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Overview

Transportation is intrinsically linked to the economic health and security of the nation. One needs only to look back at the historic role of canals, railroads, and the creation of the National Highway System to see that economic growth and security are dependent on a well-functioning, interconnected transportation system. As both an employer and a consumer of goods and services, transportation contributes significantly to the economy, and it is a key element in the production of every other product and service. It contributes about 11 percent of the U.S. Gross Domestic Product—nearly \$777 billion in 1995. It employs as many as one in twelve full-time employees in the United States—nearly 10 million men and women, providing various transportation services or manufacturing transportation-related equipment. And transportation provides strategic mobility for the military and national defense.

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 2000 Budget Request. The Performance Plan defines those performance indicators and goals we will use to measure our progress toward achieving 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 after the end of the fiscal year.

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. In that plan, citing the Department's enabling legislation from 1966, the purpose of the Department is described:

“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

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

MISSION STATEMENT

AServe America by ensuring a safe, fast, 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.A

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.

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. At the same time, many of our activities at DOT are internal ones -- like financial management, procurement, personnel -- 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.

How We Will Achieve Our Goals

The Department will achieve its Strategic Goals through its leadership role in U.S. transportation policy, operations, investment, and research. To influence results, DOT programs rely on a number of common interventions and actions. These include:

- < *Direct operations*, such as air traffic control, vessel traffic services, or military operations.
- < *Infrastructure investment*, such as highway and transit investment, and grants for airport improvement.
- < *Capital investment*, such as new Air Traffic Control system components, or Coast Guard vessels.
- < *Financial Tools*, such as loan guarantees for shipbuilding.
- < *Rulemaking*, such as equipment, vehicle or operator standards, or elimination of trade barriers.
- < *Enforcement* to ensure compliance, including inspections, investigations, and penalty action.
- < *Technology development and application*, such as fostering new materials and technologies in transportation, and transportation related research.
- < *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. Tax expenditures are also a significant tool by which the Federal government encourages transportation investment, but do not represent a key tool of intervention by DOT.

These are the broad areas of action DOT – and state and local governments – commonly use to bring about desired results. The Department’s corporate management strategies describe how our internal processes manage these actions to get results, ensuring efficient and effective program execution and strategic goal accomplishment. The most important new area of emphasis in our day-to-day management of programs and actions is our determination to become ONE DOT capable of acting as an integrated, purposeful leader to optimize transportation efficiency and effectiveness. Under the leadership of ONE DOT, people and goods will move quickly, safely and at less cost within an integrated system. To achieve our goals, we will direct our energy to ensuring that DOT’s organizational structure and operating practices are designed to support our interdependent and intermodal transportation system.

How We’re Organized

DOT employs about 100,000 civilian and military people across the country. The Department performs its many roles and exercises its leadership through an organization of ten operating administrations and bureaus, each with its own management and organizational structure:

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 Office of the Secretary of Transportation provides overall leadership and management direction, and the Transportation Administrative Service Center provides administrative support. The Office of Inspector General (OIG) and the Surface Transportation Board (STB), while formally a part of DOT, are decisionally independent by law and are not part of this plan.

How We Align Our Budget Resources with Our Goals

The budgeted resources of DOT support the broad range of DOT strategic goals. This illustrates a fundamental strength of DOT--that existing capacity delivers public value in multiple goal areas. 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 *disaggregated* in order to align with strategic and performance goals. Multiple program activities sometimes support multiple goals, and for efficiency some programs (such as administrative, legal, or facilities support) provide common support across all strategic goals. The allocation of resources (estimated obligations) to the five strategic goals is shown in Appendix II.

Tables showing the full allocation of *direct* program spending (such as direct safety spending, or direct mobility spending) are found at the beginning of each strategic goal section. This plan refers to *direct programs* as those *principally aimed at specific strategic goals*.

How We Present Our Performance Goals

In each strategic goal area, we present a discussion of the set of key performance goals we will use in FY 2000 to guide our activities and judge our results. These goals capture the major areas of DOT effort. They are not meant to replace the budgets and performance measures of our operating administrations, but rather to provide a top-level map of key activities and strategies that are planned in strategic goal areas. For each performance goal we provide:

- A general description of the problem – the reasons we act;
- The measure or measures we will use to judge our success, and the FY 2000 goal for each;
- Historical data – ten year baseline where data are available;
- The external factors that may present special challenges in achieving our goal;
- A cross-reference to common outcomes with other agencies; and
- FY 2000 activities, resources, and any significant legislation or regulations we propose.

Details on measurement data for each performance goal are provided in Appendix I, where we provide:

- The scope of the measure – what's included, what's not, and how calculations are made;
- The source of the data – specific internal or external sources, and data systems used;
- A description of the baseline used in determining the goal or target;

- Limitations of the data or the measure, and what we are doing about them;
- A description of any verification and validation processes used; and
- Other comments that may help clarify the measure or the data.

We have tried where possible to select performance measures that address activities 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.



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STRATEGIC GOAL: SAFETY

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

Safety has always been the most important of our strategic goals. Transportation enables the movement of people and goods, fueling our economy and improving our quality of life. However, any mode of transportation exposes people, property and freight to the risk of harm. That is a fundamental challenge DOT faces as we strive to improve the benefits of transportation while ever reducing the risk to health and well being.

The FY 2000 budget proposes over \$3.4 billion for direct safety programs to meet this challenge. This is a 4.3% increase over the FY 1999 level.

We Aim To Achieve These Strategic Outcomes:

- Reduce the number of transportation-related deaths.
- Reduce the number and severity of transportation-related injuries.
- Reduce the rate of transportation-related fatalities per passenger-mile-traveled and per ton-mile of total freight shipped (or vehicle miles traveled).
- Reduce the rate and severity of transportation-related injuries per passenger-mile-traveled and per ton-mile (or vehicle miles traveled).
- Reduce the dollar loss from high-consequence, reportable transportation incidents.
- Reduce the number of reportable transportation incidents and their related economic costs.

These strategic outcomes guide the development of our programs as well as the allocation of resources, and each will be measured directly.

Seventeen specific performance goals – reflecting the results of some of the key programmatic interventions within DOT– will be used to gauge our progress in advancing the Department’s outcome goals in transportation safety.

Each of these performance goals is described in more detail in this section.

PERFORMANCE GOALS:

Highway fatality and injury rates

Alcohol related highway fatalities

Seat belt use

Large truck fatality and injury rates

Air carrier fatal accident rate

General aviation fatal accident rate

Runway incursions

Operational errors and deviations

Recreational boating fatalities

Maritime search and rescue

Passenger vessel safety

Rail crash and fatality rates

Rail grade-crossing crash rate

Rail trespasser fatality rate

Transit fatality and injury rates

Pipeline failures

Hazardous material incidents

Fatalities:

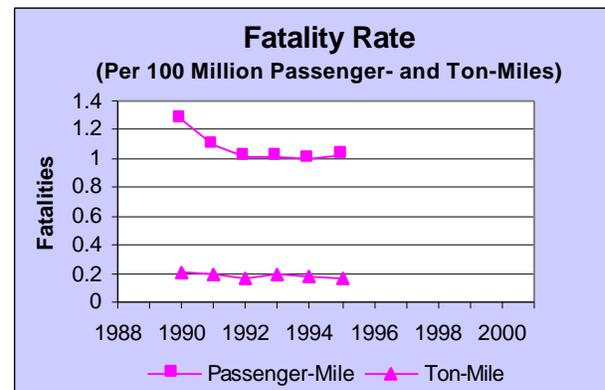
Transportation fatalities accounted for about 2% of all deaths in 1995. Ranked by years of potential life lost before age 65, transportation deaths rank third (behind cancer and suicide/homicide, and just ahead of heart disease) – reducing the overall life expectancy in America by nine and one-half months. For these reasons, the government takes action to minimize the health risks associated with the movement of people and goods while continuing to optimize flexible and accessible transportation.

Historically, the number of transportation fatalities has been declining, but growth in vehicle-miles-traveled (about 3% annually between 1985 and 1995) has contributed to an unacceptable up-turn in the number of highway fatalities in recent years. Highway fatalities account for about 94% of all transportation fatalities, and are the critical factor in this up-turn. DOT is working to lower the rate (or risk) of transportation fatalities overall in order to blunt the effects of growing transportation use. We face a big challenge in turning this trend around.



Looking beyond the recent trends, however, it is important to recognize the influence of DOT programs and policies in bringing the number of fatalities to their current level. Had the 1967 highway death rate persisted in 1996, *more than 130,000* people would have died from motor vehicle crashes instead of the 42,065 highway fatalities that actually occurred.

Economic prosperity and the way we live fuels growth in passenger-miles-traveled. As we consume more transportation, the only way to avoid more fatalities is to lower the *rate* of fatalities – the risk we face when we enter the transportation system. Fatality rates, then, are often a primary measure used by managers to assess program results.

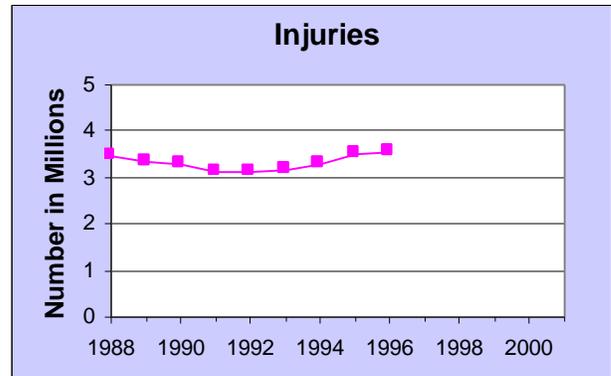


But after years of steady improvement, deaths per 100 million passenger miles have remained essentially constant from 1992 to 1995. Achieving further reductions in fatality rates will require changes in personal behavior (such as seatbelt use, reduction in alcohol-related crashes, or consumer choice of safety in transportation) and improved transportation technologies. Strategies in these areas will be discussed in the performance goals that follow.

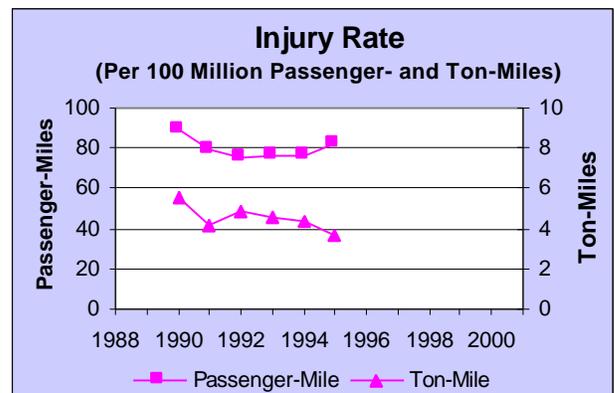
The rate of fatalities per ton-mile of freight, on the other hand, continues to follow a gradual downward trend. Part of this gain can be attributed to steady improvements in the truck and rail transportation sectors, as well as to the proportionally larger growth of inter city freight (the denominator of this measure) travelling by rail, which has a lower fatality rate.

Injuries:

Transportation injuries are a significant burden on individuals and on our society, affecting over 3.5 million people annually, as well as millions of families. Although injuries rank below fatalities in severity, they extract a terrible cost from our society in hospitalization and medical costs, lost productivity, and – not least -- pain and suffering. These costs aren't borne just by the affected parties, either. An estimated 24% of inpatient hospital costs are paid by Medicare, Medicaid, and other government sources. For all of these reasons, the government acts to minimize the risk of injury in our transportation system.



Like overall fatalities, this trend has been influenced by the steady growth in personal travel, and is dominated by trends in highway injuries. Transportation injuries are also related to our success in reducing transportation fatalities. Advances in vehicle design, passenger egress, and other safety improvements increase crash survivability proportionally more than they eliminate injury. Also, improvements in emergency response and health care have contributed to the increase in crash survivability. For these reasons, we expect injury numbers to be more difficult to hold steady or reduce. In this light, the goal of the Department is also to reduce the severity of injuries. For highway injuries, the best way to do this is to protect vehicle occupants from major trauma through improved equipment and seatbelt use. Some information on injury severity is captured in each mode of transportation, and is used where possible. Further work is ongoing to refine the data in this area.



Also like the transportation fatality rate, the injury rate has become essentially constant after several years of decline (although the most recent datum may indicate an upturn). With constant risk, the overall number of injuries has begun to climb with increasing passenger travel. Renewing a downward trend will be complicated as fatalities are prevented through improved occupant protection and egress, potentially contributing to injury numbers. The greatest influence on this trend will come from strategies to change personal behavior (such as reducing drunk driving and consumer choice of safety in transportation) and applying new technologies to *avoid* crashes, such as intelligent transportation systems, improved navigation and control systems, and improved transportation equipment performance.

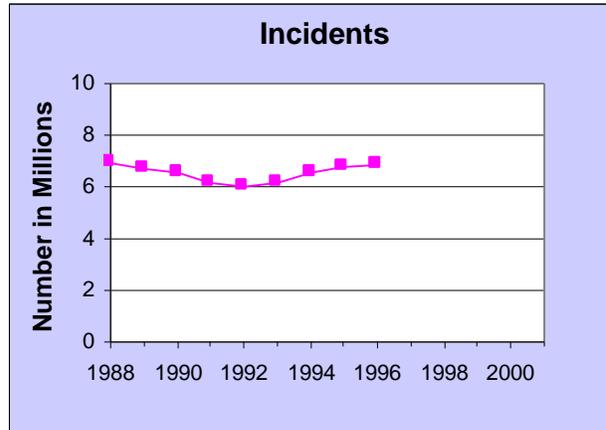
The rate of transportation injuries per ton-mile of freight has been generally downward in recent years. As with the fatality rate per ton-mile of freight, this gain can be partially attributed to steady improvements in the truck and rail transportation sectors, as well as the proportionally larger growth

of inter city freight (the denominator of this measure) travelling by rail, which has a lower injury rate.

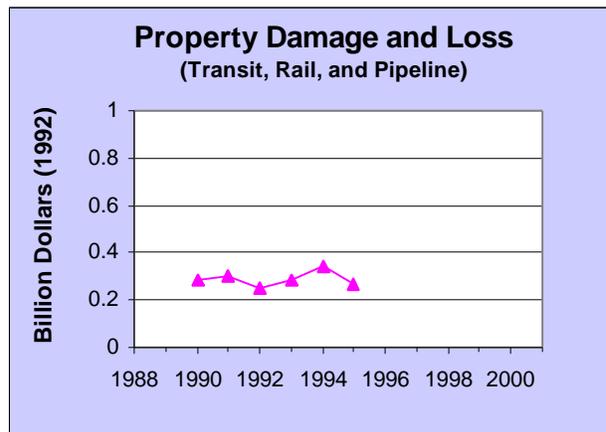
Transportation Incidents and Their Cost:

Transportation incidents (crashes, system failures, spills, releases, etc.) are precursors to injuries and fatalities, and have an economic cost independent of the human cost. As such, they provide another key indicators for managers. Reducing the number and rate of crashes is generally the most beneficial intervention to reduce fatalities and injuries. For this reason, the government acts to reduce the numbers and rate of incidents associated with the movement of people and goods.

The trend in transportation incidents is climbing at a faster annual rate than either fatalities or injuries. Again, this appears to reflect our growing consumption of transportation, particularly highway travel. It may also serve to highlight the effectiveness of many programs aimed at improving survivability and injury reduction when a crash occurs. We stand the best chance of reducing the number and rate of transportation incidents by influencing human behavior (such as human factors in transportation operation, and reducing alcohol related incidents) and through technology development and application within transportation systems.



Safety of people is the Department’s primary focus, as fatalities and injuries represent a social and economic cost of transportation that the government acts to minimize. However, the economic cost of property damage and loss due to incidents provides a complementary indicator of the value and impact of transportation safety initiatives.



The Department is developing methods to better track property damage and losses associated with high-cost, high-consequence transportation incidents. Initially, this measure includes transit, rail, and pipeline losses. Further work will be done in this area to include other modes of transportation, but for the near future DOT intends to monitor this information only.

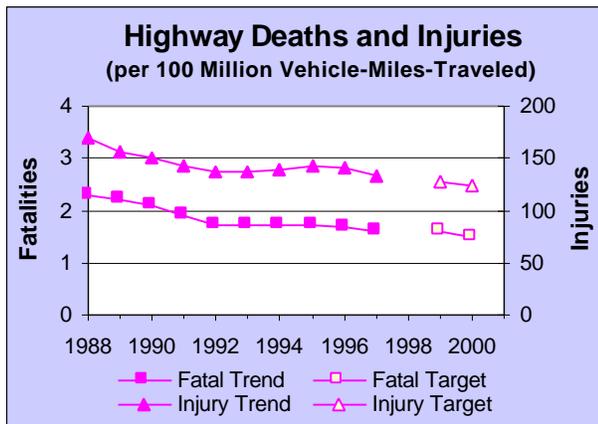
DOT Performance Plan FY 2000

		FY 1998	FY 1999	FY 2000
		Actual	Estimated	Request
DIRECT SAFETY PROGRAMS				
Estimated Obligations (FY 1998-2000), in millions				
1/29/99				
OFFICE OF THE SECRETARY		0	0	1
TPR&D	(Safety projects)	0	0	1
COAST GUARD		866	914	887
Search and Rescue	Operations	347	328	340
	Acquisition	39	76	43
	Research	4	2	3
Marine Safety	Operations	386	385	400
	Acquisition	29	55	32
	Research	6	4	5
Boating Safety Grants		55	64	64
FEDERAL AVIATION ADMINISTRATION		986	966	1,012
Operations	Regulation & Certif., Comm. Space Tr	602	636	675
Facilities & Equip.	(Safety-related projects)	244	191	208
Research	Aircraft Safety Technology	49	35	40
	Human Factors & Aviation Med.	23	27	26
	Innovative/Cooperative research	2	1	1
Airport Grants	(Safety-related work)	66	76	62
FEDERAL HIGHWAY ADMINISTRATION		365	841	890
Fed-aid Highways	STP 10% Safety Set-aside	210	554	565
	Seat Belt Grants	-	72	83
	Safety Incentive Grants	18	57	72
	Highway Safety Grants	3	2	-
	Admin (Motor Carrier Safety)	51	55	55
	RABA, net (est. distribution)	-	-	10
Motor Carrier Safety		84	100	105
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.		338	384	415
Operations & Research		154	184	208
Highway Traffic Safety Grants		184	200	207
FEDERAL RAILROAD ADMINISTRATION		86	104	131
Safety & Operations	(Safety-related portion)	57	67	71
Railroad R&D		22	26	21
NGHSR	(Safety-related portion)	7	11	4
Rail Initiatives (Tr. Fund)	H/S Crossings, PTC, NDGPS	-	-	35
FEDERAL TRANSIT ADMINISTRATION		3	2	5
Research & Technology	(Safety-related)	3	2	5
RESEARCH & SPECIAL PROGRAMS ADMIN.		60	64	74
Hazmat Safety, R&D, Program Support		27	29	32
Emergency Prep Grants		7	8	14
Pipeline Safety		26	27	28
TOTALS		2,705	3,275	3,416

HIGHWAY FATALITY AND INJURY RATES

Why We Act: 41,967 Americans died in 1997 and 3.4 million were injured in motor vehicle crashes, taking a heavy personal toll on American families and costing more than \$165 billion in medical costs. Highway crashes account for 94 percent of all transportation-related fatalities and 99 percent of transportation injuries. This is the leading cause of death for ages 6 through 27.

DOT's goals: Reduce the rate of highway-related fatalities per 100 million vehicle miles traveled (VMT) from 1.7 in 1996 to 1.5 in 2000. Reduce the rate for injuries from 141 in 1996 to 124 per 100 million VMT in 2000.



Special Challenges: Vehicle travel is expected to grow at approximately 2.2 percent per year. In addition, the highest risk population groups -- older drivers and ages 15 to 24 -- will grow at faster rates than the overall population.

Strategies: DOT will reduce highway fatalities and injuries by: 1) reducing the occurrence of crashes, and 2) reducing their consequences. NHTSA will focus especially on reducing the number of impaired drivers and increasing seatbelt usage (see separate goals related to these issues). DOT will also continue to make highways safer by improving the safety of the roadway itself, increasing the safety of rail-highway grade crossings, improving the safety of vehicles, and encouraging people to shift from highways to safer forms of travel.

Other Federal Programs with Common Outcomes: All Federal agencies are involved in the President's initiative to increase seat belt usage. NHTSA and HHS work together on several public health issues such as drinking and driving, child safety, and emergency medical services.

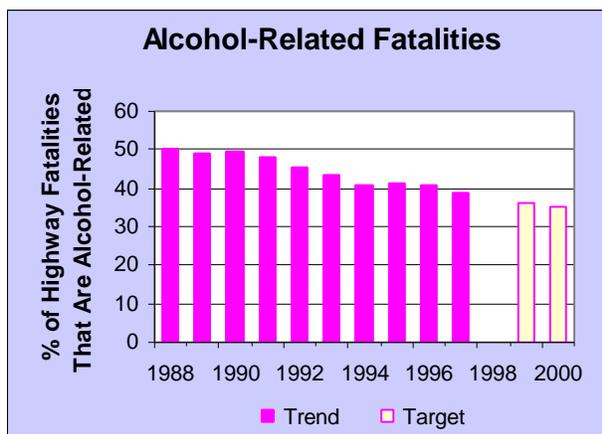
Activities and Initiatives in FY 2000 (including estimated obligations):

- NHTSA will focus on preventing crashes through behavioral programs, on lessening the severity of crashes by improving vehicles, and on emergency response capabilities – the human, vehicle and environmental factors that influence the crash event. Special emphasis will be placed on efforts to reduce injuries to children. (\$429 million).
- Emphasis will be placed on seatbelts and alcohol programs, as well as on highway-rail crossing safety. These are discussed as separate goals in this plan.
- NHTSA will provide special focus on high-risk groups. This will include research on how to maintain the elderly's mobility needs while addressing driver safety. Youth initiatives will focus on both reducing drinking-and-driving and increasing youth driving experience through graduated licensing initiatives.
- FHWA highway safety construction and highway-rail grade crossing safety programs (\$565 million) will improve roadway designs and remove roadway hazards. FHWA will focus safety research to address run-off-the-road and pedestrian and bicyclist safety.
- FHWA will improve safety management processes, and will work with industry and NHTSA to test stand alone Intelligent Vehicle Initiative (IVI) technologies, such as road departure warning systems, and begin development of integrated IVI technologies.
- Regulatory initiatives in FY 2000 will include: vehicle standards to improve head impact protection and fuel system integrity; new vehicle safety information for consumers on frontal and side impact protection, braking performance, rollover and antilock brakes. NHTSA will also evaluate safety issues for powered hand controls for disabled drivers.

ALCOHOL-RELATED HIGHWAY FATALITIES

Why We Act: Driving while impaired is the most frequently committed violent crime in America. Alcohol-related fatalities account for over 40% of all highway fatalities. While down from 25,000 in 1982, there were still 16,189 alcohol-related fatalities in 1997. Alcohol is the single biggest cause of fatal crashes. It takes a heavy, human toll – especially among young people – and it represents a serious breach of responsibility by those who drink and drive.

DOT's goal: Reduce the percentage of highway fatalities that are alcohol-related to less than 35% in 2000, from a 1996 baseline of 40.9%.



Special Challenges: The magnitude of the drinking-and-driving problem is demonstrated by 27.4% of college students reporting that they drink and drive. There is also growing evidence that the use of drugs (a corollary problem) by young people is on the rise.

Strategies: DOT will reduce highway fatalities associated with drinking and driving by developing and implementing effective countermeasures designed to reach high risk drinking drivers and focusing on youth and young adults. DOT will work with state and local partners to test new programs to get repeat offenders off the roads and get the “don’t drink and drive” message out to the highest risk populations.

Other Federal Programs with Common Outcomes: NHTSA works with HHS, ONDCP, and the Justice Department to curb the use of alcohol and illegal drugs by minors and fight the drinking and driving problem. NTSB investigates significant crashes and helps to provide information on causes of crashes and suggest potential solutions.

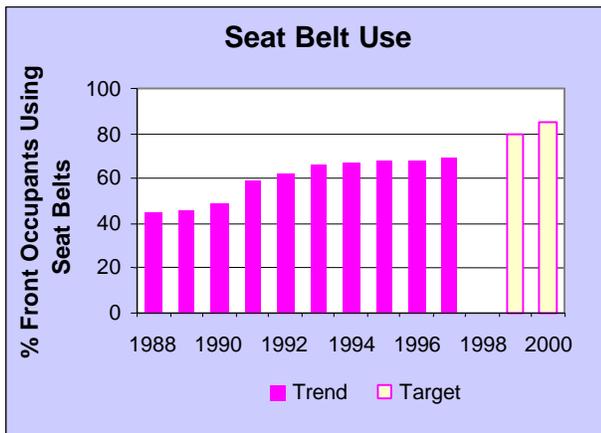
Activities and Initiatives in FY 2000 (including estimated obligations):

- In 2000, NHTSA’s impaired driving programs (\$11.1 million) will focus on reducing alcohol and drug use associated with driving. Programs include ongoing efforts in:
 - public information and education activities to develop and test new educational materials and methods for reaching the public;
 - outreach to public and private organizations, employers, legal professionals, and youth groups to establish cooperative programs that use their influence to reduce drinking and driving;
 - promoting legislative changes in the states that increase penalties for drunk driving, establish .08 percent BAC laws, and implement graduated licensing; and
 - developing increased enforcement of impaired driving laws and swift and sure penalties in the states.
- A new initiative will focus on drinking and driving by high-risk groups including 21 to 34 year olds, repeat offenders with high BAC, and youthful drivers. The initiative will develop new strategies and interventions to reach these groups.
- TEA-21 provides a new grant program focusing on reducing the incidence of intoxicated drivers. \$72 million is provided in FY 2000 for an incentive grant for states’ passage of more strict drunken driving laws (i.e., .08 percent BAC)

SEAT BELT USE

Why We Act: Over 30% of Americans still don't wear seat belts, compared to (for example) only 9% in the United Kingdom and 11% in Canada. It is estimated that seat belts save 9,500 lives in America each year. In fact, properly used lap/shoulder belts reduce the risk of fatal injury to front seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%. For light truck occupants, seat belts reduce the risk of fatal injury by 60% and moderate-to-critical injury by 65%. Studies have suggested that increasing nationwide belt usage to 85 percent would save about 4,200 lives, 103,000 injuries and \$6.7 billion per year.

DOT's goal: Increase seat belt usage nationwide to 85 percent by 2000 and 90 percent by 2005. Usage in 1997 was 69 percent.



Special Challenges: Vehicle travel is expected to grow at approximately 2.2 percent per year, increasing the exposure of people to vehicle crashes. While DOT has succeeded in convincing the majority of the population to buckle up – first surpassing 50% in 1991 – the remainder will be more difficult to convince.

Strategies: DOT will work with the states and communities to develop and demonstrate innovative programs for educating people to buckle up, and will encourage more states to pass “primary” seat belt laws that allow law enforcement officers to write citations whenever they observe unbelted drivers or passengers.

Other Federal Programs with Common Outcomes: The President has established government-wide initiatives to increase seatbelt usage by Federal employees and persons using Federal facilities. These initiatives also focus on assuring that children are buckled up in child safety seats in the back seat as a means of reducing child fatalities. NHTSA works with HHS and others to help promote seat belt use.

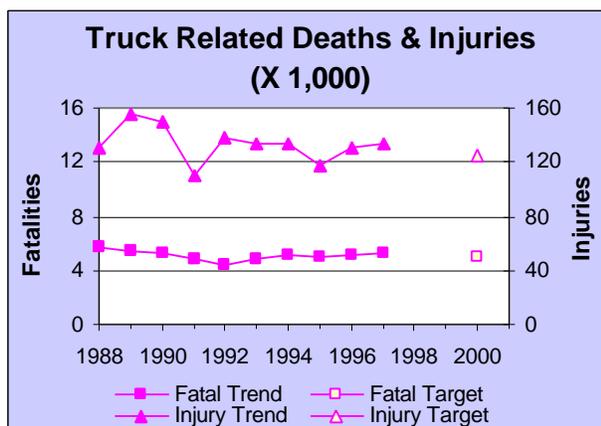
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Buckle Up America program (\$11.4 million), to implement the President's initiative to increase seat belt use, will focus on expanding activity in strategic areas, including:
 - public information and educational activities designed to develop and disseminate material to various media and groups;
 - outreach to specifically targeted groups including national organizations, and business and youth groups;
 - evaluation, training, and development of new programs to increase the effectiveness of the safety message to buckle up; and
 - preparation and distribution of materials nationwide carrying the Buckle Up America message.
- Two initiatives will be expanded, focusing on outreach and training, and assistance to the states will be expanded to increase media coverage of the seat belt issue and events.
- The Buckle Up America program will be expanded throughout DOT, with modal activity funded by the modes, to use the diverse partners of each transportation mode as a catalyst for increasing belt usage. For example, many airlines now encourage passengers to buckle up on their drive from the airport.
- TEA-21 provides a new grant program focusing on increasing seatbelt usage. \$83 million is provided in 2000 for grants to the states to increase seat belt usage.
- Several regulatory initiatives are being pursued to help meet this goal, including a number designed primarily to reduce the number of infants and children killed in vehicle crashes.

LARGE TRUCK-RELATED FATALITIES AND INJURIES

Why we act: Motor carrier safety is a critical component of the overall highway safety program--more than 5,300 Americans died, and 132,000 were injured in large truck crashes in 1997. The number of fatalities in large truck crashes per 100 million miles of truck vehicle-miles-traveled (truck VMT) has declined from 4.3 in 1986 to 2.8 in 1997 – a drop of 35% -- but since 1992 the rate has remained nearly constant.

DOT's goals: Reduce the number of fatalities involving large from 5,142 in 1996 to 4,934 or fewer in 2000. Reduce the number of injuries involving large from 130,000 in 1996 to 125,000 in 2000.



Special Challenges: The population of heavy trucks transporting goods and services, i.e. motor carriers, has expanded from 190,000 carriers of record in 1989 to 425,000 today, placing new demands on Federal and State safety resources. The motor carrier industry has now become too large and diverse to use untargeted enforcement mechanisms alone to ensure compliance.

