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**Before the Committee on Commerce, Science,  
and Transportation  
United States Senate**

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For Release on Delivery  
Expected at  
9:30 a.m. EST  
Tuesday  
February 11, 2003  
CC-2003-068

**The State of the  
Federal Aviation  
Administration**

**Statement of  
The Honorable Kenneth M. Mead  
Inspector General  
U.S. Department of Transportation**



Mr. Chairman and Members of the Committee:

I appreciate the opportunity to testify on reauthorization of the Federal Aviation Administration (FAA). We look forward to working with Administrator Blakey, who I believe will be a fine Administrator, especially with the safety background she brings from the National Transportation Safety Board. Also, like former Administrator Garvey, she has a 5-year term, a reform established by the Congress to bring stability and continuity in leadership. Before this reform, the average tenure of an FAA Administrator was about 18 months. Stability in FAA's leadership will be essential in addressing the formidable challenges facing FAA today. Administrator Blakey will require substantial support from the Congress and the Administration to address them.

Reflecting on the past 5 years, stability in leadership contributed materially to what we consider a sustained and improved focus on safety and an overall good safety record, successfully managing the Y2K computer problem, obtaining a clean opinion on agency-wide financial statements, bringing new Free Flight controller tools on-line, deploying the Display System Replacement on time and within budget, expeditiously shutting the system down safely on September 11<sup>th</sup>, improving communications links with the Department of Defense since September 11<sup>th</sup>, and setting in motion required actions to prevent a repeat of the summer of 2000 when the aviation system experienced unprecedented delays, flight cancellations, and near gridlock.

Today, there are four central issues that need to be considered in FAA's upcoming reauthorization: (1) making FAA a performance-based organization by controlling the costs of its operations and cost growth in major acquisitions; (2) building aviation system capacity and more efficient use of airspace to prevent a repeat of the summer of 2000; (3) striking a balance on how airport funds will be used for

aviation system capacity, airport safety, and security; (4) aviation safety as FAA's top priority.

**Major Improvements Are Needed to Position FAA as a Performance-Based Organization.** In 1996, FAA was given two powerful tools—personnel reform and acquisition reform. FAA was also directed to establish a cost accounting system so that it would know, at the facility level, where it was spending money and for what. The expectation was that by relieving the agency from Government rules and establishing a cost accounting system, FAA would operate more like a business—that is, services would be provided to users cost effectively and air traffic control modernization programs would be delivered approximately on time and within budget. In the Aviation Investment and Reform Act for the 21<sup>st</sup> Century (AIR-21), Congress took additional steps to make FAA more business-like by reorganizing Air Traffic Control's management structure and establishing a Chief Operating Officer position.

Seven years later, we do not see sufficient progress toward achieving those outcomes. The growth in FAA's budget—from about \$8.2 billion in fiscal year (FY) 1996 to \$14 billion in FY 2004 represents an increase of \$5.8 billion. About one-third of this increase is attributable to higher authorized amounts for airport funding. However, during this period, we have seen large increases in workforce costs, as well as cost overruns and schedule slips in major acquisitions. Continued growth in those categories of that magnitude is unsustainable, given the fiscal situation and multibillion-dollar declines in projected Aviation Trust Fund receipts. FAA cannot assume that a robust stream of Trust Fund receipts or other revenue will be available to cover its cost growth. In fact, current estimates show that over the next 4 years, Trust Fund tax receipts are expected to be more than \$10 billion less than projections made in April 2001.

We do not believe the answer to cost growth at FAA lies in an increase in taxes, fees, or other charges. Most airlines are in extreme financial distress, and passengers already pay a significant amount in taxes, fees, and charges—nearly 26 percent of a \$100 non-stop ticket goes to taxes and fees; a \$200 single-connection round trip ticket includes about \$51 or 26 percent in taxes and fees. Just like the airlines have had to rethink the basics of their business, FAA also must re-examine how it does business. FAA needs to redouble its efforts to become performance based in deeds as well as in words. This, in our opinion, is a primary challenge facing FAA and ought to be a major focus of the upcoming reauthorization.

To date, the most visible results of personnel reform are soaring workforce costs and significantly higher salaries. While during this period there has been improved labor/management relations with controllers (FAA's largest workforce), FAA's operations budget, which is mostly payroll, has increased 65 percent or \$3 billion. The average base salary for fully certified controllers has risen to over \$106,000—a 47 percent increase over the 1998 average of \$72,000. Because of collective bargaining agreements, only about 36 percent of FAA employees receive pay increases based on individual performance, and the remainder of FAA employees receive largely automatic pay increases.

We also found that there are somewhere between 1,000 and 1,500 side bar agreements or Memorandums of Understanding (MOUs) that FAA managers have entered into. Many serve legitimate purposes, but MOUs can add millions to personnel costs. However, FAA management does not know the exact number or nature of these agreements, there are no established procedures for approving MOUs, and their cost impact on the budget has not been analyzed. We briefed Administrator Blakey of our concerns regarding MOUs, and we are working with the Administrator and her staff to address this issue.

