TOP MANAGEMENT CHALLENGES

Department of Transportation

Report Number: PT-2011-010

Date Issued: November 15, 2010

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

Memorandum

Subject: <u>INFORMATION</u>: DOT's Fiscal Year 2011
Top Management Challenges
Department of Transportation
Report Number PT-2011-010

Date: November 15, 2010

From: Calvin L. Scovel III
Inspector General

Reply to
Attn. of: J-1

To: The Secretary
Deputy Secretary

As required by law, we have identified the Department of Transportation's (DOT) top management challenges for fiscal year 2011. The Nation's economy and the quality of life for all Americans rely heavily on a safe and vital transportation system. The Department spends approximately $79 billion annually on a wide range of programs and initiatives to meet this objective, and we continue to support its efforts through our audits and investigations.

Improving safety across all modes of transportation remains DOT's overarching goal. Significant challenges remain for policymakers as they seek to continue enhancing safety in the air and on the ground. This includes advancing new regulations for pilot training and rest requirements, strengthening the process for granting special permits and approvals for transporting hazardous materials, and ensuring pipeline operators identify and repair defects in oil and gas pipelines in a timely manner. Longstanding concerns that demand sustained attention include establishing realistic plans for the Next Generation Air Transportation System, securing viable financing for future surface transportation infrastructure investments, bolstering Federal oversight of transit safety, and addressing the Nation's aging surface infrastructure. At the same time, DOT must continue to improve contract management and safeguard its complex information and technology systems from cyber threats.

Budget constraints and uncertain financial markets exacerbate these challenges. With the passage of the American Recovery and Reinvestment Act of 2009 and the Consumer Assistance To Recycle and Save (CARS) Program, DOT was tasked with rapidly disbursing billions of dollars to thousands of transportation projects and to consumers who were encouraged to trade in their vehicles for new, more fuel-efficient

vehicles. Thus far, DOT has obligated almost $41 billion in Recovery Act funds. The commitment of the Secretary and his staff to the success of DOT's initiatives is evidenced by their response to our ARRA reports and advisories and the prompt implementation of the CARS Program.

We continue to build a body of work to assist DOT with its critical mission; improve the management and execution of programs; and protect its resources from fraud, waste, abuse, and violations of law. We considered several criteria in identifying the following nine challenges, including their impact on safety, documented vulnerabilities, large dollar implications, and DOT's ability to effect change in these areas:

- Ensuring Transparency and Accountability in the Department's Recovery Act Programs

- Maintaining Momentum in the Department's Oversight of Highway, Motor Vehicle, Hazardous Materials, and Transit Safety

- Maintaining Momentum in Addressing Human Factors and Improving Safety Oversight of the Aviation Industry

- Improving the Department's Oversight of Highway, Transit, and Pipeline Infrastructure

- Identifying Sufficient Funding Sources To Support Future Federal Investment in Surface Transportation Infrastructure

- Transforming the Federal Railroad Administration To Address Significantly Expanded Oversight Responsibilities

- Advancing the Next Generation Air Transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System

- Implementing Processes To Improve the Department's Acquisitions and Contract Management

- Improving the Department's Cyber Security

Given the fiscal pressures facing the Federal Government, strong leadership and careful stewardship of taxpayer dollars are critical to successfully addressing DOT's top challenges. Trade-offs among diverse programs will likely be required, but there are important opportunities to minimize these trade-offs by setting priorities and establishing sound management policies, practices, and procedures.

We are committed to keeping decision makers informed of emerging and longstanding issues identified through our audits and investigations. We appreciate DOT's responsiveness to our findings and recommendations and the commitment to taking prompt corrective action.

This report and DOT's response will be included in the Department's Performance and Accountability Report, as required by law. DOT's response is included in its entirety in the appendix to this report.

If you have any questions regarding the issues presented in this report, please contact me at (202) 366-1959. You may also contact Lou E. Dixon, Principal Assistant Inspector General for Auditing and Evaluation, at (202) 366-1427.

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cc: Martin Gertel, M-1

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Ensuring Transparency and Accountability in the Department's Recovery Act Programs

Source: Federal Highway Administration

Since February 2009, the Department and its Operating Administrations have obligated nearly $40 billion American Recovery and Reinvestment Act (ARRA) funds for more than 14,600 highway, bridge, transit, shipyard, airport, and rail projects across the Nation. In February 2010, the Office of the Secretary of Transportation (OST) awarded Transportation Investment Generating Economic Recovery (TIGER) discretionary grants to 51 recipients for multimodal surface transportation projects. Now the Department and its Operating Administrations will need to address a number of challenges associated with ensuring those funds are spent effectively.

Key Challenges

- Overseeing ARRA projects and expenditures

- Executing OST's TIGER discretionary grants program

- Collecting quality data from award recipients

CHAPTER 1

Ensuring Transparency and Accountability in the Department's Recovery Act Programs

Overseeing ARRA Projects and Expenditures   The Department must ensure adequate oversight and accountability to meet ARRA goals. Our June ARRA Advisory reported that the Federal Highway Administration (FHWA) did not ensure states conducted federally required "value engineering" studies[1] on highway and bridge projects prior to contract award. Further, the Government Accountability Office (GAO) recently reported that staffing shortages may limit states' ability to properly implement and manage ARRA programs.[2]   With limited staff, it is critical that the Department identify high-risk areas and target its resources accordingly. Additionally, the Office of Management and Budget (OMB) directed agencies to use single audit reports to identify high-risk grantees, ensure resolution of audit findings, and consider additional monitoring and inspections of these grantees.[3]   This is consistent with our August 2009 ARRA Advisory that proposed to FAA that it enhance its risk-based approach to ensuring new ARRA grant recipients, that historically have not administered funds effectively, receive increased oversight. FHWA's national review teams (NRT) also have the potential to enhance oversight of ARRA funds. Through NRT assessments of state ARRA management processes and compliance with Federal requirements, FHWA aims to identify problems needing corrective action as well as national trends and potential new risks. However, FHWA needs to follow through and implement the corrective actions identified by the NRTs to effectively use this new oversight tool. Finally, vigilant oversight is needed to ensure that ARRA recipients meet ARRA's goal to complete projects within 3 years because nearly 2 years after ARRA was enacted, a significant number of projects have yet to begin, including approximately 1,400 highway projects.

Management attention is also needed to protect ARRA funds from fraud, waste, and abuse. As of September 2010, we have 50 criminal investigations open for alleged crimes such as false statements, false claims, prevailing wage violations, disadvantaged business enterprise (DBE) fraud, and bid rigging. DBE fraud accounts for more than 30 percent of our ARRA-related investigations, compared to 10 percent for our non-ARRA investigations. Underbidding on ARRA-funded transportation projects is also a concern. Many winning bids are 20 to 30 percent below engineer's estimate, increasing the risk that some contractors

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[1] Value engineering studies are objective reviews of reasonable design alternatives. Bridges and highways with costs equal to or above $20 million and $25 million, respectively, are required to have value engineering studies.

[2] GAO, *State and Local Governments: Fiscal Pressures Could Have Implications for Future Delivery of Intergovernmental Programs*, GAO-10-899, July 2010.

[3] OMB Memorandum, "Updated Guidance on the American Recovery and Reinvestment Act," March 22, 2010.

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may attempt to make up the difference by submitting false claims or committing another form of fraud.

Executing OST's TIGER Discretionary Grants Program

In February 2010, OST awarded $1.5 billion in TIGER discretionary grants to 51 recipients for multimodal surface transportation projects. As OST moves from grant selection and award into TIGER program execution, it must provide the enhanced oversight that ARRA and OMB require. Yet, OST does not have direct experience administering grant programs and overseeing capital investments in surface transportation infrastructure. OST is leveraging oversight expertise within the Department by delegating grant oversight to the Operating Administrations. However, OST must provide stewardship by clearly defining its role and oversight strategy—including the levels of authority and accountability it will retain—and allocate adequate resources and expertise to ensure that TIGER program goals are achieved and ARRA funds are spent wisely.

Collecting Quality Data From Award Recipients

On behalf of the Recovery Accountability and Transparency Board, we assessed the Department's and six other agencies' oversight of ARRA recipient data. Each agency identified inaccuracies in recipient data in significant areas, including award type, date, and amount or the number of jobs created. Several factors contributed to these errors, including misinterpretation of guidance and technical challenges. While surveyed agencies have taken steps to address these problems, continued vigilance will be needed to meet the level of accountability called for in ARRA.

Related Products

The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Letter to Ranking Member Issa on DOT's Use of ARRA Signage, August 17, 2010
- ARRA Advisory: FAA's Process for Awarding ARRA Airport Improvement Program Grants, August 6, 2009
- ARRA Advisory: FHWA's Oversight of the Use of Value Engineering Studies on ARRA Highway and Bridge Projects, June 28, 2010

CHAPTER 1

Ensuring Transparency and Accountability in the Department's Recovery Act Programs

- Federal Railroad Administration Faces Challenges in Carrying Out Expanded Role, April 29, 2010
- Weaknesses in DOT's Suspension and Debarment Program Limit Its Protection of Government Funds, March 18, 2010
- Recovery Act Data Quality: Errors in Recipients' Reports Obscure Transparency, February 23, 2010
- Letter to Senator Mark Pryor on DOT OIG's Recovery Act Oversight Activities, February 19, 2010
- Final Report on DOT's Suspension and Debarment Program, January 7, 2010
- Final Report on DOT's Implementation of the American Recovery and Reinvestment Act: Continued Management Attention Is Needed To Address Oversight Vulnerabilities, November 30, 2009

For more information on the issues identified in this chapter, please contact Madeline Chulumovich, Chief of Staff, at (202) 366-1959 or Joseph W. Comé, Assistant Inspector General for Highway and Transit Audits, at (202)-366-5630.

Maintaining Momentum in the Department's Oversight of Highway, Motor Vehicle, Hazardous Materials, and Transit Safety

Source: Julie Nixon, John A. Volpe National Transportation Systems Center

Over the last 5 years, fatalities and injuries related to motor vehicle crashes declined by 22.3 percent and 18.5 percent, respectively. This decline is noteworthy; now, the Department must tackle persistent challenges to maintain this trend and address longstanding concerns with vehicle, motor carrier, pipeline, and transit safety concerns.

