, and overall preparation for emergency operations.

The USCG is one of the five armed services. The Coast Guard active duty and reserve components provide unique capabilities not available from other military services: maritime interception operations, environmental defense operations and deployed port security and defense operations. The USCG supports Maritime Defense Zone (MDZ) operations, providing for harbor defense, port security, and coastal sea control of littoral areas. The Coast Guard also services and maintains the navigational aids in all DOD ports nationwide.

Special initiatives and focus for FY 1999 - Details concerning MARAD's activities can be found in their 1999 budget. Highlights are to:

- Implement a mariner tracking system to be used in locating mariners who would likely be available to crew RRF vessels during a national emergency.
- Develop a commercial/military port disruption model to enable military and civilian port planners to examine possible alternatives to displacement of commercial cargoes during a deployment.
- Conduct RRF ship no-notice and maintenance activations as well as full-power sea trials on about 43 vessels. Crewing command post exercise with DOD, carriers and maritime labor representatives will test the ability to crew RRF vessels.
- Drydock sixteen ships for extensive hull preservation maintenance.

- Award ships conversion contract(s) to expand the capacity of some Roll-on/Roll-off ships.
- Combine RRF ship data into one comprehensive fleet-wide automated system.

The Coast Guard will:

- Implement new capital equipment to conduct defense related operations. This new equipment (see capital assets) will also improve reliability and enable the USCG to maintain its ability to support DOD requirements.
- Continue maritime interception operations in the Persian Gulf to enforce the United Nations embargo against Iraq.
- Commission and equip two additional Port Security Units in Seattle, WA, and in St. Petersburg, FL.
- Participate in military exercises including Exercise Foal Eagle 99 in support of Forces Korea.
- Deploy several cutters and other forces in support of Peacetime Engagement and Enlargement under the National Security Strategy. Engagement will include UNITAS training and assistance cutter deployments with the U.S. Navy to the Caribbean, South America, and Central America; cutter deployments to the Mediterranean and Black Seas; and training assistance to the Haitian Coast Guard and Peruvian armed forces.

Capital assets/capital planning - Capital acquisitions planned in FY 1999 will have significant impact on achieving the Department's goals in national security. Of particular note are new coastal patrol boats that will contribute to the USCG's ability to protect Seaports of Debarkation, which are used to onload supplies, equipment and personnel in times of military operations. The FY 1999 Budget requests resources to award up to three contracts to develop an integrated system of surface, air, command and control, intelligence, and logistics systems to provide the functional capability to carry out Coast Guard's statutory mandates in the deepwater area of responsibility. Concurrent with this effort, the Administration will begin a Presidential Roles and Missions review of future Coast Guard missions. Other noteworthy capital assets provided for in this plan include:

- Surface Search Radar Replacement
- Aviation Logistics Management Info System
- Fleet Logistics System
- Defense Message Service Implementation
- Commercial Communication Satellite Upgrade

Cross-cutting areas with other agencies - MARAD works closely with the U.S. Transportation Command of DOD and serves as co-chair of the VISA Joint Planning Advisory Group to analyze DOD sealift/intermodal service and resource requirements, identify available commercial sealift capacity, and develop concepts of operations necessary to meet DOD requirements.

MARAD will develop initiatives for closer working relationships between the ten partner agencies in the National Port Readiness Network and the DOD-designated strategic ports, including improved communications, training, port security, data exchange, and enhanced port readiness exercises.

MARAD also works closely with DOD regarding the RRF. DOD determines specific ship type and configuration requirements and readiness as well as site selection for the RRF ships; MARAD develops maintenance activity and spending plans, and provides complete program management services to maintain and activate RRF ships.

Under Title 14 of the US Code, the USCG will assist the Department of Defense (DOD) in the performance of duties for which the Coast Guard is especially qualified. The USCG works closely with the Department of Defense, particularly the U.S. Navy, on an ongoing basis. The defense readiness performance goal for the U.S. Coast Guard is aligned with measures of readiness used by the U.S. Navy.

Efficiency and effectiveness strategies and activities - The MSP provides a substantial cost savings to DOD. First, MSP costs significantly less than the Operating-Differential Subsidy program which is being phased out. Second, payments are flat with no provision for inflation adjustments. Third, the cost to the U.S. Government of owning and maintaining an equivalent sealift and intermodal capacity to the MSP would be $800 million a year, compared to less than $100 million per year for the MSP.

Plans include the incorporation of RRF ships into DOD exercises through more detailed utilization scheduling so that $5 million in MARAD test activation costs can be offset from the use of DOD exercise funds. MARAD is also working with DOD (Navy) to make more cost-effective use of outport berths at the Navy's Inactive Ship Maintenance facility locations and moving lower-priority, inactive Navy vessels to MARAD's reserve fleet anchorages. Further, expanded use of commercial best practices by ship manager companies under contract for RRF maintenance is expected to result in fewer maintenance and repair shipyard contract claims while assuring competitive contract prices and best value.

The USCG will update and rehabilitate assets to maintain current level of performance with less resources because of increased efficiency. The Coast Guard's Deepwater project is a particularly important element in achieving out year savings because it will avoid one-for-one replacement of existing assets, and achieve efficiencies by replacing existing assets with a new and smaller mix of assets, capitalizing on better technology. Also in 1999, the Coast Guard plans to close the marine safety detachment supervising explosives loading at Naval Weapons Station Concord, having established standards for moving most explosives in military cargo in containers and thereby reducing the need for supervision.

MARINE RELATED PERFORMANCE GOALS

Indicator: **Twenty foot Equivalent Units (TEUs) or square feet of sealift capacity of ships enrolled in the Maritime Security Program (MSP) and Voluntary Intermodal Sealift Agreement (VISA).**

1999 Goal: **Capacity of 124,000 TEUs or 13.0 million sq.ft. in FY 1999.**

Baseline: Capacity of 92,000 TEUs or 9.9 million sq.ft. in FY 1997.
Data: MARAD

Comment: Interim targets for sealift capacity are set at 165,000 TEUs or 14.5 million square feet of capacity. DOT is influencing this outcome through entry of ships into MSP, combined with outreach to other segments of the U.S. flag maritime industry committed to VISA.

Indicator: Percentage of DOD designated primary or alternate port facilities that are available when requested by DOD.

1999 Goal: 90% in FY 1999, including primary and alternate facilities.

Baseline: 62% in FY 1996, based on primary facilities only.
Data: MARAD data, based on monthly strategic port reports.
Comment: Candidate ports are designated by DOD; outcome measures the degree of availability. DOT can only partially influence this through cooperative work with port authorities.

Indicator: Percent of Ready Reserve Force no-notice activations which meet (1) assigned readiness activation and (2) percent of days each ship is mission-capable while under DOD control.

1999 Goal: Threshold goals of 100% and 99% respectively in FY 1999.

Baseline: 100% and 99% respectively in FY 1996.
Data: MARAD
Comment: Operational reliability data have been gathered for three years and have fluctuated. The operational reliability goal of 99% may be adjusted once a longer time series of data is established. DOT influences this outcome through management of the Ready Reserve Force; funding is provided by the Department of Defense.

Indicator: Percentage of mariners available compared to mariners needed to crew combined sealift and commercial fleets during national emergencies.

1999 Goal: 100 percent.

Baseline: 99 percent in FY 1996.
Data: MARAD (crew requirements for the commercial fleet and government-owned organic sealift); Coast Guard (mariners who have sailed on other commercial vessels)
Comment: Mariner availability during a national emergency includes those who actually sailed in a given year, plus an estimated 10 percent of the non-sailing licensed workforce. The 1999 goal is based on a sealift operation that extends beyond 6-months, necessitating relief for a portion of the mariners who were sailing at the start-up of the operation.

Indicator: Weighted index of percentage of high endurance cutters, patrol boats, and Port Security Units (PSU) that meet an average SORTS (Status of Readiness and Training System) rating of C2 or higher.

1999 Goal: Index score of 72. Attaining this score indicates that all required high endurance cutters and patrol boats, and one out of seven required Port Security Units will achieve a C2 rating.

Baseline: Index score of 57 in FY 1997.
Data: USCG
Comment: FY 1996-1997 data were developed by sampling specific time periods; methodology for better annualization of the data will be developed. The SORTS readiness rating is determined by a multi-factor matrix that calculates an overall readiness value: C1 is the highest rating, C5 lowest. The readiness index is calculated by determining the percentage of required units meeting C2 and weighting these percentages (.25 for cutters, .25 for patrol boats, .5 for PSUs) to arrive at an aggregated index score. Data is obtained from the Status of Readiness and Training System maintained by the Department of Defense.

3B. MARITIME - Law Enforcement

The program activity, means and strategies, and annual performance measures used to advance our maritime *law enforcement* reflect the efforts of the USCG.

MARITIME RELATED BUDGET PROGRAM ACTIVITIES

USCG	Estimated FY 1999 Obligations (Millions):	
Operating Expenses		
Enforcement of Laws and Treaties	1,115	*
Acquisition, Construction, & Improvements		
Enforcement of Laws and Treaties	122	*
Research, Development, Test, & Evaluation		
Enforcement of Laws and Treaties	2	*

* Program activities marked with an asterisk may not be aimed at this strategic goal as their primary purpose. See Appendix II for further detail.

MARITIME RELATED MEANS AND STRATEGIES:

Ongoing means and strategies - The Coast Guard enforces all applicable federal laws and regulations over, on, and under the high seas and waters subject to the jurisdiction of the United States. Coast Guard law enforcement authority is provided in 14 USC 89. The Coast Guard maintains an operating force of multi-mission patrol cutters, aircraft and boats to prevent and detect illegal maritime activity, and to apprehend criminals. Coast Guard law enforcement activities for security generally fall into the broad categories of drug interdiction and alien migration interdiction. Counter-drug activities include disrupting drug smuggling by maritime surface and air routes. Presidential Decision Directive (PDD-14) designates the Coast Guard as lead agency for maritime drug interdiction and co-lead for air interdiction with the United States Customs Service. The Coast Guard is tasked with specific responsibilities under Goal 4 - *Shield America's air, land, and sea frontiers from the drug threat;* and Goal 5 - *Break foreign and domestic drug sources of supply* - of the President's National Drug Control Strategy. Interdiction or rescue of undocumented migrants at sea is conducted under Presidential Decision Directive (PDD-9), which designates the Coast Guard as lead agency for maritime alien migrant interdiction.

Special initiatives and focus for FY 1999 -

- Conduct cutter patrols and aircraft surveillance flights, boardings of vessels of interest, issuance of civil violations, seizures of contraband, and arrests of suspects. This budget will support an estimated 237,000 cutter patrol hours and 37,000 aircraft flight hours in support of drug and migrant enforcement, as well as fisheries enforcement. These activities serve to both deter potential illegal activity, and catch illegal activity that is in progress.
- Improve tactical effectiveness by employing new sensor systems and a new satellite communications upgrade.

- Establish agreements with source countries to assist in reducing migrant flow. For example, aircraft overflight authority granted by Dominican Republic in 1996 contributed to the decrease in the Dominican migrant success rate.

The Coast Guard will execute its 10-year Counterdrug Strategic Plan, aligned with the National Drug Control Strategy. Within the plan, the USCG will

- Execute individual campaign plans that target the maritime high-threat areas such as the water surrounding Puerto Rico and the Gulf of Mexico.
- Conduct a Caribbean Engagement initiative that seeks to improve coordination and strengthen Caribbean nations' ability to better address drug and migrant smuggling

Efficiency and effectiveness - The USCG will focus on updating and rehabilitating assets to maintain the current level of performance with less resources because of increased efficiency. It will also reallocate available assets to focus on areas of highest threat in support of ONDCP's Counterdrug strategy.

Capital assets/capital planning - Highlights include:

- HC-130 Sensor Upgrade
- Commercial Communication Satellite Upgrade

Cross-cutting areas with other agencies - The Office of National Drug Control Policy coordinates overall drug policy for both supply and demand control. The Coast Guard's multi-year drug budget is certified by ONDCP, and its Counterdrug Strategic Plan is aligned with ONDCP. The Coast Guard participates in an interagency workgroup under ONDCP guidance to develop cross-cutting goals and measures. It also is working with ONDCP and the Customs Service to validate the Rockwell Deterrence Study, to assess and measure the deterrent effect of interdiction activity. Other active dialogue and cooperation includes:

- Department of Justice/Drug Enforcement Agency -- Drug Enforcement: Coordination surrounding DOJ operations involve maritime transportation. Maritime enforcement coordination is also accomplished as needed.
- Department of Treasury/Customs Service -- Drug Enforcement: Coordination of maritime responsibilities. The Customs Service focuses on enforcement within the maritime arrival zone. The Coast Guard is responsible for interdiction of all activity in the maritime transit and arrival zones.
- Department of Justice/Immigration and Naturalization Service -- Immigration Enforcement: Coordination of at-sea enforcement of immigration laws and seaborne repatriation of undocumented migrants. The disposition of undocumented migrants is also coordinated with INS.
- Department of Treasury/Customs Service: Immigration Enforcement - Coordination of maritime responsibilities as needed.

