# DEPARTMENT OF TRANSPORTATION
# INSPECTOR GENERAL
# TOP MANAGEMENT CHALLENGES
# FOR FISCAL YEAR 2011

## FEDERAL AVIATION ADMINISTRATION
## YEAR END PROGRESS REPORTS

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**Overseeing ARRA Projects and Expenditures**

**Why is this an issue?**

Enhanced oversight mechanisms must be in place to support a sustained public focus on ARRA administration by the FAA. The FAA must ensure adequate oversight and accountability to meet the aggressive ARRA goals. Additionally, management attention is needed to protect ARRA funds from fraud, waste, and abuse.

**Actions Taken in 2011:**

The FAA continued to evaluate the progress of remaining ARRA projects through a variety of weekly and monthly meetings, intensive reporting requirements and review processes, and extensive use of existing program resources at both national and local levels.

We have continued to collect monthly reports from both prime and sub recipients. The submitted reports were certified by recipient officials, and validated by responsible FAA personnel. Along with data obtained from internal financial tracking systems, all data was cross-referenced against 1512 quarterly recipient reporting as part of our proven data validation processes to ensure accurate reporting. Data validation and program oversight was further supported by regular ARRA project site visits and inspections.

Our Section 1512 validation processes identify reporting errors and outliers of grants that are still open. We will continue to work directly in coordination with recipients to address and resolve data quality issues and support accurate recipient reporting.

Further, we have monitored expenditure status weekly and project status on a monthly basis, performing comparative analyses against recipient reports. Weekly financial reports were prepared from information in the department's Finance and Accounting System that reflect current grant obligation and outlay data.

The Office of Airports (ARP) hired an outside contractor in October 2010 to expand the existing ARP Grant Risk Model specifically for ARRA grantees, as well as perform a sample audit of grantees for compliance with program requirements and improper payments.

ARP has continued to review all single audit findings forwarded by the OIG for information and action. These findings were addressed with the airport sponsors in a timely manner, consistent with AIP funding oversight. Single audit findings for ARRA grants tended to be procedural in nature.

The FAA reviewed ARP workload associated with the issuance and oversight of Federal funds from the three directions: 1) process standardization, 2) process re-engineering with increased automation, and 3) additional staff. The Airports Staffing Model has been updated to include 2010 workload and staffing data.

The Air Traffic Organization (ATO) has continued to track project schedule plans and accomplishments through the Corporate Work Plan (CWP) system, our toolset for monitoring scheduled project activities and actual project accomplishments.

**Actions Remaining and Expected Completion Date:**

FAA will continue our effective monitoring of ARRA projects using methods described above until the final project has been completed.

**Results or Expected Results:**

FAA will continue to provide grant and contract management and oversight until all projects are financially complete. We continue to work in coordination with recipients to address and resolve data quality issues and support accurate recipient reporting.

All ARRA funded Airport Improvement Grants are substantially complete. 83 percent of these grants are financially complete. ARP expects all ARRA grants to be financially complete in FY 2012.

ATO reports that 98 percent of our Facilities and Equipment (F&E) projects have been completed. All of our ARRA F&E projects are expected to be completed by the end of calendar year 2012.

**Collection of Quality Data from Award Recipients**

**Why is this an issue?**

ARRA mandated extensive new reporting requirements to include estimating and reporting on job creation and program data elements.  The reporting provides transparency and accountability for Federal Recovery dollars.

**Actions Taken in 2011:**

FAA obtained daily data extracts from the OMB site to ensure full recipient reporting compliance and to validate recipient data, program financial information, program schedule status and description, compensation information for corporate officers, and job numbers and descriptions.

The FAA continued to use and refine the data validation processes originally developed in FY 2009. FAA's validation processes have been reviewed by the Government Accounting Office (GAO), the Department of Transportation (DOT), and DOT Office of the Inspector General (OIG) and have served as a successful model for other DOT modes engaged in ARRA administration. The FAA's validation processes continue to be enhanced over time based on working experience and revised OMB guidance.

The FAA maintained a broad scope of internal personnel and reporting mechanisms to ensure reported data correlated with established program indicators. The Office of Airports (ARP) continued to leverage the existing SOAR grants tracking database coupled with their established Concept of Operations validation process. Grant recipient reporting was validated through ARP's Concept of Operations processes, and cross-referenced against SOAR data for accuracy.

All ATO projects were tracked through the Corporate Work Plan (CWP) System which maintains program schedule plans and actual accomplishments for each project location. The ATO collected weekly status reports that contained current technical and schedule information.  ATO reviewed and analyzed earned value management (EVM) reports from contractors and conducted weekly and monthly teleconference meetings with contractors and FAA field staff regarding project activities and progress.  Resident Engineers (REs) made onsite visits to each project location, monitoring contractor activities and conducting first hand assessments of the work and resources.  Each of these monitoring venues provided a basis for determining the reasonableness of the information provided by the ARRA contractors for public reporting.