Key Challenges

- Addressing motor vehicle safety defects

- Strengthening motor carrier enforcement programs and commercial driver's license (CDL) standards

- Strengthening the Pipeline and Hazardous Materials Safety Administration's (PHMSA) special permits and approvals program to achieve its safety mission

- Addressing potential issues if Congress enhances Federal oversight authority for transit safety

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Addressing Motor Vehicle Safety Defects
The National Highway Traffic Safety Administration (NHTSA) conducts tests, inspections, and investigations to identify motor vehicles and equipment that contain safety-related defects and ensure the public is notified so defects can be corrected. In 2002 and 2004, we reported that NHTSA had weaknesses in its defect investigation systems and processes, including a lack of reliable early warning reporting information.[4] In response, NHTSA revised its defect assessment processes and established an Early Warning Division to analyze manufacturer data for identifying potential safety-related defects.

In 2010, NHTSA's defects investigation program came under increased media and congressional scrutiny due to complaints of sudden unintended acceleration and crashes involving Toyota Motor Corporation vehicles. For example, in August 2009, a Lexus sped out of control and crashed, killing its driver and three passengers. NHTSA's investigations of the complaints resulted in 3 Toyota recalls, affecting 8 million vehicles. NHTSA also enlisted the National Aeronautics and Space Administration and the National Academy of Sciences to investigate the sudden unintended acceleration issue. We are currently determining whether there are lessons learned from Toyota recalls as well as any improvements needed in NHTSA's processes, procedures, and recourses for investigating safety defects. This work is based in part on a request from the Secretary of Transportation and Members of Congress.

Strengthening Motor Carrier Enforcement Programs and CDL Standards
From 2008 to 2009, the number of fatalities related to crashes involving large trucks or buses dropped by 20 percent.[5] To ensure this trend continues, the Federal Motor Carrier Safety Administration (FMCSA) must follow through on previous commitments, maintain its efforts to enforce safety regulations, and remove motor carriers and drivers who do not comply. FMCSA has begun several initiatives to ensure new and existing operators in the motor carrier industry operate safely. For example, the Agency implemented a more stringent safety assurance process that new entrants must complete before receiving permanent operating authority as well as a new vetting process for passenger and household goods carriers to prevent unsafe carriers from continuing operations under a

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[4] OIG Report Number MH-2002-071, "Review of the Office of Defects Investigation, National Highway Traffic Safety Administration," January 3, 2002, and OIG Report Number MH-2004-088, "Report on Follow-Up Audit of the National Highway Traffic Safety Administration's Office of Defects Investigation," September 23, 2004.

[5] Motor Carrier Safety Progress Report, Federal Motor Carrier Safety Administration, as of June 30, 2010.

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new identity. FMCSA still needs to expand this vetting process to all new entrant applicants in the motor carrier industry. In 2011, FMCSA plans to fully implement its Comprehensive Safety Analysis 2010 (CSA 2010) model, which is designed to identify high-risk carriers with safety issues that could reasonably lead to crashes. CSA 2010 will rely heavily on crash, inspection, and census data.

While FMCSA has made progress in improving crash and inspection data, it has yet to implement a longstanding Office of Inspector General recommendation to improve carrier census data reporting,[6] which would improve its ability to rank the safety performance of motor carriers and target inspection and enforcement activities. Other areas that require action include improving knowledge and skills testing standards for CDLs, new minimum standards for states to issue commercial drivers' permits, and CDL fraud prevention efforts. Delays in implementing these recommendations are largely due to the complexity of coordinating with states and other stakeholders. Taking timely action to implement fraud prevention efforts is especially important as Office of Inspector General investigations have uncovered various schemes by individuals to circumvent FMCSA standards for issuing commercial drivers' licenses. For example, a Louisiana-registered third-party CDL tester admitted that he conspired and fraudulently conducted approximately 250 CDL skills tests for $200 per test. The tester was sentenced to 5 years probation and ordered to make restitution of over $7,300. Additionally, the Louisiana Department of Public Safety, Office of Motor Vehicles recalled and retested all CDL drivers tested by this individual.

Going forward, the Department must complete ongoing efforts and resolve issues related to finalizing CDL standards to improve the safety of the motor carrier industry operating large trucks and buses on our Nation's highways.

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[6] Census data are to be provided by motor carriers on the number of drivers they employ and commercial vehicles (power units) they own or lease.

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Strengthening PHMSA's Special Permits and Approvals Program To Achieve Its Safety Mission
PHMSA regulates up to 1 million movements of hazardous materials a day. Many of these materials are transported under special permits and approvals that allow relief from the Hazardous Materials Regulations under certain conditions.[7] Our work has pointed to longstanding concerns about PHMSA's process for assessing risks and granting special permits and approvals as well as its fundamental operating procedures for promoting the safe movement of hazardous materials. In 1 case, PHMSA granted a special permit to a company that had 53 incidents within 10 years—12 of which were serious—and 22 violations issued by PHMSA's or FMCSA's enforcement office. Also of concern is PHMSA's practice of granting special permits to trade associations—effectively giving "blanket authorization" to thousands of member companies without any assessment of their safety histories or need for the permit.

PHMSA has established action plans to address the safety concerns we identified. To successfully implement these plans, PHMSA must proactively identify safety risks, work with partner safety agencies to resolve safety and operational matters, and set targeted oversight priorities.

Addressing Potential Issues if Congress Enhances Federal Oversight Authority for Transit Safety
In 2009, 3 rail-to-rail crashes in different cities killed 9 people and injured 159 others; in separate incidents, 3 transit employees were killed while working on rail tracks. While transit remains a relatively safe mode of travel, these recent rail incidents brought renewed attention to transit safety.

In December 2009, the Department proposed legislation that would shift its role from providing guidance for state-managed oversight programs to directly overseeing transit safety. An enhanced Federal role may create significant challenges for the Department, including (1) collecting data necessary to conduct effective transit safety oversight, (2) establishing standards to improve transit safety among a diverse set of systems across the country, and (3) conducting enhanced transit safety oversight and enforcement. The Secretary has established the Transit Rail Advisory Committee for Safety (TRACS)—a Federal

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[7] *Special permits* authorize a holder to vary from specific provisions of the Hazardous Materials Regulations; identify the section(s) from which relief is provided; and include provisions, conditions, and terms that must be followed in order for the special permit to be valid. An *approval* means written consent from PHMSA's Associate Administrator to perform a function that requires prior consent under the Hazardous Materials Regulations.

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advisory committee comprised of rail safety experts from transit agencies, state safety oversight agencies, labor unions, and other key constituencies—which could provide an important forum for addressing the challenges associated with enhanced oversight.

Related Products The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Actions Taken and Needed To Improve Management and Oversight of PHMSA's Hazardous Materials Special Permits and Approvals Program, April 22, 2010
- New Approaches Needed in Managing PHMSA's Special Permits and Approvals Program, March 4, 2010
- PHMSA's Process for Granting Special Permits and Approvals for Transporting Hazardous Materials Raises Safety Concerns, September 10, 2009
- Audit of the Data Integrity of the Commercial Driver's License Information System, July 30, 2009
- Use of Income Derived from the Commercial Driver's License Information System for Modernization, July 10, 2008
- Best Practices for Improving Oversight of State Highway Safety Programs, March 25, 2008
- Effectiveness of Federal Drunk Driving Programs, October 25, 2007
- Audit of the National Highway Traffic Safety Administration's Alcohol-Impaired Driving Traffic Safety Program, March 5, 2007
- Follow-Up Audit on National Highway Traffic Safety Administration's Office of Defects Investigation, September 23, 2004
- Review of the National Highway Traffic Safety Administration's Office of Defects Investigation, January 3, 2002

For more information on the issues identified in this chapter, please contact Joseph W. Comé, Assistant Inspector General for Highway and Transit Audits, at (202) 366-5630 or Jeffrey B. Guzzetti, Assistant Inspector General for Aviation and Special Program Audits, at (202) 366-0500.

Maintaining Momentum in Addressing Human Factors and Improving Safety Oversight of the Aviation Industry

The aviation industry continues to experience one of the safest periods in its history due to both Federal Aviation Administration (FAA) and industry efforts to advance safety. However, the crash of Colgan Air flight 3407 in February 2009 confirmed the need for constant vigilance.

Key Challenges

- Advancing industry and Government efforts to address pilot training and fatigue issues

- Enhancing risk-based oversight of Part 121 air carriers[8] and foreign and domestic repair stations

- Ensuring FAA provides effective oversight of mainline and regional air carriers operating under domestic code share agreements

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[8] 14 CFR Part 121 governs the operations of large, scheduled commercial passenger and cargo carriers.

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Advancing Industry and Government Efforts To Address Pilot Training and Fatigue Issues According to the National Transportation Safety Board (NTSB), pilot fatigue has been associated with air carrier accidents resulting in 250 fatalities over the last 16 years. Although NTSB has identified this issue as an area of concern for all air carriers, it is particularly critical for regional carriers. NTSB has cited pilot performance and fatigue as findings in four of the last six fatal accidents involving regional carriers, including the fatal crash of Colgan Air flight 3407 in February 2009. Under the FAA Administrator's leadership, FAA took swift action by creating the Call to Action plan to refocus and accelerate air carriers' safety efforts. The plan consists of 10 short- and mid-term initiatives to enhance pilot performance and training, increase air carrier participation in voluntary safety programs, and expand pilot records review. FAA also set goals to develop new safety oversight guidance for its inspectors, conduct regional safety forums, develop programs addressing pilot professionalism, and establish new rules on pilot fatigue and training.

FAA has issued two Notices of Proposed Rule Making to address pilot fatigue and training. The first rule would require airlines to enhance FAA-required pilot training programs, including training on hazards, such as loss of control, and recovery from approach to stalls. The rule also calls for enhanced training for flight attendants and dispatchers. The second proposed rule would require a single set of scientifically based flight, duty, and rest requirements for all Part 121 carriers. However, this proposed rule does not address NTSB's recommendation to require air carriers to address fatigue risks associated with pilot commuting—a key finding NTSB identified in its investigation into the Colgan accident. Maintaining positive momentum on these rulemakings will be an important watch item for the Department, industry, and Congress.

Enhancing Risk-Based Oversight of Part 121 Air Carriers and Foreign and Domestic Repair Stations FAA has made noteworthy progress in improving safety oversight, such as clarifying guidance for inspectors who monitor air carriers. However, we continue to find weaknesses in FAA's Air Transportation Oversight System (ATOS)—a systematic approach for identifying high-risk safety areas and targeting inspections to those areas. Specifically, FAA's oversight of ATOS inspections has been ineffective at the national level, in large part because FAA does not track unassigned inspections or fully use collected inspection data.