Acquisition reform results have been mixed—contracts are awarded more expeditiously, and FAA’s “build a little, test a little” approach has clearly avoided failures on the scale of the multibillion-dollar Advanced Automation System acquisition. In addition to progress with Free Flight Phase 1, FAA has deployed systems such as the Display System Replacement (new controller displays for en route facilities) and the initial phase of HOST (computer that receives, processes, and tracks aircraft movement throughout domestic and en route airspace) on time and within budget. But the bottom line is that significant schedule slips for major air traffic control acquisitions and substantial cost growth are all too common. For example, the Standard Terminal Automation Replacement System (STARS) (new controller displays and computer equipment for terminal facilities) has slipped at least 4 years, and the Wide Area Augmentation System (WAAS) (a new satellite-based navigation system) has slipped 5 years. Moreover, five major projects we track have experienced cost growth of \$3 billion—the equivalent to a full year’s budget for modernization.

As for FAA’s Cost Accounting System (CAS), it was to be completed by 1998 at a cost of \$12 million. However, after over 6 years of development and a price tag of \$38 million, FAA is now planning to complete its CAS by September 2003, assuming no further slippage. Additionally, we found that in two of the five lines of business where the CAS has been implemented, problems exist such as not allocating costs to individual facilities, which limit the system’s usefulness. A CAS is essential for setting benchmarks and measuring performance, and it would help greatly in determining how many controllers we need and where we need them. This is important given projections of controller retirements.

Regarding the 2000 FAA reauthorization reforms, these reforms established the position of Chief Operating Officer and an Air Traffic Control (ATC)

Subcommittee, which was empowered to, among other things, approve budgets, strategic plans, and plans for improving the safety and modernization of the ATC system. The Chief Operating Officer position has never been filled, and the ATC Subcommittee has not fulfilled its charter. The reauthorization process offers an opportunity to rethink the powers and responsibilities of the ATC Subcommittee in terms of how it will fit within the FAA organizational structure, what it can realistically be expected to do, and how it will interface with the current powers and duties of the Administrator. We understand the Subcommittee is currently working to develop performance metrics. One series of metrics, in our opinion, should include cost control metrics and the extent to which acquisitions are brought in on time and within budget.

Now, I would like to briefly discuss capacity, airport improvement funds, and safety.

**Building Aviation System Capacity and More Efficient Use of Airspace to Prevent a Repeat of the Summer of 2000.** FAA needs to be strategically positioned for when demand returns through a combination of new runways, better air traffic management technology, airspace redesign, and greater use of non-hub airports; it would be shortsighted to do otherwise. FAA's Operational Evolution Plan (OEP) is the general blueprint for enhancing capacity. It was a good plan, but it has been impacted by September 11<sup>th</sup> and the financial condition of the airlines. Given the slowdown in travel, now is a good time to determine exactly what is needed.

FAA is working to retool the OEP. FAA needs to synchronize the OEP with FAA's budget, set priorities, and address uncertainties with respect to how quickly airspace users will equip with new technologies. It also needs to ensure the costs associated with multibillion-dollar modernization projects not in the OEP are

considered when establishing priorities and are integrated with OEP initiatives. It is a good time to rethink what reasonably can be accomplished over the next 3 to 5 years.

**Striking a Balance Between How Airport Funds Will Be Used to Pay for Security and Capacity.**

A major issue for airports is funding the next phase of explosives detection systems (EDS) integration. Thus far, nearly all EDS equipment has been lobby-installed. The Transportation Security Administration's (TSA) planned next step (integrating the EDS equipment into airport baggage systems) is by far the most costly aspect of full implementation. The task will not be to simply move the machines from lobbies to baggage handling facilities but will require major facility modifications. We have seen estimates that put the costs of those efforts at over \$3 billion, and this is an almost immediate issue facing the airports.

A key question is who will pay for those costs and how. While the current Airport Improvement Program (AIP) has provided some funding in the past for aviation security, we urge caution in tapping this program until FAA has a firm handle on airport safety and capacity requirements. In FY 2002, airports used over \$561 million of AIP funds for security-related projects. In contrast, only about \$56 million in AIP funds were used for security in FY 2001. Continuing to use a significant portion of AIP funds and passenger facility charges (PFCs) on security projects will have an impact on airports' abilities to fund capacity projects.

**Safety As FAA's Top Priority.** The U.S. air transport system is the safest in the world, and safety remains the number one priority for FAA. Until the recent Air Midwest crash in Charlotte, there had not been a fatal commercial aviation accident in the United States in 14 months.

