TOP MANAGEMENT CHALLENGES

Department of Transportation

Report Number: PT-2006-007
Date Issued: November 15, 2005

Memorandum

U.S. Department of Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: INFORMATION: DOT's FY 2006 Top
Management Challenges
Report Number PT-2006-007

Date: November 15, 2005

From: Kenneth M. Mead
Inspector General

Reply to
Attn. of: J-1

To: The Secretary
Deputy Secretary

The Office of Inspector General (OIG) has identified nine top management challenges for the Department of Transportation (DOT) for fiscal year (FY) 2006. In considering the items for this year's list, we continue to focus on the Department's key strategic goals to improve transportation safety, capacity, and efficiency.

The OIG's list for FY 2006 is summarized below. This report and the Department's response (see Appendix) will be incorporated into the DOT Performance and Accountability Report, as required by law. The exhibit to this report compares this year's list of management challenges with the list published in FY 2005.

- **Working With Other Agencies To Respond to Disasters and Address Transportation Security**
    - *Responding to Hurricane Katrina and Other National Disasters*
    - *Addressing Transportation Security*

- **Getting the Most for Every Taxpayer Dollar Invested in Highway and Transit Projects**
    - *Actions by FHWA and the States Are Needed To Provide Oversight of Highway Funds To Ensure Projects Are Delivered on Time, Within Budget, and Free From Fraud*
    - *Enhancing Fraud Prevention Capabilities and Taking Aggressive Action Against Those Who Perpetrate Fraud, Including Motor Fuel Tax Evasion*
    - *Tough Decisions Ahead in Choosing Between Competing Transit Needs*

- **Building on Recent Initiatives To Further Strengthen Surface Safety Programs**
  - *Addressing Highway Safety Problems Where Serious Injuries and Fatalities Persist*
  - *Preventing Fraud in the Commercial Driver's License Program*
  - *Strengthening Rail Safety Program Oversight and Enforcement*

- **Reforming Intercity Passenger Rail To Improve Performance**
  - *Amtrak Has Little Incentive To Improve Cost-Effectiveness but Must Do More To Operate Efficiently and Improve Performance*
  - *States Need a Larger Voice in Determining Service Requirements*
  - *Adequate and Stable Federal Funding Is Essential*

- **Mitigating Flight Delays and Relieving Congestion—Actions Needed To Meet Demand**
  - *Taking Appropriate Action Against Growing Aviation Delays*
  - *Keeping Planned Infrastructure and Airspace Projects on Schedule To Relieve Congestion and Delays*
  - *Exploring Alternatives for Managing Capacity Where Infrastructure and Airspace Redesign Initiatives Are Not Feasible*

- **Reauthorizing Aviation Programs—Establishing Requirements and Controlling Costs Are Prerequisites for Examining FAA Financing Options**
  - *Controlling Major Acquisitions Costs—Delivering New Systems That Work on Time and Within Budget and Making Decisions About the Scope of Billion-Dollar Projects That Have Been Delayed*
  - *Getting Control of Support Services Contracts*
  - *Establishing Requirements for the Next Generation Air Traffic Management System*
  - *Addressing the Expected Surge in Air Traffic Controller Attrition and Negotiating an Affordable and Equitable Bargaining Agreement*
  - *Completing the Cost Accounting System To Control Costs and Improve Operations*

- **Aviation Safety—Developing Effective Oversight Programs for Air Carrier Operations, Repair Station Maintenance, and Operational Errors**
  - *Implementing a Risk-Based Approach to Air Carrier and Repair Station Oversight*
  - *Ensuring Reporting of Operational Errors*

- **Improving Information Technology Investment and Computer Security**
  - *Clarifying the Departmental Investment Review Board's Role in Assisting the Secretary To Maximize the Value and Manage the Risk of Major Information Technology Investments*
  - *Eliminating Redundant IT Infrastructure Outside of DOT Headquarters To Reduce Operating Costs*

- *Better Securing Air Traffic Control Systems*
- *Correcting Weaknesses in the Federal Railroad Administration Network and Enhancing Business Contingency Plans for Critical DOT Systems*

- **Ensuring That Reforms Are Implemented in the Maritime Administration's Title XI Loan Guarantee Program**
  - *Completing the Development of the Title XI Loan Guarantee Tracking System*
  - *Enforcing the Requirements Established To Mitigate Risks of Noncompliant Loans and Pursuing Remedies To Cure Defaults*

If you have any questions concerning this report, please call me at (202) 366-1959 or Todd J. Zinser, Deputy Inspector General, at (202) 366-6767. You may also contact Theodore P. Alves, Principal Assistant Inspector General for Auditing and Evaluation, at (202) 366-1992.

#

1. Working With Other Agencies To Respond to Disasters and Address Transportation Security

The Department of Transportation (DOT) has always played a significant role in helping states to rebuild infrastructure damaged or destroyed by natural disasters by providing technical assistance and funds through emergency relief programs. The attacks of September 11, 2001, along with the recent destruction in the Gulf Coast region caused by Hurricanes Katrina and Rita, exposed the vulnerabilities of our Nation's citizens and critical transportation and energy infrastructure to catastrophic events. What has become clear as a result of these events is the continuing need for a well-defined, well-coordinated, interagency approach to preparing for, responding to, and recovering from such devastating events. As DOT addresses the daunting rebuilding tasks, it will need to work closely with other agencies, such as the Departments of Homeland Security (DHS) and Defense to:

- Ensure that missions are performed in a well-coordinated and cost-effective manner to protect reconstruction funding from fraud, waste, and abuse. History has shown that in the aftermath of crises, substantial infusions of funding for recovery efforts are often accompanied by fraud perpetrated by parasitic elements who exploit weaknesses in Government oversight.
- Address security issues within the U.S. transportation system and protect users from criminal and terrorist acts.

Responding to Hurricane Katrina and Other National Disasters
While the Federal Emergency Management Agency (FEMA) within DHS has been assigned the primary responsibility for responding to Hurricane Katrina and other national disasters, coordinating Federal operations is a shared responsibility. Under the National Response Plan adopted in December 2004, some 32 Federal agencies and non-profit groups agreed to participate in concerted response efforts to aid areas affected by terrorist attacks, major disasters, and other emergencies of national significance.

Under the National Response Plan, DOT is the lead agency for transportation (Emergency Support Function-1) and a support agency for 11 other critical NRP functions. In the aftermath of Hurricane Katrina, DOT deployed personnel and support to the affected region as part of the national response. This included moving over 14,000 truckloads of goods, such as disaster meals, water, ice, and generators and transporting people via air and bus to safe locations across the country. DHS Secretary Chertoff characterized the airlift organized by the Department between September 3rd and 11th as the largest domestic civilian airlift in U.S. history. Additionally, the Department supported efforts to establish command and control

facilities using its National Defense Reserve Fleet and worked to repair the infrastructure at airports, roadways, ports, and pipelines. The Office of Inspector General (OIG) provided a law enforcement presence in the affected region, protecting DOT personnel and assets at airports and aboard the Reserve Fleet vessels.

DOT support will continue during the unprecedented recovery and rebuilding effort that will be needed. Effective oversight of Hurricane Katrina response and recovery funds will be important to ensure that all elements of DOT, across all transportation modes, perform their disaster response and recovery missions in the most cost-effective manner. To that end, the OIG will work to ensure that the Operating Administrations provide proper stewardship over the resources devoted to the recovery effort. Specifically, the OIG will:

- Verify that expenditures of Federal funds on transportation services and programs are being appropriately tracked by the Operating Administrations as required by the Assistant Secretary for Budget and Programs and Chief Financial Officer;
- Proactively ensure that Operating Administrations and state transportation departments exercise adequate oversight of Department expenditures and put systems in place to make certain that funds are appropriately spent;
- Audit select projects, grants, and contracts;
- Conduct fraud awareness and prevention activities to alert Federal, state, and local government agencies; and
- Investigate allegations of fraud involving transportation-funded projects, to include presenting cases to the Department of Justice for prosecution, participating in resulting prosecutions, and ensuring that the Operating Administrations and states take appropriate suspension and debarment actions.

Our preliminary risk assessment to determine if the accounting, tracking, and financial reporting of the costs of Hurricanes Katrina, Ophelia, and Rita were consistent with specific guidance provided by the Department noted that the Operating Administrations were working to establish procedures and controls to implement this guidance. Also, good controls seemed to have been established to track the Mission Assignments assigned to the Department by FEMA. We expressed concern about the adequacy of controls over funds used to support transportation-related emergency response activities provided by the Federal Aviation Administration (FAA) Southern Region. In addition, we observed that procedures and controls to track all administrative costs, as well as costs incurred prior to receiving Department guidance, had not been fully developed. Department officials agreed to address our concerns promptly, even before we issued our preliminary assessment, and stated that the Operating Administrations were working to determine all costs incurred and documenting these costs. We will verify the actions taken as

part of our ongoing oversight efforts of the Department's response to Hurricanes Katrina and Rita as announced on October 6, 2005.

Addressing Transportation Security

Aside from its disaster relief efforts, DOT also has the responsibility of working with other agencies to secure the U.S. transportation system and protect its users from criminal and terrorist acts. In our report of DOT's Top Management Challenges for FY 2005, we discussed the growing interdependency among Federal agencies in this area. The imperative for DOT is to effectively integrate new security measures into its existing safety regimen and to do so in a way that promotes stronger security without degrading transportation safety and efficiency.

DOT and DHS have signed a Memorandum of Understanding (MOU) to improve their cooperation and coordination in promoting the safe, secure, and efficient movement of people and goods throughout the U.S. transportation system. Finalizing the MOU was the first of many critical steps accomplished by DOT in what is a very dynamic process, but much more remains to be sorted out between the two departments.

There are MOU annexes and agreements covering various transportation modes, such as rail security, that have not been finalized but are necessary to clearly identify the roles and responsibilities of DHS and DOT for transportation security-related subjects such as research and development, emergency communication, and the oversight and enforcement jurisdiction of Transportation Security Administration (TSA) and Federal Railroad Administration inspectors. Further, when DOT and DHS finalize an annex or agreement clearly defining the roles and responsibilities of each agency, they must follow through and execute the terms of the annex or agreement.

For example, the Public Transportation Security annex, signed on September 8, 2005, by the Federal Transit Administration, TSA, and the Office of State and Local Government Coordination and Preparedness, will require vigilance to ensure that all the provisions of the annex are carried out to their fullest extent. Vigilance is also required to ensure the annex meets Congress' directives under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The Act directs DOT and DHS to develop security standards applicable to public transportation and regulations for providing grants to assist transit agencies in enhancing system security.

For further information, the following report can be seen on the OIG web site at http://www.oig.dot.gov:

- *New Approaches Needed in Managing FAA's Hazardous Materials Program*

2. **Getting the Most for Every Taxpayer Dollar Invested in Highway and Transit Projects**

Stewardship of taxpayer dollars has been a constant hallmark and theme of Secretary Mineta, and year after year in our Management Challenge Reports we have pointed to the need to make improvements in this area. This year, we see positive signs from the Federal Highway Administration (FHWA) with its commitment to increase oversight of transportation dollars, and we urge that sustained attention be given to this area. We continue to see examples of ineffective management of highway funds, such as the identification of over $1.2 billion in Federal highway aid obligations sitting idle during the last 7 years and transportation program fraud that continues to deny states much-needed funds for infrastructure improvements. The Department of Transportation (DOT) also faces continuing challenges with the ever-increasing demand both for new transit systems and for repair and maintenance of older systems.

Department leaders have sent a very clear message demanding effective oversight of public funds entrusted to FHWA, and there have been signs of improvement in the Department's oversight capability and efficiency, but there is still significant progress that must be made. The Department should ensure that it sustains this improvement, and, where oversight has failed, both Department employees and grantees must face the consequences. State and local government agencies share responsibility for stewardship of infrastructure improvement projects, and this task is during a time when Highway Trust Fund (HTF) revenues are falling short of an overwhelming demand for infrastructure funding. It is imperative that FHWA, along with state and local government entities, have management control systems in place to reduce the incidences of waste, fraud, and abuse; to detect them; and to respond forcefully when they occur. A 1-percent improvement in the efficiency with which states managed the $700 billion investment in highway projects over the last 6 years would have yielded an additional $7 billion for infrastructure improvements—enough to fund 8 of the 23 active major projects.