Strategies: The FHWA will target enforcement on motor carriers posing the highest risk – those with a history of poor performance. FHWA will also build new partnerships to focus greater resources on motor carrier safety. FHWA and NHTSA will promote new technologies (in information systems and truck equipment) to improve large truck safety.

Other Federal Programs with Common Outcomes: Research on the effects of work and rest schedules on driver performance is coordinated with DOD and NIH. Design of a comprehensive border clearance program for motor carriers is coordinated with the Departments of Treasury and Justice.

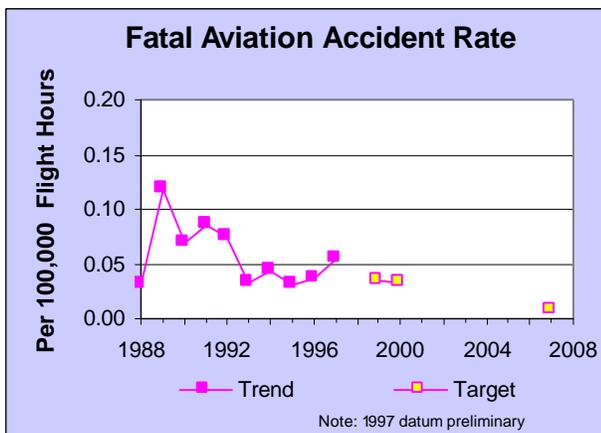
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Motor Carrier Safety Assistance Program (MCSAP) will support State commercial vehicle programs and improve the information systems and analysis needed to better target enforcement. The resulting state enforcement will include more annual roadside inspections and annual on-site company reviews. All states will submit performance-based plans, targeting federal resources to achieve greatest crash reduction. Special set aside funds will target border enforcement and other high priority safety areas. (\$105 million in FY2000).
- FHWA will use the authority provided in TEA-21 to issue stiffer penalties and shut down any motor carrier considered a serious safety risk.
- FHWA will work with border states to increase inspection activities near ports of entry and along major corridors leading from the ports. Also, FHWA will improve data exchange with the Mexican government on the safety record of Mexican motor carriers.
- NHTSA and FHWA will work to evaluate new braking technology (such as electronically controlled braking systems and on-board brake monitoring), and technology aimed at lessening the impact of driver fatigue on safety.
- FHWA will expand and improve the Performance Registration Information System Management (PRISM) program, which ties vehicle registration privileges to a carrier's safety record. Under this program, chronically unsafe motor carriers can lose their license plates if they are unable or unwilling to improve their safety performance.
- NHTSA will publish rules on braking performance standards for heavy trucks.

AIR CARRIER FATAL ACCIDENT RATE

Why we act: Commercial aviation is one of the safest forms of transportation. But when passengers board an airplane, they give up personal control and face an unfamiliar risk. While fairly rare, aviation accidents can have catastrophic consequences, with large loss of life. Despite the good safety record for air carriers, the public demands a high standard of safety, and expects continued improvement.

DOT's goal: Reduce the fatal aviation accident rate for commercial air carriers from a 1994-1996 baseline of 0.037 fatal accidents per 100,000 flight hours. The 2000 target is 0.033 per 100,000 – with the reduction to be achieved in 6 key areas outlined in the Safer Skies Agenda.



Special Challenges: The fatal accident rate is very low, as most of the major causes of accidents have been identified, and FAA has either issued regulations or provided system improvements to reduce the accident risk.

Strategies: DOT will continue to work with the aviation community and other governmental agencies to identify root causes of accidents, and intervene accordingly to prevent potential causes of future accidents. FAA's "Safer Skies" effort in the commercial aviation area includes the following six causal factors: controlled flight into terrain, loss of control, uncontained engine failure, runway incursion, approach and landing, and weather. The areas of data analysis and human factors, as well as issues associated with cabin safety, are part of all these categories.

Other Federal Programs with Common Outcomes: FAA and NASA are both committed to a goal established by the White House Commission on Aviation Safety and Security: an 80% decrease in the aviation fatal accident rate by 2007.

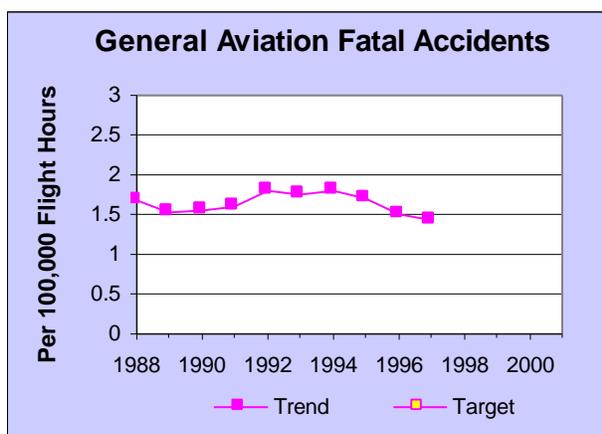
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA's "Safer Skies" effort with the aviation industry in FY 2000 will feature completion of causal analysis for the areas of loss of control and weather accidents. In addition, safety interventions identified in 1999 will be initiated for controlled flight into terrain, runway incursion, uncontained engine failure, and approach and landing. (\$5.2 million). FAA targets a 15% reduction in fatal accidents in the six areas of the "Safer Skies" initiative, which will be the key factor in reducing overall fatal accident rate.
- FAA's regulation and certification program establishes aviation safety standards, monitors safety performance, conducts aviation safety education and research, issues and maintains aviation certificates and licenses, and manages rulemaking. (\$668 million)
- With weather a factor in 40% of aviation accidents and 50% of aviation fatalities, FAA is investing in an Integrated Terminal Weather System (ITWS) and the Weather And Radar Processor (WARP). These systems will give controllers instant access to current weather data. (\$36.7 million)
- FAA's aviation medicine research program is working to determine the impact of fatigue, developing fatigue counter-measures, and developing improved cabin evacuation standards. (\$5 million)
- FAA's research in safety technology supports the regulatory program that sets safety standards for aircraft design and maintenance. Areas studied include fire resistant materials for cabin interiors, fire detection equipment, inspection and maintenance of aging aircraft, and prevention of engine failures. (\$39.6 million.)

GENERAL AVIATION FATAL ACCIDENT RATE

Why We Act: Aviation accidents overall have caused about 1,000 deaths a year in recent years, with the majority of these in General Aviation (GA). These public, private and corporate aircraft provide a wide range of services – like cropdusting, firefighting, law enforcement, news coverage, sightseeing, industrial work, and corporate transportation – in addition to personal and recreational flying. GA is an important element of the U.S. transportation system, and the U.S. economy. Between 1982 and 1997, the general aviation fatal accident rate declined 29%. But there is still a substantial risk in this area.

DOT's goal: Reduce the general aviation fatal accident rate from a 1994-96 average of 1.67 per 100,000 flight hours. (Specific target to be developed by June 1999).



Special Challenges: General aviation comprises a diverse set of aviation activities, ranging from student training to balloon rides and operation of large fleets of sophisticated, multi-engine business jets. Some elements of general aviation operate in hazardous environments such as agricultural application, external load carriage, fire fighting and power line patrol. The level of risk is inherently higher for these elements.

Strategies: General aviation is one of the three primary focus areas of the Safer Skies Initiative, announced by the Administrator in 1998. Some key identified causal factors that are areas of attention for improvements are:

- Aeronautical decision-making – when a pilot does not make the best safety decision about a flying or non-flying situation.
- Loss of control – situations in which a pilot should have maintained or regained control but did not, often the result of a pilot's attention diverted between flying the aircraft and other

applications, such as banner towing or law enforcement.

- Weather – most often involving Visual Flight Rules flight into Instrument Meteorological Conditions.
- Controlled Flight into Terrain – when an aircraft under the control of the pilot is flown into terrain, water or obstacles with inadequate pilot awareness of the impending disaster.
- Survivability – to increase occupant survivability in the event of an accident.
- Runway incursions – occurrences at airports involving an aircraft, vehicle, person or object on the ground that creates a collision hazard or results in loss of separation with an aircraft.

Other Federal Programs with Common Outcomes: NASA, in partnership with DOT, is conducting research on general aviation safety programs, including basic data gathering on accident causes, stability of aircraft design, and fuel standards for small piston engine powered aircraft.

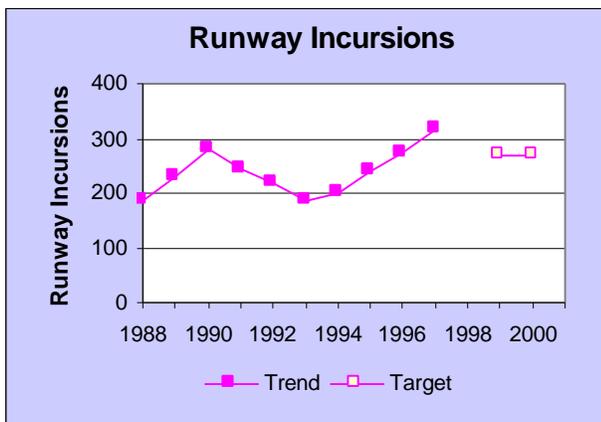
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA's Aviation Safety Inspectors conduct safety seminars, investigate accidents, and enforce safety regulations. They specialize in the following areas: operations, maintenance, and avionics.
- FAA's "Safer Skies effort with the aviation industry will feature completion of causal analysis for loss of control, survivability, and aeronautical decision making.
- Intervention strategies identified in 1999 for prevention of controlled flight into terrain, weather-related accidents and runway incursion will be initiated in FY 2000. (\$1.7 million)

RUNWAY INCURSIONS

Why We Act: Runway incursions create dangerous situations that can lead to serious accidents. A runway incursion occurs when an aircraft, ground vehicle or person enters or crosses a runway that is in active use for takeoffs or landings, without adequate separation from aircraft cleared to use the runway. The largest aviation disaster in history (a non-U.S. accident at Tenerife) resulted from a runway incursion. Reducing the number of runway incursions will lessen the probability of accidents that potentially involve fatalities, injuries and significant property damage.

DOT's goal: Reduce the number of runway incursions to a level 15% below a 1997 baseline of 318 incursions. The FY 2000 target is at or below 270 incursions.



Special Challenges: Growth in aviation operations has averaged over 1% per year. With an increased tempo of operations, the risk of incursions increases. Runway incursions are most likely to occur at complex, high volume airports. These airports are characterized by multiple parallel or intersecting runways; multiple taxiway/runway intersections; complex traffic patterns; and the need for traffic to cross active runways.

Strategies: DOT aims to reduce incursions by providing technologies that use multiple sensors including ground radars and automatic position reporting systems to detect the location of aircraft and vehicles, airport surface navigation aids, and enhanced software for detecting conflicts between aircraft on the runway and approaching aircraft, and signals at key points to warn pilots and ground equipment operators not to cross active runways.

Other Federal Programs with Common Outcomes: DoD has developed software used for detection of aircraft and other vehicular movement based on radar images to reduce runway incursions at military airports.

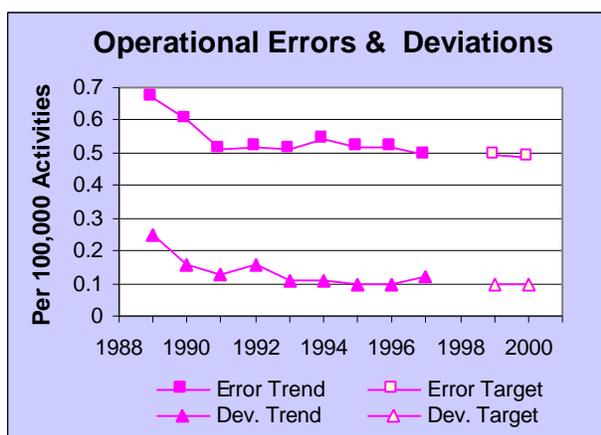
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA's approximately 3000 controllers assigned to the tower cab at airports have a major role in preventing runway incursions. They provide specific instructions to pilots and ground crew on when aircraft and vehicles can be moved or must stop and wait for other aircraft and vehicles to clear the runway or taxiway.
- FAA is currently doing research to develop detection devices that warn controllers of potential incursions and warning devices for both pilots and controllers to prevent incursions (\$3.1 million). The results of this research are shared with FRA, which is doing related research on sensors to detect movement of rail cars.
- FAA will upgrade Airport Surface Detection Systems and provide support for the software upgrades at the 40 airports with surface detection systems. (\$14.1 million).
- FAA will begin deploying the Surface Management Advisor – a computer display that makes it easier for controllers, airlines and airport operators to share information on aircraft taxiing and better manage airport ground traffic (\$6 million).

OPERATIONAL ERRORS AND DEVIATIONS (AIR TRAFFIC)

Why We Act: One of the fundamental principles of aviation safety is “separation” – the need to maintain a safe distance from other aircraft, terrain, obstructions, and certain airspace not designated for routine air travel. Air traffic controllers employ separation rules and procedures that define separation standards for many different environments where aircraft operate. Pilots flying under visual flight rules operate under a “see and avoid” policy. Pilots using instrument procedures rely on air traffic controllers’ instructions to guide them. When aircraft are allowed to violate these separation standards, an operational error occurs. When aircraft are allowed to penetrate airspace that has not been pre-coordinated for that aircraft’s use, an operational deviation occurs.

DOT’s goal: Reduce the rate of operational errors and deviations by 10% from the 1994 base-lines of 0.54 errors and 0.11 deviations per 100,000 facility activities. The 2000 target rates are 0.486 for errors and 0.097 for deviations.



Special Challenges: Operational errors and deviations are a result of human error. Studies have shown that five factors are significant: traffic management relationships, quality assurance programs, training, management involvement, and control room environment.

Strategies: One of the major approaches to reducing operational errors and deviations is to provide a common level of understanding of procedures and policies among controllers and users. Training for controllers and pilots is central to this and will continue to be the focus of Air Traffic service safety strategy. Technological improvements such as deployment of modern displays, new software automation and decision tools, and improved communication systems will support better determination of aircraft location and resolution of potential conflicts between aircraft.

Other Federal Programs with Common Outcomes: NASA is researching software automation tools.

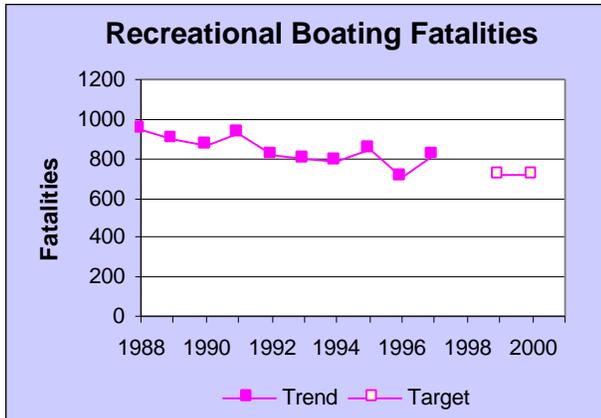
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA provides regular training for controllers to maintain their skills in dealing with complex air traffic situations. Each operational facility has computer work stations and taped air traffic scenarios to train qualified controllers.
- FAA will conduct special evaluations in 2000 and provide observations to regional quality assurance staffs to assist in developing measures to prevent operational errors and deviations.
- FAA is developing and improving several automation tools to assist controllers in maintaining safe separation in high density air space. The Air Traffic Management Program is simultaneously replacing hardware and developing tools such as Final Approach Spacing Tool and Center/TRACON Automation Tool. (\$101.8 million)
- Human Factors research will examine the factors that affect controller performance and methods to improve performance. (\$11.2 million)

RECREATIONAL BOATING FATALITIES

Why We Act: Recreational boating is a popular activity in America, but one with special risks. There are about 20 million recreational boats in the U.S. – representing about 78 million boaters -- and people operate them in an often remote and unforgiving environment. As a result, about 800 people lose their lives every year, usually by drowning.

DOT's goal: Reduce recreational boating fatalities to 720 (or fewer) fatalities in 2000. The 1997 baseline is 819 fatalities.



Special Challenges: A growing US population and a growing US economy leads to growth in the number of recreational boats. Success of our efforts is, in part, dependent on the effectiveness of many individual state-run education and enforcement programs. Also, boater behavior is often difficult to influence – for example, boaters tend to decline to wear life jackets, ignoring the risks associated with the nature of their boating activity.

Strategies: DOT aims to reduce boating fatalities by: developing and enforcing compliance with safety standards for recreational boats and equipment; promoting the wearing of personal flotation devices; improving boater behavior, skills, and knowledge; intensifying enforcement of drunk boating statutes; and conducting Coast Guard Auxiliary courtesy examinations and boating education courses to promote safe operation and use of safety equipment.

Other Federal Programs with Common Outcomes: The U.S. Army Corps of Engineers and the National Park Service manage many recreational lakes that are used by boaters.

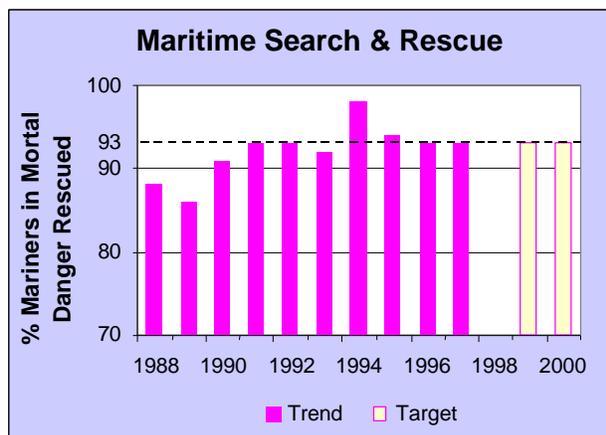
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Boating Safety program will provide funds to the states for support of their education, outreach, and law enforcement activities. This program, reauthorized in TEA-21, is funded at \$64 million for FY 2000 (the same as in FY 1999).
- Within TEA-21 funding levels, the Coast Guard Recreational Boating Safety program will work to develop safety regulations in cooperation with manufacturers and standards organizations, investigate consumer complaints related to non-compliance with standards, and monitor manufacturers' equipment recalls.
- The response capability of the Coast Guard will be expanded to better meet the full demand of heavy weather search and rescue in the regions where most boating occurs (see separate goal for Search and Rescue).
- Search and rescue boat crews will be provided a higher level of personal safety to improve their ability to successfully rescue boaters in distress.
- The Coast Guard Auxiliary will provide expanded capability to conduct courtesy examinations of recreational boats, and to provide boats and aircraft to assist with maritime search and rescue.
- The Coast Guard will also provide oversight and regulation of regattas and marine parades to help assure the safety of the boating public.

MARITIME SEARCH AND RESCUE

Why We Act: Over 50,000 ships and boats are reported in distress or in urgent need of help every year in the U.S. Operating in a remote and often very harsh environment, many mariners lose their lives, many more are injured, and billions of dollars of property are at risk. Since the 1700's, mariners have depended on the Coast Guard (or its predecessor, the U.S. Lifesaving Service) to provide rescue services in time of need.

DOT's goal: Save at least 93% of all mariners, and at least 80% of all property, reported in imminent danger.



Special Challenges: Several factors compound the difficulty of successful response: untimely notification to the Coast Guard of distress, incorrect reporting of the distress site location, severe weather conditions at the distress site, and severe property damage.

Strategies: DOT aims to save as many lives and as much property as possible by operating fleets of cutters and aircraft, and rescue stations; using search sensors and search planning tools and tactics; and requiring (by regulation) mariners to use survival gear, distress notification, alerting, and locating equipment.

Other Federal Programs with Common Outcomes: The US Navy and Air Force have search and rescue capability, primarily for their own vessels and aircraft. The Air Force is the lead agency for land-based search and rescue; the Coast Guard is the lead for maritime search and rescue. Each assists the other depending on resources available for a particular search effort. All these agencies cooperatively develop and use a national search and rescue manual.

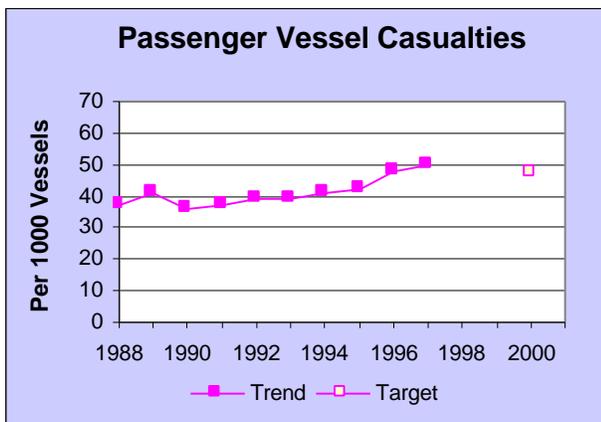
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard operates and maintains fleets of cutters and aircraft, along with rescue stations along the coasts, for immediate response to mariners in distress (\$340 million, \$12 million over FY 1999). In FY 2000, the Coast Guard will provide search and rescue boat crews a higher level of personal safety to improve their ability to successfully rescue boaters in distress.
- In FY 2000, the Coast Guard will expand its search and rescue capability, by increasing the fleet of motor lifeboats for heavy weather search and rescue, and acquire more capable sensors for use on vessels and aircraft (\$43 million).
- In FY 2000, Coast Guard will undertake R&D to improve search planning and sensor technologies. (\$3 million, about the same FY 1999).
- In FY 2000, Coast Guard will continue modernization of the National Distress System to improve distress notification communications. (\$16 million)
- The Coast Guard provides 24-hour watches at regional Rescue Coordination Centers, and manages the worldwide Automated Mutual Vessel Assistance and Rescue program – which provides position and communications information on vessels that are available to assist others at sea.
- Coast Guard will seek to improve requirements for vessels to carry distress location equipment and survival gear.
- The Coast Guard Auxiliary – a volunteer organization associated with the Coast Guard – will provide expanded search and rescue capability to assist the regular USCG.

PASSENGER VESSEL SAFETY

Why We Act: Each year over 60 million passengers are carried aboard cruise ships, ferries, charter fishing boats, sightseeing boats, and other commercial passenger vessels in the U.S. Collectively, these vessels provide one of the safest forms of transportation today. But major disasters like the *Titanic* also provide historical reminders of the inherent risk in water transportation. As newer vessels are put into use with much higher passenger capacities, the risk of a major loss of life increases too. Recent trends in “precursor” accidents – fire, capsizing, flooding, collision, sinking, grounding – indicate that while fatalities are very low, the underlying risk are still very real.

DOT’s goal: Reduce the number of high-risk passenger vessel casualties to 47 per 1000 vessels in 2000. The 1996 baseline is 48 per 1000.



Special Challenges: The operating environment at sea is often remote and unforgiving, and human factors play a significant role in most maritime accidents. The technological advancement of passenger vessels increases the complexity of their operation and maintenance. Also, many passenger vessels (particularly cruise ships operating from U.S. ports) are foreign flag vessels, subject to foreign and international standards.

Strategies: The Coast Guard develops and enforces safety standards for passenger vessel design, construction, equipment, operation, manning, and maintenance. USCG also certifies the officers and crew. In FY 2000, special attention will be given to human factors, a streamlined and risk-based inspection program, and international standards.

Other Federal Programs with Common Outcomes: The National Transportation Safety Board investigates major maritime accidents; USCG participates in these investigations, and independently investigates less serious accidents to determine cause and evaluate trends.

Activities and Initiatives in FY 2000 (including estimated obligations): The Coast Guard will:

- Manage a comprehensive Marine Safety program (\$437 million).
- Develop risk-based programs to improve passenger vessel safety. Implement, expand, market, and evaluate the Streamlined Inspection Program; and implement the Alternative Compliance Program.
- Implement and market the International Safety Management Code.
- Conduct oversight of technologically advanced vessels such as high-speed ferries, and continue oversight of third parties such as classification societies and independent laboratories.
- Implement the Prevention Through People communications plan.
- Develop a national Maritime Event/Incident Reporting System (\$175 thousand).
- Update Coast Guard training programs to include risk-based technology, computer-based regulatory development aids, cause and trend analysis, and forecasting (\$500 thousand).
- Continue productive partnerships with the Passenger Vessel Association and the International Council of Cruise Lines.
- Advance the body of research on mariner qualifications and training (\$200 thousand).
- Develop a Quality Standards System for the maritime academies (USCG and MARAD).
- Evaluate the Port State Control program and the initiative for Elimination of Substandard Vessels.

RAIL CRASH & FATALITY RATES

Why We Act: In 1997, over 1000 deaths were attributed to rail operations. The amount of freight traffic handled by our Nation's railroads has increased almost 40 percent since the rail industry was deregulated in 1980. And economic projections indicate that this growth will continue at a rate of 1.5 percent per year for the foreseeable future. Passenger railroads are also experiencing significant growth as more travelers are turning to commuter and intercity rail as a viable transportation alternative.

DOT's goal: Reduce the rate of rail-related crashes from 3.91 per million train-miles in 1995 to 3.32 (or less) in 2000. Reduce the rate of rail-related fatalities from 1.71 per million train-miles in 1995 to 1.54 (or less) in 2000.



Special Challenges: The railroad freight industry is growing substantially. Since 1990, revenue ton-miles have risen by more than a third. And since 1986, the number of rail passenger miles has risen by almost 25%. At the same time, industry has steadily downsized its workforce and infrastructure.

Strategies: DOT will continue the Safety Assurance and Compliance Program (SACP) which brings together rail labor, management, and FRA to determine the root causes of systemic railroad safety problems; and the Railroad Safety Advisory Committee (RSAC) to provide a collaborative rulemaking process. Significant research and development initiatives are aimed at technological safety advances. And many programs are aimed specifically at reducing grade crossing crashes and trespasser fatalities (see separate goals for these two areas).

Other Federal Programs with Common Outcomes: None.

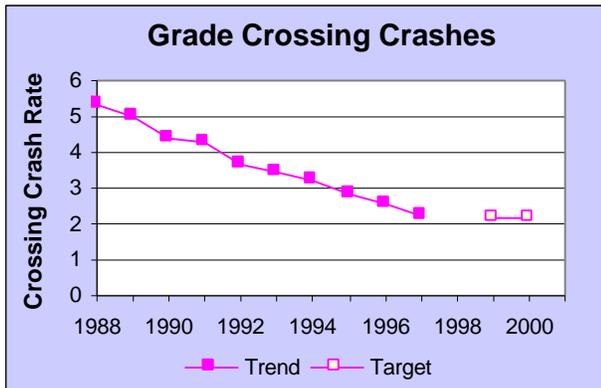
Activities and Initiatives in FY 2000 (including estimated obligations):

- FRA will continue to expand RSAC and SACP work to speed up rulemakings and to correct system-wide problems in the railroad industry. \$71 million is dedicated to safety-related operations in FY 2000, up 6% from FY 1999.
- FRA will pursue research and development in determining the causes of equipment failures, development of devices and techniques to identify degraded equipment and components before they fail, testing of potential inspection systems, and implementation of proven systems into revenue service.
- Research will be aimed at identifying causes of human performance errors, developing mitigation strategies, evaluating new technologies to aid operators, identifying training needs, and studying man-machine interfaces. Research will also be conducted in hazardous materials transportation safety, track and component safety, track-train interaction, grade-crossing safety, and safety of high-speed ground transportation systems.
- FRA continues to advance PTC systems, using the Nationwide Differential Global Positioning System (NDGPS) as a source of location information. For FY 2000, a multimodal approach is planned to coordinate strategy for enabling infrastructure. NDGPS will provide the positioning, navigation and timing accuracy, which is critical to improving safety on the Nation's surface intermodal transportation network.

RAIL GRADE-CROSSING CRASH RATE

Why We Act: In 1997, over 1000 deaths were attributed to rail operations. Almost half of these rail-related deaths were caused by collisions between automobiles or trucks, and trains. Every day, people attempt to beat a train to the railroad crossing – endangering their lives, as well as those of train crewmembers and passengers.

DOT's goal: Reduce the rate of grade-crossing crashes from 2.85 per the product of (million train-miles times trillion highway vehicle-miles-traveled) in 1995 to 2.14 (or less) in 2000.



Special Challenges: The U.S. railroad industry is rapidly expanding and America's freight railroads are becoming increasingly congested. Since 1990, revenue ton-miles have risen by more than a third. Since 1986, the number of rail passenger miles has risen by almost 25%.

Strategies: DOT sets and enforces safety standards, investigates major train accidents, and educates the public on the dangers associated with highway-rail crossings. DOT continues to improve and develop both ongoing and new technologies aimed at reducing crossing accidents. In 1994, DOT unveiled the *Highway-Rail Crossing Safety Action Plan*, a policy architecture for achieving DOT's goal of zero tolerance for highway-rail collisions. This multi-modal endeavor brings together the resources of several DOT modes aimed at educating communities on the inherent dangers posed at highway-rail crossings.

Other Federal Programs with Common Outcomes: None.

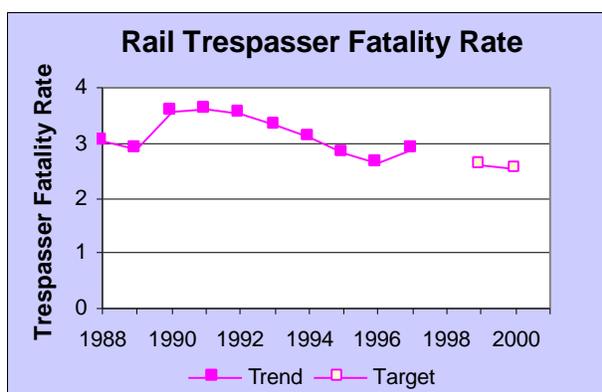
Activities and Initiatives in FY 2000 (including estimated obligations):

- FRA oversees the modification and elimination of grade crossings (\$25.05 million for grade crossing safety in FY 2000). Also, FHWA provides 10%, or approximately \$565 million, of its Surface Transportation Program (STP) funding to States for highway hazard elimination, including crossing hazard elimination initiatives. The full \$20.25 million authorized in TEA-21 for high-speed rail corridor crossing hazard elimination is requested.
- The ongoing *Always Expect a Train* public education program continues to be very successful. To date, FRA estimates the value of donated time dedicated to these English/Spanish multimedia advertisements, which have reached citizens in all 50 states, exceeds \$3.5 million.
- FRA and FHWA will continue to participate with Operation Lifesaver, Inc. (OLI), a non-profit national organization dedicated to preventing crossing collisions. As part of the OLI program, FRA, FHWA, and NHTSA work together with railroads to promote initiatives aimed at reducing collisions and casualties at highway-rail intersections. Funding for this program will increase from \$300,000 in 1997 to \$500,000 in 1998-2003 under TEA-21.
- By FY 2000, FRA's highway-rail crossing computer file will be available on the internet. This information includes precise position data regarding grade-crossings, making these files compatible with most mapping programs used for management and planning purposes.
- In FY 2000, FRA plans to implement rules to require that a locomotive horn be sounded while a train is approaching and entering a public highway-rail crossing. Exceptions will be allowed for those communities that establish alternatives that provide the same level of safety as that provided by train horns.