Progress has been made this past year in reducing the risk of aviation accidents due to operational errors and runway incursions, but both remain much too high. Operational errors and runway incursions should remain an area of emphasis for FAA because at least three serious operational errors and one serious runway incursion (in which collisions on the ground were narrowly averted) occur, on average, every 10 days.

In the current financially-strapped aviation environment, FAA must remain vigilant in its oversight to sustain a high level of aviation safety. As the Administrator's testimony states, FAA has increased surveillance at financially distressed air carriers. FAA has recognized the need and taken steps to heighten surveillance. We see the need for heightened surveillance continuing for some time to come and plan audit work to stay on top of this.

Additionally, we are encouraged by the Administrator's commitment to programs such as Flight Operational Quality Assurance (FOQA). FOQA provides objective, quantitative data on what occurs during flight rather than what is subjectively reported by individuals. FAA could use these data to identify safety trends and accident precursors.

A word of caution: FAA needs to pay close attention to the level of oversight it provides for repair stations. In the past 5 years, there has been a significant increase in air carriers' use of these facilities. In 1996, major air carriers spent \$1.6 billion (37 percent of their total maintenance costs) for outsourced aircraft maintenance. Whereas, in 2001, the major air carriers outsourced \$2.9 billion (47 percent of their total maintenance costs). FAA needs to consider this shift in maintenance practices when planning its safety surveillance work. We are now completing a review of FAA oversight of repair stations.

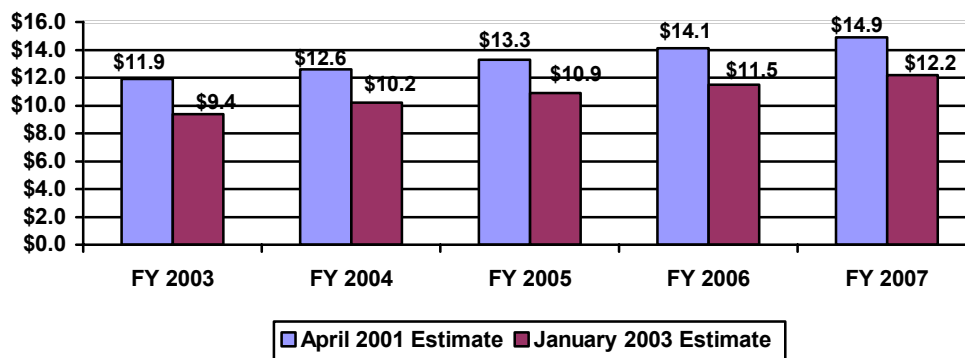
## Introduction

The aviation landscape has changed dramatically since FAA was last reauthorized. Airlines were in much better financial shape, the Trust Fund had collected more tax revenue than ever before, and future estimates projected even higher revenues coming in. Two years ago, we were focused on alleviating aviation gridlock and airline delays, and improving customer service—all of these issues are now on the back burner.

Today, reauthorizing FAA programs has to be viewed against the backdrop of the financial health of the industry, the decline in travel, and how airlines are revamping operations. Two large network carriers have entered into bankruptcy, and others are taking steps to avoid similar courses. Overall, domestic enplanements were down nearly 18 percent in November 2002 compared to November 2000.

As a result of the slow economy and the decline in air travel, there has been a significant decrease in tax revenues coming into the Trust Fund. Projected tax revenue from the Aviation Trust Fund for FY 2004 has dropped from approximately \$12.6 billion estimated in April 2001 to about \$10.2 billion estimated in January 2003. Current estimates show that over the next 4 years (FY 2004 through FY 2007) Aviation Trust Fund tax revenues are expected to be about \$10 billion less than projections made in April 2001.

### PROJECTED TRUST FUND TAX REVENUE (\$ in Billions)



Although revenues to pay for FAA's programs have fallen dramatically, FAA's costs have not. FAA's budget has increased nearly \$6 billion over the past 7 years—escalating from \$8.2 billion in FY 1996 to \$14 billion in FY 2004. About one-third of this increase is attributable to higher authorized amounts for airport

funding. However, during this period, we have seen large increases in workforce costs, as well as cost overruns and schedule slips in major acquisitions.

AIR-21 gives priority to FAA’s Airports and Modernization accounts by requiring that revenue from the Trust Fund be allocated to those accounts before allocating any revenue to FAA’s operating budget. For example, as shown in the following chart, the difference between revenues and FAA’s operating budget came from the General Fund.