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At the same time, we have repeatedly highlighted weaknesses since 2003 in FAA's oversight of aircraft maintenance and called for safety enhancements. While FAA has made a number of procedural changes to improve its oversight of repair stations, it has not addressed our most significant and longstanding recommendations to identify facilities performing safety-critical repairs and target its surveillance accordingly. Given air carriers' increasing reliance on repair stations, it is imperative that FAA provide more rigorous oversight of this industry.

Ensuring FAA Provides Effective Oversight of Mainline and Regional Air Carriers Operating Under Domestic Code Share Agreements
Mainline and regional air carriers have increasingly turned to domestic code share agreements—a marketing arrangement in which one air carrier sells and issues tickets for the flight of another carrier as if it were operating the flight itself. Through these arrangements, passengers receive lower fares and more seamless air travel, regional carriers benefit from joint promotion and advertising, and mainline carriers gain access to additional and smaller aircraft with no ownership stake for bringing passengers to their hub.

Domestic code share agreements are an integral part of the aviation system. While they can help mainline and regional carriers expand their markets and increase revenue, they also present challenges. For example, we have identified differences between the hiring, training, professionalism, and safety programs of most regional and mainline carriers. While FAA initiated a Call to Action for airline safety to encourage mainline and regional carriers to reconcile these differences, progress has been mixed. FAA and the Department must make oversight of the operators involved in these arrangements a top priority to ensure the safety of passengers who depend on those flights. This is particularly critical given that since 2003, seven commercial airline accidents have involved regional air carriers.

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Related Products   The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- FAA's Process for Reviewing Air Transportation Oversight System (ATOS) Inspection Data, March 19, 2010
- Progress and Challenges with FAA's Call to Action for Airline Safety, February 4, 2010
- Letter to Senator Claire McCaskill Regarding FAA's Progress in Implementing Past OIG Recommendations To Improve Oversight of Outsourced Maintenance, January 11, 2010
- The Federal Aviation Administration's Role in Safety Oversight of Air Carriers, June 10, 2009
- Review of FAA's Oversight of Airlines and Use of Regulatory Partnership Programs, June 30, 2008

For more information on the issues identified in this chapter, please contact Jeffrey B. Guzzetti, Assistant Inspector General for Aviation and Special Program Audits, at (202) 366-0500.

Improving the Department's Oversight of Highway, Transit, and Pipeline Infrastructure

Source: U.S. Department of Transportation

The Department faces significant challenges in overseeing highway, transit, and pipeline infrastructures, especially given current fiscal constraints. According to the American Society of Civil Engineers, $186 billion is needed each year to substantially improve the Nation's roads that are in poor or mediocre condition—well above the $70 billion spent annually on highway improvements.[9] At the same time, the Department projects shortfalls in the Highway Trust Fund, which provides most of the funding for highway and transit programs.[10] Recent gas pipeline ruptures also point to a need for program improvements to identify and repair defective pipes and ensure public safety.

Key Challenges

- Tracking and monitoring states' and localities' use of Federal funds

- Ensuring infrastructure safety and protecting federally funded highway and transit projects from fraud

- Ensuring pipeline operators identify and repair defects in oil and gas pipelines in a timely manner

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[9] American Society of Civil Engineers, "2009 Report Card for America's Infrastructure," 2009.
[10] See chapter 5 for a discussion of Highway Trust Fund issues.

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Tracking and Monitoring States' and Localities' Use of Federal Funds

With the Nation's highway and transit infrastructure needs increasing faster than funding resources, the Department must maximize the return on its surface transportation investments. The Federal Highway Administration's (FHWA) Fiscal Management Information System (FMIS) lacks sufficient detail on states' use of Highway Bridge Program (HBP) funds.[11] For example, Michigan used almost $3 million in HBP funds on a project that involved multiple bridges, but FHWA could not use FMIS to determine how much Federal funding went toward improving the condition of the project's structurally deficient bridges. Expanding FMIS's capabilities would allow FHWA to better assess the effectiveness of current programs and enable it to stretch every available infrastructure dollar.

The Department's large portfolio of transit infrastructure projects also demands rigorous oversight to ensure projects stay on schedule and within budget. While the Federal Transit Administration (FTA) has required sponsors of major projects to develop project management, project execution, and financial plans, it has not always fully used these plans to monitor project progress. For example, FTA approved an early systems work agreement last year to expedite the Access to the Region's Core (ARC) project[12] in New York and New Jersey, and awarded $130 million in ARRA funds for project activities. However, FTA had not received a final project management plan, project execution sub-plans, a master schedule, or a financial plan that described strategies for mitigating risks. The lack of finalized plans has hindered FTA's oversight of the project sponsor's efforts to mitigate risks that could increase costs or cause schedule delays.

Ensuring Infrastructure Safety and Protecting Federally Funded Highway and Transit Projects From Fraud
The 2007 bridge collapse in Minnesota highlighted the need for FHWA to focus on the safety of the Nation's surface transportation infrastructure. According to FHWA, about one-quarter of the Nation's more than 600,000 bridges have major deterioration, cracks in their structural components, or other deficiencies.[13] Our work has identified weaknesses in FHWA's enforcement of National Bridge Inspection Standards and called for sustained management attention to ensure that planned improvements in the

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[11] HBP is the primary Federal program that funds the replacement and rehabilitation of bridges nationwide.

[12] ARC involves the construction of a 9-mile commuter rail line between Secaucus, New Jersey, and Manhattan, New York. It includes construction of two tunnels under the Hudson River. The estimated cost is $9.23 billion.

[13] This estimate is based on 2009 data.

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inspection oversight program are implemented. Given the potentially catastrophic risks of not properly inspecting bridges, FHWA must determine with greater consistency whether states complied with the National Bridge Inspection Standards and define procedural steps for enforcing compliance.

Enhanced FHWA oversight is also needed for new highway projects to ensure they comply with all relevant standards and requirements. After the Central Artery/Tunnel (CA/T) Project in Boston was declared substantially complete in January 2006, 26 tons of improperly secured concrete ceiling panels fell in one of the project's tunnels and killed a motorist in July of that year. While the Commonwealth of Massachusetts initiated a "Stem to Stern" safety review that included the CA/T Project, FHWA did not always follow its protocols for conducting independent field verifications to assess the Commonwealth's progress in resolving safety risks.

With the number of highway and transit projects receiving Federal assistance, it is imperative that the Department and Operating Administrations aggressively combat fraud, waste, and abuse. Fraud awareness education and vigilant oversight are needed to identify and prevent common fraud schemes, such as bid rigging, price fixing, product substitution, bribery and kickbacks, conflicts of interest, false statements and false claims, labor and materials overbilling, and disadvantaged business enterprise fraud. Of particular concern are schemes that compromise safety. For example, a Utah corporation specializing in the installation of highway safety devices was sentenced to 36 months of probation, ordered to pay a fine of $10,000, and $31,485.45 in restitution for falsifying certificates of compliance related to the installation of highway crash cushions of a FHWA-funded project. The company admitted to submitting false certificates even though it knew that the installation of these devices did not meet contract specifications.

Ensuring Pipeline Operators Identify and Repair Defects in Oil and Gas Pipelines in a Timely Manner
The Nation's aging oil and gas pipelines are vulnerable to ruptures caused by corrosion and pipe defects. Federal regulations require pipeline operators to maintain integrity management programs, which are regulated and inspected by the Pipeline and Hazardous Materials Safety Administration (PHMSA) or its state partners. However, recent pipeline ruptures—including the explosion of a 54-year old gas pipeline in California that killed 8 people and destroyed 37 homes—call into question the effectiveness of operator programs as well as Federal and state oversight. For example, in

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July 2010, a 41-year-old Enbridge Energy interstate pipeline in Michigan leaked more than 800,000 gallons of oil. Although the company had reported nearly 330 integrity threats (including defects) on this pipeline segment, Enbridge's remediation plan requested a 30-month extension to complete needed repairs. However, the rupture occurred before PHMSA responded to this request. Going forward, PHMSA and its state partners need to closely scrutinize pipeline operator integrity management programs to ensure that defects are identified and repaired before catastrophic ruptures occur.

Related Products   The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Actions Needed To Mitigate Risks Associated with the Access to the Region's Core Project, May 17, 2010
- The Commonwealth of Massachusetts's Safety Review of the Central Artery/Tunnel Project Was Comprehensive, but FHWA's Oversight Approach Has Shortcomings, April 20, 2010
- Assessment of FHWA Oversight of the Highway Bridge Program and the National Bridge Inspection Program, January 14, 2010
- DOT's Implementation of the American Recovery and Reinvestment Act: Continued Management Attention Is Needed To Address Oversight Vulnerabilities, November 30, 2009

For more information on the issues identified in this chapter, please contact Joseph W. Comé, Assistant Inspector General for Highway and Transit Audits, at (202) 366-5630 or Jeffrey B. Guzzetti, Assistant Inspector General for Aviation and Special Program Audits, at (202) 366-0500.

CHAPTER 5

Identifying Sufficient Funding Sources To Support Future Federal Investment in Surface Transportation Infrastructure

Source: Federal Highway Administration

The Department has worked with Congress to maintain the Highway Trust Fund's (HTF) solvency, but the current short-term fixes are unsustainable and make future cash shortfalls inevitable. The Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005—the most recent surface transportation authorization act— was due to expire at the end of fiscal year 2009 but continues to operate under a series of short-term extensions. Most recently, the Hiring Incentives To Restore Employment Act extended SAFETEA-LU through December 2010 and transferred $19.5 billion from the General Fund to preempt foreseeable cash shortfalls in the HTF.

