

## **MOBILITY AND ECONOMIC GROWTH**

### **STRATEGIC OBJECTIVES:**

1. Shape an accessible, affordable, reliable transportation system for all people, goods, and regions.
2. Support a transportation system that sustains America's economic growth.

### **Strategic Outcomes:**

- Improve the physical condition of the transportation system.
- Reduce transportation time from origin to destination for the individual transportation user.
- Increase the reliability of trip times for the individual transportation user.
- Increase access to transportation systems for the individual user.
- Reduce the cost of transportation for the individual user.
- Ensure the Producer Price Index for transportation services grows less rapidly than the overall PPI through the year 2005.
- Reduce barriers to trade that are related to transportation.
- Improve the U.S. international competitive position in transportation goods and services.
- Improve the capacity of the transportation workforce.
- Expand opportunities for all businesses, especially small, women-owned, and disadvantaged businesses (discussed in the Organizational Excellence chapter).

Mobility as much as any other factor defines us as a Nation, and is intertwined with the Nation's economic growth. It connects people with work, school, community services, markets, and other people. The U.S. transportation system carries over 4.6 trillion passenger-miles of travel and 3.9 trillion ton-miles of freight every year – generated by more than 276 million people and 6 million businesses.

DOT's aim is an affordable, reliable and accessible transportation system. To achieve reliability and accessibility, 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. In FY 2002, DOT mobility and economic growth programs improved condition, performance, and services provided by the Nation's transportation system.

## PERFORMANCE SUMMARY:

|  | 1996    | 1997    | 1998    | 1999  | 2000    | 2001    | 2002  | 2002 Target | Met | Not Met |
|--|---------|---------|---------|-------|---------|---------|-------|-------------|-----|---------|
| Percentage of travel on the NHS meeting pavement performance standards for acceptable ride.  | 88.9    | 89.1    | 89.8    | 90.5  | 90.9    | 90.9(r) | 91.6# | 92.0        |     | ✓       |
| Percent of total annual urban-area travel occurring in congested conditions**  | 26.8(r) | 27.3(r) | 28.3(r) | 29(r) | 29.3(r) | 30.4(r) | 31.1* | 30.9(r)     |     | ✓       |
| Cumulative average percent change in transit passenger-miles traveled per transit market.  | 2.3     | 2.5     | 4.7     | 5.0   | 5.0     | 4.3     | N/A   | 5.3         |     |         |
| Percent of flights arriving on time  | N/A     | N/A     | 76.8    | 76.0  | 74.9    | 76.2    | 82.3  | 77.2        |     | ✓       |
| Commercial vessel collisions, allisions, and groundings  | 2,716   | 2,456   | 2,445   | 2,194 | 2,152   | 1,677   | 1,926 | 2,098       |     | ✓       |
| Percent of days in shipping season that the U.S. sectors of the St. Lawrence Seaway are available, including the two U.S. locks in Massena, N.Y. | 97.0    | 98.0    | 98.5    | 99.2  | 98.7    | 98.3    | 99.1  | 99.0        |     | ✓       |
| Percent of key rail stations ADA compliant   | 19      | 26      | 29      | 49    | 52      | 67      | 77*   | 68          |     | ✓       |
| Percent bus fleets ADA compliant   | 63      | 68      | 72      | 77    | 80      | 85      | 90*   | 86          |     | ✓       |
| Employment sites (000s) made accessible by Job Access and Reverse Commute transportation services  | N/A     | N/A     | N/A     | 1.7   | 17.0    | 17.8(r) | N/A   | 20.4***     |     |         |
| Passengers (millions) in international markets with open skies aviation agreements   | 38.4    | 40.7    | 43.0    | 49.4  | 56.8    | 56.4(r) | 57.0* | 59.7        |     | ✓       |

## FY 2001 FINAL PERFORMANCE REPORT

|  |      |      |      |      |       |       |       |       |  |   |
|--|------|------|------|------|-------|-------|-------|-------|--|---|
| Percent miles of NHS roads meeting pavement performance standards                                    | 89.6 | 91.1 | 91.8 | 92.1 | 93.0  | 93.5  | 93.7  | 91.9  |  | ✓ |
| Additional percent of annual urban-area peak period travel time attributable to congestion**         | N/A  | 43   | 45   | 47   | 49    | 51    | 53(r) | 52    |  | ✓ |
| Average annual hours of extra travel time due to delays for the individual traveler in urban areas** | N/A  | 26.8 | 28.1 | 29.1 | 30.6  | 31.2  | 32(r) | 31.7  |  | ✓ |
| Gross tonnage (in thousands) of commercial vessels on order or under construction in U.S. shipyards  | N/A  | N/A  | 579  | 407  | 595   | 1,100 | 1,162 | 530   |  | ✓ |
| Students graduating with transportation-related advanced degrees from DOT-funded universities        | N/A  | N/A  | N/A  | N/A  | 1,086 | 1,154 | 1,108 | 1,203 |  | ✓ |

