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Top Management Challenges Facing the Department of Transportation

Statement of
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Chairman Olver, Ranking Member Latham, and Members of the Subcommittee:

We appreciate the opportunity to testify today on the top management challenges facing the Department of Transportation (DOT). As you know, we report annually on these challenges as required by Congress and the Office of Management and Budget (OMB). Our latest report in November 2008[1] addressed both short- and long-term actions that we identified and that DOT should take to maximize investments in transportation and ensure transportation safety.

The U.S. transportation system is vital to the Nation's economy and the quality of life for all Americans. Each year, DOT spends about $70 billion on a wide range of efforts to enhance mobility and safety. The American Recovery and Reinvestment Act[2] infuses an unprecedented additional $48 billion for Department programs, presenting new challenges throughout the Government and particularly for DOT.

While such a rapid infusion of new funds is needed to create or preserve jobs and improve the U.S. transportation system, it will at the same time create significant oversight issues for DOT and all of the Operating Administrations receiving stimulus funds. These include the Federal Highway Administration (FHWA), the Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), and the Federal Aviation Administration (FAA). It is therefore critical that DOT reassess its business practices and investment management portfolios to address and mitigate the inherent risks associated with the substantial increase in grants and procurement actions that will result from the stimulus program.

DOT has proactively responded to the stimulus program, particularly by creating the Department Transportation Investment Generating Economic Recovery (TIGER) team to coordinate DOT-wide efforts. This past year, DOT also made progress on a number of important fronts. These include commissioning several new runways to improve capacity within the National Airspace System; committing to data-driven, risk-based oversight of bridge safety; and receiving a "clean" opinion on DOT's financial statements. However, more remains to be done in the areas of maintaining the safety of the traveling public, relieving congestion, and establishing long-term financing mechanisms for aviation and surface transportation programs.

Strong leadership will be a prerequisite for meeting the numerous issues facing the Department, and Secretary LaHood has expressed his commitment to ensure that stimulus funds are effectively used and protected from fraud, waste, and abuse. Our office stands ready to do its part to further ensure accountability, efficiency, and transparency over DOT's portion of the massive economic recovery program.

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[1] OIG Report Number PT-2009-005, "DOT's FY 2009 Top Management Challenges," November 17, 2008. OIG reports and testimonies are available on our website: www.oig.dot.gov.

[2] Pub. L. No. 111-5 (2009).

While responding to the economic stimulus is critical, we cannot overlook the fact that transportation safety is DOT's primary mission. My comments today will summarize the Department's top management challenges along three cross-cutting areas: (1) ensuring accountability, effectiveness, and efficiency in Federal funding for transportation projects; (2) improving oversight of aviation and surface safety; and (3) ensuring the solvency of transportation trust funds, thereby improving mobility and reducing congestion. I will also address DOT's actions to date in addressing some of these challenges and conclude with what remains to be done.

ENSURING ACCOUNTABILITY, EFFECTIVENESS, AND EFFICIENCY IN FEDERAL FUNDING FOR TRANSPORTATION PROJECTS

The Department is taking steps to promote accountability and transparency in transportation funding associated with the recovery program. In addition to the creation of a DOT-wide TIGER team to coordinate the Department's role and ensure accountability, Operating Administration officials told us they are (1) modifying financial management systems to track recovery funding and report on results, including the number of jobs created; (2) working with potential grantees so they can quickly submit proposals that will meet Federal requirements; (3) considering the redeployment of current agency employees or the use of "retired annuitants" to meet the increased workload; and (4) conducting outreach to grantees on procurement and other issues through the use of frequently-asked-questions on recovery internet sites and a planned "help desk" e-mail site.

We have been working with DOT officials to support their efforts and have assembled a cross-cutting team of auditors, analysts, investigators, and attorneys to review each Operating Administration's management of recovery program funds. Specifically, we are examining potential risks related to program structure, Operating Administrations' oversight process and staffing, state and local grantees' management and technical capabilities, cost and schedule estimates, contract management and oversight, and fraud deterrence efforts. We began our work in January and plan to issue the first in a series of reports by the end of this month. Based on our initial assessment and our past and ongoing work, we see four immediate, broad areas of potential vulnerability that DOT will need to address to ensure accountability, effectiveness, and efficiency of Federal funds.

- Building an effective acquisition workforce to achieve the goals of the economic recovery program;
- Establishing effective contracting mechanisms and financial practices to make sound decisions under tight timeframes and avoid wasteful spending;

- Proactively reforming mechanisms to combat fraud, waste, and abuse in an environment of significantly increased funding to state and local levels; and
- Developing comprehensive oversight of highway and transit investments.

Acquisition Workforce

DOT must ensure that it has sufficient personnel with relevant expertise to meet the increased workload and accelerated timeframes associated with overseeing stimulus spending. A sufficiently trained acquisition workforce is key to holding grantees accountable for contract actions and realistic cost and schedule estimates and ensuring that state or local recipients can effectively manage their projects and the risks associated with the recovery program.

Our work has shown that DOT faces substantial challenges in developing and maintaining a competent acquisition workforce to support its mission. In September 2007, the Department completed a strategic workforce plan, as required by OMB. However, the plan only addressed part of DOT's acquisition workforce—contract officers and contract specialists. Although the strategic plan included a skills assessment of these positions and a general discussion on retention and hiring strategies, it did not include essential workforce statistics such as retirement and attrition information, accession planning, or long- and short-term needs.

Additionally, DOT continues to face challenges in developing a comprehensive strategic plan for its acquisition workforce, other than for contracting positions. DOT officials told us they are having difficulty determining the total number of other key acquisition workforce positions, such as contracting officer technical representatives and program managers. This is because DOT lacks key information on these positions, including workforce size, knowledge and skills requirements, and attrition and retirement rates. Without these critical data, DOT is unable to identify employment trends and assess the current condition of the workforce to determine the ideal composition, skill mix, and talent for its future.

Last month, DOT officials compiled a succession plan for the acquisition workforce. The plan includes a competency assessment for the entire acquisition workforce, some retirement information, hiring plans, and training strategies for contracting positions. The Operating Administrations are now designing strategies to address those weaknesses identified in the competency assessment.

Contracting Mechanisms and Financial Practices

To manage its portion of the economic recovery program, DOT and its grantees will need to ensure that effective contracting and financial practices are in place to make sound decisions under the tight timeframes and quick roll-out of the program. Actions needed include: (1) specifying contract requirements early, maximizing competition, and using appropriate contract types; (2) preventing unallowable costs,

improper payments, and excessive overhead charges during contract execution; and (3) using financial management systems to track recovery spending and publicly report on results.

The magnitude and timing of the economic recovery program could exacerbate contract award problems we have previously identified, such as use of inappropriate contract types, inadequate competition, and failure to ensure contract prices are fair and reasonable. For example, audits of DOT and state contracts used to respond to the Hurricane Katrina emergency found instances in which DOT money was spent inefficiently because grantees used riskier contracting methods in spending Federal funds, such as sole-sourced and lump-sum contracts, resulting in significantly higher costs. In one instance, a state Department of Transportation awarded two sole-sourced contracts without assurance of fair and reasonable prices. This resulted in the state paying about $1.7 million more than necessary for bridge repairs.

