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FEDERAL MANAGEMENT

Addressing Management Issues at the Department of Transportation

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Mr. Chairman and Members of the Committee:

We are pleased to be here today to discuss critical management issues at the Department of Transportation (DOT) and actions the Congress, the Department, and affected parties can take to solve them. With more than $39 billion provided through its fiscal year 1997 appropriations act, DOT is responsible for ensuring the safe and efficient movement of people and goods and cost-effective investment in the nation's transportation infrastructure, including its highways and transit systems, airports, airways, ports, and waterways. Our testimony today is based on reports we have recently issued as well as ongoing work for the Congress. In summary, we have found the following:

- Ensuring the safety and security of travelers on the nation's airways, highways, and waterways is of paramount importance. Although the Department has made improvements, there are still opportunities to reduce deaths and enhance the safety and security of the traveling public. For example, in 1996, 380 people died in major airline accidents, the highest number in 11 years. To enhance air safety, we have consistently identified the need for the Federal Aviation Administration (FAA) to improve how it targets inspections to the areas of highest risk. A recent FAA study, completed after the crash of ValuJet Flight 592, similarly recommended that FAA target its inspections. The Department can also improve safety on the nation's highways, where over 40,000 people are killed annually. A key to reducing highway deaths is a strong partnership among federal, state, and local governments. We have pointed out that lives can be saved by the greater use of safety belts, and we have suggested, for example, that the Congress encourage states to enact primary enforcement laws allowing police officers to stop and ticket vehicles when occupants are not using safety belts, even though no other traffic violation has occurred.
- Many components of the nation's transportation infrastructure need modernization, renovation, or new investment. Major transportation projects—for air traffic control (ATC) modernization, highways, and public transit—have been plagued with cost overruns and schedule delays. DOT can do more to improve the management of its aviation and surface transportation programs to ensure that limited federal funds are effectively and efficiently used. For example, on numerous occasions, we have reported problems in FAA's multibillion-dollar ATC modernization program. FAA needs to adopt disciplined investment management and system acquisition processes, as outlined in recent legislation and promised under the agency's new Acquisition Management System. FAA

also needs to change its organizational culture so that employees become strongly committed to mission focus, accountability, coordination, and adaptability. Similarly, improved cost management and comprehensive finance plans are needed for large highway projects.

- Serious problems in long-term financing for FAA and Amtrak need to be addressed. We reported that FAA faces significant future funding shortfalls. To assist in finding solutions to FAA's long-term financing needs, the Congress formed the National Civil Aviation Review Commission, which is scheduled to make its recommendations by August 1997. Deciding among various financing alternatives for FAA will involve tradeoffs among factors such as the efficient use of the airport and airway system, fairness to system users, and the effect on competition. To effectively design any new financing system, FAA needs better cost data to appropriately allocate costs among users. However, the agency does not plan to implement its new cost-accounting system until October 1997. With respect to Amtrak, we recently reported that Amtrak's financial condition is still very precarious and that, as currently constituted and funded, Amtrak will continue to require substantial federal financial support well into the next century. The Congress could reassess Amtrak's mission and direct that Amtrak or a temporary commission make recommendations and propose options for providing service within available funding.
- DOT's ability to effectively address many of these management and financial issues depends on having a supportive organizational structure and improved management and financial data. DOT has begun to examine what efficiencies it can realize from colocating some of its nearly 400 field offices. However, DOT needs to consider whether reorganizing its surface transportation modes under one administration and consolidating its field office structure would enable it to achieve more cost-effective delivery of services. Moreover, to support its targeting of resources such as inspectors and its management of ATC modernization projects, and to improve its overall financial accountability, DOT needs better financial and operating data and a cost-accounting system. DOT's efforts to develop more results-oriented, performance-based management information, as required by the Government Performance and Results Act, should provide an incentive to develop quality data. Furthermore, in accordance with the Chief Financial Officers Act of 1990, DOT's Office of the Inspector General (OIG) identified numerous problems with the Department's financial information. DOT faces several challenges to address its financial management problems, including fully implementing new federal accounting standards to effectively meet federal financial management goals.

The organizational, information, and financial problems that DOT faces are serious. Their solutions require a commitment from the highest levels of the Department so that change can be manifested throughout the Department. This commitment requires stable leadership to actively promote change and a strong partnership between the Department and the Congress.

Improvements Needed in Transportation Safety and Security Programs

Over the years, we have identified areas in which DOT can do more to improve the efficiency and effectiveness of its transportation safety and security programs. In recent reports and testimonies, we have reiterated the need to better target limited inspection resources and improve the reliability of safety data in programs covering aviation and marine safety. We have also reported on the vulnerabilities in the overall aviation security system.

Aviation Safety and Security

The crashes of ValuJet Flight 592 and TWA Flight 800 have heightened concerns about the safety and security of our aviation system. We have reported that FAA can improve its oversight of aviation safety and security by (1) targeting limited inspection resources, (2) enhancing the reliability of safety data, (3) improving inspector training, and (4) addressing the security vulnerabilities of our air transportation system.[1] Targeting inspection resources is important because of the magnitude of FAA's inspection responsibilities—about 2,800 FAA inspectors are responsible for inspecting about 7,500 scheduled commercial aircraft and thousands of charter aircraft, repair stations, and aviation schools. As early as 1987, we reported that FAA could develop criteria for targeting safety inspection resources at high-risk areas and recommended that DOT make productivity improvements in its safety programs. Over the years, we have suggested that FAA focus its resources on such areas of concern as new entrant and commuter airlines and aging aircraft. The Congress has recognized the need for more inspectors and has appropriated additional funds to hire and train them.