MARITIME RELATED PERFORMANCE GOALS:

Indicator: **Illegal Drug Smuggler success rate in non-commercial maritime routes, expressed as a percentage.**
1999 Goal: **To be developed in 1998. (See comments).**
2003 Goal: **Reduce the smuggler success rate to 38%.**
2008 Goal: **Reduce the smuggler success rate to 10%.**

Baseline: 71% in FY 1995
Data: USCG
Comment: Standard being developed in coordination with the Office of National Drug Control Policy (ONDCP). Success rate for smugglers equals amount entering U.S. via non-commercial maritime channels divided by potential un-deterred flow via the same channels. Advanced modeling is being used to determine this indicator, and both the measure and the goal may be modified as the model is refined. The FY 1999 target will be established after the release of the 1997 cocaine flow data contained in the annual Interagency Assessment of Cocaine Movement (IACM), expected in early March 1998.

Indicator: **Undocumented migrant success rate by maritime routes, expressed as percentage**
1999 Goal: **13% in FY 1999**

Baseline: 25% in FY 1995
Data: USCG
Comment: Undocumented migrant success rate is equal to the estimated number of illegal migrants entering the U.S. via maritime channels divided by the number potentially bound for the U.S. via same channels.

Measurement, Verification and Validation

Uncertainty may exist in any of three dimensions of performance goals--projected time of attainment, projected level of attainment, and accuracy of measurement. In transportation, the origins of these uncertainties are sometimes known, although our control over the sources of uncertainty varies.

Projected time of attainment is uncertain due to the nature of transportation work. Capital investment, grant programs, and regulatory actions are activities whose results occur in future years. External forces emerge in the intervening time, giving attainment dates an inherent degree of uncertainty. DOT must work within this environment, and has set its goals based on its understanding of these delayed outcomes.

Projected attainment level can be affected by external factors or by the decisions of state and local governments through which DOT often works. DOT may provides resources, but the relationship of these resources to outcomes is difficult to project when the processes generally depend on State and local government actions for objectives to be realized. The flexibility given to local authorities under ISTEA and the proposed NEXTEA has increased the uncertainty between Federal resources and specific results, but this is balanced by the improved management and planning that come from decentralized decisions. State and local partnerships are vital to achieving DOT strategic goals, and the Department recognizes the unique and varying environment that each partner faces. Performance goals should be viewed as the goals of a larger team operating in a dynamic environment, and some variance must be expected. DOT has set goals that are relevant to the public, recognizing that certain control of outcomes is outside our scope of influence.

Accuracy of measurement is perhaps the most subtle uncertainty, and as such may be the most important to understand. While state authorities, DOT, and other federal agencies have long established programs in data collection, each of these sources has limitations. Some data are only captured in certain modes, and other data may be prone to under reporting. State data may be aligned to calendar year or state fiscal year -- in the case of safety, Federally compiled data are aligned with calendar year for consistency. All data are imperfect in some fashion. Pursuing "perfect" data, however, may consume public resources without creating appreciable value. There will always be some degree of uncertainty, and the goal of DOT is to understand that uncertainty, improve it where necessary, and use it with understanding when making management decisions. For this reason, verification and validation of measured values is an important part of managing for results and will be discussed in its own section.

In some cases, direct measures are not yet developed to reflect the desired strategic outcome goals. In these cases, intermediate outcome measures or modal measures supporting the goal are included as interim indicators. Work continues to further develop the performance goals and measures. Our long-term objective that performance goals will support each of the outcome goals of the Strategic Plan, will be clearly stated, will be high-level, and will include target levels that reflect an appropriate balance among our sometimes competing areas of interest.

Verifying And Validating Performance Measures

Integral to performance measurement is understanding data limitations, correcting these limitations where cost-effective, and learning to manage for results when data are known to be imperfect.

Virtually all data have errors. In the comments section of each performance indicator we have provided the source of the data as well as limitations of the data, observations about the quality of the data, and any known biases. This section on verification and validation complements those comments and provides a DOT-wide overview of our plan for assessing the quality of the DOT data uses to measure its performance.

Assessing and, where possible, eliminating sources of error in DOT data collection programs has always been an important task for data program managers. As a part of their ongoing work, managers of Departmental data programs follow quality control principles to identify and minimize errors that may be introduced in the data collection, maintenance, processing, and reporting phases of their respective programs. In addition, quality measurement techniques are employed to measure the effects of unanticipated errors. These include validation of data collection and coding, as well as coverage, response and non-response error studies to measure the extent of human error affecting the data. As sources of error are identified, steps are initiated to improve the data collection process.

DOT programs maintain extensive databases to track inputs, activities, outputs, and outcomes. These systems provide an established, tested, and consistent data source of primary program information. These systems employ quality control mechanisms to ensure accurate data collection and editing. As appropriate, these data are compared to other sources of similar data, validation data, or to previous data in the same series for consistency. Logic checks for data record consistency are also designed into the database systems. Examples of DOT data systems that support this performance plan include the Coast Guard Search and Rescue Marine Information System (SARMIS), the Highway Performance Monitoring System (HPMS), the Hazardous Materials Information System (HMIS), and the National Transit Database, to name a few.

The data used in measuring performance come from a wide variety of sources. Much of the data originates from sources outside the Department and, therefore, outside the control of the Department. Whether they originate internally or externally, the data often come from administrative records or from sample surveys. The myriad of data sources makes the task of assessing and, where possible, eliminating error a challenging one for the DOT. Different data systems contain different types of errors. For example, data from administrative records systems may have missing or incorrect records. In addition, data from sample surveys will also contain sampling error. Several measures (particularly in safety) require aggregation across modes. This can be problematic in some cases because of the use of different definitions (an injury may be defined differently in each industry or mode). Also, data from outside the Department may have unknown error properties.

To help the operating administrations address these issues, the Bureau of Transportation Statistics (BTS) is developing a statistical policy framework within which the operating administrations will work together to identify and implement the current, best statistical practice in all aspects of their data collection programs. This project is consistent with the data capacity discussion found in the DOT Strategic Plan. In 1998 working groups formed to establish departmental statistical standards, review and suggest improvements in quality assurance procedures, evaluate sampling and nonsampling errors, coordinate data definitions with other programs (where appropriate), and assist in developing customer satisfaction measures. BTS will assist modal data program managers in the validation and evaluation of their data and in developing standard documentation of the sources and reliability of estimates used to measure performance. In addition, the Inspector General (IG) plans to selectively verify and validate performance measurement data each year. When pertinent to the conduct of ongoing audit activities, the IG will also assess performance measures to determine their appropriateness for measuring progress toward the goal. These assessments may lead to changes in performance measures, improvements to or additions of data collection systems, or both.

Managers of departmental data systems use methods for validating and verifying data that fall into the following broad categories:

- Compare with previous data from the same source.
- Compare with another reliable source of the same type of data within DOT for the same time period.
- Compare with another reliable source of the same type of data within DOT for a previous time period.
- Compare with another reliable source of the same type of data outside DOT for the same time period.
- Compare with another reliable source of the same type of data outside DOT for a previous time period.
- The validation process is internal to the data collection system

The last bullet above includes a number of procedures performed within the data collection system to verify and validate data quality at each step of the data collection process. These include:

- Recollect/reinterview all (or a sample of) records and reconcile with the original collection. This type of operation applies to census or sample survey data collections from administrative records, organizations, or individuals.
- Conduct 100 percent (or a sample of) data recoding and reconciliation operation to assess and correct coding errors.
- Conduct 100 percent (or a sample of) data reentry and reconciliation operation to assess and correct data entry errors.

The American Travel Survey's reinterview program, in which a sample of households were recontacted and differences reconciled, is an example of a verification system within a data collection program. The American Travel Survey data along with the Nationwide Personal Transportation Survey data will be used to estimate person-miles traveled, which is used in some performance indicators (e.g., fatality, injury, and crash rates per person-miles traveled.)

Data Limitations In Performance Measures

Limitations to Data Sources within DOT

The most significant limitation to DOT data being used for performance measurement is timeliness. Some DOT data collection systems do not collect data on a yearly basis. For example, the Nationwide Personal Transportation Survey, the American Travel Survey, and the Commodity Flow Survey each collect data every five years. Systems that do collect data each year (or more frequently) usually require processing time at the end of data collection to prepare the estimates. For example, data from the Highway Performance Monitoring System which measures vehicle miles traveled (VMT), require post-data collection processing and are generally not available until several months after the end of the calendar year in which they were collected.

One way DOT will deal with this limitation is to compile preliminary estimates from the portion of data that are available in time to report on the performance measures. For example, fatality data from the first six months of the year could be compared with the first six months of the previous year for an initial performance measurement.

Other limitations to performance measurement data can be found in the documentation for DOT data programs. This documentation contains descriptions of the design of the data collection programs, estimates of sampling error (if applicable), and discussions of nonsampling errors and their hypothesized effects on derived estimates. Nonsampling errors include undercoverage, item and unit nonresponse, interviewer and respondent response error, processing error, and errors made in data analysis.

As part of its mandate in ISTEA and its plans for a statistical policy framework in the Department, BTS is working on a program of research, technical assistance, and data quality enhancement to support the continued improvement of data programs in DOT. This program is designed to help data program managers across DOT to communicate about new methods for improving their data quality and to document better what they know about the limitations of their data.

Limitations to External Data Sources

Timeliness is a significant limitation for external data as well. This limitation may be more problematic than for internal DOT data when source agencies do not use the same data for their own performance measurement (and, therefore, have no internal incentive for making the data more timely.) Other limitations of external data are noted in the comments for each performance measure.

In some cases, DOT has replaced external data, where little is known about the quality of the data, with internal data. For example, estimates of person-miles traveled (PMT) from private organizations have been used by DOT in the past in the absence of any better estimate. These data were external to the Department and had unknown error properties. With the recent

release of the 1995 Nationwide Personal Transportation Survey and the 1995 American Travel Survey, DOT now has internal data with known error properties that it can use to estimate PMT.

Many of DOT's internal data programs rely on the state DOTs to collect accurate and reliable statistics within cost constraints. While we work closely with our state DOT partners, we do not have direct control over this phase of the data program. Other limitations to external performance measurement data can be found in the documentation of statistical source and accuracy for those data programs.

Our Data Needs

In the newly released publication, *Transportation Statistics Beyond ISTEA - Critical Gaps and Strategic Responses*, BTS has summarized gaps in transportation statistics that limit our knowledge about the effectiveness and efficiency of the nation's transportation system. These gaps in the available data also limit our ability to measure the success of DOT's programs. Some of the major gaps outlined in the publication are:

- Freight transportation costs
- Timeliness and reliability of the transportation system
- Domestic movement of international trade
- Traffic congestion and the costs of delay time
- Internal travel of foreign visitors and U.S. travelers to other countries
- Vehicle-miles traveled (accurate and consistent across modes)
- Passenger vehicle inventory, age, and occupancy

While data exist on some of the items listed above, they are either incomplete or flawed in some other way to hinder accurate, national estimates. Work is underway to examine cost-effective ways of improving existing data collection programs and information systems to capture this information. For example, the Federal Highway Administration is examining ways of using intelligent transportation systems technology to estimate hours of delay per 1,000 vehicle miles (see performance indicator on page 49.) This would be used as a better measure of traffic congestion than a volume to capacity ratio, which does not take the extent or duration of delay into account. DOT is also working toward an expansion of the current Transportation Inventory and Use Survey (TIUS) from a 5 year survey to one conducted annually with additional components to capture passenger vehicle inventory, age and occupancy. We are also considering a new program to capture data on domestic transportation of international goods. DOT is in conversations with the Canadian government to establish a data exchange program for data on Canadian travelers in the U.S. Data on other foreign travelers (from Mexico and overseas) would require a new data collection program.

Our Data Systems

DOT information technology systems are regularly redesigned or upgraded to improve data quality. Broad-ranging work is planned in FY 1999. Examples of ongoing improvements include:

- The Search and Rescue Management Information System (SARMIS), used in a safety goal

indicator (see page 20),is being upgraded and improved.
- The Hazardous Materials Information System, also used in an indicator for the safety goal (page 27), is being redesigned to include automated reporting of data through electronic transmission and public access via the World Wide Web.
- The National Transit Database, also used in the safety indicators (page 24), mobility indicators (page 42), and economic indicators (page 58), is undergoing upgrades to its data entry, data editing, and data validation systems.

Program Evaluation

The DOT Strategic Plan outlines our approach to incorporating program evaluation into the decision making processes of the Department. The periodic assessment of our programs is key to understanding how we can best achieve our strategic goals. Program evaluations will help us see what worked, what didn't, understand why, and explore ideas of what should be done next. By quantifying the relationship between program efforts and levels of outcomes, program evaluation will also help us set meaningful performance goals.