RAIL TRESPASSER FATALITY RATE

Why We Act: In 1997, over 1000 deaths were attributed to rail operations. Trespassers accounted for over 50 percent of the total – exceeding highway-rail crossing collisions, which had previously been the major contributor to the number of fatalities. People trespass on rail property for a variety of reasons – to fish off bridges, take shortcuts across the tracks, try to ride on moving trains, or simply to walk along the tracks. All of these are terribly unsafe. With their very heavy weight, trains cannot stop in short distances, and many trespassers lose their lives.

DOT's goal: Reduce the rate of rail-related trespasser fatalities from 2.81 per the product of (million train-miles times billion US population) in 1995 to 2.53 (or less) in 2000.



Special Challenges: Trespassing on private railroad property is not directly subject to Federal control. The few State laws that apply specifically to trespassing on rail property—or to vandalism of rail property—vary widely. This creates problems for the law enforcement community and results in uneven and irregular enforcement and penalties. Thus, there is public perception that trespassing is a minor concern.

Strategies: DOT sets and enforces safety standards, investigates major rail-related accidents, assists the railroad industry in training its workforce on safety laws, and educates the public on the dangers associated with trespassing on rail property. DOT continues to encourage State and local governments to improve existing laws or enact railroad trespassing and vandalism statutes, which meet the standards set by the model State railroad and vandalism bills.

Other Federal Programs with Common Outcomes: None.

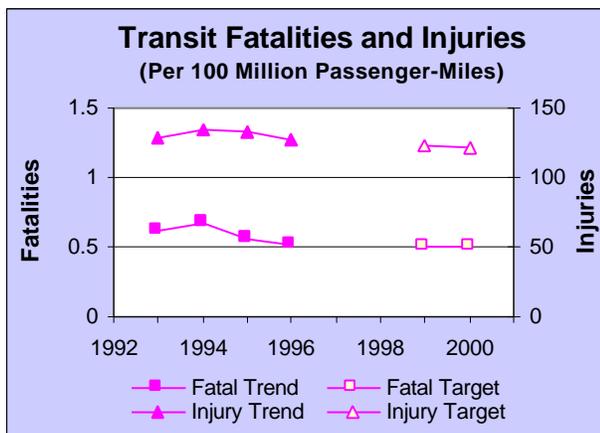
Activities and Initiatives in FY 2000 (including estimated obligations):

- FRA will work with Operation Lifesaver, Inc. (OLI) a nonprofit national organization devoted to preventing trespasser fatalities, to promote our lifesaving message throughout the Nation. In addition, FRA will continue as an active participant in the Department's *Safe Communities* traffic safety program, and the *Moving Kids Safely* child safety campaign. TEA-21 funding for the OLI program increased from \$300,000 in FY 1997 to \$500,000 in FY 1998-2003.
- FRA has successfully developed, and will continue, a partnership with the Association of American Railroads, Operation Lifesaver, Inc., FHWA, FTA, and NHTSA to advocate national safety public education. Prevention of rail trespassing, by means of promoting campaigns focussed on raising awareness about the deadly consequences of trespassing on rail property, is a key goal of this effort.
- FRA will build upon its prior work of 1998, when it developed model State trespass and vandalism-prevention legislation, in order to strengthen legislation aimed specifically at trespassing.
- FRA will continue to support OLI's sponsorship of annual speech contests at youth conferences to encourage youngsters to create and present speeches and exhibits concerning trespass prevention. The eleventh annual conference was held in Louisiana in April 1998, with nearly 1,000 participants. Idaho's third annual contest took place in May 1998.

TRANSIT FATALITY AND INJURY RATES

Why We Act: Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. However, public expectations for safety are higher for transit than they are for highway travel, particularly when most people are driving their own cars on the road. In the transit system, people give up control, and they are paying for service. Public transit can only be a viable alternative to highway travel when it is safe for its passengers and operators.

DOT's goal: Reduce the transit fatality rate from 0.52 fatalities per 100 million passenger-miles-traveled in 1996 to 0.50 (or less) in 2000. Reduce the injury rate from 127 per 100 million passenger-miles-traveled in 1996 to 122 (or less) in 2000.



Special Challenges: As the population grows, the use of public transit can also be expected to increase. Increased ridership of public transit would lead to an increase in the absolute number of fatalities and injuries even if the rate per 100 million passenger miles traveled does not change.

Strategies: DOT provides grants to improve the condition of transit infrastructure, and it works with states, local transit authorities, and the transit industry to develop technology, provide training, and supply technical assistance that advances safety. DOT also conducts research and collects data in order to provide valuable information on safety and standards.

Other Federal Programs with Common Outcomes: None.

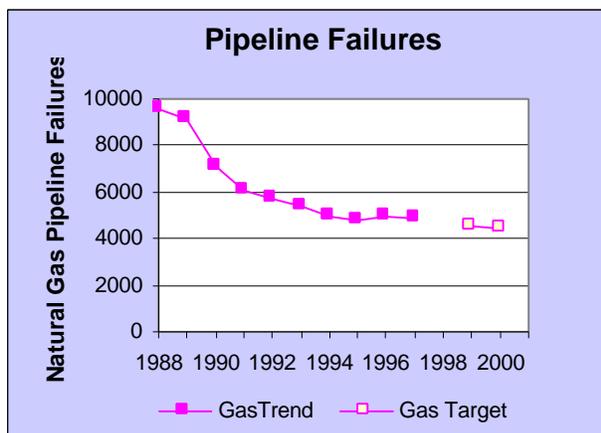
Activities and Initiatives in FY 2000 (including estimated obligations):

- Through Formula Grants and Capital Investment Grants, FTA invests in the public transit infrastructure. Many of these funds improve transit safety by replacing older bus and rail systems with newer, safer public transit. For new projects, safety is a design consideration from the beginning. These funds also support FTA's oversight activities, which work to ensure the safety and quality of transit infrastructure.
- The National Research and Technology Program will:
 - develop technology and system designs that will improve the security of the riding public. Activities will include using information technology to improve highway-rail interactions, and evaluating chemical and biological detection systems for use in public transit. (\$1.35 million in FY 2000, 6% above the FY 1999 level.)
 - train 4,000 transit professionals on a wide variety of topics such as system security, bus and rail accident investigation, and fatigue awareness. (\$1.2 million in FY 2000, 9% above the FY 1999 level.)
 - provide technical assistance to states and local agencies to improve the safety and security of public transit. Activities will include security audits of transit systems, guidance on emergency response, assistance with anti-terrorism plans, oversight of drug and alcohol testing programs, and evaluation of state safety oversight programs. (\$2.9 million in FY 2000, over three times the FY 1999 level.)

PIPELINE FAILURES

Why We Act: A network of 1.7 million miles of pipelines transport natural gas to 55 million residential and commercial customers. While pipelines are among the safest modes for transporting liquids and gases, the nature of the cargo is inherently dangerous. Pipeline failures – whether due to material failure or outside force damage – can pose an immediate threat to people and communities.

DOT's goal: Decrease the number of natural gas transmission pipeline failures from 4,933 in 1994 to 4,451 in 2000



Special Challenges: Long haul transmission pipelines are often in remote locations and underground. Short haul distribution pipelines – typically in neighborhoods – are most susceptible to outside force damage from digging.

Strategies: DOT works to reduce the risks from pipeline accidents by establishing safety regulations and assuring compliance. RSPA will emphasize pipeline integrity through testing risk management as an alternative to traditional pipeline regulation. A key strategy for reducing outside force damage will be to work with industry to implement “best practices” to prevent damage.

Other Federal Programs with Common Outcomes: DOT is developing a National Pipeline Mapping System with FERC, NOAA, DOE, EPA, DOI, USGS and others that will help us analyze risks and protect underground facilities.

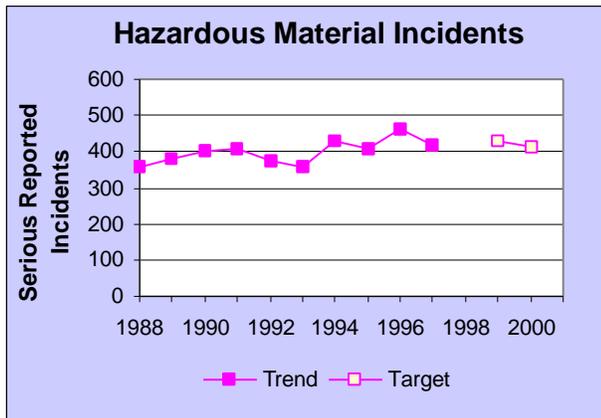
Activities and Initiatives in FY 2000 (including estimated obligations):

- Of RSPA's Pipeline Safety Program, \$28.2 million will focus on:
 - Creating better linkages from reported incident data to inspection activities. This will help clarify cause and effect relationships of compliance and regulatory activities in improving safety.
 - Working with state agencies and industry to test risk management as an alternative to traditional pipeline regulation;
 - Providing technical and grant assistance to states to conduct intrastate pipeline inspections and improve pipeline safety; and
 - Encouraging states to use risk factors to plan and carry out inspections.
- Of the \$16.0 million for Office of Pipeline Safety Grants, RSPA will provide \$12 million in grants for state inspection of natural gas pipeline operations and accident investigations, and evaluation of risk management as a safety strategy for regulation of pipelines. As with the direct RSPA inspection program, emphasis will be on increasing States' use of risk factors to determine their pipeline inspection activities.
- RSPA will fund \$1 million in grants to improve operational efficiency of one-call centers and also continue to provide \$1 million to the States to enhance damage prevention compliance in FY 2000. This program provides a single point of contact for people prior to digging to reduce the potential for damage to pipelines from excavation activity.

HAZARDOUS MATERIAL INCIDENTS

Why We Act: Many of the materials used in manufacturing and many of the retail products people buy include hazardous materials. There are over 800,000 shipments of hazardous materials (hazmat) each day in the U.S. These range from flammable materials and explosives to poisons and corrosives. Any release of these materials during transportation could result in serious injury or death, or harm to the environment.

DOT's goal: Reduce the number of serious hazardous materials incidents in transportation, to 411 or fewer in 2000 from a peak of 464 in 1996.



Special Challenges: The vast majority of hazmat accidents are caused by human error, and there are over two million workers involved in the transportation of hazardous materials in the U.S. Globalization of trade continues to increase the risks and challenges to assure that hazardous materials are moved in international trade safely.

Strategies: DOT develops regulations and standards for hazmat packaging and shipping, and enforces those standards for every mode of transportation. DOT will align its programs to better focus on the human factors involved in hazmat spills. In addition, it will work with the industry and state and local partners to prioritize risk factors, permitting better focus of resources on highest risk areas.

Other Federal Programs with Common Outcomes: DOT works closely with a number of agencies on the regulation of safety of hazardous materials including, e.g., Nuclear Regulatory Commission; EPA; and the Department of Agriculture and Food and Drug Administration (for protection of food shipments from hazardous materials contamination). Also, DOT works with the Department of State on international issues with hazardous material shipments.

Activities and Initiatives in FY 2000 (including estimated obligations):

- RSPA's hazardous materials safety programs (\$18.2 million) will upgrade the hazardous materials information system (HMIS) to assure that responders have the best information on how to respond. This will also enable enforcement activities to be focused on the highest risk shippers. RSPA will increase the number of compliance inspections conducted, and expand the inspections of hazardous materials shippers, especially those who offer materials for air transportation. RSPA will add six new positions, expanding technical assistance to industry and working with federal, state and local enforcement personnel to target enforcement activities in high-risk areas.
- FRA will continue site-specific inspections and address the impact of new hazmat shipments on five safety disciplines (motive, power, and equipment; operating practices; track; hazardous materials; and signal and train control).
- Coast Guard marine safety programs will enforce hazmat shipping regulations aboard U.S. ships and foreign ships in U.S. ports, as well as at port facilities. USCG, in conjunction with EPA, will continue to manage and operate the 24-hour National Response Center for all reporting of hazardous material releases.
- FAA will add 16 new positions in FY 2000 to address dangerous goods flows through increased inspection, targeted outreach and education, focused inspections known as "hazstrikes", increased enforcement, and more effective response and follow-up to incidents.
- FHWA will perform Compliance Reviews and, when necessary, take enforcement action against motor carriers that pose a greater risk, focusing on incidents/crashes, vehicle and driver violation occurrences, and company safety management breakdowns.

STRATEGIC GOAL: MOBILITY

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

Mobility as much as any other factor defines us as a nation. The U.S. transportation system carries over 4 trillion passenger miles of travel and 3.7 trillion ton miles of freight every year – generated by more than 260 million people and 6 million businesses. It *connects* people with work, school, community services, markets, and other people. For efficiency and equity of access, our transportation system frequently relies on common public infrastructure that is maintained on limited national resources – our land, waterways, and airspace.

DOT's objective is to optimize capital investment in these public systems and manage them to maximize the benefit to all Americans. The FY 2000 budget proposes \$40.7 billion in direct mobility funding to meet this challenge. This is a 4% increase over the FY 1999 level.

We Aim To Achieve These Strategic Outcomes:

- Improve the structural integrity of the transportation system.
- Balance new physical capacity with the operational efficiency of the nation's transportation infrastructure.
- Increase intermodal physical, information, and service connectivity.
- Increase access to the transportation system for the movement of all people and freight.
- 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.

Sixteen specific performance goals -- reflecting the results of some of the key programmatic interventions within DOT-- will be used to gauge our progress in advancing our outcome goals in transportation mobility.

Each of these performance goals and associated measures are discussed in this section.

PERFORMANCE GOALS:

Highway pavement condition

Highway bridge condition

Highway congestion

ITS integration

Runway pavement condition

Aviation delays

GPS landing approaches

Essential Air Service

Maritime navigation

Impediments to port commerce

St. Lawrence Seaway lock availability

Amtrak ridership

Transit ridership

Bus and rail transit fleet condition

Transportation accessibility

DOT Performance Plan FY 2000

DIRECT MOBILITY PROGRAMS

Estimated Obligations (FY 1998-2000), in millions

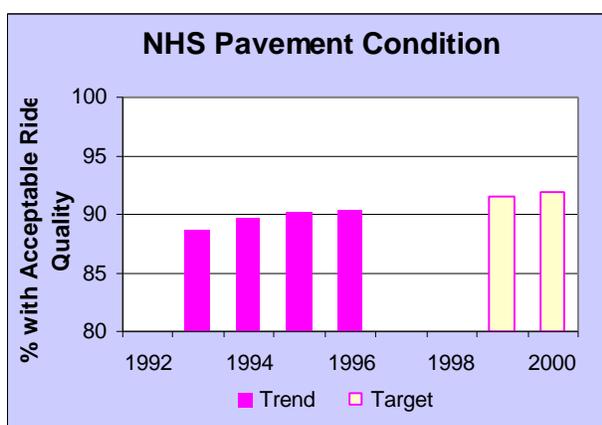
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		FY 1998 Actual	FY 1999 Estimated	FY 2000 Request
OFFICE OF THE SECRETARY				
		<u>46</u>	<u>51</u>	<u>51</u>
Essential Air Service		46	50	50
TPR&D	(Mobility projects)	0	1	1
COAST GUARD				
		<u>581</u>	<u>696</u>	<u>580</u>
Aids to Navigation	Operations	456	459	476
	Acquisition	104	191	101
	Research	3	3	3
Alteration of Bridges		18	43	-
FEDERAL AVIATION ADMINISTRATION				
		<u>7,461</u>	<u>7,835</u>	<u>8,067</u>
Operations	Air Traffic Services	4,080	4,345	4,696
	Airports	48	48	50
	Research & Acquisitions	93	74	184
Facilities & Equip.	(Mobility-related projects)	1,816	1,742	1,786
Research	(Mobility-related programs)	79	39	49
Airport Grants	(Mobility-related work)	1,345	1,587	1,302
FEDERAL HIGHWAY ADMINISTRATION				
		<u>19,731</u>	<u>23,468</u>	<u>24,526</u>
Fed-aid Highways	All except safety, EG&T, env.	19,617	23,177	24,454
State Infrastructure Banks		3	3	-
Miscellaneous Appropriations		25	246	46
Misc. Trust Funds		44	23	8
Misc. Highway Trust Funds		43	19	19
FEDERAL RAILROAD ADMINISTRATION				
		<u>774</u>	<u>723</u>	<u>615</u>
Safety & Operations	(Mobility-related portion)	19	24	24
Railroad R&D		1	1	1
Rhode Island RR Development		-	23	10
Alaska RR		15	38	-
Next Generation HSR	Mobility-related only	11	13	8
Emergency RR Rehab & Repair		10	-	-
Amtrak Reform Council		2	-	1
Amtrak Grants & Northeast Corridor		716	624	571
FEDERAL TRANSIT ADMINISTRATION				
		<u>4,245</u>	<u>6,297</u>	<u>6,834</u>
All except UTC, Safety, Job Access, Clean fuels		4,245	6,297	6,834
MARITIME ADMINISTRATION				
		<u>7</u>	<u>8</u>	<u>8</u>
Operations and Training		7	8	8
RESEARCH & SPECIAL PROGRAMS ADMIN.				
		<u>2</u>	<u>2</u>	<u>1</u>
Emergency Transportation		2	2	1
ST. LAWRENCE SEAWAY DEVELOPMENT CORP.				
		<u>13</u>	<u>12</u>	<u>13</u>
TOTALS		32,861	39,092	40,695

HIGHWAY PAVEMENT CONDITION

Why We Act: The National Highway System (NHS) consists of only 161,108 miles of rural and urban roads--just 4 percent of total highway miles--but carries 1 trillion or 43 percent of vehicle miles traveled (VMT). The system serves major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. The condition of this system can affect wear-and-tear on vehicles, travel time, congestion, comfort, as well as public safety. Improving the pavement condition is also key to the long-term structural integrity of the transportation system.

DOT's goal: Increase the percentage of miles on the NHS that meet pavement performance standards for acceptable ride quality – from 90.4 percent in 1996 to 91.8 percent in 2000.



Special Challenges: Growth in the U.S. economy has translated into over 2% annual growth in VMT. In addition, industry's demand for heavier and longer trucks and the popularity of sport utility vehicles have resulted in heavier vehicles travelling on the roads. This contributes to increasing pavement deterioration.

Strategies: DOT invests in road maintenance and rehabilitation, and focuses on promoting advances in road construction, repair, and maintenance technology. FHWA technology deployment initiatives will ensure that advancements in pavement materials and high performance materials are adopted to improve the performance of highways.

Other Federal Programs with Common Outcomes: None.

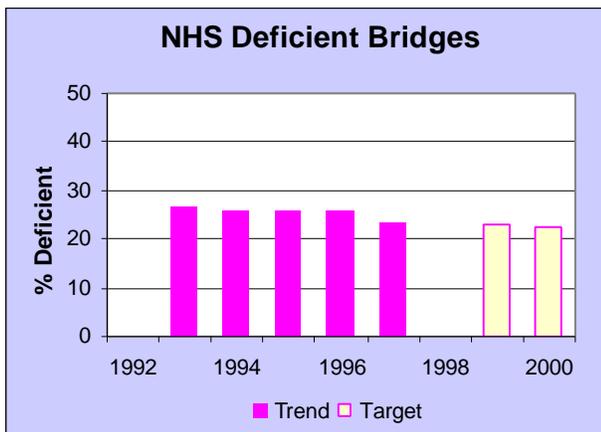
Activities and Initiatives in FY 2000 (including estimated obligations):

- The FHWA Federal-aid Program provides funds for projects that improve NHS pavement condition. Most of the funding for these projects comes from the NHS and Interstate Maintenance (IM) programs. Almost \$4.2 billion in IM funds and over \$5 billion in NHS funds will be obligated in FY2000, an increase of nearly 1 percent in both programs from FY1999 levels. FY 1999 and FY 2000 resources in these areas should directly influence pavement condition.
- The SUPERPAVE program focuses on optimizing materials selection to maximize the cost-benefit ratio associated with pavement. Costs include materials and construction costs and benefits include reduced maintenance, better ride quality, and increased pavement life. FHWA will implement SUPERPAVE Mix Design Software in 15 States and achieve nationwide implementation of SUPERPAVE Volumetric Mix Design Procedures. This program is funded at \$3.3 million.
- In TEA-21, \$9.8 million was earmarked for Pavements research (other than SUPERPAVE), and \$10 million for the Long Term Pavement Performance Program (LTPP). These programs are funded at the same level as FY 1999. Activities will include improving methods of using concrete pavement for highways and monitoring and evaluating highway sections to prepare new products.

HIGHWAY BRIDGE CONDITION

Why We Act: The National Highway System (NHS) includes 128,508 bridges serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. Almost 25 percent of these bridges are either structurally deficient or functionally obsolete (in terms of dimensions, load or other characteristics). Deficient bridges impair the public's access to activities, goods, and services.

DOT's goal: Reduce the percentage of bridges on the NHS that are deficient – from 23.4 percent in 1997 to 22.5 percent in 2000.



Special Challenges: Growth in the U.S. economy has translated into over 2% annual growth in vehicle miles traveled, increasing the stress on bridges. In addition, the 4 percent growth rate of combination truck traffic over the 1985 through 1995 period exceeded that for all types of vehicles by .7 percent. These trends directly contribute to structural and functional deterioration of our bridges.

Strategies: Federal investment will help replace or rehabilitate existing bridges. FHWA will focus research advances in technology of bridge construction, repair, and maintenance. FHWA technology deployment initiatives will ensure that advancements are adopted to improve the performance of bridges.

Other Federal Programs with Common Outcomes: None.

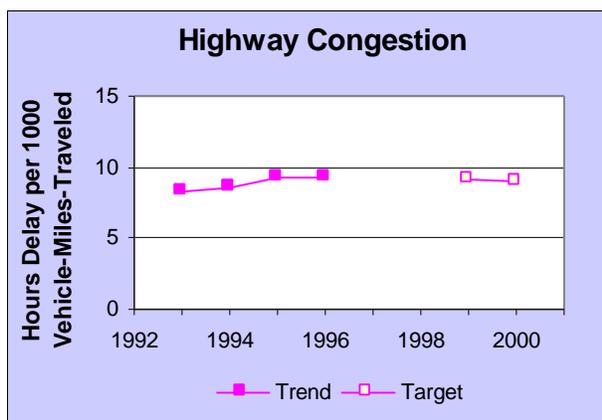
Activities and Initiatives in FY 2000 (including estimated obligations):

- The FHWA Federal-aid Highway programs provide funds for projects that improve the condition of NHS bridges. Most of the funding for these projects comes from the NHS and Bridge Programs. More than \$5 billion in NHS and \$3.6 billion in Bridge program funds will be obligated by States in FY 2000, an increase of more than 1 percent in both programs from FY 1999 levels. FY 1999 and FY 2000 resources in these areas should directly influence bridge condition.
- The Surface Transportation Research program helps provide durable structural materials, leading to extended bridge service life. Other activities include development of inspection and nondestructive evaluation technologies for condition assessment in support of bridge management, and technical assistance. A total of \$16.1 million is requested for these activities in FY 2000, which is the same funding level expected in FY 1999.
- FHWA will continue assisting States in implementing the Pontis software model, which assists in predicting bridge maintenance needs, determining bridge ratings, and enabling more cost-effective decisions on bridge improvements.
- Innovative bridge research, funded at the FY 1999 level of \$1 million, supports the deployment of innovative materials which are more durable and resistant to traffic loads and corrosive attack, resulting in less maintenance and traffic restriction. The innovative bridge construction program, funded at \$17 million, demonstrates the application of innovative materials on selected bridges. The FY 2000 funding level represents an increase of 13 percent over FY 1999.

HIGHWAY CONGESTION

Why We Act: Highway congestion is a continuing problem with social, economic, and environmental costs. Delay affects system reliability, and it threatens to undermine corporate and public efforts to improve national productivity. It imposes risk and uncertainty on users and impedes industry's ability to adopt manufacturing and distribution strategies to control warehouse and distribution costs. This inhibits U.S. industry's ability to compete effectively in the global economy.

DOT's goal: Reduce delays on Federal-aid highways to 9 hours of delay per 1,000 vehicle miles traveled. This represents a decrease of 12 minutes from the FY 1996 level of 9.2 hours.



Special Challenges: Lane mileage has increased 3.2 percent from 1980 to 1996, while highway travel has increased 66.5 percent. Increased congestion is a result of this disparity. As vehicle miles of travel (VMT) rises, congestion delay rises at a faster rate.

Strategies: DOT implements a wide range of strategies to address congestion and increase the capacity of our existing system. Although the Department will continue funding new construction, it will emphasize improvement of existing facilities and better ways to operate transportation systems through integration and deployment of Intelligent Transportation Systems (ITS) technologies (see page 34) and the use of demand control techniques such as pricing. It will also continue funding alternative travel modes, such as rail and transit. In addition, DOT will investigate ways that shifting urban development patterns may affect transportation congestion.

Other Federal Programs with Common Outcomes: None.

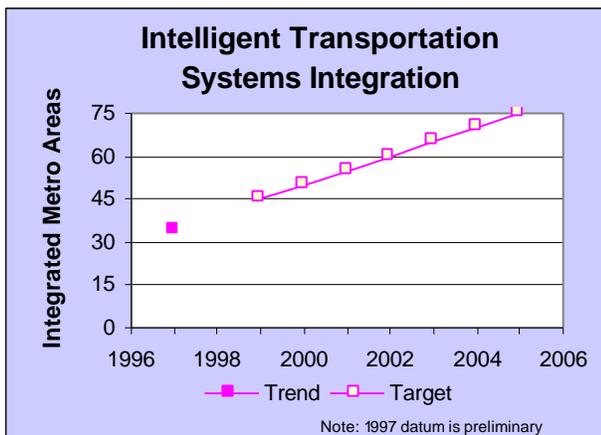
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Congestion Mitigation and Air Quality (CMAQ) Program reduces congestion and polluting emissions. Eligibility includes projects and programs that improve air quality in non-attainment and maintenance areas for ozone, carbon monoxide and small particulate matter which reduce transportation-related emissions. \$1.8 billion in CMAQ funds will be obligated in FY 2000, nearly 26% over FY 1999.
- The ITS program provides \$173 million in FY 2000 for supporting the integration of multi-modal ITS components in metropolitan and rural areas and for the deployment of the Commercial Vehicle Information Systems Networks CVISN (level 1.0), automating the credential and clearance process, in at least seven states.
- The Highway Operations Research and Development Program aims to provide uninterrupted traffic flow on streets by focusing on highway performance, including traffic control and ITS applications, innovative management practices, and winter maintenance activities. \$1.4 million is requested in FY 2000, the same as FY 1999.
- FTA's Livable Communities Initiative and Planning activities, funded at \$95 million in FY 2000, aim to provide alternatives to vehicle travel by including transit in the early stages of community planning. This funding level represents an increase of 12 percent over FY 1999.
- FHWA, FTA, and FRA investments in infrastructure directly affect congestion. FY 2000 investments for new and existing facilities will be \$35 billion, representing an increase of 5.3 percent over the FY 1999 level. Funds will be used to construct new facilities and improve existing facilities, and to provide funding for alternative modes.

INTELLIGENT TRANSPORTATION SYSTEMS INTEGRATION

Why We Act: Highway congestion is a persistent problem, and opportunities to build new roads or expand existing roads have declined substantially. Technology offers a way to increase both capacity and safety in our existing transportation system. Intelligent Transportation Systems (ITS) use electronic information and communications technology to extend the capacity of our existing infrastructure system – examples are free-way management, traffic signal control, electronic toll collection, transit management, and regional multi-modal traveler information. These technologies and others have demonstrated they can improve traffic flow on existing infrastructure, reduce congestion and enhance safety. While deployment of ITS is beneficial, piecemeal purchase and installation of technology create artificial system boundaries. The challenge to Federal, State, and local transportation officials is to ensure early integration of these systems and avoid retrofits so that the nation can realize all the potential benefits associated with ITS.

DOT's goal: Integrate ITS in 75 of the largest metropolitan areas by 2005. The FY 2000 target is 50 compared to a FY 1997 baseline of 34 areas.



Special Challenges: Significant control over ITS deployment resides at the local level. Stove-piped ITS deployments that are not regionally integrated are still occurring. This may “harden” artificial agency and modal boundaries, making future ITS integration more difficult and limiting potential benefits.

Strategies: DOT is helping to develop standards for ITS which will encourage interoperability, reduce public-agency risk, and encourage private sector involvement. It is undertaking activities to educate surface transportation agencies on ITS and is helping to develop ITS standards. It is also facilitating and promoting regional coordination for ITS deployment. TEA-21 clarification of ITS eligibility for Federal aid funding will also spur use of ITS alternatives for solving transportation problems.

