

## **INSPECTOR GENERAL'S FY 2010 TOP MANAGEMENT CHALLENGES**

### **Department of Transportation Office of Inspector General Approach**

The Office of Inspector General (OIG) issues its annual report on the Department of Transportation's top management challenges to provide a forward-looking assessment for the coming fiscal year. The purpose of the report is to aid Department of Transportation (DOT) agencies in focusing attention on and mapping work strategies for the most significant management and performance issues facing the Department.

In selecting the challenges for each year's list, the OIG continually focuses on the Department's key strategic goals to improve transportation safety, capacity, and efficiency. In addition to the OIG's vigilant oversight of DOT programs, budgetary issues, and progress milestones, it also draws from several dynamic factors to identify key challenges. These include new initiatives, cooperative goals with other Federal departments, recent changes in the Nation's transportation environment and industry, as well as global issues that could have implications for the United States' traveling public. As such, the challenges included on the OIG's list vary each year to reflect the most relevant issues and provide the most useful and effective oversight to DOT agencies.

As required by OMB Circular A-136, the OIG's report briefly assesses DOT's progress in addressing the challenges identified. To track management challenges identified from year to year, the OIG provides an exhibit to the report that compares the current list of management challenges with the list published the previous fiscal year. In addition, the OIG may refine the scope of the management challenge from year to year based on program developments, external factors, or other information that becomes available.

The OIG has not reviewed all of the actions included in this summary.

## 2010 Management Challenges

### 1. Maximizing the Department's Economic Recovery Investments

Issue: Implementing the Office of the Secretary's (\$1.5 Billion Dollar Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants Program

#### I. Why is this an issue?

A new discretionary grants program under the American Recovery and Reinvestment Act of 2009 (ARRA) includes \$1.5 billion under the Office of the Secretary (OST). Implementing the program was identified due to a concern over the adequacy of available management resources. To better ensure this program meets its objective, OST was required to develop comprehensive and sound program plans and criteria.

#### II. Actions taken to date

The Office of Policy within OST is primarily responsible for providing policy direction related to the implementation of infrastructure grant programs, credit programs and regulations that impact infrastructure development and operation. The Office of Infrastructure Finance and Innovation plays the lead role in the implementation, management and administration of the TIGER Discretionary Grant Program. For the application review and selection process, staff was supplemented by over 70 experts drawn from the Department's operating administrations (OAs). Additionally, the Office of Infrastructure Finance and Innovation has partnered with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Railroad Administration (FRA), Federal Aviation Administration (FAA) and the Maritime Administration (MARAD), to utilize existing grant management staff and resources to appropriately administer the grants and supplement OST grant administration responsibilities.

The OST developed and published project selection criteria and a solicitation for applications. The criteria for TIGER were published in the Federal Register on June, 17, 2009. The criteria are merit-based and address statutory requirements. The OST leads a Department-wide task force charged with evaluating applications and making funding recommendations. The evaluations teams comprised of technical and professional experts from OST and the Department's relevant operating administrations (OAs).

#### III. Actions remaining and expected completion date

Each project has been assigned to the most appropriate Operating Administration to secure the grant agreement and provide oversight. The OST Office of Policy also concurs on the grant agreement, and will continue to provide guidance on performance measures.

#### **IV. Results or expected results**

Successful execution of all project grant agreements.

Issue: Enhancing oversight of American Recovery and Reinvestment Act of 2009 (ARRA) spending on existing and new programs

##### **I. Why is this an issue?**

Enhanced oversight of ARRA spending is necessary to ensure the adequacy of available management resources to administer spending activities.

##### **II. Actions taken to date**

In addition to partnering with the FHWA, FTA, FRA, FAA and MARAD, to utilize existing grant management staff and resources, the Office of Infrastructure Finance and Innovation within OST has developed a programmatic structure that is designed to enhance the oversight of ARRA spending activities. The structure includes: (1) Regular reporting requirements from the grantees to the Operating Administrations and from the Operating Administrations to OST; (2) Clear procedures for escalation of issues; and (3) Promoting consistency across relevant Operating Administrations in the management of projects.

##### **III. Actions remaining and expected completion date**

The Office of Infrastructure Finance and Innovation, has done the following: (1) Promptly reconciled grantee reported data with internal records; (2) Ensured that the grantee's performance is adequate and properly reported; (3) Worked closely with each of the relevant modal administrations to ensure that the TIGER grants are administered properly; (4) Analyzed and compare the performance of the TIGER program(s) with each appropriation as well as against similar discretionary grant programs.

#### **IV. Results or expected results**

Continued reporting and adherence to procedures under the programmatic structure.

## Issue: Reporting Accurate and Consistent Job Creation Data

### **I. Why is this an issue?**

Reporting accurate and consistent job creation data on the Department's ARRA program was identified as an issue because the Department did not have a functional system in place designed to capture and report job creation data.

### **II. Actions taken to date**

To coordinate the Department's role in ARRA, the Secretary created a team at DOT. The team ensures that economic recovery act funding is rapidly made available for transportation infrastructure projects and that project spending is monitored and transparent. The team, known as the Transportation Investment Generating Economic Recovery (TIGER) team, is composed of officials from across the Department's Operating Administrations and offices. Early in 2009, the TIGER Team provided guidance to all of the relevant operating administrations – FHWA, FTA, FRA, FAA and MARAD -- on how grantees are required to report the number of paid jobs created by prime recipients, subprime recipients, and vendors (where applicable) as required under Section 1512 of ARRA. The grantees were directed to calculate and report created jobs as "Full-Time Equivalents (FTE)" to <http://www.federalreporting.gov>. All operating administrations closely monitored the jobs reporting by the recipients to ensure that the data was accurate.

According to data from the Recovery Accountability and Transparency Board, the responsible entity for recipient reports monitoring, DOT has one of the best records for recipient reporting government-wide. DOT has the second largest number of grantees and one of the lowest instances of non-reporting or reporting errors. The TIGER team has monitored and will continue to monitor the collection of jobs data for all ARRA projects administered by the Operating Administrations, as well as for the TIGER Discretionary Grant Program administered by OST.

Department-wide guidance was revised to comply with Office of Management and Budget standards once they were developed for all agencies. The TIGER Team also provided guidance for job reporting under Section 1201 of ARRA, and directed grantees to report direct job-hours for each ARRA grantee. The Department would then use data on direct jobs and expenditures to estimate indirect jobs and total employment, as required by Section 1201 of ARRA.

### **III. Actions remaining and expected completion date**

OST will work closely with each of the relevant modal administrations to ensure that accurate and consistent job creation data are collected, analyzed, and reported for TIGER grants.

### **IV. Results or expected results**

Successful execution of all Recovery Act projects with accurate and complete job reporting.

## **2. Enhancing Surface Safety Programs to Reduce Injuries and Fatalities While Defining a New Federal Role in Transit Safety**

Issue: Promoting Meaningful Performance Indicators to Consistently Measure States' Progress in Improving Safety

### **I. Why is this an issue?**

States and the Federal Government spend large sums of money on highway safety programs and activities. As a data driven organization, the National Highway Traffic Safety Administration (NHTSA) should ensure that states spend money wisely, with a focus on key issues and a positive impact on reducing the number and severity of crashes

### **II. Actions taken to date**

All states have included core performance measures in their 2010 Highway Safety Plans (HSPs), which outline programs the states will implement and show how they will spend Federal funds. NHTSA and the Governors Highway Safety Association (GHSA) have developed additional attitude and awareness performance measures. NHTSA also convened a working group which developed a consensus speed monitoring performance measure. Additionally, in July 2009, NHTSA's National Center for Statistics and Analysis (NCSA) made fatal crash maps available to the public; these maps use 2007-2009 Fatality Analysis Reporting System (FARS) data to show fatal crash locations within a state via a Google Earth plug-in download. The crash-location maps serve as an extension to the county maps that the State Traffic Safety Information website already delivers.