The FAA formally commented on 1512 records with potential inaccuracies and/or omissions by the 25th day of the "Agency Review Period," to provide recipients time to respond and correct data errors or anomalies. FAA conducted internal reviews of the ARRA data submitted by recipients, applying approved validation procedures, data reviews and analysis of Regional procedures and on-site field staff.

**Actions Remaining and Expected Completion Date:**

FAA will continue to evaluate validation processes and adjust as necessary based on future OMB and DOT guidance. ARRA recipient reporting has proven reasonable and in line with program indicators. The FAA will continue to perform internal reviews of recipient data and coordinate with ARP Regional offices and ATO field staff to validate and address data quality. The rigorous oversight by FAA and DOT along with improved OMB guidance and recipient reporting data access tools will facilitate improved clarification and reporting for all contractors and grant recipients.

**Results or Expected Results:**

Section 1512 of the American Recovery and Reinvestment Act of 2009 (ARRA) requires grant and contract recipients to provide accurate job reporting and project data until completion. ARRA recipients submit a quarterly report to

Federal Reporting.gov, the Office of Personnel Management (OMB)'s centralized data collection point for the Recovery Act reporting. The data is believed to correlate with all the standardized evaluation methods established as specified in the data validation procedures.

FAA continues to evaluate validation processes and will adjust as necessary based on future OMB and DOT guidance. ARRA recipient reporting should be reasonable and in line with program indicators. FAA will continue to perform internal reviews of recipient data and coordinate with ARP Regional offices and ATO field staff to validate and address data quality. The rigorous oversight by FAA and DOT along with improved OMB guidance and recipient reporting data access tools will facilitate improved clarification and reporting for all contractors and grant recipients.

**Advancing Industry and Government Efforts to Address Pilot Training and Fatigue Issues**

**Why is this an issue?**

Fatigue threatens aviation safety because it increases the risk of pilot error that could lead to an accident. Several aviation-specific work schedule factors can affect sleep and subsequent alertness. These include early start times, extended work periods, insufficient time off between work periods, insufficient recovery time off between consecutive work periods, amount of work time within a shift or duty period, insufficient time off between work periods, number of consecutive work periods, night work through one's window of circadian low, daytime sleep periods, and day-to-night or night-to-day transitions.

**Actions Taken in 2011:**

The FAA took several actions to address pilot fatigue in 2011. These actions include: issuing guidance to part 121 air carriers on the development and approval of fatigue risk management programs; contracting with the National Academy of Sciences for a study on the effects of commuting on pilot fatigue; and issuing proposed new regulations for flight and duty limitations and rest requirements for part 121 air carrier operations.

The Airline Safety and Federal Aviation Administration Extension Act of 2010 required all part 121 air carriers to develop and submit a fatigue risk management plan (FRMP) by November 1, 2010. An FRMP is an air carrier's management plan outlining policies and procedures for reducing the risks of flightcrew member fatigue and improving flightcrew member alertness. An FRMP can also serve as the framework for an air carrier to develop a fatigue risk management system (FRMS). To facilitate the development of air carrier FRMP, the FAA issued an Information for Operators (InFO) on August 19, 2010. All part 121 air carriers have developed FRMP. The FAA reviewed and approved all FRMP by August 15, 2011.

The FAA entered into an agreement with the National Academy of Sciences (NAS) by October 1, 2010. The NAS submitted its interim findings to the FAA on January 26, 2011 and its final report on June 28, 2011. In its report, the NAS concluded it had insufficient evidence to determine the extent to which commuting is a safety risk in commercial aviation. The FAA has reviewed the NAS report and determined its current activities surrounding FRMP and rulemaking address the NAS recommendations.

The FAA also issued a notice of proposed rulemaking on flight and duty limitations and rest requirements on September 14, 2010. The comment period closed on November 15, 2010. The FAA has developed its proposed final rule, which it forwarded to the Office of the Secretary of Transportation on July 8, 2011.

**Actions Remaining and Expected Completion Date:**

The final rule will be published in November 2011**.**

**Results or Expected Results:**

We expect to see a reduction in pilot error resulting from fatigue. Individual air carriers will make revisions to their scheduling practices as a result of the fatigue reporting associated with the fatigue risk management programs. Air carrier pilots will better know how to manage their personal contributors to fatigue as a result of improved education, which is also required by a fatigue risk management program. More long term, we expect part 121 air carriers to revise their scheduling practices to comply with the final rule.

