AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

S. HRG. 108–1019

FEDERAL AVIATION ADMINISTRATION

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

MAY 18, 2004

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PUBLISHING OFFICE

21–364 PDF WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

JOHN MCCAIN, Arizona, *Chairman*

TED STEVENS, Alaska
CONRAD BURNS, Montana
TRENT LOTT, Mississippi
KAY BAILEY HUTCHISON, Texas
OLYMPIA J. SNOWE, Maine
SAM BROWNBACK, Kansas
GORDON H. SMITH, Oregon
PETER G. FITZGERALD, Illinois
JOHN ENSIGN, Nevada
GEORGE ALLEN, Virginia
JOHN E. SUNUNU, New Hampshire

ERNEST F. HOLLINGS, South Carolina, *Ranking*
DANIEL K. INOUYE, Hawaii
JOHN D. ROCKEFELLER IV, West Virginia
JOHN F. KERRY, Massachusetts
JOHN B. BREAUX, Louisiana
BYRON L. DORGAN, North Dakota
RON WYDEN, Oregon
BARBARA BOXER, California
BILL NELSON, Florida
MARIA CANTWELL, Washington
FRANK R. LAUTENBERG, New Jersey

JEANNE BUMPUS, *Republican Staff Director and General Counsel*
ROBERT W. CHAMBERLIN, *Republican Chief Counsel*
KEVIN D. KAYES, *Democratic Staff Director and Chief Counsel*
GREGG ELIAS, *Democratic General Counsel*

SUBCOMMITTEE ON AVIATION

TRENT LOTT, Mississippi, *Chairman*

TED STEVENS, Alaska
CONRAD BURNS, Montana
KAY BAILEY HUTCHISON, Texas
OLYMPIA J. SNOWE, Maine
SAM BROWNBACK, Kansas
GORDON H. SMITH, Oregon
PETER G. FITZGERALD, Illinois
JOHN ENSIGN, Nevada
GEORGE ALLEN, Virginia
JOHN E. SUNUNU, New Hampshire

JOHN D. ROCKEFELLER IV, West Virginia, *Ranking*
ERNEST F. HOLLINGS, South Carolina
DANIEL K. INOUYE, Hawaii
JOHN B. BREAUX, Louisiana
BYRON L. DORGAN, North Dakota
RON WYDEN, Oregon
BILL NELSON, Florida
BARBARA BOXER, California
MARIA CANTWELL, Washington
FRANK R. LAUTENBERG, New Jersey

CONTENTS

	Page
Hearing held on May 18, 2004	1
Statement of Senator Burns	36
Statement of Senator Fitzgerald	47
Statement of Senator Lautenberg	2
Prepared statement	3
Statement of Senator Lott	1
Statement of Senator Rockefeller	43
Statement of Senator Smith	1
Statement of Senator Wyden	34
WITNESSES	
Blakey, Marion C., Administrator, Federal Aviation Administration	4
Prepared statement	6
Hecker, JayEtta Z., Director, Physical Infrastructure Issues, U.S. General Accounting Office	23
Prepared statement	26
Mead, Hon. M. Kenneth, Inspector General, U.S. Department of Transportation	11
Prepared statement	14
APPENDIX	
McCain, Hon. John, U.S. Senator from Arizona, prepared statement	53
Response to written questions submitted to Marion C. Blakey by:	
Hon. John D. Rockefeller IV	53
Hon. Frank R. Lautenberg	58
Response to written questions submitted by Hon. Frank R. Lautenberg to:	
Hon. Kenneth M. Mead	63
JayEtta Z. Hecker	64

FEDERAL AVIATION ADMINISTRATION

TUESDAY, MAY 18, 2004

U.S. SENATE,
SUBCOMMITTEE ON AVIATION,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 9:33 a.m. in room SR–253, Russell Senate Office Building, Hon. Trent Lott, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF HON. TRENT LOTT, U.S. SENATOR FROM MISSISSIPPI

Senator LOTT. If the witnesses would come forward and take their seats, we'd be glad to get started this morning. Well, first I'd like to thank our witnesses for appearing again before the subcommittee to take a look at FAA as a whole and its attempt to modernize and the plans to deal with the expected record air travel this summer. I look forward to hearing the testimony again of Marion Blakey, the Administrator of FAA; Ken Mead, Inspector General of the Department of Transportation; and JayEtta Hecker, Director, Physical Infrastructure Issues, GAO. Thank you all for being here.