# Projection; N/A = Not Available; (r) Revised; \* Preliminary estimate; \*\* Methodology change – a more refined and accurate congestion model was used to calculate historical and current performance. 2002 target has been changed to new methodology; \*\*\* The target from the revised *FY 2002 DOT Performance Plan* was 404, but it was based on erroneous trend data. The target calculated from correct trend data is 20,400.

**HIGHWAY INFRASTRUCTURE CONDITION:** The National Highway System (NHS) carries 1 trillion or 43 percent of vehicle-miles traveled (VMT), but consists of only 161,117 miles of rural and urban roads—just 4 percent of total highway miles—and 115,000 bridges. 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, fuel consumption, travel time, congestion, and comfort, as well as public safety. Improving pavement and bridge condition is also important to the long-term structural integrity and cost effectiveness of the transportation system.

**Performance measure:**

| Percentage of travel on the NHS meeting pavement performance standards for acceptable ride. |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>  | N/A         | N/A         | N/A         | 92.0        |
| <b>Actual:</b>  | 90.5        | 90.9        | 90.9        | 91.6#       |

# *Projection from trends.*

**2002 Results:** DOT did not meet the performance target.

Pavement condition overall continued to improve, but a few States with a significant portion of VMT reported a decline in acceptable ride quality.

To improve pavement condition, FHWA developed standards for pavement smoothness during pavement construction that were adopted by American Association of State Highway and Transportation Officials as a provisional standard, and also published reports on pavement smoothness for hot-mixed asphalt pavements and Portland Concrete Cement pavements that highlight best practices for measurement and construction practices. FHWA developed the Profile Viewer software to analyze pavement profile data collected with inertial profilers, and delivered a course on measuring pavement smoothness using advanced inertial profilers.

FHWA took several steps to improve the condition of our Nation’s bridges. To give States more flexibility in using Highway Bridge Replacement and Rehabilitation Program funds, FHWA modified its policy to allow program funds to also be used for preventative maintenance. This policy change should enable States to slow bridge deterioration and extend useful service lives. FHWA also obtained valuable input on improving the National Bridge Inspection Standard, and an Advanced Notice of Proposed Rulemaking is being drafted. Through the Innovative Bridge Research and Construction (IBRC) program, 59 bridge replacement and repair projects were delivered using innovative structural material.

A total of 2,571 miles of the Appalachian Development Highway System were open to traffic or under construction. There were 231 miles in the final design or right-of-way acquisition phase and 224 miles in the location studies phase.

**FHWA supplementary performance measures:**

| Percentage of deficient bridges on the NHS. |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>                              | 22.8        | 22.5        | 22.3        | 21.9        |
| <b>Actual:</b>                              | 23.0        | 21.5        | 21.2        | 20.7#       |

| Miles of the Appalachian Development Highway System (ADHS) completed. |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>  | 2,327       | 2,373       | 2,520       | 2,557       |
| <b>Actual:</b>  | 2,456       | 2,483       | 2,526       | 2,571       |

# *Projected from trends.*

**FY 2003 Performance Plan Evaluation:** DOT will meet the target in FY 2003.

***Management Challenge – Highway Trust Fund Receipts/Allocation (GAO); and Trust Fund Balances and Grant Fraud (IG)***

The IG's concerns extended to two areas – effective use of highway funds to improve mobility and reduce congestion; and preventing fraud and abuse in highway projects contracts. A June 2000 GAO report stated that there is little assurance that Highway Account funds distributed to the States are accurate given the information currently available. Although the Treasury Department and FHWA had taken initial actions to review and improve their estimating processes, these actions alone were not sufficient to correct the weaknesses. Therefore, to reduce the risk of errors and increase the reliability of the information used to distribute Federal highway program funds to the States, GAO made these recommendations to DOT:

- perform detailed, independent verifications of motor fuel data used in the process;
- fully document FHWA's current analysis methodology for State motor fuel data;
- conduct an independent, comprehensive review of this methodology; and
- evaluate the potential reliability of the Internal Revenue Service's ExFIRS data as a tool to validate State motor fuel data.