**Enhancing Risk-Based Oversight of Part 121 Air Carriers and Foreign and Domestic Repair Stations**

**Why is this an issue?**

The Office of the Inspector General considers national-level oversight of Air Transportation Oversight System (ATOS) inspections to be ineffective. Additionally, the Office of the Inspector General believes FAA needs to do a better job identifying repair stations that perform safety-critical repairs and target its surveillance accordingly.

**Actions Taken in 2011:**

The Flight Standards National Field Office is tracking and trending uncompleted ATOS inspections in order to strengthen its oversight of ATOS inspections at the national level. Tracking and trending data are included in quarterly ATOS accomplishment reports. The reports are used to hold Flight Standards field divisions accountable for completing ATOS inspections in accordance with national policy for scheduling inspections and assigning resources. The Flight Standards National Field Office also demonstrated to the Office of the Inspector General an ATOS software capability to track and reschedule inspections that are not completed due to resource constraints.

The Flight Standards Service defined a new category of safety-critical maintenance as "essential maintenance" and requires its inspectors to perform an initial inspection of essential maintenance providers followed by triennial recurring inspections. The Flight Standards Aircraft Maintenance Division clarified inspector guidance material on using a software tool, the Oversight Prioritization Tool, to target resources for repair station inspections. The division also published an advisory circular on contract maintenance best practices.

**Actions Remaining and Expected Completion Date:**

- Continue development of the Flight Standards Safety Assurance System, an improved system for oversight of air carriers and repair stations using system-safety principles. Target completion date: December 2013.

**Results or Expected Results:**

Beginning in FY 2011, the Flight Standards National Field Office and field division managers had the benefit of trending information regarding uncompleted ATOS inspections. This information is useful for ensuring compliance with national policy and identifying field office staffing disparities.

Beginning in FY 2010, the Flight Standards Service updated inspector guidance to clearly identify maintenance facilities that perform safety-critical maintenance and required an initial inspection of these facilities followed by triennial recurring inspections. These activities continued in FY 2011 and resulted in more rigorous oversight of foreign and domestic repair stations performing safety-critical maintenance.

Beginning in FY 2014, the Flight Standards Service will use its Safety Assurance System to provide enhanced oversight of air carriers and repair stations.

**Establish Realistic Plans and Setting Expectations for NextGen**

**Why is this an issue?**

The Next Generation Air Transportation System (NextGen), a satellite-based air traffic control system intended to replace the current ground-based system, is vital to revolutionizing our aviation system and the Nation's long-term economic growth. FAA has struggled to establish realistic plans and set expectations for NextGen in the near, mid, and long term. FAA has not yet established detailed milestones to complete initiatives at high-activity locations that affect delays nationwide.

**Actions taken in 2011:**

The NextGen Management Board (chaired by the Deputy Administrator) and the NextGen Review Board developed a set of key milestones to track key NextGen issues. These milestones and their results are as follows:
- Milestone 1: Approve Area Navigation (RNAV) and Required Navigation Performance (RNP) for closely spaced parallel runway approaches. The FAA updated Order 7110.65 to approve any combination of RNAV, RNP (excluding Radius-to-fix (RF) turns), Localizer Performance with Vertical Guidance (LPV) and Instrument Landing System (ILS) for simultaneous independent and dependent approaches to closely spaced parallel runways.
- Milestone 2: Metroplex Optimization of Airspace and Procedures. The study phase was completed for the Charlotte, Northern California and Houston metroplexes. Additional studies are under way in Atlanta and Southern California. Design/Implementation teams have begun for North Texas and Washington.
- Milestone 3: Continuous Low Energy, Emissions and Noise (CLEEN). FAA completed a low-speed wind tunnel demonstration (a technical readiness level 5 demonstration) of a subscale B737 aircraft. FAA also completed a technical readiness level 6 demonstration of an advanced combustor that met the program's 60% goal for reduced nitrogen oxide ($NO_x$) emissions.
- Milestone 4: Automated Terminal Proximity Alert (ATPA). ATPA has been implemented at Minneapolis, St. Louis, Denver and Chicago. It will be implemented at the other ARTS IIIE sites in the next software release, which is in key site testing at Roanoke and the Southern California TRACON. Testing at the remaining key site (Northern California TRACON) will be conducted before the end of September 2011.
- Milestone 5: NavLean Implementation Plan. The NavLean Implementation Plan was approved in June 2011.
- Milestone 6: Recommendations from the ADS-B Aviation Rulemaking Committee (ARC). The ADS-B ARC plans to have its final recommendations completed by the end of September 2011.
- Milestone 7: System Wide Information Management (SWIM). SWIM-related work for the activities is complete and implemented except for the portion that depends on ERAM Release 3. Implementation of the reroute data exchange capability will be completed upon the availability of ERAM Release 3.