**General Fund Contribution for FY 2003**  
(\$ in Billions)

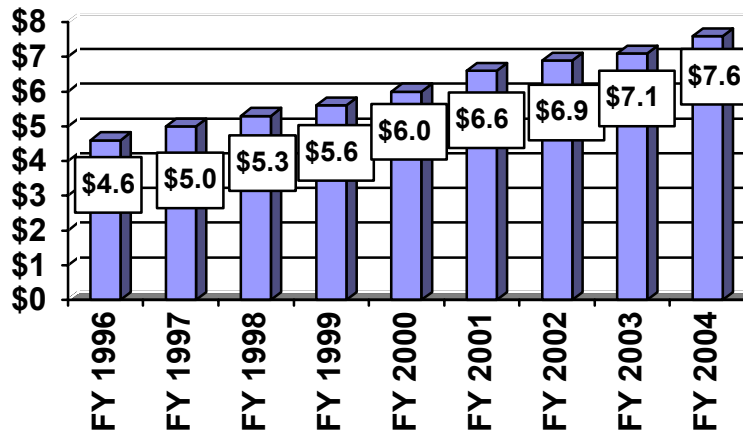
	<b>FY 2003</b>
Estimated Trust Fund Contribution	\$10.3
Less Airport Funding	(\$3.4)
Less Modernization	(\$3.0)
Less Research and Development	(\$0.1)
Residual Trust Fund Revenues Available for Operations	\$3.8
Operations Budget	\$7.1
Difference (Amount from the General Fund for Operations)	\$3.3

For FY 2004, FAA’s budget request of \$14 billion exceeds projected Trust Fund revenues by over \$3 billion. Assuming no new taxes, this shortfall will have to be made up either by drawing down the uncommitted balance of the Trust Fund or tapping the General Fund.

**Making FAA a Performance-Based Organization Through Controlling Costs in Operations and Major Acquisitions**

**Controlling Operating Costs.** Although Congress envisioned that personnel reform would result in more cost-effective operations, this has not occurred. Since 1996, FAA’s operating costs have increased substantially. As shown in the following graph, FAA’s operations budget, which is 82 percent payroll costs, has increased from \$4.6 billion in FY 1996 to \$7.6 billion in FY 2004—an increase of over 65 percent. Given the decline in Aviation Trust Fund revenues and the financial situation of the airlines, a continuation of this growth can no longer be sustained.

**FAA's Operations Budget - FY 1996 to FY 2004**  
**\$ in Billions**



\* FY 2002 excludes onetime anti-terrorist supplemental funding.

Much of the increase in operations costs has been a result of salary increases from collective bargaining agreements negotiated under FAA's personnel reform authority. The 1998 collective bargaining agreement with the National Air Traffic Controllers Association (NATCA), which created a new pay system for controllers, was a significant cost driver. Under the agreement, controllers' salaries increased substantially. For example,

- The *average* base salary for fully certified controllers has now risen to over \$106,000—a 47 percent increase over the 1998 average of about \$72,000 (as shown in the table below). This compares to an average salary increase for all other FAA employees during the same period of about 32 percent, and for all Government employees in the Washington, D.C. area of about 30 percent.

**Average Base Salaries for FAA Employees**

Average Base Salary (Including Locality)	Fully Certified Air Traffic Controllers	Non-Controller FAA Employees
2003	\$106,580*	\$78,080
1998	\$72,580	\$59,200
Percentage Increase From 1998 to 2003	46.8	31.9

\*After 4.9 percent increase.

When premium pays (such as overtime and Sunday pay) are added, controllers' total salaries can be substantially higher. For example,

- The 10 highest paid air traffic controllers in calendar year (CY) 2002 earned between \$192,000 and \$214,000. In fact, over 1,000 controllers earned over \$150,000 in CY 2002 (approximately 6.7 percent of the controller workforce). That number compares to only 65 controllers that earned over \$150,000 in 2000 (approximately 0.4 percent of the controller workforce).

Following the NATCA agreement, other FAA workforces began organizing into collective bargaining units including employees from the Office of Chief Counsel, Office of Financial Services, and Office of Airports. Today, FAA has 48 collective bargaining units as compared to 19 collective bargaining units in 1996.

The dramatic increase in bargaining units has complicated FAA's plans for fielding its agency-wide compensation system (created in April 2000), because FAA's 1996 reauthorization requires that FAA negotiate compensation with each of its collective bargaining units. This has also complicated FAA's plans to create a link between pay and performance. The agency-wide pay system does away with automatic Government-wide pay increases, and instead is designed to provide variable pay increases based on an individual's and the agency's overall performance. However, several of FAA's collective bargaining agreements have provisions that allow for higher increases than allowed under the agency-wide pay system without considering an individual's performance. For example,

- This year under terms of the NATCA collective bargaining agreement, all controllers received an automatic pay increase of 4.9 percent, regardless of their individual performance. FAA provided a similar increase to all Air Traffic field managers and supervisors.
- Because of these contractual requirements, only about 36 percent of all FAA employees receive pay increases based on performance as established in the agency-wide pay system (FAA's core plan). The remainder of FAA employees receive largely automatic pay increases.

FAA has also been less than effective in managing its labor agreements. For example, outside the national collective bargaining agreement with NATCA, FAA and the union have entered into hundreds of side bar agreements or MOUs. These agreements can cover a wide range of issues such as implementing new technology, changes in working conditions and—as a result of personnel reform—bonuses and awards, all of which are in addition to base pay.