DOT must also have financial practices in place to ensure that $27.5 billion in stimulus funding for FHWA is used effectively and in compliance with program requirements. Our work on FHWA's oversight of funding for structurally deficient bridges has highlighted this issue. For example, we reported that FHWA is unable to determine how much funding that was provided to states is actually spent on structurally deficient bridges. This is because its financial management system does not differentiate between spending on structurally deficient bridges and other bridge-related expenditures. It is imperative that FHWA better measure how states are spending Federal bridge funds so it can assess the impact of these dollars on bridge conditions and help Congress consider what changes, if any, it wants to make to the Highway Bridge Program.

Combating Fraud, Waste, and Abuse

DOT will need to tailor its counter-fraud efforts to adapt to the increase in capital funding associated with the recovery program and the expected surge in construction activity throughout the country. To do so, DOT must strengthen outreach efforts to ensure that grantees and their contractors understand how to recognize, prevent, and report potential fraud to the appropriate authorities (a list of common fraud schemes seen by our office is included at exhibit A).

Last year, we reported that DOT needed to develop and maintain a robust ethics program to promote integrity across the myriad of transportation programs. To its credit, in June 2008, the Department instituted an enhanced annual ethics training program for all DOT acquisition and grants management personnel. This year presents a two-fold ethics challenge for DOT and the Operating Administrations. First, they must follow through to fully implement this important annual training requirement. Second, they will need to increase outreach efforts to ensure that recipients of Federal funds, both grantees and their contractors, have meaningful ethics programs and sound internal controls to prevent and detect fraud.

DOT will also need to take timely actions to suspend and debar individuals or firms who have defrauded the Department. Federal regulations prohibit firms and individuals without satisfactory records of integrity and business ethics from receiving Federal contracts or assistance agreements.

DOT revised its policy in June 2005, in part, to improve timely decision making on suspension and debarment actions. However, our ongoing audit work shows that the Department needs to improve the policy—and its implementation—as Operating Administrations still do not consistently take suspension and debarment actions in a timely manner.

Last month, the Government Accountability Office testified that they confirmed allegations that businesses and individuals suspended or debarred for egregious offenses were continuing to receive Federal contracts. Our work did not find any DOT contracts or assistance agreements awarded to suspended or debarred firms or individuals. However, the suspension and debarment program's policy and implementation deficiencies leave DOT and other Government agencies vulnerable to doing business with fraudulent or unethical firms or individuals. The program also does not ensure such parties will be excluded from gaining future contracts and assistance agreements. This risk will increase significantly under the recovery program, which will include thousands of new contracts and contractors.

Sustained Oversight of Highway and Transit Investments

DOT must ensure that FHWA continues to provide strong stewardship of major highway projects to maximize the return on Federal highway funding provided to states (over $41 billion in fiscal year [FY] 2008). To its credit, FHWA has enhanced its oversight of major projects and states' management practices in recent years, but sustained focus is needed to ensure that these efforts attain their goals. In the past, we have reported on major oversight deficiencies on highway projects, such as Boston's Central Artery/Tunnel Project.

To strengthen oversight of highway funds, Congress made several important changes in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users.[3] One major change involved reducing the threshold of major projects from $1 billion to $500 million. As a result, FHWA must provide enhanced oversight to projects now defined as major projects, including a review of the required finance plan. A finance plan is an important oversight tool that provides managers and the public with information on how much a project is expected to cost, when it will be completed, whether adequate funding is committed, and whether there are risks to completing the project on time and within budget.

[3] SAFETEA-LU, Pub. L. No. 109-59 (2005). This law expires September 30, 2009.

Another major change in the legislation involved adding a requirement for major highway projects to have project management plans as well as finance plans. Project management plans serve as a "roadmap" to help the project team deliver a project in an efficient and effective manner by clearly defining roles, responsibilities, processes, and activities. FHWA needs to strengthen the use of these tools and remain vigilant in its oversight of major highway projects.

Likewise, FTA must ensure that the capital cost estimate for each proposed transit project is credible and complete. This is a key element for determining whether a project is cost effective. To its credit, FTA is now requiring its project management oversight contractors to review cost estimates earlier in the New Starts process. FTA has also implemented a program establishing a consistent format for estimating, reporting, and managing capital costs on New Starts projects. However, FTA must carefully evaluate whether each New Starts grantee has demonstrated stable and dependable financing sources to construct, maintain, and operate a proposed transit system or extension as well as the existing transit system.[4]

Finally, FTA must provide strong oversight to keep major transit projects on schedule and within budget during construction by exercising sound project and financial management. FTA must focus on the Lower Manhattan Recovery Projects in the coming year, which are facing significant challenges, including ensuring that project sponsors commit sufficient funding sources to complete the projects. The Permanent Port Authority-Trans Hudson Terminal Project alone has had cost estimate increases of up to $1 billion. These high-priority projects (which are separate from the New Starts program) constitute a $4.55 billion Federal investment to reconstruct and enhance New York City's transportation infrastructure after the September 11, 2001, terrorist attacks.

IMPROVING OVERSIGHT OF AVIATION AND SURFACE SAFETY

Improving transportation safety is DOT's primary goal. DOT has taken actions this past year to improve safety on a number of fronts, including launching an industry/government partnership to improve runway safety and committing to data-driven, risk-based oversight of bridge safety. However, we identified numerous and significant vulnerabilities in aviation and surface transportation programs. To enhance the margin of safety in the Nation's transportation programs, our work has shown that DOT needs to focus on three key areas:

[4] Local financial commitment is a major criterion that FTA uses to determine which New Starts projects are ultimately approved for a full funding grant agreement and therefore able to begin construction.

- Maintaining public confidence in FAA's ability to oversee a dynamic aviation industry,
- Addressing obsolescence in the Nation's aging surface infrastructure and enhancing surface safety programs, and
- Protecting against cyber security risks.

Maintaining Public Confidence in FAA's Ability To Oversee a Dynamic Aviation Industry

The past several years have been one of the safest periods in history for the aviation industry. This is largely due to the dedicated efforts of the professionals within FAA and throughout the industry. In January, we saw a dramatic example of aviation professionalism when U.S. Airways flight 1549 made an emergency landing in the Hudson River, and, miraculously, all 155 passengers and crew survived due to the skillful efforts of the pilot and crew. However, the tragic accident last month of Continental Connection flight 3407, which resulted in 50 fatalities, underscores the need for constant vigilance over aviation safety on the part of all stakeholders. Additionally, airline consolidation and downsizing continue to drastically change the industry, and widely publicized lapses in FAA oversight in 2008 emphasize the need for FAA to continually adapt its oversight of air carriers, external repair facilities, and runways.

Oversight of Air Carrier Operations

Last April, we testified[5] that an FAA safety inspector had an overly collaborative relationship with Southwest Airlines. The inspector violated FAA safety directives by permitting the air carrier to operate 46 planes without required inspections for fuselage cracks. Our work at Southwest and other carriers has also found weaknesses in FAA's national program for risk-based oversight, the Air Transportation Oversight System (ATOS). At Southwest, multiple, missed ATOS inspections allowed safety directive compliance issues in Southwest's maintenance program to go undetected for several years.