**Actions Remaining and Expected Completion Date:**

- National release of R36a is expected to occur in October 2011.
- An FAA internal group has been working closely with the NAC and will deliver a final set of FAA NextGen metrics to the NextGen Management Board for approval in December 2011.

**Results or Expected Results:**

Efforts will immediately improve efficiency and the operational availability of NAS resources.

**Addressing Problems with Ongoing Modernization Projects That Are Essential to NextGen's Success**

**Why is this an issue?**

FAA's ERAM program missed baseline milestones for In-Service Decision (ISD) and first and last site Operational Readiness Determination (ORD) in FY 2009 and FY 2010. ERAM is considered a transformational program that is necessary for the agency to sustain current en route operations as well as facilitate usage of the planned NextGen capabilities.

**Actions Taken in 2011:**

During FY 2011, the ERAM team achieved a successful In Service Decision (ISD) on March 29, 2011. The ISD was with an accompanying action plan to mitigate two high hazards as well as six medium hazards identified during an independent operational assessment conducted prior to the ISD.

Shortly after the ISD, due to continuing concerns with some core air traffic control functionality in ERAM, a TIGER team was established to determine improvements necessary to give the agency confidence in moving through the waterfall deployment of ERAM. This TIGER team, composed of bargaining unit employees, site personnel, and system and test engineers from the FAA and Lockheed Martin, developed a list of 117 issues needing to be corrected prior to commencing the waterfall deployment. The 117 improvements have been developed in three software releases over the April – September timeframe. The Salt Lake City and Seattle key sites are currently continuing the operational suitability demonstration phase of the program on the 2$^{nd}$ of these three releases. The third release is currently completing operational evaluation and it is anticipated that the key sites will transition to operations on the release in early October. At that time the agency's independent operational assessment team will conduct a re-assessment to determine whether the previously identified hazards have been adequately mitigated by the software releases addressing the 117 core functionality issues. This assessment is expected to complete this calendar year.

Assuming the re-assessment determines that the hazards have been adequately mitigated, the waterfall deployment of ERAM will commence. The agency expects that ERAM will achieve initial operations (defined as IOC) on ERAM at 4 - 6 additional sites by the end of CY 2011. This will begin the transition from initial through extended and on to continuous operations at these sites following a site benchmarking process.

In June of 2011 the FAA re-baselined the ERAM program based on the missed program baseline milestones. The acquisition cost baseline was increased by $330M and the acquisition program baseline schedule was extended to a last site operational readiness date (ORD) of August 2014.

**Actions Remaining and Expected Completion Date:**

Continue with the waterfall deployment of ERAM in FY2012 and FY2013. At each ARTCC site these activities include: air traffic and technical operations system checkout, conducting air traffic and technical operations refresher training, setting up site specific adaptation parameters, and delivering software releases with site specific content. Expected results include:

- Achieve IOC at 4 - 6 ARTCC sites by December 31, 2011

- Achieve IOC at 5 – 7 additional ARTCC sites by September 30, 2012

- Achieve IOC at remaining 7 ARTCC sites by September 30, 2013

**Results or Expected Results:**

Accomplish the overall ERAM acquisition program baseline by achieving last site ORD by August 2014.

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

**Why is this 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. Consistent implementation methodology and developing integrated benefit-focused projects are two key areas that will resolve the issue.

**Action(s) taken in 2011**:

In FY 2011 FAA continued to refine the integrated airspace and procedures concept. The goal is to ensure that the system works for everyone, including air traffic controllers (ATCs), pilots, airports, and the community.

In FY 2011;

- FAA completed the Draft FAA Order – *Process for Development and Implementation of PBN Procedures and Routes*. This order provides a standardized process for the development and implementation of PBN applications. The Draft Order is currently being revised to comply with FAA's Plain Language Program before further review and approval process.

- FAA's PBN goals were aligned with the Administrator's Destination 2025 vision instead of following the numerical goals. The new benefit-focused PBN goals were approved by the Administrator in February 2011. These include integrated PBN projects in metroplex areas, high altitude RNAV routes, and promoting PBN concepts globally.

**Action(s) Remaining and Expected Completion Date**:

- Review and approve the new SMS compliant PBN Order - scheduled for completion by September 2012.
- Interim Guidance documents for streamlined processing of SIDs/STARs and RNPs in lieu of the pending PBN Order are expected to be released by the FAA in October 2011.

**Results or Expected Results**:

The expected results, this year and in the future is to have a streamlined process for design and implementation of benefit-focused integrated PBN projects.