The Department is currently developing a management mechanism to both plan and track program evaluations, as well as to develop the skills and resources sufficient to conduct evaluations throughout our organization. This management plan will be discussed in our FY 2000 Performance Plan. The following program evaluations are planned in 1998 and 1999:

- In FY 1998, we will conduct evaluations of three programs: the Highway Safety Assessment and Motor Vehicle Safety Standards programs (NHTSA); and Domestic Air Competitiveness (OST).

- In FY 1999, we have scheduled evaluations of Innovative Finance (FAA) and the Livable Communities Initiative (FTA).

Corporate Management Strategies

DOT is employing six overarching corporate management strategies to build an environment conducive to accomplishing our long-range goals. Detailed descriptions of these management strategies appear in Chapter XI of the DOT 1997-2002 Strategic Plan.

The management strategies address fundamental issues such as human resources, customer service, research and technology, information technology, business processes and, most important, working *better* together. These strategies cut across all organizational boundaries within DOT and are key to our ability to perform our mission. We have set FY 1999 milestones for our corporate management strategies to judge our progress in these areas.

ONE DOT Management Strategy

Goal: Work better together to build a transportation system that is international in reach, intermodal in form, intelligent in character, and inclusive in nature.

ONE DOT is a philosophical concept that focuses on working *better* together. ONE DOT is the result of a number of strategic planning sessions conducted in 1997 where DOT's leadership discussed inadequate interfaces among DOT's modal administrations especially with respect to wide-ranging, cross-cutting issues. In early 1998, the Secretary's Management Council assumed responsibility for implementation of the ONE DOT section of the 1997-2002 Strategic Plan. Key milestones that will build ONE DOT follow.

Policy Council - DOT is creating a Policy Council to become the framework within which we will address major, cross-cutting policy issues. The mission of the Policy Council is to ensure that all affected DOT elements are involved in policy decision making; to bring fresh perspectives and new ideas to policy formulation; and to assess the implementation of policy initiatives by the responsible DOT organizations. The Policy Council will make recommendations to the Secretary and the Deputy Secretary. Milestone is:

- FY 1999 - Following the its 1998 establishment, the Policy Council makes recommendations on at least two major cross-cutting policy issues.

National Transportation Strategy - With increasing attention on making the government accountable to the American people and making it clear what the taxpayers are getting for their money, DOT is taking steps to rationalize its investments within its authorities. Managing for the best results is possible only within a strategic framework. Cognizant of the fact that the Federal sector provides only five percent to the total annual investment in the nation’s transportation system, DOT will maximize leadership, advocacy, leveraging and best practices through its national transportation strategy. Milestones are:

- FY 1999 - Following 1998 design completion, implement the Project.
- FY 2000 - Project completed for update of DOT Strategic Plan

Long-Range Planning (complements National Transportation Strategy) - DOT will develop a long-term (20-25 year) vision document that describes the most desirable strategy(ies) for the Department to accommodate a range of futures. The vision document, which will be developed in partnership with DOT's customers and stakeholders, will define future, critical success factors in global transportation to build beyond the 1997-2002 Strategic Plan. This document will be the foundation for the next iteration of the Strategic Plan due to be revised and updated on a three year cycle. Milestones are:

- FY 1999 - Continue two-year initiative begun in 1998
- FY 2000 - Complete vision document for update of DOT Strategic Plan

Transportation Survey of America (complements National Transportation Strategy) - DOT's 1997-2002 Strategic Plan sets forth five ambitious strategic goals for the national transportation system. To develop a baseline and track performance of the system on a longitudinal basis, DOT will design and administer a survey of the national transportation system. Data from this survey will be used to upgrade performance measures for the Department and its operating administrations. The rationale for this survey is contained in Section VIII Data Capacity of the DOT 1997-2002 Strategic Plan. Milestones are:

- FY 1999 - Complete project design, based on 1998 preliminary cost estimates and survey design.
- FY 2000 - Begin survey

Strategic Communications Plan - DOT's customers and stakeholders have urged the Department to place additional emphasis on advocacy for transportation issues. Strategic communications will provide a feedback loop for evaluating the 1997-2002 Strategic Plan and DOT programs. The communications plan will be a roadmap for reaching all audiences, internal and external. It will focus on long-term strategic goals and build in provisions for regularly reinforcing the message. Milestone is:

- FY 1999 - Implement and update the strategic communications plan developed in 1998.

Partnerships with Federal Agencies - As we work toward making the government accountable to the American people by making it clear what the taxpayers are getting for their money, DOT will emphasize its partnerships with other federal agencies. Through these partnerships we will collaborate on common outcomes for cross-cutting programs as well as common goals and performance measures especially in areas where there is joint responsibility in authorizing legislation. Milestones are:

- FY 1998 - Conduct an environmental scan to identify opportunities for partnering and initiate discussions to develop common outcomes, goals and performance measures for cross-cutting programs.
- FY 1999 - Develop at least one new or expanded partnership with a federal agency including common outcomes, goals and performance measures.

Human Resources Management Strategy

Goal: Foster a diverse, highly skilled workforce capable of meeting or exceeding our strategic goals with efficiency, innovation, and a constant focus on better serving our customers now and into the 21st Century.

DOT will be more effective in achieving its strategic goals if it has a workforce that is knowledgeable, flexible, efficient, and resilient; that recognizes diversity as an asset in achieving organizational goals; and whose values are reflected in the way the Department manages its resources, supports the work environment, and accomplishes its mission.

Workforce Planning - DOT's five-year strategy is to conduct workforce planning DOT-wide, starting with the senior management level, to ensure that human and intellectual capital requirements are aligned with the strategic goals. In FY 1999, DOT will build on preliminary efforts started in FY 1998 and begin the workforce planning process, which will demand the active participation of both human resources staff and the operating administrations' management teams. Complete workforce planning will be accomplished in phases over the next five years. Milestones are:

- FY 1998 - Conduct a pilot workforce planning test, based on 1998 development of process model, tools, and guidance for workforce planning.
- FY 1999 - Complete workforce planning for 100 percent of senior management level staff.

Workforce Composition - Our goal is to create a competent workforce that is reflective of America and an environment that provides individuals the opportunity to maximize their potential and fully contribute to accomplishing the Department's mission. Each organization will assess its organizational culture, policies, and procedures to ensure no one is disadvantaged in its hiring, promotion, and evaluation processes, ensuring full opportunity for all employees without regard to their differences. Milestone is:

- FY 1999 - Each operating administration will complete an assessment of its diversity climate, and develop an action plan for addressing the needs identified.

Learning and Development - To equip DOT's workforce to achieve our strategic goals, we have developed a policy framework for all supervisors and managers to use in supporting their employees' professional growth. This framework addresses topics such as assessing developmental needs, assuring equal access to developmental opportunities, setting learning priorities and evaluating the impacts of learning investments. Milestones are:

- FY 1998 - Pilot test the policy framework to evaluate how effective it is in providing employees the development they need to do their jobs.
- FY 1999 - A DOT Consortium on Learning Evaluation will be established to share methodologies, data, and best practices.

Human Resource Redesign - DOT's management strategy is to redesign HRM programs continuously as the result of formal program evaluations. DOT has developed an HRM Balanced Scorecard Evaluation Process which measures HRM program effectiveness in supporting the Department's overall strategic goals and objectives. While the evaluations and resulting changes will be completed by individual operating administrations, we will share the results across DOT to identify best practices and facilitate the exchange of ideas. Milestones are:

- FY 1998 - Initiate use of the DOT HRM Balanced Scorecard
- FY 1999 - 50% of DOT's Operating Administrations (OAs) will have completed evaluations of their Human Resources Management (HRM) programs using the DOT HRM Balanced Scorecard.

Performance Management - DOT will manage the performance of its workforce by linking individual performance standards to organizational goals; providing feedback on performance at all levels; and holding managers and supervisors accountable for using performance management as a management tool. Through the collective effort of human resource managers, DOT has established a Performance Management Framework to guide the design and implementation of internal performance management programs which will meet those objectives. To maintain the Framework as an effective tool, stakeholders will evaluate it regularly. Milestone is:

- FY 1999 - Complete an evaluation of Performance Management Framework and modify the Framework as needed.

Customer Service Management Strategy

Goal: Deliver the results customers want through a government that works better, is more practical and costs less.

To deliver the products and services our customers want, we survey our customers on an ongoing basis about their satisfaction with DOT programs. Customer feedback will be the basis for improving, revising, adding or eliminating programs and services when it makes sense and ultimately, for helping DOT become a customer-driven organization. The intent is to institutionalize a customer-focused perspective in everything we do--from delivering services to the public, to designing new programs to improve our ability to meet our goals, to considering the customer impact when we make organizational and process changes. Meeting customers' needs is a continuous improvement process which will be ongoing for the six years of DOT's Strategic Plan. To implement our customer service management strategy, DOT will take action in the areas described below.

Customer Feedback - DOT will use customer feedback to improve our programs, services and systems. By focusing on the needs and expectations of direct users, we will build into our programs a proactive customer commitment. We will collect customer feedback through surveys, focus groups, complaints and direct inquiry. To design programs from a customer's perspective, we will build on existing partnerships we have with industry, state and local government, and

academia. Milestones are:

- FY 1998 - Develop tracking systems to measure the areas which matter most to the public.
- FY 1999 - DOT will complete a customer service reports that will outline: 1) how customers and partners are included into its strategic planning process; 2) how customer feedback is incorporated into program design; and 3) how customer feedback is being used to affect internal business process/system improvements.

Customer Service - DOT will integrate customer feedback into its planning processes and customer needs will be the basis for the Department's day-to-day management. A customer awareness philosophy will reach down to program managers, front-line workers and support staff. DOT organizations will point to programs and systems that are simplified and designed for users and regulations which focus on results. Milestone is:

- FY 1999 - Operating administrations will assess service and program delivery and develop action plans for addressing the needs identified.

Service Delivery- DOT will take advantage of information technology to provide better and faster service to the public. Where feasible, DOT will streamline processes and automate service transactions such as registration, licensing, grant awards and regulatory review and comment processes. During FY 1997, DOT created the first on-line docket management system. By consolidating nine separate DOT offices into one consolidated fully automated facility, DOT reinvented the process and now offers one-stop shopping. Milestone is:

- FY 1999 - Expand the docket management system to provide the public with the ability to file on-line comments, petitions and pleadings 24 hours a day from any location.

Communications - DOT will ensure that its customers have access to accurate and timely information about DOT's programs, services and regulations. Since FY 1995, DOT has provided a wealth of transportation information on its web site and, largely through customer consultation, is expanding the information the site contains. Milestone is:

- FY 1999 - DOT will provide timely, accurate and user-friendly web sites with home pages providing information on DOT programs and services

Partnerships - DOT will work with its partners and stakeholders to achieve mutually beneficial solutions for transportation issues and problems. DOT organizations will build upon existing partnerships with industry, academia, and state and local government to create new alliances for critical programs. DOT will emphasize objectives such as streamlining processes and reducing the operational costs of providing transportation to the public. During FYs 1997 and 1998, operating administrations have developed strategic partnerships such as the Coast Guard's partnership with the American Waterways Operators to increase safety for the barge and towing industry and FHWA's partnership with state and local government and industry to develop a computer-based emergency and law enforcement system to provide better information at incident scenes. Milestone is:

- FY 1999 - Each operating administration will assess its partnerships with industry and state and local governments to determine how to meet mutual objectives and goals, and implement a plan to strengthen those relationships and solve transportation problems.

Research and Technology Management Strategy

Goal: Advance transportation research and technology to shape a fast safe, efficient, accessible and convenient transportation system for the 21st Century through strategic planning, world-class research, better exchange of information on useful technological innovations, partnerships, research and education.

Research and technology development programs are key to achieving DOT's mission and strategic goals because they provide the innovations necessary to make significant advances in the efficiency and effectiveness of the transportation system. The following research and technology corporate management strategies will be advanced in FY 1999.

Strategic Planning - A strategic planning process is needed to align Departmental and interagency transportation science and technology (S&T) policies as well as research and development (R&D) plans and budgets with national transportation goals. In FY 1999, DOT will lead initiatives, through DOT's Research and Technology Coordinating Council and the National Science and Technology Council (NSTC), to ensure integration of transportation R&D plans, programs and budgets within DOT and across the government. Milestones include:

- FY 1999 - DOT will lead Federal efforts to develop:
  - A National Transportation Technology Plan for major multi-agency, technology-based private-public partnerships.
  - A National Strategic Research Plan for long-term, multi-disciplinary transportation research.
- FY 1999 - DOT will sponsor for the National Science and Technology Council a National Research Council study to identify opportunities for linking Federal basic and applied research to transportation applications.
- FY 1999 - DOT will develop an annual DOT Transportation R&D Plan which will provide a link among the DOT Strategic Plan, individual modal administration R&D plans, and other Federal transportation-related R&D plans and programs.

World-Class Transportation R&D Capability - To advance its strategic goals through technology, DOT must ensure that its in-house R&D activities are centers of excellence in their areas of technical expertise. To advance this management strategy, our R&D facilities will undertake recognized quality programs to establish standards of excellence in transportation R&D. Milestone is:

- FY 1999 - DOT research facilities will consider using ISO 9000 certification, Malcolm Baldridge or President's Quality Award Criteria to make baseline assessments of their performance.

