Before the Committee on Appropriations Subcommittee on Transportation, Housing and Urban Development, and Related Agencies United States House of Representatives

For Release on Delivery Expected at 2:00 p.m. EST Tuesday March 6, 2007 CC-2007-021

Top Management Challenges Facing the Department of Transportation

Statement of The Honorable Calvin L. Scovel III Inspector General U.S. Department of Transportation



Mr. Chairman and Members of the Subcommittee:

As we begin the fiscal year (FY) 2008 appropriations cycle, we appreciate the opportunity to appear today to discuss the major challenges facing the U.S. Department of Transportation (DOT). At the outset, I want to express my appreciation for the strong support that Congress has shown for the Office of Inspector General (OIG) and its mission.

Our transportation system is the backbone of the Nation's economy. For FY 2008, DOT is requesting \$67 billion for a wide range of transportation efforts, including major infrastructure investments. The FY 2008 request represents an increase from its FY 2007 requested level of \$65.6 billion.

As you know, we report annually on the major management challenges facing DOT as required by Congress and the Office of Management and Budget. We recently issued our eighth report.¹

This year, we highlighted 10 major challenges facing the Department, which include implementing strategies to reduce congestion; responding to national disasters and emergencies; and strengthening the coordination of research, development, and technology activities. We also highlighted the

ı	FY 2007 Top Management Challenges
5	• Defining, Developing, and Implementing Strategies
5	To Improve Congested Conditions
1	• FAA Reauthorization
, ,	 Responding to National Disasters and Emergencies
1	 Strengthening Efforts To Save Lives by Improving Surface Safety Programs
	Aviation Safety
r	 Making the Most of the Federal Resources That
,	Sustain Surface Transportation Infrastructure
3	Improvements
, ,	 Achieving Reform of Intercity Passenger Rail
)	 Improving Acquisition and Contract Management
;	• Protecting, Monitoring, and Streamlining Information
ť	Technology Resources
/	• Strengthening DOT's Coordination of Research,
2	Development, and Technology

importance of protecting the Department's information technology resources, particularly the Nation's air traffic control infrastructure.

The Secretary and her team are responsive to the challenges we identify. The Department's Performance and Accountability Report also tracks progress in resolving the issues that we have identified and shows whether meaningful actions are underway to address the challenges identified in our annual reports.

Given the impact of congestion—in the air and on the ground—on the quality of life for travelers and on economic growth, we believe that the Department's initiative to reduce congestion among all modes of transportation is noteworthy. It represents an overall framework for Federal, state, and local authorities to begin addressing congestion and includes elements ranging from alternative funding sources for infrastructure to cross-modal solutions.

¹ OIG Report Number PT-2007-004, "DOT's FY 2007 Top Management Challenges," November 15, 2006. OIG reports and testimonies can be found on our website: <u>www.oig.dot.gov</u>.

In addition to the 10 challenges in our report, there are other issues resurfacing for Congress and the Department. These include challenges highlighted in our past reports, such as the implementation of the North American Free Trade Agreement's cross border trucking safety requirements.²

This past month, the Department announced a pilot program to allow a select number of Mexican trucking companies to make deliveries beyond the narrow 20 to 25 commercial zones of the Southwest border. This will require focused oversight from the Department to ensure that there is no degradation of truck safety and that requirements are being met. We will be testifying on this subject before the Senate later this week.

Another issue that is resurfacing is the state of airline customer service. Recent events with JetBlue and American Airlines underscore the traveling public's dissatisfaction with elements of airline service, particularly when the Nation's air traffic system responds to weather emergencies. We have examined airline customer service issues in the past.³ At the request of Secretary Peters, we are looking into why specific situations occurred and what commitments airlines have made for meeting essential needs of customer during long onboard delays. We will keep this Subcommittee apprised of our work on this important matter.

Today, I would like to highlight the major issues facing DOT in terms of linking program requirements and budgetary resources for the short and long term, challenges in the areas of aviation and surface safety, and getting the most from our Federal transportation infrastructure dollars. We have assembled these major issues along three cross-cutting areas:

- Establishing funding requirements for FY 2008 and beyond for aviation and intercity passenger rail;
- Transportation safety; and
- Contract, grant, and project oversight.

I would now like to discuss these matters in greater detail.

² OIG Report Number MH-2005-032, "Follow-Up Audit of the Implementation of the North American Free Trade Agreement's Cross-Border Trucking Provisions," January 3, 2005.

³ OIG Report Number AV-2007-012, "Follow-Up Review: Performance of U.S. Airlines in Implementing Selected Provisions of the Airline Customer Service Commitment," November 21, 2006.

ESTABLISHING FUNDING REQUIREMENTS FOR FY 2008 AND BEYOND FOR AVIATION AND INTERCITY PASSENGER RAIL

A major challenge facing DOT and Congress is reaching agreement and reconciling very divergent stakeholder positions on how to finance the Federal Aviation Administration (FAA) and developing efforts to advance the next generation air traffic management system. Linking program requirements and budgetary resources will be critical as both the current excise taxes and the underlying authorization (Vision 100)⁴ that support aviation programs expire in September 2007.

DOT must also work with Congress and other stakeholders to break the cycle of appropriations without authorization for Amtrak and to realign the intercity passenger rail system to match the levels and sources of funding available. In the past year, modest progress was made on our recommendations regarding reducing Amtrak's costs, but the current system remains unstable. A key challenge this year for intercity passenger rail is achieving needed reforms while improving fiscal discipline.

Federal Aviation Administration—Reaching Consensus on a Financing Mechanism To Fund FAA and Establishing Funding Requirements

FAA requested \$14.1 billion in fiscal year 2008 and is currently funded through a combination of excise taxes (primarily a tax on airline tickets) and the General Fund. Last month, the Department released a comprehensive proposal for reforming how FAA is financed that represents a significant change to the status quo. The proposal calls for, among other things, a shift to cost-based user fees in addition to modifications to the fuel tax and a continuing General Fund contribution. It also calls for changes in governance (a new user board) and adjustments to how airport projects are financed.