To appropriately target inspections, FAA also needs accurate, complete safety data. We have found that FAA needs to improve its Safety

[1]See, for example, Aviation Safety: New Airlines Illustrate Long-Standing Problems in FAA's Inspection Program (GAO/RCED-97-2, Oct. 17, 1996); Aviation Safety: Data Problems Threaten FAA Strides on Safety Analysis System (GAO/AIMD-95-27, Feb. 8. 1995); Aviation Security: Additional Actions Needed to Meet Domestic and International Challenges (GAO/RCED-94-38, Jan. 27, 1994); and Aviation Security: Technology's Role in Addressing Vulnerabilities (GAO/T-RCED/NSIAD-96-262, Sept. 19, 1996).

Performance Analysis System—a system being developed to integrate and analyze information within other databases—so that it contains reliable information that can be used by inspectors and managers to target the areas of greatest risk to safety. I will return to data issues later in this testimony.

Protecting the security of the traveling public is one of FAA's most challenging and difficult tasks. Although all modes of transportation are vulnerable to terrorist attacks, our work has focused on improving aviation security. Over the past several years, we have made recommendations about vulnerabilities in the aviation system—checked and carry-on baggage, mail, and cargo—and steps that could be undertaken to improve security. The White House Commission on Aviation Safety and Security (the Gore Commission), formed after the crash of TWA Flight 800, made more than 30 security recommendations in February 1997.

We believe that the Gore Commission's recommendations are a good start toward an evolutionary process of reaching agreement on goals and objectives for improving our aviation security system. These recommendations' effective implementation requires the various federal agencies, local authorities, and the aviation industry—most importantly airlines and airports—to work together to ensure that this opportunity for improvement is not lost. The Gore Commission recommended that the Secretary of Transportation report annually on the status of the Commission's recommendations and that DOT's and FAA's leaders be accountable for implementing them. In order to effectively implement the recommendations, FAA and other affected parties should establish consistent goals and performance measures, which can be used to report results to the Congress. FAA also needs to assess the effectiveness of initiatives that are being implemented to ensure that they are achieving increased security. For example, the Congress directed that FAA purchase and deploy security equipment for the nation's busiest airports and gain operational experience with this equipment. The performance of the equipment in the field can provide FAA with information to guide future deployment decisions and determine funding tradeoffs and priorities.

Although the Gore Commission made a good start, it left a key issue—the financing of additional security improvements—to be resolved by the National Civil Aviation Review Commission, which is expected to issue its report later this year. To improve aviation security, the Congress, the administration, and the aviation industry need to agree on who will pay for

the improvements. I will discuss FAA financing issues later in this testimony.

Keys to successfully implementing both safety and security recommendations are stable leadership at DOT and FAA and adequate funding. If the question of how to fund FAA is not resolved, resources may not be available to implement improvements. I will return to the funding issue later in this testimony.

Highway Safety

A critical aspect of improving highway safety is the achievement of strong, effective partnerships among federal, state, and local governments. State and local governments have the primary role in highway safety. The federal role is basically fulfilled through the programs and initiatives of the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA). Through these agencies' efforts, the states identify their problems, devise solutions, and seek federal technical assistance and funding.

Over the past 30 years, highway safety has improved as a result of federal, state, and local programs that have led to better designed vehicles and highways, tougher penalties for drunk driving, and greater use of seat belts and shoulder harnesses. Nonetheless, traffic accidents annually result in over 40,000 deaths and over $150 billion in costs to society. Each year, about 20,000 of the people who die in traffic accidents and another 600,000 who are injured are not using seatbelts. As we reported in January 1996, increasing the use of safety belts is the most effective way to lower the nation's death toll from highway accidents.[2] We suggested that the Congress consider encouraging the states to enact primary enforcement laws that allow police officers to stop and ticket a vehicle's occupants solely for not using their safety belts. We believe that such laws should cover all the occupants of all the vehicles in which belts are installed. We also recommended that the Secretary of Transportation provide special emphasis and targeted programs to increase the use of safety belts by occupants of light trucks. I understand, Mr. Chairman, that you and several members of the Committee recently joined with the administration in urging governors and state legislative leaders to enact primary enforcement laws. This is an important effort that can save thousands of lives each year.

[2]Motor Vehicle Safety: Comprehensive State Programs Offer Best Opportunity for Increasing Use of Safety Belts (GAO/RCED-96-24, Jan. 3, 1996).

In addition, we believe that improvements in highway safety can best be achieved by a national transportation safety strategy that incorporates federal-state-local partnerships and is driven by performance-based, results-oriented goals. For example, we recently issued a report on the inspection of Mexican commercial trucks entering the United States.[3] We noted that from January through December 1996, federal and state officials conducted more than 25,000 inspections of trucks from Mexico. During that time, three of the four border states substantially increased their capability to inspect trucks at the major border locations. As of January 1997, approximately 100 state and federal inspectors were assigned to border crossing locations, a significant increase over the previous year. However, as we also pointed out, despite this commitment of resources, without specific results-oriented objectives, it is still not possible to measure the increase in safety improvement, if any, for Mexican commercial trucks entering the United States.