FHWA agreed with recommendations to improve its attribution process reliability and incorporated them into a motor fuel attribution process improvement action plan. In FY 2002, FHWA:

- developed a new data submittal tool for the States (90 percent of all States are now submitting their motor fuel data electronically using this new tool);
- started detailed review of State motor fuel data collecting and reporting processes;
- refined motor fuel attribution, beginning with calendar year 2002 data; and
- initiated an independent, comprehensive review of its methodology.

FHWA will work with States to ensure that funds are being obligated for valid highway projects and to reduce the dollar value of inactive obligations for highway infrastructure projects by 10 percent per year. This will ensure that unused funds associated with completed, cancelled, or unnecessary projects are put to good use.

FHWA will encourage efficient use and management of Federal funds, and better project funds management. FHWA assists Federal, State, and local agencies in identifying projects that are ready for advancement; is streamlining the environmental process; and encouraging the use of innovative contracting and financing such as advance construction, GARVEE bonds, State Infrastructure Banks, or tapered match.

FHWA will improve management of the Federal-aid highway program, including cost containment, while allowing the States maximum delegated authority and flexibility, as appropriate. As larger and more complex projects are completed, a balance must be achieved between addressing the needs of major projects and the vast majority of the program vested in smaller projects.

**HIGHWAY CONGESTION:** Delay on the Nation's highway systems is a major cost to motorists - amounting to \$72 billion in 1997 in lost wages and wasted fuel. Congestion adds to the cost of production, drives prices up, and reduces funds available for investment in product development or firm expansion. Slowing the growth of congestion and delay aids urban travelers' mobility and productivity and curbs economic inefficiencies induced by congestion. Highly integrated Intelligent Transportation Systems (ITS) use electronic information and communications technology to extend the capacity of our existing infrastructure system, improving traffic flow and reducing bottlenecks.

**Performance measure:**

Percentage of total annual urban-area travel that occurs in congested conditions.

|                      | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
|----------------------|-------------|-------------|-------------|-------------|
| <b>Target:</b> (old) | N/A         | N/A         | 33.4        | 33.7        |
| (revised)            | N/A         | N/A         | 30.0        | 30.9        |
| <b>Actual:</b> (old) | 32.6        | 33.1        | 33.8(r)     | --          |
| (revised)            | 29.0        | 29.3        | 30.4        | 31.1#       |

# Preliminary estimate; (r) Revised

**Note on data:** A more refined and accurate urban highway congestion model was used to calculate historical and current performance. The 2002 target has been changed to new methodology.

**2002 Results:** DOT did not meet the performance target.

Trend data indicates congestion is growing in metropolitan areas of all sizes. Preliminary data for metropolitan areas with integrated ITS deployments indicates that FHWA's target of 61 cities in the medium or high deployment category will not be met.

FHWA assisted States in completing of 77 of 244 regional ITS architectures. The number of metropolitan areas with a medium or high integrated ITS infrastructure increased from 52 to 57. For areas with less well-integrated systems or no systems, FHWA continued funding and technical assistance to support integration efforts. The "511" highway information telephone number was launched in 8 metropolitan areas, and will be available in an additional 5 locations in early 2003. FHWA continued "511" system deployments through 40 planning grants and technical assistance throughout the U.S.

To improve work zone and highway incident management, FHWA:

- completed an Advance Notice of Proposed Rulemaking to require project planners and designers focus on work zone planning early in planning cycles;
- upgraded a traffic impact analysis tool that can be used for work zone delay estimation;
- expanded collection of real-time data on travel time and travel time reliability from 10 to 22 city Transportation Management Centers across the country; and
- began operational testing on integration of data and common operational practices between public safety dispatch centers and transportation management centers.

**FHWA supplementary performance measures:**

Of annual urban-area peak period travel time, additional percentage of travel time attributable to congestion.

|                | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
|----------------|--------------------|--------------------|--------------------|--------------------|
| <b>Target:</b> | N/A                | N/A                | 52                 | 53                 |
| <b>Actual:</b> | 49                 | 51                 | 53(r)              | 55#                |

For the individual traveler in urban areas, average annual hours of extra travel time due to delays.

|                | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
|----------------|--------------------|--------------------|--------------------|--------------------|
| <b>Target:</b> | N/A                | N/A                | 31.7               | 32.2               |
| <b>Actual:</b> | 30.6               | 31.2               | 32.0(r)            | 31.9#              |

Number of metropolitan areas where integrated ITS infrastructure is deployed.

|                | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
|----------------|--------------------|--------------------|--------------------|--------------------|
| <b>Target:</b> | N/A                | 51                 | 56                 | 61                 |
| <b>Actual:</b> | 49                 | 52                 | 52                 | 57                 |

(r) Revised; # Projected from trends.