User charges, a prominent element of FAA's proposal, attempt to correlate the cost of providing air traffic services to the fees collected for those services. Generally speaking, FAA's proposal calls for commercial operators to pay user fees, while general aviation operators would pay an increased fuel tax. General aviation operators would be subject to a user fee if they arrive at or depart from one of a limited number of large hub airports.

FAA's proposal provides broad parameters, such as aircraft weight and distance traveled, for establishing air traffic user fees but it does not provide specifics on the charges users would be expected to pay. Consequently, there is intense controversy regarding what type of user fee should be charged, who should pay for what, and how—if at all—the current congressional oversight of FAA spending should be

⁴ Vision 100 – Century of Aviation Reauthorization Act, Pub. L. No. 108-176 (2003).

altered. There is also disagreement about the cost of administering the fees and the burden of paying them on the aviation community.

Proponents of the current system note that excise tax revenues, which are deposited in the Aviation Trust Fund, have increased over the past 2 years, and the estimates show revenues continuing to increase over the next decade. However, others note that revenues are less than previously estimated, when events such as the September 11 attacks affected the industry as a whole.

Without question, the best way to finance FAA and the next generation air traffic management system is a policy question for Congress. Irrespective of the financing mechanisms ultimately decided upon, there are several front and center issues that must be addressed. These include the following:

• Next Generation Air Traffic Management System: A key issue is getting reliable cost estimates for the next generation air traffic management system, one of the most complex undertakings FAA has embarked upon in years. This is important because the question of how to finance FAA is closely related to what level of funding is required.

We have seen estimates suggesting that FAA would need between \$500 million and \$1 billion annually for the next 4 years over existing planned funding levels for next generation air traffic management system. In a recent report,⁵ we recommended that FAA provide Congress with cost estimates on three vectors research and development, adjustments to existing programs, and funds for new initiatives. Given the high-risk nature of the effort, we also recommended that FAA develop a strategy for how it intends to manage this extraordinarily complex effort and what expertise will be required to prevent past problems and successfully deliver new capabilities.

• Air Traffic Controller Retirements: In a recently issued report,⁶ we found that FAA continues to make progress in implementing its comprehensive staffing plan for hiring and training over 11,000 new controllers through FY 2015. For example, we found that FAA has significantly improved its hiring process and has made progress in reducing the time and costs to train new controllers. However, further progress is still needed in important areas.

For example, FAA is still developing accurate facility-level staffing standards, which are a foremost necessity in effectively placing newly hired controllers where they will be most needed. Additionally, while FAA reached its goal of

⁵ OIG Report Number AV-2007-031, "Joint Planning and Development Office: Actions Needed To Reduce Risks With the Next Generation Air Transportation System," February 12, 2007.

⁶ OIG Report Number AV-2007-032, "FAA Continues To Make Progress in Implementing its Controller Workforce Plan, but Further Efforts Are Needed in Several Key Areas," February 9, 2007.

reducing controller staffing by 3 percent for FY 2005, it is unknown whether the productivity initiatives established in the 2004 Plan were actually effective in helping to achieve that reduction. We recommended that FAA report on progress made in developing staffing ranges for each facility in the next update of its workforce plan and establish baseline metrics for assessing productivity initiatives.

Finally, FAA still has not identified the estimated total costs associated with this workforce plan. FAA submitted some cost details in its FY 2008 budget submission, in which it requested \$15.9 million to hire and train new controllers for FY 2008, but provided no details for FY 2009 and beyond when the costs of the plan may increase significantly as hiring increases. We recommended that FAA develop detailed cost estimates and offsets so that the Agency's stakeholders can clearly understand the resources required to execute the plan in its entirety.

• **Cost Accounting System:** In FY 2006, FAA substantially completed its cost accounting system at a cost of about \$66 million. The system covers all of its lines of business and captures the annual labor costs of substantially all of FAA's personnel. FAA's cost accounting system assigns costs to its service delivery points, such as air traffic towers, terminal approach radar control facilities, and en route centers. FAA can use its cost accounting system to measure performance; however, FAA generally does not use the system to make management decisions about its operations or establish cost-based goals to improve efficiency of operations.

FAA also needs to improve the accuracy of financial accounting data, which feeds the cost accounting system. FAA received a qualified opinion on its FY 2006 financial statements because construction-in-progress costs were not accounted for accurately. As a result, FAA had to make hundreds of million of dollars in adjustments to its financial statements. Work is underway to correct this deficiency, and we will continue to monitor corrective actions.

Should Congress decide to adopt FAA's recent proposal on user fees, the cost accounting system should be capable of supporting the types of fees envisioned by FAA.

Achieving Reform of Intercity Passenger Rail

The current model for providing intercity passenger rail continues to produce financial instability and poor service quality. There have been some improvements in Amtrak's financial and operating performance recently, but there are limits as to how much improvement is possible within the current framework.

Without a reauthorization, it will again fall to the Appropriations Committee to impose fiscal discipline on Amtrak. To that end, Amtrak would need \$1.35 billion in FY 2008: \$465 million for cash operating losses, \$600 million for capital spending,

and \$285 million for debt service to operate a nationwide system while maintaining modest progress towards achieving a state of good repair. Not all of this \$1.35 billion need come from direct appropriations; some could come from Amtrak's cash balances, depending on its projected year-end cash position later in the year.

The \$465 million operating subsidy would enable Amtrak to provide nationwide passenger rail service, while focusing its attention on needed reform and operational improvements. Also, Amtrak's operating subsidy should be appropriated separately from capital and debt service, just as Congress did in FY 2006. This would prevent the deferral of capital projects in order to avoid the more difficult work of improving Amtrak's operating efficiency. The capital spending amount would allow modest progress toward a state of good repair and the debt service amount would be Amtrak's estimate of its fixed cost for principal and interest.

In addition, we support—with caveats—a state capital matching grant program, as included in the President's FY 2008 Budget, as a means to stimulate rail corridor development. Rail corridors hold the greatest potential for future ridership growth, and the expected demand for these routes needs to be addressed. Our primary concern with the proposed program is that we believe it must be designed to ensure that the Federal investment leverages new state investments and does not simply supplant investments that states otherwise would have made.

Increased investment in intercity passenger rail must take place along with improved operating efficiencies. Amtrak's Board of Directors and current management seem committed to reform; however, the real test of that commitment will come when Amtrak moves from implementing easier reforms to more challenging ones.