Key Challenges

- Replacing short-term fixes for HTF solvency with long-term solutions

- Achieving consensus among stakeholders on Federal infrastructure needs, spending levels, and a funding framework for the next surface transportation reauthorization
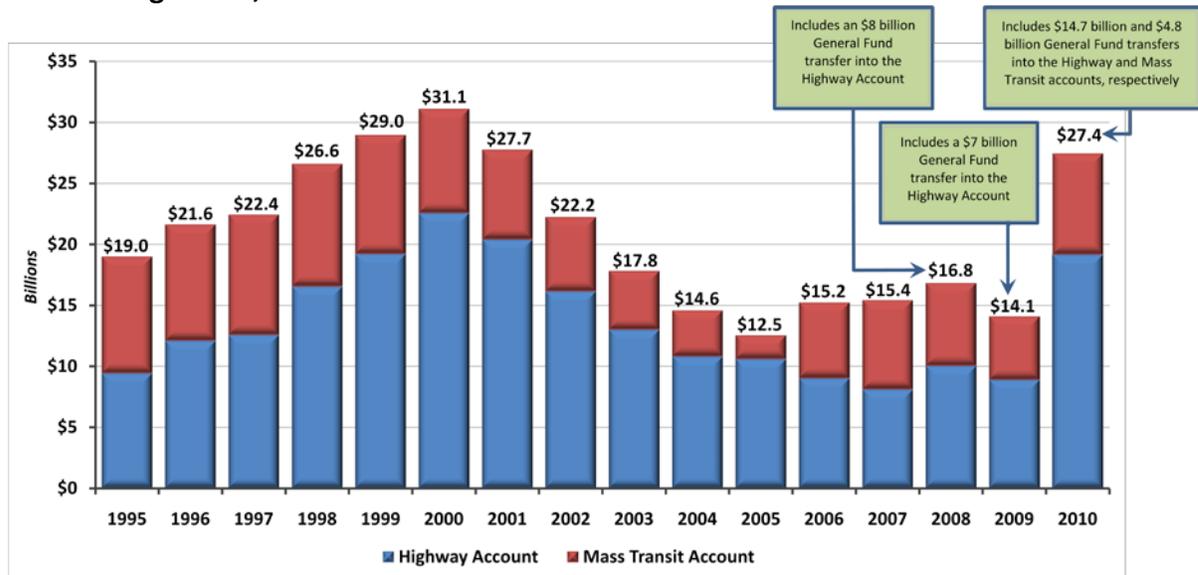
Identifying Sufficient Funding Sources To Support Future Federal Investment in Surface Transportation Infrastructure

Replacing Short-Term Fixes for HTF Solvency With Long-Term Solutions

Historically, cash receipts into HTF's Highway and Mass Transit Accounts exceeded outlays, leading to a surplus that peaked at $31.1 billion at the end of fiscal year 2000 (see figure 5.1). However, with the enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, outlays began to outpace receipts, eroding the surplus. SAFETEA-LU further eroded the surplus by increasing contract authority over TEA-21 levels without an associated increase in funding. High fuel prices and a lagging economy resulted in an unforeseen decline in vehicle miles travelled (VMT) and a more rapid decline in the Highway Account balance than anticipated. Prior to receiving the $4.8 billion cash infusion into the Mass Transit Account earlier this year, the Federal Transit Administration projected that the account would experience a shortfall in fiscal year 2011.

Figure 5.1. Historical Cash Balances in Highway and Mass Transit Accounts, Fiscal Years 1995 through 2010, in Billions of Dollars

Source: Federal Highway Administration, Federal Transit Administration
Note: In 1999, $8 billion was transferred from the Highway Account to the General Fund. Fiscal year 2010 amounts are preliminary and subject to adjustment.

Without cash infusions from the General Fund, the Federal Highway Administration would have been forced to reduce or suspend disbursements to states for eligible surface transportation expenses.

CHAPTER 5

Identifying Sufficient Funding Sources To Support Future Federal Investment in Surface Transportation Infrastructure

Achieving Consensus Among Stakeholders on Federal Infrastructure Needs, Spending Levels, and a Funding Framework for the Next Surface Transportation Reauthorization   Citing the critical role surface transportation infrastructure plays in the Nation's quality of life and economic productivity, the House Transportation and Infrastructure Committee unveiled legislation in June 2009 that proposed $500 billion in funding to support state surface transportation programs over 6 years. This proposed spending level is significantly higher than the $244 billion authorized by SAFETEA-LU over a 5-year period. Of this amount, $450 billion is proposed for highway, public transportation, and safety programs and $50 billion for high speed rail.

The Administration recently issued its framework for the next surface transportation authorization bill. The plan envisions 150,000 miles of roads rebuilt, 4,000 miles of rail constructed and maintained, and 150 miles of runway rehabilitated or reconstructed over the next 6 years. However, the Department has yet to define the spending levels needed to meet the Nation's surface transportation infrastructure requirements.

Yet, the current funding mechanism—which relies heavily on excise taxes on fuel and the sales of trucks and tires—does not generate the cash receipts needed to meet current outlays, let alone the larger outlays proposed in the next authorization. Further, given the current economic environment, the Administration opposes an increase in fuel tax rates or the establishment of a VMT-based fee, both of which Congress has discussed as methods of increasing the HTF's cash receipts.   The next authorization must establish a funding framework that aligns proposed spending levels with the HTF's cash receipts. Without this alignment, the HTF will continue to experience shortfalls and risk reducing state and local investments in surface transportation infrastructure projects.

The solution to ending the HTF's funding gap is neither obvious nor imminent. As the Department and congressional and other stakeholders evaluate alternative funding mechanisms and enact the next surface transportation authorization, the Department must also work with Congress to ensure the HTF is adequately funded during any extensions of SAFETEA-LU.   Failure to do so could significantly impact the solvency of the Highway and Mass Transit Accounts and their ability to continue reimbursements to states and transit authorities for eligible highway and transit expenses.

CHAPTER 5

Identifying Sufficient Funding Sources To Support Future Federal Investment in Surface Transportation Infrastructure

Related Products   The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Letter to Senate Budget Committee Ranking Member Gregg Regarding DOT's Projections of Highway Trust Fund Solvency, June 24, 2009
- Growth in Highway Construction and Maintenance Costs, September 26, 2007

For more information on the issues identified in this chapter, please contact Mitch Behm, Assistant Inspector General for Rail, Maritime, and Economic Analysis, at (202)-366-9970.

Transforming the Federal Railroad Administration To Address Significantly Expanded Oversight Responsibilities

Source: Federal Railroad Administration

The 2008 Railroad Safety Improvement Act (RSIA) and Passenger Railroad Investment and Improvement Act (PRIIA)—two of the most comprehensive pieces of railroad legislation in 30 years—dramatically realigned and expanded the Federal Railroad Administration's (FRA) roles and responsibilities. In addition, the American Recovery and Reinvestment Act (ARRA) infused an unprecedented amount of new capital into these new passenger rail programs and drastically accelerated timeframes for implementation.

Key Challenges

- Providing sufficient oversight of the implementation and management of the High Speed Intercity Passenger Rail (HSIPR) Program

- Addressing new PRIIA requirements to enhance passenger rail

- Ensuring the safe and secure movement of people and goods while undertaking increased passenger rail responsibilities

- Balancing an increased and diversified workload with the continuing need to oversee Amtrak operations

CHAPTER 6

Transforming the Federal Railroad Administration To Address Significantly Expanded Oversight Responsibilities

Providing Sufficient Oversight of the Implementation and Management of the HSIPR Program Historically, FRA's responsibilities have focused on promoting and overseeing railroad safety and providing grants and loans. The new HSIPR program—authorized under PRIIA—greatly expanded the Agency's responsibilities to include distributing $10.5 billion in grants for passenger rail-related projects in a compressed timeframe. To manage its expanded grants solicitation and award process, FRA requested and received 27 additional staff resources in its fiscal year 2010 budget. The Agency also requested 31 staff positions to support its additional requirements in fiscal year 2011. Although FRA has not fully positioned itself to address the challenges it faces with implementing the HSIPR program, it has moved forward with soliciting, accepting, and awarding grants for states' high-speed rail projects.

Securing these grants could be a significant challenge for states. According to FRA interim guidance, funding will not be disbursed until states finalize agreements with freight railroads that specify the passenger rail service improvements the projects are designed to achieve. The freight railroads have, however, voiced concerns about certain service outcome requirements in these agreements; specifically, that the requirements would be unduly burdensome to their operations. Chief among these service outcome requirements are rigid on-time performance metrics that require the freight railroad to incur any and all expenses necessary to ensure the passenger rail service operating on the freight tracks runs according to schedule.

Addressing New PRIIA Requirements To Enhance Passenger Rail PRIIA tasked FRA with numerous other responsibilities, including initiatives to improve or establish intercity passenger rail service; design a long-range national rail plan that promotes an integrated, efficient, and optimized national rail system; and develop metrics for passenger rail service quality. These responsibilities require FRA to perform a variety of tasks and coordinate with a number of public and private entities. For example, in developing a national rail plan, FRA must work with the rail industry and other stakeholders to address interconnectivity with other modes of transportation, identify rail projects of national significance, and consider sustainable funding options. To develop the final metrics for assessing passenger rail service quality, FRA teamed with rail industry entities, including Amtrak management and labor, the Surface Transportation Board, the freight railroads, state rail departments, and non-profit rail passenger organizations. Yet, to ensure railroads adhere to these metrics, which were effective beginning May 2010, FRA must collaborate

Transforming the Federal Railroad Administration To Address Significantly Expanded Oversight Responsibilities

with passenger rail service providers to identify a standardized mechanism for collecting and reporting train performance data.

All of these new tasks and requirements must be balanced against FRA's traditional responsibilities to administer its existing grant and loan programs: the Rail Line Relocation discretionary grant program, the Railroad Rehabilitation and Improvement Financing loan program, and the Amtrak grant program. These programs alone accounted for 37 percent of FRA's $4.4 billion fiscal year 2010 budget.

Ensuring the Safe and Secure Movement of People and Goods While Undertaking Increased Passenger Rail Responsibilities
Recent railroad legislation also expanded FRA's traditional safety role. Specifically, RSIA requires FRA to develop a long-term strategy for improving railroad safety, which includes an annual plan to address the following six goals:

- Reduce the number and rates of accidents, incidents, injuries, and fatalities involving railroads caused by train collisions, derailments, and human factors.

- Improve the consistency and effectiveness of enforcement and compliance programs.

- Improve the identification of high-risk highway-rail grade crossings and strengthen enforcement and other methods to increase grade crossing safety.

- Improve research efforts to enhance and promote railroad safety and performance.

- Prevent railroad trespasser accidents, incidents, injuries, and fatalities.

- Improve the safety of railroad bridges, tunnels, and related infrastructure to prevent accidents, incidents, injuries, and fatalities caused by catastrophic failures and other bridge and tunnel failures.

RSIA further requires FRA to establish a discretionary grant program, with authorized funding of $50 million per year for fiscal years 2009 through 2013, to support the development and deployment of positive train control (PTC) technologies.[14] While these technologies may help FRA achieve RSIA's safety goals, FRA has noted some concern on the

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[14] "Positive train control" means a system designed to prevent collisions between trains, overspeed derailments (derailments caused when a train exceeds speed limits), incursions into established work zone limits, and the movement of a train through an improperly positioned switch.