We found FAA's controls over MOUs are inadequate. For example, there is:

- no standard guidance for negotiating, implementing, or signing MOUs;
- broad authority among managers to negotiate MOUs and commit the agency;
- no requirement for including labor relations specialists in negotiations; and
- no requirement for estimating potential cost impacts prior to signing the agreement.

In addition, FAA has no system for tracking MOUs, but estimates there may be between 1,000 and 1,500 MOUs agency-wide. The total cost implications associated with these MOUs are not known. While many serve very legitimate purposes, we found several agreements that had substantial costs. For example,

- As part of the controller pay system, FAA and NATCA entered into a national MOU providing controllers with an additional cost of living adjustment. As a result, at 111 locations, controllers receive between 1 and 10 percent in "Controller Incentive Pay," which is in addition to Government-wide locality pay. In FY 2002, the total cost for this additional pay was about \$27 million.

We reviewed a number of MOUs that were not cost-effective and, in our opinion, neither necessary nor in the best interest of the Government. For example,

- One MOU we reviewed allows controllers transferring to larger consolidated facilities to begin earning the higher salaries associated with their new positions substantially in advance of their transfer or taking on new duties. At one location, controllers received their full salary increases 1 year in advance of their transfer (in some cases going from an annual salary of around \$54,000 to over \$99,000). During that time, they remained in their old location, controlling the same air space, and performing the same duties.

We have briefed Administrator Blakey on our concerns regarding MOUs, and we are working with the Administrator and her staff to address this issue.

**Improving Management of Major Acquisitions.** FAA spends almost \$3 billion annually on a wide range of new radars, satellite-based navigation systems, and communication networks. Historically, FAA's modernization initiatives have experienced cost increases, schedule slips, and shortfalls in performance. While progress has been made with Free Flight Phase 1, problems persist with other major acquisitions.

In 1996, Congress exempted FAA from Federal procurement rules that the agency said hindered its ability to modernize the air traffic control system. Now, after nearly 7 years, FAA has made progress in reducing the time it takes to award contracts, but acquisition reform has had little measurable impact on bottom line

results—bringing large-scale projects in on time and within budget. The following chart provides cost and schedule information on five projects largely managed since FAA was granted acquisition reform.

Program	Estimated Program Costs (Dollars in Millions)		Percent Cost Growth	Implementation Schedule	
	Original	Current		Original	Current
WAAS	\$892.4	\$2,922.4*	227 %	1998-2001	2003-TBD**
STARS	\$940.2	\$1,690.2**	80 %	1998-2005	2002-TBD**
ASR-11	\$752.9	\$916.2	22 %	2000-2005	2003-2008
WARP	\$126.4	\$152.7	21 %	1999-2000	2002-2003
OASIS	\$174.7	\$251.0	44 %	1998-2001	2002-2005

\* This includes the cost to acquire geostationary satellites and costs are under review.

\*\*Costs and schedules are under review.

These five acquisitions have experienced cost growth of over \$3 billion and schedule slips of 3 to 5 years. Problems with cost growth, schedule slips, and performance shortfalls have serious consequences—they result in costly interim systems, a reduction in units procured, postponed benefits (in terms of safety and efficiency), or “crowding out” other projects.

For example, STARS, which commenced operations at Philadelphia this past year, has cost FAA more than \$1 billion since 1996. Most of these funds were spent on developing STARS, not delivering systems. When the STARS development schedule began slipping, FAA procured an interim system, the Common Automated Radar Terminal System (Common ARTS) for about \$200 million. FAA is now operating Common ARTS (software and processors) at approximately 140 locations.

Moreover, in FY 2002 alone, FAA reprogrammed over \$40 million from other modernization efforts (data link communications, oceanic modernization, and instrument landing systems) to pay for cost increases with STARS. As a result of these cost and schedule problems, FAA officials have proposed scaling back the program from 182 systems for \$1.69 billion to a revised estimate of 73 systems for \$1.33 billion. No final decision has been made, and FAA is currently reevaluating how many STARS systems it can afford.

Several other modernization projects are experiencing setbacks. The Integrated Terminal Weather System, or “ITWS” provides air traffic managers with a 20-minute forecast of weather conditions near airports. FAA planned to complete deployment of all 38 systems by 2004 at a cost of about \$286 million, but production costs have tripled from \$360,000 to \$1.1 million per system. FAA cannot execute the program as intended and, absent additional funding, will defer adding several planned improvements and may procure fewer systems than intended.

In addition, FAA intended to have the Local Area Augmentation System (Category I)—a new precision approach and landing system—in operation in 2004. It is now clear that this milestone cannot be met because of additional development work, evolving requirements, and unresolved issues regarding how the system will be certified as safe for pilots to use. Moreover, the more demanding Category II/III services (planned for 2005) are now a research and development effort with an uncertain end state. This means that benefits associated with the new precision approach and landing system will be postponed.