Over the long term, reauthorization holds the key to Amtrak's future. As we have testified previously,⁷ our long-term proposal for financing intercity passenger rail service would focus on three main goals: (1) continuous improvements in the cost-effectiveness of services provided, (2) devolution of the power to determine those services to the states, and (3) adequate and stable sources of Federal and state funding.

These goals can be achieved through six programmatic changes: capital matching grants to states for corridor development, formula grants to states for capital and operating costs of intercity passenger services, restoration of the forward-going system to a state of good repair, establishment of adequate Federal and state funding, resolution of the legacy debt issues, and resolution of the Northeast Corridor ownership and control.

⁷ OIG Testimony CC-2006-026, "Intercity Passenger Rail and Amtrak," March 16, 2006.

TRANSPORTATION SAFETY

The safety of the Nation's transportation system is the Department's number one goal. The Department must ensure that FAA is performing oversight that effectively utilizes aviation inspector resources and maintains aviation system safety. The Department must also strengthen efforts to save lives by improving surface safety programs.

Aviation Safety—Performing Oversight That Effectively Utilizes Inspection Resources and Maintains Aviation System Safety

Safety is FAA's highest priority. For more than 4 years, FAA and the U.S. aviation industry have experienced one of the safest periods in history. However, the August 2006 crash of Comair Flight 5191 served as a reminder that we must remain vigilant in order to make a safe system even safer. Key challenges for FAA are advancing risk-based oversight systems for air carriers and external repair facilities, maintaining a sufficient inspector workforce, and reducing the risk of accidents on the ground and in the air.

Advancing Risk-Based Oversight Systems

In the past 8 years, FAA has made important progress in developing risk-based approaches to safety oversight but continues to face challenges in advancing these efforts at air carriers and external repair stations.

Air Carriers: There are now 52 air carriers under FAA's Air Transportation Oversight System (ATOS). This risk-based system permits inspectors to use maintenance and operations data to focus their oversight on areas of higher risk. However, FAA is still refining the system and working to implement it at the remaining 71 air carriers. In June 2005, we reported that the system was not mature enough to permit inspectors to effectively respond to the rapid changes occurring in the industry. In response, FAA developed or revised guidance to help inspectors more thoroughly monitor industry changes when assessing safety risks. In addition, FAA now plans to complete transition of all air carriers to ATOS by December 2007. For this effort to be successful, FAA must ensure that its inspectors are well-trained and located in areas of greater need.

External Repair Facilities: FAA has faced challenges in ensuring that its inspectors focus their inspections where actual maintenance work is being performed. As air carriers worked to reduce costs, they moved maintenance work that was traditionally performed in-house to external domestic and foreign repair facilities. From 1996 to 2006, use of external repair facilities grew from 37 percent of air carriers' maintenance costs to 64 percent. Recognizing that its inspector workforce cannot provide continuous oversight of every maintenance facility, and in response to our recommendations, FAA developed and implemented a risk-based oversight approach

to FAA-certificated repair stations. As with ATOS, FAA must ensure that its inspectors are well-trained on the new system for this effort to be successful.

FAA also needs to develop a more effective oversight process for critical and scheduled maintenance work performed at non FAA-certificated repair facilities. FAA oversight of the work performed at these facilities is important because there are significant differences in regulatory requirements for FAA-certificated and non-certificated repair facilities. For example, non-certificated repair facilities are not required to have a quality control system, designated supervisors and inspectors, or a training program.

In December 2005, we recommended that FAA collect data to determine whether it should limit the type of work non-certificated facilities can perform. Also, we recommended that FAA evaluate air carrier training and oversight programs for work performed at non-certificated facilities. FAA needs to follow through on its commitment to implement our recommendations.

Maintaining a Sufficient Inspector Workforce

Another challenge that FAA faces is maintaining a sufficient number of inspectors to effectively perform its safety oversight mission. FAA has recognized the need to address an expected surge in controller attrition but must also ensure that it closely monitors inspector retirements and takes steps to hire and train the next generation of safety inspectors. In its FY 2008 budget submission, FAA requested \$1.11 billion— or \$71 million more than last year's request—to fund safety-related functions. With part of this additional funding, FAA plans to hire 203 inspectors. However, this year, 28 percent (1,085 of the 3,865) of the current inspector workforce will be eligible to retire. By 2010, more than one-third, or 44 percent, of the workforce will be eligible to retire.

FAA will never have an inspection workforce that is large enough to oversee all aspects of aviation operations, but it is important for the Agency to develop a reliable staffing model to ensure that its inspectors are located where they are most needed. A recent National Research Council study⁸ validated concerns expressed in our past reports—that FAA's current method of allocating inspectors is antiquated and must be redesigned to effectively target inspector resources. In addition, the Council stressed that FAA must ensure that its safety inspectors are sophisticated database users, with knowledge of system safety principles and an analytical approach to their work.

Reducing the Risk of Accidents on the Ground and in the Air

Another watch area for FAA is reducing the risk of aircraft collisions on the ground and in the air. Reducing runway incursions and operational errors are key

⁸ Study completed by the National Research Council of the National Academies, "Staffing Standards for Aviation Safety Inspectors," September 20, 2006.

performance goals for FAA that require heightened attention at all levels of the Agency.

From 1998 to 2001, we reported that runway incursions were increasing at alarming rates. To its credit, FAA took decisive action—it established regional runway safety offices, conducted numerous safety evaluations at problem airports, initiated aggressive educational programs for pilots, and implemented technologies at major airports that alert controllers of potential runway accidents.

As shown in Figures 1 and 2, the total number of runway incursions decreased from a high of 407 in FY 2001 to 330 in 2006, and the most serious incidents have decreased from a high of 69 in FY 1999 to 31 in 2006.



However, since 2003, the number of runway incursions has leveled off but serious incursions continue to occur. Recent incidents at several large airports highlight the potential safety risks associated with runway incursions. During FY 2005 and FY 2006, Boston Logan, Chicago O'Hare, Los Angeles, and Philadelphia International airports experienced the highest number of runway incursions among the Nation's large commercial airports. We are completing a review of FAA's actions to address runway incursions at those locations and will issue a report later this spring.