We see three key issues that need to be addressed:

- Actions by FHWA and the states are needed to provide oversight of Highway Funds to ensure projects are delivered on time, within budget, and free from fraud.
- Enhancing fraud prevention capabilities and taking aggressive action against those who perpetrate fraud, including the evasion of motor fuel taxes.
- Tough decisions between competing transit needs.

Actions by FHWA and the States Are Needed To Provide Oversight of Highway Funds To Ensure Projects Are Delivered on Time, Within Budget, and Free From Fraud

Secretary Mineta stated in March 2005 that FHWA needs to make "revolutionary" changes in how it conducts stewardship and oversight of Federal-aid funds. We agree, and our past reviews have disclosed that stronger FHWA stewardship and oversight of how Federal funds are invested is essential. Prior to her departure, former Administrator Peters had begun developing several new policies, procedures, and practices to improve FHWA oversight. Successfully implementing these initiatives will require a fundamental change in the way FHWA conducts business— FHWA needs to accelerate the shift of its role from being a supportive partner to the states to one of providing independent oversight of state activities.

The cornerstone of FHWA's plan to improve its oversight must be to aggressively implement its new Financial Integrity Review and Evaluation (FIRE) program. The FIRE oversight program, developed in response to a material weakness reported in the 2004 Highway Trust Fund financial statements, is intended to improve controls and ensure that funds are safeguarded against fraud, waste, and abuse. FIRE is an important program that supports FHWA's annual certification of internal and financial controls for these financial statements through reviews of financial processes and transactions. The program includes, in part, a risk assessment of the grant financial management process and reviews of Federal-aid billing transactions to determine whether items billed to FHWA represent eligible costs, funds are properly obligated and effectively used, and findings reported by the Office of Inspector General (OIG) and the Government Accountability Office are adequately resolved. FHWA should identify sufficient resources to aggressively implement the program and write its employees' performance objectives to derive the greatest benefits possible from this program.

Specifically, FHWA needs to:

- **Ensure major project cost estimates and schedule milestones are credible.** Concerns over FHWA's reviews of state-prepared project cost estimates and finance plans came to our attention in 1999 when we found that FHWA had failed to recognize that Boston's Central Artery/Tunnel project managers and the Massachusetts Turnpike Authority had hidden about $1.4 billion in project cost increases. More recently, the California San Francisco-Oakland Bay Bridge East Span project experienced a near doubling in its cost estimate from $2.6 billion to $5.1 billion, and the Texas Katy Freeway Reconstruction project rose 56 percent from $1.7 billion to $2.7 billion. We found that FHWA Division personnel had not exercised the due diligence necessary to ensure that these project cost estimates were reasonable. Instead, Division personnel largely relied on the certification from those state departments of transportation that the cost numbers

were valid, which they were not. FHWA needs to ensure that an independent and rigorous review of project finance plans is accomplished before approval, as opposed to relying on state representations.

- **Free up idle funds for other infrastructure expansion and preservation projects.** During our fifth review in 8 years of inactive obligations in 14 states, we found $258 million of obligations that were no longer needed. We statistically projected that an additional $403 million of unneeded obligations continued to sit idle nationwide. FHWA needs to make a concerted effort to ensure the projected $403 million of unneeded obligations is identified and de-obligated. FHWA is committed to strengthening its oversight of inactive obligations and is working to resolve this longstanding problem. Our ongoing work indicates some success in these efforts as we found that in 14 states FHWA had de-obligated $239 million. FHWA also provided us with additional information showing that a total of $757 million will be de-obligated nationwide.

- **Develop a process to effectively detect improper payments and stop wasteful spending by grantees.** In FY 2004, the Department identified several grant programs as being susceptible to improper payments, including the Federal Aid Highway Program. The Department also initiated a pilot project to identify improper payments; however, the pilot project was too limited. Meanwhile, OIG investigators continue to identify instances of improper payments. For example, in May 2005, as a result of an OIG investigation, a Connecticut concrete contractor agreed to pay $499,000 to the Department for supplying materials not meeting specifications. Grants awarded to the National Crash Analysis Center at George Washington University are another example of FHWA's failure to detect improper payments. FHWA's lack of oversight and the University's lack of management controls contributed to the success of a fraud scheme at the Crash Analysis Center that cost the Department $900,000 over 4 years. The fraudulent expenditures cited have since been returned to the Agency. In response to this case, FHWA is reorganizing and redesigning its procedures to improve oversight of research agreements. This includes creating a new division within the Office of Acquisition Management devoted to the award and administration of cooperative agreements with all universities and other recipients. With the huge increases in DOT funding due to the passage of legislation[1] in August 2005 reauthorizing the highway program, there is a compelling need for FHWA to provide better oversight and accountability of Federal payments to uphold the public trust.

- **Clean up bad data and generate reliable financial statements.** In 2004, we reported a material weakness in FHWA's financial statement preparation and

---

[1] "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users" (SAFETEA-LU), Public Law 109-59 (119 Stat. 1144).

analysis. Although FHWA has made some progress correcting these deficiencies, the consequences of these weaknesses became evident in December 2004 when FHWA disclosed a material error that resulted in a $2.966 billion understatement of previously reported budgetary resources that required the financial statements to be restated. Substantial improvements still need to be made to avoid another material weakness in this area.

- **Make certain Statewide Transportation Improvement Programs (STIPs) do not make misleading promises of what can realistically be accomplished.** A few states have significantly reduced or delayed planned highway projects because adequate funds were not available. For example, in response to OIG concerns, an FHWA Headquarters team reviewed Puerto Rico's STIP process and found that insufficient funds had been identified to accomplish programmed projects. The review concluded that the STIP was not financially constrained and the process had been ineffective since 1993. These STIPs are required to be fiscally constrained. Consequently, FHWA needs to ensure they present truthful and credible information.

- **Redouble efforts to develop a multi-disciplinary workforce.** As of June 2005, financial specialists occupied less than 4 percent of the permanent positions at FHWA Divisions and Headquarters, the same as 3 years ago. This year, the Government Accountability Office reported[2] that FHWA's progress toward developing a more multi-disciplinary approach to oversight was limited by its failure to incorporate this approach into its human capital planning efforts. This was despite instructions from Congress in 2003 to develop a more multi-disciplinary workforce to perform oversight activities. Improving FHWA's financial analysis capability is critical because the failure to properly oversee states' project management practices can lead to increased project costs. Today's highway project oversight requires more employees with professional expertise in financing, cost-estimating, program analysis, and schedule management. Yet, our reviews have shown weaknesses in how FHWA has implemented its oversight, particularly in regards to financial management, indicating a need to improve skills in this area. FHWA needs to aggressively identify the skill sets needed to meet its stewardship and oversight responsibilities and act to meet this need.

Enhancing Fraud Prevention Capabilities and Taking Aggressive Action Against Those Who Perpetrate Fraud, Including Motor Fuel Tax Evasion
Contract and grant fraud continues to be a priority for the OIG, making up approximately 40 percent of our active case load. These investigations often involve bribery and corruption, bid-rigging, false claims, labor and materials overbilling, disadvantaged business enterprise fraud, and product substitution. During FY 2005,

---

[2] GAO Report Number GAO-05-173, Federal-Aid Highways: FHWA Needs a Comprehensive Approach to Improving Project Oversight," January 2005.

our increased focus on contract and grant fraud investigations has yielded 52 indictments, 42 convictions, and over $84 million in total monetary recoveries. For example, in 2005, two Wisconsin transportation contractors were sentenced for their part in rigging bids on approximately $100 million in DOT-funded contracts. The OIG investigation determined the two companies received over $62 million in illegal Federal contract work. The defendants and their companies were ordered to pay over $3 million in fines and restitution. The State of Wisconsin and FHWA debarred the companies and individuals involved.

The previously mentioned embezzlement scheme at the George Washington University is an example of Federal grant fraud that went undetected for too long. In June 2005, a University engineering professor who was the principal investigator for the DOT-funded National Crash Analysis Center was sentenced to serving 38 months in jail and paying restitution for stealing over $900,000 in FHWA grants between 2000 and 2004. The embezzlement was uncovered only after a University official identified a potential conflict of interest involving the professor's plan to contract under the FHWA grant agreement with a firm he controlled and partly owned. The success of this 4-year fraud scheme depended upon the University's lack of adequate internal controls over its administration of the FHWA grant agreement, as well as inattention by FHWA.

Our investigations have consistently demonstrated that many fraud schemes depend on (1) employees not performing basic oversight responsibilities, (2) lax internal controls, and (3) inadequate procedures to track costs and services rendered. But, to its credit, the Department is taking seriously its responsibility to aggressively combat fraud. Specifically, over the past year the Department issued new, uniform guidance for suspension and debarment of contractors who were either indicted or convicted of fraud. The Department, however, must ensure the modal administrations follow the guidance and take aggressive action against those who perpetrate fraud.

In addition to contract and grant fraud, which unnecessarily increases costs, fuel fraud represents a drain on the HTF's main source of revenue. FHWA estimates that over 90 percent of HTF revenues will be derived from fuel taxes over the next 10 years.[3] In FY 2004, motor fuel excise taxes totaled nearly $36 billion. The Internal Revenue Service estimates that $1 billion in HTF revenue is being lost each year due to the mixing of motor fuel with other products to increase the fuel volume and reduce the effective tax rate—this is just one of many fraud scams. Unless fuel fraud is significantly curtailed, the real prospect exists that there will not be sufficient funds available to support the activities authorized in the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

---

[3] Other HTF revenues are generated from truck-related taxes on tires, truck and trailer sales, and heavy vehicle use.

During FY 2005, we increased our collaboration with local, state, and Federal stakeholders responsible for state motor fuel excise tax enforcement. We are working closely with Washington State police officials in the investigation of two employees of a Washington State fuel delivery company who devised a scheme to steal pre-taxed motor fuel from a pipeline company's terminal rack using a misappropriated maintenance code. A loss of at least $500,000 in Federal and state fuel taxes resulted from the theft of an estimated 1.2 million gallons of fuel, which was sold at market or below market prices at gas stations in Idaho, Washington, and Oregon.

Any loss of Federal fuel taxes represents a commensurate loss of revenues to the HTF. The overall impact of fuel tax evasion losses to the HTF is amplified because HTF revenues are not keeping up with funding requirements. Concurrently, demands on highway capacity have reached unprecedented levels, and replacement and rehabilitation costs for existing infrastructure have greatly increased. When fuel taxes are not paid, states fall short in needed dollars for the construction and upkeep of our Nation's roads and bridges. To help address these issues, the Department should emphasize to the Internal Revenue Service that the motor fuel tax evasion compliance and enforcement strategy needs to be strengthened to help ensure all taxes are collected and remitted. Ultimately, the Internal Revenue Service is responsible for ensuring that an effective fuel tax evasion strategy is developed and implemented.

Tough Decisions Ahead in Choosing Between Competing Transit Needs

The Federal Transit Administration's (FTA) New Starts program relies on full funding grant agreements, which are long-term funding commitments that help meet the financial requirements of large transit projects. Because FTA awards relatively few of these agreements each year and funding to support the pipeline of New Starts projects is limited, it is crucial that only the most promising projects be selected as candidates for funding. As of the most recent New Starts Annual Report, there were 18 New Starts projects with full funding grant agreements and another 31 in the pipeline that were collectively seeking $14.6 billion in Federal funding. Funding available through SAFETEA-LU, along with available contingent commitment authority, will provide approximately $10.3 billion for these projects. In other words, fully one-third of the construction projects that have been requested through the New Starts program may not receive Federal funding.

Although not all projects in the pipeline will advance to full funding grant agreements, this gap between the funds being sought and the available commitment authority is likely to increase. For example, costs for the Charlotte South Corridor Light Rail Transit increased in 2004 from $385 million to $426 million primarily because of increases in the cost of concrete and steel for the track bed and vehicle maintenance building. The estimated total cost for this project has increased almost 29 percent over its 2001 cost of $331.1 million.