Our current review of ATOS has disclosed that this problem was not limited to Southwest—FAA oversight offices for seven other major air carriers also missed ATOS inspections. Over the past 6 years, we have identified system-wide problems with ATOS, such as inconsistent inspection methods across FAA field offices or incomplete inspections. We have recommended, among other things, that FAA strengthen its national oversight and accountability to ensure consistent and timely ATOS inspections.

[5] OIG Testimony Number CC-2008-046, "Actions Needed To Strengthen FAA's Safety Oversight and Use of Partnership Programs," April 3, 2008.

Our report on Southwest recommended additional actions to help maintain public confidence in FAA's oversight of air carriers. These included protecting whistleblowers, improving risk-based systems for targeting inspector resources, establishing mechanisms at the national level to provide quality assurance and independent assessments of field office inspection efforts, and creating an independent organization to investigate safety-related concerns raised by inspectors. In response, FAA took a series of actions, including creating a national review team to conduct quality assurance reviews and implementing a process to monitor field office ATOS inspections. We continue to monitor the progress and effectiveness of FAA's actions and will be reporting on these issues later this year.

External Repair Facilities

FAA continues to face challenges in identifying where critical aircraft maintenance[6] is performed. A key issue is that FAA's risk-based oversight system does not include information on critical repairs performed by non-certificated repair facilities. Currently, FAA does not require that air carriers report *all* repair stations performing repairs to critical components or that FAA inspectors validate voluntarily submitted information. FAA needs to advance risk-based oversight of outsourced maintenance providers (both foreign and domestic) by developing and implementing a system for determining how much and where aircraft maintenance is performed.

Runway Safety

Runway incidents continue to be a substantial threat to safety. A specific concern is runway incursions (any incident involving an unauthorized aircraft, vehicle, or person on a runway). Since 2003, the number of runway incursions has begun climbing again, reaching a high of 370 in FY 2007, a 13-percent increase over FY 2004 (see figure 1-1 below). Under FAA's new definition for categorizing runway incursions (effective October 2007),[7] the number of runway incursions continues to rise even more dramatically, with a 38-percent increase since FY 2004 (see figure 1-2 below). During FY 2008, 25 serious runway incursions occurred (where a collision was barely avoided); this equates to about 1 serious runway incursion every 15 days.

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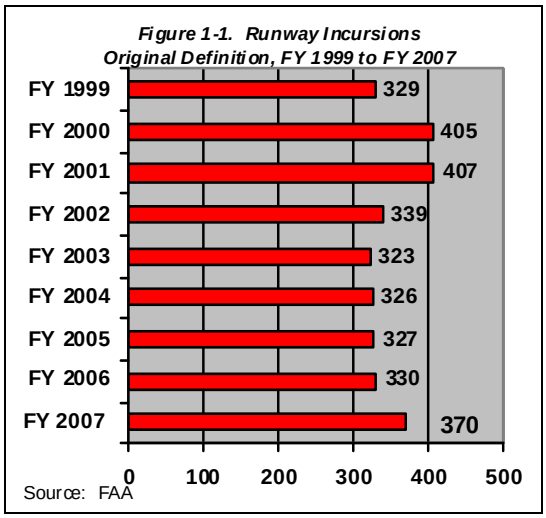
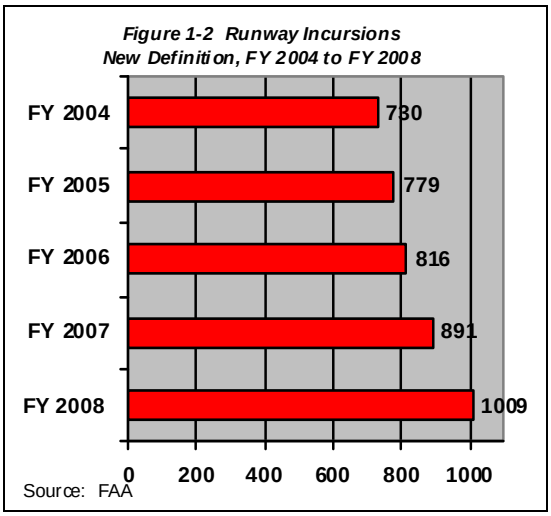
[6] "Critical maintenance" describes mandatory maintenance activities that, due to their importance to the overall airworthiness of the aircraft, must be independently inspected by a specially trained inspector after the work is complete.

[7] Effective October 1, 2007, FAA began categorizing runway incursions using the International Civil Aviation Organization (ICAO) definition. The new definition of runway incursions includes incidents that were previously defined by FAA as "surface incidents" (where a potential conflict did not exist).





Many see new technology as the key to runway safety solutions. However, our reviews of three major FAA technologies for improving runway safety disclosed serious concerns about what can be effectively deployed within the next several years. Important steps to meeting this challenge in the near term include implementing airport-specific infrastructure and procedural changes and reinvigorating existing FAA national programs for improving runway safety.

FAA has taken steps to renew its national focus on runway safety, including hiring a new Runway Safety Director, initiating a government/industry "Call to Action Plan," and issuing a National Runway Safety Plan. It is vital that FAA continue this momentum. While FAA reported no serious runway incursions during the first quarter of FY 2009 (a significant metric), the total number of runway incursions has remained relatively constant (224 in the first quarter of FY 2009 versus 226 in first quarter of FY 2008).

Addressing Obsolescence in the Nation's Aging Surface Infrastructure and Enhancing Surface Safety Programs

Fatal infrastructure failures in 2006 and 2007 have focused attention on obsolescence in the Nation's aging surface transportation infrastructure and the need to strengthen oversight. DOT must work with states and localities to ensure the safety of our bridges and tunnels and restore or replace those that present the highest risk of catastrophic failure. This is a daunting task because the average bridge in the United States is 43 years old, and almost one in four bridges is either structurally deficient and in need of repair or functionally obsolete and too narrow for today's traffic volumes.[8] Likewise, DOT must address aging transit systems that are increasingly becoming obsolete.

[8] American Association of State Highway and Transportation Officials, "Bridging the Gap: Restoring and Rebuilding the Nation's Bridges," July 28, 2008.

DOT must also continue to focus on programs for improving surface safety. Motor vehicle traffic crashes cause more than 40,000 deaths and 2 million injuries annually in the United States. Department safety improvement programs, such as Federal motor vehicle safety standards for new cars, have contributed to major improvements in surface safety. Specifically, the fatality rate in 2007 reached a historic low of 1.37 deaths per 100 million vehicle miles traveled, and the preliminary estimate of injuries in 2007 was, for the first time, below 2.5 million. However, to meet the Department's goal, the fatality rate will need to drop to 1.0 by 2011. This presents a substantial challenge since DOT does not directly control some of the most effective tools, such as states' enactment and enforcement of laws for seat belt and helmet usage, alcohol-impaired driving, vehicle inspection, and speed limits.