While FAA has seen an overall reduction in the number of runway incursions nationwide, it has not had the same success with operational errors—where aircraft come too close together in the air. In FY 2005, there were 1,488 operational errors (up from 1,148 in FY 2004), which is the highest number of errors reported in the past 6 years. Although the total number of operational errors did decrease slightly to 1,334 in 2006, the percentage of serious errors remained relatively unchanged.

While monitoring operational error totals is essential, shortcomings in FAA's reporting system for operational errors have indicated that the true number of these incidents is not yet known. This is because FAA relies on an inaccurate system of

controllers self-reporting operational errors at the majority of its air traffic control facilities—only 20 of these 524 facilities have an automated system that identifies when operational errors occur.

FAA is taking steps to improve operational error reporting. For example, in September 2005, FAA implemented procedures that require towers and terminal radar approach control facilities (TRACON) to conduct random audits of radar data to identify potential unreported operational errors. Additionally, last month, FAA revised its method of classifying operational errors to a method based on the proximity of the aircraft involved. More importantly, FAA is developing an automated system to identify when operational errors occur at TRACON facilities. FAA plans to start fielding this system later this year with an estimated completion date in 2011.

Clearly, these actions are steps in the right direction. FAA will need to remain committed to following through on those efforts and identify an accurate baseline of the number of operational errors that are actually occurring.

Strengthening Efforts To Save Lives by Improving Surface Safety Programs

Over the last several years, Congress has provided increased funding to enhance surface transportation safety programs, particularly under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).⁹ Safety is central to the mission of the Department, and three of its Operating Administrations focus on surface safety programs—the National Highway Traffic Safety Administration (NHTSA), Federal Motor Carrier Safety Administration (FMCSA), and Federal Railroad Administration (FRA). The combined budget requests for these agencies totaled \$2.4 billion in the President's FY 2008 Budget.¹⁰ The Federal Highway Administration (FHWA) also carries out important surface safety programs.

For highway safety, over the last 20 years, the Department has been successful in reducing the rate of highway fatalities per 100 million miles traveled by about 42 percent (from 2.51 in 1986 to 1.45 in 2005). Still, over 43,000 people were killed on our Nation's highways in 2005. To its credit, the Department has set an ambitious goal of reducing the highway fatality rate to 1.0 by 2011. However, as Figure 3 illustrates, safety improvements made in the past will have to be significantly accelerated if the 2011 goal is to be achieved. Finding ways to reach this goal is a significant challenge for the Department.

⁹ SAFETEA-LU, Pub. L. No. 109-59 (2005).

¹⁰ FRA's FY 2008 budget request of \$1.1 billion includes \$800 million for grants to the National Passenger Rail Corporation (Amtrak) and \$100 million to states for intercity passenger rail projects.

Figure 3: In the Coming Years, the Highway Fatality Rate Will Need To Fall Below Projected Rates To Meet the Target Rate by 2011*



Source: Actual fatality rates are from NHTSA's 2005 Transportation Safety Facts. (As of March 1, 2007, NHTSA had not finalized its projected fatality rate for 2006.) Projected rates for 2006 through 2011 were calculated using NHTSA's forecasting methodology. The Path to Target line drops from 1.45 in 2005 to 1.00 in 2011 and assumes an equal annual decrease.

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

Further, improvements in rail safety are important because railroads employ about 232,000 workers, transport about 42 percent of the Nation's freight (as measured by weight), and use over 173,000 miles of track in operations that affect the lives of millions of Americans. In 2005, railroads traversed 790 million train miles, up 18 percent since 1996. This impact will grow substantially in the future. The Department estimates that between 1998 and 2020, the amount of freight transported by rail will increase by about 50 percent.

To its credit, the Department has taken actions to enhance its surface safety programs. However, more needs to be done to protect the lives of highway and railroad travelers. Our current audit work points to several key actions the Department must take to address critical challenges in meeting its surface safety goals:

- Improving state accountability to maximize efforts to reduce impaired-driving fatalities.
- Building on successful efforts to more effectively enforce motor carrier safety regulations and improve data quality.
- Enhancing railroad safety through improved oversight of grade crossing reporting and better identification of trends.
- Ensuring the integrity and future modernization of the commercial driver's license program.

NHTSA Must Improve State Accountability To Maximize Efforts To Reduce Impaired-Driving Fatalities

NHTSA is the lead Federal agency responsible for reducing alcohol-impaired driving. SAFETEA-LU authorized \$555 million in funding for state alcohol-impaired driving incentive grants, of which NHTSA has requested \$131 million for FY 2008. The number of alcohol-related traffic deaths in 2005 was the lowest reported since 1999 and accounted for 39 percent (or 16,885) of the 43,443 traffic deaths reported in 2005. Practically speaking, no significant improvement in the safety target can be achieved unless alcohol-related fatalities drop dramatically, and the states are the linchpin in achieving this drop.

Our current work on NHTSA's efforts to counter alcohol-impaired driving found that NHTSA must ensure that states establish and report better performance measures to assess implementation of key strategies for effectively using funding to counter impaired driving. State performance plans generally contain measures on activities, such as the number of sobriety checkpoints conducted, or on the overall performance goal of reducing the alcohol-impaired fatality rate. However, the plans usually do not address performance of key strategies, such as sustained enforcement of laws, effective prosecution, and full application of available sanctions. Better information is needed on the degree to which states are implementing these key strategies. For example, NHTSA communicated to the states one possible way to quantify sustained enforcement, but none of the states included this measure in their annual plans or performance reports to NHTSA.

FMCSA Must Continue To Build on Successful Efforts To More Effectively Enforce Motor Carrier Safety Regulations and Improve Data Quality

After fatalities involving large trucks increased in 2003 and 2004, they slightly decreased in 2005 from 5,235 to 5,212. FMCSA is the lead Federal agency responsible for oversight of motor carrier safety, and it requested an FY 2008 budget of \$528 million. Our 2006 audit found that FMCSA's implementation of the Motor Carrier Safety Improvement Act of 1999¹¹ had significantly improved its oversight. However, we concluded the following:

• FMCSA must impose maximum fines on truck and bus companies that chronically violate serious safety regulations. We found that FMCSA did not consistently implement sanctions against repeat violators. Only 33 of the 533 repeat violators we identified received the maximum allowable penalty. In response to the report, FMCSA committed to strengthen its policy by May 2007 to ensure that repeat violators would be subject to maximum fines.

