

**Before the Transportation and Infrastructure Committee  
Subcommittee on Aviation  
U.S. House of Representatives**

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# **FAA's FY 2008 Budget Request: Key Issues Facing the Agency**

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



Mr. Chairman and Members of the Subcommittee,

We appreciate the opportunity to testify today regarding the Federal Aviation Administration's (FAA) fiscal year (FY) 2008 budget request. Our testimony will focus on the key issues that will frame FAA's financial requirements over the next several years. Clarifying those requirements early this session is important as Vision 100<sup>1</sup> and the current ticket taxes expire this September and Congress and the Administration begin deliberations regarding the next FAA reauthorization.

FAA is facing a significant issue—how to move forward with the next generation air transportation system. The current system handles over 700 million passengers per year, a number that will grow to over 1 billion travelers by 2015. This system must also be poised for the introduction of thousands of very light jets<sup>2</sup> over the same timeframe. This influx of new aircraft will strain the Agency's air traffic control systems and its inspection and certification workforces.

FAA oversees the safest and most complex aviation system in the world. In 2006, FAA centers—facilities that manage high-altitude traffic—handled 46 million operations, which approximate the activity levels in 2000. However, with respect to delays, operational performance of the National Airspace System (NAS) slipped slightly in 2006 with one in four flights arriving late, the worst level since 2000.

Safety is FAA's highest priority. For more than 4 years, FAA and the U.S. aviation industry have experienced one of the safest periods in aviation history. This is a remarkable accomplishment given the many changes occurring within the industry. For example, network air carriers continue to work aggressively to reduce costs by reducing in-house staff, renegotiating labor agreements, and increasing the use of external repair facilities. To address these changes, FAA is working to implement and refine risk-based safety oversight systems for air carriers, repair stations, and aircraft manufacturers.

However, the August 27, 2006, crash of Comair Flight 5191 serves as a stark reminder that a priority for all stakeholders must be to make a safe system even safer. FAA must remain attentive to runway incursions (potential collisions on the ground) and operational errors (potential collisions in the air). In recent years, FAA has made progress in reducing the number of runway incursions from a high of 407 in FY 2001 to a low of 323 in FY 2003, and the most serious incidents have decreased from a high of 69 in FY 1999 to a low of 28 in FY 2004. Since 2003, the number of runway incursions has leveled off, but very serious runway incursions continue to occur. We

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<sup>1</sup> Vision 100 - Century of Aviation Reauthorization Act, Pub. L. No. 108-176 (2003).

<sup>2</sup> These are small, "affordable" aircraft that will carry up to six passengers. Priced as low as \$1 million per aircraft, very light jet manufacturers anticipate that these aircraft will find a niche among corporate and private owners and as on-demand air taxi services. According to FAA, up to 5,000 very light jets will vie for airspace by 2017.

are currently reviewing FAA's actions to address runway incursions at four major airports and will issue our report later this year.

It is against this backdrop that we would like to discuss FAA's FY 2008 budget request. We note that Congress is considering a year-long continuing resolution that, if enacted as approved by the House, would fund FAA at or above the levels requested for FY 2007. The funding levels under consideration should allow FAA to operate the NAS without degrading operations or safety.

FAA is presenting its \$14.1 billion budget request in a new format and structure that mirror its plans to reform how the Agency is financed. Currently, FAA is financed by two mechanisms: excise taxes (primarily those from ticket taxes on airfare) and a contribution from the General Fund. We understand that FAA's reauthorization proposal will be the subject of another series of hearings.

The focus of our testimony today, Mr. Chairman, is that regardless of the funding mechanism ultimately decided upon by Congress, a number of "front and center" issues demand attention and will shape FAA's requirements over the next several years. These include the following:

- **Addressing an Expected Surge in Air Traffic Controller Retirements:** Last Friday, we issued the results of our review<sup>3</sup> of FAA's progress in implementing its controller workforce plan. The plan details FAA's strategy for hiring approximately 11,800 new controllers to replace those expected to leave over the next 10 years. The plan also outlines various initiatives to increase controller productivity and decrease on-the-job training time and costs.

Overall, we found that FAA continues to make progress in implementing a comprehensive staffing plan that addresses the expected surge in controller retirements. For example, we found that FAA has significantly improved its hiring process and has made progress in reducing the time and costs to train new controllers. However, further progress is still needed in key areas.

First, FAA is still developing accurate facility-level staffing standards, which are a foremost necessity in effectively placing newly hired controllers where they will be most needed. Planning by location is critical because FAA has over 300 terminal and en route air traffic control facilities with significant differences in the types of users they serve, the complexity of airspace they manage, and the levels of air traffic they handle.

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<sup>3</sup> OIG Report Number AV-2007-032, "FAA Continues To Make Progress in Implementing Its Controller Workforce Plan, but Further Efforts Are Needed in Several Key Areas," February 9, 2007. OIG reports and testimonies can be found on our website: [www.oig.dot.gov](http://www.oig.dot.gov).

Second, FAA reached its goal of reducing controller staffing by 3 percent for FY 2005, but it is unknown whether the initiatives established in the 2004 Plan were actually effective in helping achieve that reduction.

Finally, FAA still has not identified the estimated total costs associated with this workforce plan. Detailed cost estimates are critical so that the Agency's stakeholders can clearly understand the resources required to execute the plan.

- **Having Sufficient Safety Inspectors To Provide Oversight of a Dynamic Aviation Industry:** Controller staffing will have the larger impact on FAA's budget. However, FAA also faces substantial safety oversight challenges due to the potential attrition in its inspector workforce while the aviation industry is rapidly changing. FAA currently has 3,865 inspectors to oversee domestic and foreign aspects of the largest, most complex aviation system in the world. Over one-third of these inspectors (44 percent) will be eligible to retire by 2010.

FAA is requesting \$1.11 billion, or \$71 million more than last year's request, to fund safety-related functions. With this additional funding, FAA plans to hire an additional 203 inspectors. However, FAA must continue to closely monitor inspector staffing levels to ensure that it maintains a sufficient number of inspectors to perform safety oversight. In 2006, FAA hired 538 inspectors, but lost 226 (181 to retirements and 45 for other reasons).

FAA will never have an inspection workforce that is large enough to oversee all aspects of aviation operations, but it is important for the Agency to ensure that its inspectors are located where they are most needed. The National Research Council recently completed its study<sup>4</sup> of FAA's current methods of allocating inspector resources and concluded that the Agency's current model is not effective. FAA must develop a reliable staffing model to ensure it has the right number of inspectors at the right locations.

- **Keeping Existing Modernization Efforts on Track and Reducing Risks With the Next Generation Air Transportation System (NGATS):** FAA is requesting \$2.46 billion for its capital programs in FY 2008, the majority of which is for the Air Traffic Organization's capital efforts. The FY 2008 request also includes funding for key NGATS initiatives, such as Automatic Dependent Surveillance-Broadcast (ADS-B) and System Wide Information Management (SWIM), as well as for demonstration projects.

