

18. TRANSPORTATION

Table 18-1. Federal Resources in Support of Transportation
(In millions of dollars)

Function 400	1999 Actual	Estimate					
		2000	2001	2002	2003	2004	2005
Spending:							
Discretionary Budget Authority ...	13,673	13,286	14,525	14,464	14,952	15,581	16,344
Mandatory Outlays:							
Existing law	1,945	2,362	2,061	1,630	1,954	1,885	1,858
Proposed legislation			13	13	14	15	15
Credit Activity:							
Direct loan disbursements	159	1,002	868	N/A	N/A	N/A	N/A
Guaranteed loans	1,767	2,825	927	N/A	N/A	N/A	N/A
Tax Expenditures:							
Existing law	1,870	1,970	2,080	2,200	2,330	2,460	2,605

N/A = Not available.

A transportation system is an indispensable component of every economy and society. It can increase the value of goods by moving them to locations where they are worth more. The system allows people to commute to places of employment where their time has higher value. By extending the spatial boundaries of commodity and labor markets, transportation encourages competition and production. Our transportation system is vital to America's standard of living. An intermodal transportation system that serves best, must offer accessibility, efficiency, reliability, safety, security, and be environmentally friendly. In 2001, the Federal Government will invest over \$54 billion on transportation. This compares with \$35 billion spent on transportation in 1993. In the past eight years, Federal transportation spending has increased by 30 percent in constant dollars. This increase has been necessary to keep the Nation's infrastructure in good condition, thereby facilitating the movement of goods and people, and to ensure that the Air Traffic Control System is able to keep pace with the increasing demands of growing air traffic.

Safe Operations

Improving transportation safety is the number one Federal Government transportation objective. The Federal Government works with State and local governments and private groups to minimize the safety risks inherent in transportation. It regulates motor vehicle design and operation, inspects commercial vehicles, educates the public regarding safety, directs air and waterway traffic, rescues mariners in danger, monitors railroad safety and conducts safety research.

A range of Federal programs and activities help reduce the number of deaths and injured persons from highway crashes, which number about 42,000 and over three million a year, respectively. Federal programs reach out to State and local partners, industry and health care professionals to identify the causes of crashes and develop new strategies to reduce deaths, injuries, and the resulting medical costs. These partnerships yield results—in 1998 the Nation's safety belt use reached an all-time high of 70 percent. Alcohol related highway fatalities reached a new low in 1998, at 38 percent of all highway deaths. Along with coordinating such 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 \$499 million for NHTSA, a 33-percent increase over 2000. This Administration supports programs designed to reduce drunk and drugged driving, along with new initiatives that focus on reducing injuries and fatalities among minority, youth and rural populations. Research efforts include developing advanced technologies to reduce the likelihood of vehicle rollovers. Additionally, a new program will target unsafe driving practices in an effort to reduce the incidences of aggressive driving.

In partnership with the highway community, the Federal Highway Administration (FHWA) works to identify top roadway safety issues and countermeasures. In 2001, efforts will focus on run-off-road and pedestrian/bicycle crashes, since these safety problems contributed 36 percent and 15 percent respectively of total highway fatalities in calendar year 1997. In 2001, safety construction programs will contribute \$760 million to correct unsafe roadway design and remove roadway hazards.

Federal funding for the new Federal Motor Carriers Safety Administration (FMCSA) is proposed at \$279 million in 2001, an increase of 54 percent over 2000. The Administration's goal is to reduce motor carrier fatalities by 50 percent in 10 years. The FMCSA will increase motor carrier enforcement, improve data, and expand roadside inspections. In addition, States will be provided dedicated funding to heighten enforcement of commercial drivers (e.g., truck and bus drivers) licenses in an effort to keep improperly registered vehicles and drivers off our Nation's highways. FMCSA develops uniform standards that improve motor vehicle and driver safety, helps coordinate law enforcement activities, and aligns interstate trucking safety requirements. Grants to States to enforce Federal and compatible State standards for commercial motor vehicle safety inspections, traffic enforcement, and compliance reviews are proposed to increase 78 percent over 2000 to \$187 million in 2001.

All of these programs will help reach the Administration's safety goals, including reducing the rate of highway-related fatalities

per 100 million vehicle miles traveled (VMT). In 1998, the highway related fatalities and injured persons reached all time record lows. The fatalities per 100 million vehicle miles traveled were 1.6. The injured persons per 100 million miles traveled were 122. The 2001 target rates are 1.5 for fatalities and 113 for injured persons.