Marine Safety

Over the years, we have noted numerous problems with the Coast Guard's safety inspection programs. For example, we found that improvements were needed to (1) help detect unsafe tankers, (2) improve the safety at waterfront facilities, (3) ensure that intermodal containers carrying hazardous material are safe, and (4) improve the safety of cruise ships.[4] We also identified problems with the Coast Guard's efforts to reduce alcohol-related accidents in the maritime industry.[5] We believe that one root cause of these problems may be the frequent rotations of safety inspectors. We have reported that several organizations have concluded that lengthening or eliminating military rotation for certain types of activities, such as safety inspections, could help counter the undesirable effects of frequent rotation on the continuity of operations and the ability to build expertise and knowledge.[6] Another possible solution that has been proposed by others is to convert such positions to civilian positions, which could also result in building the expertise and knowledge needed.

[3]Commercial Trucking: Safety Concerns About Mexican Trucks Remain Even as Inspection Activity Increases (GAO/RCED-97-68, Apr. 9, 1997).

[4]Coast Guard: Program to Inspect Intermodal Containers Carrying Hazardous Materials Can Be Improved (GAO/RCED-94-139, Apr. 27, 1994); Coast Guard: Additional Actions Needed to Improve Cruise Ship Safety (GAO/RCED-93-103, Mar. 31, 1993); Coast Guard: Inspection Program Improvements Are Under Way to Help Detect Unsafe Tankers (GAO/RCED-92-23, Oct. 8, 1991); and Coast Guard: Oil Spills Continue Despite Waterfront Facility Inspection Program (GAO/RCED-91-161, June 17, 1991).

[5]Coast Guard: Magnitude of Alcohol Problems and Related Maritime Accidents Unknown (GAO/RCED-90-150, May 24, 1990).

[6]Coast Guard: Challenges for Addressing Budget Constraints (GAO/RCED-97-110, May 14, 1997).

Improvements Needed in the Management of Aviation, Highway, and Transit Programs

Our work has shown that DOT can do more to improve its management of aviation, highway, and transit programs to ensure that limited funds are effectively and efficiently used and best practices applied. FAA's multibillion-dollar program to modernize the ATC system has been plagued with cost overruns, schedule delays, and shortfalls in performance. In addition, major surface transportation projects, each costing hundreds of millions to billions of dollars, are continuing to incur cost increases, experience delays, and have difficulties acquiring needed funding commitments.

Air Traffic Control Modernization

Since 1981, FAA has had under way a mission-critical capital investment program to modernize its aging ATC system. This effort, which involves acquiring a vast network of radars and automated data-processing, navigation, and communications equipment, is expected to cost $34 billion through the year 2003. Over the years, ATC modernization projects have experienced substantial cost overruns, lengthy delays, and significant performance shortfalls. Because of the size, complexity, cost, and problem-plagued past of the ATC modernization, we designated it as a high-risk information technology initiative in 1995 and again in 1997.[7]

Over the years, we have found that the problems with the modernization program have been caused largely by technical difficulties and managerial weaknesses. If FAA is to effectively address these problems, it needs to follow management practices observed by leading public and private organizations and embedded in the Paperwork Reduction Act, the Government Performance and Results Act, the Information Technology Management Reform Act (also called the Clinger-Cohen Act), and the Chief Financial Officers Act. These acts emphasize (1) involving senior executives in decisions about information management; (2) appointing qualified senior-level chief information officers (CIO); (3) developing and implementing systems architectures, or blueprints; (4) institutionalizing discipline in such areas as investment management and system development and acquisition; (5) maintaining integrated accounting and financial management systems that permit the development and reporting of cost information and the systematic measurement of performance; and (6) using performance measures to assess technology's contributions in achieving mission results.

[7] High-Risk Series: An Overview (GAO/HR-95-1, Feb. 1995) and High-Risk Series: Information Management and Technology (GAO/HR-97-9, Feb. 1997).

Using these acts to guide our work, we have pinpointed certain solutions to FAA's long-standing problems with acquisitions. For example, we found that ATC systems have long proceeded without a complete systems architecture to guide and constrain their development and evolution, leading to unnecessarily higher spending to buy, integrate, and maintain hardware and software.[8] We recommended that FAA develop and enforce a complete systems architecture and implement a management structure for doing so that is similar to the CIO provisions of the Clinger-Cohen Act.

Furthermore, FAA's poor cost-estimating processes and cost-accounting practices leave it at risk of making ill-informed investment decisions on critical multimillion- or multibillion-dollar ATC systems.[9] We recommended that FAA institutionalize defined processes for estimating the costs of projects and develop and implement a managerial cost-accounting capability.

In addition, FAA's processes for acquiring software, the most costly and complex component of ATC systems, are ad hoc, sometimes chaotic, and not repeatable across projects. As a result, FAA is at great risk of not delivering promised software capabilities on time and within budget. Furthermore, FAA lacks an effective approach for improving software acquisition processes.[10] We recommended that FAA improve its software acquisition capabilities by institutionalizing mature acquisition processes and reiterated our prior recommendation that a CIO organizational structure be established for FAA.