**Ensuring a Sufficient Number of Certified Professional Controllers at Critical Facilities**

**Why is this an issue?**

The FAA estimates that it will need to hire and train nearly 11,000 new air traffic controllers by fiscal year 2019. Some of these new hires will be assigned to complex facilities. Because of this, the FAA needs to minimize the risk that less experienced controllers impose on the most critical facilities to the NAS. Key challenges will be ensuring adequate staffing, training resources, and other support to maintain continuity of facility operations.

**Actions Taken in 2011:**

The FAA certified more than 1,000 controllers by the end of July 2011, two months ahead of the fiscal-year goal. It published its annual Controller Workforce Plan update in March, detailing the latest staffing strategy, initiatives and results, and the agency continues to closely monitor workforce attrition.

In order to staff NAS-critical facilities with experienced controllers, beginning in FY11, Terminal Services restricted placement of inexperienced new hires (such as from the general public and Collegiate Training Initiative hiring sources) into Level 11 and 12 facilities. To attract internal Certified Professional Controller (CPC) movement to the critical facilities, the FAA offered Permanent Change of Station funds and relocation bonuses. During the year, the FAA opened several vacancy announcements seeking CPC volunteers to transfer to NAS-critical facilities. There is an open-continuous vacancy announcement for New York Terminal Radar Approach Control (TRACON) and the FAA distributed a recruitment video to promote Chicago TRACON. The agency also held two Centralized Selection Panels to select new controllers, and selecting officials carefully reviewed hundreds of applications to find the best candidates for air traffic control positions. The FAA met all FY11 hiring goals.

Additionally, the FAA is piloting the Operational Assessment Program (OAP), which screens applicants who want to transfer to Level 10 and above TRACON facilities. The program includes a knowledge exam and skills assessment as part of the pre-selection criteria, which would provide the hiring manager with additional data to consider in making the hiring decisions. OAP could screen out applicants who lack skills to succeed at more complex and NAS-critical facilities. Chicago TRACON is the first facility to use the program, and it completed assessments of 39 CPCs bidding to that facility in FY11. Southern California and Atlanta TRACONs are also OAP pilot sites.

The FAA required all new hires destined to Level 10 and higher TRACONs and is making slots available to transferring CPCs to attend the FAA Academy's Terminal Skills Enhancement Workshop, which provides additional practice in simulators to prepare students for a more complex air traffic environment, many of which are NAS-critical facilities.

The FAA also deployed additional simulators and training equipment to the field to expand use of e-learning content delivery, enhance realism for training scenarios and increase automation. The agency installed the SimFast terminal radar simulator capability at more than 50 locations that did not previously have access to a terminal radar simulator and deployed six additional Tower Simulator Systems to the field and the FAA Academy. By increasing use of simulators for refresher training, controllers have the opportunity to hone air traffic skills and increase technical proficiency.

**Actions Remaining and Expected Completion Date:**

Ensuring adequate staffing at NAS-critical facilities is an ongoing goal for the FAA. Upcoming milestones include:

- Expand OAP pilot to Atlanta and Southern California TRACONs in the first quarter of FY12. By the end of the third quarter of FY12, after all three key sites have used the assessment, the FAA will evaluate how it administered OAP during the pilot. Analysis of the overall effectiveness of the Operational Assessment Program will be ongoing as data on controllers selected through OAP becomes available in late FY12 and into FY13.

- Use additional vacancy announcements in FY12 to transfer controllers with previous air traffic experience to NAS-critical facilities. Additional Selection Panels are also scheduled to meet the hiring needs of the FAA.

- Develop a refresher course for On-the-Job Training Instructors to improve their teaching competency and performance as instructors in FY12. Initial planning began in May 2011, and a project execution timeline will be available in October.

- Develop and implement skill enhancement workshop at the FAA Academy for students assigned to Level 10 and higher control towers so students arrive at their assigned facilities better prepared for a more complex air traffic environment. The FAA hopes to fund this initiative in FY12.
- Manage training content using a Learning Content Management System, which allows content developers to search, find and reuse learning objects and allows other stakeholders (such as subject matter experts or task managers) to remotely contribute to the development of a course. The FAA hopes to fund this initiative in FY12.

**Results or Expected Results:**
The FAA expects that controllers-in-training at NAS-critical facilities will benefit from recent enhancements to FAA training and will progress to earn facility ratings in line with FAA goals. By shifting the staffing strategy where more complex facilities get higher qualified controller transfers instead of having to train inexperienced new hires, the agency will see improved attrition and quicker time to certification. As the agency executes the comprehensive Controller Workforce Plan, it continues to modify curriculum and upgrade technology to improve how it teaches today's workforce. As the Technical Training organization matures, it is positioned to more effectively provide training-related data on a regular basis. This allows stakeholders to identify trends and strategically target support to improve field training delivery.