### **III. Actions remaining and expected completion date**

NHTSA is reviewing the HSPs to assure that they include the requisite performance measures, and continues to work with GHSA on developing guidelines and implementation material for the measures. NHTSA is considering drafting additional developmental measures for enforcement activities.

### **IV. Results or expected results**

During FY 2010, states began to use core performance measures in designing their FY 2010 safety programs. NHTSA and the States will use these data, collected during FY 2010 and out years, to measure the impact of their safety programs, to evaluate safety problems, and to make appropriate modifications to their programs. In future years, States will collect improved speed and injury data, as well as new performance measures (including law enforcement measures, and attitude and awareness surveys). As more years of data become available, States will be able to evaluate the long-term impact of their programs, determine changes in the magnitude of specific safety problems, and adapt their programs to address the most significant issues. Furthermore, as States measure and report on performance measures, NHTSA will work collaboratively with them to ensure that States meet or exceed their targets. This will include using demonstration projects, technical assistance, and sharing best practices.

## Issue: Targeting Unsafe Motor Carriers and Commercial Drivers for Enforcement and Enhancing the Commercial Driver's License (CDL) Program

### **I. Why is this an issue?**

Approximately 1 in 8 overall fatalities in 2008 were related to crashes involving large trucks or buses. The Department must take stringent action against repeat violators of safety regulations, improve its enforcement and data systems, and identify and stop Commercial Drivers License (CDL) holders who are not properly licensed.

### **II. Actions taken to date**

The Agency addressed 73 percent of the total number of recommendations (26) issued by the OIG that pertain to this top management challenge. In FY 2010, the Federal Motor Carrier Safety Administration (FMCSA) closed or requested closure on 12 of the 19 remaining open recommendations pertaining to the OIG's 2010 Top Management Challenges report. FMCSA has several initiatives underway to address the remaining issues identified by the OIG and has taken vigorous action in FY 2010 to target unsafe motor carriers and commercial drivers for enforcement and to enhance the CDL program. FMCSA is committed to resolving and implementing open audit recommendations issued by the OIG.

The OIG recommended that FMCSA take stringent enforcement action against carriers that repeatedly violate safety regulations and improve enforcement and data systems used to oversee the motor carrier industry and commercial motor vehicle drivers. With regards to the OIG recommendation to satisfy the Motor Carrier Safety Improvement Act of 1999 (MCSIA) enforcement requirements and close loopholes for repeat violators, FMCSA closed six of seven recommendations highlighted by the publishing of a very stringent enforcement policy on March 30, 2009, which changed how the Administration assessed maximum fines under section 222 of MCSIA and strengthened the criteria for taking enforcement action against repeat violators.

FMCSA is also establishing quality control procedures to ensure states are reporting Mexican-domiciled Commercial Motor Vehicle (CMV) driver convictions occurring in the United States. This data ensures that the appropriate action is taken against Mexican drivers convicted of disqualifying offenses. Additionally, in response to the OIG's 2009 report, Audit of the Data Integrity of the Commercial Driver's License Information System (CDLIS), FMCSA issued in the Federal Register (July 2, 2010) guidance to state driver licensing agencies (SDLAs) in support of their efforts to comply with the Federal Commercial Driver's license (CDL) regulations including timely reporting and posting of convictions for traffic offenses. Regarding data security, FMCSA provided grant funds to the States in FY 2010 to implement a new modernized CDLIS, and closed a comprehensive OIG recommendation requiring improved CDLIS information technology security standards.

A program initiated in FY 2010 to ensure that unsafe motor carriers are placed out-of-service and not re-issued authority under new identities includes a robust New Applicant Screening program. The program detects prior unsafe carriers that disband operations before they can reincarnate as

new entities in an attempt to avoid their previous safety records. FMCSA also launched a Pre-Employment Screening program in FY 2010, which allows companies to access driver inspection and crash records as part of the hiring process. This program gives companies tools to make informed hiring decisions, which lead to hiring the safest drivers.

In FY 2010, FMCSA also issued a final rule on Electronic On-Board Recorders (EOBRs) that significantly contributes to targeting unsafe motor carriers. The final rule on EOBRs requires carriers with serious patterns of hours of service violations to install EOBRs. The Administration is also proposing stronger CDL standards and testing requirements and anticipates issuing a final rule that will establish revisions to the CDL knowledge and skills testing standards, implement fraud detection and prevention initiatives at SDLAs, and establish new minimum Federal standards for commercial learners permits.

FMCSA also strengthened the New Entrant Safety Assurance program to identify start-up truck and bus companies deficient in key areas that must be addressed in order to continue operations. By the end of calendar year 2010, FMCSA will implement Comprehensive Safety Analysis (CSA) 2010 by replacing the Administration's current motor carrier measurement system, SAFESTAT, with the CSA 2010 Safety Measurement System. Other initiatives to remove truly unfit and unsafe drivers and carriers from the Nation's roads include virtual weigh and inspection stations at the roadside and tools like infrared brake warning detection.

### **III. Actions remaining and expected completion date**

In FY 2011, the Administration anticipates developing and implementing a revised policy on the census updating requirement; fully executing CDLIS modernization and resolving information technology security and data issues; issuing proposed rules on carrier safety fitness determination and the Driver Positive Controlled Substances and Alcohol Test Results Database; and, issuing final rules on restricting the use of cellular phones, CDL testing and commercial learner's permit standards, and minimum training requirements for entry level commercial motor vehicle operations.

### **IV. Results or expected results**

The safety initiatives implemented in FY 2010 and planned for FY 2011 will improve safety and increase efficiency. These initiatives contribute to the Department of Transportation's overall safety strategic goal and performance target to reduce highway fatalities and support critical motor carrier program activities that will reduce crashes, save lives, and prevent injuries on the Nation's highways.

#### Issue: Defining a New Federal Role in Transit Safety

##### **I. Why is this an issue?**

Historically, rail transit is a safe mode of public transportation. However, recent accidents at major rail transit systems have caused nationwide concern regarding rail transit safety. Secretary

LaHood reviewed the existing legal authorities and believes that the current Federal oversight role for rail transit safety should be reformed. The current State Safety Oversight (SSO) structure (with few exceptions) lacks sufficient authority to provide a uniform approach to transit system safety. A multi-modal safety work group chaired by the Deputy Secretary recommended a number of reforms to improve public transportation safety, including submitting a legislative proposal to Congress to enhance the Federal Transit Administration's (FTA) oversight of rail transit safety.

## **II. Actions taken to date**

FTA convened the initial Transit Rail Safety Advisory Committee (TRACS) meeting September 9-10, 2010. The initial focus for TRACs will be recommendations to implement/ improve the safety management systems of rail transit systems and improve organization models for SSO agencies. FTA has increased funding for the SSO program and the Bus Safety program to include additional capacity to support an expanded role based on the proposal and to provide additional bus regulatory oversight. FTA increased the number of SSO agency program managers that are certified by the Transportation Safety Institute and decreased the average time to complete SSO agency audit findings.

## **III. Actions remaining and expected completion date**

FTA will integrate safety and security into the New Starts project development phase through more effective use of the Safety and Security Readiness Review process. FTA has worked with transit systems to increase the number of chief safety officers reporting directly to transit agency general managers. FTA continues to provide financial support to the American Public Transportation Association (APTA) in developing voluntary industry consensus safety, security and emergency management standards. FTA has also provided funding to research rail car crash performance to support the development of future rail car design standards.