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part of freight railroads that investing in PTC will divert capital from near-term capacity enhancements and lead to delays that cause more freight to shift onto already congested highways. Such concerns place an even heavier burden on FRA to balance interests of freight rail companies with the renewed focus and investment in the expansion of passenger rail service throughout the United States.

Balancing an Increased and Diversified Workload with the Continuing Need To Oversee Amtrak Operations In addition to its new and expanded responsibilities, FRA must remain vigilant in its traditional role of overseeing Amtrak's operations and disbursing Amtrak's annual grant funds.[15] This oversight role is reinforced in several provisions of PRIIA. For example, PRIIA requires FRA to produce quarterly reports on the performance and service quality of intercity passenger train operations, including Amtrak's cost recovery, ridership, on-time performance and minutes of delay, causes of delay, on-board services, stations, facilities, equipment, and other services. Similarly, FRA must oversee Amtrak's compliance with applicable sections of the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1974 to ensure that Amtrak's services and facilities are accessible to individuals with disabilities to the extent required by law.[16]

PRIIA not only expanded FRA's responsibilities but also added significantly to Amtrak's workload. For example, PRIIA requires Amtrak to implement a new cost accounting system and spearhead a committee of various stakeholders to design and develop specifications for a next generation train equipment pool. As Amtrak undertakes these new initiatives, FRA will need to enhance its Amtrak oversight capabilities.

Related Products The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Amtrak Cascades and Coast Starlight Routes: Implementation of New Metrics and Standards Is Key To Improving On-Time Performance, September 23, 2010
- Semiannual Report on Amtrak's Financial and Operating Performance and Savings From Reform, May 17, 2010

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[15] These grant funds totaled nearly $1.6 billion in fiscal year 2010.

[16] Amtrak was mandated to comply with requirements under the Americans with Disabilities Act of 1990 (ADA) by July 26, 2010. Amtrak is not yet in full compliance but has recently submitted an ADA compliance plan to Congress requesting additional funding and an extension of the ADA deadline.

Transforming the Federal Railroad Administration To Address Significantly Expanded Oversight Responsibilities

- "Federal Railroad Administration Faces Challenges in Carrying Out Expanded Role," statement of Ann Calvaresi Barr, Deputy Inspector General, U.S. Department of Transportation before the Committee on Appropriations Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, United States Senate, April 29, 2010
- DOT's Implementation of the American Recovery and Reinvestment Act: Continued Management Attention Is Needed To Address Oversight Vulnerabilities, November 30, 2009
- American Recovery and Reinvestment Act of 2009: Oversight Challenges Facing the Department of Transportation, March 31, 2009

For more information on the issues identified in this chapter, please contact Mitch Behm, Assistant Inspector General for Rail, Maritime, and Economic Analysis, at (202)-366-9970.

CHAPTER 7

Advancing the Next Generation Air Transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System

Source: Federal Aviation Administration

The Federal Aviation Administration (FAA) estimates there are around 7,000 aircraft in the air over the United States at any given time. To better manage this capacity, FAA is developing the Next Generation Air Transportation System (NextGen)—a satellite-based air traffic control system intended to replace the current ground-based system. At the same time, FAA must operate and sustain the existing National Airspace System (NAS).

Key Challenges

- Establishing realistic plans and setting expectations for NextGen
- Addressing problems with ongoing modernization projects that are essential to NextGen's success
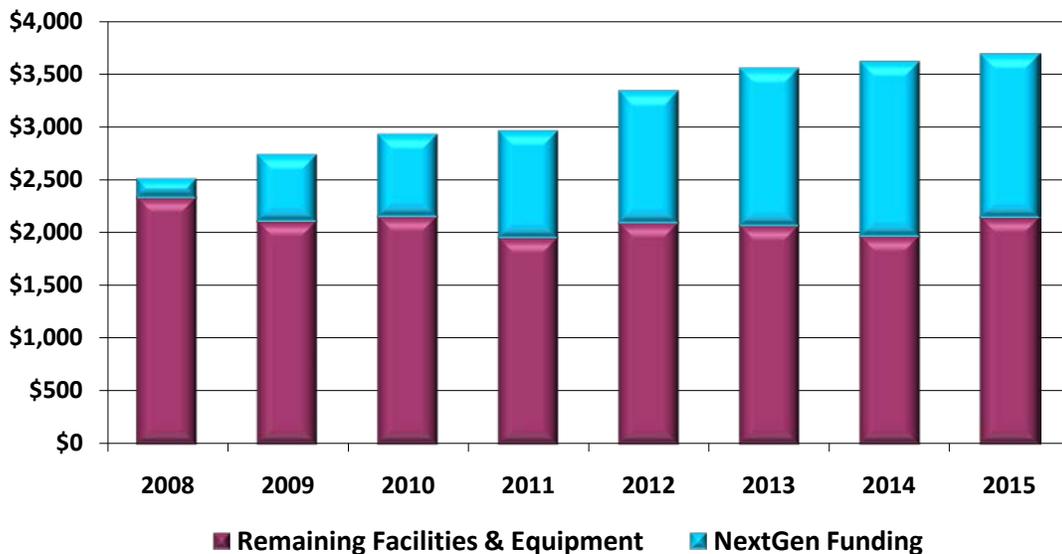
Advancing the Next Generation Air Transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System

- Maximizing the delivery and implementation of new performance-based navigation initiatives that can enhance capacity and reduce delays

- Ensuring a sufficient number of certified professional controllers at facilities that are critical to the NAS

Establishing Realistic Plans and Setting Expectations for NextGen

NextGen is vital to revolutionizing our aviation system and the Nation's long-term economic growth. Yet, the Department and FAA have struggled with setting expectations for what can reasonably be achieved in the near, mid, and long term. FAA plans to spend almost $9 billion between fiscal years 2008 and 2015 specifically on NextGen-related programs, which include a new satellite-based surveillance system and an information sharing system (see figure 7.1).

Figure 7.1. FAA Capital Funding for Fiscal Years 2008 through 2015, in Millions of Dollars

Source: FAA

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Last September, a government-industry task force made a series of recommendations for advancing NextGen in the midterm.[17] These included leveraging equipment already on aircraft, enhancing information sharing among FAA and airspace users, and reducing delays. FAA is incorporating the task force's recommendations into its plans, but it has not yet established detailed milestones to complete initiatives at high-activity locations that affect delays nationwide, like New York. Earlier this year, the task force identified 20 gaps between its recommendations and FAA's plans. Many of these relate to differences in milestones and locations as well as the need for FAA to develop more specific plans. In addition, while FAA has endorsed the recommendations, it still faces several barriers with respect to organizational culture, unresolved policy issues, and controller training that could impede implementation and expected benefits.

In June 2010, we reported that FAA had made progress in developing a vision for NextGen in the midterm but that it still needed to make a number of critical decisions to keep NextGen on track. Specifically, FAA has not decided how to allocate new capabilities for controllers among various automation systems or to what extent FAA facilities can be realigned, co-located, or consolidated due to new technology. Much work also remains to refine requirements and costs and establish metrics for measuring progress. These decisions will materially affect the cost of NextGen. In addition, FAA has not fully leveraged other Federal agencies' existing research and development programs, including research at the Department of Defense that could significantly reduce NextGen development costs.

Addressing Problems with Ongoing Modernization Projects That Are Essential to NextGen's Success Central to achieving NextGen's goals is the successful implementation of ongoing modernization projects that will provide platforms for new NextGen capabilities. Of particular concern are problems with the $2.1 billion En Route Automation Modernization (ERAM) program, which is intended to replace hardware and software at facilities that manage high-altitude traffic. FAA originally planned to deploy ERAM to 20 en route facilities by the end of 2010. However, during testing at ERAM's initial operating site, FAA encountered significant software-related problems, including radar processing failures and handing off traffic between controllers. As a result, FAA stopped ERAM testing in March 2010 to reexamine plans and develop corrective actions. FAA is working with its contractor to address the more than 200 problems identified so far and to

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[17] *NextGen Mid-Term Implementation Task Force Report*, September 9, 2009.

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improve system stability. The cost and schedule to complete ERAM are uncertain, but delays could be 2 years or longer. Delays with ERAM have serious consequences—FAA will have to maintain aging systems longer, limit capacity enhancing improvements in the high-altitude environment, and provide refresher training for controllers and maintenance technicians who must be certified on two different systems. Prolonged problems with ERAM could also have a cascading effect on implementing NextGen now and in the future, including key systems such as the Automatic Dependent Surveillance-Broadcast (ADS-B)[18] and Data Communications.[19]

Maximizing the Delivery and Implementation of New Performance-Based Navigation Initiatives That Can Enhance Capacity and Reduce Delays

A fundamental building block of FAA's NextGen efforts is establishing new performance-based navigation routes and procedures, using Area Navigation (RNAV) and Required Navigation Performance (RNP) specifications.[20] The potential benefits of RNAV and RNP are significant and include shorter, more direct flight paths; improved airport arrival and departure efficiency; enhanced controller productivity; fuel savings; and reduced aircraft noise and carbon emissions.

However, FAA has not widely implemented efficient RNP procedures, clarified the role of non-government third parties in developing RNAV/RNP procedures, or developed metrics to measure expected benefits. For example, FAA does not plan to rely on its two qualified third-party vendors to design and implement public RNP procedures, but airline officials stated that third parties may be needed to provide technical expertise for developing more efficient RNP procedures. FAA has instead focused on producing a targeted number of procedures—most of which are overlays of existing routes that do not provide shorter paths to alleviate airspace congestion or are incompatible with existing air traffic policies at airports with parallel runways. As a result, airlines that are equipped and approved for RNP are not widely using FAA's RNP procedures.

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[18] ADS-B offers surveillance, like radar, but with more precision. ADS-B provides air traffic controllers and pilots with more accurate information to help keep aircraft safely separated in the sky and on runways.

[19] Data Communications will provide comprehensive data connectivity, including ground automation message generation and receipt, message routing and transmission, and aircraft avionics requirements.

[20] RNAV is a method of navigation in which aircraft use avionics, such as Global Positioning Systems, to fly any desired flight path without the limitations imposed by ground-based navigation systems. RNP is a form of RNAV that adds on-board monitoring and alerting capabilities for pilots, thus allowing aircraft to fly more precise flight paths.