Perhaps the Federal Government's most visible transportation safety function involves air traffic control and air navigational systems. The Federal Aviation Administration (FAA) handles about two flights a second, moving 1.5 million passengers safely each day. In 2001, the FAA will perform nearly 320,000 safety related inspections. To meet safety needs, the Administration plans to spend \$9.1 billion, 14.4 percent over the 2000 level, on FAA operations and capital modernization. The FAA will seek to:

- 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. In 1998, the fatal aviation accident rate for commercial air carriers was .006 per 100,000 flight hours. This rate puts the Department on target to reaching the White House Commission on Aviation Safety and Security goal of reducing fatal accidents by 80 percent by 2007 and ahead on achieving the 2001 target of 0.031 per 100,000 flight hours.

The Federal Government also plays a key safety role on our waterways, where the Coast Guard saves one life every two hours, 24 hours a day, 365 days a year. The Coast Guard operates radio distress systems, guides vessels through busy ports, operates reliable and safe navigation systems, regulates vessel design and operation, enforces U.S. and international safety standards, provides boating safety grants to States, and supports a 35,000-member voluntary auxiliary that provides safety education and assists regular Coast Guard units. The Coast Guard is recognized as the world leader in maritime search and rescue. The budget proposes \$3.7 billion for Coast Guard operations and capital, a 12-percent increase over the current level. The Coast Guard seeks to:

- Reduce the number of recreational boating fatalities from a 1998 baseline of 793 fatalities. In 1998, recreational boating fatalities were down from 821 in 1997. The 2001 target is at or below 720 fatalities.

The Federal railroad safety program is also expanding. The Administration's budget proposes \$117 million in 2001, five percent over the 2000 level. The program 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 safety problems. This partnership has produced results: from 1994 to 1998, the railroad-related fatality rate, on-the-job casualty rate, and train crash rate fell by twenty-one, thirty-five, and one percent, respectively. The Federal Railroad Administration has made steady progress towards its multi-year safety goals. For example, its plans are to:

- Reduce the rate of rail-related crashes from a 1998 baseline of 3.77 per million train-miles to 3.29 or less in 2001; and to reduce the rate of rail-related fatalities from a 1998 baseline of 1.48 per million train miles to 1.23 or less in 2001. The 1998 level of fatalities (the 1.48 rate) was the lowest level in a decade.
- Reduce the grade crossing accident rate in 2001 to 1.39 per the product of million train-miles times trillion highway vehicle-miles-traveled. The 1998 accident rate was 1.98, a significant decline from the 1997 rate of 2.27.

Similarly, the Federal pipeline safety program has implemented several risk management projects to improve the targeting and effectiveness of regulations while reducing or minimizing their costs. The Federal Government also develops regulations and standards for hazardous materials shipping, and enforces those standards for every mode of transportation. The Administration seeks to:

- Reduce the number of serious hazardous materials incidents in transportation to 401 or fewer in 2001, from a peak of 428 in 1998. The 1998 record is not as positive as those of most of the other modes of transportation—there were 10 more inci-

dents in 1998 than there were in 1997. The Administration is giving this area special attention.

Infrastructure and Efficiency Investment

In 1996, the U.S. transportation system served 265 million people and six million businesses and supported 4.4 trillion passenger-miles and 3.7 trillion cargo ton-miles. The Federal Government helped develop large parts of the system, with funding supported by user fees and transportation taxes. Investment is targeted to maintaining and improving the condition of the existing system while at the same time advancing safety, quality, efficiency, and the intermodal character of transportation infrastructure. This investment ensures the Nation will meet commerce needs, and enhance its efficiency, which leads to advanced economic growth as well as international competitiveness.

Innovative Financing: Since 1994, the Administration has introduced a number of financing innovations designed to streamline procedures, improve existing programs, and implement new ideas for improving the Nation's transportation infrastructure. In total, these initiatives are helping advance nearly 200 projects, representing a total capital investment of more than \$20 billion. For example, there is the Transportation Infrastructure Finance and Innovation Act (TIFIA) program, authorized by TEA-21. TIFIA provides Federal credit assistance to major transportation investments of critical national importance, such as: intermodal facilities; border crossing infrastructure; highway trade corridors; and transit and passenger rail facilities with regional and national benefits. In 2000, \$90 million of TIFIA funding supported \$1.8 billion in credit assistance. In 2001, a funding level of \$96 million will be provided to continue this program

Highways and Bridges: About 957,098 miles of roads and all bridges are eligible for Federal support, including the National Highway System (NHS) and Federal lands roads. In 2001, the Federal Government plans to spend \$30 billion to maintain and expand these roads with funding from motor fuels taxes, mainly the gasoline tax. This is close to \$2 billion more than was provided in 2000, and is \$12 billion more than was provided in

1993. The Federal gas tax is 18.4 cents per gallon, of which 15.4 cents goes to the Highway Trust Fund's highway account to finance grants to States and local governments for highway-related repair and improvement.