Regarding training, FTA is developing a course for rail safety to provide SSO managers, transit personnel and rail safety inspectors with the knowledge of rail transit systems and how safety design, inspections and standards contribute to overall system safety. It is also developing a Training Curriculum for Rail Safety Inspectors that will result in certification. FTA is delivering eight (8) two-day training sessions on track inspection at selected rail transit agencies that will provide instruction on track worker and maintenance safety. This training was developed as a result of recent increases in track worker fatalities. FTA is developing a Safety and Security Strategic Training Plan to promote development and improvement of transportation safety and security, technology management, and operational procedures for educational and training programs that are responsive to modal and intermodal requirements.

TRACS is currently working to provide recommendations for transit systems to implement the best safety planning model, to include but not limited to, Safety Management System (SMS) principles and how those principles might be incorporated into transit safety plans to enhance rail transit safety. It will also provide recommendations for the best State oversight agency

organization model, to include identifying the ideal state safety partner and identify the challenges that may be faced in implementing this model along with potential ways the challenges may be overcome. Each of the TRACS recommendations has a projected delivery date of May 2011.

FTA has begun the initial phase of program/project planning to implement elements of the proposed transit rail safety legislation. The initial phase will identify program objectives, resource allocation, and implementation milestones. The initial plans are scheduled for delivery in December 2010.

FTA continues to pursue legislation to strengthen its safety oversight function.

#### **IV. Results or expected results**

FTA is projecting improvement in safety based on several actions taken in FY 2010.

The increase in number of Transportation Safety Institute certified SSO agency staff will provide enhanced technical capacity and consistent program capabilities of SSO program management by increasing the number of SSO program managers trained in broad-based knowledge of safety and security principles applicable to transit safety, operations and management. The decrease in the number of days to close out audit findings by 5% of the 2009 average of 219.8 days is a responsive risk reduction process and a tangible means to emphasize commitment to an organizational safety culture. The increase in the number of rail transit agency chief safety officers reporting directly to general managers is anticipated to improve system safety through enhanced senior management leadership and strengthened inter-departmental coordination. The training initiatives underway for transit system employees were developed to promote and improve transportation safety and security, technology management, and operational procedures and should lead to increased safety and security awareness.

### **3. Maximizing Federal Surface Infrastructure Investments by Helping States Better Allocate Resources and Providing Effective Oversight**

Issue: Developing Improved Tools and Techniques to Help States Better Allocate Scarce Resources and Providing Effective Oversight of Federal Investments

#### **I. Why is this an issue?**

According to a 2009 report from the American Society of Civil Engineers, one-third of the Nation's major roads are in poor or mediocre condition and more than one-quarter of our bridges are deficient. Maximizing federal investment in surface transportation infrastructure is particularly challenging because the majority of the federally-assisted highway programs are administered by States, which have broad flexibility in deciding how to use their funds, which projects to pick, and how to implement them.

The Department faces the following key challenges:

- Developing improved tools and techniques to help states better allocate scarce resources; and
- Providing effective oversight of Federal investments through better use of data, management tools, and performance measures

#### **II. Actions taken to date**

During FY 2010, FHWA developed a Bridge Management Systems (BMS) questionnaire that was used by the FHWA Division Office Bridge Engineers in coordination with their State DOT counterparts to assess the state-of-practice. Based on the questionnaire responses, preliminary results show that 40 States are using their BMS to store bridge information.

Also in FY 2010, FHWA initiated a process to include more detailed project information within bridge projects in the Fiscal Management Information System (FMIS). FHWA drafted detailed criteria that include more than 20 specific metrics linked to the National Bridge Inspection Standards (NBIS) regulatory provisions, such as inspection frequency and inspector qualifications, with defined risk tolerance levels for compliance, substantial compliance, and non-compliance determinations. Application of the defined criteria will improve the consistency in determining compliance with the NBIS. In May, FHWA concluded a pilot evaluation of these criteria and procedures in 12 division offices. The results of the pilot test were evaluated with regard to effectiveness and resource impact. The schedule calls for full implementation in 2011.

FTA is in the process of publishing a notice of proposed rulemaking (NPRM) on project management in the Federal Register for comment. The NPRM will codify FTA's expectations for grantee core project management principles, FTA's risk assessment approach, and enhanced oversight for major capital projects of particular size and complexity. FTA is updating the Project and Construction Management Guidelines, which is a general guidance manual for implementation of New Starts projects. The updated version emphasizes project management principles and risk management concepts. The updated Guidelines will be published by the end

of calendar year 2010.

FTA has revised and enhanced its Project Management Oversight Operating Procedures with a special focus on risk management so as to provide better guidance to its staff and oversight contractors in risk assessment and other reviews. FTA developed a new project management course which teaches project sponsors the principles of successful project management. In FY 2010, FTA offered 24 project management courses around the country. The agency initiated an annual conference (New Starts Engineering Workshop) where sponsors of New Starts projects get together to share, among other things, best practices in managing projects successfully with a focus on addressing project scope, schedule, cost and risk.

FTA developed and published a historical database of light and heavy rail project capital costs. This database provides project sponsors with enhanced cost data that supports cost estimation early in project development. This data establishes more reasonable conceptual estimates that will help inform local decision-making and subsequent project development activities.

### **III. Actions remaining and expected completion date**

A bridge management technical assistance plan will be developed once the evaluation of the BMS questionnaire results is completed and a report issued. Based on this plan, the FHWA will provide technical assistance and training to each state to provide the state of practice nationwide.

In FY 2011, FHWA will implement new NBIS compliance processes in all 52 States. In FY 2012, further enhancements to FMIS will be made to collect additional bridge project data. After reauthorization, FHWA will work with States to set performance goals and measures for bridge condition.

FTA will prepare internal standard regional office operating procedures for management of Full Funding Grant Agreements to ensure more active FTA identification and resolution of project scope, schedule, and budget issues during project construction. Finally, FTA will initiate a top-down review of its overall oversight program, intended to address a range of oversight policy, procedural, and management issues to ensure greater grantee compliance with Federal requirements and the delivery of more efficient and coordinated oversight activities.

### **IV. Results or expected results**

Improvements in future year's condition data are anticipated as a result of bridge investments under the American Recovery and Reinvestment Act of 2009, lower bridge construction unit costs in 2009 and 2010, and the use of the additional \$1 billion in dedicated Highway Bridge Program obligation limitation.

FHWA will provide targeted technical assistance to States, based on their current BMS use. Making progress among the States will take time and will require commitment by the leadership

of all State transportation agencies.

FTA expects that the steps it is taking to address this management challenge will improve management of capital projects by project sponsors, improve guidance and tools for FTA and its oversight contractors to provide more responsive and focus oversight of high-risk projects. FTA also expects an increase in the number of projects delivered on time and on budget. In the long-term, it is FTA's expectation that the culture of effective project management will improve significantly in the transit industry, ultimately resulting in improvements in project adherence to baseline scope, schedules, and budget.

## **4. Addressing Human Factors and Strengthening the Regulatory and Oversight Framework for Aviation Safety**

### Issue: Increasing Efforts to Address Human Factors

#### **I. Why is this an issue?**

Human factors in aviation can affect the safety of users of the National Airspace System (NAS). For example, the effects of fatigue negatively impact human performance through impaired reasoning, attention lapses, and reduced situational awareness. Fatigue can affect both pilots and air traffic controllers.

#### **II. Actions taken to date**

In 2010, the Department established an Air Traffic Organization (ATO) Fatigue Risk Management (FRM) program office to address fatigue in air traffic safety by identifying fatigue causes and mitigating its risks. The primary focus of the FRM program office is to build the foundation of an adaptive, evolving Fatigue Risk Management System (FRMS) to promote safety in the National Airspace System (NAS) and enhance the safety and well-being of employees.

In June 2010, FAA developed an initial communication, education, and training plan to increase fatigue awareness for operational employees and management. It also developed an initial report to implement programs to increase content of fatigue risk event information. In collaboration with the National Air Traffic Controllers Association (NATCA), FAA formed a workgroup to address air traffic controller workplace fatigue, and developed collection methodologies to capture and analyze fatigue data from reported air traffic events.