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Since we reported last year, FAA has stated that it will adjust its goals to focus on implementing beneficial procedures rather than producing a targeted number of procedures. In response to the recommendations of a joint government-industry task force, FAA is also creating joint agency-industry teams tasked with deploying enhanced procedures at delay-plagued airports in metropolitan areas, but this effort is in the early stages. FAA's key challenges to realizing the benefits of new procedures include integrating new routes with airspace redesign efforts, streamlining its procedure development process, modifying the equipment that controllers rely on to manage traffic, and properly training air traffic controllers and pilots on procedures before implementing them.

Ensuring a Sufficient Number of Certified Professional Controllers at Critical Facilities
FAA estimates that it will need to hire and train nearly 11,000 new air traffic controllers by fiscal year 2019 to replace controllers hired after the 1981 strike who are now eligible to retire. Because of the surge in attrition, FAA must assign newly hired controllers to complex air traffic control facilities, such as the Southern California Terminal Radar Approach Control, the Atlanta Terminal Radar Approach Control, the Chicago O'Hare Airport Traffic Control Tower, and facilities controlling the New York area airspace. In fiscal year 2009, 61 percent of all newly hired controllers were placed at Level 10 through 12 facilities, which are the busiest and most complex in the Nation and critical to NAS operations. In addition, 26 percent of FAA's controller workforce is currently in training—compared to 15 percent in 2004—creating the potential for fewer certified controllers in the workforce to control air traffic while providing on-the-job training for new controllers. While FAA has ongoing actions or plans to improve controller training and placement, the Agency will need to minimize the risks that less experienced controllers impose on the most critical facilities in the NAS. Key challenges will be ensuring adequate staffing, training resources, and other support to maintain continuity of facility operations.

CHAPTER 7

Advancing the Next Generation Air Transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System

Related Products The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Timely Actions Needed To Advance the Next Generation Air Transportation System, June 16, 2010
- Challenges in Meeting FAA's Long-Term Goals for the Next Generation Air Transportation System, April 21, 2010
- Actions Needed To Meet Expectations for the Next Generation Air Transportation System in the Midterm, October 28, 2009
- Challenges in Implementing Performance-Based Navigation in the U.S. Air Transportation System, July 29, 2009
- Training Failures Among Newly Hired Air Traffic Controllers, June 8, 2009
- Progress and Remaining Challenges in Reducing Flight Delays and Improving Airline Customer Service, May 20, 2009
- Aviation Industry Performance: A Review of the Aviation Industry in 2008, May 6, 2009
- Controller Staffing at Key California Air Traffic Control Facilities, April 23, 2009
- Federal Aviation Administration: Actions Needed To Achieve Mid-Term NextGen Goals, March 18, 2009
- Key Issues for Reauthorizing the Federal Aviation Administration, February 11, 2009
- FAA Faces Significant Risks in Implementing the Automatic Dependent Surveillance-Broadcast Program and Realizing Benefits, October 12, 2010

For more information on the issues identified in this chapter, please contact Jeffrey B. Guzzetti, Assistant Inspector General for Aviation and Special Program Audits, at (202)-366-0500.

Implementing Processes To Improve the Department's Acquisitions and Contract Management

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In fiscal year 2010, the Department obligated approximately $5.8 billion[21] on contracts for goods and services, including information technology services, training, road maintenance, and professional services to plan and implement key NextGen systems. Additionally, more than $60 billion was budgeted for grants to states, transit agencies, and other partners to help meet departmental strategic goals. To ensure it maximizes these dollars, the Department needs to strengthen its acquisition and contract management practices. While it has made some progress in this area, such as completing oversight reviews of the Federal Aviation Administration's (FAA) compliance with its acquisition policy guidance,[22] our audits continue to find weaknesses in how the Department plans, administers, and oversees its contracts.

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[21] Based on data from the Federal Procurement Data System-Next Generation provided by DOT.
[22] Completed regularly by FAA's National Acquisition Evaluation Program Team.

CHAPTER 8

Implementing Processes To Improve the Department's Acquisitions and Contract Management

Key Challenges

- Strengthening processes to govern the appropriate use of non-competitive or risky contracts and maximize use of competition

- Strengthening the acquisition function and workforce to provide leadership for the Department's acquisitions

- Maintaining programs to help ensure high ethical standards among the Department's contractors and employees

Strengthening Processes To Govern the Appropriate Use of Non-Competitive or Risky Contracts and Maximize Use of Competition

Recent Office of Management and Budget (OMB) contracting initiatives underscore agency use of competition and fixed-price contracts and require agencies to perform effective price analysis to mitigate risks for noncompetitive contract awards.[23] However, the Department annually awards over $1.8 billion using sole-source, cost-reimbursable, time-and-materials, and labor hours contracts, which represent the greatest risk to the Government because they are inefficient and subject to misuse. The Department was required to reduce the amount obligated for new awards of these contracts by more than 10 percent in fiscal year 2010.[24] However, our recent work on contracting at FAA and the Federal Motor Carrier Safety Administration (FMCSA) and award fee contracts illustrates that the Department needs to further improve its controls over high-risk contracts.

In fiscal year 2009, FAA obligated $541 million on more than 16,500 noncompetitive contract actions.[25] Our ongoing review of FAA's processes for awarding these sole-source contracts revealed that acquisition planning was inadequate and responsible officials were not sufficiently trained to perform price analyses. As a result, program and contracting officials took shortcuts when completing price analyses to meet compressed timeframes. Improved planning, training, and documentation are essential to ensure that prices are fair and reasonable for these contracts.

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[23] OMB Memorandum, *Increasing Competition and Structuring Contracts for Best Results,* October 27, 2009.

[24] DOT did not provide us with the analysis to show if it met the 10-percent reduction required by OMB for these contracts in fiscal year 2010.

[25] These include actions for awards of new contracts, modifications, task orders, and delivery orders. Not all of these contract actions required competitive awards, but when the action exceeds $10,000 FAA requires price analysis to ensure the Government receives the best value for dollars spent.

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FMCSA spends about 40 percent of its procurement dollars on high-risk time-and-materials contracts—compared to 5 percent Government-wide. In August 2010, we reported that FMCSA's contract pre-award processes leave it vulnerable to using ineffective business arrangements and ultimately hinder its ability to maximize competition.[26] For example, FMCSA does not prepare required acquisition plans, follow its recommended procurement lead times for planning and awarding contracts, or perform adequate market research to identify qualified vendors. While FMCSA concurred with our recommendations to follow sound procurement practices and maximize competition, FMCSA must fully implement planned actions to ensure it reduces its reliance on high-risk contracts and receives the best value for its procurement dollars.

Weaknesses in the Department's use of cost-plus-award-fee (CPAF) contracts further put its contract dollars at risk. CPAF contracts can encourage excellence by providing financial incentives based on performance, but they require effective monitoring to ensure contract dollars are spent wisely and award fees are justified. In August 2010, however, we reported that Operating Administrations did not use measurable evaluation criteria or payment structures to motivate exceptional performance. Ultimately, Operating Administrations consistently gave contractors high ratings and substantial award fees, despite lacking adequate support for their actual performance, as measured by award-fee evaluation criteria and directed by OMB.[27] These award fees totaled about 92 percent of the awards for the rating periods we reviewed. Based on our audit sample, we estimated that more than $140 million was paid in award fees without proper justification.[28] To improve its use of award fee contracts at operating administrations, the Department is developing a guidebook incorporating best practices for planning, implementing, and administering CPAF contracts and training contracting and program personnel.[29] Effective implementation of Office of the Secretary (OST) and FAA measures will be critical to ensuring the Department does not pay improper award fees to contractors.

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[26] OIG Report Number ZA-2010-093, "Federal Motor Carrier Safety Administration Lacks Core Elements for a Successful Acquisition Function," August 24, 2010.

[27] OIG Report Number ZA-2010-092, "Improvements in Cost-Plus-Award-Fee Processes Are Needed To Ensure Millions Paid in Fees Are Justified," August 25, 2010.

[28] We audited the performance periods for award fee contracts as of December 31, 2007. Our estimate was based on extrapolating our contract sample to the universe of DOT's 41 CPAF contracts.

[29] FAA issued separate award fee guidance in September 2007.

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Strengthening the Acquisition Function and Workforce To Provide Leadership for the Department's Acquisitions   To maintain an effective acquisition function, OMB provided agencies with standard guidance that emphasizes organizational alignment and leadership, policies and procedures, a workforce of the appropriate size and needed skills, and information management and stewardship.[30] However, key acquisition leadership positions within OST have been vacant or filled as collateral duties, and a strategic vision is needed to guide acquisition operations successfully throughout the Department. Also, OST's Senior Procurement Executive (SPE) does not report directly to the Chief Acquisition Officer (CAO), contrary to legislative requirements[31] and the intent of OMB guidance. Because the SPE does not have a direct line of communication with the CAO and is not formally part of the Department's top-level management discussions and meetings, the SPE's ability to elevate acquisition issues and position the acquisition function to play a strategic role is diminished. For example, OST is not sufficiently performing critical oversight of acquisitions at Operating Administrations. OST also lacks a comprehensive set of updated policies to effectively manage its acquisitions. The Department's Transportation Acquisition Regulations and Transportation Acquisition Manuals, maintained by OST, were last updated in 2005 and 2006, respectively. Finally, OST lacks the basic internal controls needed to minimize the risk of unauthorized users accessing and manipulating the Department's procurement data. The lack of internal controls compromises the data's integrity, security, and usefulness in forming management decisions and ultimately exposes the Department to fraud, waste, and abuse.

OST has begun steps to strengthen its acquisition function. However, until OST fully commits to needed reform, it will be limited in its ability to provide clear direction and vision to acquisitions across the Department. Strong acquisition direction is essential to ensure the billions of dollars the Department spends on contracting each year are used in the most efficient and effective manner and help accomplish the Department's mission.

In addition to lacking an effective acquisition function, the Department is challenged to maintain an acquisition workforce that can effectively oversee its expanding and complex contracts for goods and services. Retention and recruitment concerns, as well as the need to ensure a competent workforce, pose risks to the Department's ability to meet its

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[30] OMB Memorandum, *Conducting Acquisition Assessments under OMB Circular A-123,* May 21, 2008.
[31] Service Acquisition Reform Act of 2003 (Pub. L. No. 108-136 § 1421(c)).

