



## Testimony

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# PERFORMANCE AND ACCOUNTABILITY

## Challenges Facing the Department of Transportation

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G A O

Accountability \* Integrity \* Reliability

Mr. Chairman and Members of the Subcommittee:

We are here today to discuss the critical challenges facing the Department of Transportation (DOT). My testimony is based on reports we issued in January as part of GAO's performance and accountability series on major management challenges and program risks facing federal agencies and the federal government as a whole.<sup>1</sup> With \$58.5 billion in funding for fiscal year 2001, the Department faces critical challenges in achieving its goals of ensuring the safe and efficient movement of people and goods and in making cost-effective investments in the nation's transportation infrastructure.

The Department has achieved many successes in accomplishing its objectives and improving its operations. For example, it successfully addressed the Year 2000 computer challenge and improved the management of its transit grant programs so that they no longer are at high risk of fraud, waste, abuse, or mismanagement. However, major performance and management challenges remain. These problems are systemic and long-standing, and their resolution will require sustained attention by the Department. Therefore, it is not surprising that many of the challenges I am discussing today were also raised 2 years ago in our review of the Department's performance and accountability. I will summarize the challenges for surface transportation, aviation, the U.S. Coast Guard, and for the Department as a whole. Ultimately, the new administration and the Congress will need to address these issues in the broader context of an intermodal national transportation strategy.

- For surface transportation safety, DOT continues to face challenges in improving the safety of highways and pipelines. For example, in 1999, about 5,400 people died in crashes involving large trucks. While the Department appears to be making progress on some initiatives to reduce the number of large truck crashes, it needs to obtain high-quality, timely data on the causes of these crashes.

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<sup>1</sup>*Major Management Challenges and Program Risks: Department of Transportation* (GAO-01-253, Jan. 2001), *Major Management Challenges and Program Risks: A Governmentwide Perspective* (GAO-01-241, Jan. 2001) and *High-Risk Series: An Update* (GAO-01-263, Jan. 2001).

- For other surface transportation issues, DOT and the Congress face challenges in improving the oversight of large-dollar highway and transit projects, strengthening the financial condition of Amtrak, and enhancing freight rail competition. While the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) have improved their oversight of large projects, additional challenges exist. For example, FTA may not have the resources it needs after fiscal year 2001 to adequately oversee a significant number of new transit projects, and we recommended that the Department identify any funding shortfalls and take steps to address them. In addition, it is likely that Amtrak will not eliminate its need for federal operating subsidies by the end of 2002, as required by the Congress, which will require that fundamental decisions be made by the Congress about the continuation and scope of the nation's intercity passenger rail system.
- For aviation, the Federal Aviation Administration (FAA) continues to face considerable challenges in managing its multibillion-dollar air traffic control (ATC) modernization program, addressing shortcomings in its safety and security programs, and resolving long-standing weaknesses in its financial management. While the Department is making progress in addressing some of these issues, more remains to be done. We continued to list FAA's ATC modernization program as a high-risk information technology initiative because of its size, complexity, cost, and problem-plagued past. Congestion and record-level airline delays make it critical that FAA fully modernize the system so that it can meet the growing demands for air service. We have continued to designate FAA's financial management as a high-risk area because of the serious and long-standing nature of those weaknesses. An additional challenge is the lack of effective airline competition in certain markets, which has contributed to high fares and poor service for some communities. Possible further consolidation of the airline industry raises additional concerns about the impact on consumers.

- Improvements are needed in the Coast Guard's 20-year, \$10 billion project to replace or modernize its fleet of deepwater ships and aircraft. While the agency has addressed many of our earlier recommendations about the project's justification, attention needs to be focused on reducing the risks in its contracting approach, fully developing its acquisition strategy, and ensuring the project's affordability.
- Finally, an overriding challenge facing DOT as well as the entire federal government is the lack of attention to strategic human capital management. In January 2001, we designated this as a governmentwide high-risk area. Inadequate attention to human capital issues has been a root cause of some of the performance challenges facing DOT, such as FAA's problems with its ATC program.