Our work has also found that FAA has not followed sound business practices for administering contracts. We have consistently found a lack of basic contract administration at every stage of contract management from contract award to contract closeout. For example, we found that Government cost estimates were:

- prepared by FAA engineers, then ignored;
- prepared using unreliable resource and cost data;
- prepared by the contractor (a direct conflict of interest); or
- not prepared at all.

FAA has stated that it will take actions to address these concerns—the key now is follow through.

In addition to strengthening contract oversight, FAA needs to develop metrics to assess progress with major acquisitions, make greater use of Defense Contract Audit Agency audits, and institute cost control mechanisms for software-intensive contracts. With schedule slips and cost overruns in major acquisitions, it should be noted that FAA is not getting as much for its \$3 billion annual investment as it originally expected.

**Tracking Costs.** An effective cost accounting system is fundamental to measuring the cost of FAA activities and provides the basis for setting benchmarks and measuring performance. It represents the underpinning for FAA’s operation as a performance-based organization through the development of good cost information for effective decision-making. The 1996 Reauthorization Act for FAA required the agency to develop a cost accounting system. However, after

over 6 years and \$38 million, FAA is now planning to complete its CAS by September 2003, assuming no further slippage. Additionally, we found that in two of the five lines of business where the CAS has been implemented, problems exist such as not allocating costs to individual facilities, which limit the system's usefulness.

To have a credible cost accounting system and to effectively measure employee productivity, FAA needs an accurate labor distribution system. Cru-x is the labor distribution system FAA chose to track hours worked by air traffic employees (FAA's largest workforce). However, in September 2002, FAA and NATCA entered into an MOU that significantly reduced the system's ability to track employee productivity. Specifically, the MOU eliminated the requirement for controllers to sign in or out, and Cru-X was not programmed to identify or assign the time controllers spend on collateral activities when not controlling air traffic. We brought this issue to the attention of the Administrator, and she directed that appropriate internal controls be incorporated into the Cru-X labor distribution system.

### **Building Aviation System Capacity and More Efficient Use of Airspace to Prevent a Repeat of the Summer of 2000**

FAA needs to be strategically positioned for when demand returns through a combination of new runways, better air traffic management technology, airspace redesign, and greater use of non-hub airports; it would be shortsighted to do otherwise. FAA estimates that air traffic (measured in terms of operations) will return to its pre-September 11<sup>th</sup> growth pattern between 2005 and 2007. FAA's OEP is the general blueprint for increasing capacity. As currently structured, the plan includes over 100 different initiatives (including airspace redesign initiatives, new procedures, and new technology) and is expected to cost in the \$11.5 to \$13 billion range, excluding the costs to build new runways, but the true cost of implementing the plan is unknown. FAA estimates the plan will provide a 30 percent increase in capacity over the next 10 years assuming all systems are delivered on time, planned new runways are completed, and airspace users equip with a wide range of new technologies.

While airspace changes and new controller automated tools will enhance the flow of air traffic, it is generally accepted that building new runways provides the largest increases in capacity. The OEP now tracks 12 runways scheduled for completion in the next 10 years. Four of the runway projects are expected to be completed in 2003 at Denver, Houston, Miami, and Orlando airports. However, construction on several other airports has been delayed from 3 months to 2 years. FAA needs to continue to closely monitor new runway projects, (see Attachment).

Progress has been made with OEP initiatives, but much uncertainty exists about how to move forward with systems that require airlines to make investment in new technologies. FAA and the Mitre Corporation estimate the OEP would cost airspace users \$11 billion to equip with new technologies. For example, FAA and Mitre estimate the cost to equip a single aircraft with Automatic Dependent Surveillance-Broadcast ranges from \$165,000 to almost \$500,000, and the cost for Controller-Pilot Data Link Communications ranges from \$30,000 to \$100,000 exclusive of the cost to take the aircraft out of revenue service.

FAA is working to retool the OEP. FAA needs to synchronize the OEP with FAA's budget, set priorities, and address uncertainties with respect to how quickly airspace users will equip with new technologies. It also needs to ensure the costs associated with multibillion-dollar modernization projects not in the OEP are considered when establishing priorities and are integrated with OEP initiatives.