In aggregate, State and local governments provide 56 percent of highway and bridge infrastructure spending, most of which they generate through their own fuel and vehicle taxes. The average State gasoline tax was 19.8 cents per gallon in 1998. State and local governments accelerate their infrastructure projects through debt financing, such as bonds and revolving loan funds. The Federal Highway Administration will work with State and local governments to:

- Increase the percentage of miles on the NHS that meet pavement performance standards for acceptable ride quality—from 90.4 percent in 1996 to 91.9 percent in 2001. In 1998, the percentage was 91.8 percent.
- Reduce delays on Federal-aid highways from 9.0 hours of delay per 1,000 vehicle miles traveled in 1998 to 8.9 in 2001.
- Reduce the percentage of bridges on the NHS that are deficient—from 23.1 percent in 1998 to 22.3 percent in 2001. Between 1993–1998, bridges on the NHS that are deficient decreased by 3.6 percent, from 26.7 percent to 23.1 percent.

Transit: As with highways, the Federal Government assists State and local governments to improve mass transit. Of the Federal motor fuels tax, 2.86 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 the total spent 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.

Federal funding growth has been substantial. In 2001, the Federal Government plans to spend \$6.1 billion on transit infrastructure. This compares with \$5.8 billion in 2000 and \$2.6 billion in 1993. The Federal role

is especially important in financing new urban bus and rail transit systems, as well as rural bus and van networks. Millions of Americans use transit for their daily commute, easing roadway congestion and reducing air pollution. Many riders depend on public transportation due to age, disability, or income. Transit can also provide economic opportunity. For example, the Job Access and Reverse Commute program will help to provide transportation services in urban, suburban and rural areas to assist welfare recipients and low income individuals reach employment opportunities. The Federal Transit Administration seeks to:

- Increase transit ridership from 39 billion passenger miles traveled in 1996 to 42.86 billion in 2001. In 1998, transit ridership was 41.6 billion passenger miles traveled.

Passenger Rail: The Federal Government will invest \$521 million in 2001 to support Amtrak's capital improvements and equipment maintenance. The combination of Federal and private sector investment in the Northeast Corridor is expected to soon show results, with the beginning of high-speed rail service between Boston and New York which is estimated to reduce trip times by 35 percent.

The Administration proposes to invest \$468 million in capital in 2001 to enhance inter-city passenger rail service. This new program will provide matching grants to enhance or expand inter-city rail service nationwide. This initiative will contribute to the goals of improving the overall financial health of Amtrak, thus ensuring the long-term stability, and expanding intercity rail passenger service. These investments will be targeted to projects which make good financial sense for Amtrak and also generate substantial benefits for the general public. Rail service can play an important role in improving mobility and offers an environmentally sound alternative to simply adding highway capacity in congested corridors. Enhancing rail service by improving average speed can provide the foundation for the introduction of high speed rail service.

The Federal Railroad Administration seeks to:

- Increase Amtrak's intercity ridership from 21.1 million passengers per year in 1998 to the 2001 target (based on the introduction of high-speed rail service) of 25.3 million. In 1999, AMTRAK ridership was 21.5 million passengers. Improving ridership is important to AMTRAK's efforts to achieve self-sufficiency.

Aviation and Airports: The Federal Government seeks to ensure that the aviation system is safe, reliable, accessible, integrated, and flexible. In 2001, the Administration will continue aggressive modernization of FAA air traffic control equipment, including both development of new technologies and improvements to existing systems to decrease air traffic delays. The Free Flight Phase I program is implementing air traffic automation aids that allow controllers to use runway capacity at busy airports more efficiently. In addition, FAA is developing controller pilot data link and Global Positioning System (GPS) technologies to improve efficiency in handling aircraft. Ongoing replacement of airport surveillance and beacon radar systems will improve the reliability of equipment used for air traffic control. Finally, about 3,300 airports throughout the country are eligible recipients of Airport Improvement Program funding. This program helps enhance airport capacity, safety, security, and noise mitigation. These funds augment other airport funding sources, such as bond proceeds, State and local grants, and passenger facility charges which airports are permitted to impose on their passengers. With 98 percent of the population living within 20 miles of an airport which supports commercial carriers, most citizens have excellent access to air transportation.

To ensure the effective and efficient use of its resources, the FAA is continuing implementation of acquisition, financial and personnel reforms. Procurement reform has enabled the FAA to pre-screen contractors ensuring that firms have the capabilities and experience to deliver technology systems that improve air traffic control. Personnel reform will result in a new pay-for-performance system that focuses employees on key agency goals. In addition, the FAA will use its

existing legislative authorities to create a performance-based organization for air traffic control services to be funded through direct user fees. These combined efforts will allow the FAA to operate more like a business, modernize more quickly, and be more responsive to customers. The Administration seeks to:

- Reduce the rate of air travel delays from the 1998 baseline of 190 delays per 100,000 activities to 171 in 2001. To accomplish this goal, the requested 2001 budget for FAA operations will increase by 12 percent or \$699 million, and the FAA budget for capital modernization for capital acquisition, to upgrade air traffic control, will increase by 22 percent, or \$450 million, compared with the 2000 level.