¹¹ The Motor Carrier Safety Improvement Act, Pub. L. No. 106-159 (1999).

• FMCSA must continue improving the quality of motor carrier data. FMCSA's efforts to improve data quality have significantly reduced the percentage of motor carriers that did not report census data on drivers and trucks and have improved the overall completeness of crash reporting from the states. Still, we found that 192,643 (27.4 percent) of 702,277 existing motor carriers did not update census data on drivers and trucks. In addition, state crash forms did not consistently provide clear definitions of a large truck or a reportable crash, resulting in confusion on the crash information that FMCSA needs. Additional improvements in data quality are needed to properly rank motor carriers' safety performance, identify high-risk motor carriers, and target those carriers for compliance reviews and inspections.

Enhancing Rail Safety Through Improved Oversight of Grade Crossing Reporting and Better Identification of Trends

FRA has taken significant steps to reduce collisions and fatalities at grade crossings, including the establishment of a reconciliation process to ensure that fatal grade crossing collisions are promptly reported to the National Response Center.¹² However, our ongoing audit work shows that FRA must continue to implement its safety initiatives to reduce the approximate 3,075 train accidents and 3,082 grade crossing collisions that occur each year, on average. In our January 2007 testimony before the House Subcommittee on Railroads, Pipelines, and Hazardous Materials,¹³ we stated that FRA must: (1) improve grade crossing safety through better compliance with safety regulations and by working with states and (2) identify railroad safety trends through data analysis.

With an FY 2008 budget request of \$148 million for safety and a current workforce consisting of about 385 inspectors, FRA must continue to focus its safety oversight activities on further reducing collisions and fatalities at the Nation's nearly 240,000 grade crossings. Specifically, FRA must:

• Ensure compliance with its reporting requirements by consistently issuing violations and assessing civil penalties every time a railroad fails to submit an accident report. Our work continues to identify problems with the completeness of FRA's accident reporting system. We identified 12 railroads between 1999 and 2004 that did not report 139 collisions to FRA on time, with some being reported nearly 3 years late. These grade crossing collisions resulted in 2 fatalities and 20 injuries. Although FRA took enforcement action for some of the violations, this is clearly an area where additional enforcement and civil penalties should be considered.

¹² As part of the Department of Homeland Security, NRC is the Federal Government's 24-hour point of contact for environmental discharges anywhere in the United States and its territories. Through agreements containing criteria that serve as triggers for reporting, NRC notifies FRA and other Federal agencies of fatal train accidents and grade crossing collisions.

¹³ OIG Testimony CC-2007-018, "Reauthorization of the Federal Railroad Safety Program," January 30, 2007.

- Develop strategies to increase its involvement in grade crossing collision investigations. From 2000 through 2004, FRA investigated less than 1 percent of all train accidents and grade crossing collisions. In response to a recommendation in our November 2005 report,¹⁴ FRA initiated a pilot study in 2006 to collect and analyze independent information on crossing collisions obtained from railroads and local or state law enforcement agencies. FRA should report the results of this study as soon as possible.
- Work with the states to address sight obstructions. Greater attention is needed to ensure that highway users have a full view of approaching trains at grade crossings as sight obstructions can be a contributing factor in grade crossing collisions. Of the 15,406 grade crossing reports submitted by the railroads from 2001 through 2005, 688 noted a sight obstruction, such as standing railroad equipment and overgrown vegetation. Currently, 27 states lack laws for maintaining sight distances at grade crossings, and more needs to be done. FRA should collaborate with FHWA and the American Association of State Highway and Transportation Officials to issue mandatory national standards for maintaining sight distances at grade crossings.
- Establish reporting requirements for its national grade crossing inventory system. Accurate and complete inventory data on the characteristics¹⁵ of all grade crossings is needed to further improve safety because these data are used to identify grade crossings where Federal funds will be used by the states to make safety improvements. Nationwide, there are currently 237,959 public and private grade crossings. According to FRA, 32 percent of the private crossing records in the national inventory database have not been updated since 2001 and 21 percent have never been updated.
- Require states with the most dangerous grade crossings to develop an action plan. In June 2004, we recommended that FRA identify the states that have the most grade crossing collisions year after year and work with each of these states to develop an action plan that identifies specific solutions for improving safety at those crossings that continue to have collisions. FRA agreed and in March 2006 completed work with the Louisiana Department of Transportation and Development on the first state action plan. Now, FRA should move forward by initiating individual action plans for those states that continue to have the highest number of grade crossing collisions.

¹⁴ OIG Report Number MH-2006-016, "Audit of Oversight of Highway-Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations," November 28, 2005.

¹⁵ Inventory data on the characteristics of grade crossings include a combination of active warning devices, passive warnings, or both. Typically, active warning devices consist of automatic gates, flashing lights, and highway traffic signs. Passive warnings are primarily cross-bucks, stop signs, advanced warning signs, and pavement markings.

FRA must also aggressively implement its data-driven oversight approach by using trend analysis to track predictive indicators in problem areas and to identify potential safety "hot spots." Since 1998, our audit results have repeatedly shown that FRA would benefit from an inspection program that places substantially greater emphasis on data analysis to target its inspection and enforcement resources—a proactive rather than reactive strategy. The identification of trends for the targeting of resources to high-risk areas is particularly critical because FRA inspections decreased by 6 percent, from 67,517 in 2003 to 63,264 in 2005. To facilitate the targeting of resources, FRA implemented its National Inspection Plan in March 2006. FRA's new plan is a step in the right direction, but it is too soon to tell exactly how effective these measures will be in the long term.

Ensuring the Integrity and Future Modernization of the Commercial Driver's License Program

Since October 1, 2001, with the support of FMCSA, we have carried out investigations with other law enforcement agencies that involved commercial driver's license (CDL) fraud schemes in 26 states. To date, these investigations have led to the prosecution of CDL fraud schemes in 19 states and have revealed that thousands of CDLs were issued to drivers who obtained them through corrupt state or state-approved (third-party examiners) testing processes. Curbing CDL fraud is important to highway safety and ensures that only drivers with requisite skills, including applicable training for hazardous material transportation, obtain CDLs.