Transportation Science and Technology Information Networks - The rapid and open exchange of research and technology information is essential in enabling transportation advances and in avoiding duplication of R&D efforts both within DOT and among federal agencies. To improve our information networks and provide decision makers with accurate R&D information and real-time access to DOT R&D project information, the following milestones have been set:

- FY 1999 - Implement DOT R&D tracking system software developed in 1998.
- FY 1999 - Make the Research and Development in the U.S. (RADIUS) management information system accessible to all DOT R&D programs, enabling DOT to contribute and retrieve federal R&D project information using this governmentwide system.

Private-public Partnerships - Strategic partnerships represent an increasingly important corporate management strategy in advancing transportation science and technology. The National Science and Technology Council (NTSC) Transportation Science and Technology Strategy identifies key partnership initiatives. In 1999, DOT will make advances in several areas. Milestones are:

- FY 1999 The National Intelligent Transportation Infrastructure initiative will advance the deployment of Intelligent Transportation Systems (ITS) technologies and standards across the nation. The performance goal for this initiative is to improve the level of ITS integration in six metropolitan areas by 20 %.
- FY 1999 - The Aviation Safety Research Alliance will develop innovations to reduce human-caused accidents, eliminate weather-caused accidents, and lower accidents due to malfunctions of safety-critical systems.
- FY 1999 - The Next Generation Global Air Transportation initiative, including FAA's Flight 2000 initiative, will upgrade and increase the capacity of the nation's air traffic management system.

Education and Training - An important element of DOT's Research and Technology Strategy is our continuing investment in the human capital -- the transportation professionals and workers -- who are responsible for the design, construction, operation, and maintenance of the system. Through support of educational programs in essential transportation skills and knowledge, DOT will build the expertise necessary to address tomorrow's challenges. Milestones are:

- FY 1999 - Create a transportation curricula for use by secondary and university-level institutions as part of the Garrett A. Morgan Technology and Transportation Futures Program.
- FY 1999 - A National Transportation Education Strategy, scheduled for completion in 1998, will be published and disseminated and will begin to be implemented in 1999.

Information Technology Management Strategy

Goal: Improve mission performance, data sharing, system integrity, communications, and productivity through deployment of information systems which are secure, reliable, compatible, and cost effective now and beyond the Year 2000.

DOT will use information technology (IT) to improve both mission and process performance. IT is a key capital asset in direct support of DOT strategic goals, from air traffic control equipment to analysis systems supporting risk management in inspections. In many parts of this Performance Plan, IT investments have been tied directly to specific strategic goals and annual performance goals. However, many of the benefits derived from IT transcend both program needs and organizational processes, particularly in the areas of office automation and management information systems. DOT's corporate management strategies recognize the critical role IT will play in helping DOT accomplish its missions more effectively.

DOT's information systems -- consisting of data, software, hardware, and telecommunications -- will be fully integrated into Departmental activities. In FY 1999 we will continue work that reengineers and streamlines internal government processes so that they are more effective and cost efficient. Building on previous years' work, we will devise an architectural blueprint to ensure that our IT systems are appropriately linked. We will work closely with our transportation partners to ensure the successful transition of our IT systems into the next century. We will improve the quality, reliability and accessibility of information for our employees and for other users. We will use IT to mitigate the paperwork burden imposed on the public.

To improve both mission and process performance, IT will be fully integrated into Departmental activities. Achievement of the goal will be guided largely by the precepts contained in key legislative mandates (i.e., the Clinger-Cohen Act of 1996 and the Paperwork Reduction Act of 1995) and the resultant OMB/Departmental implementation of them. During FY 1999, we will pursue the strategies described below.

Year 2000 - DOT will devote substantial attention to managing Year 2000 activities to ensure our mission and goals. Complete Year 2000 plans are too comprehensive to be incorporated in this document. DOT will apply the OMB phased approach to resolve the Year 2000 problem and will assess its progress against established milestones (using data obtained from internal monthly reports and quarterly OMB reports). Additionally, DOT will be encouraging its organizational components to accelerate the preceding schedule dates to meet new OMB target dates (i.e., September 30, 1998, for the renovation phase and March 31, 1999, for the implementation phase). Milestones are:

- *Renovation Phase*: 100 percent of all DOT mission-critical IT systems will complete phase by December 31, 1998;
- *Validation Phase*: 100% of all DOT mission-critical IT systems will complete phase by July 31, 1999.

Productivity Enhancement - IT will be applied to migrate DOT toward a paperless environment with emphasis on using IT to mitigate the Departmental paperwork burden imposed on the public. Milestone is:

- FY 1999 - A 5% reduction in burden hours will be achieved as determined through the established DOT Information Collection Budget database.

Information Infrastructure and Capital Asset Planning - DOT will use the technology blueprint developed in FY 1998 to determine how DOT IT can be effectively integrated into the national information infrastructure; where system and data linkages and transmission capabilities and standards are needed; where redundancies, deficiencies, and vulnerabilities exist; and where information quality and accuracy can be improved. DOT is working to establish an integrated five-year capital investment and information management plan which will include applicable cost, schedule, and performance measures. Milestone is:

- FY 1999 - In IT projects initiated, 90% of the cost and schedule goals (using measures established for DOT IT programs not later than the end of FY 1998) will be achieved without reducing the performance or capabilities of the items or services being acquired.

Securing DOT's IT Systems - The President's Commission on Critical Infrastructure Protection (PCCIP) clearly indicates the increasing threats facing our information systems. DOT must ensure its information systems remain secure. A key component of continued security is the education of our workforce. By the end of FY 1998, DOT will develop information systems security training for various elements of the workforce (e.e., senior management, systems administrators, end users, etc.). Milestone is:

- FY 1999 - We will begin the training program, with the goal of training 100% of senior management, 75% of system administrators, and 60% of end users.

Resource and Business Process Management Strategy

Goal: Foster innovative and sound business practices as stewards of the public's resources in our quest for a fast, safe, efficient and convenient transportation system.

The allocation of resources, including financial, human, and information resources and capital assets, has significant impact on the Department's ability to achieve its strategic goals. Our corporate management strategy is to ensure that internal business processes are streamlined, innovative and equitable. We will focus on the major business processes as defined by cost and staff. We will ensure that all operational programs provide the best service at the least cost to meet the needs of public. To implement our resource and business process management strategy, DOT will take the following actions in FY 1999:

Budgetary Management - DOT will use the budget process as a management tool to identify budget priorities to ensure that fiscal resources are used in the most cost effective manner to

achieve the strategic goals of the Department. The budget process will provide timely, useful and reliable budget, financial and performance data to support decision making. The budget process will be open and supported with clear justifications that demonstrate linkages to the strategic and performance goals. Milestones are:

- FY 1999 - As detailed in the information technology strategies, develop an integrated five year capital investment and information management plan and annual performance and operational plans which best support the budget goals of the Department as part of the budget process.

- FY 1999 - Establish a means of judging initial success in identifying, accomplishing, and using program evaluations so that budget decisions can be informed by program evaluations.

Financial Management - To receive a clean opinion on the Department's Consolidated Financial Statement for FY 2000 and beyond, DOT will continue to improve existing and implement new accounting policies, practices, and systems; work more closely with the OIG; focus efforts to eliminate material weaknesses and reportable conditions; and develop and manage Corrective Action Plans that resolve past and prevent future audit findings.

Short and long term activities support this objective. In the short term, we will continue to establish multi-modal work groups and institute sound accounting and FM practices; focus resources to clean up, reconcile, and maintain General Ledger account balances; and execute necessary system changes. In the long term, our plans are directed at creating a more comprehensive system solution that ensures best practices and appropriate controls are in place to properly account for DOT funds and resources. Milestones are:

- FY 1999 - Reduce to 10% the value of the material findings reported in the OIG's audit report on the DOT Consolidated Financial Statement. Fifty percent of the value of the FY 1996 financial statement contained material findings.
- FY 1999 - We will reduce by 90% the number of material audit findings as contained in OIG audit report of DOT's Consolidated Financial Statement.

In addition to ensuring Year 2000 compliance for DOT financial systems, as discussed in the IT section, we are also working closely with our partners to ensure that their systems are also Year 2000 compliant.

Rulemaking - DOT's regulatory process is central to achieving its strategic goals. We recognize the value of working with the public in developing rules that advance our goals without needless impact on business. DOT is committed to increasing participation in our rulemaking process by all stakeholders. In FY 1998 the Department will enable the public to comment on rulemakings by electronic means, greatly speeding the feedback process. This process will be expanded in FY 1999, along with pro-active outreach on topics of continuing public interest. Milestones are:

- FY 1999 - DOT will expand the opportunity for the public to comment electronically on rulemakings, ensuring that this service will be available to all operating administrations.

- FY 1999 - DOT will sponsor at least three comprehensive forums in which the public will join as partners in discussion of such issues as risk assessment and the real-world impacts of existing rules.

Acquisition Management - The Department's goal is to create world-class business processes by developing, improving, and promoting DOT acquisition and grants systems which provide best-value products and services to meet departmental missions, support DOT's strategic goals, and effectively utilize public resources. The success of the procurement system is measured by the products and services it delivers. DOT has developed a comprehensive procurement performance measurement program which evaluates timeliness, quality, productivity and price to assess whether the acquisition system is meeting its goals. DOT's annual Procurement Performance Measurement Plan includes DOT-wide measures as well as measures selected by each Operating Administration to reflect their individual needs and priorities. The three items identified below are the critical DOT-wide strategic procurement objectives for the coming years.

DOT is implementing the acquisition workforce provisions of the Clinger-Cohen Act to develop an acquisition workforce that meets the demands of the 21st Century marketplace. In FY 1998, DOT will put in place a comprehensive acquisition workforce policy which will identify the education, training and certification requirements for members of the acquisition workforce to meet the Clinger-Cohen standards. Each Operating Administration will do a comprehensive review of current workforce competencies, identify training and education gaps, and develop plans to remedy those gaps. The Department will ensure that appropriate training opportunities are made available to support the program. Milestone is:

- FY 1999 - DOT will increase the percentage of the DOT procurement workforce certified per the requirements of the Clinger-Cohen Act by an amount to be determined. The baseline for this measure will be developed in FY 1998 through a survey of the DOT procurement workforce. Once the survey is completed, data will be entered in the Consolidated Personnel Management Information System (CPMIS), and an appropriate performance goal will be developed.

Doing business electronically will become the standard for DOT over the next five years. The Department will advance that goal by expanding the use of electronic commerce tools. DOT is currently one of four agencies testing the GSA Electronic Posting System (EPS) and expects to fully implement it in FY 1999. Work continues on DOT's U.S. Electronic Grants Pilot, an effort led by DOT in collaboration with several other cabinet agencies and some state governments to automate the grants process. DOT will promote the use of other electronic commerce tools such as the government-wide purchase card, electronic catalogs, governmentwide contracts and the Internet. Milestone is:

- FY 1999 - Establish performance baselines for the use of electronic commerce. The capability needed to measure this is being developed for governmentwide implementation through the Federal Procurement Data System as required by Section 850 of the FY 1998 Defense Authorization Act. In the meantime, DOT will increase the use of purchase cards to over 85% of total simplified acquisitions

DOT's strategy for acquisition customer satisfaction is to streamline internal DOT acquisition and grants policies and procedures to eliminate unnecessary paperwork and delegate authority to the appropriate working level. The DOT Procurement Reinvention Laboratory will serve as a test bed for innovative approaches such as the recent collaborative experiment with the Small Business Administration to streamline the 8(a) contracting procedures which is now being copied by other agencies. The Department will continue to be a leader in implementing a crosscutting balanced scorecard performance measurement tool to assess customer satisfaction and the health of the agency's procurement system. Milestone is:

- FY 1999 - DOT program office and end user satisfaction with procurement operations will be above 85% as measured by the Procurement Performance Measurement Model.

Appendix I

Explanation of Data Used in DOT-Wide Safety Indicators

Strategic Outcome - Reduce the number of transportation-related fatalities

The aggregate number of transportation fatalities is taken from the Bureau of Transportation Statistics *National Transportation Statistics* table "Transportation Fatalities by Mode." This table aggregates air, highway, rail, water, and pipeline related fatalities annually. These individual fatality numbers are compiled from sources including the National Transportation Safety Board (NTSB), NHTSA, FRA, FTA, USCG, and RSPA.

BTS historically is able to compile these total fatalities by December of the following calendar year. Thus, calendar year 1999 aggregate fatalities numbers could be expected by December 2000. This will be too late for the 1999 Annual Performance Report, but preliminary data may be developed in time to serve as an initial indicator of transportation fatalities by March of 2000. DOT is pursuing ways to economically process data in time for the 1999 Annual Performance Report.

Strategic Outcome - Reduce the number and severity of transportation-related injuries.

