

## 19. TRANSPORTATION

**Table 19-1. FEDERAL RESOURCES IN SUPPORT OF TRANSPORTATION**  
(In millions of dollars)

Function 400	1997 Actual	Estimate					
		1998	1999	2000	2001	2002	2003
<b>Spending:</b>							
Discretionary Budget Authority ....	38,674	41,423	41,849	42,255	42,606	43,143	43,722
Mandatory Outlays:							
Existing law .....	2,342	2,438	2,236	2,248	1,901	1,244	1,771
Proposed legislation .....		25	90	91	59	16	-14
<b>Credit Activity:</b>							
Direct loan disbursements .....	164	181	167	47	30	27	27
Guaranteed loans .....	319	477	477	477	477	477	477
<b>Tax Expenditures:</b>							
Existing law .....	1,360	1,405	1,440	1,485	1,535	1,585	1,640
Proposed legislation .....			4	11	16	23	30

America's transportation network consists of public and private systems financed by Federal, State, and local governments, and the private sector. The Federal Government, which spends about \$40 billion a year on transportation, has five major goals in shaping this system, the foremost of which is transportation safety. Federal programs also advance mobility, economic growth and trade, the human and natural environment, and our national defense. Today, our greatest challenge is to advance these five goals as we build the transportation system for the 21st Century.

### Safe Operations

The Federal Government works both directly and with State and local governments and private groups to minimize the safety risks inherent in transportation. The Federal Government regulates motor vehicle design and operation, inspects commercial vehicles, educates the public, monitors railroad safety, directs air and waterway traffic, conducts safety-related research, and rescues mariners in danger.

A range of Federal activities work to reduce highway deaths and injuries, which number about 42,000 and over three million a year, respectively. Federal programs reach out to State and local partners to identify the causes of crashes and develop new strategies to reduce deaths, injuries, and the resulting medical costs. Such partnerships yield results; through Federal, State, local, and private efforts, safety belt use reached an all-time high of 68 percent in 1996. In addition to coordinating national traffic safety efforts, the National Highway Traffic Safety Administration (NHTSA) regulates the design of motor vehicles, investigates reported safety defects, and distributes traffic safety grants to States. The budget proposes \$406 million for NHTSA, a 22-percent increase over 1998, and fully funds the Presidential Initiative for Increasing Seat Belt Use Nation-wide from 68 percent to 85 percent in 2000 and 90 percent in 2005.

Perhaps the Federal Government's most visible safety function is operating the air traffic control and air navigational systems. The Federal Aviation Administration (FAA) handles about 173,000 flights a day, moving 1.5 million passengers each day. Through

its regulatory and certification authorities, the FAA also promotes aviation safety. In 1999, the FAA will perform over 340,000 safety-related inspections. To meet safety needs in 1999, the Administration plans to spend \$7.8 billion on FAA operations and capital, eight percent more than in 1998.

The National Motor Carriers Program, for which the budget proposes \$100 million in 1999, provides grants to States to enforce Federal and compatible State standards for commercial motor vehicle safety inspections, traffic enforcement, and compliance reviews. Uniform standards help coordinate law enforcement activities, and simplify the safety requirements of interstate trucking.

The Federal Government also plays a key safety role on our waterways. The Coast Guard is recognized as the world leader in maritime search and rescue, saving over 5,000 lives in 1997 alone. It operates radio distress systems, guides vessels through busy ports, regulates vessel design and operation, provides boating safety grants to States, and supports a 35,000-member voluntary auxiliary that educates boaters. The budget proposes \$3.2 billion for Coast Guard operations and capital.

The Federal railroad safety program, for which the budget proposes \$62 million in 1999, works in partnership with the rail industry. The Safety Assurance and Compliance Program brings together rail labor, management, and the Federal Government to determine root causes of problems. From 1993 to 1996, railroad-related fatalities, on-the-job casualties, and the train incident rate fell by 19, 42, and 17 percent, respectively.

Similarly, in 1999, the Federal pipeline safety program will have in progress several risk management projects, whose goal is to provide safety and environmental protection better than under existing Federal regulations.

For each of these areas, the Federal Government seeks to promote public health and safety by working to eliminate transportation-related deaths and injuries. To measure progress towards these goals, the Department of Transportation (DOT) will seek to:

- reduce the total number of transportation-related fatalities in calendar 1999 to below 43,549, the 1995 level, despite increased passenger miles traveled; and
- reduce the total number of transportation-related injuries in calendar 1999 to below 3,438,000, the 1995 level, despite increased passenger miles traveled.