At the request of this Subcommittee, we are reviewing the progress of 18 projects with a combined cost of \$17 billion. We do not see the massive cost growth and

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<sup>4</sup> Study completed by the National Research Council of the National Academies, "Staffing Standards for Aviation Safety Inspectors," September 20, 2006.

schedule slips that we have seen in the past with FAA major acquisitions. However, there are projects, such as FAA's Telecommunications Infrastructure program, that are at risk of not achieving expected cost savings and benefits because of schedule slips.

Also, there are other short-term concerns that FAA should address now. For example, FAA needs to replace aging controller displays at four large facilities (Chicago, Denver, St. Louis, and Minneapolis) that manage traffic in the vicinity of airports. We recommended action on this matter over 2 years ago in November 2004, but FAA does not expect to finish replacing these displays until 2008. FAA should seek ways to accelerate completion of this effort.

As we note in our report, requested by this Subcommittee and issued earlier this week,<sup>5</sup> the development and transition to NGATS is one of the most complex efforts that FAA has ever undertaken. We have seen cost estimates suggesting that FAA would need \$500 million to \$1 billion annually over existing planned funding levels for NGATS. FAA is refining its estimates and should release them shortly. However, we caution that there may still be unknowns with respect to requirements for new software, intensive automation systems, and data communications. Further, considerable development will be required to refine concepts and determine how systems can be certified as safe.

Therefore, we recommended that FAA provide Congress with costs on three vectors—research and development, adjustments to existing projects, and funds for new initiatives. This will help decision makers understand the magnitude of the effort and how additional funds will be used. Given the high-risk nature of the effort, we also believe that FAA needs to articulate a strategy for how this extraordinarily complex effort will be managed (beyond conducting demonstration projects) and what expertise will be required to prevent past problems and successfully deliver new capabilities.

- **Using the Cost Accounting System To Improve Operations:** A multibillion-dollar organization such as FAA must have a cost accounting system that provides visibility into the cost of its operations to help management shape decisions and establish priorities. Since 1996, FAA has spent over \$66 million to complete implementation of a cost accounting system. This system now covers all of FAA's lines of business and captures the annual labor costs of most of its personnel, the latter having a total value of about \$7 billion—the single largest cost item to FAA. Overall, FAA's cost accounting system is properly designed to assign costs to the Agency's lines of business and can be used to measure performance.

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

However, further progress is needed to enhance operational efficiency and ensure the accuracy of financial data in the cost accounting system.

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

## **FAA'S FY 2008 BUDGET**

FAA is requesting \$14.1 billion for FY 2008, an increase of \$328 million from its FY 2007 budget request. However, this represents a reduction of \$233 million from the FY 2006 budget, the last budget enacted into law.

FAA is presenting its budget request in a new format and structure that mirror its plans to shift from the current excise taxes to a structure that relies on, among other things, cost-based user fees. FAA anticipates that the new financing system will be implemented in FY 2009. For FY 2008, FAA has realigned its four accounts to better reflect its lines of business and proposed financing system.

The budget request shows the Operations and Facilities & Equipment (F&E) accounts realigned into two new accounts. The first account combines the Agency's safety oversight, Commercial Space Transportation, and staff offices into a single account called Safety and Operations. The second account combines most of the Facilities and Equipment account with the Air Traffic maintenance and other Operations account functions into the Air Traffic Organization (ATO) account. The Airport Improvement Program (AIP) and the Research, Engineering, and Development (RE&D) accounts remain the same. FAA's budget funds these four accounts as follows:

- For the Safety and Operations account, FAA is requesting \$1.88 billion (13 percent of FAA's total budget), an increase of \$91 million over last year's request for comparable functions. For safety-related functions, such as safety inspectors and certification activities, FAA is requesting \$1.11 billion, an increase of \$71 million from last year's request.
- For the ATO account, FAA is requesting \$9.3 billion (66 percent of FAA's total budget), an increase of \$228 million over comparable functions in the FY 2007 request. For the operation and maintenance of the air traffic control system, the Agency is requesting \$6.96 billion, an increase of \$261 million over last year's request. FAA is also requesting \$2.34 billion in capital program funds for the ATO, a decrease of \$33 million from last year's request. Capital projects associated with other functions, such as safety, are now included in the Safety and Operations account.
- For the AIP account, FAA is requesting \$2.75 billion (20 percent of FAA's total budget), the same amount requested for FY 2007. However, this represents a \$765 million decrease from the amounts provided in FY 2006. To put this figure

into context, since FY 2001, the AIP account has been authorized at \$3.2 billion or higher each year.

- Finally, FAA is requesting \$140 million for the RE&D account (1 percent of FAA's total budget), an increase of \$10 million from the FY 2007 request.

To demonstrate in terms of the old and new budget presentation, Table 1 summarizes the FY 2008 budget request in last year's four-account format.

**Table 1. FAA Budgets FY 2006 Through FY 2008**  
*(\$ in Millions)*

<u>Account</u>	<u>FY 2006 Actual</u>	<u>FY 2007 Continuing Resolution (House)</u>	<u>FY 2008* Request</u>
Operations	\$8,104	\$8,393	\$8,726
Facilities & Equipment	\$2,555	\$2,519	\$2,462
Airport Improvement Program	\$3,515	\$3,515	\$2,750
Research, Engineering, and Development	\$137	\$130	\$140
<b>Total</b>	<b>\$14,310</b>	<b>\$14,557</b>	<b>\$14,077</b>

Source: FAA's FY 2008 Budget Request and FAA's Office of the Budget

\*We summarized FAA's FY 2008 budget request using the previous format for comparative purposes.

Note: Figures may not add up exactly due to rounding.

The FY 2008 budget would be financed by the two mechanisms currently used to fund FAA: excise taxes deposited into the Airport and Airway Trust Fund and a General Fund contribution. The Trust Fund, which was created in 1970, provides FAA with a dedicated revenue source for funding aviation programs. Initially envisioned as a means to fund the infrastructure and modernization needs of the National Airspace System, the Trust Fund also pays for large portions of FAA's operating budget, the Essential Air Service Program, and for one-time items (e.g., security funding after the September 11<sup>th</sup> attacks). The General Fund is used to make up the difference between Trust Fund revenues and the unfunded portion of FAA's budget.

For FY 2008, FAA expects the Trust Fund to contribute \$11.5 billion, or 81 percent, toward its total budget and the General Fund to contribute \$2.6 billion, or 19 percent. These amounts are similar to what has been budgeted in the previous 4 years. Table 2 shows the contribution from each of the funding sources toward FAA's proposed new accounts.