Our 2006 audit on CDL oversight¹⁶ recognized several positive steps that FMCSA took to counter CDL fraud. For example, FMCSA instituted a fraud prevention and detection component within its CDL compliance review program. It also worked with the states and other organizations to identify fraud vulnerabilities and to develop model law enforcement programs. In 2007, FMCSA needs to follow through on its commitment in response to our report: to request that states track the status of drivers suspected of fraud and to continue to demonstrate the high priority it places on this issue.

FMCSA is also faced with the challenge of modernizing the Commercial Driver's License Information System. This modernization program should improve the system's security and effectiveness and prevent further system degradation as its usage and requirements grow. The modernization efforts should also address future financing for the system.

¹⁶ OIG Report Number MH-2006-037, "Federal Motor Carrier Safety Administration Oversight of Commercial Driver's License Program," February 7, 2006.

CONTRACT, GRANT, AND PROJECT OVERSIGHT

Ensuring that acquisition activities and transportation projects are conducted in an efficient and effective manner and that taxpayer dollars are protected from fraud and abuse is a top priority for the Department. DOT must improve its acquisition and contract management to reduce costs and eliminate improper payments and emphasize project oversight to make the most of the Federal resources that sustain surface transportation infrastructure. Effective oversight reduces the risk of fraud in DOT procurement activities and is essential to ensure that DOT does not pay more than the value of the goods delivered and services performed.

Improving Acquisition and Contract Management To Reduce Costs and Eliminate Improper Payments

In recent years, DOT has succeeded in strengthening its oversight of grants. For example, during FY 2006, FHWA reviewed the need for inactive funds on transportation projects and identified \$738 million in idle Federal funds that were made available for use on active transportation projects.

Similar focus is required on contracting activities carried out directly by the Department. In FY 2006, about \$55 billion was obligated for grants and direct procurement. Of the \$55 billion, \$6 billion was obligated for direct procurement. With an investment of this size, active contract monitoring is essential if Department resources are to be used effectively. Ensuring that procurement and acquisition activities are carried out appropriately and that taxpayer dollars are protected from waste, fraud, and abuse is a Government-wide priority. Key issues that DOT must focus on include the following:

- Strengthening financial management oversight of institutions performing research under DOT cooperative agreements and grants,
- Promoting increased vigilance and enhanced oversight of FAA's acquisition and contract management practices, and
- Ensuring the maintenance of high ethical standards among DOT employees.

Strengthening Financial Management Oversight of Institutions Performing Research Under DOT Cooperative Agreements and Grants

In FY 2006, DOT awarded about \$256 million in research and development cooperative agreements and grants. These agreements are a vehicle through which the Department acquires transportation-related research services. Therefore, it is imperative that the Department and the public receive full value for these research expenditures. Over the past several years, our work has identified problems in DOT Operating Administrations' oversight of these cooperative agreements and grants. The following examples reaffirm the importance of implementing meaningful internal controls and fraud deterrence measures.

- The Research and Innovative Technology Administration's management and oversight of an assistance award to a major university was inadequate. This resulted in about \$3.5 million in ineligible costs that had been allowed as matching funds. The university claimed a building as its matching funds, but no transportation education, research, or technology transfer related to the grant occurred at the building.
- FHWA did not provide adequate oversight of a cooperative agreement awarded to a major university. The university, which performs research on crash simulations, billed FHWA for inflated or fictitious charges. The university agreed to reimburse the Government more than \$1.8 million for the overcharges plus penalties.

DOT Operating Administrations need to strengthen their oversight of research cooperative agreements and grants. Recently, FHWA established a new division responsible for administering cooperative agreements, initiated a process action team to identify best practices used by other Federal agencies, and enhanced training for its technical representatives. The Agency plans to issue a comprehensive manual for administering grants this spring. The Federal Transit Administration (FTA) has also initiated action to improve its process. FTA proposed in its FY 2008 budget request to set aside 1 percent of its annual budget amount for research agreements to conduct oversight reviews of these grants.

These are steps in the right direction, but DOT Operating Administrations must follow through to ensure that they provide adequate and effective oversight of these agreements and grants.

Promoting Enhanced Oversight of FAA's Acquisition and Contract Management Practices

DOT's use of support services contracts needs to be watched closely by Congress. The Department relies on contractors to provide billions of dollars in services. In FY 2006, FAA obligated about \$930 million for support services using numerous contracts and three multiple-award procurement programs. However, we have been concerned about FAA's ability to prudently manage these funds and employ sound business practices when using the private sector for services.

For example, last September, we issued a report¹⁷ on our review of the RESULTS contracting program (one of the three multiple-award vehicles), for which FAA awarded a total of about \$543 million. The program was neither properly established nor managed; continued use of this program would have cost FAA tens of millions of dollars more than necessary. FAA terminated the program last year and began

¹⁷ OIG Report Number FI–2006–072, "Audit of the Federal Aviation Administration's RESULTS National Contracting Service," September 21, 2006.

strengthening oversight of all support services contracts. FAA needs to pay special attention to the following issues:

Verification of Labor Qualification and Rates: Labor costs generally account for the largest portion of support services contracts. Our audit of FAA's RESULTS procurement program and FAA's own review of another multiple-awards program, BITS II, identified instances in which contract staff did not meet the expected qualifications for positions billed.

For example, FAA found evidence that multiple contractors had extensively billed FAA for employees at labor rates that were higher than the employees' actual education and experience warranted, as specified by the terms of the contract. This means that FAA paid millions of dollars more in higher labor rates than those for which contractor staff were qualified.

FAA referred this matter to us for investigation. As a result of FAA's review and our investigation to date, 10 of 13 contractors agreed to repay a total of \$6.9 million in inflated billings under administrative settlements with FAA.