The aggregate number of transportation injuries is taken from the Bureau of Transportation Statistics *National Transportation Statistics* table "Transportation Injuries by Mode." This table aggregates air, highway, rail, water, and pipeline related injuries annually. The remarks from the previous Strategic Outcome apply to sources and availability of data. Severity of highway injuries are tracked by NHTSA and are available from the General Estimate System (GES). GES contains data from a nationally representative sample of police-reported crashes of all severities, including those that result in death, injury, or property damage. Future measures will be developed in this area.

Strategic Outcome - Reduce the rate of transportation-related fatalities per passenger-mile traveled (including private vehicle travel) and per ton-mile shipped.

Two indicators support this outcome, and determine fatality rate by 1) passenger-mile traveled and 2) ton-mile shipped. This permits the Department to understand any underlying trends in fatalities that might relate to freight transport and its interaction with passenger transport.

Fatalities per passenger-mile were derived from the Bureau of Transportation Statistics, *National Transportation Statistics* table "Transportation Fatalities by Mode" and table "Passenger-miles." Rail grade crossing fatalities are captured in vehicle and other fatalities, and were therefore omitted in order to avoid a double count.

Fatalities per ton-mile were derived from the Bureau of Transportation Statistics, *National Transportation Statistics* table "Transportation Fatalities by Mode" and table "Ton-miles of Freight." Rail, water, and liquid pipeline fatalities are used from the table "Transportation Fatalities by Mode." Large-truck-related fatalities are taken from the NHTSA *Traffic Safety Facts* table 11 and include persons killed in other vehicles as well as in trucks. Only Intercity Truck, Class I Rail, Domestic Water Transport, and Oil Pipeline ton-miles are used from the table "Ton-miles of Freight." Aviation fatalities and ton-miles are omitted because the fatality data is not separated from passenger air-carriers.

The previous remarks regarding availability and timeliness of data apply.

Strategic Outcome - Reduce the rate and severity of transportation-related injuries per passenger-mile traveled (including private vehicle travel) and per ton-mile shipped.

Two indicators support this outcome, and determine injury rate by 1) passenger-mile traveled and 2) ton-mile shipped. This permits the Department to understand any underlying trends in injuries that might relate to freight transport and its interaction with passenger transport.

Injuries per passenger-mile were derived from the Bureau of Transportation Statistics, *National Transportation Statistics* table "Transportation Injuries by Mode" and table "Passenger-miles." Rail grade crossing injuries are captured in vehicle and other injuries, and were therefore omitted in order to avoid a double count.

Injuries per ton-mile were derived from the Bureau of Transportation Statistics, *National Transportation Statistics* table "Transportation Injuries by Mode" and table "Ton-miles of Freight." Only rail, water, and liquid pipeline injuries are used from table "Transportation Injuries by Mode." Large-truck-related injuries are taken from the NHTSA *Traffic Safety Facts* table 11 and include persons injured in other vehicles as well as in trucks. Only Intercity Truck, Class I Rail, water, and Oil Pipeline ton-miles are used from table "Ton-miles of Freight." Aviation injuries and ton-miles are omitted because the injury data are not separated from passenger air-carriers.

The previous remarks regarding availability and timeliness of data and severity of injuries apply.

Program Activities (Primary Program Purpose) by Strategic Goal

2-18-98

* Obligations are allocated to the *primary* purpose of each program - (◆) denotes significant secondary effects
* Where program levels can be broken out to specific goal areas, it is *split* by estimated amounts
* Program-related administrative costs are *distributed proportionately*
* OST and general administrative costs are *distributed evenly* across all five strategic goals

Program and Financing Schedule
FY 1999 Budget Appendix

Mode	Acct & Program Activity	Oblig. ($M)	Safety	Mobility	EC & Trade	Environment	Security	Cmts
OST	**Salaries and Expenses**	62	12	12	12	12	12	Distrib
	Office of Civil Rights	7	1	1	1	1	1	Distrib
	Minority Business Outreach	3			3			
	Transportation Planning, R&D							
	Transportation Policy and Planning	4	1	1	1	1	1	Distrib
	Systems development	1	0	0	0	0	0	Distrib
	Essential Air Service and RAIF	50		50				
	MBRC Direct loan subsidy & admin	2			2			
	MBRC Direct loan financing account							
	Direct loans	14			14			
	Interest paid to Treasury	1			1			
USCG	**Operating Expenses**							
	Search and Rescue	343	343			◆		
	Aids to navigation	464	◆	464	◆	◆	◆	
	Marine safety	402	402	◆		◆	◆	
	Marine Environmental Protection	305				305		
	Enforcement of laws and treaties	1,115				486	629	Split
	Ice operations	74		◆	74			
	Defense Readiness	69					69	
	Acquisition, Construction & Improvements							
	Search and Rescue	55	55			◆		
	Aids to navigation	136	◆	136	◆	◆	◆	
	Marine safety	41	41	◆		◆	◆	
	Marine Environmental Protection	50				50		
	Enforcement of laws and treaties	122				52	70	Split
	Ice operations	40		◆	40			
	Defense Readiness	9					9	
	Environmental Compliance & Restoration	21				21		
	Retired Pay							
	Regular military personnel	571	150	100	19	162	140	Distrib
	Reserve Personnel	37	10	6	1	11	9	Distrib
	Survivor Benefit programs	17	4	3	1	5	4	Distrib
	Medical care	59	15	10	2	17	14	Distrib
	Reserve Training							
	Drill pay and benefits	28					28	
	Full time support personnel	21					21	
	Annual training program	12					12	
	District administration and training	2					2	
	Recruit training	2					2	
	Operation and maintenance	1					1	
	Headquarters administration	1					1	
	Research, Development, Test and Eval.							
	Search and Rescue	3	3			◆		

Mode	Program and Financing Schedule FY 1999 Budget Appendix Acct & Program Activity	Oblig. ($M)	Safety	Mobility	EG & Trade	Environment	Security	Cmts
	Aids to navigation	3	◆	3	◆	◆	◆	
	Marine safety	5	5	◆		◆	◆	
	Marine Environmental Protection	3				3		
	Enforcement of laws and treaties	2				1	1	Split
	Ice operations	1		◆	1			
	Defense Readiness	1					1	
	State recreational boating safety programs	55	55					
	Oil Spill recovery, Coast Guard							
	Emergency fund	50				50		
	Payment of claims	10				10		
	Prince William Sound OSRI	1				1		
FAA	**Operations**							
	Air traffic services	4,382	◆	4,382	◆			
	Regulation and certification	635	635	◆				
	Civil aviation security	129					129	
	Airports	50	◆	50	◆	◆		
	Research and acquisitions	94	◆	94	◆			
	Commercial space transportation	6	◆	◆	6			
	Administration	260	31	222	0	-	6	Distrib
	Staff offices	76	9	65	0	-	2	Distrib
	Grants-in-aid for Airports	1,700	100	1,300		200	100	Split
	Facilities and Equipment							
	Engineering, development, test and eval	424	27	397				
	Procurement & modernization of ATC fac	980	450	518	◆	11	1	Split
	Procurement & moderniz of non-ATC fac	165	26	25		17	96	Split
	Mission support	279		279	◆			
	Personnel and related expenses	235	75	141	◆	4	15	Distrib
	Research, Engineering, and Development							
	System development and infrastructure	17	◆	17	◆			
	Capacity and air traffic mgmt technology	117	◆	117	◆			
	Comunications, navigation, and surveillance	19	◆	19	◆			
	Weather	12	◆	12				
	Airport technology	7	7					
	Aircraft safety technology	35	35					
	System security technology	55	◆				55	
	Human factors and aviation medicine	22	22					
	Environment and energy	4				4		
	Innovative/cooperative research	2	2					
FHWA	**Federal-Aid Highways (ObLim & LCA)**							
	Surface transportation program	5,608	◆	5,608	◆	◆	◆	
	National highway program	4,257	◆	4,257	◆	◆	◆	
	Interstate maintenance	4,271	◆	4,271	◆	◆	◆	
	Interstate system reimbursement	969	◆	969	◆	◆	◆	
	Bridge program	2,556	◆	2,556	◆	◆	◆	
	Congestion mitigation and air quality impr.	1,260		◆	◆	1,260		
	Flexible highway infrastructure safety	509	509	◆	◆	◆	◆	
	Integrated safety planning	50	50	◆	◆	◆	◆	
	Intelligent transportation systems	96	◆	96	◆	◆	◆	

Mode	Program and Financing Schedule FY 1999 Budget Appendix Acct & Program Activity	Oblig. ($M)	Safety	Mobility	EG & Trade	Environment	Security	Cmts
	ITS/ITI incentive development	100	◆	100	◆	◆	◆	
	Federal lands highways	512	◆	512	◆	◆		
	FHWA research and technology	126	◆	126	◆	◆	◆	
	Woodrow Wilson Memorial Bridge	180	◆	180				
	Border Gateway Crossing Pilot Program	90			90			
	Appalachian highways	290		◆	290			
	Administration	325	65	65	65	65	65	Distrib
	Research and technology	174	◆	174	◆	◆	◆	
	Contract programs	23		23				
	Other programs	104		104	◆			
	Emergency relief program	100		100				
	Minimum allocation	692	◆	692	◆	◆	◆	
	Demonstration projects	414		414				
	State Infrastructure Banks	150	◆	150	◆	◆	◆	
	Transp Infrastructure Credit Enhancement	100	◆	◆	100	◆	◆	
	Motor Carrier Safety Program							
	Motor Carrier grants	99	99					
	Administration and research	1	1					
	Miscellaneous Appropriations							
	Rail line consolidation	1		1				
	Interstate transfer grants	2		2				
	Bridge improvement demonstration project	1		1				
	Feasibility, design, environmental and engr	1		1				
	Climbing lane demonstration	4		4				
	Highway demonstration projects	13		13				
	Corridor D improvement project	2		2				
	Hwy demonstration projects - prelim eng.	1		1				
	Highway bypass demonstration	3		3				
	Railroad highway crossing demonstration	7		7				
	Surface transportation projects	37		37				
	Miscellaneous Trust Funds	8	◆	8	◆	◆	◆	
	Miscellaneous Highway Trust Funds							
	Intermodal urban demonstration project	4		4				
	Highway safety improvement demonstration	1	1					
	Climbing lane and safety demonstration proj	1	1					
	Urban Highway corridor bicycle study	1		1				
	Highway projects	26		26	◆			
NHTSA	**Operations and Research**							
	Safety performance standards	17	17					
	Safety assurance	21	21					
	Highway safety programs	62	62			◆		
	Research and analysis	66	66			◆		
	Office of the Administrator	4	4					
	General administration	3	3					
	Highway Traffic Safety Grants							
	Section 402 formula grants	167	167					
	Section 410 Incentive grants	39	39					
	National Driver Register	2	2					
	Occupant protection incentive program	20	20					

Mode	Program and Financing Schedule FY 1999 Budget Appendix Acct & Program Activity	Oblig. ($M)	Safety	Mobility	EG & Trade	Environment	Security	Cmts
	Drugged Driving Incentive Grants	5	5					
FRA	**Office of the Administrator**							
	Salaries and expenses	21	3	18	-	-	-	Distrib
	Alaska railroad liabilities	1		1				
	Railroad Safety							
	Federal enforcement	46	46					
	Automated track inspection program	3	3					
	Safety Regulation and program admin	13	13			◆	◆	
	Nationwide Differential GPS	3	3	◆	◆			
	Railroad Research and Development							
	Equipment, operations, and hazmat	6	6			◆		
	Track, structures, and train control	7	7					
	Safety of high speed ground transportation	5	5			◆		
	Research and development facilities	1		1				
	Administration	2	2					
	Rhode Island Rail Development	10		10	◆			
	Next Generation High Speed Rail							
	Technology development	12	3	9	◆			
	Administration	1		1	◆			
	Capital Grants to Amtrak							
	General capital	409		409	◆			
	Northeast Corridor Improvement Program	200		200	◆			
	NY Penn Station	12		12	◆			
FTA	**Formula Grants**							
	Urban formula-capital	346	◆	346	◆	◆		
	Nonurban formula	9	◆	9	◆	◆		
	Major Capital Investments	1,204	◆	1,204	◆	◆		
	Administrative Expenses	48	◆	48	◆	◆	◆	
	Transit Planning and Research	92	6	86	◆	◆	◆	Split
	Washington Metropolitan Area Transit Authori	50	◆	50	◆	◆		
	Formula Programs							
	Urbanized Area Formula Grants	3,411	◆	3,411	◆	◆		
	Formula Program for other than urbanized	135	◆	135	◆	◆		
	Formula Grants - Elderly and disabled	63	◆	63	◆	◆		
	Access to Jobs and Training	100	◆	100	◆	◆		
SLSDC	**Public Enterprise Funds**							
	Operations and maintenance	12	◆	12	◆	◆	◆	
	Replacement and improvements	1	◆	1	◆	◆	◆	
RSPA	**Research and Special Programs**							
	Hazardous materials safety	16	16	◆	◆	◆	◆	
	Emergency transportation	1		1	◆		◆	
	Research and technology	4	4	◆	◆	◆	◆	
	Program and administrative support	9	9	0	-	-	-	Distrib
	Pipeline Safety							
	Operations	15	15	◆	◆	◆		
	Research and development	2	2	◆		◆		