### **Infrastructure and Efficiency**

America has about four million miles of roads, 580,000 bridges, 180,000 miles of railroad track, 5,500 public-use airports, over 6,000 transit systems, 350 commercial ports, and 25,000 miles of commercially-navigable waterways. This extensive, intermodal network is essential to the Nation's commerce, and enhancing its efficiency advances economic growth and international competitiveness.

The Federal Government has helped develop large parts of the system, with funding mainly through user fees and transportation taxes. The total Federal investment represents about half of all public investment in transportation—that is, \$27 billion of the \$54 billion of total Federal, State, and local spending on transportation infrastructure in 1994. In 1999, infrastructure investment would rise to a level 42 percent higher than the annual average of \$21.1 billion from 1990 to 1993, with the rising investment of recent years targeted to advance the safety, quality, efficiency, and intermodal character of transportation infrastructure.

**Highways and Bridges:** About 955,550 miles of roads and all bridges are eligible for Federal support, including the National Highway System (NHS) and Federal lands roads. In 1999, the Federal Government plans to spend over \$23 billion to maintain and expand these roads, with funding from motor fuels taxes, mainly the gasoline tax. The Federal gas tax is 18.4 cents a gallon, of which 15.45 cents goes to the Highway Trust Fund's highway account to finance formula grants to States for highway-related repair and improvement.

State and local governments provide 58 percent of total highway and bridge infrastructure spending, most of which they generate through their own fuel and vehicle taxes.

The average State gasoline tax was 19.6 cents per gallon in 1996. State and local governments accelerate their infrastructure projects through debt financing, such as bonds and revolving loan funds. Under the State Infrastructure Banks program, the Federal Government provides funds to help States underwrite debt issuance for highway and transit projects. Under the new Transportation Infrastructure Credit Enhancement Program, the Federal Government would provide grants, which could be supplemented by non-Federal contributions, to create Revenue Stabilization Funds to help secure private debt financing for nationally significant projects.

In 1999, the Federal Government will work with State and local governments to:

- increase the percentage of NHS miles that meet pavement performance standards for acceptable ride quality (based on the International Roughness Index) to 91.5 percent, from the 1996 baseline of 91.1 percent, to reach the overall goal of ensuring that 93 percent of NHS pavement has acceptable ride quality by 2008; and
- reduce the percentage of NHS bridges that are classified as deficient to 24.3 percent, from the 1996 base level of 25.8 percent, to reach the overall goal of ensuring that less than 20 percent of NHS bridges are deficient by 2008.

**Transit:** As with highways, the Federal Government works with State and local governments to improve mass transit. Of the Federal motor fuels tax, 2.85 cents a gallon goes to the Highway Trust Fund's Mass Transit Account, which funds transit grants to States and urban and rural areas. Federal capital grants comprise about half of total spending each year to maintain and expand the Nation's 6,000 bus, rail, trolley, van, and ferry systems. Together, States and localities invest over \$3 billion a year on transit infrastructure and equipment.

In 1999, the Federal Government plans to spend \$4.6 billion on transit capital. In particular, the Federal Government finances capital-intensive urban bus and rail transit systems and rural bus and van networks. About 80 million Americans depend on public transportation due to age, disability, or in-

come. Furthermore, transit use by commuters eases roadway congestion and reduces polluting emissions. Capital investment cuts maintenance and operating costs and gives more mobility to Americans.

In 1999, to improve the quality and availability of transit services, DOT will seek to:

- reduce the average age of the motor bus fleet from a calendar 1995 base level of 8.1 years to 7.6 years by calendar year 2002 while increasing bus service, and
- maintain the average age of the rapid rail fleet at 19.3 years through calendar year 2002.

**Passenger Rail:** The Federal Government will invest \$621 million in 1999 to support the Nation's passenger rail system (in addition to the \$2.2 billion that the 1997 Taxpayer Relief Act provides for capital improvements and equipment maintenance). The extension of the Northeast Corridor high-speed rail service from New York to Boston highlights the Federal-private partnership to improve passenger rail service. The Federal Government funds the electrification of the rail line, while the private sector helps to finance the high-speed trainsets that will begin operating in late 1999.

To improve Amtrak's Northeast Corridor, in 1999 the Federal Government will strive to complete electrification of the New York-Boston segment and introduce new high-speed trainsets, reducing travel time between New York and Boston from the four-hours-and-45-minutes of today to three hours in the year 2000.