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

**Why is this an issue?**

Recent Office of Management and Budget (OMB) contracting initiatives underscore maximized use of competition and fixed-price contracts, and require agencies to perform effective price analysis to mitigate risks and misuse associated with noncompetitive contract awards and cost-type contracts. Effective training, management controls and oversight encourage the proper selection of contract types and effective administration of FAA awards.

**Actions Taken in 2011:**

- In FY2011 FAA continued training and education for Contracting Officers (CO), Contracting Officer's Technical Representatives (COTR) and Program Managers that develops knowledge, skills and abilities to determine which type of contract is most appropriate and how to properly award and administer FAA awards. Four hundred fifty-seven FAA personnel were trained in FY2011 through 17 focused acquisition training programs.

  The Cost/Price Analysis Support Group provided focused training sessions to 1102 Contract Specialists detailing how to effectively select contract types and analyze associated data and risks. This training included basic cost/price training and how to easily manipulate associated data using Excel, and an interactive session to discuss lessons learned on cost/price analysis and contract types (Spring 2011).

  To ensure 1102 Contract Specialists have the knowledge to effectively award and manage various contract types, to include cost-type, the Cost/Price Analysis Support Group provided sessions to include determining contractor financial responsibility using Dun & Bradstreet Financial reports (April 2011) and developing a negotiated fee position using weighted guidelines (July 2011).

- Contracting Team Managers and Senior Contracting Officers (CO) performed reviews in FY2011 of proposed single source, noncompetitive and cost plus award-fee (CPAF) awards to ensure contract type, risk and oversight requirements were properly considered. The National Acquisition Evaluation Program (NAEP) included this type of management oversight as a measurable factor in its FY2011 contract reviews. The data supporting this factor revealed substantial compliance for management reviews and the proper adjudication of identified issues.

- FAA's National Acquisition Evaluation Program (NAEP) reviewed 225 awards made by FAA in FY2011 to measure compliance with applicable policy and the accuracy of contract reporting. These actions included contracts, purchase orders and task/delivery orders, and the sample was comprised of fixed and cost-type awards made on a competitive, noncompetitive or other basis (e.g. Not Available for Competition). NAEP found FAA showed improvement in market analysis and the formation of independent government cost estimates (IGCE) from FY2010 to FY2011, while procurement planning and cost/price evaluation remained steady after significant improvement from FY2008 to FY2010.

- Beginning FY2011, the National Acquisition Evaluation Group (NAEG) provides the FAA Acquisition Executive a monthly summary of all awards made by FAA. This includes a trend analysis of dollars obligated, competition and type of contract awarded.

**Actions Remaining and Expected Completion Date:**

None for FY2011

**Results or Expected Results:**

Through the FAA actions identified above, improvement was measured in core areas supporting effective market analysis, acquisition planning and cost/price analysis.  It is expected that training and oversight efforts like above will continue to decrease FAA's risks of loss or misuse, and improve savings potential and FAA's ability to effectively achieve mission requirements.

**Strengthening the Acquisition Function and Workforce to Provide Leadership for the Department's Acquisitions**

**Why is this an issue?**

Modernizing the complex, highly sophisticated National Airspace System depends on FAA's acquisition workforce professionals and requires that they be of the highest caliber.  The purpose of the acquisition workforce plan is to ensure FAA has a stable cadre of federal employees to provide consistent, long-term staffing and maintain core in-house capabilities necessary to successfully manage FAA's major systems acquisitions.  The acquisition workforce plan provides a blueprint for developing a high-performing acquisition workforce capable of successfully managing the FAA's major systems acquisitions.

**Actions Taken in 2011:**

Acquisition workforce planning and career development has made a leap forward this fiscal year.  All action items for 2011 were completed.

- The first draft of the FY 2011 Acquisition Workforce Plan was completed by June 30, 2011 and, after vetting throughout the agency, the final was completed in early September 2011.

- Test and Evaluation competencies and behavioral indicators were developed by December 31, 2010 and January 31, 2011 respectively: certification levels and requirements were defined by July, 2011.  In addition, competencies and behavioral indicators were completed for Systems Engineering. The importance of the competencies and behavioral indicators are that they serve as the basis for workforce development including training requirements, experiential requirements, and career paths.  Certification status of program managers and contracting officers/specialists were assessed and reported to the Acquisition Workforce Council (AWC) monthly.  By the end of the fiscal year, 95% of Acquisition Category (ACAT) 1 & 2 programs were managed by a level 3 certified program managers; all entry level contracting specialists achieved level 1 certification within 15 months of hire.

- The agency developed recruiting strategies that address the methods and activities necessary to identify, recruit, and hire acquisition workforce professionals.

- The agency refined its acquisition workforce data collection processes and developed a data repository that informs data analysis and decision-making.