**Table 2. Funding Source Contributions**  
(\$ in Millions)

<u>Account</u>	<u>Airport and Airway Trust Fund</u>	<u>General Fund</u>	<u>Total</u>
Air Traffic Organization	\$7,915 (85%)	\$1,393 (15%)	\$9,308
Safety and Operations	\$672 (36%)	\$1,208 (64%)	\$1,879
Airport Improvement Program	\$2,750 (100%)	\$0 (0%)	\$2,750
Research, Engineering, and Development	\$123 (88%)	\$17 (12%)	\$140
<b>Total</b>	<b>\$11,459 (81%)</b>	<b>\$2,618 (19%)</b>	<b>\$14,077</b>

Source: FAA's FY 2008 Budget Request to Congress  
Note: Percentages in table are toward the total budget.  
Note: Figures may not add up exactly due to rounding.

## **WORKFORCE CHALLENGES**

Controlling operating cost growth will remain a significant challenge for FAA as it faces several workforce challenges in the coming year. Our office has an extensive body of work regarding cost control and financial issues within FAA. For example, in 1999, we reported<sup>6</sup> that persistent cost growth in the Agency's operating account (primarily salary-driven) was "crowding out" critical capital investments in the Agency's modernization account. This is still a challenge today. As FAA focuses on increasing workforce productivity and decreasing costs, it must also continue to address the expected increase in air traffic controller and safety inspector retirements and ensure that it has the right number of controllers and inspectors at the right locations.

### **FAA Continues To Make Progress in Implementing Its Controller Workforce Plan, but Further Efforts Are Needed in Several Key Areas**

In December 2004, FAA issued the first in a planned series of congressionally directed annual reports that outline the Agency's plans for hiring new controllers to replace those expected to leave over the next 10 years. The 2004 plan also outlined various initiatives for increasing controller productivity and for decreasing on-the-job training time and costs. FAA issued a June 2006 update to the 2004 plan, which

<sup>6</sup> OIG Report Number AV-1999-066, "Federal Aviation Administration's Financing and Cost Control," March 22, 1999.

revised projected hiring to approximately 11,800 new controllers over the next 10 years.

In June 2006, we began a review of FAA's progress in implementing key initiatives of its controller workforce plan and issued our final audit report last Friday. Overall, we found that FAA continues to make progress in implementing a comprehensive and complex staffing plan. For example, we found that FAA made significant improvements by centralizing many aspects of its hiring process. We also found that FAA made progress in reducing the time and costs to train new controllers, primarily through greater use of simulator training at the FAA Training Academy, and implemented a new national database to track on-the-job training statistics.

Further progress is needed, however, in several key areas.

**First, FAA is still in the process of validating facility-level staffing standards, which are a foremost necessity in effectively placing newly hired controllers where they will be most needed.** Planning by location is critical because FAA has over 300 terminal and en route air traffic control facilities with significant differences in the types of users served, the complexity of airspace managed, and the levels of air traffic handled. Without accurate facility-level planning, FAA runs the risk of placing too many or too few controllers at these locations.

FAA is aware of this concern and is validating its facility staffing standards down to the sector and position level for each location in order to develop accurate staffing ranges for all of its facilities. FAA expects to complete this assessment for its 21 en route centers (its largest facilities) in early 2007. However, FAA does not expect to complete the entire project, including terminal facilities, until late 2008. Given the goal of increasing controller productivity, the lengthy training time, and the significant expenditures that will be required to hire and train new controllers over the next 10 years, FAA must ensure this project remains on track.

We recommended that FAA report in its next annual update to the workforce plan in March 2007 the progress made in validating facility staffing standards, including the number of facilities completed, the staffing ranges established for each location, and the estimated completion date for all remaining facilities. FAA concurred with our recommendation and agreed to include a section on the progress made in the next update of the plan.

**Second, FAA reached its goal of reducing controller staffing by 3 percent for FY 2005, but it is unknown whether the initiatives established in the 2004 Plan were effective in helping achieve that reduction.** FAA introduced several initiatives in the 2004 Plan intended to improve workforce efficiency and controller productivity. Those initiatives include efficiencies such as reducing the use of sick leave by

8 percent, ensuring appropriate use of workers' compensation benefits, and increasing scheduling efficiencies.

FAA achieved a 3-percent productivity gain in FY 2005 by decreasing total controller staffing by 3 percent, a goal established in the 2004 Plan. However, it is unclear what, if any, additional impact FAA's productivity initiatives had on controller productivity because FAA did not establish baseline metrics for measuring their effectiveness. We recommended that FAA establish baseline metrics for the initiatives and update the Plan annually to reflect actual progress in achieving each initiative and ultimately in achieving its goal to reduce controller staffing by 10 percent. FAA agreed to continue to provide status updates for the initiatives but stated that estimating the contribution of each initiative would be labor intensive and costly and would divert resources.

We believe that FAA should reconsider its position. Without the metrics to determine if the productivity initiatives are driving the reductions in staffing, FAA runs the risk of simply having fewer controllers controlling more traffic. This is important given that the Agency is still validating its staffing needs at the facility level.

**Third, FAA has not identified the total costs associated with the plan.** FAA's 2006 Update does not identify the annual and total costs for hiring, training, and certifying new controllers to meet future requirements. The cost of hiring and training over 11,800 new controllers will be substantial, particularly since it currently takes 2 to 5 years for new controllers to become fully certified. During that time, FAA incurs the cost of the trainee's salary and benefits as well as the cost of the salaries and benefits of the certified controllers who instruct trainees individually.

FAA submitted some of the cost details associated with the 2004 Plan in its FY 2008 budget submission. For example, FAA requested \$15.9 million to hire and train new controllers in FY 2008. Of that amount, \$5.9 million is to hire 1,420 new controllers in FY 2008 and the remaining \$10 million is to support classroom and laboratory training for approximately 3,900 controllers hired since FY 2005.

We recommended that FAA develop detailed cost estimates and offsets so that the Agency's stakeholders clearly understand the resources required to execute the plan.

### **An Evolving Aviation System Requires That FAA Maintain a Sufficient Number of Safety Inspectors Positioned in the Right Locations**

Safety is and must remain FAA's highest priority. Although accidents have occurred in recent years, the United States continues to maintain the safest aviation system in the world. While much credit is due to safety systems that air carriers have built into their operations, FAA regulations and inspectors play an important role in providing an added layer of safety oversight. As shown in Table 3, this oversight covers a vast

network of operators and functions, which make up the largest, most complex aviation system in the world.

**Table 3. FAA Inspectors' Workload**

Commercial Air Carriers	123	Flight Instructors	90,555
Repair Stations	4,927	FAA Designee Representatives	11,000
Active Pilots	744,803	Aircraft	347,326
Approved Manufacturers	1,738	FAA-Licensed Mechanics	320,293

Source: FAA

FAA's 3,865 inspectors must oversee both domestic and foreign aspects of these operations—a task made more difficult by the rapidly changing aviation environment. To ensure that the system remains safe, FAA must maintain a sufficient number of inspectors.

**FAA needs effective oversight systems to maximize inspector resources.** FAA will never have an inspection workforce that is large enough to oversee every aspect of aviation operations. As a result, FAA has been working toward using risk-based safety oversight systems—that is, systems that target inspection resources to areas of greatest risk.