FAA collaborated with its internal stakeholders and NATCA to develop an initial draft of the Fatigue Risk Management System (FRMS) concept. The FRMS will include a broad range of fatigue risk mitigations, such as scheduling, training and education, methods for reporting fatigue, and strategic communications activities.

In September 2010 FAA published a pilot flight and duty time and rest requirements (FDR) notice of proposed rulemaking. FAA use science and information on fatigue, as well as international standards, to develop the proposed rule.

#### **III. Actions remaining and expected completion date**

In FY 2011, FAA and NATCA will deliver an initial recommendation for potential policy and procedural changes that address air traffic controller (ATC) fatigue, as well as the jointly-designed FRMS. FAA will also identify causes of ATC fatigue, associated hazards and risks, and appropriate mitigations to reduce fatigue risk in the NAS.

#### **IV. Results or expected results**

The FAA has made substantial progress towards addressing fatigue. FRMS will bring about a sustained focus on fatigue safety through a top-to-bottom approach that incorporates and rests upon fatigue science. The FRMS will also leverage all appropriate fatigue risk mitigation best practices to develop and implement effective improvements in fatigue safety. The results of the Final Rule on pilot flight and duty, and rest requirements will be consistency and standardization in guidance that addresses fatigue, a critical factor in aviation safety. This will mitigate the risks of fatigue and provide the traveling public with reliably-rested flight crews.

Issue: Providing an Equivalent Level of Safety for Passengers Flying On-Demand Carriers by Strengthening FAA Regulations and Oversight

**I. Why is this an issue?**

FAA has regulatory and statutory authority to provide oversight on air carriers' safety standards. Through our surveillance activities, we are responsible for ensuring that air operators and air agencies provide service with the highest level of safety to the traveling public. FAA is developing a risk-based oversight approach for on-demand operators but it will not be implemented for 4 years.

**II. Actions taken to date**

In FY 2010, FAA revised internal guidance material to strengthen our oversight of on-demand operators. FAA updated and published the following orders and notice that require principal inspectors to use the Safety Performance Analysis System (SPAS) Surveillance Priority Index (SPI) for work program planning and updating their work.

- August 12, 2010, published FAA Order 1800.56 (National Flight Standards Work Program Guidelines)
- August 12, 2010, published FAA Order 8900.1 (Volume 6, Chapter 2, Section 1 – General Policies and Procedures for Parts 121, 135, and 91 Subpart K Surveillance)
- August 12, 2010, published Notice 8900.132 (Work program Development for 14 CFR Part 135 Certificate Holders).

The FAA is currently considering how best to implement Safety Management System (SMS) for on-demand air carriers. Flight Standards is sponsoring a set of SMS Pilot Projects, through which operators can develop a safety management system that conforms to International Civil Aviation Organization's requirements using the guidance published in FAA Advisory Circular (AC) 120-92A. SMS enhances the operators' safety by applying risk management and safety assurance processes to their operational systems. On-demand operators of all types, from international jet operators to air tour helicopter operators are participating. One subset of the community that has become especially active is the Helicopter Emergency Medical Service (HEMS) industry. In another segment, an air tour CEO recently stated that "This [SMS] is the best investment that any aviation company can make." The pilot projects are also conducted in close coordination with each operator's FAA certificate management team. Currently, for on-demand operators, the SMS Pilot Project has 53 current participants, 18 of whom joined in FY

2010.

FAA also continued its longer-term strategy to develop and deploy over the next four years a new risk-based oversight approach for on-demand operations as defined by the multi-year Systems Approach to Safety Oversight (SASO) Project Management Plan. SPAS is a major tool for managing a risk-based work program and provides a foundation for a data-driven approach to safety oversight. Mandatory use of the Safety Performance Analysis System Surveillance Priority Index tool aids principal inspectors in using resources more effectively by focusing surveillance on higher priority risks. Inspectors can use information from the Surveillance and Evaluation Program Data Package of each certificate holder to identify areas of risk within the certificate holder's operations. These tools help inspectors prioritize surveillance and focus attention where it is most needed.

Information technology requirements and automation requirements were developed in FY 2010. The functionality of the Safety Assurance System (SAS) was demonstrated with a prototype.

The change management and communications strategies for transition to SAS were established and implemented.

### **III. Actions remaining and expected completion date**

FAA will continue the implementation of change management and communications strategies for the transition to SAS. Wave 1 of the SAS software will be developed by September 30, 2011.

### **IV. Results or expected results**

By the end of FY 2013, deployment of SASO will allow FAA inspectors to provide strengthened, risk-based, and standardized oversight to on-demand carriers. Prior to the deployment of the SAS (2013), the SPAS SPI, the SEP data packages, and the SMS guidance material and pilot project will provide strengthened, risk-based, and standardized oversight of on-demand air carriers.

## Issue: Maintaining Momentum in Joint FAA/Industry Efforts to Improve Runway Safety

### **I. Why is this an issue?**

FAA experiences almost 1,000 runway incursions per year, and each one has the potential to result in a collision. The majority of runway incursions (approximately 65 percent) occur when a pilot violates a regulation or fails to adhere to an air traffic controller's instruction. FAA must find near-term solutions to reduce runway incursions and fully vet and set milestones for the plan's mid- and long-term initiatives.

### **II. Actions taken to date**

In June 2010, FAA published the Runway Safety Call to Action Mid-Term and Long-Term Initiatives Action Plan. This plan addresses the status of FAA activities, schedules, and

milestones required to implement mid-and long-term initiatives.

FAA's Root Cause Analysis Team (RCAT), chartered by the Runway Safety Council (RSC), reviewed serious runway incursions at seven airports. Full root cause analyses were conducted at four of the seven airports. Formal prioritized recommendations were presented to the RSC for one airport and initial recommendations for three, as well as event review results for three airports.

In December 2009, FAA convened the first-ever FAA International Runway Safety Summit. It conducted nine trade shows and safety conferences that were held throughout the continental United States. At one event alone over 43,000 runway safety publications were distributed. This event raised runway safety awareness globally, improving safety for the flying public, including U.S. citizens traveling abroad.

On June 30, 2010, the FAA instituted an Explicit Taxi Instruction Campaign which implemented new phraseology that will reduce runway incursion risks. Under the new procedure, pilots are required to receive explicit instructions before crossing or taxiing onto a runway.

In 2010 FAA introduced a "Line Up and Wait" Campaign, another significant phraseology change, adopting the international terminology "Line up and wait" in place of the current U.S. phrase "Taxi into position and hold". The terminology change will reduce runway incursion risks by establishing a common international standard for this critical air traffic control instruction.

### **III. Actions remaining and expected completion date**

FAA plans to modernize the Notice to Airmen (NOTAM) system to provide current and relevant information to pilots which could prevent runway incursions. NOTAM digitization and dissemination trials are currently running at six airports.

FAA is also developing an "off the shelf" Low Cost Surveillance System (LCGS) for use at smaller airports in order to provide some of the surveillance and conflict alerting capabilities of Airport Surface Detection Equipment – Model X (ASDE-X). LCGS will improve controller surface situational awareness. LCGS is in a two-year test period.

### **IV. Results or expected results**

FAA continues its ongoing outreach, education, and awareness programs to affected groups through mass electronic mail communications, training animations, and a new webpage. Runway safety remains one of our top priorities and we remain committed to mitigating the risks of runway incursions.

As each mid-and long-term item in the action plan is implemented both the number and severity of runway incursions is expected to be reduced.

The recommendations concerning root causes of runway incursions identified by the RCAT were

accepted by the Runway Safety Council. The Council assigned a lead organization for each recommendation and is currently tracking the implementation progress for each as well as the effectiveness of the recommendation once implemented.