Bridge and Tunnel Safety

Recent fatal infrastructure failures underscore the significance of bridge and tunnel safety as major challenges. In 2006, ceiling panels collapsed in a tunnel in Boston's Central Artery/Tunnel Project, killing a motorist. In 2007, the catastrophic failure of the I-35W Bridge in Minneapolis killed 13 people. These tragic incidents brought renewed national attention to the safety of our bridges and tunnels. To strengthen bridge and tunnel safety oversight, FHWA needs to take action in two key areas:

- First, FHWA must implement a data-driven, risk-based approach for overseeing the safety of the Nation's bridges. FHWA has concurred with our recommendation to develop a comprehensive plan to routinely conduct systematic, data-driven analysis to identify nationwide bridge safety risks, prioritize them, and target those higher priority risks for remediation in coordination with states. FHWA committed to developing the plan by the end of this month. The key now is following through to complete the plan and execute its new processes and priorities.

- Second, FHWA needs to establish a national tunnel inspection program. While the National Bridge Inspection Program has existed for decades, FHWA currently lacks a highway tunnel inspection program. FHWA should implement a system to hold states accountable for inspecting and reporting on tunnel conditions. FHWA officials recently issued an advance notice of proposed rulemaking in November 2008 to seek input on the development of national tunnel inspection standards. FHWA must ensure that finalizing the rulemaking remains a top priority.

Aging Transit Systems

The Nation's largest transit systems are becoming increasingly obsolete. Many of our transit systems are concentrated in large, urban areas and are very old and in need of substantial upgrades or repairs. FTA must work with state and local transit agencies to identify ways to repair, rehabilitate, or replace their infrastructure to meet current demand, keep up with projected ridership, and prevent any catastrophic failures caused by aging or obsolete infrastructure.

Unsafe Motor Carriers

The Federal Motor Carrier Safety Administration (FMCSA) is the lead agency for establishing and enforcing motor carrier and commercial motor vehicle driver safety requirements and standards. FMCSA needs to take stringent enforcement actions against carriers that repeatedly violate safety regulations. Specifically, FMCSA must renew efforts to strengthen its repeat-violator policy in a timely manner, as nearly 2 years have passed since its original commitment to do so.

Enforcement actions alone, however, will not ensure compliance with Federal safety regulations because some individuals avoid sanctions by creating new motor carrier identities. In August 2008, FMCSA started a vetting process to review new carrier applicants to ensure the applicants are not trying to avoid enforcement sanctions. We are reviewing this vetting process as part of our ongoing audit of FMCSA's oversight of motor coach safety.

The Commercial Driver's License Program

The Commercial Driver's License (CDL) Program's purpose is to improve highway safety by ensuring that drivers of large trucks and buses are qualified to operate those vehicles and to remove unsafe and unqualified drivers from the highways. FMCSA must enhance the CDL program by rigorously enforcing existing standards in cooperation with state and local law enforcement agencies. In the past 5 years, our joint investigations of fraudulent schemes for obtaining CDLs through corrupt means, such as bribery, have led to the prosecution of CDL fraud schemes in 15 states.

FMCSA must also strengthen the CDL program by adopting and implementing new standards. FMCSA has proposed new, stronger CDL standards that will reduce the possibility that unqualified individuals can obtain CDLs. FMCSA will have to work with states to ensure sustained cooperation in implementing these new standards because some changes will need additional state resources.

Protecting Against Cyber Security Risks

Another important oversight challenge we identified for DOT is protecting its networks and computers from increased cyber security risks—a problem facing all Government agencies. DOT has made progress in addressing its overall statutory responsibility to protect personally identifiable information (PII). For example, in recent years, DOT has designated its Chief Information Officer as Chief Privacy Officer; issued a privacy benchmark report to Congress; and established procedures for assessing the need for PII collection, use, and security. However, last month's cyber attack—in which hackers penetrated DOT networks and captured PII information on 48,000 current and former FAA employees—demonstrates that more remains to be done to fully secure PII on DOT systems.

ENSURING THE SOLVENCY OF TRANSPORTATION TRUST FUNDS, THEREBY IMPROVING MOBILITY AND REDUCING CONGESTION

We identified significant challenges for DOT regarding funding for Federal highway, transit, and aviation programs. Ensuring solvency in the transportation trust funds is critical to DOT's ability to carry out its mission of enhancing mobility and reducing congestion. Congestion-related problems have impacted all modes of transportation; DOT estimates that congestion costs the Nation almost $200 billion per year.

Flight delays and cancellations continued to be a concern in 2008, and the Nation's highways continue to experience record levels of congestion. In the near term, DOT must take steps to prevent recurrence of this summer's Highway Trust Fund (HTF) cash flow crisis and ensure that new projects that will maximize the use of airspace are properly managed. Specific challenges in these areas include:

- Maintaining the solvency of the Highway and Aviation Trust Funds,
- Operating and maintaining the National Airspace System while developing and transitioning to the next generation air transportation system (NextGen), and
- Reducing aviation and surface congestion.

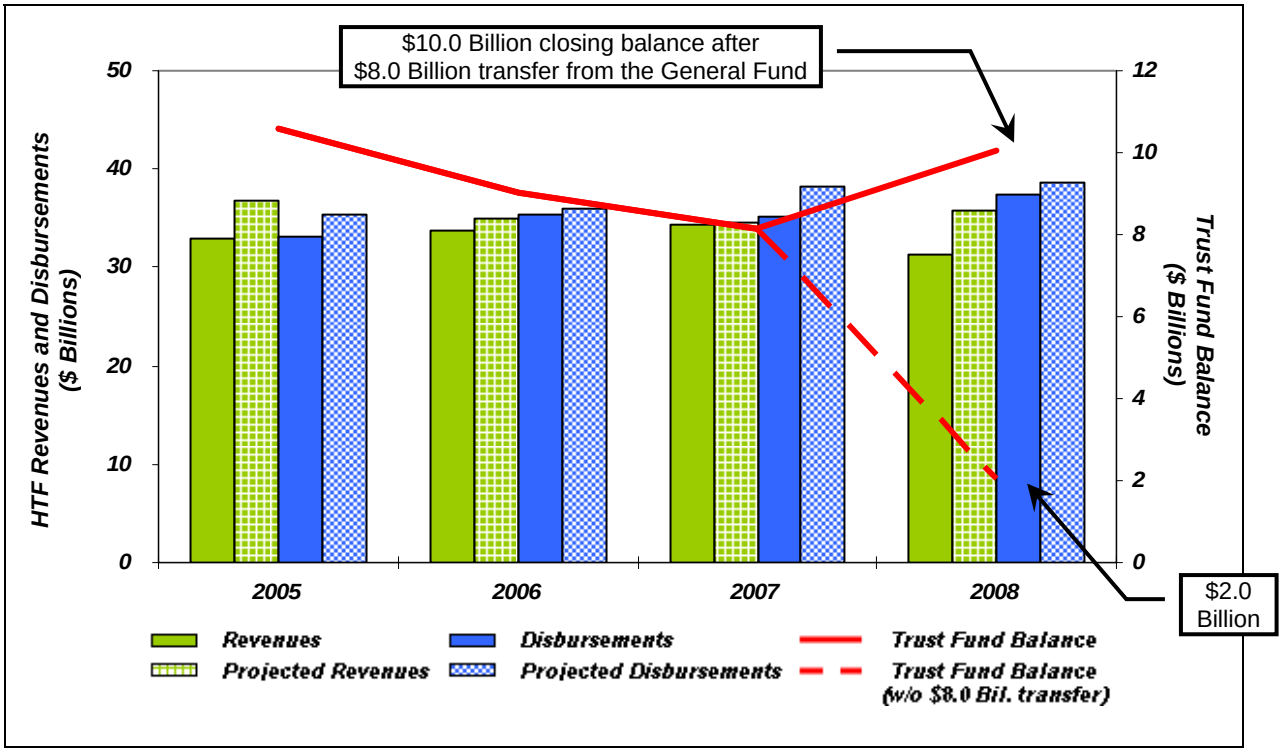
Maintaining the Solvency of the Highway and Aviation Trust Funds