Without question, risk-based oversight is the best approach; however, our past reports have identified a wide range of areas in which FAA should strengthen its inspector oversight. For example, air carriers continue to increase their use of external maintenance facilities, but FAA still needs to implement better processes to determine where air carriers send their critical maintenance. In December 2005, we reported<sup>7</sup> that FAA must understand the full extent and type of work that is being performed by non-certificated repair facilities. These facilities are not licensed or routinely visited by FAA inspectors but perform critical maintenance, such as engine replacements. FAA has yet to develop a process to determine which non-certificated repair facilities perform this type of maintenance for air carriers. Until FAA knows where critical maintenance is performed, it cannot ensure it has focused its inspection resources to areas of greatest risk.

<sup>7</sup> OIG Report Number AV-2006-031, "Review of Air Carriers' Use of Non-Certificated Repair Facilities," December 15, 2005.

FAA developed a risk-based oversight system for FAA-certified repair stations; however, it only recently completed full implementation of the system. If used effectively, the new repair station oversight system should significantly improve FAA's ability to target resources to areas of higher risk in this growing segment of the aviation industry.

**A changing aviation environment requires strategic inspector placement.** The pace at which changes are occurring in today's aviation environment makes it imperative that FAA place sufficient resources in areas where they are most needed. FAA has made at least two attempts to develop a staffing model to determine the number of inspectors needed and the best locations for placement. Neither model, however, provided FAA with an effective approach to allocate inspector resources. At the request of this Subcommittee, the National Research Council completed a study in September 2006 of FAA's current methods for allocating inspector resources. This study validated our concern expressed in many of our past reports—that FAA's current method of allocating inspectors is antiquated and must be redesigned to effectively target inspectors to those areas of higher risk.

In particular, the Council reported that the changing U.S and global aviation environments have important implications that will be key drivers of future inspector staffing needs. For example, airlines' outsourcing of aircraft maintenance, FAA's shift to a system safety oversight approach, and safety inspectors' attrition and retirement are all important changes that must be considered in determining staffing needs. This year, 28 percent (1,085 of the 3,865) of the current inspector workforce will be eligible to retire. By 2010, more than one-third, or 44 percent, of the workforce will be eligible to retire. To counter this trend, FAA requested funding to hire an additional 203 aviation safety inspectors in its 2008 budget submission.

Unless FAA develops an effective staffing model, however, it will not be able to make effective use of the resources that it obtains. Further, the Council stressed that FAA must ensure that its safety inspectors are sophisticated database users, with knowledge of system safety principles and an analytical approach to their work. In addition, inspectors must maintain their capabilities to conduct thorough on-site inspections of air carrier, aircraft maintenance, and aircraft manufacturer operations.

At the same time, FAA must prepare for emerging safety issues, such as very light jets and unmanned aerial vehicles. For example, by 2017, approximately 5,000 new aircraft known as very light jets will be an integral part of the U.S. aviation system. These aircraft will be flown by a new class of pilots with mixed levels of expertise and will vie for airspace with commercial jets. Three models of very light jets were certified in 2006 for operation. As these become operational, FAA inspectors will face new oversight challenges in every aspect of FAA's operations, including inspector oversight of pilot training and aircraft maintenance and air traffic control.

## CHALLENGES FACING FAA'S MODERNIZATION EFFORTS

FAA faces challenges in maintaining existing systems while developing and implementing new capabilities to meet the anticipated demand for air travel. For FY 2008, FAA is requesting \$2.46 billion in capital funds, the majority of which (\$2.3 billion) is for ATO efforts to modernize the National Airspace System. Since FY 2005, capital funding requests have been essentially flat, falling within the range of \$2.4 billion to \$2.5 billion and well below the levels authorized in the Vision 100 Act.

Over the last several years, increasing operating costs have crowded out funds for the capital account. Another trend has been FAA's decision to cancel, defer, and segment acquisitions while the capital budget stayed essentially flat. Further, only about 50 percent of FAA's capital budget goes to air traffic systems; the remainder goes to personnel, mission support, and facilities. Although the majority of FAA's capital funds will go for sustainment, FAA is requesting funds for two key technologies for NGATS.

- **Automatic Dependent Surveillance-Broadcast (ADS-B)<sup>8</sup>** is a satellite-based technology that allows aircraft to broadcast their position to others. FAA requested \$80 million in FY 2007 for this satellite-based technology and is requesting \$85.7 million for FY 2008. FAA expects to award a contract for the installation and maintenance of the ADS-B ground infrastructure in 2007. However, a number of challenges must be addressed; these include conducting human factors work and determining how air and ground elements will be certified as safe. FAA may have to rely on a rulemaking initiative to help speed equipage.
- **System Wide Information Management (SWIM)** is a new information architecture that will allow airspace users to securely and seamlessly access a wide range of information on the status of the National Airspace System and weather conditions. It is analogous to an internet system for all airspace users. FAA requested \$24 million for this program in FY 2007 and is requesting \$21.3 million for FY 2008. We note that SWIM is scheduled to be reviewed by FAA's Joint Resources Council in the spring of 2007.

At the request of this Subcommittee, we are updating our work on progress and problems with FAA's major acquisitions and efforts to move toward NGATS. We are tracking 18 programs with a combined acquisition cost of \$17 billion. Today, we will

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<sup>8</sup> The first phase of ADS-B implementation, known as *ADS-B out*, is expected to replace many ground radars that currently provide aircraft surveillance with less costly ground-based transceivers. Aircraft would be equipped with ADS-B out, which broadcasts a signal to these transceivers. However, implementing ADS-B out is just the first step to achieving the larger benefits of ADS-B, which would be provided by *ADS-B in*. ADS-B in would allow aircraft to receive signals from ground-based transceivers or directly from other aircraft equipped with ADS-B. This could allow pilots to "see" nearby traffic and, consequently, transition some responsibility for maintaining safe separation from the air traffic controllers to the cockpit.

highlight (1) progress and problems with key modernization efforts and (2) actions required to reduce risk with NGATS.

### **Progress With Major Acquisitions: FAA Needs To Keep Major Acquisitions On Track**

We do not see the massive cost growth we have seen in the past with FAA acquisitions. However, we found that several projects require significant attention because of their size, recent problems, or importance to the NGATS transition.

**En Route Automation Modernization (ERAM):** This program is intended to replace the “HOST” computer network—the central nervous system for facilities that manage high-altitude traffic. FAA requested \$375.7 million for ERAM in FY 2007 and is requesting \$368.8 million for FY 2008. The first ERAM system is scheduled to be fielded by December 2009.

With an acquisition cost of \$2.1 billion and a monthly expenditure or “burn rate” of \$31 million, this program continues to be one of the most expensive and complex acquisitions in FAA’s modernization portfolio. While currently on track, considerable testing and integration work lies ahead. The next major milestone is completion of systems integration, which is planned for April 2007. ERAM cost increases or schedule slips would have a cascading impact on other capital programs and could directly affect the pace of the overall transition to NGATS.