While many are seeking funding of new transit systems, aging transit systems are experiencing financial difficulties. Many transit systems neither generate enough revenue to operate their day-to-day service nor provide operators with enough capital to refurbish and maintain their infrastructure. Cities such as Chicago and Washington, DC, rely on subsidies from state and local jurisdictions to cover budget deficits from operations, leaving these systems without enough revenue for capital maintenance and refurbishment. As more new systems are built, the competition for rail modernization funding and operating assistance will become more intense. The Department will need to focus on the problems of these aging systems in large cities to prevent the loss of vital transportation services. Otherwise, transit system shutdowns—like those threatened in Philadelphia and Pittsburgh in 2004—could occur. Action will be needed to ensure that these transit agencies do not face many of the problems that Amtrak faces, such as the ever-increasing and unfulfilled need for huge capital investments to improve its infrastructure to a state of good repair.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Impact of Water Leaks on the Central Artery/Tunnel Project and Remaining Risks*
- *FHWA's Need To Capture Aggregate Cost and Schedule Data To Improve Its Oversight of Federal-Aid Funds*
- *Water Leaks Within the I-93 Tunnels of the Central Artery Project*
- *Managing Risk in the Federal-Aid Highway Program*
- *Highway Trust Fund FY 2004 Financial Statements*
- *DOT Consolidated Financial Statements for Fiscal Years 2004 and 2003*
- *Audit of the Tren Urbano Rail Transit Project*
- *Finance Plan for the Central Artery/Tunnel Project*
- *The Rating and Evaluation of New Starts Transit Systems*
- *DOT FY 2005 Budget and Management Challenges*
- *Opportunities To Control Costs and Improve the Effectiveness of Department of Transportation Programs*
- *Controlling Costs and Improving the Effectiveness of Federal Highway Administration and Federal Transit Administration Programs*
- *Audit of Actions To Prevent Fraud on Cooperative Agreements With Universities*

3. Building on Recent Initiatives To Further Strengthen Surface Safety Programs

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), enacted August 10, 2005, includes significant funding increases and initiatives in highway, commercial vehicle, and rail safety programs. It includes a highway safety improvement program that provides funding for infrastructure improvements for highway safety and at highway-rail grade crossings. DOT has set an ambitious goal of reducing the rate of highway fatalities from 1.46 fatalities per 100 million vehicle miles traveled to 1.0 fatalities by 2008. Meeting this goal appears unrealistic at this time as it would require significant acceleration in past improvements to meet the precipitous drop targeted after year 2007 (see Figure 3-1). The Department should explain how it will meet the targeted decline in annual fatality rate from 2007 to 2008 (nearly 28 percent), which, if met, would more than double the largest year-to-year rate decline going back 30 years.

Figure 3-1. Actual Fatality Rates When Projected to 2008 Lag Targeted Rates*
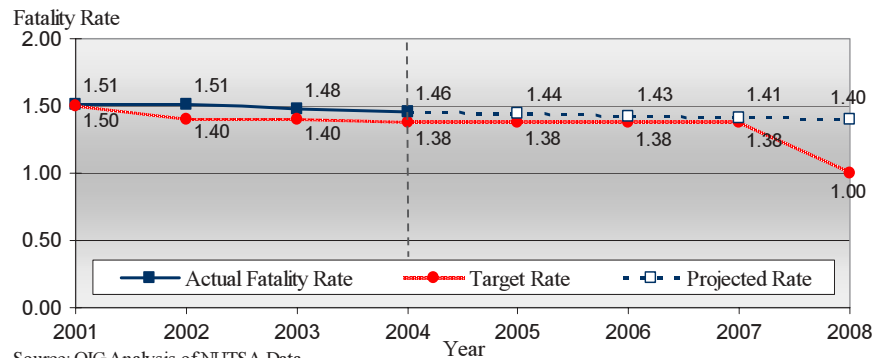
Source: OIG Analysis of NHTSA Data

* Fatality rates are shown as the number of fatalities per 100 million vehicle miles traveled.

DOT must use the tools provided in SAFETEA-LU to build on past initiatives. Key steps are to:

- Address highway safety problems where serious injuries and fatalities persist,
- Prevent fraud in the Commercial Driver's License (CDL) program, and
- Strengthen Rail Safety Program oversight and enforcement.

Addressing Highway Safety Problems Where Serious Injuries and Fatalities Persist

SAFETEA-LU provides state incentives, managed by the National Highway Traffic Safety Administration (NHTSA), addressing three persistent challenges—reducing alcohol-impaired driving fatalities, promoting greater seat belt use, and abating the increase in motorcycle fatalities.

- **More Focus on States With the Greatest Number of Alcohol-Impaired Driving Fatalities.** SAFETEA-LU will now allow NHTSA to direct grant funding to 10 states with the most fatalities related to impaired drivers, an action we previously supported in congressional testimony.

- **Use of SAFETEA-LU Authority To Aggressively Promote Greater Seat Belt Use in States.** NHTSA has been effective in promoting seat belt use—steadily increasing the usage rate to a high of 82 percent in 2004. However, only 21 states and the District of Columbia have a primary seat belt law. SAFETEA-LU provides incentives to states to pass either a primary seat belt law or maintain or increase seat belt use. These incentives provide a potent force for the new NHTSA Administrator to use in aggressively promoting changes in seat-belt use.

- **Help States Address the Steady Increase in Motorcycle Fatalities.** Motorcycle fatalities have increased for the last 7 years. Research shows that increased use of motorcycle helmets could save lives, but the helmet usage rate for motorcyclists in the United States dropped to 48 percent in 2005, after remaining unchanged at 58 percent for the 3 previous years. Only 20 states and the District of Columbia require helmets for all motorcycle riders. Making use of the SAFETEA-LU safety incentive grants, NHTSA could promote a reduction in the number of motorcycle deaths.

Preventing Fraud in the Commercial Driver's License Program

Curbing CDL fraud is important to highway safety as it helps ensure that only drivers with the requisite skills drive large trucks and other commercial vehicles. Over the last 5 years, we have investigated and prosecuted CDL fraud schemes in 23 states and found over 8,000 CDLs that were issued to drivers through corrupt examiners, mostly third-party examiners working on behalf of the state to test CDL applicants. Our work has paired us with the Department of Justice and other Federal and state law enforcement agencies to root out CDL fraud schemes and has been supported by the Federal Motor Carrier Safety Administration (FMCSA). Yet, problems persist. For example:

- In July and August 2005, two former employees of the Colorado Department of Motor Vehicles, working with a "middleman," pled guilty to fraud for facilitating the unlawful sale of CDLs and Colorado State driver's licenses to undocumented

aliens. The investigation disclosed that these individuals were involved in a scheme to sell at least 100 Colorado State driver's licenses and 20 CDLs.

- In June 2005, three employees of a firm providing legal documents preparation and language translation services entered guilty pleas for assisting Illinois residents in obtaining false proof of residency and providing the answers to the CDL written test through a corrupt language translator at the test site. It is estimated that more than 600 fraudulent licenses were issued in this scheme. Tragically, a defendant in a related case who possessed a fraudulent Wisconsin CDL caused a fatal truck crash, killing a family of four.

- In April 2005, a third party tester for the Louisiana Department of Public Safety pled guilty to making false statements fraudulently certifying the test scores required to obtain CDLs. The investigation disclosed that the defendant accepted bribes in exchange for falsely certifying passing test scores for 12 applicants. The Louisiana Department of Commercial Motor Vehicles subsequently identified and retested 60 CDL holders tested by the defendant. All of the drivers failed the retest and their CDLs were revoked.

FMCSA has initiated improvements to the CDL program, but it will need to implement SAFETEA-LU provisions on learner's permits, background checks, and information systems modernization to further strengthen the program. Improvement should include ensuring that states track the status and disposition of suspect CDL holders, and require the retesting of drivers when appropriate. Based on information we obtained from the states on 15,032 suspect CDL holders, from 1998 to 2003, we were not able to determine whether actions, such as retesting or removal of CDL privileges, had been taken against 6,739 (45 percent) of these individuals.

Strengthening Rail Safety Program Oversight and Enforcement

Over the last 10 years, the Federal Railroad Administration (FRA) has made significant strides in reducing collisions and fatalities at highway-rail grade crossings (grade crossings). Nevertheless, grade crossing collisions increased from 2,976 in 2003 to 3,059 in 2004 (3 percent) and fatalities increased from 333 in 2003 to 368 in 2004 (11 percent). Furthermore, train accidents increased from 2,994 in 2003 to 3,292 in 2004 (10 percent) and fatalities jumped from 4 in 2003 to 13 in 2004, a 225 percent increase. Our February 2005 review of safety and enforcement data showed that safety problems have long persisted for four of the nation's largest railroads, despite the increase in civil penalties FRA has assessed against them. In total, FRA's civil penalty settlement amounts for all railroads increased by 180 percent, from $3.8 million in 2000 to $10.6 million in 2004.

To its credit, FRA implemented a reconciliation process in July 2004 to enforce reporting of fatal grade crossing collisions to the National Response Center, began implementation of a National Inspection Plan in April 2005 to strengthen its compliance program, and issued a safety advisory in May 2005 promoting grade

crossing safety. However, given the rise in the types of accidents and fatalities discussed above, coupled with the upward trend in train and highway traffic, it is critical that FRA's program oversight and enforcement efforts are carefully targeted to address those rail safety problems that are most likely to result in accidents and fatalities.

FRA should:

- Improve its oversight of grade crossing accident reporting, accident investigations, and enforcement of safety regulations. Improved oversight is needed because the Federal Government investigated very few crossing collisions from 2000 to 2004, and FRA recommended only a few crossing warning signal violations for enforcement actions, despite the many critical safety defects it identified.
- Use its newly issued rail safety action plan as the linchpin for further reducing rail-related accidents and fatalities by increasing enforcement, focusing inspection resources on areas of greatest safety concerns such as the most frequent and highest risk causes of accidents, and using accident and inspection data to target compliance problems.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Reauthorization of TEA-21 Safety Programs*
- *Processing Petitions To Import Non-Canadian Gray Market Vehicles*
- *Follow-Up Audit on NHTSA's Office of Defects Investigation*
- *Review of NHTSA's Progress in Implementing Strategies To Increase the Use of Seat Belts*
- *Progress and Challenges in Implementing the TREAD Act*
- *NHTSA Office of Defects Investigation*
- *Background Checks for Holders of Commercial Drivers Licenses With Hazardous Materials Endorsements*
- *Follow-up Audit of the Implementation of the North American Free Trade Agreement's Cross-Border Trucking Provisions*
- *Investment Review Board Deliberations on the Motor Carrier Management Information System*
- *Improvements Needed in the Motor Carrier Safety Status Measurement System*
- *Improving the Testing and Licensing of Commercial Drivers*
- *Highway-Railroad Grade Crossing Safety Issues*
- *FRA Safety-Related Findings and Recommendations*
- *Report on the Audit of the Highway-Rail Grade Crossing Safety Program*
- *FRA Oversight of Use of Slow Orders and Track Reclassification*

4. Reforming Intercity Passenger Rail To Improve Performance

Intercity passenger rail service is an important component of a balanced transportation system, but Amtrak's current model is broken. Amtrak continues to incur unsustainably large operating losses, provide poor on-time performance, and bear increasing levels of deferred infrastructure and fleet investment on its system. From fiscal year (FY) 1997 to FY 2004, annual operating losses rose from $797 million to $1.3 billion, and Amtrak's debt grew from $1.7 billion to $4.6 billion. Although ridership increased to 25.1 million in FY 2004, passenger revenues were 2.8 percent below the level achieved in 2002. Amtrak has an estimated $5 billion backlog of infrastructure repairs, and on-time performance continues to fall—from 77 percent in FY 2002 to 71 percent in FY 2004.

Reauthorization is an opportunity for true reform to reduce costs, repair neglected infrastructure, improve service, and redesign routes to better serve the public. Reauthorization should focus on improving mobility in corridors (routes of less than 500 miles) around the country—not just in the Northeast Corridor—and in restructuring long-distance services (routes of greater than 500 miles) to complement corridor services.

This will require new relationships and new partnerships among the Federal Government, the states, Amtrak, and the freight railroads. It will involve giving states much greater authority and control over intercity passenger rail decisions, along with a responsibility to provide state funds. It is imperative that the Department of Transportation work with Congress to create a new model for passenger rail transportation that provides essential mobility with greater efficiency, reliability, and cost-effectiveness.