The Highway Trust Fund

DOT recognized the urgency of a cash flow crisis in the HTF last August and requested Congress to approve legislation that would transfer $8 billion from the General Fund to the HTF. While DOT successfully managed the HTF cash flow to minimize negative impacts on state departments of transportation, pending the transfer of the $8 billion from the General Fund, it is uncertain how long this infusion of funds will last.

DOT's ability to pay bills submitted by states for authorized costs incurred depends on the amount of funds in the HTF. That balance largely depends on Federal motor fuel excise tax receipts, which have been declining steadily in response to volatile fuel prices and a deteriorating economy. Motorists are cutting back on their driving, purchasing more fuel-efficient vehicles, and buying less gasoline, thereby generating fewer receipts for the HTF. As a result, the cash balance in the Highway Account of the HTF declined from $10.0 billion at the end of FY 2008 to $5.7 billion at the end of January 2009 (see figure 2 below).

Figure 2. Highway Trust Fund – Highway Account Balance (FY 2005 – 2008)



Source: FHWA for actual Trust Fund revenues and disbursements and the President's Budget for projected revenues and disbursements.

Compounding the Department's near-term challenge is the fact that it does not directly control the rate at which funds are drawn from the HTF. Instead, the pace of state highway construction is driven by when states submit bills to DOT to be paid from the HTF. While DOT has taken steps to better manage the cash in the HTF, the potential exists for a recurrence of this summer's HTF insolvency crisis before a long-term solution can be reached. Therefore, DOT needs to maintain its focus on the HTF cash flow.

Given that the current highway authorization expires at the end of FY 2009, DOT needs a framework to guide surface transportation decisions and investments, the level of highway funding needed, and its expenditure plans.

Surface transportation funding levels are generally determined by projected receipts into the HTF. The projections of HTF receipts for the upcoming surface reauthorization period are unlikely to support current funding levels, let alone increased funding levels. The growth in highway construction and maintenance costs, which we reported on last year, and the growing demand for higher levels of surface infrastructure investment raise significant questions regarding the adequacy of a funding structure that heavily relies on the 18.4 cents per gallon Federal gasoline tax.

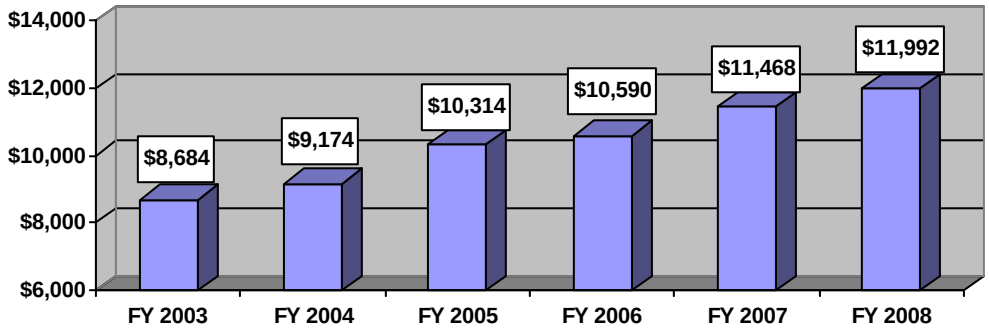
DOT needs to work with the various stakeholders and Congress on what an appropriate level of Federal surface infrastructure investment should be and how that investment should be financed. Alternative or supplemental funding mechanisms that might be considered include increasing the current fuel tax, imposing additional vehicle registration or sales taxes, new tolls, or customs duties. Each revenue source would have a significant impact on highway users and the economy, which DOT would need to consider carefully.

The Aviation Trust Fund

FAA is currently financed by two mechanisms: excise taxes deposited into the Airport and Airway Trust Fund and a General Fund contribution. Over the past 5 years, the Trust Fund has paid for approximately 81 percent of FAA's total budget with the remaining 19 percent paid out of the General Fund. However, since FAA submitted its reauthorization proposal in 2007, the aviation environment has changed significantly. The current economic downturn following record-high fuel prices has caused air carriers to dramatically scale back operations. This trend has resulted in declining revenues for the Airport and Airway Trust Fund, the main funding mechanism for FAA programs.

According to Treasury Department data, Trust Fund revenues declined by more than 11 percent during the first quarter of FY 2009. Over the past 5 years, Trust Fund tax revenues have steadily increased (see figure 3). However, given the drop in aviation traffic and the resulting decline in passenger taxes, it is almost certain that future Trust Fund tax revenues will drop significantly during the balance of FY 2009 and in FY 2010 as well.

Figure 3. Airport and Airway Trust Fund Tax Revenues FY 2003 to FY 2008 ($ in Millions)

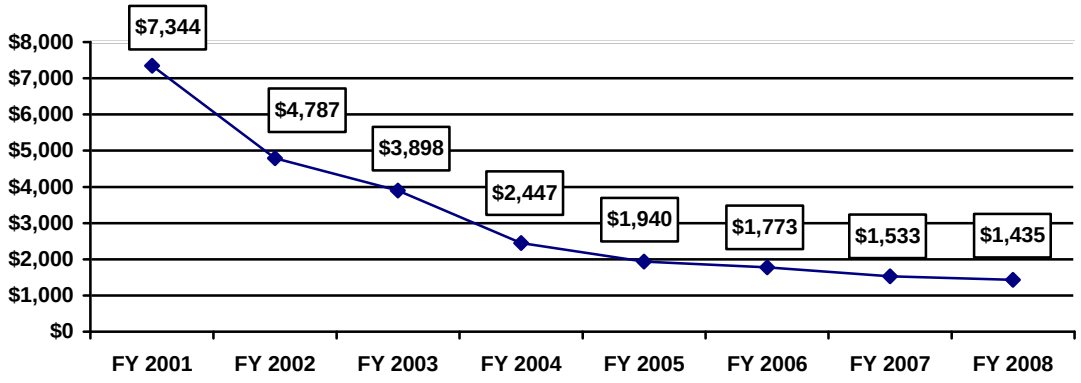


Source: FAA

In addition, past differences between FAA's budget, the Trust Fund revenues, and the General Fund contribution have been made up by drawing down the Trust Fund's uncommitted balance. However, these actions have depleted that balance to the point where only a limited cushion of funding remains. As shown in figure 4 below, the

uncommitted Trust Fund balance has declined by more than 80 percent, from $7.3 billion at the end of FY 2001 to $1.4 billion at the end of FY 2008. As a result, this practice may no longer be a viable option for funding new and existing projects.