### **Highway and Pipeline Safety Challenges**

Of the more than 42,000 people who died on our nation's highways in 1999, about 5,400 died in crashes involving large trucks, a figure largely unchanged from a decade ago.<sup>2</sup> (See fig. 1.)

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<sup>2</sup>Large trucks are those with a gross weight of more than 10,000 pounds.

Figure 1: Number of Fatalities From Large Truck Crashes, 1989-1999



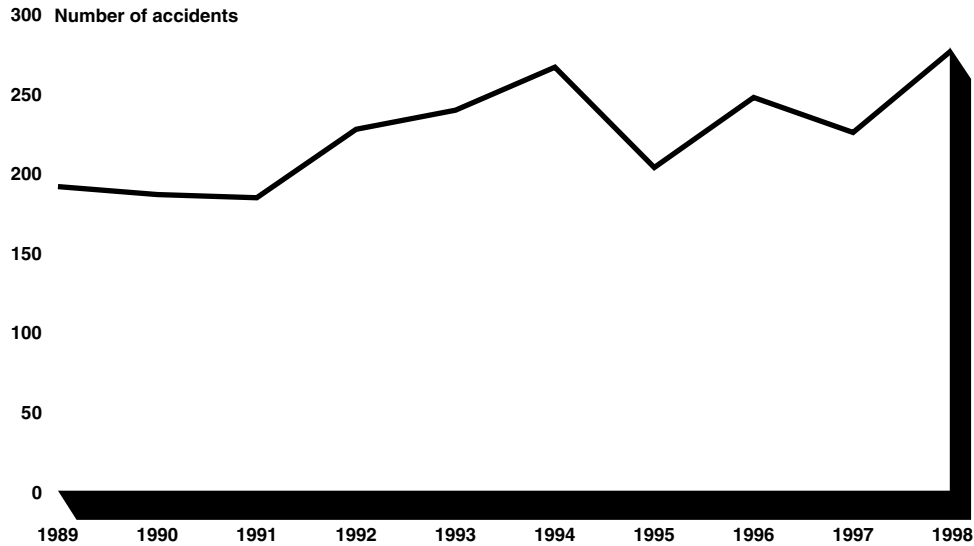
Source: DOT.

DOT has taken several steps to improve truck safety, including (1) establishing, at the direction of the Congress, a new organization—the Federal Motor Carrier Safety Administration—that is responsible for truck safety and (2) developing an overall strategy—called the Safety Action Plan—to improve the safety of commercial motor vehicles. Nonetheless, the Department must overcome significant barriers to make measurable progress in improving truck safety. For example, while the Department appears to be making progress on some initiatives in its Safety Action Plan, it lacks high-quality, up-to-date information on the causes of large truck crashes. Without such data, DOT cannot determine the degree to which its initiatives will reduce truck-related fatalities. In addition, the Department is just beginning to determine whether it will have the resources to complete the activities in its plan.

In addition to highway safety challenges, major pipeline accidents have claimed about 22 lives per year.<sup>3</sup> From 1989 through 1998, the number of major pipeline accidents increased by about 4 percent annually (see fig. 2).

<sup>3</sup>Major pipeline accidents are those that result in a fatality, an injury, or property damage of \$50,000 or more.

**Figure 2: Pipeline Accidents Resulting in Fatalities, Injuries, or Property Damage of \$50,000 or More, 1989-98**



Source: GAO's analysis of data from the Office of Pipeline Safety.

DOT's Office of Pipeline Safety (OPS) has adopted several initiatives to improve pipeline safety, including moving toward inspecting entire pipelines rather than segments of pipelines to provide a more comprehensive assessment of safety risks. We have concerns, however, about OPS' actions, such as relying less on states to inspect those portions of interstate pipelines within their borders. States' familiarity with the pipeline segments in their jurisdictions could aid in identifying the very risks that OPS is hoping to mitigate through its new approach. Furthermore, a combined federal and state approach to overseeing pipeline safety could better leverage federal resources. In addition, OPS has changed its approach to enforcing compliance with its regulations by reducing its use of fines and, instead, working with pipelines operators to identify and correct safety problems. However, the office has not assessed whether its revised approach to enforcement is resulting in greater rates of compliance. We recommended that DOT determine whether the reduced use of fines has improved compliance with pipeline safety regulations.