Three key steps in providing this new direction are to:

- Require Amtrak to do more to reduce cost, although it has little incentive to improve cost-effectiveness;
- Give states a larger voice in determining service requirements; and
- Establish adequate and stable Federal funding.

Amtrak Has Little Incentive To Improve Cost-Effectiveness but Must Do More To Operate Efficiently and Improve Performance

Amtrak, as the sole provider of intercity passenger rail service, has few incentives, other than the threat of budget cuts or elimination, for cost control or delivery of services in a cost-effective way. Amtrak has not achieved significant cost savings since its last reauthorization. Cash losses have merely kept pace with inflation, rising

an average 2.1 percent per year. In short, there has been little or no efficiency gain. Funding these losses leads to the bigger question of whether or not Federal dollars for intercity passenger rail are being used as efficiently and wisely as possible.

In our recent analysis of Amtrak's long-distance services, our goal was to determine whether cost savings could be achieved without eliminating any routes, station stops, or frequencies. We estimated that changes in services on those routes could save between $375 million and $790 million (depending upon the variability of maintenance labor costs) in net operating costs and $395 million in avoidable planned capital expenditures from FY 2005 to FY 2009. Our report identified labor, maintenance, and equipment costs that could be reduced.

We are awaiting Amtrak's implementation of pilot programs related to our recommendations, as promised in the Amtrak Board of Directors' response to the report. The Government Accountability Office and the Amtrak Inspector General also have issued reports and testimony that highlighted wasteful practices in Amtrak's food and beverage services. Recently, in response to a request from a congressional committee, our office initiated an audit to review the costs and expenditures associated with legal services performed for Amtrak.

States Need a Larger Voice in Determining Service Requirements
The current model for providing intercity passenger service does not give states enough say in selecting the best mix of service for their needs—what cities are served, schedules, frequency of service, and what amenities should be provided. Those decisions are made by Amtrak, and they are not always in the best interests of the states.

Intercity passenger rail would be better served with state-led initiatives as to where and how intercity passenger rail service is developed. State sponsorship will become increasingly important under our proposal, as the states should also be asked to provide increased operating and investment support. Capital funding decisions, as with mass transit, should ultimately reside with the Department of Transportation, based on congressional direction and in partnership with the states.

Adequate and Stable Federal Funding Is Essential
None of the corridors around the country, including the Northeast Corridor (NEC), can provide the type of mobility needed without significant up-front investment. In the NEC this means bringing the existing facilities to a state of good repair. In other corridors around the country, it means creating the infrastructure for high-frequency services in partnership with freight railroads and commuter authorities.

A robust Federal program of capital matching grants will be essential if these corridors are to be developed. In addition, long-distance services that provide connections between corridors require recapitalization if they are to be run efficiently

and are to provide the high quality services their passengers deserve. None of this, however, implies giving more money directly to Amtrak, especially under the current model. A number of other issues that have proven contentious in the past must also be addressed. These include what to do about Amtrak's legacy debt, its governance, and its assets, including management and ownership of the NEC.

Some proposals for reforming intercity passenger rail service advocate eliminating the monopoly Amtrak now holds. Introducing competition into the intercity passenger rail system by authorizing multiple passenger rail service providers is one way to encourage efficiency and innovation. But competition is not likely to occur unless and until the rail system is restored to a state of good repair. The first steps that must be achieved are to ensure adequate Federal and state funds are available for operations and for infrastructure repair; make significant cuts to net operating costs; and give states more power to select routes, schedules, frequencies, and amenities.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Reauthorization of Intercity Passenger Rail and Amtrak (September 21, 2005)*
- *Analysis of Cost Savings on Amtrak's Long-Distance Services*
- *Intercity Passenger Rail and Amtrak*
- *Reauthorization of Intercity Passenger Rail and Amtrak (April 21, 2005)*
- *Assessment of Amtrak's 2003 and 2004 Financial Performance and Requirements*

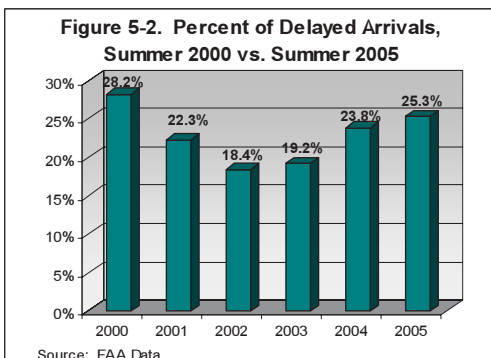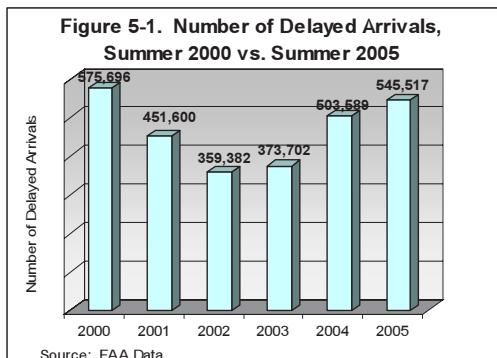# 5. Mitigating Flight Delays and Relieving Congestion—Actions Needed To Meet Demand

After a few years of relative reprieve from aviation congestion, traffic and delays are once again returning, with the Federal Aviation Administration's (FAA) Air Route Traffic Control Centers reporting 2005 year-to-date operations that exceed 2000 levels by more than 3 percent. This growth in operations has brought an increase in the number of aviation delays, with the incidence, rate, and length of delays this past summer approaching 2000 levels, which was generally regarded as the worst summer of aviation delays.

The Department of Transportation's challenge in addressing delay growth is three-fold:

- Taking appropriate action against growing aviation delays,
- Keeping planned infrastructure and airspace redesign projects on schedule while effectively implementing short-term initiatives to relieve congestion and delays, and
- Exploring alternatives for managing capacity where new initiatives are not feasible.

Taking Appropriate Action Against Growing Aviation Delays

As the following figures illustrate, the number of arrival delays in the summer months of 2005 (June, July, and August) was within 5 percent of the number of arrival delays in the same period in 2000 and represented an 8 percent increase over the number of delays in 2004. The rate of delay in 2005 (25.3 percent) is also gaining on the summer of 2000, when 28.2 percent of arrivals were delayed. The average length of delays during the summer of 2005 (56.4 minutes) was actually 5 percent greater than the average delay length in 2000 (53.9 minutes) (see Figure 5-3).

Figure 5-1. Number of Delayed Arrivals, Summer 2000 vs. Summer 2005

Source: FAA Data

Figure 5-2. Percent of Delayed Arrivals, Summer 2000 vs. Summer 2005

Source: FAA Data

Delays were particularly disruptive this summer at several key airports. Of the top 15 delayed airports during the summer of 2005, 11 were also among the top 15 airports during the summer of 2000. Italicized entries in Table 5-1 identify the new airports in the ranking in 2005. At the four most delayed airports, more than one of every three flights arrived late. The average delays at these 15 airports exceeded 48 minutes, with 5 airports exceeding an hour. LaGuardia had the longest average delays of just over 70 minutes.

Figure 5-3. Average Delay Length, Summer 2000 vs. Summer 2005

Year	Minutes
2000	53.9
2001	52.8
2002	49.0
2003	50.7
2004	54.2
2005	56.4

Source: FAA Data
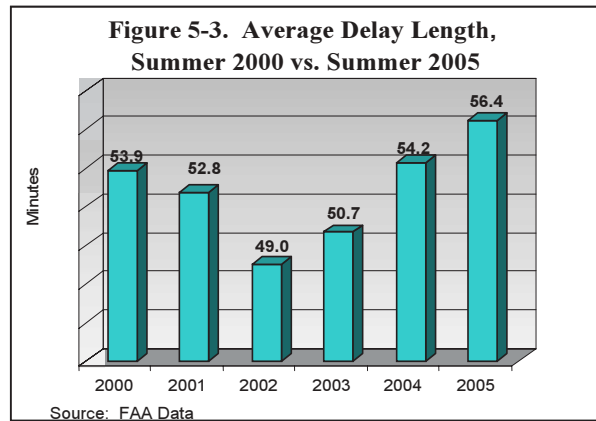
Table 5-1. Top Fifteen Delayed Airports: Summer 2005

Rank	Airport	Percent Delayed	Average Minutes
1	Newark (EWR)	37.02	68.81
2	Atlanta (ATL)	35.41	62.98
3	NY-Kennedy (JFK)	35.28	58.01
4	West Palm Beach (PBI)	33.39	53.88
5	LaGuardia (LGA)	31.58	70.03
6	Philadelphia (PHL)	31.43	66.26
7	Miami (MIA)	30.79	58.16
8	Louisville (SDF)	30.41	47.59
9	Boston (BOS)	29.97	59.59
10	Bradley (BDL)	28.58	55.83
11	Washington-Dulles (IAD)	28.40	60.11
12	Indianapolis (IND)	28.18	55.45
13	Fort Lauderdale (FLL)	27.59	54.43
14	Dallas-Love Field (DAL)	27.49	48.93
15	Baltimore (BWI)	27.46	56.21

As we learned during the painful delay-ridden years in 1999 and 2000, congestion and delays are strong drivers of customer service issues. As delays are again returning, we have initiated work at the request of Representative John Mica, Chairman of the House Committee on Transportation and Infrastructure, to review airline customer service commitments and, in particular, the Department's role in ensuring that airlines are treating their customers consistently within existing laws and regulations.

The Department has had some success in intervening to mitigate delays before they reach a crisis situation. Most notably, delays appear to be improving at Chicago-O'Hare, an airport that has been plagued by congestion for more than 30 years. In the summer of 2000, O'Hare ranked first in the list of most delayed airports, with more than 40 percent of flights arriving late. This past summer, O'Hare ranked 30th out of 53 airports, with a delay rate of 24.3 percent.

The improvement appears to be, at least in part, a result of the Department's administrative actions in 2004 to cap hourly operations at O'Hare at a level consistent with available capacity. The controls on landing slots and schedules have brought some short-term relief, but, in the long run, controls do not accommodate demand and can stifle competition.

The Department's challenge will be to develop a toolbox of relief measures, including construction, technological improvements, procedural changes, administrative controls, and market-based solutions, that can be used as appropriate given the severity of conditions and the physical and practical constraints of the affected airports. The importance of FAA's efforts to develop and define the next generation air traffic management system and corresponding funding requirements are included in our views on the challenges facing FAA with respect to the upcoming reauthorization process.

Keeping Planned Infrastructure and Airspace Projects on Schedule To Relieve Congestion and Delays

While new technologies can help enhance airport arrival rates, new runways provide the most increases in capacity. New runways have been built at the Phoenix, Detroit, Miami, Denver, Houston, Orlando, and Cleveland Airports. Without a doubt, congestion would be much worse without the new capacity in the system.

Between now and 2008, eight additional runway projects (six new runways, a major extension of an existing one, and a significant reconfiguration of another) are expected to come on-line. These include projects at the Atlanta, Boston, and Philadelphia Airports. There are over 10 other new runway projects in various planning stages, including major efforts at Chicago O'Hare, but completion dates are not yet firm. The Department and FAA will need to make sure that, among other issues, navigation equipment and airspace modifications are in place when these projects are commissioned.

Airspace redesign efforts are also critical to enhance the flow of air travel in both the short- and long-term. In May 2005, we reported that FAA's management of redesign efforts was fragmented and diffused—projects had been delayed 3 years or more, thereby postponing capacity improvements. We recommended that FAA prioritize efforts, establish criteria for assessing a project's system-wide impacts, and revamp

how resources are used. FAA is taking steps to address these concerns—the key will be sustained management attention and follow-through.

Exploring Alternatives for Managing Capacity Where Infrastructure and Airspace Redesign Initiatives Are Not Feasible

As delays return, FAA and some airports are considering a variety of administrative and market-based solutions (e.g., slot auctions, schedule caps, congestion pricing) that allow some variable pricing of access to control congestion and delays. FAA has used administrative actions twice to reduce delays at O'Hare and is considering continuing with this approach until the O'Hare Modernization effort is complete. At LaGuardia, where slot controls expire in 2007, new runway construction is not an option; tools to manage demand will likely be needed to prevent what could be crippling delays. Market-based solutions have merit but entail difficult policy questions (i.e., who sets the rates and who collects the funds).