- The staffing model tool was advanced to include data from approximately 150 Capital Investment Plan programs.  On-board staffing gains and losses to the acquisition workforce were reported to the AWC monthly.

- Career Planning, Development, and Resource Guides were developed for both employees to use as their own guidance and for managers in providing guidance in career development to their employees.

- The development of an acquisition workforce community of practice portal was initiated to create a forum for sharing best practices, provide guidance and tools to support career development, and link to certification requirements and applications.

- The agency continued to offer extensive curriculum in all professions, adding to and enhancing existing courses, including over 4,000 seats in more than 200 classes for FAA acquisition professionals.  Training offered also included graduate level certificate programs and industry certifications for acquisition professionals.

- The agency created a planning process that links acquisition program work requirements with staffing demand projections to better forecast future staffing mix and hiring and development needs.

- Executive engagement in the acquisition workforce planning process continued through monthly and ad hoc Acquisition Workforce Council meetings.

**Actions Remaining and Expected Completion Date:**

FAA will continue its progress in acquisition workforce planning and development in FY2012. This will include monthly Acquisition Workforce Council meetings, monthly reviews of staffing gains and losses and employee certifications, enhancements to training, implementation of Acquisition Workforce Plan strategies and activities, and annual update of the Plan. Acquisition workforce planning and development is a continuous cycle of product delivery, assessment, and improvement. The agency relentlessly continues to seek the best methods to enhance skills and to further develop the acquisition workforce.

**Results or Expected Results:**

FAA will have sustained high performance in managing acquisitions through sufficient staffing and skilled/certified acquisition workforce. Acquisition professionals have clearer guidance for developing needed skills and more accessible career development guidance. Staffing projections can be made based on data from across all Capital Investment Programs providing greater clarity in acquisition staffing requirements.

**Maintaining Programs To Help Ensure High Ethical Standards Among the Department's Contractor's and Employees**

**Why is this an issue?**

Maintaining programs to ensure high ethical standards among contractor's and employees is important as those employees have oversight of billions of dollars annually.

**Actions Taken in 2011:**

In 2011, the Office of the Chief Counsel, Acquisition and Commercial Law Division, created three separate training modules focused on Contract Fraud and Abuse, Controlling Contract Waste and Suspension and Debarment. The modules were created to target Acquisition personnel. In conjunction with the Electronic Learning Management Office (eLMS) the modules were placed into the learning baskets of all identifiable contracting officers, contracting specialists, contracting officer's technical representatives and program managers. The training modules were made available to all targeted Agency personnel on August 5, 2011.

**Actions Remaining and Expected Completion Date:**

The Office of the Chief Counsel continues to respond to questions regarding the training material. All questions from the material are used to tweak and re-define the modules for future training sessions.

**Results or Expected Results:**

The expected result is a more ethical and knowledgeable acquisition staff. With a clearer understanding of their ethical and legal responsibilities, over time, FAA employees will be able to more vigilantly and timely identify and prevent procurement fraud, waste and abuse.

**Establishing a Robust Information Security Program**

**Why is this an Issue?**

The Federal Information Security Management Act (FISMA) of 2002 requires agencies to establish an information security program to protect agency information and systems. The FAA needs to enhance the ability to combat cyber attacks and improve the governance of information technology resources. To supports the Department's mission, FAA needs to establish a robust information security program.

In 2010, the DOT succeeded in providing security awareness training to over 90 percent of its employees, including five that provided this training to 100 percent of their employees. Despite this outstanding accomplishment deficiencies exist in high level security policy development, key control areas, including management of information, system authorization, configuration management, and contingency planning. Additionally, the Department's Office of the Chief Information Officer could do more to guide and oversee the Operating Administrations in building and sustaining strong information security practices. Finally, the Department has yet to meet OMB's requirement for issuing Personal Identity Verification cards to employees and contractors.

**Actions Taken in 2011:**

During FY 11 FAA's Office of Information Systems Security conducted monthly reviews to ensure the highest levels of situational awareness through the use of scorecards, visibility charts and project updates. The DOT & FAA Cyber Security Management Center provided security incident reporting, scanning results, and regular vulnerability assessments to FAA Staff Offices and Lines of Business.

The FAA Lines of Business and Staff Offices (LOB/SO) completed certification and accreditation on 70 systems within triennial review anniversary date and 222 annual assessments. FAA systems that did have high risk POA&M vulnerabilities due for remediation in FY 2011 were completed.

Also in FY 2011, FAA's Office of Security and Hazardous Materials Safety (ASH) completed PIV card issuance to 64,470 out of 69,804 employees and contractors that require them. ASH has set up a total of 303 sites nation-wide that issue these cards.