Figure 4. Airport and Airway Trust Fund Uncommitted Balance FY 2001 to FY 2008 ($ in Millions)



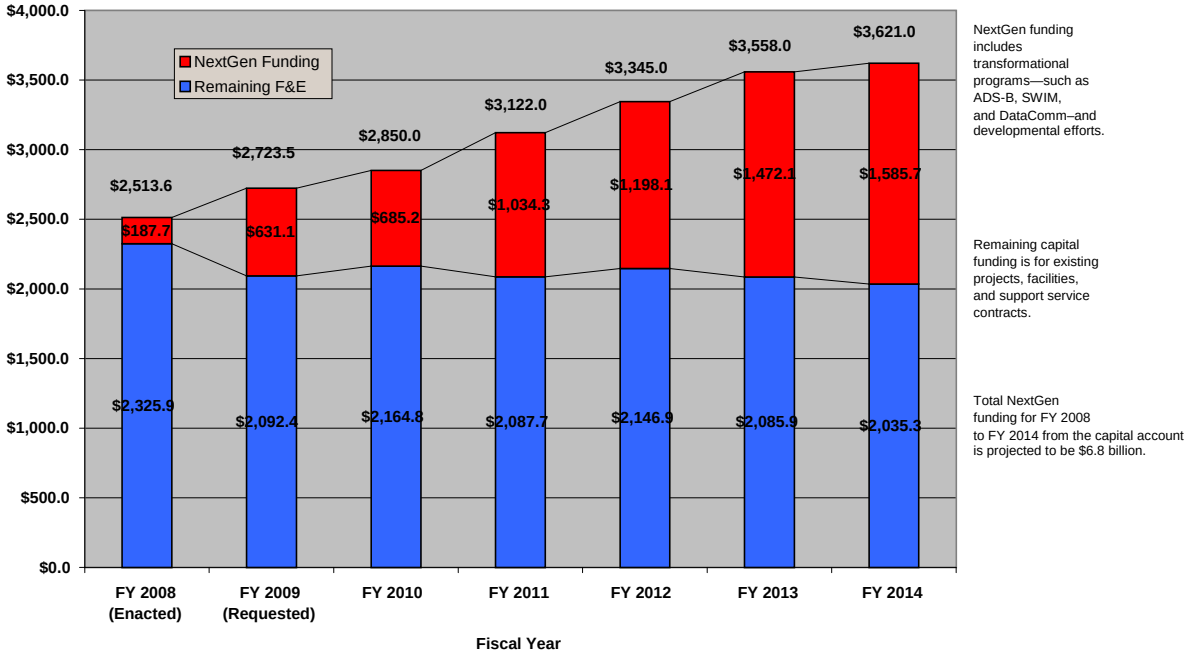
Source: FAA

As Congress moves forward with FAA's annual appropriations and multi-year reauthorization legislation, it should monitor the status of the Trust Fund to ensure its long-term solvency while ensuring sufficient funding for Agency programs.

Operating and Maintaining the National Airspace System While Developing and Transitioning to NextGen

FAA will face challenges in balancing the needs of the current National Airspace System, which is showing signs of strain, with future training, technological, and facility requirements associated with NextGen. Developing NextGen is a high-risk effort involving billion-dollar investments from both the Government and industry. After more than 4 years of planning, FAA must shift to implementation. FAA plans to spend more than $630 million in 2009 on NextGen-related programs, which include Automatic Dependent Surveillance-Broadcast (ADS-B) and System-Wide Information Management (SWIM). Figure 5 below illustrates FAA's planned investments in ongoing projects and NextGen initiatives from FY 2008 to FY 2014.

Figure 5. FAA Capital Funding for FY 2008 to FY 2014
($ Totals in Millions)



Source: FAA

In FY 2010, FAA will request more than $800 million for NextGen. In addition to specific capital projects totaling $685 million as shown in figure 5, FAA is also requesting $57 million for Research, Engineering and Development projects, $48 million for support service contracts, $26 million for personnel, and $13 million from the Operations account. To reduce risk, we recommended last April[9] that FAA conduct a "gap analysis" of the current system and the vastly different NextGen system planned for 2025 and develop an interim architecture. FAA has focused considerable attention on mid-term objectives, but fundamental issues remain to be addressed. These include the following:

- **Completing the gap analysis of today's system and NextGen as promised and refining the NextGen mid-term architecture.** These two efforts are important because FAA intends to rely on existing automation systems to provide the basis for NextGen through the mid term. However, until FAA establishes the detailed changes needed to transition to NextGen, it will be impossible to determine requirements that can be used to develop reliable cost and schedule estimates to achieve NextGen's mid-term goals.

[9] OIG Report Number AV-2008-049, "Air Traffic Control Modernization," April 14, 2008.

- **Establishing priorities and Agency commitments with stakeholders and reflecting them in budget requests and plans.** It remains difficult for decision makers to determine what to invest in first from the wide range of operational improvements in NextGen planning documents. Also, stakeholders have asked FAA to clearly state mid-term Agency and operator commitments in its NextGen plans.

- **Managing NextGen initiatives as portfolios and establishing clear lines of responsibility, authority, and accountability.** It is important to manage NextGen capabilities in an integrated way because new systems as well as procedure and airspace changes will be needed to deliver benefits. However, FAA's Acquisition Management System was not designed for managing NextGen investments. Rather, FAA's system focuses on baselines and specific capital programs—not a collection of investments. FAA recognizes that it must adjust its process for approving acquisitions. FAA could also strengthen its NextGen Implementation Plan by assigning responsibility, authority, and accountability for specific NextGen portfolios.

- **Identifying the number and type of facilities that will be needed to support NextGen.** FAA has not made key decisions regarding facility consolidations and infrastructure needs—a key cost driver for NextGen. FAA plans to spend $17 million in FY 2009 to examine various alternatives for revamping its facilities. The realignment or consolidation of FAA facilities is a controversial undertaking. Therefore, FAA must ensure that this analysis clearly addresses the technological and security prerequisites, cost drivers, benefits, and logistical concerns associated with consolidation so decision makers will know what can be reasonably accomplished. Timely completion of this analysis is particularly critical as the economic recovery program includes an additional $200 million for FAA facilities and related equipment.

- **Hiring and training the next generation of air traffic controllers.** Through 2017, FAA plans to hire and train nearly 17,000 new controllers to replace those who were hired after the 1981 strike and are now retiring. A major challenge will be training and certifying the huge surge of new controllers at their assigned location, a process that currently takes up to 3 years. Controllers in training now represent nearly 26 percent of the workforce (up from 15 percent in 2004). However, many key facilities, such as the Southern California Terminal Radar Approach Control (which expects to have nearly 100 controllers in training later this year or over 40 percent of its workforce), already exceed the national levels. Ensuring there are enough certified controllers at FAA's more than 300 air traffic control facilities will remain a significant watch item for the Department and Congress for at least the next 10 years.