The International Runway Safety Summit was very successful, attracting over 500 people from almost 20 countries. This has resulted in the FAA presenting a Runway Safety working paper at the International Civil Aviation Organization's (ICAO) High Level Safety Conference. The paper was accepted and ICAO and several states submitted Runway Safety working papers to ICAO's 37th Assembly. This has resulted in ICAO, with FAA support, planning a Global Runway Safety Symposium in May 2011. A second International Runway Safety Summit tentatively will be hosted by EuroControl in 2013.

In addition to the two major fly-in events, FAA participated in over 600 functions where it interacted with pilots and vehicle drivers and distributed safety information. In this way, FAA expects to increase awareness and knowledge of best practices and procedures, resulting in fewer runway incursions.

While it is too soon to evaluate the effect of explicit taxi instructions or the phraseology change to "Line up and wait", we expect these changes to also reduce the number of runway incursions.

Modernizing the NOTAM system will provide current and relevant safety information to pilots concerning airport information that will help them avoid runway incursion situations.

The LCGS systems are operational at two airports and are scheduled to be installed at three additional airports. These systems will provide the basis for a thorough evaluation of this technology. If adopted, these systems will improve the situational awareness of controllers and provide a tool which can be used to prevent runway incursions.

## **5. Moving Toward the Next Generation Air Transportation System and Improving Performance of the National Airspace System**

### **Issue: Taking Actions to Deliver NextGen Benefits in the Near- and Mid-Term**

#### **I. Why is this an issue?**

The FAA's Next Generation Air Transportation System (NextGen) is a complex, multi-program undertaking encompassing a portfolio of investments designed to deliver new capabilities to the National Airspace System (NAS) over the next five to ten years. It is a high-risk effort involving billion-dollar investments from both the government and the airline industry. NextGen's challenges are multi-dimensional, involving research and development, complex software development and integration for existing and new systems, workforce changes, and policy decision-making. The integration of new systems, technologies and capabilities impact the workforce and how FAA conducts the air traffic control operation. A key challenge for the Department and FAA involves setting realistic expectations for what NextGen can deliver in the near and mid-term.

#### **II. Actions taken to date**

The NextGen Implementation Plan (published annually) summarizes NextGen goals and objectives and provides details on the planned activities required to achieve the desired near and mid-term operational improvements and associated benefits. NextGen implementation projects have been managed and tracked against the planned annual activities and milestones contained in the NextGen Implementation Plan. Moving forward, FAA has continued to integrate RTCA Task Force recommendations into the agency's NextGen planning and implementation activities. Diverse and competing interests of the stakeholders have further reinforced the need for continued government/industry collaboration. As a result, FAA directed RTCA to create a new advisory committee for NextGen. The newly-created NextGen Advisory Committee includes senior industry participants who speak for safety, airport, environmental, global harmonization, and air traffic interests.

The FAA published an updated Enterprise Architecture (EA) in early 2010 that reflects updates to the infrastructure roadmaps such as: Aircraft, Air-Ground, Automation, Weather, Communication, Navigation, Surveillance, Airspace & Procedures, Enterprise Services, Facilities, Human Systems Integration, and Information Systems Security. The NAS EA provides the technical roadmaps for NextGen, and FAA has worked to ensure there are links within the EA from the mid-term through the long-term.

In FY 2010, in conjunction with the National Academy of Public Administration (NAPA) findings and recommendations, FAA developed and implemented an acquisition workforce plan to ensure the hiring, development, certification and retention of a workforce with enhanced competencies and skills to successfully implement NextGen. The plan contains descriptions of the acquisition workforce, challenges, workforce planning process, current views of the workforce and future demand, staffing/hiring plans, and strategies to address

workforce gaps/needs.

### **III. Actions remaining and expected completion date**

FAA will test the Aeronautical Information Management portion of the Special Use Airspace Automated Data Exchange capability for System Wide Information Management by December 2010. Prior to first production sites, terminal separation services will be provided (ADS-B to ADS-B and ADS-B to Radar) for Common Automated Radar Terminal System (Initial Operating Capability (IOC) April 30, 2011).

FAA will provide initial operating capability for En Route separation services with ADS-B integrated into En Route Automation Modernization (ERAM) by April 2011 and En Route separation services with ADS-B integrated into Advanced Technologies and Oceanic Procedures (ATOP) August 2011. Terminal separation services prior to first production sites (ADS-B to ADS-B and ADS-B to Radar) for STARS will have initial operating capability by June 2011.

By the end of FY 2011, FAA will calculate impacts of NAS system performance on passenger exposure in all phases of flight, including delays, using a national flow model for major airports and execute its acquisition workforce plan.

### **IV. Results or expected results**

The FAA will continue to focus on the integration across agency processes, systems and personnel. Under the construct of FAA's portfolio management framework, FAA will conduct detailed integrated program planning to effectively manage NextGen.

Issue: Maximizing the Benefits of Performance-Based Navigation in the National Airspace System and Keeping Airspace Redesign Projects on Track

#### **I. Why is this an issue?**

As air travel continues to be a way of life, increasing demands are made on airspace capacity. Although FAA is maximizing the efficiency and safety of our national airspace system (NAS) through performance-based navigation (PBN) and airspace redesign, there is a need to streamline and expedite the implementation processes. Increased awareness and better project management are two key areas that will help achieve the goals of developing integrated, benefit-focused projects.

#### **II. Actions taken to date**

FAA has continued to refine the Integrated Airspace and Procedures concept. It has promoted awareness by reaching out to stakeholders to ensure that they understand the full benefits of implementing area navigation (RNAV) and required navigation performance (RNP) initiatives. The goal is to ensure that the system works for everyone, including air traffic controllers, pilots, airports, and the community. To increase awareness amongst the aviation community, in June 2010, FAA initiated a plan to develop material for briefing industry and air traffic controllers. Industry, through RTCA Task Force 5, recommended that RNAV operations that focus on

benefits should be increased and optimized; that a structured and systematic approach to PBN implementation is essential; that environmental concerns and fuel-savings considerations must be a focus; that teams to study the Metroplex issues should be implemented immediately; and that industry should continue to be involved. The primary goal is to produce measurable benefits in reduced flight time & fuel burn by utilizing airspace redesign and performance-based navigation. The team also hopes to deconflict airports in the same Metroplex such as Washington Dulles, Washington National, and Baltimore-Washington International as well as the smaller airports. Anticipated reduction in controller workload will lead to reduced congestion and improved airport and airspace capacity.

To pursue the integrated airspace and procedures concept, FAA held prototype activities, including kick-off meetings, and planning discussions with facilities in Denver in February 2010. On April 19-23, 2010, a design meeting was held with all parties and the initial integrated procedures design was completed in August 2010. Environmental review and human-in-the-loop simulations will further determine refinements to the initial designs.

To improve project management and project tracking mechanisms, FAA initiated development of two databases to track PBN procedures. The first database, the PBN Project Tracking Tool, is a web-based tool that provides a tracking mechanism to expedite the development, review, and implementation of PBN procedures and routes throughout the lifecycle of the PBN project. Additionally, it was developed to align with the new FAA order governing the process for developing and implementing PBN procedures and routes. It provides project management functionality for PBN working group members, along with transparency for those interested in the progress of PBN projects. The PBN Project Tracking Tool is designed to be used by all parties involved with developing PBN procedures and routes. It includes features that are important for compliance with the Safety Management System. The PBN Project Tracking Tool is currently in the initial testing phase. FAA is also developing a new order on the process for development and implementation of PBN procedures and routes. The second database that was developed in May 2010 is an interim solution to project tracking. It helps track individual procedures and report on procedure counts for our Flight Plan goals.

### **III. Actions remaining and expected completion date**

FAA will approve the new PBN order and release the online procedures tracking database by December 2011. It will also complete the final deliverable DVD briefing material to FAA's Technical Training Organization by July 2011 and update guidance material as needed.