I've said many times that the only way FAA can ever become efficient is if they're allowed to modernize. We've talked a lot about it, we've put some money in it, but we still have a long way to go, and I want to continue to see what the vision is and how we're going to get to where we need to be in the future of aviation.

Under the direction of current Administrator Blakey, the FAA has been making strides in this area. They are preparing for the future, but we need to know how it's going. Congress should continue to monitor the FAA and ensure that they are indeed prepared for what the future will hold.

I'd like to ask the members if they would withhold their opening statements, just go ahead and hear the testimony of the witnesses, and we'll give you extra time if you need it for your questions. Do you object, Conrad? Good.

STATEMENT OF HON. GORDON H. SMITH, U.S. SENATOR FROM OREGON

Senator SMITH. Mr. Chairman?

Senator LOTT. Yes, sir.

Senator SMITH. I have to go preside shortly. I just want to pose a question I know my colleague will pose as well. We have a major fire season coming up. MTSB has said—they've grounded these air-

planes that are older than I am. I understand why they're grounding them. However, we need your help. We need them certified safe. We need something to replace them, if not them, we need something, or else a lot of people are going to be in a lot of jeopardy.

So, thank you, Mr. Chairman, that's all I wanted to say.

Senator LOTT. Well, those are the aircraft that are used in fire fighting?

Senator SMITH. Correct.

Senator WYDEN. I've got a follow up to that too.

Senator LOTT. All right. You're posing——

Senator LAUTENBERG. I'd like to chime in also.

Senator LOTT. On the fires in Oregon?

Senator LAUTENBERG. No, but if you have airplanes that's older than you, that's one problem. The airplanes are older than me.

Senator LOTT. That's a huge problem.

[Laughter.]

Senator LOTT. And all I have to say is, if you want new airplanes, we'll build them.

Senator LAUTENBERG. Mr. Chairman, on a serious note, and this is a serious hearing, I have to leave. I planned my morning accordingly and I have, as my colleagues have also, a schedule that's already laid out based on the fact that we would be able to make our statements and if necessary——

Senator LOTT. I think my idea to move forward with the testimony of the witnesses has been overridden by the need for the members to make statements and pose questions, and to accommodate that, we'd be glad to do it. Are you OK? We want that issue addressed when you respond, and I'm sure Senator Wyden will follow up on it.

Senator Burns, you want to——

Senator BURNS. No, I'm just going to listen to the witnesses.

Senator LOTT. All right. Senator Lautenberg, you want to make a statement here before you have to go? Go ahead.

STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM NEW JERSEY

Senator LAUTENBERG. Thank you very much, Mr. Chairman. I appreciate it. This is a subject of which I've been deeply involved, and I'm glad to see Marion Blakey, Ken Mead and Ms. Hecker. These are very important players in the decisions we're going to make and I am happy to see you despite my throat.

Airline travel, such an important component of the economy and the rebuilding of our economy, 700 million passengers a year depend on the FAA to ensure that planes are safe to fly on, facilities are operating properly, and that flight operations are conducted in a safe manner.

There are two major challenges I foresee for the FAA, modernizing the equipment, as the Chairman already mentioned, used to manage and control air traffic in our air space; and ensuring an adequate workforce to operate and maintain the air traffic control system. And I'm hopeful that the newly formed Air Traffic Organization will have access to the tools to address these challenges ade-

quately. But I remain concerned that the policies of the administration are being forced on the FAA.

It's no secret that I believe very strongly that the management of our skies is something that should be performed by the government and no one else. Our air traffic control system is too important to jeopardize by playing budget or name games, and I don't care whether it's called contracting out, privatizing, or outsourcing. I will oppose shifting ATC functions to the lowest bidder as long as I'm a United States Senator.

And when I look at what happened with NASA when that agency contracted out too much of its in-house expertise, it didn't have enough people who could properly oversee the contractors. And right now FAA is spending millions of dollars in an attempt to begin privatizing part of the air traffic control system, the flight service stations. Congress did not specifically authorize this endeavor, and in the end, there aren't any assurances that any money will actually be saved.