**FY 2003 Performance Plan Evaluation:** DOT will likely meet the target in FY 2003.

**TRANSIT RIDERSHIP:** In 2001, people rode public transportation systems 9.5 billion times, traveling to and from work, medical appointments, school and social events. Public transit offers many benefits. It is one of the safest ways of traveling, relieves road congestion, and reduces air pollution. To achieve these benefits, transit must be convenient and cost-efficient. Federal transit investment combined with State and private sector funds enable this means of transportation.

**Performance measures:**

|  |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| Average percent change in transit passenger-miles traveled per transit market. |             |             |             |             |
|  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>   | N/A         | N/A         | N/A         | 5.3         |
| <b>Actual:</b>   | 5.0         | 5.0         | 4.3         | N/A         |

*N/A Not available.*

**2002 Results:** DOT cannot characterize its performance since no data was available.

In FY 2002, DOT changed the transit ridership measure to the average change in passenger miles traveled per market. This change was prompted by the fact that the previous measure placed excessive emphasis on increasing ridership in the Nation's very largest urban areas. The new measure was intended to focus more attention on increasing transit ridership in every community.

After a year of experience with this measure, DOT has concluded that this measure should be modified to better account for the impact of economic conditions on transit use. The revised measure will adjust for changes in the level of employment in each urbanized area. A recent study by the Mineta Institute found that change in employment is a key economic factor associated with change in transit ridership. This finding is consistent with the fact that approximately one-half of transit riders are traveling to and from work. Further, employment levels also reflect the financial capacity of local governments to support transit service levels and keep fares stable.

An increase in the average transit ridership per market, adjusted for changes in employment, represents an increase in transit's share of the personal travel market. The goal is a 2.0 percent increase per year, adjusted for changes in employment.

At present, this measure is reported based on year-to-year changes in transit ridership from the annual reports made to the National Transit Database, based on local fiscal years. Thus, the data being reported for the year 2001 represents changes between local fiscal years ending in 2001 (e.g., July 2000 to June 2001 or January 2001 to December 2001) versus local fiscal years ending in 2000. In order to improve the timeliness of the data reported, and to make the period being reported more comparable across areas, in the future, the measure will utilize data on transit boardings from the new monthly National Transit Database that was initiated in 2002. This data is available for the largest 150 transit operators, which account for about 95 percent of all transit ridership. Thus, for 2003, the indicator will compare transit ridership for the urbanized areas containing the 150 largest transit agencies (normalized for employment levels) for the year ending in November 2003 with the year ending in November 2002. Data on employment is based on monthly employment levels for metropolitan statistical areas reported by the Bureau of Labor Statistics.

**FTA supplementary performance measures:**

|  |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| Passenger-miles traveled (in billions) by transit. |             |             |             |             |
|  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>                                     | ---         | 40.56       | 44.8        | 47.5        |
| <b>Actual:</b>                                     | 43.3        | 45.1        | 46.3        | 47.1        |

|   |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
| Average condition of motor bus fleet (on a scale of 1 (poor) to 5 (excellent)). * |             |             |             |             |
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>  | N/A         | 3.15        | 3.20        | 3.25        |
| <b>Actual:</b>  | 3.13        | 3.07(r)     | 3.11(r)     | N/A         |

Average condition of rail vehicle fleet (on a scale of 1 (poor) to 5 (excellent)). \*

|                | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
|----------------|-------------|-------------|-------------|-------------|
| <b>Target:</b> | N/A         | 3.19        | 3.24        | 3.29        |
| <b>Actual:</b> | 3.14        | 3.55(r)     | 3.58(r)     | N/A         |

(r) Revised; # Preliminary estimate; \* In 2001 the method for calculating condition was revised to better reflect actual conditions -- this is reflected in the revised actual numbers for 2000 and 2001.

**FY 2003 Performance Plan Evaluation:** DOT will meet the target in FY 2003.

#### ***Management Challenge – Transit Grant Oversight (IG/GAO/OMB)***

Oversight of transit grants is a core management responsibility of FTA, and the IG and GAO have identified ways to improve oversight. Over the past several years, FTA has worked to continuously improve its grants management by implementing better oversight activities and exercising full use of available enforcement tools to correct grantees' noncompliance with Federal regulations. As a result, FTA is reducing the risk associated with its grants program.

FTA will use its project management oversight contractors (PMOC) to provide monthly reports on all phases of construction of transit projects. Tracking project contract changes and costs, and implementing measures to control cost will remain part of the PMOC responsibilities.