## **Challenges Facing Surface Transportation Projects and Passenger and Freight Rail**

Over the years, many large-dollar highway and transit projects have incurred cost increases and schedule delays. Under the Transportation Equity Act for the 21st Century (TEA-21), at least \$198 billion will be provided for highway and transit projects from fiscal year 1998 through fiscal year 2003. Although FTA and FHWA have improved their oversight of large projects, additional challenges exist. FTA may not have the necessary level of resources after this fiscal year to adequately oversee a significant number of new transit projects. In September 2000, we recommended that DOT identify any funding shortfalls in its budget for fiscal year 2002 and proposed steps to address them. This recommendation was reinforced during the last appropriations process when the Congress directed DOT to develop a plan to address expected shortfalls and to include this information in its fiscal year 2002 budget submission. We also found that DOT is likely to exhaust its commitment authority for the construction of new transit systems or the extensions of existing systems before the end of the funding period for TEA-21. Therefore, we recommended that DOT prioritize eligible transit projects so that funds can be directed to those offering the best potential for cost-effective transportation improvements.

Despite efforts to improve its overall financial condition, the National Railroad Passenger Corporation (Amtrak) has made relatively little progress in reducing its need for federal operating subsidies. Since 1971, the federal government has provided Amtrak with over \$23 billion in operating and capital assistance. In 1994, at the request of the administration and later at the direction of the Congress, Amtrak pledged to eliminate the need for federal operating subsidies by the end of 2002. However, in fiscal year 2000, Amtrak reduced its need for operating subsidies by only \$5 million—substantially less than its planned reduction of \$114 million. Over the last 6 years (1995-2000), Amtrak reduced its need for operating subsidies by only \$83 million and must make \$281 million in further reductions in 2001 and 2002 to become operationally self-sufficient. While revenues have increased, so have costs. As a result, it is unlikely that Amtrak will eliminate its need for federal operating subsidies as directed. If Amtrak

does not meet the goal, plans for restructuring intercity passenger rail service and liquidating Amtrak are to be submitted to the Congress.

Even if Amtrak does attain operational self-sufficiency, it will require substantially more financial support to meet its capital needs. Amtrak estimates that it will need an average of \$1.5 billion a year in federal funds to meet its identified capital needs over the next 20 years. Amtrak is also requesting authority to issue \$12 billion in tax-exempt bonds to meet its capital needs. Bondholders would receive an income tax credit equal to the interest they would otherwise receive.

Continued consolidation in the railroad industry has raised concerns about poor service and high rates in certain markets. The Surface Transportation Board, which approves rail mergers and consolidations, has taken a number of actions to address rail rate, service, and merger issues. For example, shippers are now allowed to receive expedited temporary relief from inadequate rail service through service from an alternative carrier. However, the Board's actions may not fully satisfy many shippers who believe that increased competition in the rail industry is needed to improve service. Because of the divergent views of railroads and shippers, resolving service and competition issues will be difficult and may require congressional action.

### **Aviation Challenges**

Over the past 19 years, FAA's multibillion-dollar ATC modernization program has experienced cost overruns, delays, and performance shortfalls of large proportions. FAA is making progress in addressing some of the causes of these problems, but its reforms are not complete, and major projects continue to face challenges in all three areas. To date, the Congress has appropriated over \$32 billion for the program, and FAA estimates that the program will need an additional \$13 billion through 2005. Because of its size, complexity, cost, and problem-plagued past, we first designated FAA's ATC modernization program as a high-risk information technology initiative in 1995. Since 1995, we have made over 30 recommendations to address the root causes of the program's problems, which include an ineffective investment management structure



and inadequate cost-estimating and cost-accounting practices. While FAA has initiated activities in response to our recommendations in many areas, more must be done. For example, FAA has begun to improve its cost estimates, but it has not yet fully instituted rigorous cost-estimating practices. With a modernized ATC system, FAA will be in a better position to meet the growing demands for air service. The congestion and record-level airline delays facing the nation make it critical that FAA meet its challenge in this area.