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Aviation Industry Performance: Trends in Demand and Capacity, Aviation System Performance, Airline Finances, and Service to Small Airports*
- *Chicago's O'Hare Modernization Program*
- *Outlook for Aviation Delays in the Summer of 2005 and Actions Needed To Mitigate Congestion in the Short- and Long-Term*
- *Airspace Redesign Efforts Are Critical To Enhance Capacity but Need Major Improvements*
- *Review of December 2004 Holiday Air Travel Disruptions*

6. Reauthorizing Aviation Programs—Establishing Requirements and Controlling Costs Are Prerequisites for Examining FAA Financing Options

A major focus of the Federal Aviation Administration (FAA) over the next year will be preparing to reauthorize a wide range of aviation programs and exploring alternative financing mechanisms. The current authorization and various taxes expire in 2007, and FAA has begun seeking views on alternative financing options. However, before decisions about various financing mechanisms—such as adjustments to existing taxes, user fees, or borrowing authority—can be made, a clear understanding of the financial requirements (for new and existing efforts) and of ways to control costs is needed.

For decades, the Aviation Trust Fund has provided FAA with a dedicated stream of revenue for airport improvements, capital projects, and operations. However, there has been a decline in expected revenues coming into the Trust Fund. In 2001, FAA estimated that Trust Fund revenues in 2005 would be about $14.5 billion. That estimate has now been reduced to $10.9 billion, a reduction of $3.6 billion (nearly 25 percent) from the 2001 estimate.

FAA's budget has remained essentially flat at just under $14 billion since fiscal year (FY) 2004. The Agency is in the situation where increasing operating costs are crowding out its capital and airport accounts. Also, there are increasing demands on the Trust Fund and other revenue sources, including the General Fund. In FY 2006, FAA's budget is expected to exceed estimated Trust Fund revenues by $2.0 billion, as shown in Figure 6-1.

Figure 6-1. FAA's Budget vs. Trust Fund Revenues
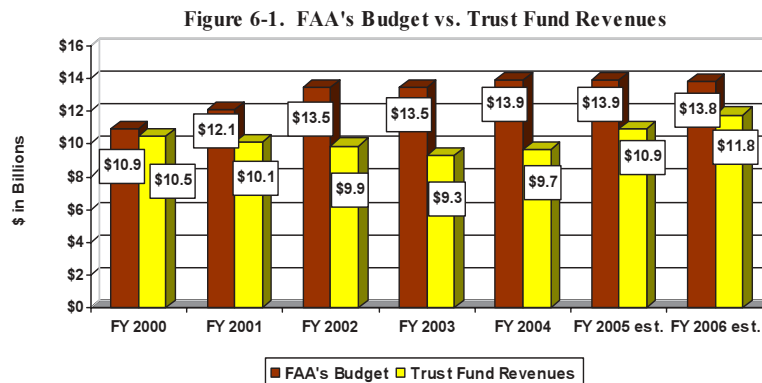
Historically, the General Fund has made up the difference between the Trust Fund contribution and FAA's budget. There are some exceptions, including FY 2000, when the Trust Fund paid for FAA's entire budget. For the last 10 years, (FY 1996 to FY 2005), the General Fund contributed on average about 21 percent of FAA's budget. Over the past 3 years (FY 2003 to FY 2005), the General Fund has contributed about $3 billion annually to FAA's budget. However, FAA's FY 2006 budget request estimated the General Fund contribution to be $1.6 billion, or 11 percent of the Agency's budget request. The size of the General Fund contribution will be a central issue in the upcoming debate about how to finance FAA.

The challenges facing FAA include:

- Controlling costs with major acquisitions by delivering new systems that work, are on time, and are within budget and making decisions on the scope of billion-dollar projects that have been delayed for years;
- Getting control of support service contracts, reducing associated costs, and following through on the implementation of new procedures;
- Establishing requirements for the next generation air traffic management system;
- Addressing the expected surge in controller attrition and negotiating an affordable and equitable bargaining agreement; and
- Completing a cost-accounting system to reduce costs and improve operations.

Controlling Major Acquisition Costs—Delivering New Systems That Work on Time and Within Budget and Making Decisions About the Scope of Billion-Dollar Projects That Have Been Delayed

FAA needs reliable cost and schedule estimates for its major acquisitions. It will be important for FAA to deliver new systems without incurring additional cost growth or schedule delays. FAA needs to make decisions whether to continue, modify, or discontinue multi-billion programs like the Standard Terminal Automation Replacement System (STARS) and FAA's Telecommunications Infrastructure (FTI) projects.

- STARS was expected to replace computers and controller workstations at FAA's terminal facilities. In 1996, FAA estimated that STARS would be completed in FY 2005 at a cost of $940 million for 172 systems, but it is no longer the same program. Facing costs of over $2 billion, FAA limited STARS deployments in 2004 to just 50 sites at a cost $1.46 billion. FAA subsequently reduced the number of sites to 47. In June 2005, FAA approved acquiring new equipment for nine more terminal facilities—five small sites and four large sites with aging displays. FAA intends to deploy STARS at the five small sites but pursue a competitive procurement for the four sites with aging displays. Final decisions about over 100 sites have not been made, efforts to replace aging and failing

displays at large sites have not been accelerated, and the cost and timeframes to complete terminal modernization remain unknown.

- FTI is expected to replace most of FAA's existing telecommunications services and was expected to save the Agency millions annually beginning in FY 2005. However, FTI capital costs have grown from $205 million to $310 million, or 51 percent, and operating costs (i.e., telecommunications services) are now estimated to be more than $2.1 billion. According to FAA officials, cost growth is attributable to, among other things, expanded FTI requirements, improved security, and a more comprehensive estimate of transition efforts. FTI equipment has been installed at fewer than 700 of 4,500 sites, and only about 6 percent of the 25,000 existing services and circuits to be replaced are now operating with new equipment. Overall, the vast majority of the new equipment is not yet operational. Moreover, the underlying assumptions about program costs and expected savings that drove the investment in FTI are no longer valid because of delays in installing new equipment. FTI is a high-risk effort, and FAA needs to develop an executable plan to complete the effort without further cost increases or schedule delays.

Getting Control of Support Services Contracts

Every year, FAA uses contractors to provide more than $1.3 billion of support services. Of particular and urgent concern is FAA's use of three large multiple-award contracts for support services that use pre-qualified vendors and, in some instances, pre-negotiated labor rates.

Our audit of one multiple-award program administered by the Aeronautical Center in Oklahoma City identified vulnerabilities for these contracts, including inadequate scope management, revolving employment where FAA employees have recently left FAA for employment with the contractors, lack of competition awarding the contracts, contract performance issues, and failing to use cost estimates as well as audits.

We provided FAA with specific steps it needed to implement to strengthen controls over support service contracts. FAA agreed that action needed to be taken quickly. FAA issued guidance indicating that the Chief Financial Officer would exercise greater oversight over support services contracts. This included establishing an independent cadre of personnel with significant acquisition and financial controls experience to advise the Chief Financial Officer in reviews of acquisitions of support services. We will be following up to ensure that all planned actions to improve controls over support service contracts have been implemented. Until FAA establishes necessary procedures to implement its planned corrective actions, the potential for cost overruns and improper payments on these contracts will still exist.

Establishing Requirements for the Next Generation Air Traffic Management System

Because much of FAA's current capital budget focuses on keeping things running (i.e., sustainment), attention has focused on FAA's new Joint Program and Development Office and what it can deliver. The office is mandated to coordinate research among Federal agencies and develop a vision for the next generation air traffic management system in the 2025 time frame. FAA is in the process of determining what "interim capabilities" it will pursue, as well as funding the requirements. It will be important for FAA to give Congress an understanding of how much money will be needed (in both the short- and long-term) and for what purposes, as was promised by DOT officials earlier this year.

Addressing the Expected Surge in Air Traffic Controller Attrition and Negotiating an Affordable and Equitable Bargaining Agreement

Over the next 10 years, FAA estimates that approximately 73 percent of the organization's nearly 15,000 controllers will become eligible to retire. FAA anticipates a need to train and hire 12,500 new controllers over the same period to meet anticipated needs. This must be done within a tightly constrained budget.

At the direction of Congress, FAA issued the first in a series of annual reports in December 2004 that addresses the expected surge in controller attrition. In our opinion, the report is a good first step in that it lays out the magnitude of the issues and establishes broad measures for meeting the challenge. However, there are several issues that need to be specifically addressed in the next report to Congress.

FAA has not identified the annual and total costs for hiring and training the number of controllers it says it needs over the next 10 years. Although FAA has submitted some of the cost details of its staffing plan in its FY 2006 Budget Submission, the Agency provided no details for FY 2007 and beyond, when the costs of the staffing plan may increase significantly. In addition, FAA's plan does not address staffing needs by location. Without accurate facility-level planning, FAA runs the risk of placing too many or too few controllers at key locations. FAA has committed to evaluate its facility staffing standards and provide details by the end of this calendar year.

Another cost-driver for FAA will be negotiating a new collective bargaining agreement with the National Air Traffic Controllers Association, the union representing FAA's largest workforce. The current contract, which has been extended for 2 years, expired in September 2005. Unlike the previous agreement, which required an estimated $1 billion in additional funding over its original 5-year term, FAA needs to ensure that the new agreement is cost effective and does not crowd out other programs, such as its safety inspector workforce. In addition, FAA needs to ensure that productivity initiatives are in place and measurable. It is unlikely that

FAA can achieve significant reductions in its operating costs without substantial improvements to controller workforce productivity.

Completing the Cost Accounting System To Control Costs and Improve Operations

FAA has made significant advances by substantially completing the portion of its cost-accounting system for the Air Traffic Organization in FY 2004. Also, FAA completed labor-distribution systems for all personnel in August 2005 and plans to have a fully operational system in place by September 30, 2006.

With a number of further refinements we have recommended, FAA should have sufficiently accurate data for establishing alternative financing mechanisms, including user fees. Additional refinements include finding an acceptable method of assigning about $800 million in miscellaneous service-level costs (including depreciation) to facilities and strengthening controls over its labor-distribution system. FAA faces challenges in completing its cost-accounting system: (1) deploying the system to its Safety and Airports line of business (which represents about one-third of its operational costs), (2) integrating the system with its labor-distribution system for controllers, and (3) linking the system with performance measures.

Another critical issue for FAA in exploring financing options is allocating its costs to airspace users. While a cost-accounting system will provide decision makers with information on FAA's costs at the national and facility level, it will not allocate these costs to diverse airspace users (i.e., passenger airlines, cargo airlines, or general aviation). FAA has an ongoing study using cost accounting and activity data to allocate costs for providing air traffic services and has sought industry comment on methods for doing so. Allocating FAA costs involves difficult policy decisions regarding, among other things, use of congested airspace, marginal use of the system, and aircraft size.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Key Issues for the Federal Aviation Administration's FY 2005 Budget*
- *Observations on Bringing More Fiscal Discipline and Accountability to FAA's Air Traffic Control Modernization Program*
- *FAA Needs To Reevaluate STARS Costs and Consider Other Alternatives*
- *Terminal Modernization: FAA Needs To Address Its Small, Medium, and Large Sites Based on Cost, Time, and Capability*
- *Next Steps for the Air Traffic Organization*
- *Perspectives on the Aviation Trust Fund and Financing the Federal Aviation Administration*

- *Status of FAA's Major Acquisitions: Cost Growth and Schedule Delays Continue To Stall Air Traffic Modernization*
- *Report on Controller Staffing: Observations on FAA's 10-Year Strategy for the Air Traffic Controller Workforce*
- *Addressing Controller Attrition: Opportunities and Challenges Facing the Federal Aviation Administration*
- *Opportunities To Improve FAA's Process for Placing and Training Air Traffic Controllers in Light of Pending Retirements*

7. Aviation Safety—Developing Effective Oversight Programs for Air Carrier Operations, Repair Station Maintenance, and Operational Errors

The Federal Aviation Administration's (FAA) primary mission is safety, and, to its credit, the Agency is making progress toward a risk-based safety oversight system to focus limited inspection resources. The U.S. aviation industry has maintained an impressive safety record. However, financial uncertainty, competition from low-cost carriers, and rebounding air traffic all contribute to a very different and still evolving aviation environment. Large U.S. air carriers are working aggressively to move away from high cost structures by reducing in-house staff and increasing the use of outside repair facilities. The transition to increased use of outside repair facilities is not the issue—it is that maintenance, wherever it is done, requires oversight. FAA must ensure it is channeling its oversight toward the organizations actually performing the maintenance. At the same time, FAA needs to work more aggressively to reduce instances where aircraft fly too close together in what are called operational errors.