**Federal Aviation Administration Telecommunications Infrastructure (FTI):** The purpose of the FTI program is to replace seven telecommunications networks that are owned and leased by FAA with a single network that will provide FAA with telecommunications services through 2017. FAA expects FTI to significantly reduce its operating costs after the new network is completed. In FY 2007, FAA requested \$28 million for the FTI program and is requesting \$8.5 million for FY 2008. However, the vast majority of FTI is funded out of the Operations Account. For example, for FY 2008, FAA estimates it will need \$211 million to support FTI operations and another \$91 million to support the existing system.

In April 2006,<sup>9</sup> we reported that FTI was a high-risk, schedule-driven effort that was unlikely to meet its December 2007 completion date. We found that FAA needed to improve management controls over FTI by developing a realistic master schedule and an effective transition plan. To its credit, FAA has taken positive steps by revising its schedule and developing an effective transition plan that was coordinated with all affected parties. As a result of these steps, the Agency extended the FTI completion date to December 2008, a 1-year schedule delay.

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<sup>9</sup> OIG Report Number AV-2006-047, “FAA Telecommunications Infrastructure Program: FAA Needs To Take Steps To Improve Management Controls and Reduce Schedule Risks,” April 27, 2006.

FAA also increased its acquisition costs to develop the FTI network by \$8.6 million (from \$310.2 to \$318.8 million) and increased its operations costs to provide life-cycle support by about \$100 million (from \$3.0 to \$3.1 billion). This cost growth is further eroding anticipated cost savings. By December 2004, FAA's expected benefits dropped from \$820 million to \$672 million. By the end of FY 2006, we estimated that benefits had dropped to about \$415 million. However, FAA has not yet independently validated FTI cost and benefits estimates—an action that we recommended and FAA agreed to take—so actual costs and benefits remain unknown.

In May 2006, we began a follow-up review of FTI. FAA is making significant progress in delivering FTI services, and 8,611 of about 20,000 services were operating on FTI as of December 31, 2006. However, FAA continues to face challenges in making the transition to FTI. For instance, FAA currently has a large backlog of re-work amounting to about 20 percent of the total number of services that FAA attempted to transition to the FTI network. Additionally, transitioning digital services, such as critical radar and flight data, to FTI continues to be problematic. For example, FAA put a “national hold” on transitioning flight data services between air route traffic control centers until a solution is identified.

Further, FAA needs to ensure that it has an effective strategy to address FTI reliability and customer service problems that have led to a number of serious outages (i.e., unscheduled outages leading to flight delays). For example, on January 9, 2007, the Salt Lake City Center experienced a 3-hour outage that caused 90 departure delays due to an FTI maintenance contractor trying to upgrade operational FTI equipment.

Overall, key watch items for FTI include addressing schedule delays caused by the growing backlog of re-work, improving FTI reliability and customer service, and validating cost savings. FAA also needs to complete negotiations to extend its bridge contract for LINCOS (FAA's largest and costliest existing network), which expires in March 2007. (Currently, only about 34 percent of LINCOS circuits have been cutover to FTI.) Until negotiations are complete, the total cost to transition to FTI remains unknown. We will report on the FTI program later this year.

**Airport Surface Detection Equipment-Model X (ASDE-X):** We are currently reviewing ASDE-X, which is an important safety initiative planned to reduce the risks of accidents on runways. In FY 2007, FAA requested \$63.6 million for the ASDE-X program and is requesting \$37.9 million for FY 2008.

ASDE-X is FAA's latest effort designed to provide controllers with positive identification of aircraft and vehicle positions on the airport surface. It is planned to improve airport safety by operating in all-weather and low-visibility conditions (e.g., fog, rain, and snow) when controllers cannot see surface movement on ramps, runways, and taxiways.

ASDE-X was initially designed to provide a low-cost alternative to FAA's ASDE-3 radar systems but has evolved into a different program. FAA made a significant change to the scope of the program in September 2005 and now intends to upgrade 25 ASDE-3 systems with ASDE-X capabilities and install the system at 10 other airports that currently lack surface surveillance technology. In September 2005, FAA revised ASDE-X costs to \$549.8 million. Additionally, the ASDE-X completion date has slipped from 2007 to 2011. We remain concerned about the possibility of further cost increases and schedule slips, and uncertainty remains regarding when key safety features (such as automatic alerts for intersecting runways) will be delivered. We plan to issue a report on these issues later this year.

**Air Traffic Management (ATM):** ATM includes the Traffic Flow Management–Modernization (TFM-M) program and the Collaborative Air Traffic Management Technologies (CATMT) program. TFM-M modernizes the TFM system, which is the Nation's single source for capturing and disseminating air traffic information to reduce delays and make maximum use of system capacity. CATMT provides new decision support tools to deliver additional user benefits and increase effective NAS capacity. At a cost of \$450 million, these are two key efforts for coordinating air traffic across the NAS and managing the adverse impacts of bad weather. In FY 2007, FAA requested \$79 million for ATM programs and is requesting \$91 million for FY 2008.

Although the TFM-M effort has not experienced cost increases or schedule delays, we are concerned about risks and what will ultimately be delivered. Our concerns are based on the fact that FAA and the contractor significantly underestimated the size and complexity of TFM-M software development. FAA was pursuing TFM-M through a cost-reimbursable agreement, meaning that all risk for cost growth rested with the Government. FAA is modifying the contract and adjusting the approach of work to be performed.

The current risks for TFM-M focus on developing complex software, integrating TFM-M with other NAS systems, and stabilizing requirements. We note that interfaces with weather platforms and ERAM have yet to be defined.

There are three near-term issues with FAA's major acquisitions that require attention:

- **Replacement of Aging Controller Displays:** FAA's FY 2008 request calls for \$40 million for efforts aimed at modernizing controller displays and related automation systems at terminal facilities. In the past, FAA's modernization efforts focused exclusively on the Standard Terminal Automation Replacement System (STARS). Faced with cost growth in excess of \$2 billion for STARS, FAA rethought its terminal modernization approach, shifted to a phased process, and

renamed it Terminal Automation Modernization-Replacement (TAMR).<sup>10</sup> In 2005, FAA approved modernizing five small sites and replacing the aging displays at four large, complex facilities. This leaves over 100 sites that still need modernization.

Without question, the most urgent concern facing terminal modernization is how quickly FAA can replace aging displays at the four large sites that are particularly critical to the NAS—Chicago, Denver, St. Louis, and Minneapolis. FAA chose not to compete this work based on a joint proposal from two contractors and instead decided to modify the current STARS contract to include the work. Although this was expected to expedite replacement of the aging displays, the time spent revising the contract to establish cost, schedule, and design parameters caused FAA to lose the time advantage from foregoing competition. As a result, the aging displays will not be replaced until 2008. We recommended action on this matter over 2 years ago in November 2004. FAA should seek ways to accelerate completion of this effort.