Finally, the lack of continuity in FAA's top management and the agency's organizational culture have been underlying causes of the agency's acquisition problems.[11] During the modernization program's first 10 years, FAA had seven different Administrators and acting Administrators. Furthermore, between 1982 and 1993, the average tenure for the Administrator was less than 2 years. Although it is difficult to measure the effect of the turnover, the instability has resulted in the agency's bureaucracy focusing on short-term improvements, avoiding

[8]Air Traffic Control: Complete and Enforced Architecture Needed for FAA Systems Modernization (GAO/AIMD-97-30, Feb. 3, 1997).

[9]Air Traffic Control: Improved Cost Information Needed to Make Billion-Dollar Modernization Investment Decisions (GAO/AIMD-97-20, Jan. 22, 1997).

[10]Air Traffic Control: Immature Software Acquisition Processes Increase FAA System Acquisition Risks (GAO/AIMD-97-47, Mar. 21, 1997).

[11]Aviation Acquisition: A Comprehensive Strategy Is Needed for Cultural Change at FAA (GAO/RCED-96-159, Aug. 22, 1996).

accountability, and resisting fundamental changes. Changes to the organizational culture will address shortcomings in mission focus, accountability, coordination, and adaptability. We have recommended that FAA develop a comprehensive strategy for cultural change that includes specific responsibilities and performance measures for all stakeholders throughout FAA and the incentives needed to promote the desired behaviors. Recent congressional action making the position of the FAA Administrator a 5-year appointment should help overcome the problem of instability in agency leadership.

Highway and Transit Programs

Major highway and transit projects, each costing hundreds of millions to billions of dollars, are continuing to incur cost increases, experience delays, and have difficulties in acquiring needed funding commitments. We have found, particularly for large-dollar projects, that costs have increased and financing has become more difficult at the same time that federal, state, and local governments must deal with the need for balanced budgets and many competing priorities.[12] Large-dollar projects can overwhelm other projects in a state if the former require significantly more time and money than originally estimated. Given funding constraints and competing priorities, it is critical that these projects are well managed and their costs are contained, and that research is focused on ways to make our transportation system more effective and efficient.

Each year, the federal government distributes nearly $20 billion to the states for the construction and repair of the nation's highways. Costs have grown on many large-dollar highway projects.[13] Cost containment, however, is not an explicit statutory or regulatory goal of FHWA's oversight of highway projects. As such, FHWA has done little to ensure that cost containment is an integral part of states' project management. We believe that FHWA can do more to address the problem of cost growth by working with states to improve the cost management of large-dollar highway construction projects. Initiatives that some states are undertaking and that others could pursue more vigorously include improving the quality of initial cost estimates, establishing cost performance goals and strategies, and using external review boards to approve cost increases. Although FHWA disseminates information to state departments of transportation on a

[12]The surface transportation projects we discuss in this testimony all cost over $1 billion, but the definition of a large-dollar project for an individual state or transit operator is relative to that state's or operator's size and resources.

[13]Transportation Infrastructure: Managing the Costs of Large-Dollar Highway Projects (GAO/RCED-97-47, Feb. 28, 1997).

wide variety of technical and research topics, we found that the agency does not evaluate and disseminate information to all the states on the best cost management practices. We recommended that FHWA do so. If FHWA were more proactive in this regard, it could provide states with strategies that could contain project costs and promote more cost-effective project management.

An underlying issue concerning cost containment is determining the appropriate federal role in the federal-state partnership. Over the years, federal involvement in state highway projects that receive federal aid has evolved from "full" project oversight—approving design and construction specifications, periodically inspecting construction sites, and formally accepting the final product for all interstate construction projects—to requiring this level of detailed oversight only on new construction or reconstruction projects on the interstate highway system that are estimated to cost over $1 million. As the Congress and the administration work toward reauthorizing federal-aid highway programs in 1997, they will ultimately decide on the federal role in large-dollar highway projects. Cost management of these projects is just one part of the federal government's role. If appropriate, expanding that part could take the form of encouraging the states to enhance their cost-management practices by using some of the best practices some states already use. From a broader perspective, the Congress could consider strategies to make the federal-aid highway program more performance-driven. For example, once an initial cost estimate is developed, establishing cost-performance goals based on this estimate and a strategy to accomplish them would make cost awareness and cost containment an integral part of how states manage a project over time. Cost-performance goals and an appropriate strategy do not mean that an initial cost estimate cannot be increased; however, any change and reason for it should be agreed to. Such an approach has the potential to improve accountability for cost increases and create a culture in which cost control is part of day-to-day activities.

Funding shortfalls and the need for better financial planning affect federally funded highway and transit projects. For example, the Los Angeles Red Line Project, a 23.4-mile heavy-rail subway system, is facing cost increases as well as financing uncertainties associated with funding shortfalls and the long-term financial capacity of the Los Angeles County Metropolitan Transit Authority, the project manager. To address such financial problems, the Federal Transit Administration (FTA) can do more to better ensure that large-dollar transit projects have secured firm commitments for the funding needed to finance them. For example, we

have testified that FTA needs to utilize the results of its financial consultant's review of the fiscal capacity of the Los Angeles County Metropolitan Transit Authority to finance the Los Angeles Red Line Transit Project, the Alameda Corridor Project, and other surface transportation projects to determine what funding shortfalls exist.