The DOT Inspector General advised the FAA to look at consolidating these facilities, but said nothing about the privatizing or outsourcing the operations and their maintenance. And I'm also concerned about the staffing level of the air traffic controllers. Now, it's my understanding that about 7,100 controllers, nearly half of the work force, are eligible for retirement in the next 9 years, and I'd like to know why there hasn't been any hiring of controllers this entire Fiscal Year. What can Congress expect to have—when can Congress expect to have FAA's plan to deal with the upcoming wave of retirements? We know that it takes a long time to get a controller fully operational.

There are some things which are rightly expected from the Federal Government. One of them, is the highest possible level of safety when they travel by plane, and we ought not to diminish that in any way. And I thank you, Mr. Chairman, for the opportunity to speak.

[The prepared statement of Senator Lautenberg follows:]

PREPARED STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY

Mr. Chairman:

Thank you for holding this hearing on a subject I am passionate about: air safety.

Airline travel is such an important component of our economy and our way of life. 700 million passengers every year depend on the FAA to ensure that planes are safe to fly on, facilities are operating properly, and flight operations are conducted in a safe manner.

There are two major challenges I foresee for the FAA: (1) modernizing the equipment used to manage and control air traffic in our airspace; and (2) ensuring an adequate workforce to operate and maintain the air traffic control system.

I am hopeful that the newly formed Air Traffic Organization will have access to the tools to address these challenges adequately, but I remain concerned that the policies of White House ideologues are being forced on the FAA.

Modernization of the equipment used to control traffic in our skies is a multi-billion dollar proposition.

The FAA has a spotty record managing the upgrade.

In a study last year, the DOT Inspector General found that cost growth, schedule delays, and performance problems continue, with 20 major projects experiencing overall cost growth of about $4.3 billion and schedule slips ranging from one to seven years.

I'm anxious to hear what progress FAA has made in getting its arms around these major acquisitions, and what more needs to be done.

It's no secret that I believe very strongly that the management of our skies is something that should be performed by the government and nobody else.

Our air traffic control (ATC) system is too important to jeopardize by playing budget and "name" games—I don't care whether it's called "contracting out," "privatizing," or "outsourcing."

I will oppose shifting ATC functions to the lowest bidder for as long as I'm a U.S. Senator.

Just look at what happened with NASA and the Space Shuttle. When NASA contracted out too much of its in-house expertise, the agency didn't have enough people who could properly oversee the contractors.

Right now, the FAA is spending millions of dollars in an attempt to begin privatizing part of the air traffic control system—the flight service stations.

Congress did not specifically authorize this endeavor and in the end, there aren't any assurances that any money will actually be saved.

The DOT Inspector General advised the FAA to look at consolidating these facilities, but said nothing about privatizing or outsourcing the operations and their maintenance.

I'm also concerned about the staffing level of air traffic controllers. I understand that 7,100 controllers—nearly half of the workforce—are eligible to retire in the next nine years.

I want to know why the Administration hasn't hired any controllers this entire Fiscal Year. When can Congress expect to have FAA's plan to deal with the upcoming wave of retirements?

I understand there's an effort to allow controllers to serve longer than current rules allow, and FAA is also looking to cut training for controllers.

These are not long-term solutions to an emerging staffing crisis. Either you have enough properly-prepared controllers or you don't.

We need to know that there are enough controllers, that they are employed by and directly accountable to the Federal Government, and that they aren't being forced to deal with any more stress than they already have on the job.

There are some things which people rightly expect from the Federal Government. One of them is the highest possible level of safety when they travel by plane.

Thank you, Mr. Chairman.

Senator LOTT. Thank you, Senator Lautenberg. Administrator, we'd be glad to hear from you.

STATEMENT OF MARION C. BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Ms. BLAKEY. I appreciate the opportunity to appear before you, Chairman Lott, and members of the Subcommittee. It's a pleasure, in fact, to discuss the future of the United States air traffic system. This little question that traffic levels are coming back since 9/11, we've already taken a number of steps to avert a repeat of the delays that plagued us during the summer of 2000.

In March, the FAA convened an important conference with airline and aviation decisionmakers to iron out a plan to address looming congestion as the traffic comes back this year. Together, we developed express lanes that are essentially highways in the sky designed to speed departures from busy airports. The group also agreed to delay triggers, which spread minor delays in the system as necessary to avoid bottlenecks at major intersections.