DOT/FTA grants to States and localities are a key tool in achieving the benefits that increased transit use provides to individuals, communities and the Nation. Oversight of these grants to ensure that funds are spent in conformance with Federal laws and regulations is a core management responsibility of FTA. In the 1990s, the IG, GAO and OMB criticized FTA's grant oversight, and placed FTA grant assistance on a list of high-risk Federal programs. Subsequently, FTA established a systems approach to oversight through an annual risk assessment of each of its 600-plus grantees. In addition, numerous improvements were made to FTA oversight, which resulted in FTA being first Federal agency to be dropped from the list of high-risk Federal programs.

Over the last two years, FTA has worked diligently to further improve its grants management oversight by implementing a fully coordinated approach to oversight. Recently, FTA has taken several steps to strengthen the Triennial Review Program, FTA's statutory oversight program, and to provide additional assistance to grantees in meeting FTA's requirements. Grantees who will be subject to a Triennial Review in FY 2003 were offered 10 one-day regional workshops to help them better understand what is required. To ensure that grantees have the necessary information to assist them in meeting Federal standards, the number of Grants Management Seminars was expanded from three to five each year and the Grants Management Seminar Workbook was placed on the FTA public website. This document includes links to all FTA Circulars, OMB Circulars, Federal Register Notices and other laws and regulations that grantees are required to follow.

To improve grantee compliance with statutory and administrative requirements, in FY 1998 FTA established a goal to reduce by five percent per year the deficiency findings per FTA management review. Since that time, as FTA has increased its effort to strengthen grantee performance, the number of questions asked of grantees has increased by over 20 percent. Thus, while deficiency findings have not decreased, a more rigorous oversight process has reduced the risks associated with FTA's grant assistance programs. In addition, FTA is providing more assistance to grantees in resolving these findings.

FTA no longer believes that a reduction in the average number of deficiency findings is necessarily a good indication of improved grantee performance, particularly since the grantees reviewed change from year to year. In fact, this result theoretically could be achieved by conducting less rigorous reviews, which would be counterproductive to our ultimate goal. In all oversight areas, the proper balance has to be found in streamlining reviews and reducing deficiency findings, while encouraging grantees to continue to improve their management of Federal transit funds.

**AVIATION DELAY:** Commercial aviation delays cost airlines an estimated \$3 billion per year. Passengers are directly affected by missed flight connections, missed meetings, and loss of personal time. There are approximately 20 congested airports, each averaging over 20,000 hours of flight delay per year. Delays throughout the system are projected to increase as passenger travel demand continues to recover and rise.

**Performance measures:**

| Percent of on-time flights. |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|
|                             | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>              | N/A         | N/A         | N/A         | 77.2        |
| <b>Actual:</b>              | 76          | 74.9        | 76.2        | 82.3        |

**2002 Results:** DOT met the performance target.

DOT worked with the aviation community to develop an action plan for increasing on-time flight arrivals. While recognizing the role of airlines and airports, this plan focuses on:

- an examination of the success that Canada and other nations have experienced with individual air traffic control systems owned and operated by private companies;
- improved FAA business practices;
- organizational changes, including establishing a performance-based air traffic control organization; and
- market-oriented techniques to strengthen our operations and reduce system delays.

Over the long term, increased airport capacity, all-weather access to runways, and building more runways provide the best means of matching capacity to demand and reducing the possibility of delayed flights. In the near term, delay reduction depends on improved FAA service delivery, deployment of improved decision making tools such as Free Flight software, continued air traffic management system modernization to keep system reliability up, and improvements to aviation weather information systems.

Capacity Growth: In addition to grant funding for additional runways, taxiways, and aprons at airports, FAA continued or completed the following projects to increase usable capacity, flexibility, and efficiency:

- Center TRACON Automation System (CTAS), a decision support tool for air traffic controllers, which enables a more efficient arrival flow into terminal airspace and onto runways;
- User Request Evaluation Tool (URET), a conflict probe that enables controllers to more quickly approve user requests in en route airspace by identifying potential aircraft-to aircraft conflicts up to 20 minutes in advance;
- Traffic Management Advisor (TMA) at major hubs (Dallas–Ft. Worth, Los Angeles, Atlanta, Minneapolis, Oakland, Miami, and Denver);
- two major systems to improve weather reporting, processing, and dissemination - Integrated Terminal Weather System to consolidate information from several sources, which is then provided to TRACONs and airport towers and Weather and Radar Processor to provide integrated weather observations and weather radar data to FAA traffic control centers;
- improved weather sensors such as Next Generation Weather Radar, Terminal Doppler Weather Radar, the Low-Level Wind Shear Alert System and a wind shear detection channel for the terminal radar, the Automated Surface Observation System; and
- Collaborative Convective Forecast Product (CCFP), an experimental demonstration program from the National Weather Service, at the Air Traffic Control System Command Center. The CCFP provides a single convective forecast for use in coordinating a system wide approach to severe weather events.