Other Federal Programs with Common Outcomes: None

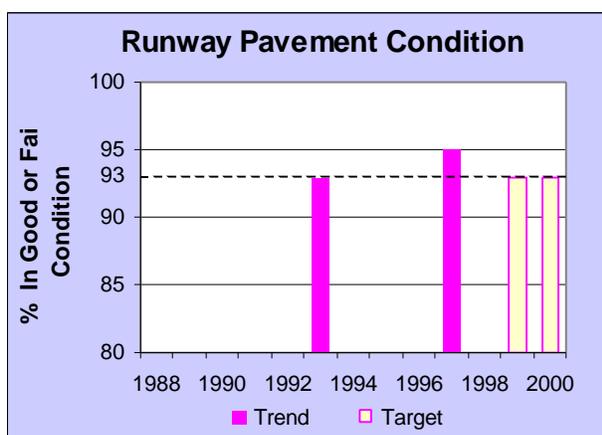
Activities and Initiatives in FY 2000 (including estimated obligations):

- The ITS program office will work to integrate multi-modal ITS components in metropolitan areas. The goal of the program is to accelerate the integration and interoperability of ITS across agency, jurisdictional, and modal boundaries (\$65 million).
- FHWA's ITS program office will support institutional and technical assistance activities to help metropolitan and rural areas deploy ITS in an integrated manner. It will also implement ITS customer service activities in 30 additional metropolitan areas (up from 10 in FY 99) to help them deploy integrated systems (\$6 million).
- The ITS program office will also support ITS professional capacity building and training programs to ensure sufficient numbers of trained ITS professionals (\$6 million).
- FHWA's and FTA's field offices will ensure ITS projects receiving federal-aid funding from the Highway Trust Fund (including the Mass Transit Account) conform to the National ITS Architecture and Standards, per TEA-21 requirements (\$1 million). The goal of FHWA's policy is to foster integration and facilitate future system expansion by encouraging development of regional architectures and incorporating ITS into the transportation planning process.

RUNWAY PAVEMENT CONDITION

Why We Act: Paved runways are essential for takeoffs and landings of large commercial and private airplanes. Deteriorated pavement can damage propellers, turbines and airplane landing gear. Proper design, construction, and maintenance can slow this deterioration, but runways still need complete rehabilitation every 15 to 20 years. This means that during a typical year, 5% to 7% of runways require rehabilitation. Federal airport funding helps achieve this necessary level of rehabilitation, and -- combined with proper maintenance -- helps keep runway condition at or above the minimum level needed to ensure efficient airport operation.

DOT's goal: Maintain in good or fair condition at least 93 percent of runways at all commercial service airports and reliever airports, as well as selected general aviation airports.



Special Challenges: Although runway rehabilitation is among the highest priorities of FAA's Airport Improvement Program (AIP), projects are initiated by airport operators (who pay part of the costs) and not the FAA. Also, the regular availability of grants for rehabilitation may detract from regular maintenance programs, which are usually funded entirely by the airport operator.

Strategies: Maintaining and rehabilitating runways costs less than total reconstruction of runways. Since FY 1995, AIP grant recipients have been required to show evidence of an airport maintenance management program, including pavement maintenance. An AIP demonstration program is underway to fund crack sealing at non-primary airports.

Other Federal Programs with Common Outcomes: None.

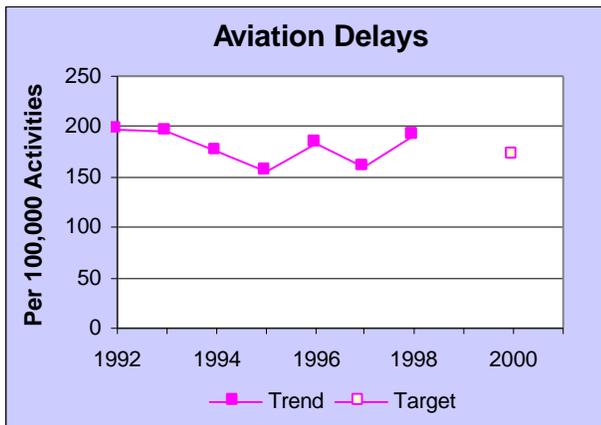
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA estimates that approximately 200 runways will be rehabilitated with aid in 2000. FY 1999 and FY 2000 resources in this area will have the most immediate influence on runway pavement condition (\$150-200 million)
- FAA will conduct research to refine pavement design to accommodate new larger aircraft that will impose very heavy wheel loads on pavement (\$2.0 million).
- In response to the General Accounting Office's July 1998 report "Airfield Pavement: Keeping Nation's Runways in Good Condition Could Require Substantially Higher Spending," the FAA will update guidance for inspecting and reporting the condition of runway pavement, and will ensure that inspectors are aware of the guidance.

AVIATION DELAYS

Why We Act: Delays to commercial aviation are estimated to cost the airlines over \$3 billion a year. Passengers are directly affected by the inconvenience of delays in terms of missed flight connections, missed business meetings and loss of their personal time. With demand for passenger travel increasing each year, there are now 20 severely congested airports, each with an estimated average annual delay of over 20,000 hours, and delays throughout the system are projected to increase.

DOT's goal: Reduce the rate of air travel delays by 5.5% from a 1992-1996 baseline of 181 delays per 100,000 activities. The FY 2000 target is 171 per 100,000 activities.



Special Challenges: About 75% of delays are attributable to bad weather, which is a changing external variable. Capacity-related delays are most prevalent at large hub airports that have significant constraints on increasing runway capacity. Equipment failures, volume of air traffic, and runway closures are other significant causes of delays.

Strategies: In 2000 FAA will target a 20% reduction in volume- and equipment-related delays and a 1% reduction in weather delays, which together should yield a 5.5% reduction in *overall* delays. With Free Flight Phase I, FAA is aiming to improve the spacing of traffic streams into major airports and maximize the use of available capacity. FAA is also developing improved weather reporting systems that allow operational facilities to minimize weather diversions and delays.

Other Federal Programs with Common Outcomes: NASA has developed enhanced software tools for air traffic control in partnership with FAA. Research on new weather systems is done in cooperation with the National Weather Service.

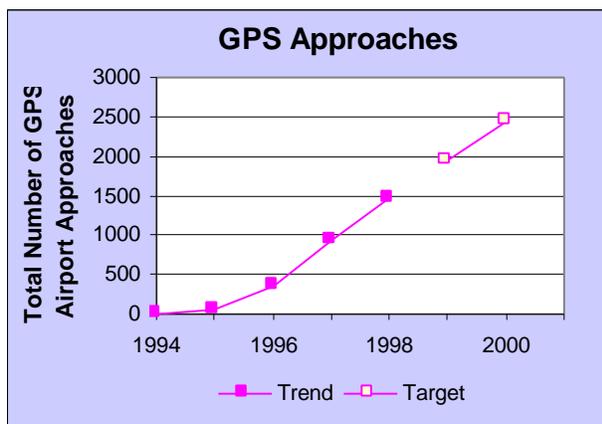
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA is implementing air traffic automation enhancements in Free Flight Phase I. Initial sites for new software tools such as the Final Approach Spacing Tool and Center/TRACON Automation System will be implemented at 9 airports beginning in 2000. (\$184.8 million)
- Existing controller workstations are being upgraded to run enhanced software (Display System Replacement). New equipment will improve system reliability and allow the new software to be added to existing controller automation tools. (\$208.1 million)
- FAA's Advanced Technology Development and Prototyping programs will improve modeling of airspace capacity, developing better algorithms and completing prototype development and evaluation of new equipment for collaborative decision making with users. (\$9.9 million)
- FAA is developing two major systems to improve weather reporting, processing, and dissemination. The Integrated Terminal Weather System will consolidate information from several sources, which is provided to airport towers. The Weather and Radar Processor will report weather information and integrate weather radar data provided to FAA centers. (\$36.7 million)
- FAA is continuing to implement and improve existing weather sensors such as the NEXRAD weather radar, Terminal Doppler Weather Radar, Low Level Wind Shear Alert System, a wind shear detection channel for the terminal radar, and the Automated Surface Observing System. (\$50.5 million)
- FAA's weather research program is demonstrating storm growth and delay forecasting technology. (\$15.7 million)

GPS LANDING APPROACHES

Why We Act: For aircraft to land in restricted visibility, the airport must have a precision approach guidance system (currently ILS). Today, precision approach capability is available at approximately 933 runways. However, most public use airports (about 5300) do not have this capability. When the Wide Area Augmentation System (WAAS) becomes operational in 2000, the GPS satellite navigation signal can be corrected to sufficient accuracy for use in precision approach guidance at airports that do not qualify for current precision guidance systems. To prepare for this capability, FAA is developing and publishing GPS approaches to the nation's airports. Together with WAAS, this will increase user access to airports during low visibility conditions.

DOT's goal: Increase access to the nation's airports during adverse weather conditions by publishing 500 GPS approaches per year for the next 2 years, from a prior year (FY 1995-1998) baseline of 1453 GPS approaches to date. The FY 2000 target is to complete at least 2453 approaches total.



Special Challenges: Developing the approaches requires accurate survey information for airport runway location and any obstacles near the flight path for approach. To use the approaches, aircraft will have to be equipped with GPS receivers and pilots will require appropriate training. To maximize the benefits to aviation users, FAA will need to develop approaches for airports that have electronic aids and those that don't.

Strategies: FAA is using automated tools to incorporate airport and obstruction data into the printed approach plates used by pilots. A large number of approaches is being developed each year to ensure that precision approach guidance can be used.

Other Federal Programs with Common Outcomes: The basic enabling technology for precision approaches is the GPS satellite navigation system developed and maintained by DOD. Map informa-

tion will be obtained from NOAA. State aviation authorities under contract to FAA are doing the airport surveys.

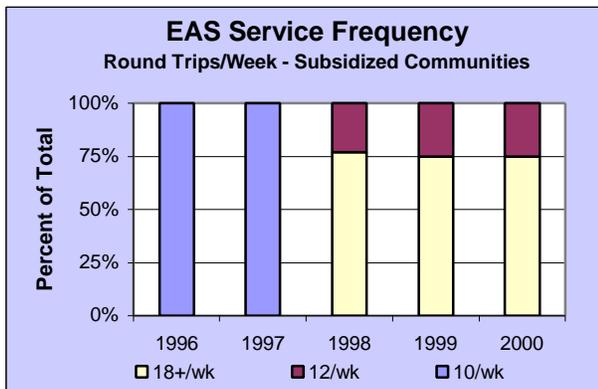
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA's WAAS program will manage the development of the approaches. Information is generated specific to the airport location, and an "approach plate" is published which gives the altitudes and path to the runway for the approach. (\$18.8 million)
- The Wide Area Augmentation System provides accuracy and integrity information that is necessary to fly precision approaches. Initial WAAS operational capability will be established in 2000 with two communication satellites providing position corrections. (\$65.2 million).
- FAA is negotiating with the Department of Defense to add a third frequency to the GPS satellites. This new frequency will decrease interference problems and further improve the accuracy corrections to the basic GPS signal. (\$17 million)

ESSENTIAL AIR SERVICE

Why We Act: A key ingredient of the deregulation of the airline industry in 1978 was the establishment of the EAS program to guarantee eligible communities a minimum level of service. Under this program, the Department subsidizes an air carrier to provide scheduled air service only if no other carrier is willing to provide the service subsidy-free.

DOT's goal: Provide eligible communities reliable access to the nation's air transportation system, with no disruption in service if air carriers choose to discontinue operations. Ensure at least 2 round trip flights per day, 6 days/week at all such communities in the continental U.S.; and 3 round trip flights per day, six days/week at 75% of these communities.



Special Challenges: The backbone of the EAS program for the past decade has been pressurized 19-seat aircraft. For a number of reasons, this aircraft size is being phased out of many airlines' fleets. That phenomenon is making it increasingly difficult for the Department to continue to deliver the required air service at the 100+ subsidized communities nationwide. In addition, the program is subject to factors over which the Department and airlines have little control, such as the price of aviation fuel and the general state of the economy.

Strategies: DOT will expand the competitive bidding process by using Internet sources to issue "Requests for Service Proposals."

Other Federal Programs with Common Outcomes: The USDA has a number of rural initiatives, but those are aimed at the transportation of bulk agricultural goods, typically by rail and truck, as opposed to passenger air service which, excluding Alaska, is the focus of the EAS program.

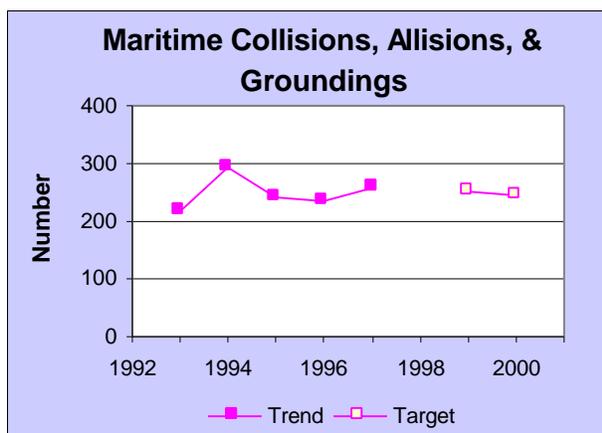
Activities and Initiatives in FY 2000 (including estimated obligations):

- The FAA Reauthorization Act of 1996 provides a \$50 million annual budget for the provision of EAS, funded by FAA overflight fees. This amount is aimed at maintaining at least the minimum guaranteed level of scheduled air service (12 round trip flights per week) at those communities in the continental U.S. that:
 - are beyond 70 highway miles from the nearest large and medium hub airport, and
 - do not require a subsidy of more than \$200 per passenger. (The subsidy criterion does not apply if the community is beyond 210 miles from the nearest large or medium hub airport.)
- In FY 2000, it is expected that funding levels will permit the guaranteed level of service at all eligible communities, and service frequency of at least three round trip flights per day (18/week) at most communities. Airlines have reported that more than two round trip flights/day is needed to maintain a viable market.
- \$150,000 is included in the FY 2000 budget request for the research study: "Economic Evaluation of the Impact of Air Service on Small Metropolitan and Rural Communities". This study will address air transportation linkages to rural America, the role of intermodal systems, the potential role of regional airports, and the comparative experiences in Canada and Europe. It is scheduled for completion in 2000.
- The EAS program also will provide basic air service for 26 communities in Alaska, for passenger as well as cargo carriage.

MARITIME NAVIGATION

Why We Act: Over two billion tons of domestic and foreign commerce is transported through U.S. ports and waterways every year. As U.S. port capacities become squeezed by larger volumes of maritime and recreational vessel traffic, navigation accidents involving commercial vessels can greatly affect cargo throughput, and may even force closure of major waterways. These accidents also may cause serious damage to ships and navigation channels, putting people and other ships at risk.

DOT's goal: Reduce the number of collisions, allisions, and groundings from a statistically derived baseline of 256 in FY 1998 to 246 or less in FY 2000.



Special Challenges: Severe weather can degrade an aids to navigation system over a wide area. Also collisions, allisions and groundings are strongly affected by human error on the part of those piloting the ships. Faster, larger, deeper draft vessels will pose a greater risk of navigational accident.

Strategies: The Coast Guard will operate and maintain a national aids to navigation (ATON) system; develop national and international standards for vessel navigation, manning, and crew qualifications; and enforce these standards. Coast Guard will also monitor waterways and intervene where necessary, including breaking ice.

Other Federal Programs with Common Outcomes: The Army Corps of Engineers dredges channels to maintain charted depth and width; the Coast Guard marks these channels with buoys, lights, and other structures. The Army Corps and NOAA provide navigation charts of U.S. ports and waterways, and Coast Guard establishes requirements for these charts aboard ships. NOAA provides weather information to ships, while Coast Guard provides urgent weather broadcasts by radio.

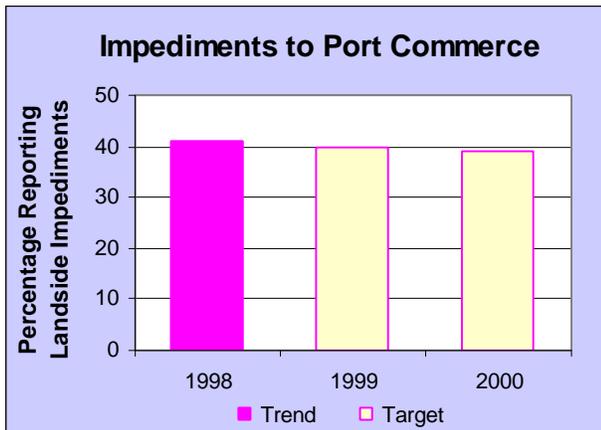
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard will operate and maintain a fleet of buoy tenders, construction tenders, ice-breaking vessels, and a system of radionavigation aids to navigation.
- Coast Guard is replacing its aging seagoing and coastal buoy tenders with modern state of the art vessels that will enable the Coast Guard to more efficiently maintain the ATON, and is requesting two additional Seagoing Buoy tenders in 2000 (\$81.6 million).
- The Coast Guard will continue its efforts to replace aging aids to navigation and to mark channels that have been altered by the Army Corps of Engineers (\$5 million).
- Coast Guard will continue to improve navigation services provided to the maritime community through final implementation of the Maritime Differential Global Positioning System.
- Cooperating with several DOT administrations, the Coast Guard will play a key role in the development of: (1) Nationwide Differential Global Positioning System, which will provide accurate navigation data; and (2) the Federal Radionavigation Plan, which serves as an important source of information and guidance for radionavigation users.
- The Coast Guard will continue to oversee the alteration or removal of bridges determined to be unreasonable obstructions to navigation, under the Truman-Hobbs Act. Funding will be made available from the Federal-Aid Highway Discretionary Bridge Program.

IMPEDIMENTS TO PORT COMMERCE

Why We Act: Ports play an essential role in the U.S. economy; over two billion tons of goods produced or consumed in the United States move through our Nation's ports. However, many U.S. ports are not able to handle the large, modern cargo ships ("megaships") that may become the norm in the world fleet in the 21st century. Increased bottlenecks will potentially degrade the efficient movement of goods through ports.

DOT's goal: Reduce the percentage of ports reporting landside impediments to the flow of commerce from 41% in FY 1998 to 39% in FY 2000.



Special Challenges: Inadequate dredging on a timely basis will limit the ability of the most modern, cost-effective ships in the world fleet to call at U.S. ports. The adoption of new environmental compliance requirements, and natural disasters such as floods could impede access to ports and terminals. Differences between U.S. and international standards for freight transport may also present a challenge in achieving this goal.

Strategies: In FY 2000, MARAD, FHWA, FTA, and FRA will work with Metropolitan Planning Organizations (MPOs), and state DOTs to incorporate multi-modal considerations into transportation planning.

Other Federal Programs with Common Outcomes: Under its civil works program, the U.S. Army Corps of Engineers dredges and disposes of dredged material from Congressionally-authorized navigation improvement and maintenance projects. The Environmental Protection Agency is responsible for developing environmental criteria used to evaluate dredged material disposal projects.

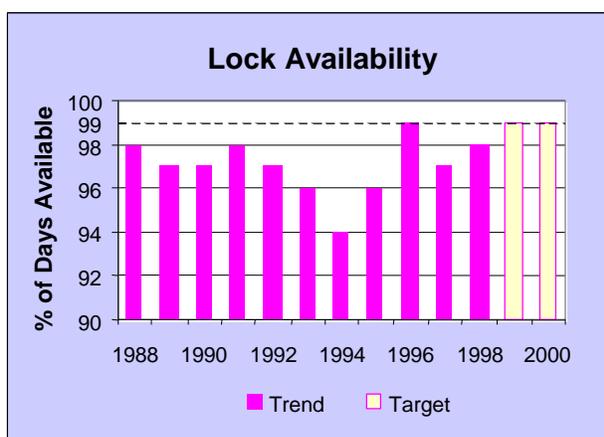
Activities and Initiatives in FY 2000 (including estimated obligations):

- MARAD will partner with other federal agencies in the National Science and Technology Council "Enhanced Gateway" Initiative, and will develop and implement strategies to alleviate identified impediments to the efficient and safe transportation of domestic freight corridors and at international gateways.
- MARAD will actively pursue adoption of uniform international and domestic standards for the maritime industry by working closely with industry organizations, federal partners, and international organizations (e.g. IMO).
- FRA will seek to reduce the number of highway-railroad grade crossings throughout the United States. While aimed primarily at safety benefits, this will also help reduce delays for both vehicles and trains around seaports.
- FHWA will complete a condition and investment study on the National Highway System (NHS) intermodal connectors.
- Coast Guard, MARAD and FHWA will partner to develop strategies to improve the marine portion (i.e., waterways, ports, and intermodal connectors) of the National Transportation System.
- The Department will implement an Intermodal Enhancement Action Plan resulting from a Departmental review of intermodal freight connectors.
- The Coast Guard, working through the Captain of the Port, will continue to regulate the location of vessel anchorages by balancing the needs of the different users with safety concerns.

ST. LAWRENCE SEAWAY LOCK AVAILABILITY

Why We Act: The St. Lawrence Seaway is the international gateway to the Great Lakes, providing access for 2,809 commercial vessel transits in 1997 (and 36.9 million tons of cargo) to and from U.S. and Canadian ports. This shipping route offers competitive costs with other routes and modes to the interior of the country, helping to increase U.S. exports and facilitating economic access to imports. The U.S. Department of Transportation and Transport Canada share responsibility for operation and maintenance of the Seaway locks and related navigation facilities. The reliability of each lock determines the reliability of the system as a whole.

DOT's goal: Ensure the availability and long term reliability of the Locks and related navigation facilities in the St. Lawrence River. Maintain 99% availability during the 2000 shipping season.



Special Challenges: Several external factors may affect performance including vessel incidents due to human error and mechanical failure; and weather conditions (poor visibility, high wind, or ice formation). Water levels and the rate of flow in Lake Ontario and the St. Lawrence River are subject to bi-national regulation.

Strategies: SLSDC strategies for FY 2000 focus on long term preventive maintenance programs, including periodic inspections; winter shutdown maintenance program; emergency response simulations and training, and replenishment of reserves for emergencies and critical maintenance outlays.

Other Federal Programs with Common Outcomes: The Canadian Saint Lawrence Seaway Management Corporation (SLSMC) carries out counterpart programs. SLSDC engages in information exchanges with the U. S. Army Corps of Engineers, which operates locks on U.S. inland waterways, and the Panama Canal Commission.

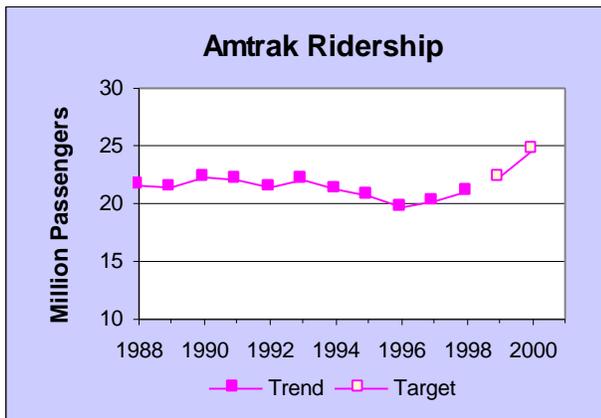
Activities and Initiatives in FY 2000 (including estimated obligations):

- The SLSDC will operate and maintain the locks and related navigation facilities for the U.S. portion of the St. Lawrence Seaway (\$13 million). FY 2000 emphases will include:
 - periodic inspections and surveys of locks and machinery;
 - channel sweeping and maintenance dredging;
 - mitre gate rehabilitation at the Snell Lock; and
 - gatelifter overhaul and maintenance.
- In FY 2000 SLSDC will survey vessel operators who transit the Seaway system to assess customer satisfaction with the quality of service provided.
- As part of a major quality services initiative to achieve ISO 9002 certification of all SLSDC office units, SLSDC will develop manuals specifying the operating procedures for vessel traffic control, marine services and the office of administration. Certification is only conferred on firms that meet the highest quality management standards established by the Geneva-based International Organization for Standardization.
- SLSDC will continue coordination with its Canadian counterpart agency to ensure consistency in the vessel inspection procedures of the two agencies; and to identify how the U.S. and Canada will share the cost and operation of applying GPS technology to vessel tracking systems.

AMTRAK RIDERSHIP

Why We Act: Intercity rail passenger service helps to reduce highway and aviation congestion in many areas of the U.S. It can help decrease the need for more highway and aviation infrastructure, reduce air pollution, and decrease our use of energy resources. But passenger rail service is capital intensive, and the many public benefits cannot be fully captured in individual rider fares. Ridership growth is a key component in achieving Amtrak's financial viability.

DOT's goal: Increase Amtrak's intercity ridership from 20.2 million passengers per year in 1997 to a record level of 24.7 million or more in 2000.



Special Challenges: Amtrak is a for-profit corporation. DOT must work to ensure that Amtrak balances the conflicting pressures of generating short term cash, long term revenues and restoring Amtrak's aging infrastructure. Outside of the Northeast Corridor, commercial railroads own both rights-of-way and operating systems. This can create problems in achieving on-time performance (and customer satisfaction) on lines congested by freight trains.

Strategies: Improved services, such as the high-speed rail service along the Northeast Corridor, scheduled to begin in October 1999, have the potential to significantly improve Amtrak's level of ridership and economic viability. Through support for capital investments and its role on Amtrak's Board, DOT will work to facilitate the successful launch of the Northeast Corridor high-speed rail initiative and the modernization and upgrade of Amtrak equipment.

Other Federal Programs with Common Outcomes: None.

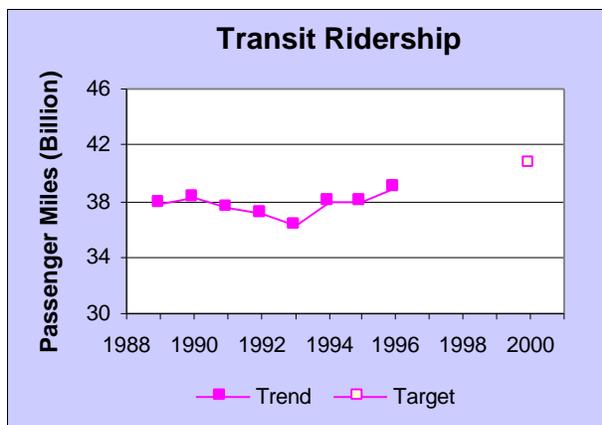
Activities and Initiatives in FY 2000 (including estimated obligations):

- DOT's FY 2000 capital investment in Amtrak (\$571 million) will serve to reduce the effects of past under-capitalization, which have forced Amtrak to forego ridership/revenue building opportunities and incur long term costs that could have been avoided through proper capital investment. Investments will be made in the areas of facilities and infrastructure including track, platform work, signals, electric high-speed rail power systems, and station improvements. Investments will also continue in the acquisition of new equipment, including trainsets and high-speed locomotives. Amtrak will complete corridor testing of the new high-speed trainsets during FY 2000 following successful construction, testing and commissioning of the electric power system between New Haven and Boston, MA in FY 1999.
- High-speed rail service is scheduled to begin in the Northeast corridor on a limited revenue basis in October 1999; Amtrak should begin to realize the benefits of DOT's investments with increasing ridership numbers along this route after full revenue service is begun in July 2000. Infrastructure improvements and maintenance will continue in accordance with Amtrak's 5 year capital plan.
- Amtrak will continue dialogue with major freight carriers over which lines Amtrak operates and support statutory requirements for preference by passenger trains in dispatching. Northeast Corridor improvements will continue, further minimizing congestion and improving on-time performance.
- DOT will provide evaluation and support for Amtrak's high-speed rail initiatives. DOT's strategies include quarterly assessments of ridership and revenue performance relative to targets.

TRANSIT RIDERSHIP

Why We Act: Public transit offers many benefits: it is one of the safest ways of traveling, it relieves road congestion, and it mitigates air pollution. However, these benefits will not be gained unless people decide to use public transit and leave their cars at home.

DOT's goal: Increase transit ridership from 39.0 billion passenger-miles in FY 1996 to 40.56 billion in FY 2000.



Special Challenges: Our communities are spreading farther away from the central cities, and jobs are increasingly located in the suburbs. This creates longer commutes and more scattered travel patterns. Rural areas and small communities are shifting from an agricultural to a service and manufacturing economy, creating a demand for public transportation. As more women enter the labor market, a larger share of workers will need to travel to child-care centers as well as work locations. All these factors will challenge traditional transit systems.

Strategies: FTA provides grants to states and localities to develop new transit systems and extensions to existing systems in urbanized and non-urbanized areas. In addition to increasing transit services, FTA provides transportation planning to ensure that public transit systems are accessible, convenient, and well managed. Finally, FTA works to improve the safety of public transit so that it will offer a viable alternative to automobile travel.

Other Federal Programs with Common Outcomes: The Departments of Health and Human Services, Education, Housing and Urban Development, and Labor are interested in improving the mobility of low income workers. Public transit can provide better access to work opportunities, social services, and health care.

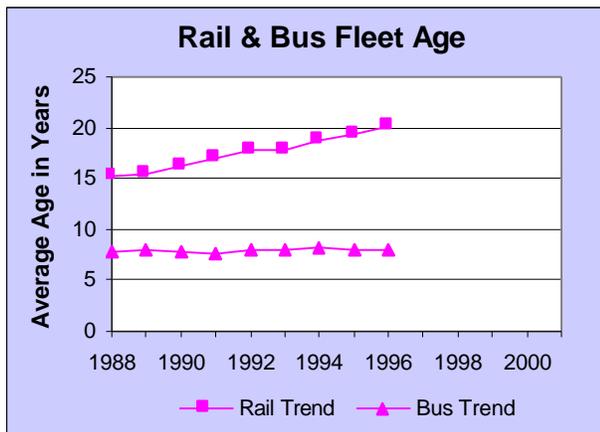
Activities and Initiatives in FY 2000 (including estimated obligations):

- FTA makes large investments in the transit infrastructure. Some of these funds are used to create new transit services, making transit available to more people in both urbanized and rural areas. Other funds are used to improve the condition of current transit services, making them more reliable and appealing to people and making transit a time-saving alternative to other modes of transportation. (\$5.9 billion in FY 2000, 14% above the FY 1999 level.)
- FTA provides financial assistance to Metropolitan Planning Organizations and State Departments of Transportation for planning activities. These investments in planning activities ensure that new transit services are accessible, convenient, and well managed. (\$60 million in FY 2000, 13% above the FY 1999 level.)
- FTA participates in numerous research activities. These activities increase the capacity of public transit by improving train control systems and fleet management, and they help FTA to provide more customer friendly service in order to attract riders. (\$51 million in FY 2000, 13% above the FY 1999 level.)
- FTA works to ensure the safety of public transit by auditing the security of transit systems, providing guidance on emergency response, and assisting with antiterrorism plans, among other activities. These activities are geared to making public transit appealing to people. (\$5.45 million in FY 2000, more than twice the FY 1999 level.)

BUS AND RAIL TRANSIT FLEET CONDITION

Why We Act: Public transit provides people with a reliable way to get around day by day, whether they are going to and from work, school, entertainment, or shopping. If the transit infrastructure is in disrepair, then reliability drops and service schedules are not met. Ridership may also drop, reducing many of the environmental and congestion benefits of transit. By improving the condition of buses and the rapid rail fleet, DOT can keep public transit moving and make sure that it is reliable and dependable.