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acquisition workload demands.[32] Between fiscal years 2008 and 2018, the percentage of employees in the Department's contracting series eligible to retire will more than triple to 63 percent—a rate about 10 percent higher than the average for civilian agencies. According to FAA, its acquisition workforce is currently 6 percent understaffed, and this shortage could grow to 26 percent by 2014. Despite these concerns, the Department has yet to develop adequate plans to address this challenge. For example, the Department's 2009 Strategic Acquisition Workforce Succession Plan is based on survey responses from less than half of its workforce. In addition, Operating Administrations have not made sufficient progress in implementing the specific strategies and goals in the Department's first Acquisition Workforce Strategic Human Capital Plan, issued in April 2010, for increasing the capacity and capability of the acquisition workforce through fiscal year 2014.[33] This year, FAA—whose procurement function is autonomous from the Department's—updated its 2009 Acquisition Workforce Plan to project workforce needs through 2014 and broaden the definition of acquisition workforce.

Maintaining Programs To Help Ensure High Ethical Standards Among the Department's Contractors and Employees
Our audits and investigations have identified the need for more vigilant oversight to detect and prevent procurement fraud, waste, and abuse within the Department and among its fund recipients. The Department's oversight of over $40 billion in Recovery Act funds heightens the importance of safeguarding against awarding funds to those with a record of wrongdoing and abuse.

Contract and grant fraud cases currently comprise about 42 percent of active Office of Inspector General investigations. Between June 2009 and September 17, 2010, contract grant fraud cases resulted in 27 indictments, 34 convictions, and $72 million in recoveries. For example, an airport owner and recipient of FAA Airport Improvement Program grants was sentenced to 2 years probation for diverting approximately $375,000 in grant funds— provided by FAA to pay contractors who completed airport improvements—for his personal use. Similarly, a Chicago engineering firm owner was sentenced to 41 months in prison and ordered to pay $10 million in restitution for overstating overhead expenses on various engineering and architectural projects. The overpayments were due to invalid charges on

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[32] OIG Report Number PT-2010-008, "DOT's Fiscal Year 2010 Top Management Challenges," November 16, 2009.

[33] DOT's plan was in response to an October 27, 2009, Office of Federal Procurement Policy requirement that civilian agencies develop an annual acquisition human capital plan.

Implementing Processes To Improve the Department's Acquisitions and Contract Management

projects funded by the Federal Transit Administration, the Federal Highway Administration, and FAA.

In January 2010, we reported that the Department's ability to safeguard against awarding contracts and grants to improper parties was limited by delays in its suspension and debarment (S&D) decisions and reporting, as well as deficiencies in its policies, procedures, and internal controls.[34] In response to our recommendations, OST and FAA revised their S&D policies to require timely action on S&D decisions and accurate and timely reports on these cases. However, neither OST nor FAA has fully implemented the reporting system and corresponding internal controls used to collect and manage S&D information across the Department. Until the Department fully implements these improvements to its S&D Program, it will have incomplete information on its S&D caseloads and risk awarding contracts and grants to parties that have been suspended or debarred.

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[34] OIG Report Number ZA-2010-034, "DOT's Suspension and Debarment Program Does Not Safeguard Against Awards to Improper Parties," January 7, 2010.

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Implementing Processes To Improve the Department's Acquisitions and Contract Management

Related Products The following related reports, testimonies, and advisories can be found on the OIG website at http://www.oig.dot.gov.

- Improvements in Cost-Plus-Award-Fee Processes Are Needed To Ensure Millions Paid in Fees Are Justified, August 25, 2010
- Federal Motor Carrier Safety Administration Lacks Core Elements for a Successful Acquisition Function, August 24, 2010.
- Weaknesses in DOT's Suspension and Debarment Program Limit Its Protection of Government Funds, March 18, 2010
- DOT's Suspension and Debarment Program Does Not Safeguard Against Awards to Improper Parties, January 7, 2010
- ARRA Advisory–DOT's Suspension and Debarment Program, May 18, 2009

For more information on the issues identified in this chapter, please contact Tony Wysocki, Acting Assistant Inspector General for Acquisition and Procurement Audits, at (202)-493-0223 or Timothy Barry, Principal Assistant Inspector General for Investigations, at (202) 366-1967.

Improving the Department's Cyber Security

Source: freepixels.com

As part of its Accountable Government Initiative, the Administration seeks to enhance Federal cyber security[35] while closing information technology (IT) gaps between the Government and private sector. With new cyber threats constantly arising, automated tools are essential to continuously monitor security-related information. With more than 400 systems—nearly two-thirds of which belong to the Federal Aviation Administration (FAA)—and an approximately $3 billion annual technology investment, the Department is working to incorporate new technologies and meet the Administration's cyber security goals.

Key Challenges

- Establishing a robust information security program

- Strengthening air traffic control system protections

- Increasing protection of personally identifiable information (PII)

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[35] Cyber security is the branch of security that pertains to computers and networks, including the Internet.

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Establishing a Robust Information Security Program
The Federal Information Security Management Act (FISMA) of 2002 requires agencies to establish an information security program to protect agency information and systems. Last year, we reported that the Department's information security program was not as effective as it should be and did not meet key FISMA and Office of Management and Budget (OMB) requirements.[36] With limited progress during fiscal year 2010, several challenges remain.

First, security deficiencies still exist in key control areas, including management of information, system authorization, configuration management, and contingency planning. For example, we determined that the Department's Recovery Act websites made user information and departmental systems vulnerable to attack. To build an information security program that adequately protects against cyber threats, the Department needs to address security deficiencies in a sustainable and flexible manner so it can quickly adapt to and avert new threats.

Second, the Department's Office of the Chief Information Officer (OCIO) could do more to guide and oversee the Operating Administrations in building and sustaining strong information security practices. In 2009, OCIO issued its Department-wide information security policy—the first step in building an information security program. The next step for OCIO is to enhance this policy and develop Department-wide procedural guidance. In addition, OCIO needs to conduct quality assurance reviews of modal cyber security efforts and assess the use of technology to facilitate timely management of the Department's cyber security. At present, the Department does not have central, automated systems to enable the timely assessment of its information security program. Until the OCIO can better guide and oversee Operating Administrations' information security, the Department cannot ensure that policy is properly implemented or deploy automated tools to quickly and continuously monitor its cyber security posture.

Finally, the Department has yet to meet OMB's requirement for issuing Personal Identity Verification (PIV) cards to employees and contractors—a key Government-wide initiative to secure Federal information and information systems. OCIO and the Assistant Secretary of

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[36] OIG Report Number FI-2010-023, "Audit of DOT's Information Security Program and Practices," November 18, 2009.

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Administration share the responsibility of managing PIV card issuance. More than a year after OMB's October 2008 deadline, less than 30 percent of the Department's approximately 112,000 employees and contractors had a PIV card. The Department has yet to develop an actionable plan to complete issuance of PIV cards to its remaining employees and contractors. In addition, the Department needs a better process for securing the information systems used to store, process, and transmit personally identifiable information. Until it takes action to address these weaknesses, the Department not only risks issuing PIV cards to non-DOT employees and contractors, it cannot secure personal information such as Social Security numbers (SSN).

Strengthening Air Traffic Control System Protections FAA's planned Next Generation Air Transportation System (NextGen) system relies on a number of new technologies to achieve its goals. The Automatic Dependent Surveillance-Broadcast (ADS-B), a key NextGen system, uses satellite-based surveillance to more precisely track the location of aircraft.[37] While ADS-B offers many benefits over traditional ground-based radar systems, some aspects are vulnerable to certain types of cyber attack. Also, as part of the transition to NextGen, FAA is increasingly relying on the use of Internet Protocol (IP)-based commercial products and web applications rather than proprietary software. While this strategy will enable FAA to efficiently facilitate air traffic control services, it poses a higher security risk due to the vulnerabilities inherent in using commercial IP-based products. In addition, FAA is outsourcing more of its operations to contractors. ADS-B is the first operational Air Traffic Control (ATC) system to be owned and operated by a contractor. Because FAA only owns the data, not the system, it could have little control over security challenges encountered with ADS-B.

As FAA develops NextGen, it must continue to protect its current ATC systems, which are located at hundreds of operational facilities, such as en route centers, Terminal Radar Approach Control (TRACON) facilities, and airport control towers. Yet, FAA has not established adequate Intrusion Detection System (IDS) capabilities to monitor and detect potential cyber security incidents at key ATC facilities. Instead, FAA relies on the Department's Cyber Security Management Center to monitor cyber incidents only for administrative systems, such as email at these facilities. To collect critical information for

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[37] See chapter 7 for a discussion of NextGen.

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security analyses, FAA needs to install IDS sensors at key locations.[38] During the past year, FAA has taken steps to identify key ATC facilities that need IDS monitoring and has begun deploying IDS at certain TRACON facilities. However, without comprehensive NAS-wide IDS capabilities, FAA cannot effectively monitor ATC systems for possible cyber attacks or take timely action to stop them. FAA management is developing an implementation strategy to address this issue but has not developed or identified a timetable for deploying IDS beyond the specified TRACON facilities.

Increasing Protection of Personally Identifiable Information To minimize the risks associated with the unauthorized disclosure of PII, OMB required agencies to eliminate the unneeded use of SSNs by November 2009. In fiscal year 2010, the Department stabilized its inventory of systems containing PII, provided advanced training sessions for modal privacy personnel, and continued its analysis to reduce the use of SSNs in PII systems. Despite this progress, PII remains vulnerable to misuse. The Department has preliminarily identified 70 systems that need to be evaluated for SSN elimination but does not plan to complete the elimination until 2013. To protect the public's privacy and comply with OMB requirements, the Department must assign a priority to meet the OMB mandate of eliminating unneeded use of SSNs in a timelier manner.

Our review of the Airmen Medical Support Systems (MSS) found that airmen's PII was not properly secured to prevent unauthorized access due to serious security lapses in FAA's management of user access to the system.[39] For example, medical examiners' former staff continued to have access to MSS. At the same time, FAA has not fully implemented security controls required by OMB and the Department to protect PII. In addition, FAA has not ensured secure configuration of MSS computers in accordance with the Department's baseline standards to reduce the risk of unauthorized access and corruption. We found vulnerabilities on MSS computers, such as the configuration allowing intruders to install malicious codes on FAA user computers. These weaknesses make airmen's PII vulnerable to unauthorized access and use and potential falsification of medical certificates that could lead to unfit airmen being medically certified to fly. During our review, FAA took immediate

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[38] Sensors are a combination of hardware and software that serve as the "eyes and ears" of the IDS. Ideally, they are placed at key network locations (e.g., Internet access points) to detect threats such as viruses.