Efficient Use of Daily Capacity: FAA tracks airport acceptance and departure rates, reflecting the arrivals and departures that can occur, based on standard air traffic management practices. Demand for arrivals or departures at an airport divided by its practical capacity, gives a utilization rate for that airport. By tracking utilization rates, FAA can evaluate the effectiveness of its delay reduction programs.

To further increase efficiency, FAA and NASA developed enhanced software tools for air traffic control. FAA and National Weather Service aviation weather research programs developed improved flight planning and collaborative decision making tools for more detailed and timely detection and forecasting of hazardous weather, icing, turbulence, oceanic convection, ceilings and visibility.

**FAA Supplementary performance measures:**

| Airport Efficiency Rate (percent of actual arrival capacity used). |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
|  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>   | N/A         | N/A         | N/A         | 95.25       |
| <b>Actual:</b>   | N/A         | 94.7        | 94.9        | 96.20       |

| Average Daily Level of Airport Arrival Capacity (thousands of landings) |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>  | N/A         | N/A         | 46.6        | 46.6        |
| <b>Actual:</b>  | 44.7        | 44.7        | 46.6        | 47.0        |

**FY 2003 Performance Plan Evaluation:** DOT will meet the target in FY 2003.

***Management Challenge – Aviation System Capacity and Air Traffic Control Modernization (IG/GAO)***

The FAA is engaged in a comprehensive program to modernize the air traffic control system. This includes: replacement of the controller workstations and automation software; replacement of radar surveillance systems; modernization of voice communication systems; and the introduction of enhanced automation aids, data links, and improved weather systems. Modernization is necessary to accommodate air traffic growth. Given the complex nature of the equipment and the need for the highest level of reliability, there are significant management challenges associated with maintaining schedule and cost discipline, and in ensuring efficient and timely use of airport grant funds.

FAA’s Operational Evolution Plan (OEP) outlines how National Airspace System capacity will be increased over time. The OEP builds upon successful Free Flight program techniques and integrates well-defined operational concepts, early deployment, spiral development, and objective, measurable results. Through the RTCA Advisory Committee, FAA is working to synchronize efforts with the aviation industry so that FAA investments yield timely benefits. Responsibility for delivery of each new capability is assigned to a single senior executive who coordinates both acquisition and operational integration performance. The FAA is working to map OEP metrics directly to organizational measures. This linkage ensures that resources are properly aligned with the FAA's commitment to increasing capacity.

It is generally accepted that new runways are the most effective way to increase capacity. In the 10 years prior to the FAA’s OEP, six new runways had been completed, including runways at Dallas and Phoenix. When the OEP was first published in June 2001, it included provisions to add 15 new runways, but that was before 9/11, and before the effects of the economic slowdown became more pronounced.

As of November 2002, FAA's Airport Improvement Program (AIP) had 61 grant obligations, totaling about \$72 million, with no expenditures within 18 months. FAA is working with the grantees to ensure that the grants will be activated or closed out expeditiously. The inactive grants and the unused funds will be eliminated during FY 2003.

**MARITIME NAVIGATION:** More than 2 billion tons of freight worth \$1 trillion moves annually through U.S. ports and waterways. The St. Lawrence Seaway is the international shipping gateway to the Great Lakes, offering access and competitive costs with other routes and modes to the interior of the country. As trade increases, ensuring safe and unimpeded access to commercial and recreational vessel traffic will be increasingly important to the national economy. Navigational accidents and ice-choked

shipping channels impact freight movements and increase the risk of environmental damage. Extending shipping routes in winter is crucial for many industries and for home heating oil shipments to the Northeastern U.S. where transportation alternatives do not exist.

**Performance measures:**

|  |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| Total number of commercial vessel collisions, allisions, and groundings. |             |             |             |             |
|  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>   | N/A         | N/A         | 2,204       | 2,098       |
| <b>Actual:</b>   | 2,194       | 2,152       | 1,677       | 1,926       |

|   |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
| Percentage of days in the shipping season that the U.S. portion of the St. Lawrence Seaway system is available. |             |             |             |             |
|   | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>  | 99          | 99          | 99          | 99          |
| <b>Actual:</b>  | 99.2        | 98.7        | 98.3        | 99.1#       |

# Preliminary estimate.

**2002 Results:** DOT met the collisions, allisions, groundings, and the Seaway availability target.

41 percent of the events leading to diminished waterway traffic availability were groundings, 40 percent were allisions, and 18 percent were collisions. 65 percent of collisions, allisions and groundings were associated with the Nation’s towing industry.