DOT's goal: Improve the condition of buses and rapid rail fleets. The current measure of condition – average age of fleets – may provide a distorted picture of actual condition, as it does not reflect investments in refurbishment. This measure will be monitored only (no target is set) until a new condition measure is available in 2001.



Special Challenges: DOT provides substantial grants, but state and local agencies allocate these resources to improve the condition of their transit infrastructure. Furthermore, the impact of today's capital investments will not be realized for several years. In the meantime, changes in the national and regional economies may affect transit investment, maintenance, and use.

Strategies: DOT provides grants to state and local agencies and local transit authorities in order to promote investment in the transit infrastructure. FTA is also developing the Transit Economic Requirements Model (TERM) which more accurately depicts the relationship between asset age and condition. Nonlinear deterioration curves are now used to assess the condition of public transit assets.

Other Federal Programs with Common Outcomes: None.

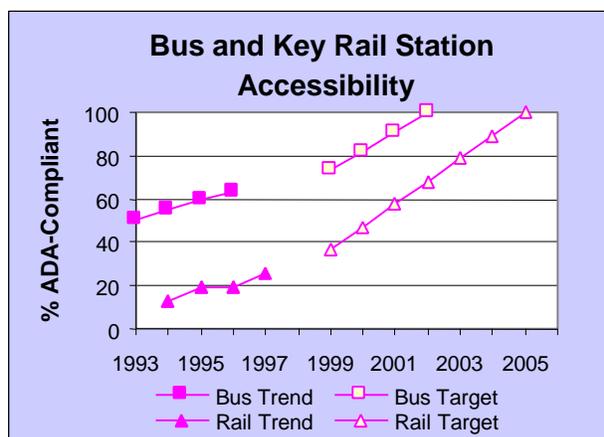
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Formula Grants program provides funds for transit projects, including preventive maintenance, and bus and railcar purchases. (\$3.3 billion in FY 2000, 18% above the FY 1999 level.)
- The Major Capital Investments Program provides grants to projects that increase investment in the transit infrastructure. This program will provide \$490 million for buses and bus facilities, \$980 million for rail modernization, and \$980 for new rail projects and extensions. (Total funding equals \$2.45 billion in FY 2000, 6% above the FY 1999 level.)
- The Job Access Program provides funding for new transportation services which are designed to help welfare recipients commute to work. Although it is targeted for a specific population, this program also represents an investment in the condition of our transit infrastructure. (\$150 million in FY 2000, twice the FY 1999 level.)
- FTA collects data for the National Transit Database and uses this information to produce the Condition and Performance Report to Congress. These activities ensure that funding from other programs are allocated efficiently to get the most out of our investments. (\$3.1 million in FY 2000, 19% above the FY 1999 level.)

TRANSPORTATION ACCESSIBILITY

Why We Act: Transportation can be vital in maintaining independence for people with disabilities. Despite important progress toward accessibility, transportation remains a major obstacle to employment and participation in the community for many people with disabilities. The Americans with Disabilities Act (ADA) requires that public transportation services must be accessible to individuals with disabilities, and DOT has set a goal which is more ambitious than the statutory requirements of ADA.

DOT's goal: Increase the percentage of bus fleet that are ADA compliant from 63% in CY 1996 to 82% in 2000. Increase the percentage of key rail stations that are ADA compliant from 19% in CY 1996 to 47% in CY 2000. 100% compliance will be achieved for key rail stations by 2005, and for bus fleet by 2002.



Special Challenges: As the population ages, more people will require accessible public transit. DOT provides grants and technical assistance, but state and local agencies decide how to best allocate these resources to ensure ADA compliance.

Strategies: DOT provides grants to help local transit operators meet the requirements of ADA, and assesses compliance at rail stations which are self-certified as compliant with ADA requirements. DOT is increasing its outreach activities to the disabled and transit communities in order to understand their concerns better.

Other Federal Programs with Common Outcomes: DOT participates in the DOT-HHS Coordinating Council with the Department of Health and Human Services. By cooperating with each other, DOT can develop transportation strategies to meet the needs of elderly and disabled people, and HHS can ensure that its services are accessible to its clients.

Activities and Initiatives in FY 2000 (including estimated obligations):

- FTA's Formula Grants for Special Needs of Elderly Individuals and Individuals with Disabilities provide funds to make transit more accessible. (\$77 million in FY 2000, 15% above the FY 1999 level.) Funds provided by other Formula Grants, Capital Investment Grants, and Job Access and Reverse Commute Grants may be used to buy new vehicles and facilities that are ADA compliant.
- FTA reviews grantee compliance with ADA. (\$900,000 in FY 2000.)
- FTA's Project ACTION conducts research, develops technology, and provides technical assistance to transit operators providing accessible service. (\$3 million in FY 2000, same as in FY 1999.)

In addition to these activities, DOT works to improve accessibility of other modes of transportation:

- FTA's Rural Transportation Accessibility Incentive Program helps operators of over-the-road buses finance ADA compliance. (\$5 million in FY 2000, 150% above FY 1999 level.)
- FRA works with Amtrak to ensure compliance on trains and in stations. (Approximately \$5-10 million in FY 2000, same as in FY 1999.)
- Public airports with commercial services are required to be accessible by ADA and submit accessibility plans to FAA. Airport Improvement grants and Passenger Facility Charges may fund lifts, ramps, and other devices. Facilities owned, leased or operated by air carriers are covered by the Air Carrier Access Act enforced by the Office of the Secretary.
- The Office of the Secretary is studying the feasibility of applying ADA requirements to passenger vessels, docks and piers. The Coast Guard will provide an advisory role.

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STRATEGIC GOAL: ECONOMIC GROWTH AND TRADE

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

Economic growth and trade reflect some of the most basic purposes of our transportation system. Beyond access and mobility, transportation is an enabler – a factor of production. One has only to look back at the historic role of canals, railroads, and the creation of the National Highway System to see the tremendous leveraging effects. On the other side of the ledger, there are costs. These may be in terms of delay, fairness and equity, regulatory cost, or even the shocks to our economy associated with disruptions. The FY 2000 budget proposes \$993 million in direct programs to meet these challenges.

We Aim To Achieve These Strategic Outcomes:

- Reduce the real economic cost of transportation, taking into account changes in the efficiency and quality of transportation services.
- 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.
- Reduce the average time for delivery of people, goods, and services to their destinations
- Improve the reliability of the delivery of people, goods, and services to their destinations.
- Reduce trade barriers, support economic deregulation, and promote competition in domestic and international markets in transportation-related services.
- Improve the U.S. international competitive position by facilitating the export of domestic transportation goods and services.
- Accelerate desirable, sustainable, and cost-beneficial regional and local economic development through major transportation investments.
- Increase the education and public awareness of individuals in transportation-related fields.
- 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.
- Increase the nation's economic growth and trade through wise, cost-effective transportation investments.

PERFORMANCE GOALS:

Appalachian highway system

Highway border crossings

Flight route flexibility

International air service

Great Lakes winter navigation

Commercial shipbuilding

Access to jobs

Transportation and education

Disadvantaged Business Contracting

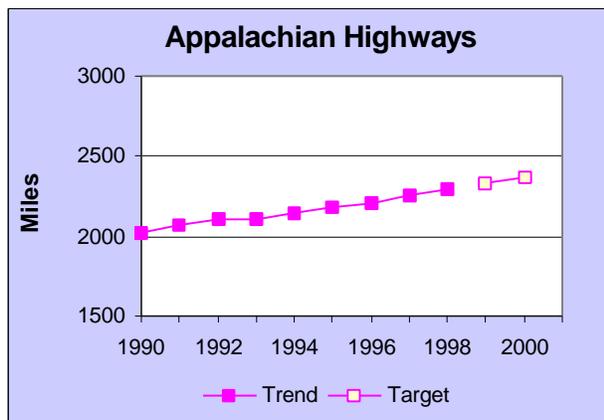
Ten specific performance goals -- reflecting the results of some of the key programmatic interventions within DOT -- will be used to gauge our progress in advancing our outcome goals in economic growth and trade. Each of these performance goals is described in more detail in this section.

DIRECT PROGRAMS FOR ECONOMIC GROWTH & TRADE				
Estimated Obligations (FY 1998-2000), in millions				
1/28/99		FY 1998 Actual	FY 1999 Estimated	FY 2000 Request
	OFFICE OF THE SECRETARY	16	17	17
	Minority Business Outreach & Loan Program	5	6	5
	TPR&D (Economic projects)	1	1	1
	OST-X and OST-P Salaries & Expenses	10	10	11
	COAST GUARD	99	161	154
	Icebreaking Operations	70	106	110
	Acquisition	28	54	43
	Research	1	1	1
	FEDERAL HIGHWAY ADMINISTRATION	261	808	648
	Appalachian Dev. Hwy Program	258	571	405
	Border Crossing Program	-	124	126
	Credit Program	-	71	81
	* University Transp Centers	3	43	27
	RABA, net (est. distribution)	-	-	9
	NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	0	0	0
	** Theft Prevention & Odometer Fraud	0	0	0
	FEDERAL TRANSIT ADMINISTRATION	6	81	156
	* University Transportation research	6	6	6
	Job Access and Reverse Commute	-	75	150
	MARITIME ADMINISTRATION	49	51	18
	MARAD Operations and Training	7	8	8
	Title XI Program	42	43	10
	TOTALS	432	1,118	993
	* Programs administered by RSPA.			
	** \$0.2 million per year (rounds to zero).			

APPALACHIAN HIGHWAY SYSTEM

Why We Act: The economic condition of the Appalachian Region, comprising areas within 13 states, has historically lagged far behind the nation as a whole. Growth depends on overcoming the Region's isolation and providing this underserved area with adequate infrastructure. Supporting economic development in the Appalachian Region by strengthening the Region's highway infrastructure will improve not only the Region, but will have a synergistic affect on the Nation as a whole. In 1965, the Appalachian Regional Commission (ARC) was established to help develop the Region, and it runs the Region's highway program. Congress has authorized a 3,025 mile system for Appalachia – the Appalachian Development Highway System (ADHS) – to provide a modern system of highways. Approximately 80 percent of this system is complete or under construction.

DOT's goal: Provide funding and technical assistance in support of the ARC goal to complete approximately 37 additional miles of the ADHS each year through 2003. The FY 1998 completion level is 2290 miles. The FY 2000 goal is to have 2373 miles open to traffic.



Special Challenges: The ARC has responsibility for all decision-making functions of the Appalachian highway program. The most expensive and difficult miles remain to be built.

Strategies: FHWA will coordinate with ARC, provide funds to States for construction of the ADHS, and provide administrative and technical assistance as it does for other Federal-aid programs.

Other Federal Programs with Common Outcomes: FHWA coordinates with the ARC to provide the Appalachian Region with a modern highway system to promote economic development in the Region.

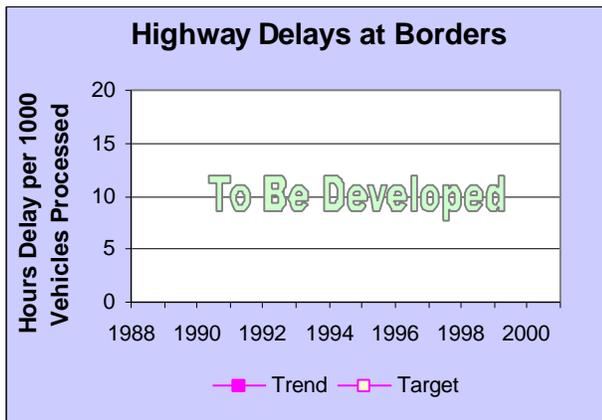
Activities and Initiatives in FY 2000 (including estimated obligations):

- FHWA will provide funds to the 13 states with Appalachian corridor highways. The level of needed funding for each state is determined by the ARC, based on cost-to-complete estimates. Estimated obligations for FY 2000 are \$405 million, nearly a 2% increase from the FY 1999 level.
- FHWA provides the ARC with administrative and technical assistance. At the ARC's request, FHWA gathers data, such as cost-to-complete estimates.

HIGHWAY BORDER CROSSINGS

Why We Act: Our nation's economic strength and our individual purchasing power are enhanced by lower transportation costs. In the first year following the North American Free Trade Agreement, the dollar value of trade with Canada and Mexico increased 10.5 and 7.8 percent respectively. Over two-thirds of this trade with Canada moved by truck; over four-fifths of trade with Mexico was by truck. This resulted in 11,000 truck crossings from Mexico to the U.S. on an average weekday in 1995. Inspections and checks associated with these crossings has caused significant delay.

DOT's goal: Reduce the delay at NHS border crossings per 1000 vehicles processed in FY 2000. (Target to be developed in FY 1999.)



Special Challenges: Truck traffic with both Canada and Mexico is expected to grow with an expanding economy, straining existing capacity. Efficient movement of trucks must be balanced with vehicle safety, immigration, and customs requirements. Accordingly, physical infrastructure is less a factor in border delays than other vehicle processing requirements.

Strategies: FHWA will coordinate overall crossing efficiency with international, Federal and State partners. This will include improved infrastructure solutions, technology applications, and leadership in collaborative improvements to vehicle processing.

Other Federal Programs with Common Outcomes: DOT will coordinate border processing requirements with U.S. Customs, U.S. Immigration and Naturalization Service, State authorities, and the international authorities. FHWA is working with U.S. Department of State and the Mexican government to complete a bi-national study of trade flows and planned infrastructure improvements along the U.S./Mexico border.

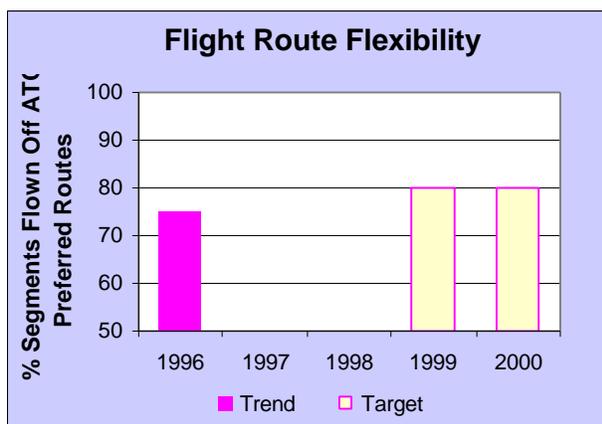
Activities and Initiatives in FY 2000 (including estimated obligations):

- Implement the National Corridor Planning and Development program and the Coordinated Border Infrastructure program. Fund infrastructure improvements (such as upgrades to facilities, additional lanes, etc.) that facilitate the safe and efficient movement of people and freight across our borders with Canada and Mexico. FHWA will obligate \$126 million in FY 2000 for these programs, up nearly 2% from the FY 1999 level.
- As a part of the Coordinated Border Infrastructure program, and in cooperation with the Department of the Treasury, expand the use of ITS technologies to support the efficient and safe use of board crossings. Examples may include automating administrative processes (documentation, etc.) and integrating this information with the ITS coordination of vehicle movement.
- Evaluate ITS technology in processing people and goods at six testing centers at international crossings. (Ongoing)

FLIGHT ROUTE FLEXIBILITY

Why We Act: Many of the most heavily traveled routes in the national airspace system have published air traffic control (ATC) preferred routes, which are based on flying from one navigational aid to another to ensure accuracy in navigation. These routes are designed to minimize conflicts in congested airspace, and they are an especially important tool in helping air traffic controllers organize traffic flow around major airports. However, these routes often differ significantly from the routes that pilots or flight planners would normally propose between two cities. They desire the capability to optimize their operations based on their own objectives and constraints, which vary flight-by-flight and user-by-user. By allowing aircraft to fly the most direct routes, or choose other indirect routes to avoid weather, there can be time and cost savings or smoother flights that avoid turbulence. Enhanced automation aids now being developed facilitate the use of more direct routes.

DOT's goal: Increase the number of flight segments that aircraft are able to fly off ATC-preferred routes from 75% in FY 1996 to 80% in FY 2000.



Special Challenges: There are significant savings for longer routes, but the shorter routes are not as likely to benefit because of the limitations while climbing from or descending to an airport. Growth in aviation increases the complexity of air traffic control and makes it more difficult to allow flights off the preferred routes.

Strategies: DOT is implementing the Free Flight Phase I program to allow greater use of direct routes. The enhanced software tools and the Conflict Probe software allows controllers to better project future flight paths and maintain separation for flight segments off the preferred routes.

Other Federal Programs with Common Outcomes: FAA has coordinated with DOD for several years to allow direct flights. The techniques used will assist FAA as wider scale use of direct flights is made by commercial airlines.

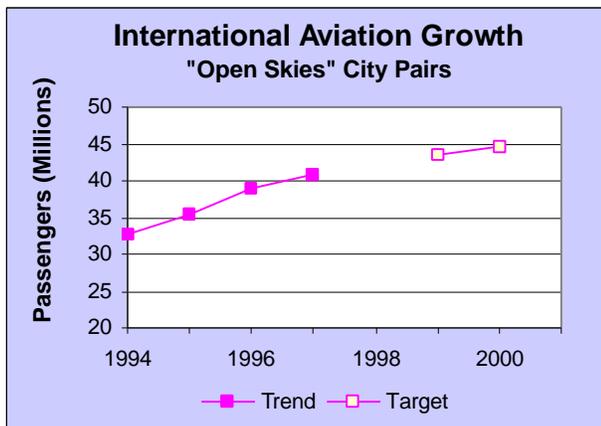
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA will continue working closely with airlines to share air traffic information so that collaborative decisions can be made. Airlines often have priority preferences among their own flights and can indicate to FAA which flights are most important. Collaborative decision making is mostly by voice communication now, but software and hardware for automated collaborative decision making is being developed within the Free Flight Phase I Program. (\$29.4 million)
- FAA will begin operational use of Conflict Probe at 7 centers which allows controllers to project aircraft flight paths into the future and resolve future conflicts well in advance. This automation tool allows pilots to fly the most efficient routes between terminal control areas because controllers only have to intervene when Conflict Probe shows the selected route will result in a potential conflict. (\$83.2 million)
- FAA Research, Engineering and Development program is continuing work on the software development necessary to enhance and expand the capability of Conflict Probe. (\$.5 million)

INTERNATIONAL AIR SERVICE

Why We Act: Air transportation is the principal mode for international passenger travel. International air transportation has been subject to restrictive bilateral agreements with other countries since the 1940's. These agreements tended to raise prices and artificially suppressed aviation growth in these markets. The International Air Transportation Policy Statement issued by the Department in 1995 aimed to open international air travel to market forces. DOT works within this framework to open international air transportation so that increased service, lower fares, and enhanced opportunity for economic growth can be achieved.

DOT's goal: Achieve at least a three percent annual growth rate in those international markets with open aviation agreements. The 1997 base-line for the 31 "open skies" countries and Canada was 40.9 million passengers. The FY 2000 target is at or above 44.7 million passengers.



Special Challenges: Agreements to foster greater access are negotiated on a nation by nation basis, and must balance conflicting interests. Negotiating agreements and achieving passenger growth goals may be influenced by the strength of the world's economy.

Strategies: DOT aims to remove many of the bilateral restrictions that limit the freedom of U.S. and foreign airlines to provide air service between the U.S. and foreign nations and price their services in accordance with free market principles. DOT has pioneered the use of "open-skies" agreements that allow most of the freedoms needed to ensure a free competitive market place to the benefit of travelers throughout the world as well as the general economies of the U.S. and other nations.

Other Federal Programs with Common Outcomes: The Department of State works with DOT in negotiations that support DOT's goal.

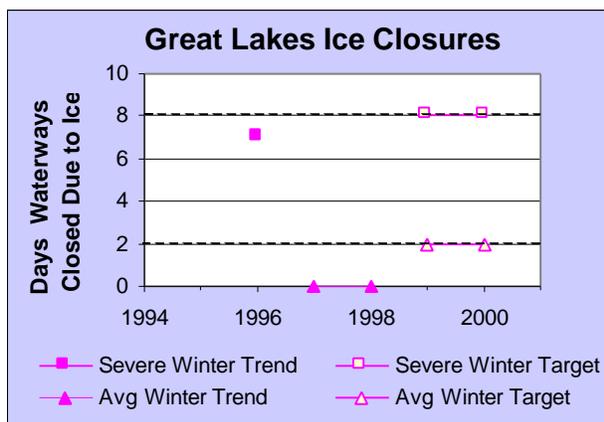
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Offices of International Aviation and International Law will negotiate and implement international air transportation agreements that support free market air service. Typically, there are between 50 and 70 negotiations each year, ranging from local talks to negotiations held as far away as Hanoi. FY 2000 funding is \$4.1 million.
- The Office of Aviation and International Economics will provide data analysis and economic support for agreement negotiation. Funding is \$128,000.
- DOT will continuously review and streamline the regulatory processes by which authority is awarded to U.S. and foreign air carriers. Authority to serve fully competitive international markets, such as those governed by "open-skies" agreements, is awarded for open routes so that the authorized air carriers will not have to seek periodic amendment of their licenses.
- Existing legislation is sufficient to support DOT efforts, and provides a facilitative framework for negotiating pro-competitive agreements and awarding broad authority.

GREAT LAKES WINTER NAVIGATION

Why We Act: The Great Lakes support 15 million tons of regional commerce during the annual ice season, and Great Lakes shipping provides the most cost-effective transportation for many industrial materials, especially those carried in large bulk quantities. During the winter, heavy ice that forms on the Great Lakes would stop marine commercial traffic if left alone. Waterway closure increases transportation costs substantially, and potentially overloads other transportation systems.

DOT's goal: Limit closures of certain critical waterways due to ice -- to 2 days (in an average winter) and 8 days (in a severe winter).



Special Challenges: Icebreaking performance is affected by ice thickness, which is linked to the severity of the winter weather. Some sources of traffic delay (e.g., canal lock closures) must be addressed by other government agencies such as the Army Corps of Engineers and the St Lawrence Seaway Authority of Canada.

Strategies: DOT aims to limit days of waterways closure due to ice by breaking the ice so that ships can pass, using Coast Guard ships with strengthened hulls for operating in ice.

Other Federal Programs with Common Outcomes: None.

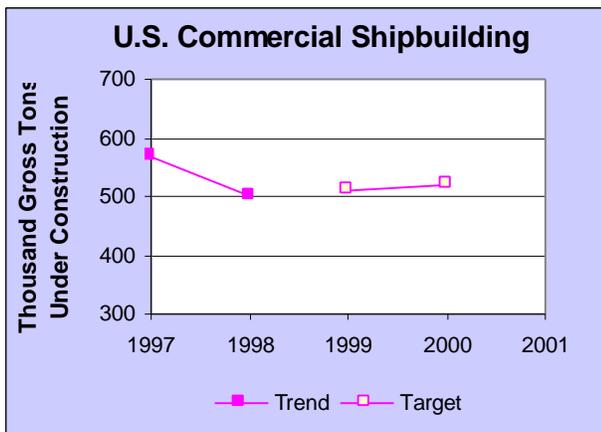
Activities and Initiatives in FY 2000 (including estimated obligations):

- USCG will operate and maintain the heavy icebreaker MACKINAW and icebreaking tugs on the Lakes to keep waterways open. (\$11.78 million).
- USCG will also conduct icebreaking escorts of commercial vessels, establish and maintain ice-free tracks, monitor traffic routing and ice conditions, and free vessels beset in ice.

COMMERCIAL SHIPBUILDING

Why We Act: Like other industries that depend upon defense contracting, major U.S. shipyards need to transition to commercial production while maintaining a U.S. shipbuilding capability sufficient for national and economic security. Major barriers have impeded the U.S. shipbuilding industry from competing in the international market, including substantial shipbuilding subsidies by foreign governments and greater economies of scale and efficiencies in foreign shipyards derived through series production of standardized vessels. U.S. government action is necessary to help the U.S. shipbuilding industry compete in the international market.

DOT's goal: Attain a stable U.S. commercial shipbuilding orderbook of 520,000 gross tons by FY 2000. The FY 1997 baseline is 567,000 gross tons.



Special Challenges: Continued subsidization of foreign shipyards by their governments, including significant expansion of modern shipyard facilities, will create excess shipbuilding capacity and enable foreign shipyards to price ships below cost, an inducement for vessel owners to purchase ships outside the United States. Devaluation of foreign currencies (such as experienced during the 1998 "Asian flu") also allows foreign shipyards to sell ships at prices that are below the cost of building in the U.S. Corporate decisions by U.S. shipyards to focus on military ship construction could significantly reduce commercial shipbuilding capability for large, oceangoing vessels.

Strategies: MARAD will continue implementation of the National Shipbuilding Initiative, emphasizing timely and effective management of the Maritime Guaranteed Loan (Title XI) program to enable U.S. shipyards to increase productivity, reduce costs, and stimulate the construction of vessels in U.S. shipyards and to modernize U.S. shipyard facilities.

Other Federal Programs with Common Outcomes: The OECD Shipbuilding Agreement aims to end shipbuilding subsidies and to open the international market for U.S. shipyards. MARAD coordinates with the Office of U.S. Trade Representative (USTR) and the Department of State in efforts to enact legislation implementing the OECD Agreement. MARAD also works closely with DOD to assist the shipbuilding industry with competitive ship designs, market strategies and modern shipbuilding processes and procedures. DOD reviews Title XI loan guarantees for ships constructed for export.

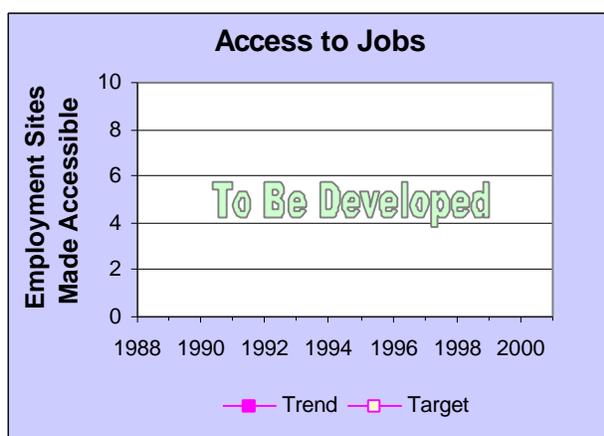
Activities and Initiatives in FY 2000 (including estimated obligations):

- MARAD will continue to encourage private sector investment in the modernization of U.S. shipbuilding facilities, either independently or through the use of the Title XI (\$9.9 million).
- MARAD will maintain the National Maritime Resource and Education Center (NMREC) as a centralized source of information, expertise and reference materials on commercial shipbuilding.

ACCESS TO JOBS

Why We Act: Two years ago, President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act. Among other changes, the reform of our welfare laws limits the time a person can receive benefits and generally requires recipients to participate in job and training activities. But for many of these people, transportation is the key to making this transition. Nationally, only six percent of welfare recipients own a car. Public transit helps connect our lower income population to employment.

DOT's goal: Increase the number of employment sites that are made accessible by Job Access and Reverse Commute transportation services. Target for FY 2000 to be developed by March 1999.



Special Challenges: A physical disconnect exists between job growth in the suburbs and the majority of the low income population living in rural areas or central cities. Current transit services are poorly equipped to accommodate these commutes. Furthermore, low-income workers frequently commute during nontraditional hours and cannot take advantage of rush hour transit services.

Strategies: DOT provides grants for transit projects designed to transport welfare recipients and low-income individuals to and from jobs. DOT also provides grants to transit projects designed to provide access to suburban employment sites.

Other Federal Programs with Common Outcomes: Helping people move from welfare to work is a goal shared by HUD's Bridges to Work, DOL's Welfare to Work, and HHS's Temporary Assistance to Needy Families (TANF). Federal funds from these departments may be used as part of the local match to DOT's Job Access grants. An interagency working group, with members from DOL, HUD,

HHS and other agencies, will assist in the application review process.

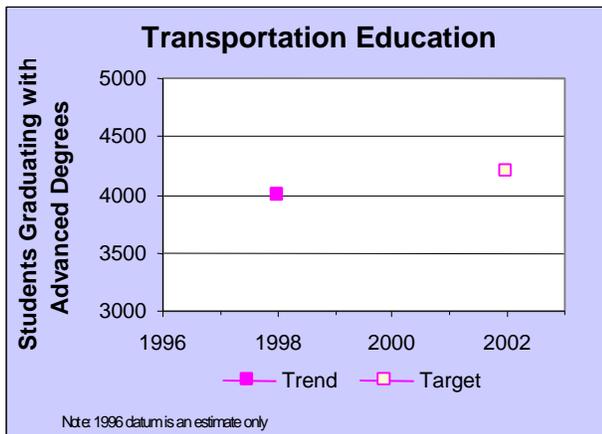
Activities and Initiatives in FY 2000 (including estimated obligations):

- FTA's Job Access and Reverse Commute programs provide grants which assist states, local governments, and non-profit organizations in implementing new transportation services to link welfare recipients to jobs. (\$150 million for FY 2000; 100% above the FY 1999 request.)
- Within FTA's Reverse Commute program, grants are provided for new transportation services that transport workers to suburban employment opportunities. (Up to \$10 million for FY 2000, same as in FY 1999.)
- FTA will conduct a study which evaluates the Job Access and Reverse Commute grants programs, and submit the study to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate. (\$150,000 for FY 1999 and 2000.)
- Under the Job Access Support Program of the National Research and Technology Program, FTA will provide technical assistance to transportation planners, document the best practices of transportation planning, and demonstrate innovations in transportation services. (\$200,000 in FY 2000.)

TRANSPORTATION AND EDUCATION

Why We Act: The U.S. needs an educated, innovative, and highly skilled transportation workforce in the 21st century if it is to compete effectively in the global economy, and provide its people with a safe, efficient transportation system. This future outcome can be achieved only by investing now in the people who will make up our future workforce, and in research programs that will develop the tools and techniques that the future transportation system will require.

DOT's goal: By 2002, increase by 5% the number of students graduating with transportation-related advanced degrees from universities receiving DOT funding. Estimate of graduates in FY 1998 is 4000. As a long-term investment, by the end of CY 2000 reach one million students of all ages through the Garrett A. Morgan Technology & Transportation Futures Program.