#### **IV. Results or expected results**

The expected result is to have an expedited and integrated process for PBN design and implementation. Air traffic controllers and other stakeholders will have a greater understanding of RNAV and RNP, enhancing wider acceptance and technical knowledge.

In FY 2011, FAA will continue to produce PBN routes and procedures at a similar rate as in FY 2010. These procedures and routes will be focused and mainly implemented in Metroplex areas. The FAA's efforts to deconflict arrival and departure traffic around multiple airports in congested metropolitan areas will move RNAV/RNP airspace and procedure design away from individual overlays into an Integrated Airspace and Procedures approach. The agency is also focusing on city pair networks, deconflicting and optimization of procedures serving airports in close proximity.

FAA initiated two databases to increase efficiency in tracking the progress and status of all PBN procedures. This web-based tool will help expedite PBN procedures, aids in Safety Management Systems compliance and expedites coordination with FAA's new more efficient 5 phase development and implementation of PBN procedures and routes.

#### Issue: Improving Programs for Developing the Next Generation of Air Traffic Controllers

##### **I. Why is this an issue?**

Over the next decade, FAA plans to hire and train nearly 11,000 new air traffic controllers to replace those who are close to retirement. Ensuring that these controllers are properly trained and certified at FAA's more than 300 air traffic control facilities requires effective national oversight and accurate metrics for measuring progress of new controllers in training.

##### **II. Actions taken to date**

FAA published a report that outlines training failure information by year, type of hire, what stage of training the student failed and completion time. FAA also published a comparison study that provides information on transfers, as well as whether or not the transferred controllers were successful or unsuccessful in their new facility. This study made multiple comparisons between en route and terminal air traffic control facilities as well as a comparison of the results of transfers from en route-to-en route facilities, en route-to-terminal facilities, terminal-to-terminal facilities, and terminal-to-en route facilities. The FAA has been analyzing and reporting the time it takes to become a Certified Professional Controller, the number of training failures, and the number of training delays. Enhancements of the methods used for analyzing and reporting on relevant training data continue. A periodic review of these specific indicators has continued through the end of the fiscal year and will continue into subsequent fiscal years.

FAA initiatives to analyze training hours and costs are based on contractor provided invoice data. This ongoing review of training hours and costs has allowed FAA to better monitor training/recruit trends. Also, FAA developed tools to predict contract costing trends for the Air Traffic Control Optimum Training Solution (ATCOTS) contract by May 1, 2010. These tools analyze training hours and weekly invoice data provided by the contractor. In addition, FAA has developed contractor utilization surveillance tools to monitor hours billed for supplemental field training. A program-wide online tool will be deployed in November 2010. As a result of prior recommendations, FAA has aggressively filled multiple ATCOTS program management positions, including Executive Lead, Communications Lead, Management Analyst, and Business Manager. Additionally, contract support vehicles have been utilized to provide contractor support for the Contracting Officer, Program Manager, and Quality Lead. New award fee metrics and goals were established to include individual competency, organizational competency, cost awareness, and customer satisfaction.

### **III. Actions remaining and expected completion date**

Because of the boost in hiring activities since 2006, new air traffic controllers are increasingly brought on with no prior experience. The En Route facilities have established training programs which are able to handle and have been effective handling any type of controller new hire. However, some of the larger terminal facilities have been challenged in meeting the training demand. But since 2007 - and especially in the past year - the FAA has launched several initiatives to update its training methodologies and lesson plans to fit the profile of those who are being hired. The FAA continues to modify its training curriculum to improve its effectiveness for training today's workforce. In addition, periodic review of the stated key performance indicators, measures, and metrics, will continue to assist in determining where additional effort can be targeted, continuously improving the training system, including areas applicable to new hires from the general public.

An ATCOTS program-wide online tool to analyze contractor training hours and weekly costs will be deployed in November 2010.

### **IV. Results or expected results**

The Technical Training Office is positioned to analyze training related data more efficiently with the data sets newly available on a regular basis, allowing for more substantial efforts towards root-cause analysis going into FY 2011. As the metrics and measures mature over the course of the next year, the office will be able to use them to strategically target training support and oversight efforts through weekly tasks, quarterly initiatives, and an annual workplan.

The ATCOTS program office successfully executed the second contract year and remained within the initial and supplemental funding allocation.

By revamping the award fee structure, the FAA now motivates the contractor to perform with added focus in specific program areas. This has resulted in the contractor aligning its initiatives to the FAA's vision for the Technical Training organization and provides a better structure to

inform stakeholders on contractor contributions.

By increasing staffing at the FAA ATCOTS Program Office, the Government has improved its capability to support a performance-based, cost-plus contract of this magnitude, scope and complexity. It has built tools to improve day-to-day monitoring of the contract, processes for two-way communications to the field, and an organization structure to improve Program Office efficiency. The program stood up a quality assurance team that now analyzes contractor activities, and established a joint Risk and Opportunity Management Board to guide excellence and efficiency. The FAA participates in the contractor's quality assurance sit visits and audits and manages its own instructor evaluation and voucher review programs. To augment existing voucher review processes, the FAA secured third-party audit assistance providing dedicated analyses to ensure direct and indirect costs paid under the ATCOTS contract are allowable and appropriate. The ATCOTS Program Office believes increased scrutiny of quality, cost and price performance could net additional savings that could be redirected to funding training development and delivery.

Once the FAA deploys the first phase of the contractor utilization surveillance tool, expected in November 2010, training managers in the field will be able to forecast and reallocate resources while remaining under established budget. This provides added flexibility for frontline training managers to move resources where they need them without having to go through a lengthy approval process that previously required action from both the FAA and contractor program managers.

## **6. Improving Contract Management and Oversight**

Issue: Recent Government-wide efforts to stimulate the economy and reduce spending heighten the need for DOT to address weaknesses in contract planning, administration and oversight

### **I. Why is this an issue?**

For the past several years, the Department has had a weakness in its suspension and debarment (S&D) program and internal processes. Significant time delays were occurring for entering Operating Administrations (OAs) S&D decisions into General Services Administration Excluded Party Listing System.

These weaknesses increase the risk that the Department and other Federal agencies may award contracts and grants to irresponsible and/or fraudulent parties. DOT faces the following challenges:

- Strengthening DOT's suspension and debarment program to effectively safeguard against awards to improper parties and
- Maintaining high ethical standards among DOT employees and fund recipients

### **II. Actions taken to date**

In FY 2010, the Department revised and issued an updated S&D order (5200.E) which clearly defines expectations, processes, timeframes, and responsibilities of the OAs, Office of the Senior Procurement Executive (OSPE), the Office of the Inspector General (OIG), and the Office of General Counsel (OGC). It has also modified and enhanced the utility of the S&D reporting tool to increase tracking and management oversight capabilities. DOT has trained the OAs on the enhanced utility of the S&D tracking and reporting tool. It will continue the direct and formal line of communication with the OIG to ensure that the OSPE receives timely and accurate information regarding S&D activity throughout the Department. Finally, the Department has maintained intra-agency S&D quarterly meetings to share best practices, and updated the OAs on current internal and external developments or issues.

DOT continues to conduct reviews of completed and current Cost Plus Award Fee (CPAF) contracts, and de-obligate unused funds where legally acceptable, practicable and appropriate.

DOT continues to reduce the use of CPAF contracts with only 59 CPAF contracts in FY 2010, which is less than 1% of DOT's contracting activities. DOT had 197 CPAF contracts in FY 2009.

The SPE in conjunction with the modes is developing a Cost Plus Award Fee (CPAF) Guidebook incorporating planning, implementation and administration of CPAF contracts, based on guidance available from best practice agencies. The guidebook will be completed by July 1, 2011.