In September 2008, FAA made a major change to its training program by awarding a 10-year, nearly $900 million contract to the Raytheon Technical Services Company to support the Agency's training of newly hired and existing air traffic controllers. The contract calls for Raytheon to provide training support at both the FAA Academy in Oklahoma City, Oklahoma, and at air traffic facilities nationwide. We are beginning a review of this contract program later this month.

Reducing Aviation and Surface Congestion

DOT has made progress in implementing several congestion-mitigation initiatives this past year, and it is imperative that these remain a key Federal priority across all modes. For example, DOT has taken steps to ease aviation congestion by reducing flights in the New York City area and establishing new routes through airspace redesign and air traffic control procedures. DOT is also building new runways nationwide.

Reducing delays, particularly at already congested airports, and improving airline customer service are important issues facing the Nation. Peak-year 2007 trends continued into the first 6 months of 2008, with more than 1 in 4 flights (29 percent) delayed or cancelled. However, in the second half of 2008, flight delays declined by 24 percent over the same period in 2007. This improvement was largely the result of huge cutbacks in scheduled flights implemented by airlines beginning in September.

These cutbacks resulted in a 13-percent reduction in domestic flights and lowered flight delays and cancellations at most airports to levels last seen in 2002. However, delays continued to be a problem over the summer at heavily congested airports such as Newark (up 0.4 percent), John F. Kennedy, LaGuardia, and Chicago O'Hare (down only 5 percent each).

Although DOT decides where to invest Federal funds to operate and expand the air traffic control system, state and local authorities select most highway and transit projects for funding. Therefore, DOT will need to work with these stakeholders to target Federal infrastructure funding to congestion relief for surface transportation.

New Runways

The long-term solution to increasing capacity and reducing delays depends largely on expanding capacity through NextGen. While there is no "silver bullet" for addressing delays, several near-term initiatives can help relieve congestion. According to FAA, building new runways provides the largest increases in capacity. In November 2008, FAA commissioned three new runways—at Chicago O'Hare, Seattle, and Washington-Dulles—and estimates that these runways have the potential to accommodate an additional 300,000 operations annually. Currently, there are four runway projects underway at four major airports, which are expected to be complete by 2014. The table below provides details on the four runway projects.

Table. Current Airfield Construction Projects

Airports	Airfield Construction Projects	Est. Completion	Cost Estimate
Chicago O'Hare	Runway (10C/28C)	2012	$1.3 billion
Charlotte	Runway	February 2010	$300 million
Boston	Centerfield Taxiway	November 2009	$55 million
JFK	Multiple Taxiways	2014	$200 million

Source: FAA

Airspace Redesign and New Routes

Airspace redesign efforts are critical to realizing the full benefits of runways and can also enhance capacity without new infrastructure. Currently, FAA is pursuing six airspace redesign projects nationwide, including a major but controversial effort to revamp airspace in the New York/New Jersey/Philadelphia area. However, FAA's airspace redesign efforts still do not function as a "national" program since FAA facilities are now using their own resources to redesign airspace without coordinating with Headquarters. FAA needs to complete guidelines for managing airspace projects across the Agency's lines of business and establish realistic funding profiles for airspace projects.

Another factor for maximizing the use of airspace is establishing new routes that rely on equipment onboard aircraft. These new routes rely on procedures (called Area Navigation/Required Navigation Performance or RNP) that allow aircraft to fly more precise routes, which also reduces fuel burn. At this stage, the challenge facing FAA is shifting from localized operations to networking city pairs, like Washington, DC, and Chicago, IL, which will require considerable simulation modeling as well as close coordination with airspace redesign efforts and stakeholders. Last month, we began a review to assess FAA's use and oversight of third parties for developing new RNP procedures.

Intercity Passenger Rail

Intercity passenger rail is an integral part of America's transportation system, particularly in light of growing highway and aviation congestion and fluctuating fuel prices. Amtrak, the Nation's intercity passenger rail service provider, experienced record revenue and ridership until October 2008 when ridership began to decline. Amtrak now forecasts a 3.6 percent decline in ridership in FY 2009.

The economic recovery program contains a one-time capital infusion of $1.3 billion for Amtrak, and a separate infusion of $8.0 billion for capital assistance for high-speed rail and intercity passenger rail service. However, given the likelihood of a further constrained Federal funding environment and Amtrak's continuing struggles with poor on-time performance, Amtrak's long-term ability to continue to grow as a viable transportation alternative and reduce congestion remains uncertain.

Amtrak's poor on-time performance also weakens its financial position by reducing its revenues and increasing its operating costs. Between FY 2003 and FY 2008, Amtrak's on-time performance for its strongest service, *Acela*, ranged between 71 percent and 88 percent, while on-time performance for long-distance routes off the Northeast Corridor only reached an average high of 54 percent; for non-corridor routes, on-time performance fell from an average of 76 percent to nearly 69 percent.

The recently enacted Passenger Rail Investment and Improvement Act (PRIIA)[10] enables DOT, through the Surface Transportation Board, to improve Amtrak's on-time performance on freight railroads (over whose track Amtrak travels). Also, DOT needs to work with the freight railroads and Amtrak to develop and implement the performance improvement plans called for under PRIIA.

CONCLUSION

The Administration and the 111th Congress face an array of challenges and difficult decisions with respect to transportation programs. While we have seen improvements on several fronts, important challenges remain that DOT must address. The significant increase in funding for transportation projects associated with the economic recovery program adds new challenges to long-standing ones. DOT will need sustained efforts to ensure that accountability, efficiency, and effectiveness are maintained in its portion of the recovery program.

Specifically, DOT should focus on: (1) building an effective acquisition workforce to ensure that the goals of the economic recovery program are achieved; (2) establishing effective contracting mechanisms and financial practices to facilitate sound business decisions, ensure returns on investment, and avoid wasteful spending; (3) reforming mechanisms to prevent fraud, waste, and abuse; (4) developing comprehensive oversight of highway and transit investments; (5) enhancing FAA's ability to provide oversight of a dynamic aviation industry; (6) addressing obsolescence in the Nation's aging surface infrastructure and enhancing surface safety programs; and (7) ensuring solvency in the Highway and Aviation Trust Funds to carry out its mission of enhancing mobility and reducing congestion.

That concludes my statement, Mr. Chairman. I will be happy to answer any questions you or other Members of the Subcommittee may have.

[10] Pub. L. No. 110-432 (2008).

EXHIBIT A. TYPES OF FRAUD SCHEMES INVESTIGATED BY OIG

The following are brief descriptions of fraud schemes commonly seen by U.S. DOT OIG Special Agents.