In 1999, FAA did not meet any of the four performance goals it had established for improving aviation safety. (See table 1.) We have identified numerous shortcomings in FAA's safety and security programs. For example, we recommended that FAA improve the effectiveness of its Safer Skies program—a joint government and industry initiative to identify and address the root causes of aviation accidents—by developing better evaluation procedures. We also recommended that FAA clarify program guidance for and improve the usefulness of its Air Transportation Oversight System for targeting inspection resources more effectively.

**Table 1: DOT's Fiscal Year 1999 Performance Measures and Goals for Aviation Safety**

| <b>Performance measure</b>   | <b>Fiscal year 1999 goal</b>             | <b>Fiscal year 1999 performance</b>     | <b>Goal achieved?</b> |
|--|--|---|-----------------------|
| Number of fatal aviation accidents for U.S. commercial air carriers per 100,000 flight hours                 | 0.034 accidents per 100,000 flight hours | 0.04 accidents per 100,000 flight hours | No                    |
| Number of dangerous incidents on airport runways (runway incursions)   | 270 incidents                            | 322 incidents                           | No                    |
| Number of errors in maintaining safe separation between aircraft per 100,000 activities <sup>a</sup>         | 0.496 errors per 100,000 activities      | 0.57 errors per 100,000 activities      | No                    |
| Number of deviations—i.e. when an aircraft enters airspace without prior coordination—per 100,000 activities | 0.099 deviations per 100,000 activities  | 0.18 deviations per 100,000 activities  | No                    |

<sup>a</sup>“Activities” are total FAA facility activities, as defined in *Aviation System Indicators 1997 Annual Report*. An example of an activity is an air traffic controller providing guidance to a pilot who needs to make an instrument landing.

Source: DOT.

Further improvements are needed in hiring and training personnel who operate security checkpoints at airports to screen passengers and carry-on baggage for dangerous

objects. For instance, we have found that several factors continue to reduce airport screeners' effectiveness in detecting dangerous objects, most notably (1) the rapid turnover of screener personnel—often above 100 percent a year at large airports (see table 2)—and (2) the human factors associated with screening that have for years affected screeners' hiring, training, and working environment. Although FAA is pursuing efforts to improve the hiring, training, and testing of airport screeners, most of these efforts are behind schedule.