Maritime Transportation: For our Nation's commercial shipping infrastructure, Federal loan guarantees issued by the Maritime Administration make it easier to build and renovate vessels in U.S. shipyards, while the Coast Guard establishes and operates radio and visual aids-to-navigation infrastructure that enables the safe movement of shipping. Port development is left largely to State and local authorities, which have invested over \$16 billion in infrastructure improvements over the past 50 years. The Maritime Administration and the Coast Guard are co-leading a new effort to develop more comprehensive coordination, leadership, and cooperation among Federal, State, and local agencies and private sector owners and operators of the Marine Transportation System (MTS). The MTS is faced with growing levels of demand, shifting and competing user requirements, and safety and information system improvements. The Administration seeks to:

- Attain a stable commercial shipbuilding order book in U.S. shipyards of 530,000 gross tons by 2001. Between 1997 and 1998, U.S. commercial shipbuilding order book fell from 506,000 gross tonnage to 407,312. The Maritime Administration is focused on reversing this trend. In 1999, Title XI loan guarantees were awarded for the construction of two large cruise passenger vessels, the first to be built in the United States in 50 years.

- Reduce the percentage of U.S. ports reporting landside impediments to the flow of commerce from 41 percent in 1998 to 37 percent in 2001.

Research and Development

The Federal Government has a role in developing transportation technology. Federal research helps build stronger roads and bridges, design safer cars, reduce human error in operations, and improve the efficiency of existing infrastructure.

The Department of Transportation's (DOT's) Intelligent Transportation Systems (ITS) program is developing and deploying technologies to help States and localities improve traffic flow and safety on streets and highways. ITS provides cost-effective ways to improve the management of our infrastructure, boosting efficiency and capacity. The private sector, which works closely with the ITS program, will deploy many of the technologies developed jointly with Federal funding.

The FAA's research, engineering, and development programs help improve safety, security, capacity, and efficiency in the National Airspace System. For example, the development of improved weather forecasting and modeling tools will help reduce delays and prevent accidents and injuries caused by aircraft icing and turbulence. In 2001, the budget includes work on the impact of fatigue on performance and determining the causes of human error that lead to accidents. Work will continue on aircraft safety and fire protection methods that explore new methods for reducing the risk of aircraft fires and developing new inspection techniques to detect flaws in aging aircraft. Security and explosive detection systems research will develop machines that process baggage more rapidly and provide new technology for passenger and cargo screening. Research will continue on reducing aircraft noise and emissions.

The National Aeronautics and Space Administration's (NASA's) Aero-Space Technology Enterprise funds partnerships with the FAA, the Department of Defense (DOD), aircraft manufacturers, and airlines to address aviation safety, air traffic, and environmental

impact issues that are key to the continued growth of the U.S. aviation system.

Using technology, the Federal Government seeks to balance new physical capacity with the operational efficiency and safety of the Nation's existing transportation infrastructure. The Administration will seek to:

- Increase the number of metropolitan areas with integrated ITS infrastructure from 34 in 1997 to 56 in 2001. In 1998, there were 46 communities with these systems.

DOT, NASA, DOD, and private industry will work together on research to reduce the fatal aviation accident rate for commercial air carriers by a factor of five in 10 years (from a 1994–1996 baseline of 0.037 per 100,000 flight hours). Research will focus on preventing equipment malfunctions, reducing human error, and ensuring the separation between aircraft and potential hazards.

Regulation of Transportation

Federal rules greatly influence transportation. In the past two decades, economic deregulation of the railroad, airline, and interstate and intrastate trucking industries has reduced costs for consumers and shippers, while improving service.

The Federal Government also issues regulations that promote safer, cleaner transportation. The regulations—of cars, trucks, ships, trains, and airplanes—have substantially cut the number of transportation-related deaths and injuries, improved the safe handling of hazardous materials shipments, and helped reduce the number of oil spills.

Where regulations are used to meet our transportation safety, security, and environmental goals, the government aims for rulemakings that are cost-effective and make common sense. For example, in establishing security standards for passenger vessels and associated terminals, the Coast Guard listened to public comments and tailored the rulemaking to be consistent with international standards while giving operators the flexibility to customize their plans and choice of equipment.

Tax Expenditures

Employees do not pay income taxes on what their employers pay for parking and transit passes. These tax expenditures cost the Treasury about \$2 billion in 2001 and almost \$12 billion from 2001 to 2005. 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."