**Actions Remaining and Expected Completion Date:**

ASH will continue to use its on-line Card Management System (CMS) for application, enrollment, and issuance of PIV Cards. ASH will continue to set up PIV card issuing stations for small and remote FAA offices.

- Continue PIV card issuance across the US in an effort to issue PIV cards to all 69,804 employees and contractors that require them by September 30, 2012.

- PIV card issuance to new employees and contractors will occur as they are hired in FY12.

**Results or Expected Results:**

FAA systems protection remains an increasing, shared, and visible priority. The FAA seeks not only to protect systems that protect travelers, but to instill a full and justified confidence in both stakeholders and employees, and to set a recognized standard for systems security. The agency continues to remain vigilant in protection, detection and response to its networks, systems and stakeholders. Additionally, Federal information and information systems will be secure by ensuring all current and new FAA employees and contractors will have PIV cards.

**Strengthening Air Traffic Control System Protections**

**Why is this an issue?**

FAA's NextGen system relies on a number of new technologies to achieve its goal. As FAA develops NextGen, it must continue to protect its current Air Traffic Control (ATC) systems. FAA has not established adequate Intrusion Detection System (IDS) capabilities to monitor and detect potential cyber security incidents at key ATC facilities. Additionally, FAA has not developed or identified a timetable for deploying IDS beyond specified TRACON facilities.

**Actions Taken in 2011:**

The ATO is implementing a suite of cyber protection mechanisms for the NAS that do not solely rely on static IDS signature-based detection mechanisms. The following is a summary of the protection mechanisms being implemented:

- Modified ATO Notice 1370.44 to include policy that establishes formal ATO security requirements derived from NIST 800-53. (15 August 2011)
- Began the Project Initiation Phase for a centralized NAS monitoring capability. (30 August 2011)
- Included policy statement for NAS Operational Contract Services to comply with defined ATO security requirements.(30 September 2011)
- Coordinated Agency NAS Cyber Event Response steps: Completed draft of NAS Incident Response SOP. (30 September 2011)

**Actions Remaining and Expected Completion Date:**

None

**Results or Expected Results:**

- 2011 Impact: Formal ATO NAS security requirements will be levied on contractor provided NAS services. Centralized NAS cyber event monitoring and agency-level response will be initiated.

- Future Impact: NAS contract services will be secured at the same level as NAS owned systems. NCO will provide for fully centralized NAS cyber detection and response capability.

**Increasing Protection of Personally Identifiable Information**

**Why is this an issue?**

The DOT IG recommended the FAA increase its protection of personally identifiable information (PII) to minimize the risks associated with unauthorized disclosure of such data.  The FAA had not fully implemented controls required by OMB and the Department to protect PII.

**Actions Taken in 2011:**

In order to strengthen the privacy protection program and secure PII, the FAA is actively establishing appropriate administrative, technical, and physical safeguards.  This is reflected in our multi-phase Social Security Number (SSN) reduction/elimination plan to reduce the unnecessary collection and use of SSN and eliminate such use throughout the agency, where possible and practical.

In FY 2010, FAA completed Phase One efforts to identify, reduce, protect, and prevent the use of SSN across the agency, while laying critical groundwork to usher in Phase Two in FY 2011, which ensured that digital Sensitive Personally Identifiable Information on the FAA networks were identified and protected from misuse or violation of the provisions of the Department of Transportation's policies.  Future phases will ensure full compliance with OMB's mandate in FY 2013 that requires reduction of unnecessary use of SSNs.

The privacy program has implemented phase one of the PII Reduction Strategy. The FAA Lines of Business and Staff Offices have been engaged in review of their records management practices to identify records that require archival or destruction in accordance with approved records retention policies.

In addition, the privacy program has initiated actions for individuals who handle PII to sign a Privacy Rules of Behavior in FY 11.  At present, the FAA is 85% compliant with this important OMB mandate.  The privacy program has implemented components of a Data Loss Prevention (DLP) solution to detect and remediate unencrypted privacy data at rest, data in use and data in motion. We conducted DLP scans, distributed reports of scan results and remediated findings in accordance with LOB/SO Service Level Agreements.

Lastly, the Privacy Office conducted an extensive review of privacy policies, processes, and procedures in FY 2011 to assess compliance with applicable laws and mandates.  The recommendations from these reviews will be utilized to further mature the Privacy Program by implementing additional requirements, and incorporating best practices into program policies and procedures.  We completed the development of third party privacy policy and third party privacy assessment.

**Actions Remaining and Expected Completion Date:**

None

**Results or Expected Results:**

As additional components of the Privacy Program are implemented, the FAA will continue to reduce its risk of possible PII exposure.  The FAA will improve its privacy posture through implementation of strategic privacy controls, system compliance reviews, and updated privacy policies.