- **Bid Rigging & Collusion**: In bid rigging and collusions, contractors misrepresent that they are competing against each other when, in fact, they agree to cooperate on the winning bid to increase job profit.
- **Materials Overcharging**: Under this fraud scheme, a contractor misrepresents how much construction material was used on the job and then is paid for excess material to increase job profit.
- **Time Overcharging**: In a time overcharging scheme, a consultant misrepresents the distribution of employee labor on jobs in order to charge for more work hours, or a higher overhead rate to increase profit.
- **Product Substitution**: In a scheme involving product substitution, a contractor misrepresents the product used in order to reduce costs for construction materials.
- **Disadvantaged Business Enterprises**: Under this scheme, a contractor misrepresents who performed the contract work in order to increase job profit while appearing to be in compliance with contract goals for involvement of minority/women-owned businesses.
- **Quality-Control Testing Fraud**: In this scheme, a contractor misrepresents the results of quality control tests to earn contract incentives falsely or to avoid production shutdown in order to increase profits or limit costs.
- **Bribery**: Bribery occurs when a contractor misrepresents the cost of performing work by compensating a Government official for permitting contract overcharges to increase contractor profit.
- **Kickbacks**: In kickback schemes, a contractor or subcontractor misrepresents the cost of performing work by secretly paying a fee for being awarded the contract and therefore inflating the cost to the Government.
- **Conflicts of Interest**: In fraud involving conflicts of interest, a contracting or oversight official misrepresents that he or she is impartial in business decisions when he or she has an undisclosed financial interest in a contractor or consultant who inflates job cost to the Government.

The following pages contain textual versions of the graphs and charts included in this document. These pages were not in the original document but have been added here to accommodate assistive technology.

Testimony on Top Management Challenges Facing the Department of Transportation

Section 508 Compliant Presentation

Figure 1-1. Runway Incursions, Fiscal Year 1999 to Fiscal Year 2007 – Original Definition

Fiscal Year	Runway Incursions
FY 1999	329
FY 2000	405
FY 2001	407
FY 2002	339
FY 2003	323
FY 2004	326
FY 2005	327
FY 2006	330
FY 2007	370

Source: Federal Aviation Administration

Figure 1-2. Runway Incursions, Fiscal Year 2004 to Fiscal Year 2008 – New Definition

Fiscal Year	Runway Incursions
FY 2004	730
FY 2005	779
FY 2006	816
FY 2007	891
FY 2008	1,009

Source: Federal Aviation Administration

Figure 2. Highway Trust Fund – Highway Account Balance (Fiscal Year 2005 – Fiscal Year 2008)

- In 2005, the Trust Fund opening balance was $10.8 billion. Revenues added were $32.9 billion, and disbursements subtracted were $33.1 billion, leaving the Trust Fund balance at $10.6 billion. Per the President's budget, projected revenues were $36.7 billion and projected disbursements were $35.3 billion.

- In 2006, the Trust Fund opening balance was $10.6 billion. Revenues added were $33.7 billion, and disbursements subtracted were $35.3 billion, leaving the Trust Fund balance at $9.0 billion. Per the President's budget, projected revenues were $35.0 billion and projected disbursements were $36.0 billion.

- In 2007, the Trust Fund opening balance was $9.0 billion. Revenues added were $34.4 billion, and disbursements subtracted were $35.2 billion, leaving the Trust Fund balance at $8.1 billion. Per the President's budget, projected revenues were $34.6 billion and projected disbursements were $38.2 billion.

- In 2008, the Trust Fund opening balance was $8.1 billion. Revenues added were $31.3 billion, and disbursements subtracted were $37.4 billion, leaving the Trust Fund balance at $2.0 billion. Trust Fund balance with the transfer from the General Fund: $10.0 billion. Per the President's budget, projected revenues were $35.9 billion and projected disbursements were $38.7 billion.

Source: Federal Highway Administration for actual Trust Fund revenues and disbursements and the President's Budget for projected revenues and disbursements.

Figure 3. Airport and Airway Trust Fund Tax Revenues, Fiscal Year 2003 to Fiscal Year 2008

Fiscal Year	Revenue Amount
FY 2003	$8,684,000,000
FY 2004	$9,174,000,000
FY 2005	$10,314,000,000
FY 2006	$10,590,000,000
FY 2007	$11,468,000,000
FY 2008	$11,992,000,000

Source: Federal Aviation Administration

Figure 4. Airport and Airway Trust Fund Uncommitted Balance, Fiscal Year 2001 to Fiscal Year 2008

Fiscal Year	Uncommitted Balance
FY 2001	$7,344,000,000
FY 2002	$4,787,000,000
FY 2003	$3,898,000,000
FY 2004	$2,447,000,000
FY 2005	$1,940,000,000
FY 2006	$1,773,000,000
FY 2007	$1,533,000,000
FY 2008	$1,435,000,000

Source: Federal Aviation Administration

Figure 5. The Federal Aviation Administration's Capital Funding for Fiscal Year 2008 to Fiscal Year 2014

(Note: NextGen funding includes transformation programs—such as ADS-B, SWIM, DataComm—and developmental efforts. Total NextGen funding for fiscal year 2008 to fiscal year 2014 from the capital account is projected to be $6.8 billion. Remaining Facilities and Equipment (F&E) includes funding for existing projects, facilities, and support service contracts.)

- For fiscal year 2008, the NextGen funding enacted is $187,700,000, and the remaining funds enacted for Facilities and Equipment is $2,325,900,000. Total capital funding enacted for fiscal year 2008: $2,513,600,000.

- For fiscal year 2009, the NextGen funding requested is $631,100,000, and the remaining funds requested for Facilities and Equipment is $2,092,400,000. Total capital funding requested for fiscal year 2009: $2,723,500,000.

- For fiscal year 2010, the NextGen funding projection is $685,200,000, and the remaining funds projected for Facilities and Equipment is $2,164,800,000. Total capital funding projection for fiscal year 2010: $2,850,000,000.

- For fiscal year 2011, the NextGen funding projection is $1,034,300,000, and the remaining funds projected for Facilities and Equipment is $2,087,700,000. Total capital funding projection for fiscal year 2011: $3,122,000,000.

- For fiscal year 2012, the NextGen funding projection is $1,198,100,000, and the remaining funds projected for Facilities and Equipment is $2,146,900,000. Total capital funding projection for fiscal year 2012: $3,345,000,000.

- For fiscal year 2013, the NextGen funding projection is $1,472,100,000, and the remaining funds projected for Facilities and Equipment is $2,085,900,000. Total capital funding projection for fiscal year 2013: $3,558,000,000.

- For fiscal year 2014, the NextGen funding projection is $1,585,700,000, and the remaining funds projected for Facilities and Equipment is $2,035,300,000. Total capital funding projection for fiscal year 2014: $3,621,000,000.

Source: Federal Aviation Administration

Table. Current Airfield Construction Projects

- Chicago O'Hare Airfield Construction Project: 1 runway (10C/28C). The estimated completion date is 2012, and the project's estimated cost is $1.3 billion.

- Charlotte Airfield Construction Project: 1 runway. The estimated completion date is February 2010, and the project's estimated cost is $300 million.

- Boston Airfield Construction Project: centerfield taxiway. The estimated completion date is November 2009, and the project's estimated cost is $55 million.

- John F. Kennedy Airfield Construction Project: multiple taxiways. The estimated completion date is 2014, and the project's estimated cost is $200 million.

Source: Federal Aviation Administration