Key challenges for FAA are:

- Following through on its commitments to advance risk-based systems for air carrier operations and work performed by external repair facilities, and
- Continuing its efforts to identify and reduce operational errors.

Implementing a Risk-Based Approach to Air Carrier and Repair Station Oversight

FAA continues to face challenges in advancing its efforts to implement risk-based oversight systems. Facing a rapidly changing aviation industry and its own challenging budget, FAA needs effective systems that will enable it to target its inspection resources to areas of higher risk. To its credit, FAA has implemented risk-based, data-driven approaches for oversight of air carriers: the Air Transportation Oversight System (ATOS), used for oversight of 17 air carriers, and the Surveillance and Evaluation Program, used for oversight of the remaining 110 commercial air carriers. FAA is also working to implement a similar risk-based system for oversight of repair stations. However, our reviews have shown that FAA still has a substantial amount of work ahead to refine and effectively implement these oversight systems.

Air Carrier Oversight. FAA inspectors were not able to use its risk-based oversight systems to respond effectively to the changes network carriers were making to reduce costs and compete with low-cost carriers. For example, FAA inspectors did not complete 26 percent of their planned inspections when air carriers were at the height of streamlining operations and reducing costs. This is neither an adequate response to

these changes nor reflective of a more agile approach, given that more than half of the inspections that were not completed were in areas where inspectors had identified risks. Improvements are still needed in the processes FAA inspectors use to identify risks in air carriers' systems, prioritize inspections, and shift inspections to areas of greater risks.

To improve its oversight of air carriers, FAA has committed to:

- Strengthen national assistance to field offices and improve field office managers' oversight of risk assessment and inspection planning processes;
- Develop procedures to ensure inspectors are continually monitoring the effects of industry changes, such as financial distress;
- Ensure that inspections are prioritized so high-risk areas are inspected before lower-risk areas and that inspectors are able to effectively change inspection plans when new risks are identified.

We realize that FAA is facing budgetary challenges, so our work also highlighted the need for FAA to make enough efficiency gains to ensure it can commit adequate resources to air carrier oversight. This will remain important as the airline industry continues to make significant changes in operations, to work to resolve financial challenges, and to navigate through bankruptcy. FAA's practice of shifting resources for increased surveillance at bankrupt carriers may not be a viable option, given that three of the major air carriers are now in bankruptcy. The current state of the industry makes it imperative that FAA improve its risk-based oversight system so inspectors focus their efforts on areas of greatest risk.

Repair Station Oversight. Outsourcing aircraft maintenance has been a prominent aspect of air carrier efforts to restructure their operations and reduce costs. Providing oversight of air carrier outsourcing, or use of external repair facilities, has been particularly challenging for FAA. We reported in July 2003 that FAA needed to improve the processes it used to monitor domestic and foreign repair station operations. FAA initially planned to implement all of the recommendations we made for improving this program by August 2005, but it has completed only one of nine promised actions. FAA now indicates all recommended actions will not be fully implemented until the beginning of fiscal year (FY) 2007.

A key part of the work that remains is completion of FAA's plan to implement a new risk-based system for oversight of domestic repair stations. FAA has developed the framework for the system but still needs to train the inspectors and develop new computer software that will provide inspectors with data analysis capabilities. FAA needs to expedite improvements to its process for oversight of repair stations, especially given the continued trend of air carriers shifting maintenance to outside repair facilities. Air carriers now outsource 53 percent of their maintenance expense, compared to just 37 percent in 1996.

A portion of this maintenance outsourcing consists of maintenance work performed by repair facilities that have not been certificated by FAA, meaning FAA has not verified that they have the staff, facilities, or equipment to perform the work. At the request of Representative James Oberstar, we conducted a review of air carriers' use of non-certificated repair facilities. We found that non-certificated repair facilities perform some of the same maintenance functions that certificated facilities perform, such as flight control repairs and scheduled maintenance tasks. However, these facilities are not included in FAA's risk-based oversight system for air carriers or its planned oversight system for repair stations. Ultimately, FAA is responsible for oversight of air carrier maintenance, regardless of who performs it. Therefore, FAA may need to place emphasis in this area to better assess air carriers use of non-certificated repair facilities. We recently issued a draft report to FAA on this matter.

FAA must follow through on its commitments to advance its risk-based systems for oversight of air carriers and repair stations, particularly in light of the magnitude of changes in the aviation industry and the pace at which they are occurring. Aircraft maintenance, no matter where it is performed, requires oversight. FAA must ensure it is shifting its resources toward the organizations actually performing the maintenance.

Ensuring Reporting of Operational Errors

A primary indicator of system safety is the number of operational errors (when air traffic controllers allow planes to come too close together in the air). Reducing these incidents is a key performance goal for FAA and one that continues to require heightened attention at all levels of the Agency.

Figure 7-1. Operational Errors FY 1999 to FY 2005

Source: FAA

This past year, there was an increase in the number of operational errors reported—1,489[4] (up from 1,150 in FY 2004), which is the highest number of errors reported in the past 6 years (see Figure 7-1). In addition, of the 1,489 errors reported, 73 were classified as serious incidents (those rated as "high" severity), compared to 40 serious incidents reported in FY 2004. While that increase is significant, it is important to recognize that the number of errors reported in prior years may not be an accurate benchmark. This is because at the majority of FAA facilities, FAA relies on an inaccurate system of self-reporting operational errors.

In September 2004, we determined that only 20 of FAA's 524 air traffic control facilities (both FAA- and contractor-operated) have an automated system that identifies when operational errors occur. At its towers and terminal radar approach
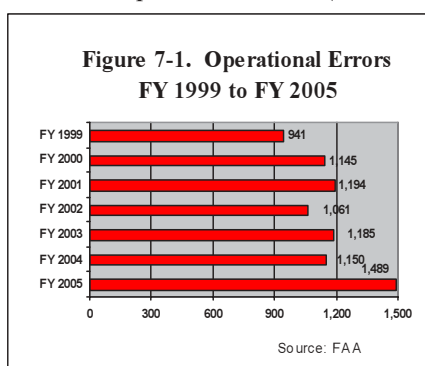
[4] Based on preliminary data.

control (TRACON) facilities, FAA depends on a system of self-reporting operational errors.

Recent investigations by our office and FAA at two locations found multiple instances of unreported operational errors. For example, in response to a hotline allegation at the Dallas/Fort Worth TRACON, we identified multiple operational errors that had not been reported. Prior to our investigation, the facility reported just two operational errors during the 6-month period from January 1 to June 24, 2004. During our investigation, we identified five unreported operational errors that occurred during May and June alone. After instituting appropriate use of playback tools[5] in June 2004, the facility reported 36 operational errors during the next 6 months.

At the New York TRACON, FAA initiated an internal investigation in response to a rash of allegations that operational errors were increasing. That review identified 147 unreported operational errors during a 2-month period. A number of these errors were serious and indicated the need for immediate corrective action. Managers at the facility took immediate actions to improve operations, including re-training all personnel and redesigning certain facility-specific air traffic procedures.

This past year, FAA has taken actions to improve the reporting of operational errors. In response to our September 2004 report, FAA recently implemented procedures that require towers and TRACONs to conduct random audits of radar data to identify potential unreported operational errors. FAA Headquarters is also conducting random audits at selected facilities and is evaluating its severity rating system in an effort to more accurately capture the collision risk that operational errors pose. Clearly, these actions are steps in the right direction, but FAA will need to remain committed to following through on those efforts—the number of unreported errors identified just at New York TRACON underscores the need for top management attention to this issue.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Safety Oversight of an Air Carrier Industry in Transition*
- *Letter to Representative Oberstar Regarding FAA Actions on Air Carriers' Use of Aircraft Repair Stations*
- *Controls Over the Reporting of Operational Errors*
- *Alleged Cover-Up of Operational Errors at DFW TRACON*

---

[5] Playback tools are software programs and other electronic instruments for recreating air traffic incidents by replaying recorded radar and voice data.

8. Improving Information Technology Investment and Computer Security

The Department of Transportation (DOT) is responsible for one of the largest information technology (IT) investment portfolios among civilian agencies, with almost 500 computer systems supporting key mission areas at a cost of about $2.7 billion annually. Over 80 percent of the investments are in air traffic control modernization. During fiscal year (FY) 2005, the Department enhanced the quality of systems security reviews to better ensure the integrity, confidentiality, and availability of system-dependent operations. The departmental Investment Review Board (IRB) also continued its oversight of major IT investments but with mixed results. Last year, we reported that corrective actions were needed to enhance air traffic control systems security protection and correct known problems in the Operating Administrations' business contingency plans. The Department has yet to complete these corrective actions. We also found security weaknesses in a DOT network that made the Department vulnerable to attacks from the Internet. The major challenges facing DOT in the IT investment and computer security areas include:

- Clarifying the departmental Board's role in assisting the Secretary to maximize the value and manage the risk of major IT investments,
- Eliminating redundant IT infrastructures outside of DOT Headquarters to reduce operating costs,
- Better securing operational air traffic control systems, and
- Correcting weaknesses in the Federal Railroad Administration network and enhancing business contingency plans for critical DOT systems.

Clarifying the Departmental Investment Review Board's Role in Assisting the Secretary To Maximize the Value and Manage the Risk of Major Information Technology Investments

This year, the IRB reviewed investment projects managed by various Operating Administrations, including the Federal Aviation Administration (FAA). While projects managed by most Operating Administrations have benefited from the Board's oversight, the Board has had little positive impact on complicated air traffic control projects, which are still experiencing significant cost increases and schedule delays. We reviewed 16 FAA major acquisitions and found that 9 projects had experienced schedule delays of 2 to 12 years, and 11 projects had experienced cost growth of about $5.6 billion. The bulk of the cost growth occurred before the establishment of the new Air Traffic Organization and had been building for some time without being recognized. Some major investment projects have experienced persistent cost and

schedule problems, such as the Wide Area Augmentation System and the Standard Terminal Automation Replacement System.

Nine years after Congress passed acquisition reform for FAA, exempting it from compliance with Federal acquisition regulations, air traffic control modernization projects are still experiencing performance problems, along with the cost increases and schedule delays. Further, FAA's acquisition process has stayed on the Government Accountability Office's high-risk list since 1995. Meanwhile, FAA continues to initiate new, costly, and complex IT modernization projects. This year, two new multibillion-dollar FAA investment projects—FAA Telecommunication Infrastructure (FTI) and En Route Automation Modernization (ERAM)—went forward to the Office of Management and Budget (OMB) without reliable cost and schedule data and other project information. OMB rejected the budget submissions and asked the Board to reexamine business cases for these investment projects.

We are concerned that the Board's review of FAA's major IT investment projects is not providing value-added services as intended and is facing the risk of becoming a paperwork exercise that provides little substantive value to the Secretary. There are two basic reasons for this:

- First, there is a lack of clarity about the Board's role in reviewing major FAA investment projects. The Clinger-Cohen Act of 1996 requires the Secretary to implement a process for "maximizing the value and assessing and managing the risks of the information technology acquisitions of the executive agency." The Board was created as part of this process and is tasked with advising the Secretary regarding whether to continue, modify, or terminate major IT investments within the Department. However, FAA has frequently cited its independent acquisition authority, based on provisions in the Department's Appropriations Act for Fiscal Year 1996, to argue that the Board should play only a limited role in overseeing FAA investments. The provision in the Appropriations Act exempted FAA from compliance with the Federal acquisition regulations and key Federal procurement laws to help facilitate implementation of a timelier and more cost-effective acquisition process.

  The issue that needs to be resolved is whether FAA's exemption from compliance with the Federal procurement regulations also applies to management oversight required by the Clinger-Cohen Act. Until this issue is resolved, it is our opinion that the Board's continued "review" of FAA's multibillion-dollar investment projects will not result in "maximizing the value and assessing and managing the risks of the information technology acquisitions," and will impede the Secretary's ability to fulfill his Clinger-Cohen Act requirements.