The Office of the Senior Procurement Executive and the OIG provided supplemental ethics

training to the Operating Administration's contract and grant personnel. The training used interactive case studies that addressed a wide range of ethical concerns specific to contract and grant personnel. The Senior Procurement Executive issued a policy on 01/07/2009 APL-2009-01, Preventing Fraud in Contracting, which amplifies the requirement for contractor codes of ethics and conduct and internal controls systems.

The Operating Administrations are currently doing monthly site visits on American Reinvestment and Recovery Act (ARRA) grants. This ensures that internal controls systems are in place and assist in detecting fraud waste and abuse. Non-ARRA contracts are currently being reviewed randomly. The Department has incorporated the Financial Assistance Guidance Manual into TIGER grants to ensure that sound internal controls are in place to prevent and assist in detecting fraud. The Department's risk assessment office set up an internal control work group to assist in developing tighter internal controls for ARRA grants.

### **III. Actions remaining and expected completion date**

The Office of the Senior Procurement Executive has completed the recommended OIG actions to strengthen internal controls, oversight, and transparency into the overall S&D process and program.

Outreach, training, site visits and risk assessments will continue for ARRA. This is an ongoing effort.

### **IV. Results or expected results**

The new S&D Order 5200.E has clearly identified and clarified the roles and responsibilities of the OGC, OIG, OA's, and OSPE. The enhanced S&D reporting tool will be an excellent resource for management's use when inquiring about the status of S&D actions for an individual OA or for the Department as a whole. All S&D liaisons and officials have been trained on the reporting tool's utility and have attended workshops designed to explain the expectations and updates contained in the S&D Order 5200.E. It is anticipated that these enhancements will serve as a strong deterrent for effectively safeguarding the Department against contractor and grantee fraud, waste, and abuse.

The DOT Cost Plus Award Fee (CPAF) Guidebook will incorporate planning, implementation, and administration of CPAF contracts. The guidebook will provide the appropriate training to DOT program managers and contracting personnel involved in the use of CPAF contracts. This training will highlight proper CPAF award and administration and will result in increased knowledge and application and institution of an annual training requirement.

The supplemental training was received by approximately 500 employees. Based on the results of the survey, employees suggested that they now have a better understanding of Government ethics. The risk assessment and the monthly site visits have ensured proper oversight and have dovetailed into preliminary ethical issues and the Office of the Senior Procurement Executive has been able address the issue prior to escalation. This also allows the Government to spot glar-

ing anomalies and mistakes. At this time, the Office is unable to pinpoint any issues directly.

## **7. Enhancing the Ability to Combat Cyber Attacks and Improving the Governance of Information Technology Resources**

Issue: Given the scope and complexity of DOT systems, it is critical that DOT effectively manage and secure its information technology resources

### **I. Why is this an issue?**

DOT's financial systems manage and disburse over \$50 billion in Federal funds each year. At the same time, DOT's information technology (IT) budget covers more than 400 information systems across its 13 Operating Administrations-nearly two-thirds of which belong to the Federal Aviation Administration (FAA).

DOT faces the following management challenges:

- Establishing a robust information security program to support the Department's missions
- Increasing security protection and resilience of the air traffic control system to reduce the risks of cyber attacks

### **II. Actions taken to date**

The Department's Office of the Chief Information Officer (OCIO) led the development of a Comprehensive DOT Strategy Plan. The plan focused on areas such as training, consolidation and integration, remediation, upgrades, governance, and infrastructure protection.

To influence the Operating Administrations (OAs), OCIO has established three control boards (Technology Control Board, Governance & Investment Board and the Cybersecurity & Privacy Board). All of the OAs contributed to the Cybersecurity Strategic Plan focus areas by having representatives work towards the DOT mission. By involving the OAs the Department is collaborating towards a joint solution. The Department has begun to issue PIV cards. Additionally the Departmental OCIO representatives have educated the OAs on the importance of PIV cards and credentialing. The OCIO developed action plans to remediate and mitigate known vulnerabilities by assigning team leads to oversee compliance.

FAA has resolved eighty percent of the it's web application security issues identified in the FY 2010 DOT Top Management Challenges. Compliance checks for all items were completed ahead of schedule. Meticulous tracking has been performed to document the successful resolution of identified issues. Completion has been slightly delayed due to Traffic Flow Management web asset consolidation at the William J. Hughes Technical Center, which will yield increased security benefits.

### **III. Actions remaining and expected completion date**

The DOT Cybersecurity Strategic Plan is complete; plans of action are on-going initiatives that focus on people, process and technology.

#### **IV. Results or expected results**

The DOT CIO strategically developed a plan with mission, vision, goals and action objectives that included collaborative efforts with other Federal agencies and industry partners. The DOT CIO and executives developed a budget plan that concentrated on revamping the infrastructure of DOT to enhance the cyber security efforts. The OCIO conducted several briefings within DOT as well as to the Senate and House Appropriations Committees to present the challenges DOT faces in cybersecurity.

## **8. Developing a Funding Framework for the Next Surface Transportation Reauthorization**

Issue: The Next Surface Transportation Reauthorization Will Need to Provide a Comprehensive Funding Framework for Addressing Infrastructure Needs.

### **I. Why is this an issue?**

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the current authorization law, expired at the end of FY 2009 and since then has been operating under an extension.

The Department faces the following key challenges:

- Ensuring the short-term solvency of the Highway Trust Fund (HTF);
- Assessing the annual federal funding needed to preserve and enhance surface transportation infrastructure; and
- Developing a comprehensive funding framework for the future.

### **II. Actions taken to date**

Throughout FY 2010 DOT released weekly cash balance tables for both the Highway Account and the Mass Transit Accounts. Both accounts maintained cash balances that were sufficient for prudent financial management.

DOT maintained outlay projection models for both the Highways and Transit programs to determine how current spending compares to projections. In FY 2010, both FHWA and FTA continued to assess the results of the most recent FY 2008 Conditions and Performance (C&P) Report. The Federal Transit Agency followed up the C&P Report with a special report on Maintaining a State of Good Repair at transit agencies nationwide.

Additionally in FY 2010, DOT conducted outreach events throughout the nation to gather input from stakeholders to develop proposals for the next reauthorization legislation.

### **III. Actions remaining and expected completion date**

Work is ongoing to develop a reauthorization proposal.

### **IV. Results or expected results**

Regular cash balance reporting has maintained a transparent chain of communications with Congress. The Department is on track to release a reauthorization proposal.

## **9. Strengthening the Department's Acquisition Workforce**

### Issue: Addressing Acquisition Workforce Retention and Recruitment Concerns

#### **I. Why is this an issue?**

Since 2001, human capital management has been identified as a Government-wide high-risk area. With the expanding and increasingly complex acquisition workload, addressing this risk is critical. About 46 percent of contracting specialists are eligible for retirement in less than 5 years. DOT needs to do more to ensure it has the needed size and skill levels to support its mission, especially given its need to oversee billions of dollars in ARRA funds.

#### **II. Actions taken to date**

DOT staff volunteered to participate in a government-wide New Hire Immersion Program Focus Group. The purpose of the focus group was to design a course which could be used to quickly train newly hired mid-level (GS9/12 or equivalent) acquisition individuals.

The Intermodal DOT Acquisition Workforce Working Group surveyed DOT Acquisition Directors to get input on rotational exchange and intern programs, designed an acquisition brochure to be distributed at job fairs and career days, conducted a networking Brown Bag where Acquisition Directors networked with new acquisition professionals and colleagues, and drafted requirements for a DOT Rotational Exchange program.

#### **III. Actions remaining and expected completion date**

DOT will finalize Rotational Exchange program requirements and implement them by FY 2011. It will also design and implement an intern program in FY 2012.

Based on input from the focus group participants, the Department will develop a final report of the program with specifications including contents, structure and schedule. The final report will be used to develop course materials and select instructors; ensuring that the report is aligned with the acquisition community's vision.