USCG Aids to Navigation, Icebreaking, and International Ice Patrol Operations: No waterways were either closed or restricted in FY 2002 due to failures of the aids to navigation system or excessive ice buildups, and no connections were drawn between aid to navigation failures and any groundings, collisions, or allisions. Significant ice did not form on the Great Lakes until mid-January when more seasonal temperatures caused rapid ice formation in the northern lakes. In the Northeast, there was little ice formation until early January. Most ice operations were centered on the upper Penobscot River in Maine and the upper Hudson River in New York.

No ships collided with icebergs. The 2002 season was a moderate ice year with several icebergs surviving long enough to drift past the southern end, or “Tail” of the Grand Banks. Over 4,700 icebergs were sighted in the patrol area, 877 of them south of latitude 48°, which is the area of greatest concern.

St. Lawrence Seaway Operations: The most common cause of system non-availability in 2002 was weather. Weather delays usually occur at the beginning and end of each navigation season, and are caused by poor visibility, high winds, ice, blizzards, and dense fog. The other major factor that reduced lock availability in 2002 was vessel incidents, usually caused by human error on the part of a vessel’s crew. Vessel incidents are also caused by mechanical breakdowns. Of the remaining system non-availability causes, the SLSDC has the most control over the proper functioning of lock equipment. During 2002, only 3.2 hours of the 63.2 total hours of downtime (5 percent) were due to malfunctioning lock equipment.

To address vessel related non-availability causes, SLSDC has joined with its Canadian counterpart, the St. Lawrence Seaway Management Corporation, as well as the U.S. and Canadian Coast Guards, to institute a joint boarding program for the foreign vessels that use the Seaway. This vessel inspection program was certified as ISO 9002 compliant in 1998. In 2002, SLSDC continued this program by inspecting 100 percent of all ocean vessels in Montreal. This improved inspection regime has saved vessels, on average, four hours per transit and ensured that any safety or environmental issues are addressed prior to entering U.S. waters. As a result, delays were reduced and ocean carriers using the Seaway saved more than \$500,000 in operating costs during 2002.

The SLSDC also unveiled an Automatic Identification System (AIS)-based Vessel Traffic Management System (TMS) in 2002 that is based on Global Positioning System (GPS) technology. The application of Universal AIS technology enhances the efficiency of Seaway operations, and improves the safety of navigation on the Seaway.

**USCG supplementary performance measure:**

|  |                    |                    |                    |                    |
|--|--------------------|--------------------|--------------------|--------------------|
| Days critical waterways are closed due to ice. (2 days in an average winter; 8 days in a severe winter.) |                    |                    |                    |                    |
|  | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
| <b>Target:</b>   | 2-8                | 2-8                | 2-8                | 2-8                |
| <b>Actual:</b>   | 0                  | 0                  | 7#                 | 0                  |

# The winter of 2000-2001 was classified as a severe winter.

**FY 2003 Performance Plan Evaluation:** SLSDC will meet the target in FY 2003. DOT cannot characterize Coast Guard performance for FY 2003, since the Coast Guard will be a part of the new Department of Homeland Security.

**TRANSPORTATION ACCESSIBILITY:** Transportation is vital in maintaining independence and mobility for people with disabilities, linking them to employment, health care, and participation in the community. The President's New Freedom initiative seeks to create a more accessible public transportation system for individuals with disabilities. The Personal Responsibility and Work Opportunity Reconciliation Act limits the time a person can receive welfare benefits, and generally requires recipients to participate in job and training activities. For many of these people, access to transportation is the key to making a transition from welfare to work.