- Second, to be effective, the Board needs to perform more substantive, in-depth, and analytical reviews of progress, problems, and risks associated with these

complicated investments. The current level of support available to the Board is not sufficient to allow the members to make responsible decisions about these investments. The Board relies on the pre-IRB "prep group" process, which is composed of Operating Administration representatives who perform a cursory review of each others' investment projects. This prep group is led by an Associate Chief Information Officer with the support of one mid-level staff person, who came on board only 4 months ago. Obtaining adequate support to research potential project cost, schedule, and performance shortfalls is essential if the Board is to perform oversight to maximize the value and manage the risks of major IT investments in the Department.

Eliminating Redundant IT Infrastructures Outside of DOT Headquarters To Reduce Operating Costs

Last year, DOT identified opportunities for cost savings by consolidating systems used to support common business operations across the Operating Administrations, such as office IT infrastructure (e.g., desktop computers, local area networks, e-mail), financial management, and grants management. While most initiatives are still under evaluation, the Department has made progress in consolidating the 10 separate IT operating environments at Headquarters into a single, common operating environment. Initially, the Department estimated an 18- to 26-percent reduction in costs from the consolidation, based on industry averages. This would translate into multimillion-dollar annual savings for the Headquarters consolidation effort. However, based on a recent study, the Department lowered the estimated cost savings to about $2 million over a period of several years. To achieve worthwhile savings, DOT needs to consolidate the fragmented IT infrastructures outside of Headquarters. For example, four Operating Administrations with field offices co-located in San Francisco use separate networks to connect to Headquarters. Integrating these fragmented networks could result in immediate and substantial cost savings to the Department.

Better Securing Operational Air Traffic Control Systems

Last year, FAA committed to taking aggressive corrective actions to better protect air traffic control systems but did not start to initiate these corrective actions in earnest until this April. As a result, FAA's overall progress in this area was insufficient. In FY 2005, the Government Accountability Office also identified the need to enhance both computer security protection in air traffic control systems and physical security protection at air traffic control facilities.

FAA had committed to completing security reviews of all operational air traffic control systems—at en route, approach control, and airport terminal facilities—between FY 2005 and FY 2007. During FY 2005, according to FAA, it conducted security reviews at all en route centers. However, these reviews were incomplete for the following reasons:

- More than 30 computer systems are used to support en route (high-altitude) air traffic services. However, FAA officials collected systems security information on only about half of these systems.

- FAA is still in the process of analyzing the information collected; it has not yet determined what remediation work is needed to secure the systems reviewed.

- FAA officials did not perform any independent testing at en route centers. Testing is key to identifying potential security breaches and is required for reviewing high-risk systems, according to minimum Government security standards.

This year, FAA conducted a tabletop exercise and identified a cost-effective strategy to restore essential en route air service in case of prolonged service disruptions. However, FAA is years away from completing the planned actions necessary to implement the strategy. We recognize that FAA faces critical decisions in balancing its priorities in today's tight budget environment, yet it needs to assign a priority to implementing the selected contingency plan during FY 2006 to meet the President's requirements for protecting the Nation's critical infrastructure.

The President designated the air traffic control system as part of the critical national infrastructure due to the important role of commercial aviation in fostering and sustaining the national economy and ensuring the safety and mobility of citizens. FAA's current business continuity plan has worked well in the past in dealing with temporary, less severe service disruptions. However, it is not adequate to deal with prolonged service disruptions at a major facility such as an en route center, which would severely disrupt air traffic, causing significant economic losses and subjecting travelers to delays and inconvenience.

It is also important that FAA coordinate the implementation of the selected contingency plan with other modernization projects—ERAM and FTI—at en route facilities. These modernization projects have been under development for several years, and one is scheduled for completion in 2007. To be cost effective, FAA needs to assign a priority to identifying continuity plan requirements that need to be included in ERAM or FTI implementation. As Government experts have pointed out, retrofitting requirements into a completed project costs significantly more than accommodating them when the project is under development.

Correcting Weaknesses in the Federal Railroad Administration Network and Enhancing Business Contingency Plans for Critical DOT Information Systems

This year, we reviewed security over the Federal Railroad Administration's network, which has a direct connection to the Internet. We found this network vulnerable to unauthorized access and attack from both outside and inside the Department. We were able to gain unauthorized access to individual computers on the network from the Internet and obtained sensitive information, such as draft safety inspection reports,

proposed penalties for safety violations, and travel vouchers containing employee Social Security Numbers and credit card numbers. These individual computers, however, do not host FRA financial and human resources systems. Given the interconnectivity of Department networks, vulnerabilities in one network can put other DOT systems at risk. DOT management is taking actions to remediate the security weaknesses identified.

In FY 2003, we reported cases in which the recovery processing sites for critical information systems were within 10, 15, or 25 miles of the primary sites. Such proximity made DOT vulnerable to losing both sites to the same disaster. We recommended, and the Department agreed, to develop guidance on the minimum geographic distance between primary and backup sites, but it has yet to be developed. Further, none of the several Operating Administrations that we identified as having this problem have moved their backup sites to a more remote location to reduce the risk of losing all processing capabilities to a single disaster.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *DOT Information Security Program (October 7, 2005)*
- *DOT Information Security Program (October 1, 2004)*
- *DOT Information Security Program (September 25, 2003)*
- *DOT Information Security Program (September 27, 2002)*
- *DOT Information Security Program (September 7, 2001)*
- *Security and Controls Over the Federal Railroad Systems Network*
- *Security and Controls Over the Remote Maintenance and Management System, FAA*
- *Security and Controls Over Technical Center Computer Systems, FAA*
- *Security and Controls Over En Route Center Computer Systems, FAA*
- *DOT's Implementation of the Federal Implementation of the Federal Information Security Management Act*
- *Quality Control Review of the Report on Controls Over the Delphi Financial Management System, DOT*
- *Office of the Chief Information Officer's Budget, DOT*
- *Consolidated DOT Financial Statements for Fiscal Years 2004 and 2003*

9. Ensuring That Reforms Are Implemented in the Maritime Administration's Title XI Loan Guarantee Program

As of June 30, 2005, the Maritime Administration's (MARAD) consolidated Title XI loan guarantee program portfolio was valued at $3.2 billion, with another $618 million in pending loan guarantee applications. The loan guarantees are designed to assist private companies in obtaining financing for the construction of ships or the modernization of U.S. shipyards—with the Government holding a mortgage on the equipment or facilities financed.

Over 25 percent ($800 million) of the portfolio remains on "Credit Watch," which means it is at an elevated risk of default and is being monitored more extensively by MARAD. However, the number of companies considered at the greatest risk has been reduced and reductions have also been experienced in the total exposure and number of companies on the Credit Watch list since the issuance of our last audit report on September 28, 2004 (see Figure 9-1).

Figure 9-1. Title XI "Credit Watch" Portfolio Breakdown

September 30, 2004 *$3.5 Billion Total Portfolio*	June 30, 2005 *$3.2 Billion Total Portfolio*
21 Credit Watch Companies	*20 Credit Watch Companies*
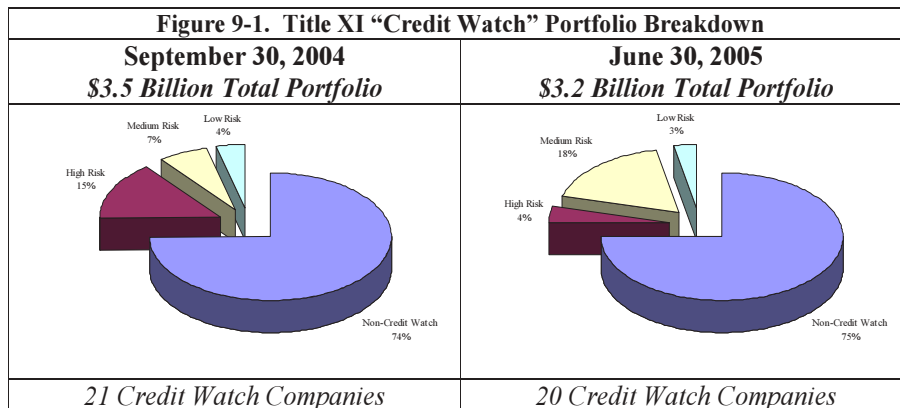
There is a natural tension that exists between the dual missions of the Title XI program. On the one hand, MARAD is charged with supporting the domestic shipbuilding industry. On the other hand, MARAD is responsible for protecting the taxpayers' dollars. However, the reforms that we have recommended, such as timely financial monitoring and tracking of the portfolio and seeking compensating measures to address the increased risk associated with any waivers or modifications, are not inconsistent with the dual missions of the Agency but are fundamental to proper management and oversight of any credit program. Nonetheless, MARAD has made progress in implementing the new policies and procedures that we have recommended to provide better oversight of the program.

Given the amount of funds at risk, however, it is essential that MARAD continue to be vigilant and closely manage and monitor the loan guarantee portfolio by:

- Completing the development of its computerized Title XI loan guarantee tracking system and
- Fully enforcing the reserve requirements established to mitigate the risks of noncompliant loans and pursuing remedies to cure any outstanding defaults.

Over the past 2½ years, we have issued two audit reports on the Title XI Loan Guarantee Program. Our March 2003 report responded to a request from Congress following several large loan defaults that had occurred in the previous 5 years. Those loan defaults resulted in payouts of approximately $490 million. One company alone, American Classic Voyages Co., accounted for $330 million of that amount. Our audit identified a number of areas where MARAD could improve its Title XI program practices, limit the risk of default, and prevent future losses to the Federal Government.

Our September 2004 report was a follow-up to the 2003 audit and was initiated as a result of the Emergency Wartime Supplemental Appropriation bill that Congress passed on April 16, 2003.[6] The bill provided $25 million for the costs of new Title XI loan guarantees that were to remain available until September 30, 2005. However, Congress prohibited MARAD from obligating or expending those funds "…until the Department of Transportation Inspector General certifies to the House and Senate Committees on Appropriations that the recommendations of report CR-2003-031[7] have been implemented to his satisfaction."

During our follow-up audit, we found that MARAD had developed policies and procedures that addressed each of the recommendations from our March 2003 audit report. However, in verifying the development of these policies and procedures, we found additional issues that needed to be addressed to limit the risk of default and reduce future losses of Government funds.

Our certification of the program in the follow-up audit report was contingent upon an action plan created by MARAD with steps and milestones to address the additional recommendations. In accordance with its action plan, MARAD must complete the following tasks to be better positioned to protect Federal Funds.

Completing the Development of the Title XI Loan Guarantee Tracking System
Until MARAD is able to fully implement a computerized tracking system for its portfolio, it will be unable to efficiently realize its goal. MARAD's rudimentary

---

[6] "Making Emergency Wartime Supplemental Appropriations for the Fiscal Year 2003," Public Law 108-11.
[7] OIG Report Number CR-2003-031, "Title XI Loan Guarantee Program," March 27, 2003.

financial monitoring system is inadequate to effectively manage its $3.2 billion portfolio. Therefore, developing a computerized database system is essential for MARAD to efficiently and promptly assess the financial condition of the companies in its portfolio and to track trends in these companies' finances and operations.

Pursuant to our recommendation, MARAD obtained congressional approval to use up to $2 million of the $25 million appropriated in the April 2003 Emergency Wartime Supplemental Appropriation to develop a comprehensive computer-based financial monitoring system. The plan to develop, acquire, and implement a new monitoring system is on track, and the "alternative analysis" phase is nearing completion. This involves an investigation into whether any pre-existing tools can be "piggybacked" to reduce the ultimate cost of the system. MARAD expects to complete this phase of the process by the end of calendar year 2005. MARAD will be implementing the system during calendar year 2006 with full implementation anticipated by the end of 2006.

Enforcing the Requirements Established To Mitigate Risks of Noncompliant Loans and Pursuing Remedies To Cure Defaults

MARAD was not sufficiently enforcing the reserve requirements established to mitigate the risks of noncompliant loans. The Title XI Reserve Fund and Financial Agreement, a key instrument in the Title XI closing documentation, establishes financial tests and covenants that the borrowers are required to meet. The Reserve Fund established in this agreement is a type of escrow account that borrowers pay into each year they do not meet certain financial tests. Paying into the Fund provides borrowers additional security over the life of the loan guarantee in case they run into financial difficulty.