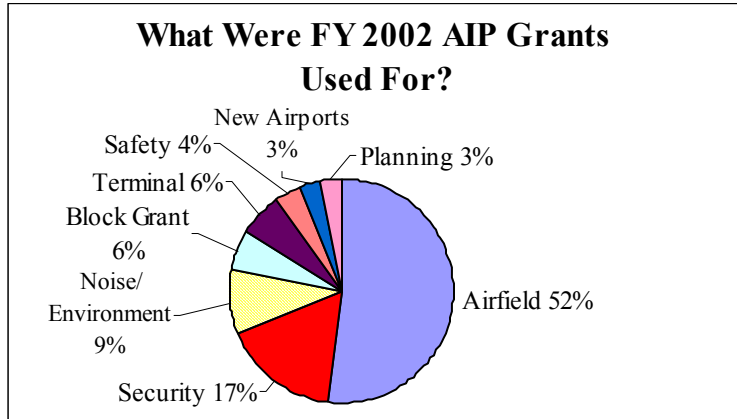
It is a good time to rethink what reasonably can be accomplished over the next 3 to 5 years, and what will be needed by FAA and industry given the decline in Trust Fund revenue and the financial condition of the airlines. According to the Associate Administrator for Research and Acquisition, it is likely that the OEP will shift from a plan that relied heavily on airspace users to equip their aircraft to one that places greater emphasis on airspace changes and procedural changes that take advantage of equipment already onboard aircraft. FAA has an opportunity to set priorities, flesh-out benefits, adjust to a changing business model, and develop a reasonable path for moving forward with the OEP before system-wide capacity problems return.

### **Striking a Balance Between How Airport Funds Will Pay for Capacity and Security Initiatives**

A major issue for airports is funding the next phase of EDS integration. Thus far, nearly all EDS equipment has been lobby-installed. TSA's planned next step (integrating the EDS equipment into airport baggage systems) is by far the most costly aspect of full implementation. The task will not be to simply move the machines from lobbies to baggage handling facilities but will require major facility modifications. We have seen estimates that put the costs of those efforts at over \$3 billion, and this is an almost immediate issue facing the airports.

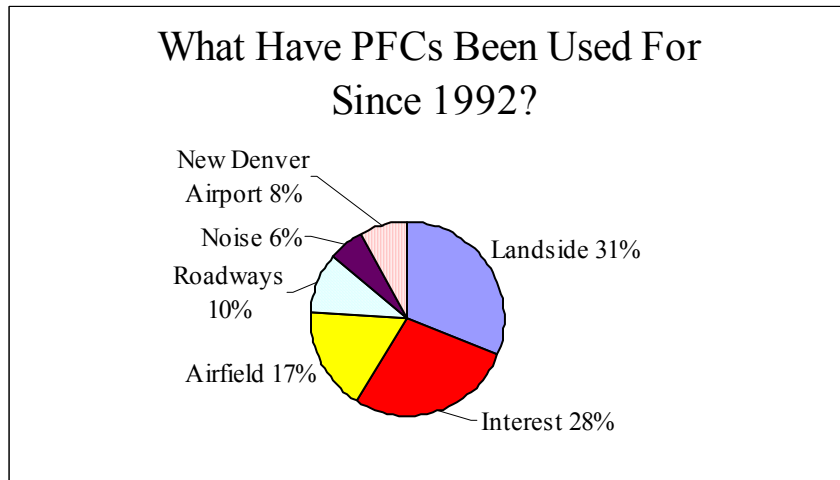
A key question is who will pay for those costs and how. While the current AIP has provided some funding in the past for aviation security, we urge caution in tapping this program until we have a firm handle on airport safety and capacity requirements. In FY 2002, airports used over \$561 million of AIP funds for security-related projects. In contrast only about \$56 million in AIP funds were used for security in FY 2001. Continuing to use a significant portion of AIP funds

on security projects will have an impact on airports' abilities to fund capacity projects. The following chart shows how AIP funds were used and for what type of project in FY 2002.



Source: FAA

AIP funds as well as passenger facility charges (PFCs) are eligible sources for funding this work. However, according to FAA, PFCs are generally committed for many outlying years and it would be difficult, requiring considerable coordination among stakeholders (i.e. airports and airlines), to make adjustments for security modifications at this point. The following chart shows how PFC funds have been used since 1992.



Source: FAA

There have also been proposals to raise the cap on PFCs; however, we urge caution before adding additional fees or taxes for air travel. Consumers already pay a significant amount in aviation taxes and fees. For example, a \$100 non-stop round trip ticket includes approximately \$26 (26 percent) in taxes and fees. Put differently, the airlines receive approximately \$74 and the government and airports get \$26. A \$200 single-connection round trip ticket includes approximately \$51 (26 percent) in taxes and fees. Here the airline gets approximately \$149 and the government and airports get \$51.

## **Aviation Safety As FAA's Top Priority**

The U.S. air transport system is the safest in the world and safety remains the number one priority for FAA. Until the recent Air Midwest crash in Charlotte, there had not been a fatal commercial aviation accident in the United States in 14 months.

Progress has been made this past year in reducing the risk of aviation accidents due to operational errors and runway incursions. Operational errors (when planes come too close together in the air) and runway incursions (potential collisions on the ground) decreased by 11 percent and 17 percent, respectively, in FY 2002. Notwithstanding these improvements, operational errors and runway incursions should remain an area of emphasis for FAA because at least three serious operational errors and one serious runway incursion (in which collisions were narrowly averted) occur, on average, every 10 days.