**Table 2: Turnover Rates for Screeners at 19 Large Airports, May 1998-April 1999**

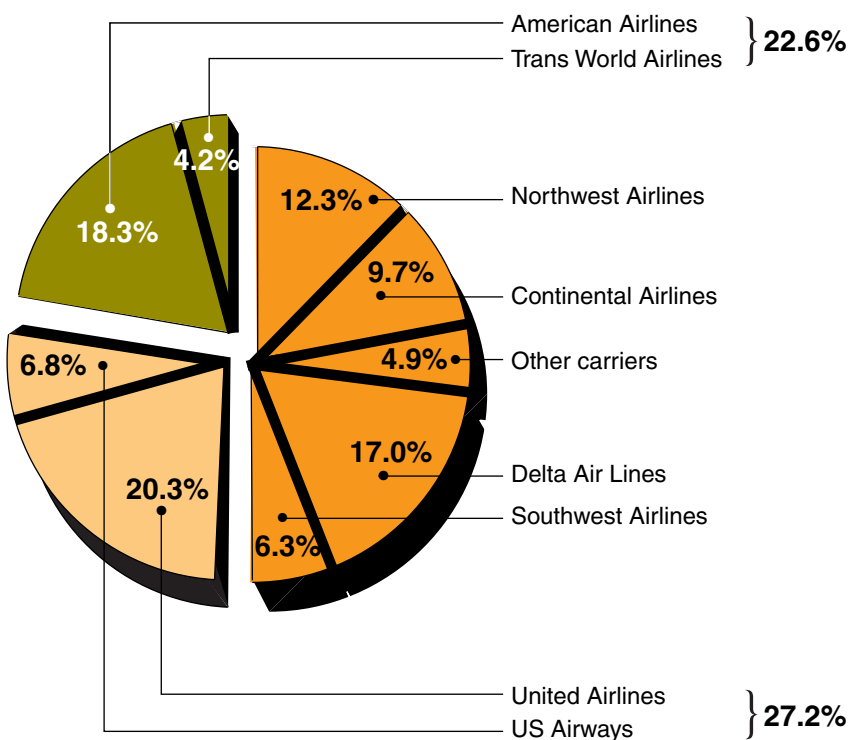
| <b>City (airport)</b>                             | <b>Annual turnover rate (percent)</b> |
|---|---------------------------------------|
| St. Louis (Lambert St. Louis International)       | 416                                   |
| Atlanta (Hartsfield Atlanta International)        | 375                                   |
| Houston (Houston Intercontinental)                | 237                                   |
| Boston (Logan International)                      | 207                                   |
| Chicago (Chicago-O'Hare International)            | 200                                   |
| Denver (Denver International)                     | 193                                   |
| Dallas-Ft. Worth (Dallas/Ft. Worth International) | 156                                   |
| Baltimore (Baltimore-Washington International)    | 155                                   |
| Seattle (Seattle-Tacoma International)            | 140                                   |
| San Francisco (San Francisco International)       | 110                                   |
| Orlando (Orlando International)                   | 100                                   |
| Washington (Washington-Dulles International)      | 90                                    |
| Los Angeles (Los Angeles International)           | 88                                    |
| Detroit (Detroit Metro Wayne County)              | 79                                    |
| San Juan (Luis Munoz Marin International)         | 70                                    |
| Miami (Miami International)                       | 64                                    |
| New York (John F. Kennedy International)          | 53                                    |
| Washington (Ronald Reagan Washington National)    | 47                                    |
| Honolulu (Honolulu International)                 | 37                                    |
| <b>Average turnover rate</b>                      | <b>126</b>                            |

Source: FAA.

We also identified actions necessary to secure FAA's ATC computer systems to reduce the possibility of intrusions or attacks. We made 22 recommendations through May 2000 to address these problems. For example, we recommended that FAA tighten controls over contract employees by ensuring that appropriate background investigations are performed. While FAA has responded to these recommendations, progress in some areas has been slow. We made an additional 17 recommendations in December 2000 to address the continuing weaknesses.

We have reported that a lack of effective airline competition in certain markets has contributed to high airfares and reduced service in some communities. A number of communities have not benefited from increased aviation competition, largely because barriers inhibit the entry of new airlines and, as a result, pockets of high fares and poor service exist. These barriers include limited access to gates at certain airports and “slot” controls that limit the number of takeoffs and landings at certain congested airports. The Congress has begun to address some of these barriers, including requiring the phaseout of “slot” rules. However, the proposed merger between United Airlines and US Airways and American Airlines’ proposed purchase of Trans World Airlines have raised questions about how such consolidation within the airline industry could affect competition in general and consumers in particular. If both proposals are approved, United would have the largest market share of any U.S. airline—over 27 percent—and American would have a 22.6 percent share. (See fig. 3.)

**Figure 3: Percentage of Total U.S. Domestic and International Passengers Carried by Major U.S. Airlines**



Note: Percentages may not total because of rounding.

Source: GAO's analysis of data from DOT for the 12 months ending June 30, 2000.

The proposals raise a number of questions—such as how a consolidated industry might affect service to small communities and new airlines' ability to compete. The Congress, DOT, and the Department of Justice must closely evaluate these proposals to assess their impact.