Mode	Program and Financing Schedule FY 1999 Budget Appendix Acct & Program Activity	Oblig. ($M)	Safety	Mobility	EC & Trade	Environment	Security	Cmts
	Grants	15	15		◆	◆		
	Emergency Preparedness Grants							
	Grants	13	◆	13	◆	◆		
	Below reporting threshold	1	◆	1	◆	◆		
	Trust Fund Share of Pipeline Safety	3	◆			3		
OIG	**Salaries and Expenses**	42	4	33	0	3	2	Distrib
MARAD	**Maritime Security Program**	98					98	
	Ocean Freight Differential	24			24		◆	
	Operations and Training							
	Merchant Marine Academy	33					33	
	State marine schools	7					7	
	MARAD Operations	31		8	8	8	8	Distrib.
	Federal Ship Financing Fund							
	Operating expenses	6			6		◆	
	Default claims	13			13		◆	
	Maritime Guaranteed Loan (Title XI)							
	Guaranteed loan subsidy	26			26		◆	
	Administrative expenses	4			4		◆	
DEPARTMENT OF TRANSPORTATION TOTALS:		44,141	3,812	35,117	805	2,762	1,645	
	Share of DOT Obligations (FY 1999):		8.6%	79.6%	1.8%	6.3%	3.7%	

Appendix III

Management Challenges

As DOT advances toward its strategic goals, it must confront and resolve management challenges in all levels of its programs. Several noteworthy management challenges confront the Department in FY 1998 and FY 1999, and will receive special focus and attention. Many of these management challenges have been identified in past General Accounting Office (GAO) and DOT Inspector General (IG) audits, and have been addressed over the past five years. The Department's ongoing efforts in response to these management challenges is summarized below. Where specific milestones for 1999 have been identified, they are included in the discussion below.

TRANSPORTATION SAFETY

FEDERAL HIGHWAY ADMINISTRATION

Motor Carrier Safety

To establish a system for prioritizing carriers for compliance reviews based on performance criteria and aimed at reviewing all problem carriers, the SAFESTAT risk assessment criterion was implemented nationwide as a selection tool for compliance reviews, during March 1997. This system focuses on a carrier's on-the-road performance relating to regulatory compliance and commercial vehicle crashes. The strategy involves conducting reviews on the highest risk carriers, sending warning letters to those carriers posing the next highest level of risk, and monitoring/tracking the progress each carrier makes toward safety improvement. FHWA has also developed a procedure for verifying carrier evidence of corrected out-of-service violations discovered during roadside inspections. Increasing attention will be placed on carriers which fail to improve, with a focus on enforcement where appropriate.

To improve the data base used to prioritize carriers for compliance reviews, FHWA is working with the states to improve the accuracy, timeliness and completeness of safety performance data. This will result in the inclusion of larger numbers of carriers in our risk assessment database, and will significantly improve our ability to monitor their performance on a current basis. FHWA is also fostering new partnerships with non-Motor Carrier Safety Assistance Program (MCSAP) agencies at the state and local levels to obtain new and existing types of performance data in order to continually improve its risk measurement capabilities. Data quality management reports have been developed to increase management's awareness of progress made to improve data timeliness, accuracy and completeness. These reports have been distributed monthly since July 1997.

To further strengthen its enforcement program and promote regulatory compliance, FHWA fully implemented in 1997 the use of Uniform Fine Assessment Software which weights the nine Congressionally mandated factors and assesses penalties for continued noncompliance. FHWA intends for this initiative to promote uniformity in appropriately penalizing the most severe violations and chronic noncompliance.

FHWA has made efforts to clarify the purpose and capabilities of compliance orders to all field staff during in-service training conducted beginning in Fiscal Year 1997. Efforts will be made to increase the use of consent orders and compliance orders by Federal managers where the appropriate situation exists.

Mexican Truck Safety

In April 1997, GAO recommended that FHWA measure progress by Mexican commercial truck carriers in meeting U.S. safety regulations and encourage and assist the border states in developing and implementing measurable results-oriented goals for inspecting commercial trucks entering the United States from Mexico. A performance based MCSAP was implemented in March 1996 as a pilot involving 14 MCSAP states, including the Southern border states of Arizona and New Mexico. These states volunteered to participate by preparing their FY 97 State Enforcement Plan, now known as a Commercial Vehicle Safety Plan (CVSP), under the performance-based concept.

In addition, to ensure that truck safety inspection facilities are included, where practicable, when border installations are planned, constructed, or refurbished, the Department of Transportation has proposed a discretionary funding program for border infrastructure needs in the National Economic Crossroads Transportation Efficiency Act (NEXTEA) and the Fiscal Year 1998 budget. The construction of enforcement facilities is a key element of this program being considered by Congress.

Intelligent Transportation Systems Deployment

GAO has found that challenges to widespread deployment of ITS systems include a lack of technical expertise by local officials, a lack of cost-benefit data proving the systems are cost effective, and a lack of funds to support deployment given other transportation priorities. GAO also found that refocusing the Automated Highway System program on short term initiatives raises uncertainty about long-term ITS research. To address these issues, FHWA has crafted a five-part deployment strategy involving demonstrations, professional capacity building, technical assistance and guidance, standards development, and deployment incentives. This strategy will be continued and expanded in 1999. In addition, the FHWA completed the demonstration of an automated highway and concluded that it needed to refocus its resources on developing the building blocks that must become part of the mainstream vehicle fleet and infrastructure before supporting further development of a more advanced system.

FEDERAL AVIATION ADMINISTRATION

Targeting Airline Surveillance

FAA has been strengthening its ability to focus on high risk opportunities for surveillance with its Safety Performance Analysis Subsystem (SPAS). SPAS receives data from a number of FAA's systems in an effort to identify those opportunities for surveillance that pose the greatest risk to aviation safety. Two of the systems feeding into SPAS are the Program Tracking and Reporting Subsystem (PTRS) and the Vital Information Subsystem (VIS). FAA has introduced a number of enhancements to PTRS and VIS by providing look-up tables and cross-field validations. FAA has also added a number of fields in the data bases of PTRS and VIS which will improve data quality. In September 1997, FAA also began releasing a subsequent version of SPAS I (SPAS II) to all inspectors.

Inspector training is scheduled to be completed by September 1999, and full deployment of SPAS II by December 1999.

Air Traffic Controller Staffing

In further response to GAO's April 1997 report on controller staffing, FAA is finalizing its labor-intensive process of validating the changes to the consolidated personnel management information system software. They expect to complete this work by the end of April 1998. The improved data will provide a more accurate determination of the number of controllers eligible to retire each year and FAA will then be able to make better projections of outyear controller hiring requirements.

FEDERAL RAILROAD ADMINISTRATION

Safety Assurance and Compliance Program

The new Safety Assurance and Compliance Program (SACP) is intended to complement FRA's traditional safety enforcement program with a comprehensive approach in which SACP participants work with FRA to identify and correct root causes of problems across an entire railroad network. The fundamental objectives of the program are fourfold: (1) identify and resolve the root causes of systemic safety problems prevalent over a carrier's system; (2) promote, encourage and facilitate safety partnerships between carriers, labor organizations and FRA; (3) ensure consistency in regulatory applications; and (4) become more proactive -- identify safety problems before they cause accidents.

SACP Goals and Results to Date

Since March 1995, approximately fifty SACP reviews have occurred and more than 100 systemic safety concerns were identified. Performance challenges have been established to

measure how FRA has succeeded at transforming its safety program. Using 1995 as the base year, FRA has established the following goals covering the period 1996-2002:

Reduce the rate of all rail-related fatalities by 14% from 1995 to the end of FY 2002, to achieve a rate of 1.47 per million train miles. FRA's goal for FY 1999 is to reduce the rate by 8%, to 1.57 or less.

Reduce the rate of trespasser fatalities by 14% from 1995 to end of FY 2002, to achieve a rate of 2.41 per million train-miles times billion U.S. population. FRA's goal for FY 1999 is to reduce the rate by 8% to 2.58 or less.

Reduce the rate of train accidents by 21% from 1995 to the end of FY 2002, to achieve a rate of 3.09 or less per million train miles. FRA's goal for FY 1999 is to reduce the rate by 12% to 3.44.

Reduce the rate of highway-rail grade crossing collisions by 28% from 1995 to the end of FY 2002, to achieve a rate of 2.06 or less per million train-miles times trillions of annual VMT. FRA's goal for FY 1999 is to reduce the rate by 16% to 2.40.

In July of 1997, GAO published a report that evaluated FRA's new approach to railroad safety. This report found that accidents involving UP/CSX trains raise questions about the effectiveness of FRA's new approach. While recognizing that individual accidents can raise questions, the overall effectiveness of the FRA's new approach must be measured over time. Since inception of the SACP in 1995, the train accident rate has steadily declined every year and employee casualties have decreased by more than a third.

Highway-Rail Grade Crossing Safety Program

In 1996, GAO issued a report that recognized the Department's challenges in further improving grade crossing safety. In 1994, the Secretary of Transportation established a Highway-Rail Crossing Safety Action Plan. The Plan has a goal of reducing railroad crossing accidents and fatalities by 50 percent nationwide in 10 years. The six major categories of initiatives are: (1) increased enforcement of traffic laws at crossings; (2) rail corridor crossing safety improvement reviews; (3) increased public education and Operation Lifesaver; (4) increased safety at private crossings; (5) data collection and research; and (6) trespass prevention. The Action Plan proposed 55 initiatives in these categories. Twenty initiatives have been completed, twelve reached a stage where they are considered to be ongoing, nineteen are in progress, and four have been terminated. Between calendar years 1994 and 1996, there has been a 14.5 percent reduction in highway-rail crossing accidents, a 20.7 percent decline in the number of highway-rail crossing fatalities, and a 17.9 percent drop in the number of highway-rail crossing injuries.

FRA's goal for FY 1999 is to reduce the rate of highway-rail grade crossing collisions by 16% to achieve a rate of 2.40 per million train-miles times trillions of annual VMT.

UNITED STATES COAST GUARD

Offshore Facility Inspection

The USCG enhanced its inspection of offshore facilities by increasing the level of inspection activity, streamlining processes, improving its tracking of new facilities on the Outer Continental Shelf (OCS), and revising its policy for oversight inspections by field offices. USCG is working with the Minerals Management Service (MMS) to finalize a new Memorandum of Understanding (MOU) between the two organizations.

Revisions to the MOU will enhance the cross use of MMS and USCG personnel to conduct oversight inspections of OCS facilities and improve the accuracy of the existing database of regulated OCS facilities for the fixed-facility self-inspection program. A draft MOU was published in the Federal Register on January 5, 1998, with a 60-day comment period.

Waterfront Facility Inspections

In order to address concerns identified by the OIG regarding waterfront facility inspections, the USCG distributed guidance for risk-based decision-making to the Captains of the Ports, providing a formal risk assessment and targeting protocol, and updating its waterfront facility inventories in FY 1996. Revisions to policy and procedures for field units to properly document inspections and conduct follow-up on deficiencies are being developed.

The revised policy and procedures are expected to be issued in the first quarter of FY 1999.

Vessel Inspection

USCG implemented a risk-based methodology for assessing foreign vessels for boarding based on their association with shipping companies, classification societies, and flag states. These assessments allow the USCG to prioritize vessel inspections, focusing on those ships most likely to be substandard. Although civil penalties are not typically assessed as a result of deficiencies identified during Port State Control examinations, ships that are found with serious problems are detained. Also, the USCG has developed explicit criteria to ensure field units apply enforcement measures consistently.

Cruise Ship Safety

As a result of a GAO report, the USCG formed a Cruise Safety Task Force in 1995 which conducted a comprehensive review of the industry and USCG's internal practices for regulating the industry. USCG subsequently developed a new course in passenger vessel inspections in October 1997, and attendance now includes industry representatives. We also established a passenger vessel program manager at USCG Headquarters and added ten passenger vessel inspection billets at ports with high vessel traffic. Further, USCG proposed, and had adopted by

all the signatory nations to the Standards of Training, Certification and Watch Keeping (STCW) Convention, recommendations including those mandating advanced shipboard fire fighting courses. Also, the Coast Guard has signed a partnership agreement with the International Council of Cruise Lines. The Coast Guard currently measures passenger deaths per 1,000 passenger vessels, with a stated goal of reducing the number of deaths by 20 percent. In 1996, the most recent year for which we have data, there were no deaths.

TRANSPORTATION SECURITY

FEDERAL AVIATION ADMINISTRATION

Aviation Security Initiatives

FAA is continuing its comprehensive inspections and has been utilizing more realistic and aggressive tests of industry performance and compliance with all security requirements. In addition, the FAA has implemented many of the recommendations of the White House Commission on Aviation Safety and Security. Since the Commission's report over a year ago, FAA has made substantial progress in improving aviation security, from implementing background checks to deploying advanced explosive detection technology.