Finally, improvements are needed in DOT's program to deploy the Intelligent Transportation System (ITS) to ensure its success. The ITS program has received about $1.2 billion since 1992.[14] This amount represents about 35 percent of the $3.5 billion the federal government provided for surface transportation research programs from 1992 to 1997. The program has not been successful in achieving widespread deployment of an integrated ITS for several reasons. For example, the program's national architecture and technical standards, which define the elements for an integrated ITS, are prerequisites for large-scale deployment. However, the national architecture was not completed until July 1996, and a 5-year effort to develop standards is planned for completion in 2001. Under the reauthorization of surface transportation programs, DOT has proposed a $600 million incentives program to facilitate the deployment of integrated ITS systems. However, DOT needs to address a number of obstacles, such as limited technical expertise among state and local officials, before it can aggressively pursue a large-scale deployment program.

Viable Long-Term Financing Systems Needed for FAA and Amtrak

Critical transportation financing issues face the Congress and the administration: meeting the long-term funding needs of FAA and Amtrak. Each area presents formidable challenges that will stretch limited resources and will require long-term commitments to successfully address.

FAA Financing

FAA estimates that its needs will exceed projected funding levels by about $13 billion over the next 5 years. This shortfall is driven by the safety and security improvements that FAA needs to undertake and an effort to speed up the ATC modernization program. Deciding how to meet FAA's funding needs involves not only determining what FAA's financial requirements are but choosing the best financing mechanism to meet those needs. Recognizing the seriousness of these issues, the Congress directed that a number of studies be undertaken, including (1) an independent

[14]The ITS program is intended to improve surface transportation's efficiency and safety through enhanced computer and telecommunication technologies. An example of ITS technology is ramp meters to control the flow of traffic entering expressways.

assessment of FAA's financial needs and costs, which was performed by Coopers & Lybrand, and (2) an assessment by GAO of how ATC costs are allocated between FAA and the Department of Defense (DOD). The Congress also established the National Civil Aviation Review Commission to, among other things, consider these studies and recommend to the Secretary of Transportation, by August 1997, how best to finance FAA.[15]

FAA receives most of its funding from excise taxes, including a 10-percent tax on domestic airline tickets, but those taxes, which were recently reinstated, lapse at the end of fiscal year 1997. The administration has proposed replacing the current system with user fees, and the national commission will be examining this option among others, including taxing indicators of system use such as departures or fuel consumed.

We believe that determining how best to finance FAA is a complex problem that requires careful study and good cost data. Our work has shown that the agency does not have an adequate cost-accounting system and, as a result, has limited capability to accumulate accurate, reliable cost data.[16] FAA plans to implement a cost-accounting system in October 1997. Having a cost-accounting system is important for budget control and performance measurement and will become particularly important if FAA shifts to user-fee financing. FAA must be able to determine the costs of its services and which users cause FAA to incur those costs. In addition, FAA needs to establish an equitable method for allocating common costs, which account for about 55 percent of its costs. In allocating common costs, assumptions and judgments must be made, and the goals of enhancing economic efficiency and maintaining equitable treatment of multiple user groups should be considered. Different user groups are likely to have diverging opinions about what constitutes an equitable cost allocation.[17]

We have emphasized that the financing mechanism that is finally selected should be relatively easy to administer and help ensure that, in the long term, FAA has a secure funding source, the nation's airports and airways are used as efficiently as possible, commercial users of the system pay their fair share, and a strong, competitive airline industry continues to

[15]The Secretary of Transportation is required to consult with the Secretary of the Treasury and report to the Congress by October 1997 on the Secretary's recommendations for funding FAA through 2002.

[16]Air Traffic Control: Improved Cost Information Needed to Make Billion-Dollar Modernization Investment Decisions (GAO/AIMD-97-20, Jan. 22, 1997).

[17]National Airspace System: Issues in Allocating Costs for Air Traffic Services to DOD and Other Users (GAO/RCED-97-106, Apr. 25, 1997).

exist. Ultimately, the Congress will decide how to achieve these and other goals.

Amtrak Financing

Since 1995, we have reported that Amtrak remains in a very precarious financial position and continues to depend heavily on federal support to meet its operating and capital needs.[18] Amtrak's passenger rail service has never been profitable, and through fiscal year 1997, the federal government has provided Amtrak with over $19 billion for operating and capital expenses. Amtrak projects that its fiscal year 1997 operating loss could be $783 million. In response to its deteriorating financial condition, in 1995 and 1996, Amtrak developed strategic business plans designed to increase revenues and reduce the growth in costs. However, passenger revenues have generally declined in recent years when adjusted for inflation, and at the end of fiscal year 1996 the gap between operating deficits and federal operating subsidies began to grow.