Review of Contractor-Proposed Prices: Our RESULTS audit also found that FAA awarded contracts without sufficient competition and price analysis. FAA now requires that the Deputy Administrator approve all new contracts valued at over \$1 million that are awarded on a sole-source basis. While this is a positive step, FAA must still strengthen its review of contractor-proposed prices. When facing inadequate competition from contractors, FAA's contracting officers are required to perform a price analysis to assess the fairness of contractor-proposed prices, yet this control was frequently not working. For example, one independent Government cost estimate was prepared by the contractor to whom the contract was awarded. We will follow up on FAA's use of price and cost analysis techniques to ensure the reasonableness of prices in contract proposals.

These issues underscore FAA's need to continue strengthening its oversight of acquisitions to ensure that procurement and contracting officials implement the Agency's Acquisition Management System regulations and guidance.

Ensuring That DOT Employees Maintain High Ethical Standards

DOT, like other Federal agencies, is vulnerable to contract and grant fraud stemming from ethical lapses on the part of employees involved in awarding or administering procurements. Employees involved in the acquisition of support services are particularly susceptible. For example:

• At one Operating Administration, a program manager (who is no longer employed with DOT) received a \$120,000 kickback from a contractor who was awarded about \$3.5 million in purchase orders for information technology services.

• At another Operating Administration, a program manager steered a \$465,000 subcontract for financial analysis services to a firm owned and controlled by a household member.

In many cases, officials failed to maintain an appropriate "arms-length" relationship with contractors and cooperative agreement recipients, resulting in significant administrative and, sometimes, criminal consequences for both employees and contractors. In some instances, employees simply did not recognize in advance that their actions could violate ethical standards or create, at a minimum, the appearance of ethical impropriety.

The Department needs to continually promote and reinforce ethical standards through rigorous ethics awareness and training programs, especially for avoiding conflicts of interest in contracting. Moreover, while DOT has taken some steps to strengthen controls, such as those governing cooperative agreements, it needs to remain vigilant to strengthen internal controls to prevent and detect inappropriate conduct involving procurements and take action when violations occur.

Emphasizing Project Oversight To Make the Most of the Federal Resources That Sustain Surface Transportation Infrastructure Improvements

At a time when transportation infrastructure needs are increasing faster than the financial resources available to fund them, stewardship of taxpayer dollars continues to be a priority for the Department. We see three key issues that need continued management emphasis:

- 1. FHWA must ensure that initiatives to strengthen its oversight of Federal highway funds are implemented effectively so that major projects are delivered on time, within budget, and free from fraud.
- 2. FHWA's oversight must include actions to ensure that highway tunnels are safe for the driving public.
- 3. FTA must continue to exercise vigilant oversight to ensure that large and complex transit infrastructure projects are completed on time and within budget.

Initiatives To Improve Oversight of Highway Funds Need To Be Implemented Effectively To Ensure That Projects Are Completed On Time, Within Budget, and Free From Fraud

In 2006, FHWA implemented several initiatives to strengthen its oversight, such as issuing new regulations to help states monitor obligated Federal highway funds and dedicating staff in its Division Offices to oversee major projects with costs of over \$500 million. Although we foresee positive outcomes to these initiatives, FHWA must take additional steps to ensure that large, complex construction projects are delivered on time, within budget, and free from fraud.

Specifically, FHWA needs to:

- Strengthen financial and cost controls for Federal highway funds to better detect improper payments to states. FHWA's implementation of its Financial Integrity Review and Evaluation (FIRE) Program will help to improve controls and safeguard highway funds. The FIRE Program is the cornerstone of FHWA's plan to improve oversight by supporting the annual certification of internal and financial controls over the Highway Trust Fund financial statements. The program also includes a risk assessment of the grant financial management process and statistical reviews of Federal-aid billing transactions to determine whether costs submitted to FHWA by state transportation departments are eligible for reimbursements. Establishment of the FIRE Program is a significant step, and FHWA must ensure that the program is implemented effectively in each of its 52 Division Offices.
- Ensure that cost estimates and schedule milestones for major projects are realistic, reasonable, and credible and that potential risks are thoroughly considered. FHWA can build on its existing practices by increasing its oversight and providing greater financial and technical expertise to help states address funding shortages, cost increases, schedule delays, and construction quality issues. FHWA oversees 117 major highway projects estimated to cost \$192 billion. Of the 12 major highway projects we are monitoring, two-thirds have experienced moderate to significant increases in their cost estimates. For example, we have found that states' cost estimates have frequently excluded or understated known elements of cost growth that were needed to complete projects. To ensure that states prepare reliable estimates of the cost to complete major projects, FHWA needs to routinely validate the reliability of these estimates.

One such step for FHWA to take would be to promote greater use of value engineering to help achieve savings on planned construction projects. Our ongoing review on value engineering found that states missed opportunities for significant savings—\$725 million over a 4-year period—by not performing all required value engineering studies or approving all practical recommendations.

• Focus on effective implementation of SAFETEA-LU provisions designed to promote stronger oversight of Federal-aid funds. FHWA's policies are intended to promote project oversight by: (1) lowering the major project threshold from \$1 billion to \$500 million and (2) requiring states to submit project management plans and annual financial plans to FHWA for each major project. To effectively implement these provisions, FHWA will need to ensure that its workforce is appropriately trained in identifying critical risks and taking appropriate action.

FHWA's Oversight Must Include Actions To Ensure That Highway Tunnels Are Safe for the Driving Public

During the past 2 and a half years, serious failures in construction quality on the Central Artery/Tunnel Project in Boston, Massachusetts, have highlighted the additional steps that FHWA needs to take to ensure the Nation's highway infrastructure safety. Effective quality control and vigilant oversight are key components throughout the construction process to ensure safety. The Project's complex network of tunnels and bridges has a history of schedule delays and construction problems, including water leaks and the July 10, 2006, ceiling collapse that killed a motorist and led to widespread tunnel closures.