The FAA is promulgating a proposed rule to improve the security of checked baggage through the use of Computer Assisted Passenger Screening (CAPS) in conjunction with either enhanced baggage screening or passenger-bag match systems. The CAPS profiling software is currently being integrated with several major air carriers, with all certified carriers required to have CAPS installed by the end of 1998.

To improve the performance of checkpoint screeners, the FAA is deploying SPEARS (Screener Proficiency Evaluation and Reporting System) at several airports, which is a training tool to enhance screeners' ability to identify explosive devices. In addition, the FAA is expanding rules concerning criminal background checks and FBI fingerprint checks to all screeners and their supervisors. Dangerous Goods and Cargo are targeted for increased enforcement, as FAA plans on conducting 4,000 dangerous goods and 1,000 cargo inspections in 1999. FAA's "Red Teams' (unannounced inspections) will continue their vital role, testing and evaluating procedures such as positive passenger bag match, X-ray screening, airport access, and profiling overseas. The program has been expanded and has begun unannounced assessments of the use of explosives detection systems, such as the CTX-5000, to determine operator effectiveness in detecting and resolving alarms of explosive materials. Finally, FAA will continue its effort to deploy advanced explosive detection devices with funding already in place for the purchase 54 CTX-5000SP machines, 18 advanced automated x-ray machines, and four other advanced technology devices for use at the nation's airports. Further, over 480 trace detectors for use at checkpoints will be purchased, with over 125 already in place and operational. The Department recently transmitted to the Appropriations Committees a reprogramming request that would

make an additional $25 million available in FY 1998 for the acquisition and deployment of explosive detection equipment, and the 1999 Budget requests $100 million for these purposes.

Federal Aviation Administration Reform

The Administration has identified Federal Aviation Administration (FAA) reform -- including acquisition, personnel, and financial reform -- as one of 22 Government-wide priority management objectives. In an effort to allow the FAA to operate in a more businesslike manner, with less red tape, the 1996 Transportation Appropriations Act gave the FAA broad authority to implement new procurement and personnel systems. The FAA's new acquisition management system was implemented on April 1, 1996, and is discussed in the following section on air traffic modernization.

Many of FAA's personnel reforms also became effective on April 1, 1996, as the first step toward a new personnel management system that will be more efficient and provide greater flexibility in the hiring, training, compensation, and location of FAA personnel. Under the new personnel system, the average time to recruit new external employees has been reduced by as much as 80 percent, time-in-grade restrictions for promotions have been eliminated in favor of performance-based promotions, and the grievance/appeals process for employees not covered by a bargaining unit is simpler and faster, reducing the average time to resolve complaints from one year to three months. Implementation of longer-term initiatives will continue during FY 1998 and FY 1999.

Regarding financial reform, the FAA is currently developing a cost-accounting system, as required by the Federal Aviation Reauthorization Act of 1996. The FAA's goal is for the system to attribute at least 90 percent of FAA's direct and indirect costs to specific FAA products and services, thereby accurately relating services to costs that can be reflected in user charges. Plans for system implementation are discussed further in the following section on Air Traffic Modernization.

AIR TRAFFIC MODERNIZATION

FAA over the last few years has significantly revised its acquisition processes and procedures due to lessons learned, new statutory authority, and independent assessments of the new system. The FAA's new acquisition management system incorporates a life cycle approach to managing National Airspace System (NAS) acquisitions. Under the new acquisition system, FAA is establishing performance, cost, and schedule baselines. It is also developing methods to measure progress against those baselines to ensure programs remain within budget, are delivered on time, and perform as expected. The Acquisition Management System is now in place and FAA has established baselines for major programs, and all new acquisitions are using the new process.

ATC Systems Architecture

The NAS Architecture Version 3.0 represents the FAA's baseline architecture from which technical architectures will be developed. The more detailed technical architectures will provide specific design guidelines for individual programs. FAA will develop the technical architectures to provide a sound basis for a detailed investment analysis and to ensure that system engineering studies necessary to develop and evaluate alternative approaches are based on specific system designs. The NAS Architecture Version 3.0 is currently under review and should be released by July 1998.

Modernization Cost Information

GAO recommended that FAA improve the cost estimating process, disclose uncertainty ranges for those cost estimates, and develop a managerial cost accounting capability that fully satisfies Federal standards. The FAA has efforts underway to complete a fully acceptable managerial cost accounting system. FAA has installed software for cost accounting and implemented a baseline system on October 1, 1997. FAA plans to implement a fully operational system by October 1998. In regard to system cost estimating, an FAA-wide process improvement effort began in 1997 and an action plan has been developed. FAA has also developed a capability called the Cost and Performance Management Program (CPMP). The CPMP measures the performance of Airway Facility services and systems; combines this performance data with the cost data from the accounting system (under development); and creates processes, tools, and methodologies for estimated project and life cycle cost for acquisitions related to the mission of Air Traffic Services. The air traffic systems requirements service will continue developing cost and performance projections and strategic tools to identify cost and performance requirements. With these new tools, FAA will be better able to establish program baselines against which contract performance can be measured and determine more accurately the cost savings from implementing new systems.

System Requirements Stability

GAO has indicated that unstable systems requirements specifications were a significant factor contributing to problems in past modernization efforts. To address these issues, FAA has required program managers to report on requirements changes, established stronger requirements controls, and strengthened the ties between its system development and user communities. By taking these actions, FAA can better assure that requirements are developed early in the acquisition process, and priorities are established for decisions on requirements changes. By having a properly trained workforce develop accurate requirements reflecting all of the operators' needs on a timely basis, FAA has already seen significantly reduced need to change requirements later in the process, as reported in the acquisition reviews held for each program.

To further these objectives, FAA provided key staff with specialized training in requirements writing skills to ensure that the requirements established are accurately and effectively

communicated. Additional training is planned for this area for new employees in 1998. In addition, the air traffic system requirements service provided training in "a systems view of ATS requirements," an intensive 40-hour course consisting of eight modules designed to provide the knowledge and skills necessary to fulfill ATS requirements. All assigned staff completed this course in October 1997.

Year 2000

FAA has completed assessment of all of its mission critical systems for year 2000 problems. A significant number (125 out of 209) of air traffic mission critical systems are already certified as year 2000 compliant. The renovation of software and replacement of hardware is in progress for the systems needing renovation, and FAA plans to have the renovation work complete by December 1998. Testing and validation will ensure that the computer systems are Year 2000 compliant. FAA plans to complete the testing and validation of their computer systems to assure Year 2000 compliance by July 1999.

Solutions to the Year 2000 problem consist of both rewriting software code and replacing hardware. FAA estimates the total cost of these solutions to be about $160 million and has allocated the resources necessary to take care of all Year 2000 problems. FAA is continually updating the air traffic software, and there is staff at the William J. Hughes Technical Center dedicated to that task who are rewriting and testing software code now. Other programs such as air traffic management will replace workstations with new Year 2000 compliant computers. Initial assessments have identified the problems, and FAA is confident that these problems can be resolved.

EFFICIENT USE OF SURFACE TRANSPORTATION FUNDS

FEDERAL TRANSIT ADMINISTRATION

Mass Transit Funding

Over the last few years a large body of work has been conducted by both GAO and OIG regarding FTA's grant management programs. These issues reached a critical point when FTA grants management was placed on both GAO and OIG high risk lists in the early 1990s. At that time, the audit entities maintained that FTA focused more on awarding grants than on ensuring their proper use. Oversight was found to be superficial and inconsistent.

In December 1995, GAO dropped FTA from its high risk list and the OIG soon followed in 1996. It was found that over the past few years, FTA made substantial improvements in its process to oversee its grants program, including organizational changes, increased oversight staff levels, and better training. FTA was found to have gone from relying primarily on grantee certifications of compliance to implementing various initiatives and systems that would instill a

more proactive approach to its grant management, oversight, and enforcement responsibilities. In addition, the formula nature of most of FTA's programs under ISTEA and local/state/Federal funding constraints encourages mass transit grantees to implement efficient fiscal policies.

Large Transit Projects

Past efforts by GAO and the OIG maintained that FTA needed to better ensure that large-dollar transit projects have adequate technical oversight and secured firm commitments for funding.

PMOP (Project Management Oversight Program) contractor monitoring of projects has brought an awareness of the need for grantee strengthening of project controls, specifically cost and schedule control, and quality assurance programs. These needs for improvement in project functions are being brought into focus by the PMOP program contractors in the early stages of projects. This quick response time is allowed by the on-call nature of the PMOP contractors technical services providing expertise in engineering areas that FTA does not have expertise in, such as signaling, rail vehicles, tunneling, and project start-up.

FTA has updated its PMOP operating guidance to require contractors to independently verify grantees are adequately implementing their quality assurance/quality control programs; to monitor project cost and schedule and to independently verify quality of construction data. Where problems are encountered, early detection has permitted appropriate corrections and has minimized project impacts.

> In FY 1999, FTA will increase construction savings due to value engineering on major capital projects by 4% per year and develop an effective project management plan during preliminary engineering for all FTA-funded major capital investments. It will also work with the National Transit Institute to conduct a series of training courses on management of transit construction projects that will help improve FTA’s management oversight of major transit projects.

Los Angeles Red Line Project

Work by OIG and GAO maintained that FTA needs to utilize the results of its financial consultant's review of the fiscal capacity of the Los Angeles County Metropolitan Transit Authority (LACMTA) to finance the Los Angeles Red Line transit project, the Alameda Corridor project and others to determine what funding shortfalls exist. FTA has taken a number of actions as a result of the Financial Management Oversight (FMO) and PMOP consultants' review of LACMTA. First, on August 1, 1997, FTA stopped payment and work on the Eastside Extension due to unacceptability of MTA's most recent proposed recovery plan. FTA also enforced an earlier funding stoppage on Mid-City due to its reverting to the planning stage of project development. FTA also required a revised and restated North Hollywood FFGA (Full-Funding Grant Agreement) to include an up-front reserve of $50 million to cover possible overruns, which was signed on June 9, 1997. As a result of FTA’s reviews and a realistic look by MTA of its financial strengths, the LACMTA Board voted on January 14, 1998, to suspend

work on the Mid-City, East Side, and Pasadena Blue Line rail projects for at least six months pending a reassessment of available funds.

FEDERAL HIGHWAY ADMINISTRATION

Central Artery/Tunnel

GAO has stated that "increases in construction costs seem likely to push the project's total net cost higher than the $10.8 billion estimate."

The Massachusetts Highway Department (MHD) submitted its latest finance plan, which was accepted by FHWA on February 5, 1998. The single greatest unknown variable in the finance plan update is still Massachusetts' level of post-ISTEA Federal funding. The MHD has agreed with FHWA's position that, if eventual reauthorization levels differ significantly from those assumed in the latest document, the state will provide a new update. FHWA's Division Office dedicates about half of its total workforce to oversight and stewardship of the project on a daily basis with formal reviews with headquarters staff every three months.

As recommended by the GAO and OIG, the FHWA and the MHD are actively working to advance the concept of sharing a number of beneficial "lessons learned" from the CA/T project. For example, research done on the project to define appropriate fireproofing for tunnels has not only saved more than the research cost on the project itself, but has also saved millions of dollars on other tunnel projects around the USA.

Cost Management for Large Highway Projects

In response to a recent GAO report that called on FHWA to work with states to evaluate and disseminate information on best state practices concerning cost management to all states, FHWA has been working with states for several years to assist them in establishing programs that will help ensure more efficient management of highway project costs. For example, FHWA has extensively implemented Value Engineering (VE) programs, which provide a systematic approach to simultaneously reducing project costs and improving project quality. The program employs a scientific method for contractors to examine proposed projects and encourages them to propose more cost effective alternatives for accomplishing project objectives. During FY 1995, the most recent year data are available, the FHWA's program saved $477 million. In addition, FHWA has developed a technical bulletin on life-cycle-cost analysis for pavement design that implements the requirement in section 303(a) of the NHS Designation Act for the states to conduct an analysis of the life-cycle-cost of each usable project segment on the NHS with a cost of $25 million or more.

In FY 1999 the Department's surface transportation reauthorization proposal would require states to prepare a financial plan for each Federal-Aid Highway project estimated

to cost $1 billion or more to assure that all relevant costs are fully considered during project planning and implementation.

AMTRAK FINANCING

Amtrak Financing and Performance

The Amtrak Board of Directors, on which the FRA Administrator and the Deputy Secretary serve, as representatives of the Secretary, has shown a commitment to a high-quality national passenger rail system along with the willingness to make difficult decisions regarding cutting routes and services that are not economically viable. The Board has also supported the reorganization of Amtrak's corporate structure with a new emphasis on customer satisfaction, a key element to improving Amtrak's financial position and providing safe service of high quality. However, some measures of Amtrak's financial situation have deteriorated since 1990. GAO audits have expressed concern that the company cannot overcome its financial difficulties without increased passenger revenues and subsidies from the government. The Department is taking a broad range of measures to address these concerns and help assure the financial strength of Amtrak.