- **Upgrading Power Distribution at Air Route Traffic Control Centers and Several Terminal Facilities:** After electrical outages in southern California delayed over 300 flights in July 2006, FAA determined that it needed to upgrade its emergency power back-up systems at all facilities managing high altitude air traffic to prevent a recurrence of this failure at other locations.<sup>11</sup> However, cost profiles are not included in the Agency's current Capital Investment Plan, and some reprioritization of efforts may be required. FAA must establish cost and schedule parameters for these efforts and fund them accordingly.
- **Resolving Problems With FAA's New Automation System for Managing Oceanic Air Traffic:** Since September 2005, FAA controllers have experienced recurring failures (loss of data-link communication with aircraft and aircraft position jumps) with its new system—the Advanced Technology and Oceanic Procedures (ATOP)—at the Oakland, California, site. These problems directly limit the potential capacity and productivity benefits from the new automation system.

According to controllers, these incidents represent potentially hazardous safety conditions that need to be resolved. The larger separation distances required between aircraft over the oceans than for those in domestic airspace have allowed controllers to manage these problems. However, benefits from the new automation system, such as reduced separation, have not been fully realized. FAA

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<sup>10</sup> OIG Report Number AV-2005-016, "Terminal Modernization: FAA Needs To Address Its Small, Medium, and Large Sites Based on Cost, Time, and Capability," November 23, 2004.

<sup>11</sup> For additional details, see our letter to Senator Boxer regarding equipment outages in southern California (CC-2006-279, November 7, 2006).

needs to resolve the problems that it has identified with communication service providers and aircraft avionics and adjust ATOP software as needed to realize expected benefits.

### **Reducing Risks Associated With the Next Generation Air Traffic Management System**

The overarching question facing FAA's capital account focuses on how to move forward with the next generation air traffic management system (NGATS). This is a high-risk effort of unprecedented scope and complexity that also involves complex policy questions as well as billion-dollar investments by FAA (new systems) and airspace users (new avionics).

In our report, requested by this Subcommittee, we highlighted a number of actions that FAA and the Joint Planning and Development Office (JPDO) need to take to make the shift from research to implementation and reduce risk with this extraordinarily complex effort:

**FAA needs to develop realistic cost estimates, quantify expected benefits, and establish a road map for industry to follow.** We have seen preliminary estimates for NGATS from FAA and other agencies. Generally, these estimates suggest that FAA will need between \$500 million and \$1 billion annually for the next 5 years over current capital investment levels. Considerable development will be required, and there are unknowns with respect to performance requirements for new automation systems and data-link communications. Another cost driver focuses on the extent to which FAA intends to consolidate facilities based on modern technology. When reporting NGATS costs to Congress, we recommended that FAA report costs on three vectors—research and development needed, adjustments to existing projects, and costs for new initiatives. FAA agreed and stated it will be building a comprehensive cost estimate this year.

More work remains to set expectations, requirements, and milestones. At workshops, industry participants have asked FAA for a “service roadmap” that (1) specifies required aircraft equipage in specific time increments, (2) bundles capabilities with clearly defined benefits and needed investments, and (3) uses a 4- to 5-year equipage cycle that is coordinated with aircraft maintenance schedules. Once concepts and plans have matured, it will be important for FAA to provide this information to industry.

**FAA needs to review ongoing modernization projects and make necessary cost, schedule, and performance adjustments.** As FAA's budget request points out, 30 existing capital programs serve as “platforms” for NGATS. We recommended that FAA review ongoing modernization programs to determine what adjustments in cost, schedule, and performance will be required. This is critical because NGATS planning documents suggest that billions of dollars will be needed to adjust ongoing programs,

like ERAM and TFM-M. Moreover, over 25 critical decisions must be made about ongoing programs in the FY 2007 to FY 2008 timeframe that will directly impact how quickly new capabilities can be deployed. These decisions include how to establish requirements for future ERAM software releases, how to make investment decisions about supporting existing radars, and how to incorporate weather information into SWIM.

**FAA and the JPDO need to develop approaches for risk mitigation and systems integration.** FAA and the JPDO must articulate how past problems that affected modernization efforts (such as cost growth, schedule slips, and performance shortfalls) will be mitigated and what specific skill sets will be required to do so. The transition to NGATS will pose complex software development and integration problems and require synchronized investments between FAA and airspace users over a number of years. In response to our report, FAA plans to address our concerns later this year.

FAA is requesting \$50 million in its FY 2008 budget for demonstration projects, which are important opportunities to reduce risk. FAA has in the past had problems with certifying systems as safe that led to cost growth and schedule slips. Therefore, we recommended, and FAA agreed, that planned NGATS demonstration projects develop sufficient data to establish a path for certifying new systems and identify the full range of adjustments to policies and procedures needed for success.

## **ACQUISITION AND CONTRACTING ISSUES**

Providing increased attention to ensure that procurement and acquisition activities are conducted in an efficient and effective manner and that taxpayer dollars are protected from fraud and abuse is a Government-wide priority, and we have focused significantly more audit and investigative resources on procurement and acquisition issues. In our testimony today, we would like to highlight two specific watch areas for FAA: support services contracts and the transition of flight services to contract operations.

### **Support Services Contracts**

FAA's use of support service contracts is an important watch item for Congress. FAA faces challenges for each phase of the acquisition cycle, including planning, awarding, and administering support services contracts. In FY 2006, FAA obligated about \$930 million for support services using numerous contracts and three multiple-award "umbrella" procurement programs.

On September 21, 2006, we issued a report<sup>12</sup> on our review of the RESULTS program (one of the three multiple-award programs), for which FAA has awarded about

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<sup>12</sup> OIG Report Number FI-2006-072, "Audit of the Federal Aviation Administration's RESULTS National Contracting Service," September 21, 2006.

\$543 million since program inception. We found that the program was not properly established or managed. Continued use of this program would cost FAA tens of millions of dollars in higher costs. FAA terminated this procurement program in 2006 and started strengthening oversight of all support service contracts. FAA needs to pay special attention to the following.

**Verification of Labor Qualification and Rates:** Labor costs generally account for the largest portion of support service contract costs. Our RESULTS audit and FAA's own review identified incidents when contractor staff did not meet the expected qualifications for positions billed. For example, we found an employee on a contract was originally billed as an administrative assistant at an hourly rate of \$35. Four months later, the same employee was billed as an analyst at an hourly rate of \$71 without any proof of additional qualifications. Verifying contract labor qualification for the rates billed could potentially save FAA millions of dollars for support services.

In conjunction with our RESULTS audit, the FAA Administrator announced an Agency-wide initiative to strengthen internal controls over procurement. FAA also reviewed one of its other multiple-award programs, BITS II, and found similar problems. For example, FAA found evidence that multiple contractors had extensively billed FAA for employees at labor rates that were higher than their actual education and experience warranted, as specified by terms of the contract.