#### **IV. Results or expected results**

The above results will increase employee recruitment, engagement and retention.

### Issue: Ensuring a Sufficient and Competent Acquisition Workforce to Meet Mission Needs

#### **I. Why is this an issue?**

Since 2001, human capital management has been identified as a Government-wide high-risk area. With the expanding and increasingly complex acquisition workload, addressing this risk is critical. About 46 percent of contracting specialists are eligible for retirement in less than 5 years. DOT needs to do more to ensure it has the needed size and skill levels to support its mission, especially given its need to oversee billions of dollars in Recovery Act funds.

FAA faces the same challenges confronting many Federal agencies and acquisition organizations. The number and complexity of acquisitions across the Federal Government have increased significantly at the time when retirement eligibility is on the rise. These combined factors are resulting in an ever-increasing competition for acquisition talent. Currently, about 15 percent of FAA's core acquisition workforce is eligible to retire with a cumulative eligibility of 32 percent by FY 2014. As increasing numbers of acquisition employees retire, FAA's pipeline could shrink. To combat this, FAA has a concerted focus on bringing in and developing new talent.

## **II. Actions taken to date**

In FY 2010, DOT conducted the 2010 Acquisition Workforce Competency Survey. It issued DOT DASH reiterating that all Contracting Officer Technical Representatives (COTRs) must meet the Federal Acquisition Circular (FAC) COTR training requirements to achieve certification. It also issued FAC-COTR Certifications.

In FY 2010, FAA created the centralized Acquisition Career Management Group under the FAA Acquisition Executive. This group had its primary staffing in place by December 2009. The group's focus is workforce planning, workforce development, and the implementation of certification programs specifically designed for the acquisition workforce. The change in organizational infrastructure emphasizes the critical importance of the agency's acquisition workforce to mission accomplishment and transition to the NextGen air traffic control system.

On March 31, 2010, FAA published the Acquisition Career Program Guide under the Acquisition Management System (AMS) policy to further recognize the need for workforce competency. This Guide establishes core requirements related to competencies, training, experience, and certification for multiple acquisition workforce disciplines.

FAA's 2010 Acquisition Workforce Plan provides a profile section for each acquisition-related discipline to provide information about the community, critical competency requirements, training and certification programs, and other workforce-related initiatives. Additionally, FAA carried out reviews of the National Acquisition Evaluation Program (NAEP) in July, 2010. The findings are being used to identify performance gaps within the acquisition workforce. Current training programs and policies are being modified as needed. Areas of review included defining and estimating FAA requirements, making better use of performance-based acquisition, evaluation of proposals and negotiations, Contracting Officer Technical Representative (COTR) communications and management, and administration life-cycle logistics and contracts by program offices.

## **III. Actions remaining and expected completion date**

DOT expects to update the COTR Program Guidance by the 2nd quarter of FY 2011. This will enable COTRs to go to one source to get information regarding the FAC-COTR Certification program. Changes have been made since the initial guidance in 2007 in the form of DOT

DASHs and the guidance needs to be updated to reflect these changes. DOT will also update the Transportation Acquisition Manual and Transportation Acquisition Regulations by year end FY 2011 to incorporate required changes made since the last update for DOT-Wide source of information.

FAA has completed all tasks related to this management challenge.

#### **IV. Results or expected results**

DOT has a good understanding of its acquisition workforce's competency through the 2010 Acquisition Workforce Competency Survey. It provides clearer guidance to COTRs by clarifying the FAC-COTR requirements for certification. DOT reviewed and approved 454 FAC-COTR certifications and issued seven FAC-Cases DASH Policy Documents.

FAA expects to have the staffing and skill mix to successfully manage NextGen and other major acquisition programs now and into the future. Through the introduction of the Acquisition Career Management Group, documented plans and standards, and proper oversight, FAA will be able to estimate and implement training and support where most needed to effectively achieve its mission.

## **10. Successfully Implementing the Newly Created Multi-Billion Dollar High-Speed Intercity Passenger Rail Program**

Issue: Designing and Implementing the HSIPR Program from the Ground Up

### **I. Why is this an issue?**

The High-Speed Intercity Passenger Rail (HSIPR) Program required the Federal Railroad Administration's (FRA) to undergo organizational transformation, from an agency focused primarily on rail safety issues to a more comprehensive intercity passenger and high-speed rail program and regulation agency.

### **II. Actions taken to date**

The HSIPR Program has made significant progress to date in meeting deadlines and obligating funds for both the Recovery Act and the FY 2009 and FY 2010 Appropriations. From a pool of 259 submissions, FRA has reviewed and selected 82 Recovery Act and FY 2009 high-speed rail applications for funding. As of January 4, 2011, FRA had obligated \$4.279 billion out of \$8 billion in Recovery Act high speed rail funds.

In addition, FRA has restructured its organization to more effectively manage the program. The Office of Passenger & Freight Programs was reorganized into six divisions to align with the functional responsibilities of administering the new HSIPR Program. FRA hired 11 new staff and filled other vacancies internally to support the HSIPR Program. Additionally, FRA has assigned a "customer support lead" to serve as FRA's primary contact for each State, supported by teams of subject matter experts.

### **III. Actions remaining and expected completion date**

In addition to administering both current and future grants, FRA has identified three key areas essential to the implementation of the HSIPR Program. FRA will continue to hire additional HSIPR Program staff to fill the positions provided for in FY 2010. It will also develop final guidance to govern the program, rather than issuing interim guidance with each application solicitation. The Advanced Notice of Proposed Rulemaking (ANPRM) is targeted for FY 2011. Finally, FRA will continue to provide robust technical assistance to States (and other stakeholders) in developing and implementing their proposals.

### **IV. Results or expected results**

Administratively, FRA's staffing increases will allow the agency to provide greater technical support to States, as well as improve the overall efficiency of the program's management. Developing final guidance for the program will provide States, railroads, Congress, and other stakeholders with greater clarity on the program's policies and organizational structure, as well as provide a consistent and predictable framework that allows for sound planning and investment decisions.

## Issue: Establishing Policies and Procedures for the Program's Grant Lifecycle Process and Oversight Activities

### **I. Why is this an issue?**

In order to meet the intent of the ARRA to promptly award funds and produce economic stimulus, FRA has operated under a series of interim measures in implementing the new HSIPR Program. While this approach has enabled the agency to stand up the program in a short timeframe, greater standardization and documentation of procedures are necessary to ensure the program's long-term success.

### **II. Actions taken to date**

During FY 2010, FRA developed and documented standardized grant management procedures in a new Grant Management Manual. It also drafted new interim program guidance for FY 2010 high-speed rail applications. FRA conducted significant outreach with States and other stakeholders to provide technical assistance in developing high-speed rail proposals, completing required application/award documentation, and complying with Recovery Act reporting requirements.

### **III. Actions remaining and expected completion date**

FRA will need to provide training to grant managers on the application of the Grant Management Manual. This is expected in mid-FY 2011. FRA will also develop and begin implementing a robust oversight and monitoring program, consisting of programmatic, financial, and administrative reviews of grantee-submitted reports and documentation and grantee/project site visits conducted by FRA staff and project management oversight contractors by the end of FY 2011. FRA will also develop final guidance to govern the program that documents application evaluation and selection criteria and methodologies, reporting and oversight conditions, and requirements for supporting application/ award documentation. The Advanced Notice of Proposed Rulemaking (ANPRM) is targeted for FY 2011.

### **IV. Results or expected results**

In FY 2011, FRA intends to develop and implement policy changes that will affect both internal program administration and external stakeholder activities. By documenting standardized grant management procedures, FRA staff will be able to apply a consistent approach to grant administration and management. Developing final guidance for the program will provide States, railroads, Congress, and other stakeholders with greater clarity on the program's policies and organizational structure, as well as provide a consistent and predictable framework that allows for sound planning and investment decisions.