In the current financially-strapped aviation environment, FAA must remain vigilant in its oversight to sustain a high level of aviation safety. Currently, airlines are restructuring and changing the way they operate. For example, carriers are standardizing their aircraft fleet (e.g., parking older aircraft), using aircraft repair stations to complete more of their maintenance work, and relying on internal flight operational quality assurance programs to reduce costs and increase safety. FAA has systems in place to closely monitor air carriers' operations, such as aircraft maintenance, once an airline has declared bankruptcy. As the Administrator's testimony states, FAA has increased surveillance at these carriers based on analysis of inspectors' observations and industry databases.

Additionally, we are encouraged by the Administrator's commitment to programs such as Flight Operational Quality Assurance (FOQA). FOQA provides objective, quantitative data on what occurs during flight rather than what is subjectively reported by individuals. FAA could use these data to identify safety trends and accident precursors.

A word of caution: FAA needs to pay close attention to the level of oversight it provides for repair stations. In the past 5 years, there has been a significant increase in air carriers' use of these facilities. In 1996, major air carriers spent \$1.6 billion (37 percent of their total maintenance costs) for outsourced aircraft maintenance. Whereas, in 2001, the major air carriers outsourced \$2.9 billion (47 percent of their total maintenance cost). FAA needs to consider this shift in maintenance practices when planning its safety surveillance work.

That concludes my statement Mr. Chairman. I would be pleased to address any questions you or other members of the Committee might have.

**Status of Major Runway Projects as of February 2003  
(Information Provided by FAA and Airports)**

<b>Airport</b>	<b>Estimated Completion Date</b>	<b>Phase(s)</b>	<b>Cost Estimate (Millions)</b>	<b>Challenges to Timely Completion (as provided by the airport)</b>
Miami	2003	Construction	\$206	✓ Acceptability of runway procedures for simultaneous operations on closely spaced parallel runways (800 feet in this case).
Orlando	2003 <sup>1</sup>	Construction	\$222	✓ Construction weather delays.
Houston	2003 <sup>2</sup>	Construction	\$267	✓ None cited.
Denver	2003	Construction	\$169	✓ None cited.
Minneapolis	2004 <sup>3</sup>	Construction	\$510	✓ Construction weather delays. ✓ Contractor ability to carry large bonds and complete existing contracts on time after unexpected accidents, labor actions, work force problems, and material shortages.
Cleveland	Phase 1: Completed Opened Dec. 12, 2002 2004 (Phase 2)	Construction	\$230 \$211	✓ Relocation of major primary road. ✓ Relocation of NASA facilities with associated landfills. ✓ Mitigation for major creek.
Cincinnati	2005	Environmental	\$246	✓ Timely land acquisition.
Atlanta	2006 <sup>4</sup>	Construction	\$1,284	✓ Obtaining fill material for the runway. ✓ Local authorities' relocation of existing road, utilities, and NAVAIDS. ✓ FAA funding and installation of NAVAIDS. ✓ FHWA and Georgia DOT design concurrence on runway support structures for the runway portion that extends over I-285.
Boston	2006 <sup>5</sup>	Environmental	\$100	✓ Public and political opposition, including lawsuits from opposing groups and organizations. ✓ Maintaining current operations during construction. ✓ Availability of NAVAIDS.
St. Louis	2006	Construction	\$1,100	✓ None cited.

<sup>1</sup> Orlando's runway completion date slipped from August to October 2003 because of reduced revenues and the economic downturn.

<sup>2</sup> Houston has slipped the runway completion date from April to October 2003 because of construction difficulties associated with a landfill.

<sup>3</sup> Minneapolis has slipped its completion date by a year from 2003 to 2004 because of the economic impacts.

<sup>4</sup> Atlanta slipped the runway completion date by one year to May 2006 from May 2005 due to lawsuits related to the fill dirt.

<sup>5</sup> Boston has slipped the runway completion date from December 2005 to April 2006.

**Attachment (Continued)**

**Status of Major Runway Projects as of February 2003 (continued)**

<b>Airport</b>	<b>Estimated Completion Date</b>	<b>Phase(s)</b>	<b>Cost Estimate (Millions)*</b>	<b>Challenges to Timely Completion (as provided by the airport)</b>
Dulles	2007	Environmental	\$155	✓ Obtaining waiver from FAA for 4,000 ft. separation from parallel runway.
Seattle	2008 <sup>6</sup>	Environmental and Construction	\$773 - \$948	✓ U.S. Army Corps of Engineers permit for wetland fills. ✓ Pending citizen lawsuits.

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<sup>6</sup> Seattle moved its deadline from November 2006 to November 2008 due to environmental concerns.