Special Challenges: Student enrollment at universities has been declining across-the-board for several years. Students choose major fields of study and career paths for a variety of reasons, and the academic environment is by nature somewhat resistant to outside influence.

Strategies: To achieve these goals, DOT will work with the private sector, labor, and educational institutions. DOT will work directly with University Transportation Centers, funded by DOT grants, to develop and implement focused transportation degree programs, and with schools at all levels to expand the information available to students about the potential for careers in transportation.

Other Federal Programs with Common Outcomes: DOT coordinates its educational efforts with the Departments of Education and Labor--for example, on school-to-work initiatives with Prince Georges County and vocational/technical training

through career guides for middle and high school students.

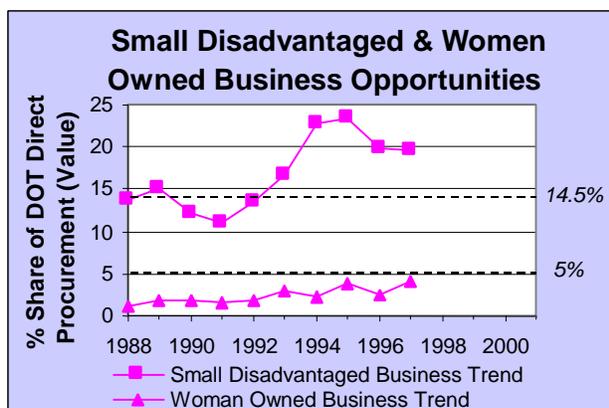
Activities and Initiatives in FY 2000 (including estimated obligations):

- RSPA will manage 33 University Transportation Centers (UTCs) and administer \$33.3 million in FHWA and FTA funding in FY 2000. The Centers will provide educational grants to students pursuing careers in transportation, will perform basic and applied research, and will conduct outreach efforts for pre-college students and practitioners.
- The Garrett A. Morgan Technology and Transportation Futures Program will partner with education, business, labor and non-profit communities to interest students of all ages in transportation careers and ensure they have the knowledge and skills for those careers. Funding will be at \$200 thousand.
- The Eisenhower Transportation Fellowship Program will be funded at \$2 million annually to award fellowships to undergraduate and graduate students to pursue studies and degrees to prepare for transportation-related careers.
- The National Transit Institute at Rutgers University will receive \$4 million to improve workforce performance and build professional capacity in the transit industry.
- The National Summer Transportation Institute Program allows secondary school students to spend four weeks at Historically Black Colleges and Universities and other Minority Educational Institutions to increase awareness of transportation-related career opportunities.
- The Summer Transportation Internship Program for Diverse Groups will provide on-site experiential transportation opportunities in DOT modal administrations for ten weeks during the summer.

DISADVANTAGED & WOMEN OWNED BUSINESS CONTRACTING

Why We Act: Small disadvantaged and women owned businesses provide vital contributions to our Nation's economy, bringing products and services into the market, ensuring competition, and providing training and jobs for thousands of workers who are often socio-economically disadvantaged. These businesses also face special challenges in competing for government contracts, such as access to capital, bonding assistance, and expertise in complex contracting procedures. As a result, these groups can be under-represented in DOT direct contracts. For example, women own more than 35% of US businesses, yet receive less than 2% of federal contracting dollars. In 1994, the Federal Acquisition Streamlining Act (FASA) established a government-wide goal of five percent for contract and subcontract awards to women-owned businesses (WOB). DOT also negotiates goals with the Small Business Administration (SBA) for contracting with small disadvantaged businesses (SDB).

DOT's goal: Award at least 5% of the dollar value of DOT direct contracts to women-owned business in FY 2000. Award at least 14.5% of DOT direct contracts to small disadvantaged businesses (this target may be further negotiated with SBA).



Special Challenges: The most significant challenge involves implementation of the new SDB process outlined in the revised Federal Acquisition Regulations resulting from the Adarand Supreme Court case. The case established a strict scrutiny standard for federal affirmative action contracting programs that may hinder the Department's ability to reach desired levels of participation. Another impediment to reaching the goal is the growing government-wide practice to reduce administrative costs through contract bundling. Contract bundling results in fewer but larger Federal contracts. As a result, small disadvantaged and women-owned businesses may have fewer opportunities to compete for Federal contracts.

Strategies: The Department is increasing its outreach efforts to reach small disadvantaged businesses, women-owned businesses and the contract-

ing community. DOT will continue to consult with SBA to identify and implement ways to make it easier for contracting officers to identify and approach SDB and WOB as potential contractors.

Other Federal Programs with Common Outcomes: The Small Business Administration (SBA) is the lead agency overseeing government-wide goals for small disadvantaged and women-owned business contracts. DOT was the first government agency to work with the Small Business Administration to sign a memorandum of understanding (MOU) specifically geared to increasing WOB participation in DOT contracting. DOT is working with the SBA and other federal agencies to implement the MOU. DOT is also working to establish strong working relationships with the Interagency Council on Women's Business Enterprises and the National Women's Business Council to assist in reaching the goal.

Activities and Initiatives in FY 2000 (including estimated obligations):

- Continue to assist and promote small businesses in general, many of which are disadvantaged or women-owned businesses. Activities include training, conferences, information dissemination and technical assistance (\$3 million total).
- Increase women-owned business participation in Intelligent Transportation System (ITS) related contracts and industry through a specially targeted outreach initiative (\$200,000).
- Promote and encourage women-owned businesses in Federal contracts through participating in the National Women's Business Council (\$30,000).

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STRATEGIC GOAL: HUMAN AND NATURAL ENVIRONMENT

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

Transportation makes our communities more livable, enhancing the quality of our lives and our society. However, transportation generates undesired consequences too, such as pollution, noise, and the use of valuable land and fisheries. Our natural resources are “public goods,” providing broad benefits that are distributed throughout our society. Because of this, those who might gain by polluting or using up these resources do not bear the full costs of their actions. This requires government intervention to maximize the overall public benefits. No matter how much is done to improve the capacity and efficiency of our transportation system, we can not consider our programs to be successful unless we also manage the effects on our environment, and ultimately our own health.

DOT’s objective is to advance the benefits of transportation while minimizing its negative environmental impacts. The Department also aims to advance government-wide goals for preserving our national resources. The FY 2000 budget proposes \$3.9 billion in direct environmental funding to meet this challenge. This is a 13% increase over the FY 1999 level.

We Aim To Achieve These Strategic Outcomes:

- Improve the sustainability and livability of communities through investments in transportation facilities.
- Reduce the amount of transportation-related pollutants and greenhouse gases released into the environment.
- Improve the natural environment and communities affected by DOT-owned facilities and equipment.
- Reduce the adverse effects of siting, construction and operation of transportation facilities on the natural environment and communities, particularly disadvantaged communities.
- Improve the condition of our living marine resources.

Ten specific performance goals -- reflecting the results of some of the key programmatic interventions within DOT-- will be used to gauge our progress in advancing our outcome goals for the nation’s human and natural environment.

Each of these performance goals and associated measures are discussed in this section.

PERFORMANCE GOALS:

Mobile source emissions

Greenhouse gas emissions

Energy Efficiency

Wetland protection and recovery

Livable communities (transit service)

Aircraft noise exposure

Maritime oil spills

Fisheries protection

Pipeline spills

DOT facility cleanup

Environmental justice

DOT Performance Plan FY 2000

DIRECT ENVIRONMENTAL PROGRAMS

Estimated Obligations (FY 1998-2000), in millions

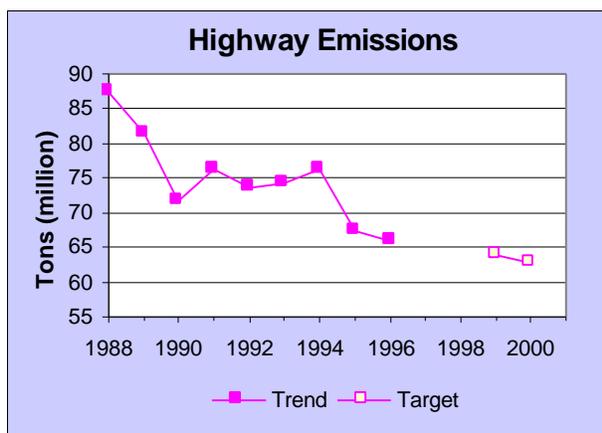
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		FY 1998 Actual	FY 1999 Estimated	FY 2000 Request
OFFICE OF THE SECRETARY				
TPR&D	(Environmental projects)	-	0	0
COAST GUARD				
Marine Env. Protection	Operations	301	325	338
	Acquisition	43	83	47
	Research	3	3	4
ELT (Fisheries)	Operations	459	462	480
	Acquisition	36	34	38
	Research	1	0	2
Oil Spill Cleanup		79	61	61
Facility Compliance & Restoration		23	21	21
Denali Commission		-	4	-
FEDERAL AVIATION ADMINISTRATION				
Airport Grants	(Noise-reduction)	233	275	226
Environment & Energy	(Noise-reduction)	3	4	4
Facility Compliance & Restoration		71	55	59
FEDERAL HIGHWAY ADMINISTRATION				
Congestion Mitigation & Air Quality (CMAQ)		700	1,408	1,770
Federal-aid Highways	10% set-aside for TE	360	554	565
	Community Preservation	-	14	48
	Recreational Trails	15	40	50
	RABA, net (est. distribution)	-	-	27
FEDERAL TRANSIT ADMINISTRATION				
Clean Fuels Program		-	50	100
MARITIME ADMINISTRATION				
Operations and Training		7	8	8
RESEARCH & SPECIAL PROGRAMS ADMIN.				
Advanced Vehicle Program (in FHWA)		-	[5]	[20]
Pipeline Safety (liquid)		9	10	10
TOTALS		2,343	3,410	3,856

MOBILE SOURCE EMISSIONS

Why We Act: The National Ambient Air Quality Standards target six major pollutants as among the most serious airborne threats to human health. Transportation emissions account for nearly 50% of these six pollutants. And nearly three-quarters of transportation-related emissions come from on-road motor vehicles. The quality of our air is a public good, and the cost of these pollutants is not captured in the marketplace. For this reason, the government works to mitigate this negative impact.

DOT's goal: Reduce on-road mobile source emissions by 2% from 1999 to 2000, to a target level of 62.7 million tons. The 1996 baseline was 65.9 million tons.



Special Challenges: Growth in the U.S. economy has translated into over 2% annual growth in vehicle miles traveled. The principal component, private vehicles, provides flexibility to consumers; and diversion of users to more emission-efficient modes must be balanced with market choice and other economic factors.

Strategies: DOT aims to reduce mobile source emissions by encouraging the use of less polluting transportation; designing and implementing infrastructure that reduces congestion and emissions; researching and modeling the emissions impacts of investment choices; and supporting the development of fuel- and emission-efficient vehicles.

Other Federal Programs with Common Outcomes: DOT efforts support the government-wide goals for National Ambient Air Quality Standards. Cooperative programs with EPA include: The Transportation and Air Quality public education initiative; implementing the transportation conformity regulation and the Congestion Mitigation and Air Quality Improvement Program (CMAQ), and conducting research on various strategies that target the reduction of mobile source emissions.

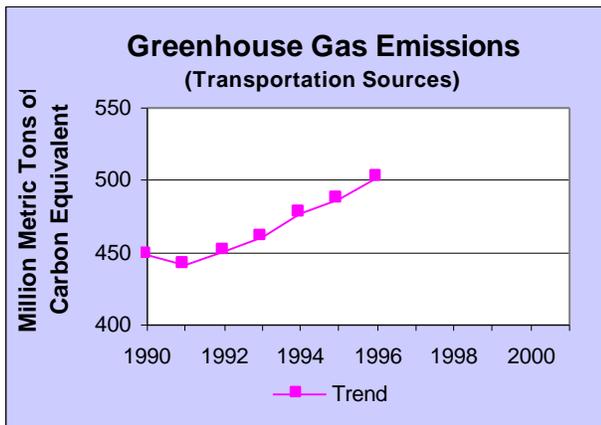
Activities and Initiatives in FY 2000 (including estimated obligations):

- FHWA will target transportation infrastructure investment to reduce mobile source emissions and highway congestion through the CMAQ Program. (\$1.8 billion in FY 2000, an increase of 26 percent from FY 1999.)
- FHWA will identify and help resolve challenges in implementing the amended 1997 conformity regulations for clean air, through phase II of the Conformity Assessment Project (CAP).
- FHWA will develop approaches to improve air quality and evaluate emissions impacts and cost-effectiveness of transportation strategies, through continued research on transportation and air quality. As in FY 1999, \$4.9 million is slated for environmental research in FY 2000. Activities include research on a 2.5-micron particulate matter emission model to support revised National Ambient Air Quality Standards (joint with EPA).
- With the Partnership for a New Generation of Vehicles, NHTSA will conduct research on the relationship between vehicle design, crashworthiness, and occupant protection so that increased fuel efficiency and reduced emissions are achieved without compromising safety.
- Investment in transit and rail infrastructure provides a secondary contribution to reducing mobile source emissions to the extent that transit travel is substituted for private vehicle travel.

GREENHOUSE GAS EMISSIONS

Why We Act: The atmospheric accumulation of CO₂ and several other greenhouse gases (GHG) affects the re-emission of absorbed solar radiation, and may have negative consequences for the human and natural environment. During this century, annual emissions of CO₂ from human activity have risen by a factor of ten. During the next half-century, they are projected to grow by another factor of two or more. Transportation currently accounts for about one third of the carbon dioxide (CO₂) emissions from human activity in the U.S. The impact of these trends is being studied globally.

DOT's goal: Reduce greenhouse gas emissions from transportation in the U.S. in conjunction with other DOT. No target is set for this goal.



Special Challenges: The U.S. is experiencing over 2% annual growth in highway travel, and significant growth in other transportation modes. Demand for less GHG-intensive vehicles and fuels is weakened by real petroleum prices that are at or near historical lows.

Strategies: DOT supports the development and use of safe, fuel-efficient vehicles. While waiting for Senate ratification of the Kyoto Protocol, the Department will continue to work to reduce greenhouse gases in conjunction with our other social goals assigned by the Congress.

Other Federal Programs with Common Outcomes: DOT participates with DOE in the Partnership for a New Generation of Vehicles and in a DOT/DOE initiative supporting public/private partnership to promote the design, development, and deployment of alternative fuels and propulsion systems.

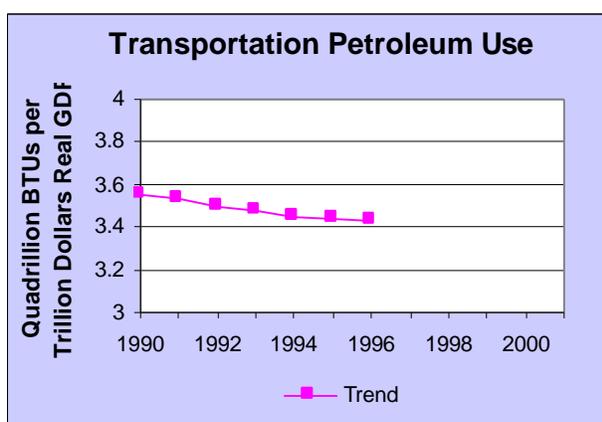
Activities and Initiatives in FY 2000 (including estimated obligations):

- RSPA will lead a public/private partnership to develop, demonstrate, and deploy advanced transportation technologies for medium- and heavy-duty vehicles (\$20 million in FHWA funding).
- USCG will participate in a joint project with the Navy to develop fuel cell technology for marine applications (\$ 1.5 million).
- FHWA and FTA will continue to provide technical assistance to help State and local transportation and air quality officials to implement programs such as commuter choice and telecommuting, as stated in the 1993 Climate Change Action Plan.
- To assure the safety of new concept vehicles, NHTSA will develop computational tools, methodologies, and models for evaluating the fleet compatibility of vehicles being developed under the Partnership for a New Generation of Vehicles (\$3.5 million).
- DOT will conduct ongoing evaluation of strategies to mitigate transportation-related greenhouse gas emissions.
- FAA will continue research on aircraft emissions reduction and control. Engine exhaust emissions certification procedures will be harmonized with European Joint Aviation Authorities (\$1 million).

ENERGY EFFICIENCY

Why We Act: Moving people and goods requires more than one-quarter of the total energy used in the U.S., and two thirds of U.S. petroleum consumption. Transportation is nearly totally dependent on oil for energy, and almost half of that petroleum must be imported. This dependency makes the U.S. economy particularly vulnerable to supply disruptions. To lessen this vulnerability, the Federal government acts to improve the fuel efficiency of various transportation modes and to develop transportation power systems that use alternatives to petroleum based fuels. Our actions in this area complement our work in reducing emissions.

DOT's goal: Reduce the nation's vulnerability to oil price shocks by reducing transportation energy consumption as a function of Gross Domestic Product. No target is set.



Special Challenges: Growth in the U.S. economy has translated into steady growth in transportation energy consumption. Private vehicles, which account for the majority of this energy use, provide flexibility to consumers. Shifting drivers to fuel efficient or alternative fuel modes will be subject to market choice and other economic factors.

Strategies: DOT aims to reduce transportation petroleum consumption by encouraging the use of fuel efficient transportation and designing and implementing infrastructure that reduces energy consumption. DOT will also research and support the development of fuel-efficient vehicles as well as alternatives to petroleum fueled vehicles.

Other Federal Programs with Common Outcomes: DOT efforts in transportation energy efficiency support the Department of Energy's Comprehensive National Energy Strategy. The Federal R&D partnership for next generation vehicle development includes the Departments of Commerce, Defense, Energy, and Transportation as well as the Environmental Protection Agency.

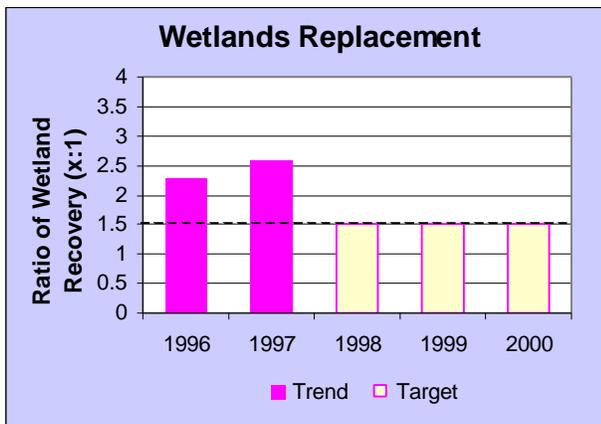
Activities and Initiatives in FY 2000 (including estimated obligations):

- FHWA will support State and local governments in implementing fuel efficiency programs including alternative fuel initiatives and other congestion reduction programs that have air quality benefits through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.
- NHTSA will conduct research associated with the Partnership for a New Generation of Vehicles (PNGV). In FY 2000, NHTSA will study the relationship between vehicle design, crashworthiness, and occupant protection so that increased fuel efficiency is achieved without compromising safety. (\$3.5 million)
- FTA will complete demonstration of proton exchange membrane fuel cell hybrid transit buses. In cooperation with the transit industry and domestic fuel cell suppliers, we will also initiate development and demonstration of non-hybrid proton exchange membrane fuel cell transit buses. The clean fuels program is funded at \$100 million in FY 2000.
- Investment in transit and rail infrastructure provides a secondary contribution to energy efficiency to the extent that transit and rail travel are substituted for private vehicle travel. Infrastructure investment in these modes will increase 6 percent in FY 2000, to \$6.1 billion.
- Coast Guard will accelerate development, test, and evaluation of a full-scale prototype fuel cell for its potential use on Coast Guard cutters (\$1.5 million).

WETLAND PROTECTION AND RECOVERY

Why We Act: Wetlands are an important natural resource. They provide natural filtration of pollutants, and they store and slow down the release of floodwaters, thereby reducing damage to downstream farms and communities. Wetlands also provide an essential habitat for biodiversity. But many of the nation's wetlands have been lost to development over the years, before their value was fully recognized. Highways and transportation facilities (siting, construction, and operation) can be a significant factor affecting these ecosystems.

DOT's goal: Minimize the adverse impacts of transportation projects on wetlands, and replace at least 1.5 acres of wetlands for every 1 acre affected by Federal-aid Highway projects where impacts are unavoidable.



Special Challenges: Wetland impacts are sometimes unavoidable, particularly in construction of bridge crossings. In addition, projects on existing alignments can cause wetlands degradation that is impractical to avoid. In areas where the concentration of wetlands is high (southern bottomlands, Midwestern prairie potholes, and eastern pine flatwoods), transportation projects must cross wetlands to provide accessibility to the area.

Strategies: Through research, new technologies, analytical models, management training, and development of technical transfer documents, the Department will promote the construction, maintenance, and use of transportation projects that are compatible with national environmental objectives and that conform with the Clean Water Act.

Other Federal Programs with Common Outcomes: The Department will continue to coordinate wetland programs and research initiatives with EPA, the Departments of Interior, Commerce, and Agriculture, and the Army Corps of Engineers. This coordination is aimed to improve wetlands

policies and to address the Vice President's Clean Water Action Plan by ensuring a net gain in wetlands.

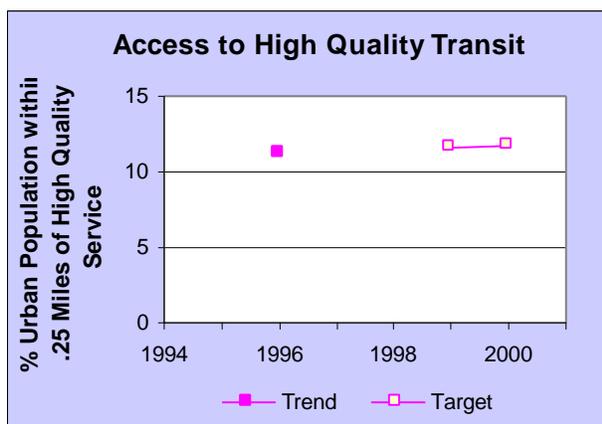
Activities and Initiatives in FY 2000 (including estimated obligations):

- FHWA will support the development of environmental analytical models to assist decision-makers and will promote initiatives to protect and enhance ecosystems on a programmatic basis, including the use of inventories, partnerships with resource agencies, and practices such as wetland banking.
- FHWA will provide a model process based on the results of watershed pilot programs of the Washington State DOT and other sponsors that provide recommended techniques and practices to minimize transportation impacts on watershed functions and values. A total of \$150 thousand is expected to be obligated in FY2000.
- FHWA will support R&D to continue the development of new wetland evaluation techniques, the Hydrogeomorphic or HGM assessment method in cooperation with EPA and the U.S. Army Corps of Engineers. A total of \$200 thousand is expected to be obligated in FY 2000.
- Amtrak, working with the Corps of Engineers, assesses wetland effects and pays the Corps a fee that covers the conversion/purchase of 1.5 times what was taken. FRA oversees this process.
- FTA ensures that grantees restore the functional value of any wetlands that are degraded.

LIVABLE COMMUNITIES – TRANSIT SERVICE

Why We Act: For the 80 million Americans who do not drive, public transit provides access to school, work, market, community services and family. It lessens highway congestion and helps the environment by slowing the growth of automobile traffic. And it provides options. Together, these features help to improve our human environment and make communities more livable.

DOT's goal: In CY 2000, increase to 11.68% the percentage of urban population living within a quarter mile of transit stops with service frequency of 15 minutes or less (non-rush hour). The CY 1996 baseline is 11.22%.



Special Challenges: The traditional commute from the suburbs into the city is becoming just one of many commuting patterns. People are moving farther away from the central cities, and jobs are increasingly located in the suburbs. These demographic shifts are translating into increased commutes, and more scattered travel patterns.

Strategies: The Livable Communities initiative stresses planning and design of community-oriented, and customer friendly transportation facilities and services. DOT will provide funds and technical assistance to local communities so they can better incorporate transportation into community planning and development. DOT will document and demonstrate the best practices in fully integrating community and transportation planning.

Other Federal Programs with Common Outcomes: Transportation, housing, economic development, and environmental decisions are highly interrelated, and they are best planned as part of a comprehensive process. DOT will work with the Environmental Protection Agency and the Department of Housing and Urban Development on the issue of sustainable development.

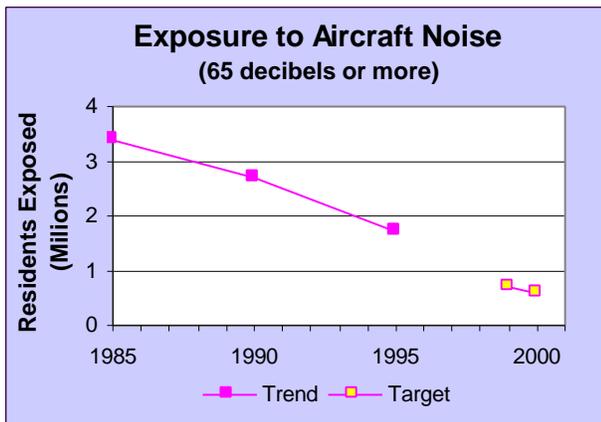
Activities and Initiatives in FY 2000 (including estimated obligations):

- Through Formula Grants, Capital Investment Grants, and the Job Access and Reverse Commute Programs, FTA invests in the public transit infrastructure. By increasing transportation services, these programs increase the availability of public transit in general.
- FTA monitors and reviews the planning activities of recipients of New Starts funding. These reviews include assessments of land use, travel demand, and environmental information. In FY 2000, FTA will conduct approximately 90 reviews. (\$1.35 million in FY 2000, 50% above the FY 1999 level.)
- To support the Livable Communities initiative, FTA invests in the following planning activities:
 - FTA provides financial assistance to Metropolitan Planning Organizations and State Departments of Transportation. These organizations develop the plans and implement the programs to improve their own communities. (\$60 million in FY 2000, 13% above the FY 1999 level.)
 - FTA operates the Research and Technology Program. Activities include investigating the relationship between transportation and land use, developing technology to reduce travel time, and increasing intermodalism. (\$51 million in FY 2000, 13% above the FY 1999 level.)

AIRCRAFT NOISE EXPOSURE

Why We Act: Public concern and sensitivity to aircraft noise around airports is high. In recent years, noise complaints have increased even while quieter aircraft technology has been introduced. This aircraft noise is an undesired by-product of our mobility, and the government acts to reduce the public's exposure to unreasonable noise levels.

DOT's goal: Reduce the number of people in the U.S. exposed to significant aircraft noise by at least 64% from the 1995 baseline of 1.7 million. The FY 2000 target is at or below 600,000.



Special Challenges: Much of the recent progress has been achieved by legislatively mandated transition of airplane fleets to newer-generation aircraft that produce less noise. Most of the gains from this change will have been achieved by FY 2000. The Airport Noise and Capacity Act of 1990 set December 31, 1999 as the deadline for elimination of Stage 2 (older, noisier) aircraft weighing more than 75,000 pounds. Growth in aviation activity also works against easy progress.

Strategies: DOT pursues a program of aircraft noise control in cooperation with the aviation community through noise reduction at the source (development and adoption of quieter aircraft), soundproofing and buyouts of buildings near airports, operational flight control measures, and land use planning strategies.

Other Federal Programs with Common Outcomes: FAA is engaged with NASA in joint noise reduction technology research.

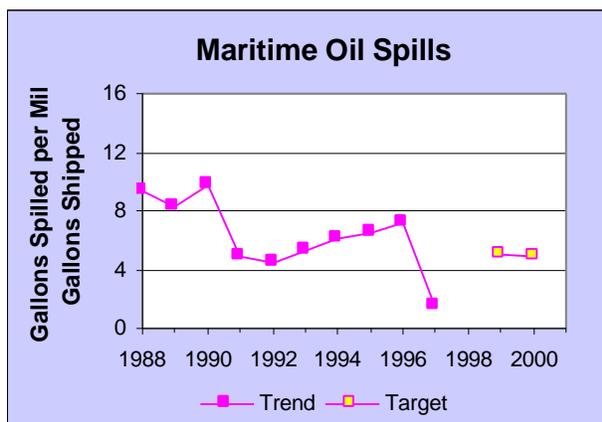
Activities and Initiatives in FY 2000 (including estimated obligations):

- The FAA's Airport Improvement Program will continue to provide funds for such noise reduction activities as the soundproofing of residences and buildings used for educational or medical purposes near airports, purchase of buffer zones around airports, and noise reduction planning (\$226 million).
- The FAA will continue to engage in noise research and assessment technologies (\$1.5 million).
- FAA Air Traffic Services implements operational flight control measures to reduce neighborhood exposure to aircraft noise.
- The joint FAA/NASA report on subsonic aircraft noise reduction will be completed in FY 2000. The report will contain potential new noise reduction technologies that could be implemented in future years.
- In FY 2000, FAA will continue examination and validation of the methodologies used to assess aircraft noise exposure and impact.

MARITIME OIL SPILLS

Why We Act: A large share of the U.S. economy is fueled by oil. Over half of the oil that is used in the U.S. today is imported, and most of the imported oil is carried aboard tankships. While the design of these ships has improved substantially over the past few decades, accidents like the *Exxon Valdez* oil spill in Alaska illustrate the enormous magnitude of the environmental effects and potential economic effects when there is an accident.

DOT's goal: Reduce the rate of oil spilled into the water by maritime sources to 4.83 gallons per million gallons shipped. The 1996 datum was 6.66 gallons per million gallons shipped.



Special Challenges: Over 90% of the oil spilled into U.S. waters results from a few large spills. Tank ships and barges are the leading sources of spills, and human error is the primary cause.

Strategies: DOT aims to reduce oil spillage by developing standards and regulations – and enforcing those requirements – for the transport of oil by ship or barge, and transfer operations to shore facilities. Requirements address vessel characteristics, equipment and personnel qualifications; methods of operation; and the knowledge and skills of industry personnel.

Other Federal Programs with Common Outcomes: The Coast Guard is the lead agency for oil pollution prevention and response in the coastal maritime zone. EPA is the lead for inland waters. The National Transportation Safety Board investigates some major marine casualties in coordination with Coast Guard investigations.