The President's FY 1999 budget increases Federal financial assistance to Amtrak to record levels of capital in 1999. When combined with funding from the Taxpayer Relief Act (TRA), over the coming five years (1998-2002), the Administration plans to invest more in Amtrak than has been invested over any five-year period in the past eighteen years. This funding commitment to Amtrak -- the largest ever proposed by this Administration -- will provide Amtrak with the firm financial footing it needs to succeed as a vital part of our national transportation system.

The Federal financial support is combined with vigorous and essential reform to increase Amtrak's long-term viability. The budget assumes that Amtrak will deposit the capital funds it will receive under section 977 of the Taxpayer Relief Act of 1977 (TRA) into a new capital grant account and that the release of the TRA funds, as well as the $621 million in 1999 capital appropriations, will be contingent upon creation of a thorough and prudent capital investment plan. This capital investment is the key to improving Amtrak's operating efficiency, increasing ridership and ensuring long term success.

To judge Amtrak's progress toward financial strength, FRA will monitor the following FY 1999 milestones:

- Amtrak revenues (including Federal operating support) less expenses, on a current year basis, will improve to -$14M in FY 1999. This will mark planned progress toward positive budget result in 2001.
- Revenues through Amtrak's Express Pilot will reach approximately $73M in FY 1999. Amtrak will target a customer satisfaction index of 87 in FY 1999, compared to a FY 1997 baseline of 84.

ORGANIZATIONAL STRUCTURE AND COLLOCATION

Departmental Structure

The Department has taken several steps to implement the ONE DOT management philosophy in the five months since we published our strategic plan. For example, using a team building approach, we have formed Safety, International Affairs and Policy councils to address major issues that crosscut the Department and other Federal agencies. We have a DOT Strategic Plan, and we are beginning work on strategic communications and a transportation survey of America. Consistent with the Government Performance and Results Act (GPRA), we are identifying opportunities to partner with other agencies to develop common outcomes, goals and performance measures on crosscutting programs. We are conducting all of these initiatives through teams representing DOT's Operating Administrations. We have set forth our goals for these and several other management initiatives in this performance plan.

Field Office Collocation

A collocation task force with representation from the operating administrations and the Office of the Secretary was created by the Secretary's Management Council in 1996. The task force was charged with recommending potential collocation opportunities. The task force established the objective of collocating field offices wherever practicable to reduce the number of separate locations, enhance customer service, streamline space inventory, and increase administrative efficiencies in DOT field offices. In working toward its objective, the task force has emphasized that collocation involves more than locating multiple offices in a single building.

The task force has focused its efforts on field offices only. It has defined a field office as providing program, financial, or technical assistance to customers and partners. Based on that definition, certain field facilities have not been considered for collocation opportunities. They include: operational offices which provide special services that require direct access, such as air traffic towers, radar facilities, or small boat stations; research facilities; training facilities and other special facilities. In its interim report, issued in November 1996, the task force identified an initial list of 160 offices which might be consolidated into 50 sites. Four major collocation initiatives are now underway. Collocation has been established as a priority for field offices, and DOT is attempting to collocate its offices in central business districts where feasible.

A collocation planning initiative is underway in Denver. Field personnel have undertaken a study to determine the cost and benefits of alternative sites for collocation. Collocation will not take place until leases expire in 1999. Another initiative has begun in Ft. Worth where field staff are currently making a comparative study of alternative sites. This study is due to be completed in August 1998. In New York City, the new metro office, FHWA's Motor Carrier office, FTA Region II, and MARAD's office will be collocated at one building in the summer of 1998.

Several smaller efforts have also been accomplished. Through aggressive use of telecommuting and space being provided for swing work stations by other operating administrations, FRA has been able to close 13 of its field inspection offices.

Because of funding constraints, plans for collocation are scheduled around lease expiration of one or more offices to be collocated. DOT does not have the resources to make front-end investments in collocation without taking this approach. However, planning processes are being initiated to allow sufficient lead time for complex collocation initiatives such as those described.

Federal Highway Administration

The Federal Highway Administration (FHWA) established an organization structure evaluation task force to review the role, functions, and organization of the FHWA's field structure, particularly the regional offices. This review responds to the need to ensure that the agency is organized to best achieve its vision, mission, and goals as outlined in the new FHWA Strategic Plan. Additionally, it responds to the National Performance Review's call to continue reinventing agencies and redesigning program delivery mechanisms, and the charge from Congress contained in the Department's FY 98 Appropriations Bill to streamline our field structure.

Based on this task force review, which happened during 1997, the FHWA has analyzed alternative scenarios for a restructured field organization and identified a preferred alternative. The task force analyzed office roles and functions, highlighting FHWA's intent to have a strong customer focus and provide quality customer service in areas of technical and program assistance, training and technology deployment, as well as intermodal and interagency coordination. Important roles and functions for these field offices also include providing leadership in strategic initiatives, supervision of the field organization, and legal services. While specific roles, functions, and staffing will be finalized and locations identified during the implementation phase, the preferred alternative involves a reduced number of regional level offices. During the first half of Calendar Year 1998, the FHWA will develop a detailed implementation plan for the proposed field structure, including estimated costs and budget allocations. A report to Congress concerning the results of the review and plans for implementation is being prepared.

United States Coast Guard

As part of a multi-year budget strategy to reduce the USCG by 12 percent over a four year period, the agency implemented several streamlining and downsizing initiatives. For example, the USCG headquarters merged eleven Operating and Support Offices into four Directorates designed to match work processes (operations, marine safety, human resources, and systems). The consolidation decreased the size of USCG Headquarters by approximately 300 people. At the field level, the USCG merged two Districts with existing Area Commands, eliminated another District (2nd District in St. Louis), and downsized the remaining District Offices. The

new field organizational structure reduced operational staff elements by about 25 percent. Also, the USCG created twelve regionally-focused support units. The twelve regionally-focused support units (integrated support commands) will provide virtually all the support services required by Operational Commanders and Operating Units under the two maintenance and logistics commands. The final portion of USCG streamlining embraced a number of separate initiatives to consolidate and centralize services.

INFORMATION RESOURCES

FEDERAL AVIATION ADMINISTRATION

The Safety Performance Analysis Subsystem (SPAS) has received extensive attention from GAO. FAA has been working to refine SPAS, which receives data from a number of FAA's systems in an effort to identify those opportunities for surveillance that pose the greatest risk to aviation safety. FAA is implementing its plan to refine the quality of data input into the system and SPAS is now in the initial phases of implementation.

The system is expected to be fully operational in 1999.

UNITED STATES COAST GUARD

As a result of several OIG and GAO audit reports that identified problems with the agency's Marine Safety Information System (MSIS), the USCG initiated the Marine Information for Safety & Law Enforcement (MISLE) project to serve as a suitable replacement for MSIS. The MISLE consists of three cross-functional information systems: the Marine Safety Network (MSN); the Vessel Identification and Documentation System (VIDS); and the Law Enforcement Information System (LEIS) II. The USCG will integrate all information into MISLE thereby eliminating the need for dual systems and duplicate data entry. The VIDS is expected to be the first application to come on line during the 1st quarter in FY 98. The USCG will stagger the remaining applications for the other two components every 12 to 18 months until full implementation, expected by the end of 2002.

DOT FINANCIAL ACCOUNTING

The Department established a 5-year plan to improve financial management and accountability over its financial resources. DOT is firmly committed to improving the quality and accessibility of the information contained in its financial management systems. Recurring problems cited by the OIG center around weaknesses associated with the Department's ability to account for Property and Equipment (P&E) and Operating Materials and Supplies (OMS). Currently, cumbersome manual review processes are used and systems are not integrated, are incompatible, and do not retain the types of P&E and OMS data required to reconcile with data accumulated in the core accounting systems. This also hampers the ability to properly classify, as capital or

expense, these assets at the time of acquisition and as such, the integrity of the financial information is compromised. The result is that transactions received and processed by the accounting system may not incorporate all relevant data.

DOT is taking aggressive action to correct these deficiencies. The USCG, MARAD, and FAA have developed corrective action plans to implement the necessary changes to address these issues, improve cost information, reconcile data, and ensure that the integrity of the system is maintained. The Department's office of Financial Management has established a constructive and productive working relationship with the OIG to clarify issues, and reach agreement on actions that need to be taken in order to achieve an unqualified opinion on the Department's Consolidated Financial Statement. For the FY 1996 Consolidated Financial Statement, DOT has achieved an unqualified opinion regarding 60 percent of its funds, including the work DOT performs on the Highway Trust Fund and the Saint Lawrence Seaway Development Corporation.

DOT is working with the OIG to address the major problems that have been identified in prior audits of our financial statements recognizing that reliable financial information is needed to ensure that (1) Federal funds are properly managed, (2) performance is measured, and (3) reliable reports are prepared.

To help achieve its goal of a clean opinion in FY 1999 and FY 2000 for the Consolidated Financial Statement, the CFO's office has held high-level meetings with the OIG and all OA's, and developed specific and appropriate corrective action plans.

COMPLIANCE WITH EXISTING REQUIREMENTS

FEDERAL AVIATION ADMINISTRATION

Monitoring Airport Revenues

The use of airport revenues has received substantial attention from the OIG. To address some of the concerns raised, in February 1996, FAA issued "proposed policy and procedures concerning the use of airport revenue." Based on comments received, FAA issued a supplemental proposed policy in December 1996. FAA is currently reviewing and addressing the comments received, and developing a final policy. In support of this policy FAA issued a notice to all federally assisted commercial service airports requiring them to submit airport financial reports that detail payments of airport revenues to state and local governments and summarize annual revenues and expenses. In June 1997, FAA issued a proposed modification to the grant assurances that would require airport sponsors, as part of their required annual audit, to conduct a review and obtain an opinion regarding the appropriateness of the disposition of airport funds paid or transferred to the sponsor. These audit opinions will be reviewed by the FAA for consistency with Federal policies and procedures regarding the use of airport revenues.

Appendix IV

List of Acronyms

ACOE	-	United States Army Corps of Engineers
ATC	-	Air Traffic Control
BEA	-	Bureau of Economic Analysis
BTS	-	Bureau of Transportation Statistics
CFR	-	Code of Federal Regulations
CMAQ	-	Congestion Mitigation and Air Quality Improvement
DGPS	-	Differential Global Positioning System
DOD	-	Department of Defense
DOJ	-	Department of Justice
DOT	-	Department of Transportation
EPA	-	Environmental Protection Agency
FAA	-	Federal Aviation Administration
FARS	-	Fatality Analysis Reporting System
FHWA	-	Federal Highway Administration
FRA	-	Federal Railroad Administration
FTA	-	Federal Transit Administration
FY	-	Fiscal Year
GDP	-	Gross Domestic Product
GES	-	General Estimates System
GIS	-	Geographic Information System
GPRA	-	Government Performance and Results Act
GPS	-	Global Positioning System
GT	-	Gross Tons
HMIS	-	Hazardous Materials Information System
HPMS	-	Highway Performance Monitoring System
HRM	-	Human Resources Management
IMO	-	International Maritime Organization
ISTEA	-	Intermodal Surface Transportation Efficiency Act
IT	-	Information Technology
ITS	-	Intelligent Transportation Systems
IOCS	-	Integrated Operator Compliance System
JPO	-	DOT Joint Program Office
MARAD	-	Maritime Administration
MSP	-	Maritime Security Program
NAFTA	-	North American Free Trade Agreement
NAS	-	National Airspace System
NASS	-	National Automobile Safety Sampling
NBI	-	National Bridge Inventory
NDGPS	-	National Differential Global Positioning System

NEXTEA	-	National Economic Crossroads Transportation Efficiency Act
NHS	-	National Highway System
NHTSA	-	National Highway Traffic Safety Administration
NMFS	-	National Marine Fisheries Service
NOAA	-	National Oceanic and Atmospheric Administration
NPR	-	National Performance Review
NTSB	-	National Transportation Safety Board
OA	-	Operating Administration
OIG	-	Office of Inspector General
ONDCP	-	Office of National Drug Control Policy
OSDBU	-	Office of Small and Disadvantaged Business Utilization
OST	-	Office of the Secretary
P&F	-	Program & Financing
PAWSS	-	Port and Waterway Safety System
PMT	-	Person Miles Traveled
PTC	-	Positive Train Control
RRF	-	Ready Reserve Force
RSPA	-	Research and Special Programs Administration
SARA	-	Superfund Amendments and Reauthorization Act
SARMIS	-	Search and Rescue Marine Information System
SLSDC	-	Saint Lawrence Seaway Development Corporation
STB	-	Surface Transportation Board
TASC	-	Transportation Administrative Service Center
USCG	-	United States Coast Guard
USDA	-	United States Department of Agriculture
VISA	-	Voluntary Intermodal Sealift Agreement
VMT	-	Vehicle Miles Traveled
WAAS	-	Wide Area Augmentation System