Amtrak's goal is to eliminate the need for federal operating support by 2002. To achieve this goal, Amtrak is relying on significantly increased federal capital assistance—about $750 million to $800 million per year—from a dedicated funding source. However, the President's fiscal year 1998 budget for Amtrak's capital subsidies is over $300 million less than the amount envisioned in Amtrak's plans. In addition, we have raised concerns about whether Amtrak will continue to find it difficult to make the route and service adjustments necessary to reduce costs and to collectively bargain cost-saving productivity improvements with its employees. As a result, Amtrak faces significant challenges to achieving operating self-sufficiency. In addition, Amtrak has substantial capital investment needs to, among other things, bring its equipment and infrastructure into a state of good repair and introduce high-speed rail service between New York and Boston.

Solutions to Amtrak's financial problems are not easy and will require congressional attention. Additional capital funding will be needed to help Amtrak increase revenues by improving the quality of its service and to facilitate revenue growth. In fact, successful implementation of Amtrak's

[18] Transportation Financing: Challenges in Meeting Long-Term Funding Needs for FAA, Amtrak, and the Nation's Highways (GAO/T-RCED-97-151, May 7, 1997); Intercity Passenger Rail: The Financial Viability of Amtrak Continues to Be Threatened (GAO/T-RCED-97-94, Mar. 13, 1997); Amtrak's Strategic Business Plan: Progress to Date (GAO/RCED-96-187, July 24, 1996); Northeast Rail Corridor: Information on Users, Funding Sources, and Expenditures (GAO/RCED-96-144, June 27, 1996); Amtrak: Early Progress Made in Implementing Strategic and Business Plan, but Obstacles Remain (GAO/T-RCED-95-227, June 16, 1995); and Intercity Passenger Rail: Financial and Operating Conditions Threaten Amtrak's Long-Term Viability (GAO/RCED-95-71, Feb. 6, 1995).

entire strategic business plan will be important. We believe that Amtrak—as currently constituted and funded—will continue to need federal operating and capital funds well into the future. If the Congress decides to reassess the scope of Amtrak's mission, it could direct Amtrak or a temporary commission to make recommendations and offer options that define and realign Amtrak's basic route network so that efficient and quality service could be provided within the funding available. Earlier this year, a blue-ribbon panel was formed by the House Committee on Transportation and Infrastructure to provide advice on how to best develop an emergency plan to address the perilous financial condition of Amtrak and intercity rail service. The panel is expected to offer recommendations about Amtrak's future no later than June 1997.

An Appropriate Organizational Structure and Adequate Management and Financial Information Are Needed

Keys to successfully implementing many of the solutions we have discussed are having (1) an appropriate organizational structure and (2) adequate financial and other management information. As we previously discussed, other crucial elements that must be in place include adequate funding, an organizational culture and stable leadership that promotes the changes needed. These are probably the most difficult solutions to implement and will require dedicated leadership in the Department and a strong partnership with the Congress.

Organizational Structure

DOT can do more to develop an appropriate organizational structure to achieve the most cost-effective delivery of services and ensure the proper use of federal funds. We have reported that opportunities exist to achieve these objectives by (1) examining the appropriateness of reorganizing the surface transportation administrations and their field office structure, (2) making changes to FAA's management structure and organizational culture, and (3) identifying additional opportunities to streamline the Coast Guard's operations.

Surface Transportation

DOT's current organizational structure for surface transportation—separate agencies to manage the different transportation modes—limits interaction and coordination among the modal administrations. Two years ago, DOT proposed reorganizing and combining its five surface transportation operating administrations—FHWA, FTA, NHTSA, the Federal Railroad Administration, and parts of the Maritime Administration. This reorganization would have provided an opportunity for more cost-effective delivery of services by consolidating administrative and executive support

functions and consolidating an extensive field office structure. DOT has since dropped plans for this overall reorganization, and it is not currently examining options for consolidating its field office structure for surface transportation.

Changes to DOT's field structure need to be driven by the role field offices will have in carrying out the Department's mission and the skills that will be needed. New technologies—such as ITS—and transportation-related issues—such as energy conservation, land use concerns, and statutory requirements for monitoring transportation's impact on air quality—increasingly require staff who are skilled in fields that are both highly technical and rapidly changing.

Even if departmental reorganization does not occur, opportunities may still exist to streamline the field structure through colocation. Colocation occurs when two or more offices share a common office space, thereby potentially reaping the benefits of shared administrative services, such as reception, printing, mailing, and copying. The existing field structure does not generally take advantage of colocation. For example, the Denver metropolitan area has seven DOT field offices for surface transportation. Some of these offices are located in different buildings in downtown Denver, while others are located outside Denver.

DOT has established a Colocation Task Force to identify opportunities for its modal agencies, including FAA and the Coast Guard, to colocate field offices within metropolitan areas. The task force initially identified 160 field offices that could be colocated into 60 locations. The results of its initial evaluation of these offices are due this summer and will be reviewed by the Secretary's Management Council. In addition, we plan to examine the organizational structure of DOT's field offices.

Aviation

FAA can do more to develop an appropriate managerial structure and organizational culture to achieve the most cost-effective delivery of services. This includes establishing a business-like approach for developing and enforcing an ATC systems architecture and for implementing and enforcing software acquisition improvements. We have recommended that FAA establish a chief information officers management structure similar to the department-level chief information officers prescribed in the Clinger-Cohen Act. In addition, as we mentioned earlier, FAA's organizational culture has been an underlying cause of the agency's acquisition problems. We have recommended that FAA develop a comprehensive strategy for cultural change. Such cultural change is

necessary before FAA can successfully overcome more specific problems we have noted in its major acquisitions programs.