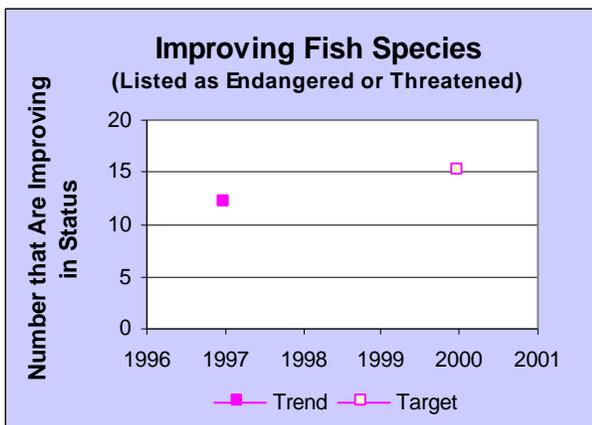
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard's Marine Safety and Environmental Protection programs address both prevention and response.
- The Coast Guard's Merchant Marine Licensing and Documentation (MMLD) program will evaluate and certify mariners and tankermen. (\$21 million). This program focuses especially on reducing the impact of human error.
- The Marine Inspection program will inspect and certify U.S. ships carrying oil, and examine foreign ships for compliance with international treaty requirements. Coast Guard will continue to lead the U.S. delegation to the International Maritime Organization, Marine Environmental Protection Committee – to improve international standards in ship design and operations.
- Through its investigations and response operations, the Coast Guard analyzes the causes of accidents for remedial action. It may also suspend or revoke licenses and documents, and assess civil penalties.
- Coast Guard plans to develop regulations to implement provisions of OPA 90 that require operators to have an approved response plan.
- Through regulation, the Coast Guard will establish a numbering system for barges to allow identification of their owners and help prevent abandonment of barges that become pollution hazards.
- Coast Guard will install new sensors aboard its ships and aircraft, and add response resources that improve pollution detection and enforcement capability. (\$6.5 million)

FISHERIES PROTECTION

Why We Act: The oceans, and in particular the Exclusive Economic Zone (EEZ) of the U.S., represent a significant source of renewable wealth – providing a livelihood for commercial fishers, a rich supply of seafood for the American public, and a source of recreation for over 17 million Americans. Commercial and recreational fisheries contribute an estimated \$20 billion every year to the U.S. economy. There are intangible, ecosystem benefits from protection of marine mammals and endangered species as well. The importance of responsible management of ocean resources will continue to grow as the oceans are looked to as an increasingly critical source of food for the world’s growing population.

DOT’s goal: Conduct enforcement operations to support the National Marine Fisheries Service goal of improving the status of endangered or threatened fish species. The 2000 target is to improve the status of 15 species, from a 1997 baseline of 12 species that were improving.



Special Challenges: Several external factors affect the attainment of the goal: compliance with regulations is affected by the economic health of the fishing industry; scientific errors in resource management estimates can degrade the effectiveness of regulation enforcement; and environmental factors can affect fisheries stock health.

Strategies: DOT aims to help achieve this goal by enforcing National Marine Fisheries Service (NMFS) regulations, as outlined in the Magnuson-Stevens Fishery Conservation Management Act.

Other Federal Programs with Common Outcomes: 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. State and local governments also have enforcement responsibilities, and the Coast Guard coordinates with these local agencies.

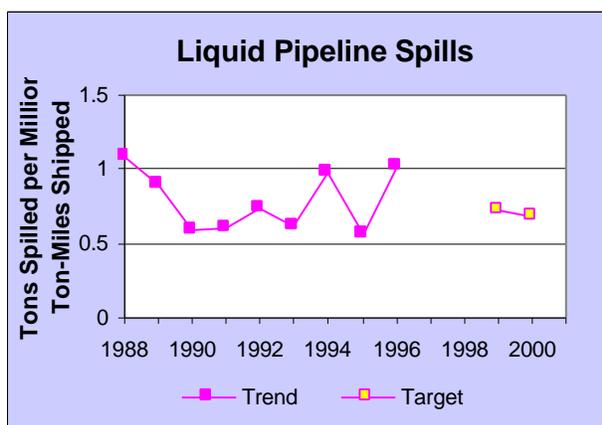
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard will monitor high threat areas, aiming to detect 80% of all significant violations or suspected violations; intercept every suspect that is detected; and stop all known, significant violations in progress. (\$480 million)
- USCG will board 20% of the U.S. fishing fleet operating in high threat areas during FY 2000.
- The Coast Guard will increase the surface and air capability of its aircraft and ships, as well as the sensors on both, to increase the effective law enforcement presence in fishery areas.
- The Coast Guard is also developing regulatory initiatives regarding ballast water management practices for ships, to help protect native fisheries (and other living marine resources) from harm by invasive species.
- The Coast Guard will continue implementation of the Atlantic Protected Living Marine Resources Initiative, implement an initiative to reduce commercial ship collisions with whales, coordinate the location of endangered whales, and initiate a program to adjust Coast Guard ship operations to avoid collisions with whales.

PIPELINE SPILLS

Why We Act: More than 605 billion-ton miles of petroleum and other hazardous liquids move across the country by pipeline. While this is usually the least costly way to transport these bulk cargoes, it also entails some risk. Because of the large volume moved by pipeline, any spill into the environment is potentially a significant one.

DOT's goal: Reduce the rate of hazardous liquid materials released by pipelines to the environment per million ton-miles shipped, from a 1994 baseline of 0.98 to 0.68 or less in 2000.



Special Challenges: Prevention and mitigation of pipeline spills requires improved site-specific knowledge of water and sensitive environmental areas to provide tailored actions to first prevent leaks, and, if they do occur, assure that appropriate and timely response is undertaken.

Strategies: DOT aims to prevent spills by working with operators to classify and address the threats of spills, particularly in environmentally sensitive areas. New regulatory efforts will focus on risk. DOT also works to reduce the consequences of spills through a consultative process with the pipeline industry and other stakeholders, to improve and test response plans through practical exercises.

Other Federal Programs with Common Outcomes: DOT is working with FERC, NOAA, DOE, EPA, DOI and USGS on the development of a National Pipeline Mapping system. DOT also works with EPA on spill response and response planning.

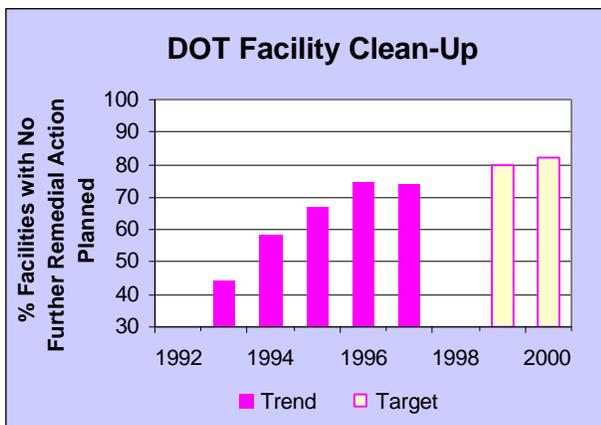
Activities and Initiatives in FY 2000 (including estimated obligations):

- RSPA programs are designed to both prevent accidents that can result in hazardous material spills and mitigate the consequences if an accident does take place.
- Of RSPA's Pipeline Safety Program, \$10 million will continue to prevent or mitigate environmental damage from pipeline spills. Particular focus will be on expanding and improving RSPA's risk-based management of pipeline inspection activity to focus resources on environmental areas of highest risk of damage.
- RSPA will continue to work with the pipeline industry to improve the efficiency and effectiveness of pipeline inspections through a cooperative effort that identifies the highest risk pipelines or segments and focuses resources on these areas. It also will continue its cooperative effort with industry to develop a nationwide map of hazardous materials pipelines and facilities, including information on attributes of these facilities and environmentally important areas.
- RSPA's information, analysis and training initiatives will look toward making its risk-based strategy more effective in reducing pipeline spills to the environment.
- RSPA will continue to review, approve and test oil spill response plans.
- Of the \$16.0 million for Office of Pipeline Safety Grants, RSPA will provide \$2 million in grants for state inspection of hazardous liquid pipeline operations and accident investigations, and evaluation of risk management as a safety strategy for regulation of pipelines.

DOT FACILITY CLEANUP

Why We Act: As the lead agency for many environmental programs, DOT must ensure that its own facilities are compliant with environmental laws and regulations. Restoration activities involve identifying, investigating, and cleaning up contaminated sites, which have resulted from past practices. Compliance activities involve present-day operation of facilities, equipment, and vessels in accordance with environmental requirements. Pollution prevention activities involve avoiding future cleanup activities by avoiding the generation of pollutants in our operations or facilities in the first place.

DOT's goal: Increase the number of facilities categorized as No Further Remedial Action Planned (NFRAP) under the Superfund Amendments and Reauthorization Act (SARA). The FY 2000 target is 82%.



Special Challenges: Future progress may be slower as the remaining sites, although progressively lower in risk, are often larger and more difficult to clean. The Environmental Protection Agency (EPA) has the authority to reactivate previously NFRAP sites, and new sites may be identified. Also, requirements may change as laws and resulting regulations change to reflect new research and findings.

Strategies: Facility cleanup will comply with the Superfund Amendments and Reauthorization Act (SARA) process and the requirements of the National Oil and Hazardous Substances Pollution Contingency Plan. A "worst first" prioritization system is used to assign highest priority to those facilities representing the greatest potential hazard to the public health and the environment. Regulatory factors at the local, state, and Federal levels are also considered in the decision making process.

Other Federal Programs with Common Outcomes: The DOT performance measure for this program is based on EPA standards and is in line with government-wide efforts under SARA.

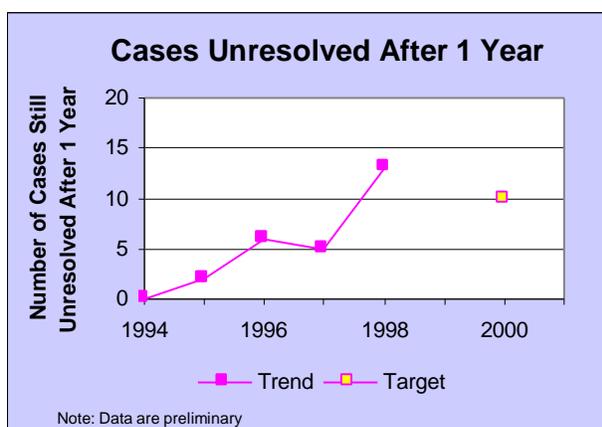
Activities and Initiatives in FY 2000 (including estimated obligations):

- USCG will conduct remediation activities at major sites in Base Kodiak, AK; Air Station Elizabeth City, NC; and Air Station Cape Cod, MA; along with other smaller sites. \$21 million for this effort will also continue Aids to Navigation battery cleanup at sites throughout the U.S. and removal of PCBs and asbestos from Coast Guard cutters.
- FAA will conduct compliance and cleanup activities at identified sites, maintaining mandatory schedules for the Alaskan Region, the Aeronautical Center, and the Technical Center. This effort also supports management of hazardous materials to prevent contamination (\$25.5 million). FAA will also do normal life-cycle replacement of outdated fuel tanks with newer, higher standard tanks; registration and testing of tanks; and investigation, removal of tanks and clean-up at decommissioned facilities (\$10.5 million). FAA has an ongoing program to maintain air traffic control towers in compliance with environmental regulations including energy management. Funds are provided for environmental assessments and physical modification to ensure compliance. (\$23.0 million)
- FRA has three facilities discussed in the annual SARA Report to Congress. EPA determined that no further remedial action is necessary at one of these facilities. The Department of Justice is representing FRA at the other sites, which are waiting for resolution of state issues.
- FHWA has one facility discussed in the SARA Report. EPA determined that no further remedial action is necessary at this site. However additional work will be conducted to meet the legal requirements of the involved State.

ENVIRONMENTAL JUSTICE

Why We Act: Many low income and minority people believe that their communities receive a disproportionately high number of projects that hurt their health and well being. The President responded to such concerns about Environmental Justice (EJ) by issuing Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." DOT followed up with a DOT Order, marrying this EO to Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin by recipients of federal financial assistance, and to the National Environmental Policy Act.

DOT's goal: Reduce by 20% the number of environmental justice cases that remain unresolved for over one year, from a FY 1998 baseline of 13. The FY 2000 target is 10 or less.



Special Challenges: Resolution of complaints is complicated by lack of federal statutory protections for people on the basis of income. The nature of the issue and circumstantial factors also sometimes make it difficult to find the proximate cause of -- and differential damages due to -- an environmental effect; and to differentiate between discriminatory versus economic decisions in locating projects.

Strategies: Work with stakeholders and officials at the state and local levels to ensure that environmental justice concerns are integrated into the transportation planning process.

Other Federal Programs with Common Outcomes: DOT will work with other agencies to share expertise and resolve jurisdictional overlaps and duplications, principally through the Interagency Work Group, chaired by EPA. DOT also works with the Department of Justice on legal guidance, the Council on Environmental Quality, the Corps of Engineers (on wetlands permitting), U.S. Navy (MARAD joint interests in the National Defense Reserve Fleet and ports), and the Departments

of Interior (Native American issues and FAA national parks flyover issues), Energy (hazardous materials rail transport through Indian Nations), Health and Human Services (poverty statistics, minority health, and coordinating human services transportation), and Housing and Urban Development (public transit issues). All federal agencies are linked through the common goals in the Executive Order on EJ -- to identify and address disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority and low income populations.

Activities and Initiatives in FY 2000 (including estimated obligations):

- DOT will educate stakeholders, provide Title VI training, and ensure public participation in the concept stage -- before project designs are chosen -- by reaching out to potentially affected populations.
- DOT will participate in the Interagency Working Group on Environmental Justice (IWG), and examine the DOT process for the National Environmental Policy Act (NEPA) and other environmental laws to integrate EJ.
- DOT will also develop tools for making equity determinations and analyses in transportation planning by Metropolitan Planning Organizations (MPOs). We will build capacity and multiply effects by helping other levels of government identify and address potential noncompliance.

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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.

Transportation provides the vital, strategic mobility of materials and forces in times of national emergency, contributing to the nation's security. And the Department of Transportation provides unique resources in the Coast Guard for national defense. But the transportation system is also vulnerable to intentional harm, and our borders are vulnerable to intrusion through smuggling of contraband and illegal migrants. DOT's objective is to advance the benefits of transportation to our national security while minimizing the vulnerability of our nation to disruption, damage, or exploitation through the transportation system.

The FY 2000 budget proposes \$1.4 billion in direct national security funding to meet these challenges – about the same as the FY 1999 level.

We Aim To Achieve These Strategic Outcomes:

- Reduce the vulnerability and consequences of intentional harm to the transportation system and its users.
- Ensure readiness and capability of all modes of commercial transportation to meet national security needs.
- Ensure transportation physical and information infrastructure and technology are adequate to facilitate military logistics during mobility, training exercises, and mobilization.
- 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.
- Reduce flow of illegal drugs and of illegal aliens entering the United States.

Nine specific performance goals -- reflecting the results of some of the key programmatic interventions within DOT-- will be used to gauge our progress in advancing our outcome goals in transportation mobility.

Each of these performance goals and associated measures are discussed in this section.

PERFORMANCE GOALS:

Aviation security
Critical infrastructure protection
Sealift capacity
Mariner availability
DOD-designated port facilities
Ready Reserve Force (RRF) activation
Military Readiness (USCG)
Drug interdiction
Migrant interdiction

DOT Performance Plan FY 2000

DIRECT NATIONAL SECURITY PROGRAMS

Estimated Obligations (FY 1998-2000), in millions

1/28/99

		FY 1998 Actual	FY 1999 Estimated	FY 2000 Request
OFFICE OF THE SECRETARY		<u>1</u>	<u>1</u>	<u>5</u>
Office of Intelligence & Security		1	1	2
TPR&D	(Security projects)	-	-	3
COAST GUARD		<u>832</u>	<u>991</u>	<u>928</u>
Drug/Mig Interdiction	Operations	638	709	735
	Acquisition	50	131	48
	Research	2	4	3
Defense Readiness	Operations	68	60	62
	Acquisition	6	12	7
	Research	1	1	1
Reserve Training		67	74	72
FEDERAL AVIATION ADMINISTRATION		<u>189</u>	<u>297</u>	<u>343</u>
Operations	Civil Aviation Security	96	123	145
Facilities & Equip.	Explosive Det. Systems	-	94	110
	Other Security Programs	30	16	25
Research	System Security Tech	46	52	53
Airport Grants	(Security-related work)	17	12	10
MARITIME ADMINISTRATION		<u>130</u>	<u>145</u>	<u>148</u>
Maritime Security Program		84	98	99
Operations & Training	Merchant Marine Academy	32	32	34
	State Marine Schools	7	7	7
	MARAD Operations	7	8	8
TOTALS		1,152	1,434	1,424

AVIATION SECURITY

Why We Act: The U.S. and its citizens are often the targets for terrorist groups seeking to challenge power, or to influence international relations. Although the number of incidents of terrorism or other threats against aviation has been low, the potential losses associated with any such incident are unacceptable. Because terrorists seek to destroy public confidence in the safety of air travel, the continued growth of commercial air transportation depends on the effectiveness of aviation security.

DOT's goal: Increase the detection of explosive devices and weapons that may be brought aboard aircraft.

(Detection rates are sensitive information protected under 14 CFR Part 191. The 1998 baseline and targeted increases will be made available to appropriate parties upon request.)

Special Challenges: Technology and human vigilance must keep pace with the increasing sophistication of bombs and other devices terrorists may use to attack a flight. At the same time, the speed of processing passengers and baggage through screening checkpoints and other security measures must improve to accommodate the rapid growth in passenger traffic. These challenges must be met while protecting civil liberties.

Strategies: FAA will conduct research to develop better technology and procedures to prevent weapons and explosive devices from being taken aboard aircraft. FAA, working with airlines and airports, will continue to purchase and deploy advanced aviation security equipment, will monitor its use, and will test and assess the performance of security systems. The planned certification of screening companies is expected to increase levels of screener professionalism. A new performance-based approach to compliance with security requirements will encourage partnering to improve aviation security.

Other Federal Programs with Common Outcomes: Aviation security is part of the National Security Strategy developed by the National Security Council. FAA is a Core Agency Group member and participant in key working groups for the Federal Inter-Agency Counterterrorism and Technology Plan. Current work with the Bureau of Alcohol, Tobacco and Firearms is aimed at improving the use of canines for explosives detection. Work with the U.S. Customs Service and the U.S. Postal service is aimed at preventing dangerous items from coming aboard aircraft in cargo or mail.

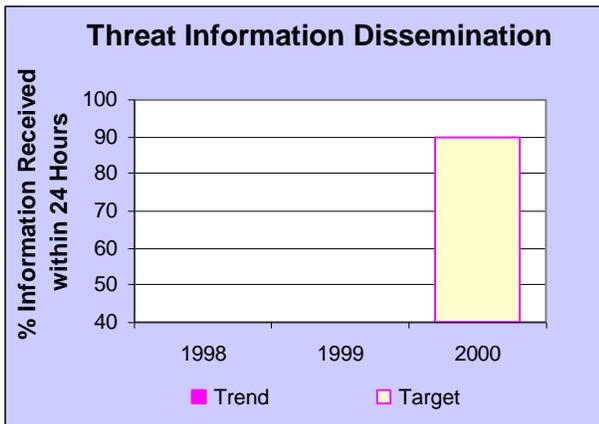
Activities and Initiatives in FY 2000 (including estimated obligations):

- FAA will continue to develop aviation security countermeasures; assist U.S. air carriers and foreign air carriers who provide air service to the U.S.; and monitor and test the compliance of airports and air carriers with security requirements. (\$145 million).
- FAA will purchase advanced security equipment, including explosives detection systems for checked baggage, for airports across the Nation (\$110 million).
- FAA will continue research and development to improve human factors and technology for detecting explosive devices and weapons and to decrease the vulnerability of airports and aircraft to security threats. (\$53 million).
- FAA will also strengthen partnerships between Federal government, local authorities, and the aviation industry by convening consortia at over 100 airports by the year 2000.
- Regulatory related initiatives include publication of the final rule requiring the certification of screening companies. The rule will require the companies that perform aviation screening at airports to a minimum performance standard for detecting simulated explosive devices or deadly or dangerous weapons. This will drive the overall system performance to higher levels. FAA plans to publish a final rule implementing a provision of the Antiterrorism and Effective Death Penalty Act of 1996 in FY 2000. This rule would require foreign air carriers and U.S. air carriers flying to and from the United States to have the same security measures.

CRITICAL INFRASTRUCTURE PROTECTION

Why We Act: The U.S. transportation system is one of the most developed in the world and covers a tremendous area. The system links across modes, and increasingly relies on information and telecommunication systems. Given our open society, the transportation system is vulnerable to threats intended to destroy or degrade its infrastructure and performance. The key to deterring and preventing such attacks is to identify the threats (through intelligence) and to get this information quickly to those who must act.

DOT's goal: Get threat information to those who need to act within 24 hours, at least 90% of the time (baseline to be developed in FY 1999).



Special Challenges: The private sector or state and local agencies own and operate the majority of the nation's transportation infrastructure. Achievement of this goal relies on increased coordination and cooperative partnerships with private industry and law enforcement, and the willingness of industry to adjust security procedures based on threat information provided by DOT.

Strategies: DOT will improve data receipt from intelligence and law enforcement authorities and industry, evaluate and improve information channels, and provide education and awareness programs to increase information sharing.

Other Federal Programs with Common Outcome: Presidential Decision Directive (PDD) 63, Critical Infrastructure Protection, requires the federal government to achieve and maintain the ability to protect our nation's critical infrastructure by 2003. The PDD directs the intelligence community to collect and analyze threats to the national infrastructure, including cyber and information warfare threats. All Departments and agencies are expected to have systems and protocols in place for rapidly disseminating this information to headquarters and field personnel, and to owners and operators.

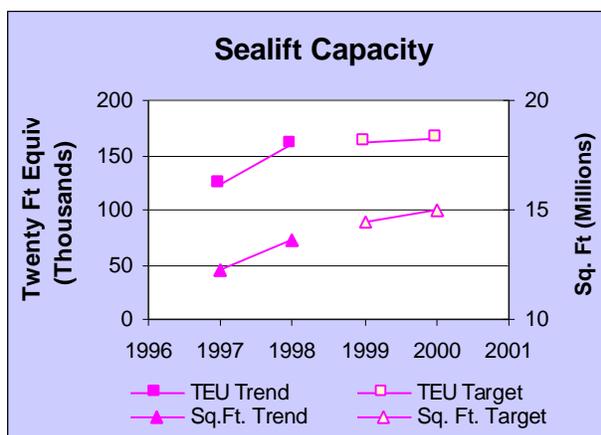
Activities and Initiatives in FY 2000 (including estimated obligations):

- DOT representatives will be appointed to the National Protection Center Staff at the Department of Commerce and the FBI National Infrastructure Protection Center (\$200 thousand). DOT secure communications requirements will be evaluated to increase compatibility with DOD and FBI systems (\$50 thousand).
- OST, FHWA, FAA and USCG will take the actions mandated by PDD/63 to reduce the vulnerability of the Department's critical cyber systems and security plans. (\$1.15 million).
- FAA is conducting security vulnerability and risk assessments of the air traffic control facilities, and is in the process of implementing a National Airspace System Risk Management Program to determine the most cost effective way to protect its employees and critical infrastructure from disruptions and attacks. (\$16.9M). FAA is also developing information security plans to prevent penetration of information systems and corruption of air traffic and operational data (\$20.4 million). OST will coordinate the R&D effort to develop self-contained navigation systems that can maintain high-accuracy position data for periods up to one hour (\$1 million).
- OST will investigate vulnerabilities in our transportation system communication architectures and centralized command and control systems (\$750,000). OST will develop and demonstrate means to improve the overall security of passenger and freight terminals (\$750,000). OST will also provide outreach and education to the transportation industry and increase industry awareness (\$100 thousand).

SEALIFT CAPACITY

Why We Act: Since the end of the Cold War, the Department of Defense (DOD) has downsized significantly. To maximize DOD's logistics capability and minimize its cost, future defense transportation requirements will be met by increased reliance on the U.S. commercial sector. However, increasing globalization and consolidation of transportation providers have left fewer U.S.-flag commercial carriers and an increased risk of disruption of defense transportation. The United States' ability to respond unilaterally to future military emergencies will require adequate U.S.-flag sealift resources.

DOT's goal: Increase the intermodal sealift capacity available to DOD to meet their national emergency requirement of approximately 165,000 TEUs or 15 million square feet by FY 2000. The FY 1997 baselines are 124,000 TEU and 12.3 million square feet.



Special Challenges: Changes in DOD contingency transportation requirements, particularly changes in threat scenarios such as the number and location of theaters of operation and the amount and type of equipment that would have to be transported, could affect intermodal sealift requirements. Business trends and globalization of international shipping companies could also impact the availability of U.S. sealift capacity.

Strategies: DOT will achieve this goal by leveraging relatively modest Federal maritime support dollars to retain "assured access" to U.S.-flag shipping capacity. DOT will also maintain sealift agreements with DOD and the industry to provide DOD with assured access to a total global intermodal transportation network that includes carriers' ships, logistics management services, infrastructure, terminals and equipment, communications, and cargo-tracking networks, as well as seafaring and shore-side workforce. Further, joint planning

among DOD, DOT and the maritime industry will provide a mechanism for U.S.-flag carriers to pool resources and meet DOD and commercial transportation requirements simultaneously during a defense emergency.

Other Federal Programs with Common Outcomes: DOD establishes sealift requirements. MARAD works closely with the U.S. Transportation Command of DOD and serves as co-chair of the Voluntary Intermodal Sealift Agreement (VISA) Joint Planning Advisory Group to analyze capacity, and develop concepts of operations necessary to meet DOD requirements.

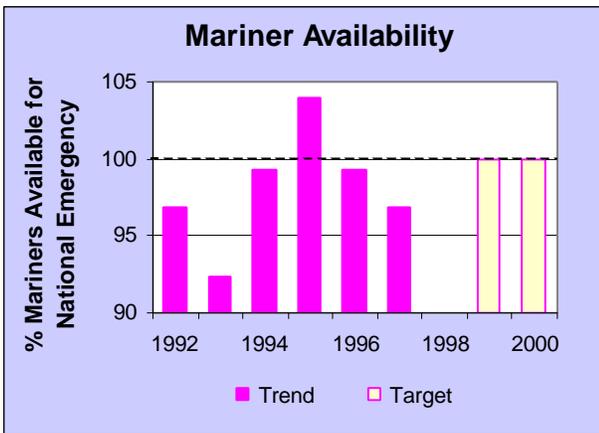
Activities and Initiatives in FY 2000 (including estimated obligations):

- In FY 2000 MARAD will continue implementing the Maritime Security Program (MSP), providing funding to make payments of \$2.1 million per ship per year (\$98.7 million) to U.S. carriers for 47 ships.
- MARAD will develop a computer-based status and asset tracking system, the Global Deployment Analysis System (GDAS), to analyze the effects on commercial operations of allocating intermodal capacity during a DOD contingency (\$150 thousand).
- MARAD will complete a program evaluation of the MSP/VISA program to assess the impact of the program on achieving DOT's national security strategic goal.

MARINER AVAILABILITY

Why We Act: U.S. national defense depends on strategic mobility to project power in remote places of the world. This, in turn, depends on maritime shipping, and these ships need competent crews. In particular, all vessels in the Ready Reserve Force (RRF) require licensed and unlicensed U.S. seafarers to become operational. Merchant mariners employed on commercial vessels in the U.S. domestic and international trades provide the core job skills needed to crew the RRF. Without this pool of merchant mariners, it is unlikely that sufficient seafarers would be available to crew the RRF, as well as maintain ongoing commercial activity, in an emergency.

DOT's goal: Ensure that the nation can provide 100% of the mariners needed to crew combined sealift and commercial fleets during national emergencies.



Special Challenges: Performance may be affected by the number of U. S. mariners who maintain the required seafarer's certificates and experience needed to crew both the commercial and government-controlled sealift fleets during contingencies. Also, the tightening of international standards for maritime training and certification and the availability of U.S. maritime training facilities to provide the requisite training may affect the number of qualified merchant mariners.

Strategies: DOT supports mariner education to create an available pool of crewmembers, provides training to maintain and increase their competence, and works with labor unions to match supply with national emergency needs.

Other Federal Programs with Common Outcomes: DOD establishes requirements for sealift capacity. This impacts the number of mariners required.

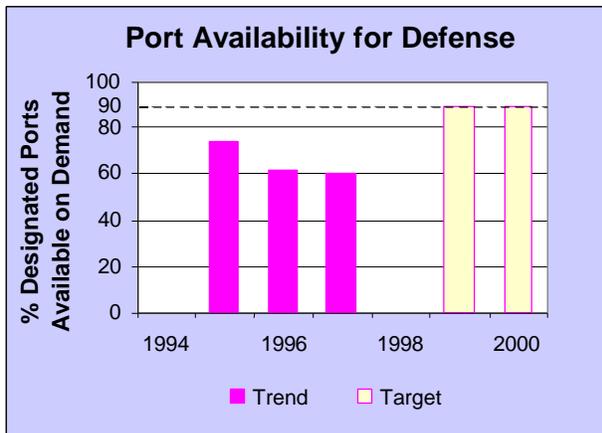
Activities and Initiatives in FY 2000 (including estimated obligations):

- MARAD is partnering with Coast Guard to evaluate and certify, as appropriate, the seven maritime academies' training programs to assure compliance with the International Maritime Organization (IMO) Standards of Training, Certification and Watchkeeping (STCW) revisions adopted in 1995.
- In FY 2000, MARAD will continue to:
 - partner with the major maritime labor unions to develop agreements on the use of manpower to crew DOD's fleet of government owned and long term time chartered vessels in times of national emergency;
 - partner with DOD and U.S. maritime industry (ship operators, maritime labor, and the maritime academies and unlicensed labor training facilities) to instruct and equip the seagoing workforce to deal with the emergency threat of chemical and biological use by adversaries; and
 - support merchant marine officer training through the US Merchant Marine Academy educational program (\$34.1 million), and the State Maritime Schools (\$7.2 million).