In addition, major improvements are still needed in FAA's financial management systems. In January 1999, we designated FAA's financial management as a high-risk area because of serious and long-standing accounting and financial management weaknesses. FAA received its first-ever unqualified opinion on its fiscal year 1999 financial statements, but it did so only through herculean efforts. FAA has not yet proven it can sustain this outcome. Because FAA lacks an adequate system to account for its physical assets on an ongoing basis, the agency used labor-intensive methods to establish baseline and cost information for the financial statements. In addition, FAA

lacks a cost-accounting system or an alternative means to meaningfully accumulate and report its costs. FAA has made significant progress in its long-term plan to remedy its financial management weaknesses. For example, it is developing a cost-accounting capability that is expected to provide detailed information about the costs of services that it provides to the public. In addition, it has begun implementing new systems to remedy its physical assets deficiencies. However, its core cost-accounting system is not expected to be fully in place until the end of fiscal year 2002 and its physical assets system will not be fully operational until fiscal year 2003. Until FAA has financial management systems and related procedures and controls that provide reliable information, it will continue to be at high risk of waste, fraud, abuse, and mismanagement.

### **Coast Guard Challenges**

Improvements are needed in the Coast Guard's Deepwater Project—a 20-year, \$10 billion project to replace or modernize its fleet of deepwater ships and aircraft and communications and radar equipment. The Coast Guard needs to focus attention on reducing the risks associated with its contracting approach, fully developing its acquisition strategy, and ensuring the project's affordability. Although the agency has addressed many of our earlier recommendations about the project's justification, numerous uncertainties still exist. For example, the Coast Guard does not expect to finish planning the Deepwater Project until July 2001, but we understand that DOT is planning to request \$350 million for the project this spring. Asking for funds prior to completing the planning process and fully addressing the risks associated with this project raises uncertainties about whether the funds will be used effectively. A major risk is the Coast Guard's contracting approach—awarding a series of contracts to one system integrator for potentially 20 or more years. Such an approach has never been used on a procurement of this size or complexity. Because of the uniqueness of this approach, the large dollars involved, and the importance of the approach in shaping the future of the Coast Guard, the agency's planned contracting strategy requires a carefully thought-out and well-documented acquisition plan. We are currently reviewing the

Coast Guard's efforts in this area and have been providing real-time advice to help mitigate the major risks associated with the program. We plan to report our results in time for the appropriations committees' deliberations on this year's funding requests for the project.

### **Departmentwide Human Capital Challenges**

This year, GAO designated human capital management as a new governmentwide high-risk area. Federal programs rely for their success on the performance of the federal government's people—its human capital. Workforce and succession planning are central elements of successful human capital management. These elements pose both short- and long-term challenges for DOT. According to the Office of Personnel Management's data, approximately 41 percent of DOT's fiscal year 1998 civilian workforce of 63,781 will be eligible to retire by the end of fiscal year 2006—however, actual retirements may not be that high. Responding to this human capital challenge, DOT's strategic plan for 2000-2005 envisions expanded workforce and succession planning for retirements in the next 10 years. According to a DOT official, as of December 2000, DOT offices had initiated pilot programs to identify future workforce needs for key occupations and DOT had drafted a Human Resources Action Plan to meet overall human capital planning needs.

Clearly, human capital challenges have contributed to the performance problems of some DOT programs. For example, a "stovepiped" culture at FAA has been one of several underlying causes of acquisition problems in the agency's ATC modernization program. As we have learned, organizational cultures can be barriers to high performance and make management improvement efforts more difficult.

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In summary, many of the challenges we identified at DOT are long-standing and will require sustained attention by the new administration and the Congress. While the Department has initiatives under way to address the shortcomings in some of its

programs, these activities have not been fully implemented. Their success will depend on a strong commitment from DOT's new leadership and a sustained effort to identify and address critical human capital issues. Finally, as they address the problems facing each of the individual components, given the myriad of demands for new resources, the new administration and the Congress must think and act so as to ensure that their transportation decisions reflect an intermodal transportation strategy that addresses the most pressing national needs in a cost-beneficial manner.

This concludes my prepared statement. I would be glad to answer any questions.

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