[39] OIG Report Number FI-2010-069, "Information Security and Privacy Controls over the Airmen Medical Support Systems," June 18, 2010.

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action to enhance security protection by working with doctors to remove thousands of separated medical staff's access to MSS and retracting millions of PII records from the contractor's site. However, additional improvements are needed to adequately secure PII data from unauthorized use.

Related Products The following related reports and testimonies can be found on the OIG website at http://www.oig.dot.gov.

- Review of FAA's Progress in Enhancing Air Traffic Control Systems Security, November 2, 2009
- Final Report on the Department of Transportation's Information Security Program and Practices, November 18, 2009
- Information Security and Privacy Controls Over the Airmen Medical Support Systems, June 18, 2010

For more information on the issues identified in this chapter, please contact Earl Hedges, Acting Assistant Inspector General for Financial and Information Technology Audits, at (410)-962-3612.

Comparison of Fiscal Year 2011 and 2010 Top Management Challenges

Fiscal Year 2011 Challenges	Fiscal Year 2010 Challenges
• Ensuring Transparency and Accountability in the Department's Recovery Act Programs	• Maximizing the Department's Economic Recovery Investments
• Maintaining Momentum in the Department's Oversight of Highway, Motor Vehicle, Hazardous Materials, and Transit Safety	• Enhancing Surface Safety Programs To Reduce Injuries and Fatalities While Defining a New Federal Role in Transit Safety
• Maintaining Momentum in Addressing Human Factors and Improving Safety Oversight of the Aviation Industry	• Addressing Human Factors and Strengthening the Regulatory Oversight Framework for Aviation Safety
• Improving the Department's Oversight of Highway, Transit, and Pipeline Infrastructure	• Maximizing Federal Surface Infrastructure Investments by Helping States Better Allocate Resources and Providing Effective Oversight
• Identifying Sufficient Funding Sources to Support Future Federal Investment in Surface Transportation Infrastructure	• Developing a Funding Framework for the Next Surface Transportation Reauthorization
• Transforming the Federal Railroad Administration to Address Significantly Expanded Oversight Responsibilities	• Successfully Implementing the Newly Created Multi-Billion Dollar High-Speed Intercity Passenger Rail Program
• Advancing the Next Generation Air Transportation System While Ensuring the Safe and Efficient Operation of the National Airspace System	• Moving Toward the Next Generation Air Transportation System and Improving Performance of the National Airspace System
• Implementing Processes To Improve the Department's Acquisitions and Contract Management	• Improving Contract Management and Oversight • Strengthening the Department's Acquisition Workforce
• Improving the Department's Cyber Security	• Enhancing the Ability To Combat Cyber Attacks and Improving the Governance of Information Technology Resources

APPENDIX. DEPARTMENT RESPONSE

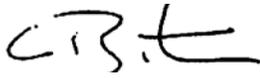![U.S. Department of Transportation logo]

**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Memorandum

Subject: **ACTION:** Response to Office of Inspector General (OIG) draft report, "Top Management Challenges for Fiscal Year 2011"

Date: November 3, 2010

From: Christopher Bertram
Assistant Secretary for Budget and Programs, and
Chief Financial Officer

Reply to
Attn. of:

To: Calvin L. Scovel III
Inspector General

Throughout FY 2010, the Department of Transportation (DOT) has maintained its long-standing record of excellence in delivering a world-class transportation system for our Nation. Many of our recent accomplishments demonstrate the Department's continued commitment to ensuring safe and reliable transportation for today, while at the same time planning for the transportation needs of tomorrow. The Department continues to promote intermodal solutions utilizing the best that each transportation mode has to offer for solving current transportation challenges, as well as an even more holistic or systems approach that builds transportation efficiency into communities from the start. This new systematic focus encourages livable communities by incorporating consideration of the important role that transportation plays into development decision-making to help make neighborhoods safe, accessible and efficient.

Transportation Safety is the Department's First Priority

The Department's commitment to maintaining and further improving transportation safety in all modes is unequivocal. The results of our safety culture continue to be demonstrated in recent metrics. Working together with state and local authorities, we have achieved further reductions in the annual highway fatality rates. This includes reductions in motorcycle fatalities which had been steadily rising. We raised public awareness around the Nation about the dangers posed by distracted driving from the unsafe use of cell phones, texting, and the use of other electronic devices. The Secretary personally highlighted the risks associated with distracted driving at events throughout the country and hosted a Distracted Driving Summit here at the Department to focus on this important issue. The Secretary also moved

forward with a bold initiative to extend the Department's safety culture to the transit systems millions of people depend on each day to travel to and from work. After a recent string of safety failures across the Nation, the Secretary determined that it is time for the Federal Transit Administration to take a stronger, more proactive role in transit safety, and has been working with the Congress to bring an increased Federal focus on transit safety.

The Department's combined efforts through each of its operating administrations continue to advance transportation safety through improvements in systems, processes, and oversight. Through the Pipeline and Hazardous Materials Administration, the Department has significantly improved its oversight of hazardous materials transportation over the past year, with the application of improved procedures, better interaction with organizations throughout the Department, and increased management focus on the issues. The National Highway Traffic Safety Administration demonstrated its commitment to ensuring vehicle safety through its introduction of new and tougher vehicle safety rating systems, its enforcement of vehicle recall requirements, and its use of new and creative ways to inform the public. Its continued emphasis on proven public information campaigns, such as "Click it or Ticket," combined with targeted enforcement activities led to further improvement in the rate of seat belt use across the country, which is saving lives today. The Federal Aviation Administration (FAA) has demonstrated continued success in its use of safety data to better focus safety inspections and affect appropriate actions by air carriers to continue achieving a strong safety record, even through difficult economic times. As a result of these and other actions throughout the Department, we continue to make significant strides in achieving our safety goals.

DOT Recovery Act Implementation Generates Tens of Thousands of Jobs with More than 15,000 Infrastructure Projects

FY 2010 marks the second year of the Department's implementation of the American Recovery and Reinvestment Act of 2009 (Recovery Act) and the Department's programs continue to generate worthwhile jobs with careful investments in useful transportation infrastructure. The $48.1 billion appropriated to DOT has been used to support more than 15,000 infrastructure projects. This investment has improved the safety and efficiency of the Nation's system of highways, transit, ports, and airports. Just as important, these projects generated tens of thousands of jobs in transportation and related sectors, during a difficult economic environment.

In addition to enhanced funding for the Department's traditional programs, the Recovery Act included $1.5 billion for the Secretary's Discretionary Grant program known as TIGER Grants, and $8 billion to begin addressing the President's vision for a world class high speed intercity passenger rail system for America. The TIGER Grant program focused on projects that apply intermodal solutions and innovative strategies to address demonstrated transportation needs. Early in 2010, the Secretary selected 51 projects nationwide that promote greater mobility, a cleaner environment and more livable communities. Through the Federal Railroad Administration (FRA), the Department has devoted significant time and

resources over the past year for successful implementation of the new High Speed rail initiatives. These efforts require nothing less than building an entirely new program including identifying programmatic requirements, identifying and obtaining necessary resources, and creating oversight structures, while implementing the program with unprecedented speed. Using a truly intermodal approach, FRA identified best practices from operating administrations throughout the Department and is modeling the program based-on best practices from the Department's established grant programs.

Implementing the Recovery Act also generated unanticipated benefits, including new business processes, increased focus on new measures of results, and ever growing expectations for expeditious program implementation with unprecedented transparency to the public. We identified new ways to collect, analyze, and convey data. As we implemented the Recovery Act, our innovative staff created capabilities that bring nationwide transportation data to a level of granularity that is meaningful and accessible to local communities. For the first time, the public can log onto the internet and with a few clicks of a mouse, gain a clear sense of what the Recovery Act meant to their community, their state and the Nation. We developed new training methods that helped the transportation community understand and comply with the Recovery Act's requirements. We developed new programs, like the TIGER program from the ground up, based on virtual teams and existing resources that can be quickly assembled, utilized, and then deconstructed, to get things done quickly and expertly, with a minimum cost to the taxpayer. We will continue to assess and analyze the lessons from Recovery Act implementation to determine how they can be applied to increase the efficiency and effectiveness of the Department's future endeavors.

Preparing for the Next Generation of Air Travel

FAA continues its efforts to effect a major change in the management of the Nation's airspace with its NextGen initiative. NextGen is intended to replace aging radar-based air traffic management systems with a new state-of-the-art satellite-based technology that holds the potential to improve system performance, address airspace congestion, and provide the airline community with significant operational benefits. Implementing this "system of systems" into an integrated air traffic management tool is a major undertaking and one of the Department's highest priorities. Ensuring that each NextGen segment moves forward in a synchronized way and effectively addresses the interdependencies among the various systems presents an enormous technical challenge to the Department. We must also keep in mind, that as the development and implementation of NextGen proceeds, FAA must also ensure that today's airspace continues to meet operational goals, such as reducing tarmac delays, increasing on-time arrivals, and maintaining strong safety performance throughout the National Airspace System.

Planning for the Surface Transportation Needs of the Future

The Department's surface transportation programs are due to be authorized by Congress. Throughout FY 2010, we have been working to delineate the Administration's priorities for

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surface authorization and reflect the President's vision for meaningful investment in transportation infrastructure to facilitate economic growth, enhance safety, and improve the environment. In identifying these priorities we continue to build on a focus of intermodal solutions and enhancing the systems approach for improving livability with effective transportation solutions. We look forward to working with the Congress to explore the potential for new and better ways to fund transportation infrastructure investment, including innovative financing tools that will further leverage limited Federal resources and maximize our return on investments for the public.

Overall, the nature of the Department's mission with its focus on transportation safety and guiding wise investments in transportation infrastructure leads to a continuous cycle of management challenges. Even as progress is achieved, new challenges arise. For example advances in automotive electronics led to new advances in safety such as advanced vehicle stability control that is saving lives today. At the same time, we recognize that advanced electronics also lead to new challenges that resulted in the Secretary's initiative to reduce distracted driving. Nonetheless, the Department has established a clear record of accomplishment throughout the operating administrations and in the Office of the Secretary over the past year. As we begin FY 2011, we will once again bring to bear the talent, energy and commitment of the Department to help Transportation meet its goals. Thank you for sharing the Office of Inspector General's perspectives on the challenges facing the Department. This information will be helpful in planning for FY 2011 and beyond.