FAA also has opportunities to reduce costs by contracting out air traffic control towers and consolidating facilities. However, these actions often result in considerable opposition by local communities as well as FAA employees. FAA is already contracting out level I towers—which handle low-volume traffic—and the next logical step is to examine the feasibility of contracting out higher-volume level II towers.

Coast Guard

Over the past several years, the Coast Guard has carried out an ambitious streamlining program that is expected to result in an estimated net savings of $77 million a year. However, the Office of Management and Budget's budget targets call for the Coast Guard to find additional reductions of 4 times this amount by fiscal year 2002. Coast Guard managers have acknowledged the enormity of this task. We have identified organizational issues facing the Coast Guard during this period that include reconsidering several options for streamlining—such as lengthening periods between military assignment rotations to substantially reduce personnel transfer costs—that were not implemented in earlier efforts. Such changes are controversial within the Coast Guard because they involve a change in organizational culture. Therefore, outside studies or independent validation of the Coast Guard's studies may be needed. Examining other streamlining alternatives, such as changing the services provided, may also be needed. In addition, in 1994, we validated the Coast Guard's process to determine which search and rescue stations are no longer needed. However, the Coast Guard has not been able to close most of these stations because of congressional objections. A panel much like the Department of Defense's Base Closure and Realignment Commission, established by the Congress, may also be helpful to address the closing of Coast Guard facilities. We have recently issued a report requested by the Subcommittee on Coast Guard and Maritime Transportation, House Committee on Transportation and Infrastructure that addresses the challenges the Coast Guard faces in addressing budget constraints, including some organizational issues.[19]

Our latest report on the Coast Guard found that, even after it has nearly completed its streamlining efforts, it still has about 40 percent of its staff working in support functions, headquarters, area offices, or district offices. The Clinger-Cohen Act calls for agencies to develop measures of efficiency and to reengineer their processes as ways of determining the

[19] Coast Guard: Challenges for Addressing Budget Constraints (GAO/RCED-97-110, May 14, 1997).

proper mix of support and on-line staff. Until such actions are carried out and data become available, the Congress and Coast Guard managers are at a disadvantage in their efforts to assess the agency's operations and to make data-based decisions for improving the cost efficiency of those operations.

Information Resources

To monitor the performance of U.S. transportation systems, determine how best to allocate resources, and provide information for congressional oversight, DOT needs timely, accurate, and complete data. Serious problems, however, exist with DOT's information resources and database management. These problems, which affect financial and other program information, adversely affect the Department's ability to identify, develop, and evaluate the performance of the U.S. transportation system, set priorities for infrastructure investment needs, and evaluate the impacts of transportation systems across modes. These problems are exacerbated by challenges facing the Department in addressing the "Year 2000" computer problem. Efforts by DOT to develop more results-oriented, performance-based management information as required by the Government Performance and Results Act should provide a good start to improving data departmentwide. However, to improve its oversight of programs and risk management, DOT also needs to ensure that its data are reliable.

Financial Information

An overriding concern is recurring problems that have been identified in DOT's financial information and reporting. DOT lacks the reliable financial management information necessary to ensure that federal funds are properly managed, performance is measured, and reliable financial reports are prepared. The lack of such information has pervasive effects and limits the ability of program managers and elected officials to make informed decisions. For example, as mentioned earlier, decisions about financing FAA depend in part on understanding what it costs to provide services to various users. However, we recently reported that such basic information is not available.[20]

For fiscal year 1996, DOT prepared its first departmentwide financial statement as required by the Chief Financial Officers Act. DOT's Office of the Inspector General (OIG) undertook an audit of the departmentwide balance sheet but was unable to provide an opinion about its reliability because of inadequate records and other deficiencies. The OIG was unable

[20]Air Traffic Control: Improved Cost Information Needed to Make Billion-Dollar Modernization Investment Decisions (GAO/AIMD-97-20, Jan. 22, 1997).

to validate the value of property, equipment, operating materials, and supplies reported to be worth $25.8 billion because of inadequacies in supporting documentation and unreconciled discrepancies between summary accounts and their supporting details. For example, detailed records for certain FAA property had an unreconciled difference of over $500 million with the corresponding general ledger total.

A strong internal control system is essential for providing DOT with a framework for accomplishing management objectives and accurately reporting financial information. Effective internal controls serve as checks and balances against undesired activities and reduce the risk of waste, fraud, and abuse. In evaluating DOT's internal controls, the OIG identified 11 significant internal control weaknesses and 13 additional conditions deemed important for reporting. Overall, the OIG made 72 recommendations to strengthen internal controls and improve the accuracy of DOT's financial reporting.

DOT faces several important challenges to addressing its financial management problems including (1) correcting the known weaknesses so that it can produce reliable, auditable financial statements; (2) fully implementing new federal accounting standards to meet federal financial management goals; (3) implementing and maintaining financial management systems that comply substantially with federal requirements for financial management systems, applicable federal accounting standards, and the U.S. Government Standard General Ledger at the transaction level; and (4) submitting fully audited financial statements that cover all accounts and associated activities.