**Performance measures:**

|   |                    |                    |                    |                    |
|---|--------------------|--------------------|--------------------|--------------------|
| Percentage of bus fleets that are ADA-compliant.        |                    |                    |                    |                    |
|   | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
| <b>Target:</b>  | 73                 | 80                 | 83                 | 86                 |
| <b>Actual:</b>  | 77                 | 80                 | 85                 | 90#                |
| Percentage of key rail stations that are ADA-compliant. |                    |                    |                    |                    |
|   | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
| <b>Target:</b>  | 37                 | 47                 | 58                 | 68                 |
| <b>Actual:</b>  | 49                 | 52                 | 67                 | 77#                |

|  |                    |                    |                    |                    |
|--|--------------------|--------------------|--------------------|--------------------|
| Number of employment sites (000s) that are made accessible by Job Access and Reverse Commute (JARC) transportation services. |                    |                    |                    |                    |
|  | <b><u>1999</u></b> | <b><u>2000</u></b> | <b><u>2001</u></b> | <b><u>2002</u></b> |
| <b>Target:</b>   | N/A                | 4.1                | 15.7               | 40.4               |
| <b>Actual:</b>   | 1.7                | 17.0               | 17.8(r)            | N/A                |

(r) Revised; # Preliminary estimate; N/A Not available; Rail station measure does not reflect stations under a time extension as discussed below.

**Note on data:** The FY 2002 target for work sites made accessible by Job Access and Reverse Commute grants was adjusted upward in the FY 2002 Performance Plan based on FY 2001 preliminary estimates of actual performance. Subsequent revisions to the methodology used to calculate the estimates resulted in revised actual performance numbers in FY 2001. Future performance targets will be adjusted to account for improved trend data.

**2002 Results:** DOT met both bus and rail station ADA compliance targets, and cannot characterize performance for the Job Access and Reverse Commute work site accessibility target since data has not yet received from JARC grantees to verify that FY 2002 program targets have been achieved. A new easier-to-use reporting system is being implemented that should improve data gathering performance.

The bus transit fleet continues to become more accessible as older vehicles are replaced with those that are lift-equipped or have low floors. The overall rate of increase in bus accessibility has slowed somewhat since many of the buses replaced were already lift-equipped.

There are a total of 685 key rail stations nationwide designated by the commuter authority or light/rapid rail operator in cooperation with the local disability community. To date, of the 685 key stations, 547 were covered by a Voluntary Compliance Agreement that expired December 31, 2001. The other 138 are currently operating under time extensions. Since 1995, FTA has assessed more than 509 stations, taking on-site measurements, recording specific accessibility features at stations, and simultaneously providing technical assistance. Quarterly rail station status reports and key rail station assessments have significantly increased the number of key rail stations that have come into compliance over the last several years.

In areas that receive JARC funds, the program successfully meets the transportation needs of low-income individuals seeking reliable transportation to employment and related support services. Grantees have used JARC funds for a wide variety of services, ranging from expansion of fixed route bus systems to the provision of customer information. In each community that has received a grant, JARC transportation services have reached new employment sites, making thousands of entry-level jobs and employers accessible for the program's target populations. New stops have also increased access to critical employment support sites, particularly childcare and job training facilities.

**FY 2003 Performance Plan Evaluation:** DOT will meet the targets in FY 2003.

**INTERNATIONAL AIR SERVICE:** Since the 1940's international air transportation has been subject to restrictive bilateral agreements that raise prices and artificially suppresses aviation growth. DOT's policy is to negotiate bilateral agreements to open international air travel to market forces, thereby removing limitations on the freedom of U.S. and foreign airlines to increase service, lower fares, and promote economic growth. These agreements have made it possible for the airline industry to provide better quality, lower priced, more competitive service for millions of passengers in thousands of international city-pair markets.

**Performance measure:**

|  |             |             |             |             |
|--|-------------|-------------|-------------|-------------|
| Number of passengers (in millions) in international markets with open skies aviation agreements. |             |             |             |             |
|  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> |
| <b>Target:</b>   | 43.4        | 44.7        | 51.6        | 59.7        |
| <b>Actual:</b>   | 49.4        | 56.8        | 56.4(r)     | 57.0#       |

# Preliminary estimate

**2002 Results:** DOT did not meet the performance target.

Passenger travel diminished in FY 2002 because of 9/11's impact on air travel. However, DOT increased the number of countries with which the U.S. has "open-skies" agreements to 59, adding five new open-skies agreements (France, Sri Lanka, Uganda, Cape Verde and Jamaica). In addition, the U.S. has

multilateral open-skies agreements with six other members of the Asia-Pacific Economic Cooperation (APEC) forum (Brunei, Chile, New Zealand, Peru, Samoa and Singapore); and an "open transborder" agreement with Canada.

**FY 2003 Performance Plan Evaluation:** DOT expects to meet the target in FY 2003. Although the European Court of Justice (ECJ) found that some elements of the U.S.s' aviation agreements with eight EU member states violated EU law, it did not nullify our agreements with those eight or the other seven EU members. Those agreements, which form the legal basis for air service between the United States and EU countries, will remain in force, and the ECJ decision will not affect our ability to meet the FY 2003 target.