These recent events related to the Central Artery/Tunnel Project have demonstrated the need for stronger oversight of highway projects as well as the need for greater steps to ensure the safety of the Nation's tunnels. FHWA should:

- Provide continued oversight of the Central Artery/Tunnel Project as it goes through safety reviews and remediation work. The magnitude of the safety reviews and remediation work that have resulted from the July 2006 incident, as well as the intense public concern for the safety of this massive project, present a significant challenge to FHWA and the Department beyond their normal oversight roles. FHWA has been actively involved in the reopening of the closed sections of the Central Artery/Tunnel Project and must continue to vigilantly oversee the project as more comprehensive safety reviews are conducted this year. We have also devoted significant resources to providing an independent check on the efforts of FHWA and the Commonwealth of Massachusetts to ensure that the safety reviews and remediation work are conducted in a rigorous manner.
- Implement a national tunnel inspection program. The safety problems that surfaced in the Central Artery/Tunnel Project also require the Department to assess FHWA's oversight and quality control processes for constructing and maintaining highway tunnels. In light of the known problems of the Central Artery tunnels, FHWA should develop and implement a system to ensure that states inspect and periodically report on the condition of the Nation's tunnels. FHWA already operates the National Bridge Inspection Program to periodically inspect and report on the conditions of each inventoried bridge. FHWA should revisit the issue of implementing a national inspection program for the Nation's tunnels.

FTA Must Continue To Exercise Vigilant Oversight To Ensure That Large and Complex Transit Infrastructure Projects Are Completed On Time and Within Budget

FTA has an established program for oversight of its transit infrastructure projects, including the hiring of external project and financial management oversight consultants. FTA uses a risk-based approach for the oversight of its Federal

projects—a best practice. FTA's initiatives have generally improved oversight for its projects. However, numerous large and complex transit projects, especially those in New York City and the Washington, D.C., metropolitan area, will present new oversight challenges.

On July 13, 2006, we testified¹⁸ before Congress that effective day-to-day oversight of these large and complex transportation projects is critical and that FTA should use all of its oversight tools effectively. For example, FTA's project management oversight contractors are charged with regularly monitoring each project and providing feedback to Federal officials should any problems arise. The oversight contractors hired for each project are charged with conducting risk assessments, reviewing costs and schedules regularly, and assessing each grantee's plans for the project. FTA must ensure that it fully analyzes the results of the contractors' reports; promptly takes action on those results, where appropriate; and exercises its own oversight role in addition to the contractors' work.

The Lower Manhattan Recovery Project in New York City and the Dulles Metrorail Corridor Project in the metropolitan Washington, D.C., area, which we are actively monitoring, highlight the complexity of FTA's oversight challenges.

- A challenge in the New York City area is the sheer amount of concurrent construction activity. The terrorist attacks of September 11, 2001, caused unprecedented damage to the city's transportation infrastructure, resulting in major construction projects in Lower Manhattan. The Federal Government has dedicated \$4.55 billion to Lower Manhattan transportation projects, and FTA has the ultimate oversight responsibility for all projects constructed with this money. In addition to these reconstruction projects, New York City has two other large-scale grants projects in progress—the Second Avenue Subway and the Long Island Rail Road East Side Access projects—with estimated total costs of \$4.7 billion and \$7.3 billion, respectively. These projects could tap FTA's oversight resources in that area. Further, as we found in our September 2006 report¹⁹ on selected Hurricane Katrina-related contracts in Mississippi, increased competition for materials and labor in a particular area can increase costs significantly. Accordingly, vigilant oversight will be needed.
- The Dulles Corridor Metrorail Project is expected to cost over \$4 billion. While Federal funding is not guaranteed until the project has gone through departmental review processes, the project's potential Federal investment is \$1.275 billion— \$900 million in grants funding and \$375 million in Transportation Infrastructure

¹⁸ OIG Testimony CC-2006-056, "Lower Manhattan Reconstruction: Lessons Learned From Large Transportation Projects," July 13, 2006.

¹⁹ OIG Report Number MH-2006-065, "Audit of the Mississippi Department of Transportation's Award of Selected Hurricane Katrina Emergency Repair Contracts," September 6, 2006.

Finance and Innovation Act $(\text{TIFIA})^{20}$ program loans. The project also involves several unique challenges that FTA must manage closely. For example, the project is facing significant controversy over whether to proceed with a largely aerial alignment for a 4-mile segment of the project or replace this design with a tunnel. It is uncertain what impact a change in design at this stage would have in the application for Federal funding.

Further, project management at the state level is in the process of being transferred from the Virginia Department of Rail and Public Transportation to the Metropolitan Washington Airports Authority. This creates uncertainty with respect to project decision making. Going forward, FTA must focus on ensuring that application requirements for Federal funds are properly assessed, the project progresses in a cost-effective and timely manner, the transfer of project control is completed smoothly and effectively, and the Federal Government is not exposed to any undue risks.

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

²⁰ The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) appears as sections 1501 through 1504 of the Transportation Equity Act for the 21st Century (TEA 21, Public Law 105-178), as amended by the TEA 21 Restoration Act (Title IX of Public Law 105-206).

The following page contains textual versions of the graphs and charts found in this document. This page was not in the original document but has been added here to accommodate assistive technology.

Top Management Challenges Facing the Department of Transportation Section 508 Compliant Presentation

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

Figure 1. Runway Incursions Fiscal Year 1999 to Fiscal Year 2006

Source: Federal Aviation Administration

Figure 2. Serious Runway Incursions Fiscal Year 1999 to Fiscal Year 2006

Fiscal Year	Runway Incursions
1999	69
2000	67
2001	53
2002	37
2003	32
2004	28
2005	29
2006	31

Source: Federal Aviation Administration

Figure 3. In the Coming Years, the Highway Fatality Rate Will Need To Fall Below Projected Rates To Meet the Target Rate by 2011

(Note:	Fatality rates	are shown as	s the number	of fatalities	per 100 million	vehicle-miles	traveled.)
(1,000	1 availey 10000			01 1000000	per 100		

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Actual Fatality	1.51	1.51	1.48	1.44	1.45	0	0	0	0	0	0
Rate											
Projected Rate	0	0	0	0	0	1.43	1.41	1.40	1.38	1.36	1.35
Path to Target	0	0	0	0	0	1.38	1.30	1.23	1.15	1.08	1.00

Source: Actual fatality rates are from the National Highway Traffic Safety Administration's 2005 Transportation Safety Facts. (As of March 1, 2007, the National Highway Traffic Safety Administration had not finalized its projected fatality rate for 2006.) Projected rates for 2006 through 2011 were calculated using the National Highway Traffic Safety Administration's forecasting methodology. The Path to Target line drops from 1.45 in 2005 to 1.00 in 2011 and assumes an equal annual decrease.