DOT has begun addressing some deficiencies. For example, FAA hired a contractor in 1996 to study its policies and procedures for processing and recording equipment purchases. The contractor made over 100 recommendations, and FAA is developing a corrective action plan to implement the recommendations. In addition, FAA established a Cost Accounting Systems Division in 1996. A contractor has been hired to help implement a cost-accounting system, which is scheduled to be completed in October 1997.

Program Information

We have also identified the need for better management data in many of DOT's programs. For example, for years we have reported on shortcomings in FAA's aviation safety inspection program, including the inadequacy of aviation safety databases. In 1991, FAA began developing the Safety Performance Analysis System (SPAS), which draws on information from a

number of safety-related databases to better establish priorities for FAA's inspections. However, SPAS is not expected to be fully operational until 1999. Furthermore, some databases that may provide source data for SPAS contain incomplete, inconsistent, and inaccurate data. FAA has recently developed and is implementing a strategy to improve data quality to ensure that these source databases provide reliable information. The success of this strategy is critical to SPAS' becoming an effective tool for targeting resources to high-risk activities.

In addition, we have frequently found that the Coast Guard has not had an adequate base of information about its programs and activities. For example, in 1990, we reported that the federal government had lost millions of dollars because the Coast Guard did not calculate accurate spill costs from the Exxon Valdez oil spill. In 1991, we reported that the Coast Guard, while responsible for responding to spills from pipelines, did not know the locations of the pipelines. To address these problems, we recommended that the Coast Guard enhance its strategic planning process to improve its information resources management. The Coast Guard recognizes its information problems and is in the process of implementing many new information systems.

Year 2000 Issues

DOT faces challenges in addressing data issues such as those we mentioned and, at the same time, ensuring that it addresses the upcoming "Year 2000" computer problem. DOT's Year-2000 program is probably the largest computer system conversion effort ever undertaken by the Department and its modal administrations. First-class program management and the disciplined and coordinated application of scarce resources are required to achieve the departmentwide system conversion that must be completed by a fixed date. The massive year-2000 program is a management challenge.

To help federal agencies achieve Year-2000 compliance, we developed a guide that provides them with a framework and checklist of the Year-2000 issue.[21] The guide is divided into five phases—awareness, assessment, renovation, validation, and implementation—supported by program and project management activities. We have used the guide's checklist to describe DOT's activities and progress in the first two phases—awareness and assessment. Although DOT considers the awareness campaign about 90-percent complete, we believe that DOT has not completed some of the key tasks in that phase. For example, DOT has not (1) performed a high-level analysis of the potential impact of the Year-2000 problem on its

[21] Year 2000 Computing Crisis: An Assessment Guide, Exposure Draft (GAO/AIMD-10.1.14, Feb. 1997).

core business areas, (2) developed or documented a Year-2000 strategy, or (3) appointed an executive management council to guide the Department's Year-2000 conversion program.

During the assessment phase, DOT must work with its administrations to identify (1) systems that are mission-critical or support important functions and must be converted or replaced by the deadline and (2) systems that support marginal functions and may, therefore, be converted or replaced later. Although DOT has a partial inventory of its systems, the information on its inventory may not be very useful for establishing system conversion priorities. For example, FAA's Air Traffic Control Systems and Travel Voucher Tracking System are both defined as mission-critical. Moreover, the inventory does not identify internal or external interfaces or show which systems are to be renovated, replaced, or eliminated.

We believe that as DOT deals with the Year-2000 issue, it is essential that top-level management be fully aware of the problem and its potential impact on DOT and those who use its services. It is the responsibility of the chief information officers to provide leadership in defining and explaining the importance of achieving Year-2000 compliance, selecting the overall approach for structuring DOT's program, mobilizing needed resources, and assessing the adequacy of the existing information resources management infrastructure to adequately support year-2000 activities.

Government Performance and Results Act

The Government Performance and Results Act is intended to address basic management problems and deficiencies that have been typical throughout the federal government. If properly implemented, the act could be a useful tool for solving many of the problems we have identified at DOT. The act requires agencies to clarify their missions, set strategic goals, and measure performance toward those goals with reliable, auditable information that the Congress can use to hold them accountable for results rather than activities or processes. DOT could use this framework, for example, to reach agreement on the goals and objectives of our aviation security system, to develop performance goals and data for safety inspections, or to clarify mission needs for its ATC modernization program.

DOT, like other federal agencies, faces challenges in developing good management, financial, and program information, which are key to successfully implementing both the act and many of our recommendations. Without such information, accountability for achieving results-oriented goals can never be ensured. It is up to the Congress and

committees such as yours to make the act come alive by working with agencies and holding them accountable for its implementation.

Conclusions

Many of the problems we have discussed are not new issues to either the Department or the Congress. Adequately addressing many of these problems, however, will take concerted action by the Congress, senior management at the Department, and program managers and staff. The Congress has a key role to play in helping set transportation priorities and providing appropriate funding. The Department can do more to make clear its commitment to those priorities and the organizational culture needed to implement them. Program managers and staff need to constantly strive to achieve the most cost-effective delivery of services. Congressional oversight, such as that provided by this hearing, is also key.

Mr. Chairman, that concludes our prepared statement. We would be happy to respond to any question that you or other Members might have.

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