DOD-DESIGNATED PORT FACILITIES

Why We Act: Port and intermodal facilities provide the critical interface between the water and surface modes of transportation, handling both commercial and military cargoes. During military mobilizations, DOD must be able to move equipment and supplies through designated commercial port facilities on a timely basis if cargo is to be delivered to the theater of operations when needed by U.S. troops. DOT is responsible for the prioritized use of ports and related intermodal facilities during DOD mobilizations, when the smooth flow of military cargo through commercial ports is critical.

DOT's goal: Maintain strategic U.S. port readiness by ensuring that 90 percent of DOD-designated commercial port facilities and appropriate trained personnel are available to meet national security requirements when requested by DOD.



Special Challenges: The capability of U.S. ports to meet U.S. national security requirements will be affected by adequate land and waterside access to the strategic ports, the availability of sufficient longshore labor to load military cargo onto sealift vessels during contingencies, and improvements in cargo handling technology and equipment.

Strategies: In partnership with DOD and the port industry, MARAD will develop agreements between DOD and the fourteen DOD-designated strategic commercial ports. MARAD will also work cooperatively with ports, carriers and DOD to improve the interface between water and surface modes of transportation in the movement of essential cargoes during national emergencies.

Other Federal Programs with Common Outcomes: DOD determines the military port through port requirements. MARAD coordinates deployment and port readiness issues with DOD agencies and commands through the National Port Readiness Network (NPRN) and works with the strategic ports

to ensure that they are ready to move DOD cargo when contingencies arise.

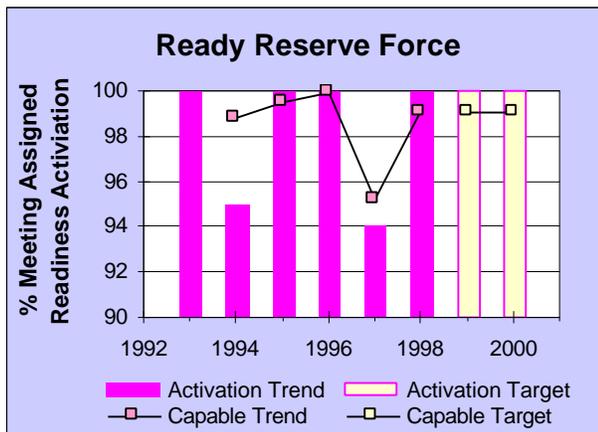
Activities and Initiatives in FY 2000 (including estimated obligations):

- The port readiness program (\$125 thousand) requires the issuance of port planning orders, and provides for Federal Port Controller contracts to coordinate military deployment requirements with commercial ports. In FY 2000 MARAD will:
 - continue to administer port readiness programs and chair the NPRN;
 - complete the identified initiatives as agreed to by all parties;
 - increase port facility capability by assisting in the transfer of surplus property;
 - provide technical assistance to the Center for the Deployment of Transportation Technologies;
 - conduct semi-annual port readiness visits of terminal facilities at strategic ports;
 - conduct workshops for commercial port personnel and federal port controllers; and
 - participate in mobilization exercises.

READY RESERVE FORCE (RRF) ACTIVATION

Why We Act: The RRF is one of the Department of Defense's (DOD) key sources of surge strategic sealift capacity. The fleet is sized and configured to meet DOD requirements for specific ship types and for especially outfitted support ships to carry heavy and outsize military cargoes that cannot fit into the container ships that are predominant in today's commercial general cargo fleet. A consistently high level of operational reliability, which requires extensive coordination among participants through no-notice activations and sea trials, is essential for the RRF to effectively support DOD.

DOT's goal: Provide reserve strategic sealift resources to meet DOD surge and other national security requirements by: (1) delivering ships within DOD-assigned readiness timelines 100 percent of the time; and (2) ensuring that once operational, ships are mission-capable 99 percent of the time.



Special Challenges: Changes in viability of the U.S. ship repair industry may affect activation of the RRF.

Strategies: MARAD aims to ensure rapid activation of RRF vessels in support of DOD national security sealift requirements by maintaining accurate fleet-wide data on RRF vessels and characteristics; requiring the use of commercial contracting practices by RRF ship managers; upgrading the status of priority RRF ships to include permanent onboard Reduced Operating Status (ROS) crews; and conducting more full-power sea trials than in previous years.

Other Federal Programs with Common Outcomes: DOD funds the RRF and determines specific ship type, configuration requirements, as well as site selection for the RRF ships. MARAD develops supporting maintenance activity and spend-

ing plans, and provides complete program management services to maintain and activate the fleet.

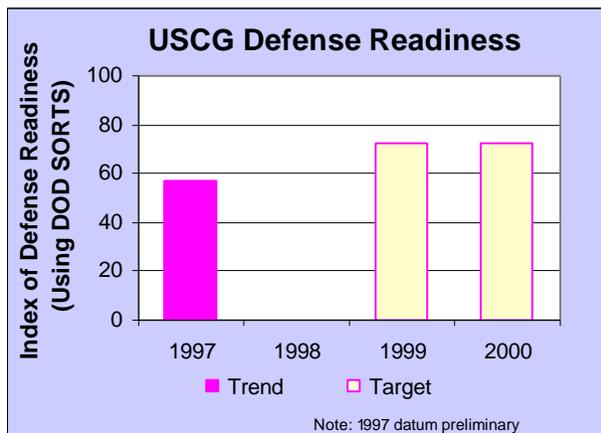
Activities and Initiatives in FY 2000 (including estimated obligations):

- In FY 2000, \$255.6 million is being requested by DOD to support 91 RRF ships. This will support the readiness goals prescribed by US-TRANSCOM that include 26 ships in Reduced Operating Status (ROS)-4 status, 25 in ROS-5, 19 in RRF-10, 2 in RRF-20, 15 in RRF-30 and 4 ships in preposition status under the operational control of the Military Sealift Command (MSC).
- In FY 2000, MARAD will conduct 47 maintenance sea trials and 10 dock trials. The trials enable MARAD to monitor the material condition of the ships and provide ROS crews as well as ship managers with training. DOD also plans several no-notice RRF test activations.

MILITARY READINESS (COAST GUARD)

Why We Act: Providing for the common defense of the nation is one of the few, specific roles of the Federal government outlined in the U.S. Constitution. And the U.S. Coast Guard – as one of the five armed services – provides an essential and unique element of our national security. The Coast Guard has served the U.S. in every major conflict since the Revolutionary War. Today, its defense functions are targeted to the service’s unique capabilities in maritime interception (related to Coast Guard’s law enforcement work), environmental defense (such as oil spill operations in the Persian Gulf in 1991), and deployed port security and defense.

DOT’s goal: Achieve and maintain C2 readiness status for all high and medium endurance cutters, patrol boats, and port security units, as measured under DOD’s Status of Readiness and Training System (SORTS). The FY 2000 target is an annualized, weighted readiness index of 72. The baseline is an index of 57 in 1997.



Special Challenges: The level and tempo of national security operations can degrade readiness. A strong national economy and tight labor market can make recruiting and retention of personnel difficult.

Strategies: To achieve a higher level of both readiness and capability, the Coast Guard will improve its logistics and maintenance systems, increase vessel and aircraft capabilities, and update and rehabilitate aging assets. Particular focus will also be given to recruiting and retention of personnel.

Other Federal Programs with Common Outcomes: The Department of Defense coordinates the assigned roles of each service in national defense, and develops readiness-rating systems. The Coast Guard may operate under the Secretary of the Navy in time of war.

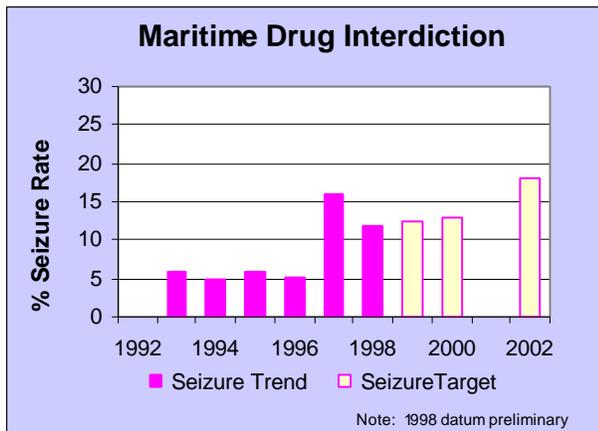
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard will maintain a reserve force of 7,600 reservists who will train and operate with the regular Coast Guard, augmenting its peacetime missions while preparing for national emergencies. To maintain this in a competitive employment market, the Coast Guard will also intensify its reserve recruiting effort in FY 2000 (\$72 million).
- The Coast Guard will participate in DOD readiness exercises, conduct refresher training, and regularly evaluate its defense resources for readiness status.
- The Coast Guard will undertake a new initiative (\$2.6 million) to improve expeditionary/in theater logistics support by providing mobile support forces for operational deployments.
- During FY 1999, the Department is beginning the process to identify future systems to replace current Coast Guard deepwater assets as they reach the end of their useful lives. FY 2000 will continue this process toward analysis of what is needed to upgrade existing assets.
- Maintaining an adequate, ready workforce is critical to military readiness. To help address this issue, FY 2000 funding will increase active duty recruiting and support parity with Department of Defense pay, medical, and family benefits (a total increase of \$95 million above FY 1999). These improvements are targeted to establish and maintain the Coast Guard as a competitive employer.

DRUG INTERDICTION

Why We Act: Illegal drugs threaten our children, our communities, and the social fabric of this country. Over 14,000 Americans die every year because of illegal drugs, and the annual social cost is estimated at \$67 billion – mostly as a consequence of drug-related crime. Illegal drug smuggling also destabilizes the nations it touches along the way. In 1997, an estimated 430 tons of cocaine, 13 tons of heroin, and significant amounts of marijuana passed through the transit zone on its way to the U.S.

DOT's goal: Increase the seizure rate for illegal drugs from 8.7% of the total amount shipped (the 1995-97 average) to 13% or more in 2000. The FY 2002 target is 18%.



Special Challenges: Drug interdiction operates in a changing environment, and against a thinking opponent. The international drug syndicates operating throughout our hemisphere are resourceful, adaptable, and extremely powerful. At the same time, socioeconomic conditions – here and abroad -- influence the supply and demand for illegal drugs.

Strategies: Reducing the supply of drugs entering the U.S. is a vital element of the National Drug Control Strategy, allowing time for demand reduction efforts to take hold. Coast Guard will develop sequential, regional pulse operations to deny maritime smuggling routes, targeting high threat areas.

Other Federal Programs with Common Outcomes: The Office of National Drug Control Policy (ONDCP) coordinates U.S. drug policy overall. The Commandant of the Coast Guard serves as the U.S. Interdiction Coordinator and coordinates international interdiction efforts with DOD, Customs, and other agencies. Department of State provides international, diplomatic liaison with other countries and supports DOT efforts in bilateral agreements to counter drug smuggling.

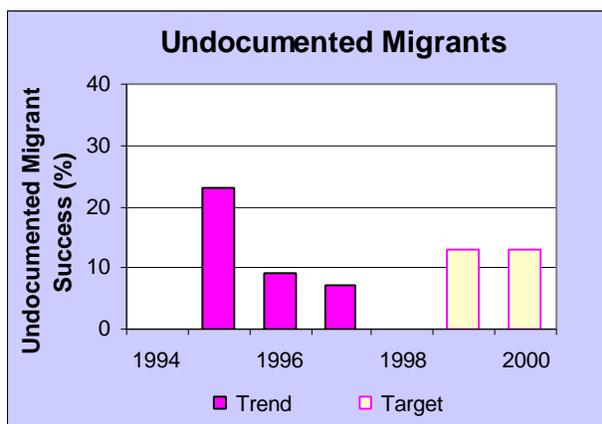
Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard will continue to operate along maritime smuggling routes to detect and deter drug smugglers. It will also train others in source and transit zone countries to enhance their ability to prevent smuggling. (\$411 million)
- The Coast Guard's law enforcement presence in the maritime approaches of the U.S. will be increased with additional patrol boats and cutters, fast boats, and associated shoreside support facilities.
- New ship and aircraft sensors (\$6.5 million) will be procured to increase the operational effectiveness and performance of Coast Guard law enforcement assets.
- The Coast Guard will enhance its ability to conduct expeditionary pulse operations by increasing its deployable logistics and intelligence capability (\$2.6 million).
- Coast Guard also is working with ONDCP and the Customs Service to validate the Rockwell Deterrence Study, which may help better measure the deterrent effect of interdiction activity.
- The Federal Aviation Administration will continue to develop and correlate flight plans and transponder codes to enhance communications between air route traffic control centers and U.S. Customs/Coast Guard facilities, and will continue identifying airborne drug smugglers by using radar, posting aircraft lookouts, and tracking the movement of suspect aircraft.
- The NHTSA will contribute to demand reduction by continuing its programs to educate America's youths to reject drugs, and by contributing to the reduction of drug-related crime and violence.

MIGRANT INTERDICTION

Why We Act: Illegal immigration poses a serious threat to America's economic and social well-being, and challenges the integrity of our borders as a sovereign nation. The U.S. has always been a land of immigrants, but as a nation we must be able to control the rate of immigration. Thousands of people try to enter this country illegally every year via maritime routes, sometimes in large waves from unstable countries. And many who try do not survive the harsh environmental conditions at sea.

DOT's goal: Restrain the flow of undocumented migrants by reducing the success rate for undocumented migrants to 13% or less over maritime routes. The baseline is 23% in 1995.



Special Challenges: Socioeconomic and political conditions in both the U.S. and migrant source countries drive migrant entry attempts. Outcomes are also influenced by the active criminal intent of those who profit from moving illegal migrants. As such, year to year measures of success can take unexpected turns based on changing criminal tactics.

Strategies: We will establish agreements with source countries to assist in reducing migrant flow. For example, aircraft overflight authority granted by the Dominican Republic in 1996, and the resultant deterrent effect, contributed significantly to the decrease in illegal Dominican migrants. We will use intelligence to target our presence in the maritime environment to provide both deterrence and an effective enforcement capability.

Other Federal Programs with Common Outcomes: The U.S. Border Patrol enforces the immigration laws of the U.S. shoreside, while the Coast Guard has the lead at sea. The Immigration and Naturalization Service cooperates with the Coast Guard on the disposition of undocumented migrants who are detained.

Activities and Initiatives in FY 2000 (including estimated obligations):

- The Coast Guard will operate along maritime routes to deter attempts by undocumented migrants, and to detect and stop those who try to enter the U.S. illegally (\$179 million).
- The Coast Guard will continue developing agreements with source countries to coordinate interdiction efforts and to work out strategies for preventing potential illegal migrants from making the attempt.
- The Coast Guard will add patrol boats, cutters, fast boats, and associated shoreside infrastructure (\$48 million) to provide increased law enforcement presence at sea.
- Coast Guard will also test, procure, and operate new ship and aircraft sensors (\$18 million for drug and migrant interdiction) to increase the operational effectiveness and performance of Coast Guard law enforcement assets.

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Corporate Management Strategies

DOT employs six overarching corporate management strategies in pursuing its strategic and performance goals. These corporate management strategies are a vital part of managing for results within DOT. Our strategic and performance goals set out *what* we aim to accomplish. Our corporate management strategies set out *how* we work to achieve those goals. These strategies cut across all organizational boundaries within DOT and are key to performing our missions efficiently and to providing our customers with consistent and seamless transportation policy and services. Most importantly, these strategies help us work *better* together, providing higher performance with the same organizational capacity and resources.

A detailed discussion of these management strategies appears in Chapter XI of the DOT 1997-2000 Strategic Plan. DOT updated these in the revised final FY 1999 Performance Plan. The following are our corporate management strategies, and specific measures and milestones we will use to judge our managerial success in FY 2000.

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

ONE DOT supports our strategic goals by ensuring that we work together when it is more efficient, eliminating duplication of effort and tapping mode-unique strengths for cross-modal problem solving. Success in this corporate management strategy will be measured by:

Working Better Together: We will build and improve upon collaborative processes within DOT. In FY 2000 we will:

- Recognize and reward employees who contribute to ONE DOT success.
- Broaden employee experience in transportation systems by increasing the number who are assigned to other modes and elements of OST, by 5% over 1999.
- Increase the number of ONE DOT best practices by 5% from 1999.
- Encourage the mobility of middle management within DOT to promote ONE DOT careers.

Policy Council: We will foster increased involvement and fresh perspectives in DOT policy formulation. In FY 2000 the policy council will:

- Make recommendations on at least two major crosscutting policy issues.

Long-range Planning: We will provide long-range policy direction for all DOT's programs by updating DOT's Strategic Plan consistent with statutory and OMB requirements. In FY 2000 we will:

- Publish the DOT Strategic Plan for fiscal years 2000-2005.

Transportation Data Review: We will assess our data needs for measuring DOT's performance against our goals, identifying gaps and opportunities for improving data validity, reliability and timeliness. In FY 2000 we will:

- Begin data upgrades based on results of the FY 1999 Transportation Data Review.

Strategic Communications Plan: We will establish a feedback loop for evaluating our communications with stakeholders. In FY 2000 we will:

- Develop and implement an evaluation tool to assess the effectiveness of DOT's communications with the public.

Partnerships with Federal Agencies: We will collaborate across government programs where this partnering advances federal goals. In FY 2000 we will:

- Identify one new or expanded partnership with a Federal agency that will advance each of the five DOT strategic goals, including common outcome goals and performance measures.

Human Resources Management: 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.

Human resource management supports our strategic goals by ensuring that our workforce has the required skills and competencies to support current and future program challenges. Success in this corporate management strategy will be measured by:

Workforce Planning: We will determine the human capital requirements necessary to support the DOT Strategic Plan. In FY 2000 we will:

- Identify workforce needs for key occupations for a three-year horizon and complete development of an integrated strategy to meet those needs.

Managing Diversity: We will build a talented workforce that reflects America and is unrestricted in its ability to pursue DOT's goals. In FY 2000 we will:

- Design and implement appropriate interventions based on organizational assessments in compliance with the DOT Diversity Order.

Learning and Development: We will ensure our employees professional growth. In FY 2000 we will:

- Use learning and development activities that ensure DOT's workforce has the knowledge and competencies to manage for results in DOT strategic goal areas.

Human Resources Redesign: We will evaluate and redesign as necessary our human resource management programs. In FY 2000 we will:

- Assess the need for specific improvements based on feedback of strengths and weaknesses using evaluation tools such as the balanced scorecard.
- Select a Human Resource Information System (HRIS) cross-service provider that will provide personnel and payroll processing support to DOT.

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

A customer focused management strategy supports our strategic goals by ensuring that outcome accomplishment is matched with our customers' concerns and suggestions about how we deliver services in support of an integrated transportation system. Customer service also provides vital feedback on how DOT programs are actually influencing desired outcomes. Success in this corporate management strategy will be measured by:

Customer Feedback: We will use customer feedback to improve our programs. In FY 2000 we will:

- Complete a second comprehensive Customer Service Report and compare findings with FY 1999 baseline data. Communicate progress made and areas for improvement to external customers and to DOT management and employees for appropriate action.
- Report customer service standard satisfaction findings--including strategies/timetables for fixing problem areas--annually to employees and to external customers.
- Provide continuing opportunities for the public to tell us what they need through direct interventions such as "Conversations with America" and listening sessions. Develop statistically rigorous feedback mechanisms, such as questionnaires, to collect additional information on customer expectations.

Customer Focus: We will use customer needs as the basis for DOT's day-to-day management and operations. In FY 2000 we will:

- Integrate customer feedback considerations into updated strategic plans, performance agreements, and performance plans.
- Ensure that all operating administration mission statements and business plans include a customer focus.
- Increase the number of "one-stop shopping" opportunities for state and local partners and

the public that seek service in regional and field locations.

Communications: We will ensure that customers have access to accurate and timely information. In FY 2000 we will:

- Provide timely, accurate, and user-friendly Internet web sites and home pages providing information on DOT programs, services, and key points of contact.
- Use plain language in all proposed and final rulemakings and establish timetables for re-writing existing departmental regulations in plain language.

Partnerships: We will build and improve upon partnerships with industry, academia, and state and local government. In FY 2000 we will:

- Develop at least one best practice example of partnering to achieve outcome goals for each strategic goal, focusing on how best to build consensus, common goals, achieve outcomes and communicate successes.

Research and Development Management:

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, and research education & training.

Research and development management supports our strategic goals by aligning areas of common research, harnessing government-wide and private research for application to transportation problems, and building intellectual capital necessary for solving future transportation problems. Success in this corporate management strategy will be measured by:

Strategic Planning: We will align DOT and interagency policy and plans with national transportation research goals. In FY 2000 we will:

- Lead Federal efforts to implement the National Transportation Science and Technology Strategy:

- A National Transportation Technology Plan for major technology-based and private-public transportation partnerships.

- A National Transportation Strategic Research Plan for long-term, multi-disciplinary transportation research.

- Sponsor, on behalf of the National Science and Technology Council, a National Research Council review of the Federal and Department's transportation R&D strategic planning process.
- Revise the DOT Transportation R&D Plan to better link the Department's Strategic Plan, individual modal administrations R&D plans, and other Federal transportation-related R&D plans and programs. The National Research Council will also review the details of the Plan and implementing performance plans.

World-Class Transportation R&D Capability:

We will ensure that in-house R&D organizations are technical centers of excellence. In FY 2000 we will:

- Complete baseline self assessments of DOT R&D program performance using Malcolm Baldrige or President's Quality Award criteria, ISO 9000 or Software Engineering Institute's Capability Maturity Model certification.

Transportation Science & Technology Information Networks:

We will improve our information networks to advance research and avoid duplication of effort. In FY 2000 we will:

- Implement a DOT R&D tracking system.

Private-public Partnerships:

We will advance the partnerships identified in the National Science and Technology Council (NTSC) Transportation Science and Technology Strategy. In FY 2000 we will:

- Complete with industry an assessment of aviation accidents and incidents to determine the primary fatal accident causal factors that will be used by the FAA/NASA Aviation Safety program in structuring an integrated research program. (Aviation Safety Research Alliance)

- Initiate deployment of air traffic management (ATM)--Free Flight Phase I--automation tools developed under a joint FAA and NASA ATM research program in accordance with priorities established in partnership with the aviation industry to achieve the highest benefits to the user community. (Next Generation Global Air Transportation initiative)
- Complete demonstration of proton exchange membrane fuel cell hybrid transit buses. Initiate with transit industry and domestic fuel cell suppliers development and demonstration of non-hybrid proton exchange membrane fuel cell transit buses. (Next Generation of Motor Vehicles and Ships initiative)
- Implement Intelligent Transportation System (ITS) service plans in at least 30 additional metropolitan areas and 10 rural areas to help them deploy integrated systems. (National Intelligent Transportation Infrastructure initiative)
- Complete implementation of the Commercial Vehicle Information System (Level 1.0), automating the credentialing and clearance process, in at least seven states. (National Intelligent Transportation Infrastructure initiative)
- Deploy ITS technologies at border crossings as a part of the Enhanced Goods and Freight Movement at Domestic and International Gateway initiative. (National Intelligent Transportation Infrastructure initiative)
- Work with industry to develop integrated IVI technologies that will reduce the number of motor vehicle crashes. (Intelligent Vehicle Initiative; IVI)
- Award grants to States, metropolitan planning organizations, and local governments to plan, develop, and implement strategies to integrate and carry out projects to address transportation efficiency and community and system preservation plans and practices. (Transportation and Sustainable Transportation Communities initiative)
- Initiate the development of testbeds at intermodal terminals to demonstrate advanced security technologies and systems. (Total terminal security initiative)

- Complete an action plan to eliminate barriers to innovation in the transportation road and building industry. (Partnership for the Advancement of Infrastructure and Its Renewal)

Enabling Research: We will advance the areas of enabling research identified in the NTSC Transportation and Technology Strategy. In FY 2000 we will:

- Use the National Transportation Strategic Research plan to establish our long-term, high-risk research priorities and to increase the awareness of other Federal agencies of the relevance and importance of their R&D to transportation.

Education and Training: We will invest in the human capital necessary to develop and apply advanced research and technology to the nation's transportation system. In FY 2000 we will:

- Implement the DOT University Research and Education Plan developed in FY 1999.

Information Technology Management: 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.

Information Technology (IT) management supports our strategic goals by ensuring that IT investments are optimized to increase program productivity, and that IT systems are secure and stable now and into the 21st Century. Success in this corporate management strategy will be measured by:

Year 2000: We will assess and document year 2000 activity completion. In FY 2000 we will:

- Complete all Year 2000 remediation or appropriate contingency plans such that there were no critical system disruptions that prevented accomplishment of DOT's missions/programs.

Productivity Enhancement: We will use IT to streamline our work processes, minimize paper-

work, and enhance the ability of our employees to perform their jobs. In FY 2000 we will:

- Identify 3 major Departmental business/work processes where applying reengineering has the potential to achieve at least a 5% time and/or cost savings.
- Achieve 5% reduction in burden hours (from FY 1999) as determined through the established DOT Information Collection Budget database.
- Establish baseline IT core competencies and evaluate DOT employees against them to assess Departmental IT literacy.

Customer Communications – We will use communication tools such as the Internet and teleconferencing to improve information exchange between DOT and the public. In FY 2000 we will:

- Index all DOT information dissemination products and make them available and/or described on DOT Internet websites. Ensure products can be readily located and searched by the public to meet the objectives of the OMB-mandated Government Information Locator System (GILS).
- Provide direct desktop Internet access to at least 75% of all DOT employees who use the Internet in performing their jobs.

Information Infrastructure and Capital Asset Planning: We will fully integrated IT into DOT's internal decision-making processes (e.g., strategic planning, budgeting, research and development, capital planning, acquisitions/grants, program management, and performance measurement). The Department technology management blueprint and integrated five-year capital investment plan developed in previous years will be used to effectively manage DOT's IT portfolio. In FY 2000:

- 90% of the cost and schedule goals for IT investments will be achieved without reducing the performance or capabilities of the items or services being acquired.

Securing IT Systems: We will ensure that DOT information systems remain secure. In FY 2000 we will:

- Conduct vulnerability assessments on 100% of new IT systems to be deployed in FY 2001 which fall under the purview of Presidential Decision Directive 63.
- Ensure that 100% of all DOT employees receive/have received general security awareness training in FY 1999 or 2000, and 60% of systems administrators will receive specialized security training not later than September 30, 2000.

Innovation and Partnership – We will increase system and information capability by supporting, in partnership with industry, the use of emerging IT applications that improve the quality and efficiency of the nation's transportation system. Milestones are:

- Make electronic signature capability available for at least 25% of DOT information systems and/or forms.
- Identify and disseminate new and emerging IT for use by DOT public and private partners and meet the program strategies and performance goals included elsewhere in the DOT performance plan (e.g., Intelligent Transportation Systems).

Resource and Business Process Management:

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.

Resource and business process management supports our strategic goals by ensuring that we effectively allocate scarce resources and fully account for their use, that our systems work together to create integrated business processes, and that our internal standards are flexible and results-oriented. Success in this corporate management strategy will be measured by:

Budgetary Management: We will build and improve upon the budget process to ensure funds are available for transportation priorities, that fiscal resources are cost-effectively allocated to achieve DOT's strategic goals, and that we remain accountable for results. In FY 2000 we will:

- Implement the DOT program evaluation plan, and integrate program evaluation into the budget justification process.
- Improve the quality and usefulness of performance planning and performance measurement in managing for results, establishing accountability, and allocating resources.

Financial Management: We will build and improve our systems and practices to support unqualified audit opinions and provide reliable and timely financial information for decision makers. In FY 2000 we will:

- Receive an unqualified audit opinion on DOT's FY 2000 Consolidated financial statement and standalone financial statements.
- Enhance efficiency of the accounting operation consistent with increased accountability and reliable reporting.
- Implement a pilot of the improved financial systems environment in at least one Operating Administration.

Rulemaking: We will increase participation in the rulemaking process by all stakeholders. In FY 2000 we will:

- Continue to issue user-friendly regulations and rewrite as many existing regulations in plain language as resources permit to better communicate with the public, to increase trust in the government, and to reduce the burden on the public.

Acquisition & Grants Management: We will create business processes in acquisition and grants that provide best-value products and services that advance DOT goals. In FY 2000 we will:

- Increase the percentage of the DOT procurement workforce meeting the acquisition training and educational requirements of the Clinger-Cohen Act and the Office of Federal Procurement Policy letter 97-01. In FY 2000, we aim to increase the number meeting training requirements by 50% and the number meeting education requirements by 5%.

- Establish a performance baseline for the use of Electronic Commerce (EC) (e.g., the Electronic Posting System, Electronic Grants Initiatives, Contract Writing Systems) as defined in the DOT EC Strategic Plan.
- Increase the use of purchase cards from 85% to 87.5% or more of total simplified acquisition actions.
- Increase the customer satisfaction measure of the balanced scorecard performance measurement system by 5% over the FY 1999 percentage.

Managerial and Operational Flexibility: We will find new and better ways of doing business by creating managerial and operational flexibility. In FY 2000 we will:

- Review the DOT-wide waiver process to determine its effectiveness in achieving managerial and operational flexibility.
- Continue to utilize a website to post approved and disapproved waivers for the sharing of this information and fostering further waivers.

Capital Assets Management: We will ensure all DOT facilities meet the highest Federal "standards" in terms of accessibility, energy conservation, security systems, technology and maintenance. In FY 2000 we will:

- Develop a master plan, including resources required, to reduce the number of days that DOT employees are on workers' compensation.
- Use 20% less energy per square foot compared to our use in FY 1985, in compliance with the Energy Policy Act of 1992.
- Develop a plan to protect DOT's critical physical assets that meets the requirements of the President's Policy on Critical Infrastructure Protection (PDD-63).
- Increase the number of completed transition plans for removing physical barriers to access to DOT conducted programs and activities (target to be set).

Data Verification and Validation

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 and understanding data limitations are critical elements in managing for results.

Verifying & 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, work planned or ongoing to improve data quality, 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 (SAR-MIS), 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. While we may not have a strong voice in improving the quality of outside data, we take all available information about the limitations and biases known to exist in outside data into account when using the data.

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 admini-

strations 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, document limitations and known errors and biases in data, 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.

As one of the missions of the Data Initiative Working Group, BTS is assisting 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:

- < Recollecting/reinterviewing 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.
- < Conducting 100 percent (or a sample of) data recoding and reconciliation operation to assess and correct coding errors.
- < Conducting 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 that 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 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 00.) 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.

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