**Aviation and Airports:** The Federal Government seeks to ensure that the aviation system is accessible, integrated, efficient, and flexible. To reach those goals, and to begin to address a White House Commission on Aviation Safety and Security recommendation to modernize the air traffic control system by 2005, the budget proposes to increase investments in aviation facilities and equipment by about 10 percent a year for five years. In addition, about 3,300 airports throughout the country are eligible for the Airport Improvement Program (AIP), which funds projects that enhance capacity, safety, security, and noise miti-

gation. These funds augment other airport funding sources, such as bond proceeds, State and local grants, and passenger facility charges. With 98 percent of the population living within 20 miles of one of these airports, most citizens have excellent access to air transportation.

- In 1999, DOT will seek to reduce the number of volume- and equipment-related delays to 30.7 per 100,000 flight operations, from a 1994 base level of 36.9 delays per 100,000 flight operations.

**Other Transportation:** For the Nation's commercial shipping infrastructure, Federal loan guarantees make it easier to build and renovate vessels. Port development is left largely to State and local authorities, which have invested over \$14 billion in infrastructure improvements over the past 50 years.

- To help make the shipyard industry more competitive, the Federal Government will strive to attain two percent growth in U.S. commercial shipbuilding (measured by tonnage) in 1999, compared to 1998.

### Research and Technology

The Federal Government helps advance transportation technology. Federal research focuses on building stronger roads and bridges, designing safer cars, reducing human error in operations, and improving the efficiency of the existing infrastructure. In 1999, the Federal Government will spend over \$1 billion on transportation research and technology.

DOT's Intelligent Transportation Systems (ITS) program is developing and deploying technologies to help States and localities improve safety, increase capacity, and enhance traffic flow on their streets and highways. In an era of constrained Federal resources, ITS provides a cost-effective way to improve the management of our infrastructure, boosting efficiency and capacity. The private sector, which works closely with the ITS program, will initially deploy many of the technologies that it develops jointly with Federal funding.

FAA's research, engineering, and development programs help improve safety, security, capacity, and efficiency in the National Airspace System. For example, the development of an advanced traffic management system

and the demonstration of revolutionary routing and navigation procedures will enhance not only safety, but air system capacity and efficiency. In 1999, the budget proposes the Flight 2000 free-flight demonstration program, which promises operational improvements to deliver passengers and cargo more quickly and safely. Free-flight improves aviation system efficiency by giving pilots the tools to plot their own flight paths. Other FAA research will focus on the causes of human error, aircraft safety, fire protection, aviation weather, engine noise, aircraft emissions, and security and explosives detection systems.

The National Aeronautics and Space Administration's (NASA) Aeronautical Research and Technology Program funds partnerships with industry that may revolutionize the next generation of planes, making them safer, faster, more efficient, and more compatible with the environment.

The Federal Government seeks to balance new physical capacity with the efficiency and safety of the existing infrastructure. With this goal in mind:

- DOT will seek to expand the integration of ITS technology in six metropolitan areas by 20 percent in 1999, compared to a 1997 survey baseline, and
- DOT, NASA, the Defense Department, and private industry will work together on research to reduce the fatal aviation accident rate by a factor of five in 10 years; the 1995 baseline is 0.35 per 100,000 departures. Research will focus on preventing equipment malfunctions, reducing human error, and ensuring the separation between aircraft and potential hazards.

### Transportation Regulation

Federal rules greatly influence transportation. In the past two decades, deregulation of the domestic railroad, airline, and interstate and intrastate trucking industries has boosted economic growth.

The Federal Government also issues regulations to spur safer and cleaner transportation. The safety regulations—of cars, trucks, ships, trains, and airplanes—have substantially cut the number of transportation-related deaths

and injuries—for example, saving over 100,000 lives since 1966.

The Federal Government has taken regulatory steps to meet transportation-related environmental and safety goals in a cost-effective manner. For example, during the transition to double hulled tank vessels between now and 2015, the costs of meeting oil pollution requirements will decline due to “lightering zone” regulations that temporarily permit older, single-hull vessels to offload oil under stringent, environmentally safe conditions within certain areas in the Gulf of Mexico.

### **Tax Expenditures**

For the most part, employees do not pay income taxes on what their employers pay for parking and transit passes. These tax expenditures will cost the Government an estimated \$7.1 billion from 1999 to 2003. To finance infrastructure, State and local governments issue tax-exempt bonds; the Federal costs in lost revenues are included in the calculations for Function 450, “Community and Regional Development,” and Function 800, “General Government.”