FAA referred this matter to us for investigation. In one case, we found that a contractor invoiced FAA for the services of an employee in the labor category of "Senior Management Analyst" at a rate of \$100 per hour, instead of the proper rate of \$40 per hour based on the employee's qualifications. Specifically, the "Senior Management Analyst" category required an individual with 12 years of direct experience, yet the employee in question had only 2 years of experience. As a result of our investigation to date, 8 of 13 contractors have agreed to repay a total of \$6.5 million in inflated billings under administrative settlements with FAA.

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

## **FAA Has Implemented a Series of Internal Controls To Manage the Transition of Flight Services to Contract Operations and Is Entering the Most Critical Phase of the Transition**

On February 1, 2005, FAA awarded a 5-year, fixed-price incentive contract (with 5 additional option years) to Lockheed Martin to operate the Agency's 58 flight service stations in the continental United States, Puerto Rico, and Hawaii. The contract, worth about \$1.8 billion, represents one of the largest non-defense outsourcing of services in the Federal Government.

FAA anticipates that by contracting out flight service facilities, it will save \$2.2 billion over the 10-year life of the agreement. On October 4, 2005, Lockheed Martin took over operations at the 58 flight service stations. In May 2006, we began a review of FAA's controls over this transition process.

Overall, we found that FAA has implemented effective controls over the initial transition of flight service stations to contract operations. These controls include contractual performance measures that require the contractor to achieve acceptable levels of safety, operational performance, and service and internal mechanisms that oversee the operational and financial aspects of the program.

We also found that the Agency uses these controls to monitor contract flight service stations and, in some cases, penalizes the contractor for poor performance. To date, FAA has imposed approximately \$9 million in financial penalties against the contractor for failing several contractual performance measures; FAA is requiring the contractor to submit corrective action plans to resolve the deficient performance measures.

However, FAA and the contractor are now entering the next and most critical phase of the transition. Beginning this month, the contractor plans to complete, test, and implement a new software operating system for flight service stations and consolidate the existing 58 sites into 3 hub and 17 refurbished locations—all within 5 months. Any slips in that schedule could have significant implications to the costs and anticipated savings of the transition.

One critical tool that could assist FAA in monitoring this transition—a variance report comparing estimated and actual first-year costs—has not been completed. This tool would allow FAA to identify cost overruns, determine the reasons for the overruns, and allow for adjustment to ensure that savings are realized. According to the FAA Flight Services Program Director, the Program Office has recently received the necessary cost accounting data and expects to complete the first report sometime this month. We will review the completed variance report and expect to issue our report assessing FAA's progress during the next phase of the transition later this year.

## **USING THE COST ACCOUNTING SYSTEM TO IMPROVE OPERATIONS**

Since 1996, FAA has spent over \$66 million to implement a cost accounting system. Regardless of the financing system ultimately decided upon by Congress, FAA must have an effective cost accounting system. A multibillion-dollar organization such as FAA must have a cost accounting system that provides visibility into the cost of its operations to help management shape decisions and establish priorities.

FAA has substantially completed its cost accounting system. It covers all lines of business and captures the annual labor costs of substantially all its personnel, the latter having a total value of about \$7 billion—the single largest cost item to FAA. Overall, FAA's cost accounting system is properly designed to assign costs to service organizations for performance monitoring. However, to enhance operational efficiency, FAA must ensure the accuracy of financial data in the cost accounting system.

Financial transactions in FAA's core accounting system are used to compile financial statements for audits and to feed the cost accounting system, which in turn assigns accumulated costs to responsible service organizations. Accordingly, the integrity of the cost accounting system depends on the reliability of its financial accounting system. FAA received a qualified audit opinion on its FY 2006 financial statements because it could not adequately support the Construction in Progress (CIP) account balance, which totaled \$4.7 billion as of September 30, 2006, in its financial accounting system. As a result, costs assigned to service organizations in the cost accounting system could contain significant errors.

FAA is in the process of completing a cost allocation system to develop user fees for its Air Traffic Organization services. According to FAA, however, it may not include construction-related costs in its user fees. Regardless of whether construction-related costs will be used to support user fees, FAA needs to enhance the integrity of its underlying financial data processes to make sound business decisions. FAA is making a concerted effort to correct this deficiency, improve its practice of tracking capital investments, and make proper adjustments in its accounting records. We will continue to closely monitor FAA's corrective actions.

## AIRPORT ISSUES

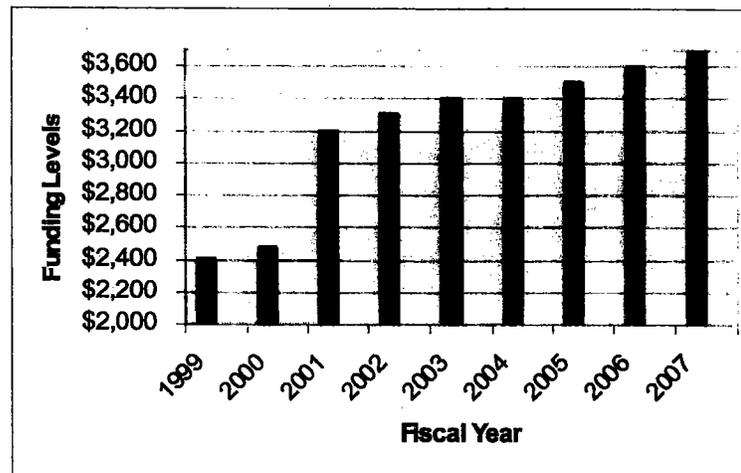
In the coming months, Congress and aviation stakeholders will discuss important questions about how to fund airport improvement projects. Airport Improvement Program (AIP) funding levels for FY 2008 are an important topic of today's testimony. Further, key issues during the reauthorization debate will be AIP and passenger facility charges (PFC) funding levels, project priorities, and project eligibility.

### Airport Improvement Program

FAA is requesting \$2.75 billion for the AIP in FY 2008. Since the current authorization, Vision 100, expires in FY 2007, no AIP authorization target exists for FY 2008. However, the FY 2008 request is a substantial reduction over the FY 2007 authorized level in Vision 100.

The AIP supports the airport system by providing funds to primarily enhance safety and security, maintain the infrastructure, increase capacity, and mitigate airport noise in surrounding communities. AIP authorized funding has steadily increased over the last 9 years. As shown in Figure 1, authorized funding increased by approximately 54 percent from 1999 to 2007. Since 2001, the AIP has been authorized at \$3.2 billion or higher in funding each year.

**Figure 1. AIP Authorized Funding Levels, 1999 to 2007**  
(\$ in Millions)



Sources: 1999-2003 Wendell H. Ford Aviation Investment and Reform Act for the 21st Century and 2004-2007 Vision 100-Century of Aviation Reauthorization Act.

As shown in Table 4, 2 of the last 3 years' budget requests have been significantly less than authorized levels. The FY 2007 budget request for AIP funding of \$2.75 billion was nearly \$1 billion less than authorized under Vision 100 for FY 2007.