In response to our recommendation, MARAD performed an accounting of each company's Reserve Fund requirements and continues to negotiate with those companies that remain in default. While this effort has been somewhat successful, several outstanding defaults remain, requiring MARAD's continued enforcement.

We continue to closely monitor the steps MARAD is taking in response to our recommendations. MARAD has worked to get satisfactory procedures in place, but the proof of its efforts will be in the follow through and implementation regarding specific loan guarantee applications.

For further information, the following reports and testimonies can be seen on the OIG web site at http://www.oig.dot.gov:

- *Title XI Loan Guarantee Program (March 27, 2003)*
- *Title XI Loan Guarantee Program (June 5, 2003)*
- *Title XI Loan Guarantee Program (September 28, 2004)*

EXHIBIT. COMPARISON OF FY 2006 AND FY 2005 TOP MANAGEMENT CHALLENGES

Items in FY 2006 Report	Items in FY 2005 Report
• Working With Other Agencies To Respond to Disasters and Address Transportation Security	None
• Getting the Most for Every Taxpayer Dollar Invested in Highway and Transit Projects	• Getting the Most Value From Investments in Highway and Transit Infrastructure Projects • Strengthening Financial Management To Protect Federal Funds • Holding the Line on Programs Conducive to Fraud
• Building on Recent Initiatives To Further Strengthen Surface Safety Programs	• Ensuring That Surface Safety Programs Lead to More Lives Saved • Holding the Line on Programs Conducive to Fraud
• Reforming Intercity Passenger Rail Service To Improve Performance	• Restructuring the Intercity Passenger Rail System To Match Fiscal Capacity
• Mitigating Flight Delays and Relieving Congestion—Actions Needed To Meet Demand	• Increasing Aviation Capacity and Mitigating Delays
• Reauthorizing Aviation Programs—Establishing Requirements and Controlling Costs Are Prerequisites for Examining FAA Financing Options	• Delivering Air Traffic Control Services and Fielding New Air Traffic Control Equipment While Controlling Costs in a Fixed Budget Environment • Strengthening Financial Management to Protect Federal Funds
• Aviation Safety—Developing Effective Oversight Programs for Air Carrier Operations, Repair Station Maintenance, and Operational Errors	• Ensuring Safety in a Changing Aviation Environment
• Improving Information Technology Investment and Computer Security	• Improving Cost Effectiveness of $2.7 Billion in Information Technology Investments and Continuing To Enhance Computer Security
• Ensuring That Reforms Are Implemented in the Maritime Administration's Title XI Loan Guarantee Program	• Management Attention Needed To Strengthen Oversight of Title XI Loan Guarantees

Exhibit. Comparison of FY 2006 and FY 2005 Top Management Challenges

Memorandum

**U.S. Department of
Transportation**
Office of the Secretary
of Transportation

Subject: **ACTION**: Departmental Comments on the OIG Draft Report – Top Management Challenges, Department of Transportation

Date: November 1, 2005

From: Phyllis Scheinberg
Assistant Secretary for Budget and Programs/Chief Financial Officer

Reply to
Attn. of:

To: Kenneth Mead
Inspector General

We appreciate the opportunity to review and comment on the Office of Inspector General's (OIG) Management Challenges Report for the Department of Transportation (DOT). We value the perspective offered by the OIG and your efforts to help management ensure DOT's programs are on track and our operations are effective, efficient and financially sound. We are gratified to note that DOT is taking meaningful action in response to each of the management challenges recognized in the draft report. We provide the following discussion, which offers some highlights of those actions, to be included in the final OIG Management Challenges report.   Separately we have offered detailed comments related to specific and technical issues in the draft report.

DOT Provided Expeditious, Effective Relief to Hurricane Victims

DOT quickly and effectively marshaled resources to aid the victims of the Hurricanes affecting our Nation's Gulf Coast this year. Fulfilling the Department's role to help move people and goods in emergency situations, DOT moved record numbers of individuals in the Nation's largest domestic airlift. On land, DOT oversaw the formation of an emergency bus fleet rivaling the size of the Greyhound fleet, in a matter of days. The Department continues its efforts to assist by helping arrange transportation services needed to move vital food, water and supplies necessary for relief and recovery efforts. All these actions were performed using existing, competitively bid, proven contracting mechanisms that were put in place in preparation for such a need. Recognizing the potential for abuse, DOT moved quickly to implement special enhanced oversight mechanisms, in line with Office of Management and Budget (OMB) directives, to further ensure that our critical emergency response activities were not targets for abuse.

Security and Continuity of Operations Are a Key Focus

DOT continues to build an unprecedented level of cooperation with the Department of Homeland Security (DHS). With the primary framework established by a Memorandum of

Appendix. OST Comments

2

Understanding (MOU) between DOT and the DHS, each of our operating administrations, as appropriate, are working to implement more specific, function-based agreements, or annexes to the MOU. The annexes will ensure each organization explicitly understands its security related responsibilities and how they will be fulfilled in coordination with the Transportation Security Administration and other DHS organizations. These specific annexes have been implemented in key areas, including aviation security, transit security, and hazardous materials and we continue to aggressively pursue final agreement on a few remaining matters. Once the agreements are implemented, we work closely with DHS to keep them up to date and effective. For example, when FAA identified an opportunity to enhance communications with TSA regarding hazardous materials left at airport gates, the annex was revised to incorporate more effective electronic information exchange mechanisms which are now being implemented.

Another key aspect of security for the Department is ensuring its continuity of operations (COOP) and its ability to support interagency disaster and security efforts. DOT's COOP planning has received extensive, detailed review by the Government Accountability Office (GAO), which enabled us to continue efforts to refine and improve the Department's capabilities. The recent Gulf Coast hurricanes reinforced DOT's understanding of the need for focusing not only Federal, but also regional, state, and field office continuity of operations so that regardless of the nature of the emergency, vital transportation services can continue.

Efforts in Place to Maintain and Enhance Federal Funds Stewardship

The Department expects and demands nothing less than full accountability over the use of precious taxpayer funds, and works hard to ensure that its programs overseeing expenditures are effective and efficient. For example, the Federal Transit Administration's New Starts program has been recognized by the GAO as "a model the Federal government could use for approving other transportation projects." Efforts are in progress to further enhance the Federal Highway Administration's capabilities for ensuring that funds are similarly well spent, consistent with the overall statutory framework for the Federal-aid highway program, which leaves considerable decision-making authority in the hands of the states. FHWA is more fully incorporating financial stewardship initiatives into its traditional focus on sound engineering and project management.

Continued Progress Improving Surface Transportation Safety

Over the last year, DOT saw continued progress in meeting and exceeding its surface transportation safety goals. The highway fatality rate dropped to the lowest level since record keeping began 30 years ago. Similarly, total rail-related accidents and fatalities also declined. Nonetheless, we recognize much work remains to continue progress and to bring accident and fatality rates even lower. For example, to reduce the number of highway-rail grade crossing accidents, FRA has developed measures to detect failures by railroads to provide immediate notification of certain serious incidents and has embarked on a strict enforcement policy for failure to report crossing accidents. The Federal Motor Carrier Safety

Appendix. OST Comments

3

Administration has also stepped up activity to improve motor carrier safety through education, inspection and enforcement. Further, the National Highway Traffic Safety Administration is using all means available by statute, to further increase highway safety by encouraging manufacturers to produce safer vehicles, reducing alcohol related crashes, and increasing safety belt use.

DOT is a Proponent of Amtrak Reform

DOT, by working with the Congress and through its membership on the Amtrak Board of Directors, has been a vocal proponent of effective Amtrak reform to increase management accountability and encourage response to market forces. Working with the Congress, the President submitted legislative proposals that would significantly change Amtrak's operational structure, create a system driven by sound economics, introduce carefully managed competition to provide higher quality rail services at reasonable prices, and establish a long-term partnership between the states and the Federal Government to support intercity passenger rail service. We continue our efforts with the Congress to bring about real and effective Amtrak reform. At another level, DOT, through its membership on the Amtrak Board of Directors serves as a proponent of strong and effective management oversight and works to reinvigorate the role of the Board in ensuring that Amtrak functions as effectively and efficiently as possible.

DOT Initiatives Address Flight Delays

DOT has worked aggressively to reduce flight delays by expanding infrastructure where possible and also implementing strong measures to better allocate existing capacity where expansion is not an option. In pursuing these initiatives, we seek to ensure efficient utilization of increasingly scarce aviation resources, provide for airline competition, and maximize passenger movement through the system in a safe and customer-oriented manner. Throughout DOT's efforts we have been careful to seek and accommodate the perspectives of system users. We continue to work with key stakeholders to explore new and innovative solutions, evaluate the impact of alternative actions, and identify the most practical and effective means available to ensure that our airspace is managed in a way that makes it as productive as possible, while maintaining the highest levels of aviation safety.

Aviation Reauthorization Offers an Opportunity for New Thinking in Aviation Funding

We agree with the OIG that aviation trust fund revenues are shrinking while the demands and costs to the system continue to increase. New approaches are needed to fund the aviation system. The Department is working aggressively with stakeholders to explore options, understand the implications of alternative solutions, and seek to identify a path that will keep this Nation's aviation system second to none. We also agree that the FAA must closely examine its own cost structure with the intention of identifying and implementing actions to reduce costs. Air Traffic Control Systems must be developed on time, within budget and

Appendix. OST Comments

4

meet or exceed performance expectations. FAA has been strengthening its capabilities to manage to these results, and progress is being achieved.

Aviation Safety Continues at Exceptionally Strong Levels

DOT, FAA, and the airline industry last year achieved the lowest airline fatal accident rate in the history of aviation. Further, for the third consecutive year, runway incursions are down. FAA's aviation safety inspectors are using risk-based systems to guide their activities. Risk management techniques are also being extended to aviation repair station oversight, which will be using revised inspector guidance, new training, and improved data for an enhanced comprehensive repair station surveillance program.

Actions Continue to Address IT Security, Investment and Enterprise Architecture

DOT continues to strengthen its IT infrastructure by addressing computer security issues, improving computer acquisition oversight, and updating its enterprise architecture. DOT has certified and accredited 96 percent of its information technology (IT) systems. This provides management with an acceptable level of assurance that all systems either meet a minimum level of baseline requirements or have plans of action and milestones to mitigate any remaining risks. The Department implemented a continuous vulnerability scanning program as part of its compliance review process. DOT has also improved its oversight of IT investment with participation in the capital planning process expanded across all OAs. During the year, DOT released an updated iteration of our modernization blueprint including as-is and to-be enterprise architecture for the DOT common IT infrastructure in a framework aligned with OMB guidance. Finally, the Department continues working with OMB on a number of governmentwide endeavors, significantly improving its exhibit 300s and recently completing a plan that will reduce the risk associated with FAA Air Traffic Control Modernization, with the ultimate intention of gaining agreement to have GAO remove it from its high risk list.

Title XI Loan Guarantee Program is Functioning Effectively

With oversight from OIG and DOT's Credit Council, MARAD has worked to refine the Title XI loan guarantee program. MARAD now systematically monitors its loan portfolio and the creditworthiness of the companies making use of program funding. The number of companies now considered at the greatest risk have been reduced and creditworthiness overall has improved. MARAD has achieved progress implementing new policies and procedures to provide better oversight of the program and has not experienced any defaults during the last three fiscal years. This year, MARAD will implement a computer based system that will further facilitate its monitoring efforts.

In conclusion, many of these categories, such as aviation and surface transportation safety will likely remain management challenges for DOT in future years as demands on the transportation system and traffic continue to increase; there will always be a need for

Appendix. OST Comments

5

vigilance in regard to transportation safety. Similarly, there will always been a need for careful oversight in the stewardship of funds and transportation security activities and programs. In other, more specific challenges, such as the MARAD's Title XI program, we believe considerable progress has been achieved and will continue to be made with the expectation that these issues will not appear in future OIG reports on DOT's management challenges.

Appendix. OST Comments

ACKNOWLEDGMENTS