**Table 4. AIP Authorized and Budget Request Funding Levels  
2005 to 2007**

<b>Fiscal Year</b>	<b>Authorized (in thousands)</b>	<b>Budget Request (in thousands)</b>
2005 (Vision 100)	\$3,500	\$3,500
2006 (Vision 100)	\$3,600	\$3,000
2007 (Vision 100)	\$3,700	\$2,750

Source: FAA Budget Requests from FY 2005 through FY 2007

However, Congress has provided FAA with close to the Vision 100 authorized amounts in FY 2005 and FY 2006. Under the FY 2007 continuing resolution, the AIP will be funded at the 2006 level of \$3.5 billion. That would be a \$200 million reduction from the FY 2007 authorized level, but would prevent any reduction in “formula grants.”<sup>13</sup>

With the decrease in available AIP funds, FAA must take a more proactive role managing and overseeing airport grants. Since the early 1990s, we have identified hundreds of millions of dollars in airport revenue diversions, revenues that should have been used for the capital or operating cost of an airport but instead were used for non-airport purposes. In the last 4 years, we reported on revenue diversions of more than \$50 million at seven large airports, including one airport whose sponsor—a local government agency—diverted about \$40 million to other projects not related to the airport.

FAA is now taking a more active role to identify airport revenue diversions, but airports must do their part to ensure that airport revenues are not used for non-airport purposes. Similarly, as we testified last year, ensuring that airports dispose of land acquired for noise mitigation purposes when the land is no longer needed for noise compatibility purposes or airport development would also provide additional funds for airport projects. Our review in 2005 of 11 airports identified approximately \$242 million that could be used for other noise mitigation projects at the respective airports or returned to the Airport and Airways Trust Fund.

With growing demands for airport improvement projects and potentially less AIP funding available, AIP funds must be directed to the Nation’s highest priority projects while meeting the unique needs of small airports. During our current review of the AIP, we found that FAA policies and procedures, for the most part, ensure that these high priority projects are funded with AIP funds. We also found, however, that the

<sup>13</sup> FAA distributes a category of AIP funding called formula grants to primary airports (commercial airports with at least 10,000 passenger boardings per year), cargo service airports, and states (for general aviation and smaller airports) according to statutory provisions. These grants are calculated using specific formulas.

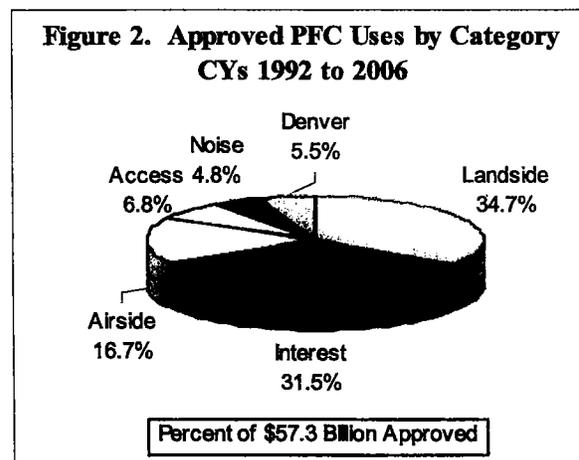
AIP Military Airport Program set-aside<sup>14</sup> (MAP) can result in low priority projects being funded at an airport that meets set-aside program requirements while higher priority projects at other airports could go unfunded.

In order to meet the required level of MAP set-aside funding of approximately \$34 million per year, the majority of projects being funded are comprised of lower priority projects as rated under FAA's numerical rating system. FAA ranks projects on a scale of 0 to 100. Projects rated at 40 or above are generally funded by FAA. However, in FY 2006, 18 of 26 (69 percent) MAP projects with ratings ranging from 17 to 36 were funded at an estimated cost of \$31 million, as a result of the MAP set-aside funding requirements. For example, one project, with a rating of 19, was funded at a cost of more than \$2.2 million to rehabilitate a parking lot.

Given the growth in projected passenger traffic and the Department's commitment to accelerate major airport infrastructure projects by giving priority treatment and resources to capacity projects, it may be time to reexamine AIP funding levels and the type of projects funded. We will be reporting on FAA's prioritization of AIP funds later this year.

### Passenger Facility Charges (PFCs)

In addition to AIP funds, passenger facility charges (PFCs) have become an important funding mechanism for airports. For instance, between 1992 and 2006, FAA approved the collection of \$57.3 billion in PFCs. Of this amount, airports have collected approximately \$22 billion, with another \$2.6 billion anticipated for 2007. In comparison, airports received about \$35.2 billion in AIP grants between 1992 and 2006, with FAA requesting another \$2.75 billion for 2007. Overall, airports anticipate using 34.7 percent of PFC collections to finance landside projects (e.g., terminals, security, and land), another 31.5 percent for bond interest payments, 16.7 percent for airside projects (e.g., runways, taxiways, and equipment), 6.8 percent for access roadways, 4.8 percent for noise abatement, and 5.5 percent for the Denver International Airport (see Figure 2).<sup>15</sup>



Source: OIG analysis of FAA data

<sup>14</sup> Under Vision 100, the AIP discretionary fund is subject to three statutory set-aside programs that benefit (1) noise compatibility planning to mitigate airport noise in surrounding communities; (2) the Military Airport Program to convert former military fields to civilian airfields; and (3) certain reliever airports.

Currently, PFCs are capped at \$4.50 per segment of flight (a maximum of \$18.00 on a round trip). The current cap on PFCs is an important matter for this Committee and has significant implications for major airports' capital expenditure plans. Over 75 percent (248 of 328 airports) of the airports collecting a PFC charge the maximum amount. The current cap has led some airports to collect PFCs for extremely long periods of time in order to cover the cost of their projects, including: Clarksburg, WV (50 years); Miami, FL (34 years); Detroit, MI (25 years), and Denver, CO (25 years). Overall, 45 percent of airports collecting a PFC have set collection periods longer than 10 years. Other airports are anticipating future increases in the cap as part of their financing plans, such as O'Hare International Airport. How future airports projects are funded and the level of AIP funding and PFC charges will be important issues as the Congress decides how best to finance FAA.

An important issue regarding PFCs is FAA's reliance on airport sponsors for PFC oversight. Unlike AIP grants, DOT and FAA officials have concluded that the Agency lacks clear authority to prevent airports from contracting with suspended or debarred companies for projects funded by PFCs. This is significant because, of the 838 projects that FAA approved in FY 2006 to receive PFC funding, 194 are to be funded solely by PFCs and 93 others via PFCs and other non-AIP funding sources. Moreover, of the associated \$2.7 billion in approved PFC collections, an estimated \$1.8 billion (67 percent) will go for projects funded solely by PFCs or a combination of PFC and other non-AIP funding sources. According to FAA, however, companies suspended or debarred for committing fraud on other government contracts cannot be excluded from projects funded solely with PFCs. Congress should consider legislation to address this risk area.

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

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<sup>15</sup> FAA tracks Denver's PFC separately due to its large size and because it was used to fund the new airport, not specific projects.