I'm also pleased to say that Secretary Mineta and I were able to broker a 5 percent reduction in the flight schedule of United and American at Chicago's O'Hare with an additional 2.5 percent cutback scheduled in mid-June. It's unfortunate, but the fact of the matter is, as Chicago goes, so goes the system, and a runway can only handle so many planes in an hour. Posted schedules now at Chicago still exceed that number. So far, we've successfully averted what could become a bottleneck that could choke the entire system.

We'll continue to track O'Hare delays to determine if additional action is needed.

But while we're working to handle the increase in traffic that comes with this summer, we're also getting ready for what is to come a few years from now. Step number one for the FAA is to take a hard look at how we operate. Taking advantage of personnel and procurement reforms already in place, we're transitioning to a much more business-like, bottom-line focused model. We're following the best practices from the private sector and academia. In our new Air Traffic Organization, we've stripped away about a half-dozen layers of management. We've taken responsibility and accountability to the right levels.

The people who develop and buy the equipment to modernize our system are also responsible for that purchase throughout its life cycle now. By integrating the authority and accountability for capital investments within the new organization, the goal is to link our capital budget to the operating budget that will lead to reductions in future operating costs.

Safety. Safety is one thing, however, that hasn't changed. It remains our highest priority. In fact, the three-year average for fatal commercial accidents is at its lowest in history. This is a cause for tremendous credit to this Congress and to the work here in this country of all of the partners in aviation. We've put in place two new safety organizations to further enhance safety for air traffic control to make sure that our world-leading safety record remains second to none. The first office monitors day-to-day operations. The second is positioned outside the new Air Traffic Organization to enhance and exercise independent review.

In terms of investments, our flight plan is serving the taxpayer well. It's a five-year blueprint, a lens through which all of our activities our measured. For the first time ever, all of our activities are linked directly to our budget and our performance measures are metrics driven. The flight plan is serving as a to-do list essentially for accountability. The results are there for all to see posted on our website on a quarterly basis. You can go to www.faa.gov and see exactly how we're doing.

The flight plan, of course, addresses our near-term needs, and incorporated within it and stretching further down the road is the Agency's operational evolution plan, a rolling ten-year effort that's well underway. The OEP, as it's known, is designed to address arrival and departure delays, weather, and congestion. The OEP set a robust goal to squeeze 30 percent more capacity out of the system without increasing delays, and the latest news from this program is good. The Nation's top 35 airports already have an increase in capacity of 6.5 percent over the year 2000, our baseline year, with an average of less than 14 minutes of delay.

At this point, I'd be remiss not to mention a commitment we made to this Congress to address the issue of the wave of controller retirements that are coming up in future years. We've committed to get a plan to you by the end of the year. As you see on this chart, we have projected retirements through the year 2015, and while our track record in forecasting retirements has been remarkably good, we can't be precisely sure of the retirement rate in the future. As you know, there are many factors that will affect an in-

dividual employee's decision, and that what this cumulatively is all made up of.

But during this year, we're planning to drill down to the facility level and understand to the greatest degree possible when these retirements will occur, and therefore, what our planned hiring and training plans should be.

Now, under the leadership of Secretary Mineta and at the direction of Vision 100, the landmark legislation that this committee got enacted last year, we're also looking to take the longer view with the creation of a joint planning and development office called the JPDO. This office is an intergovernmental body composed of DOD, DHS, NASA, FAA, Commerce, Transportation, and the Vice President's Office of Science and Technology Policy.

The effort brings together some of aviation's best minds to focus on aviation in the year 2025 and beyond. Specifically, the JPDO's mandate is to manage the development of our national plan for the next generation air transportation system. The first edition of this plan will be published in December and serve as a road map for our future aviation system.

I think most telling about this effort is the organization's motto: New ideas are welcome. That demonstrates a willingness to think beyond what might always be considered the traditional course for the FAA and much of government and create a road map for the future. It represents an unprecedented collaboration among all aviation system stakeholders, ranging from government to industry. It also represents a new day for aviation, and I think it's clear, it represents a new FAA.

I thank you for your time and I look forward to your questions.

[The prepared statement of Ms. Blakey follows:]

PREPARED STATEMENT OF MARION C. BLAKEY, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Chairman Lott, Senator Rockefeller, and Members of the Subcommittee:

Good morning. It is my pleasure to appear before you this morning to discuss the future of the air traffic system in this country. This is a very timely hearing as we approach Memorial Day weekend and the start of the busy travel season with its daily reminders of the benefits and challenges of air travel in this country. Today, I would like to bring you up to date on what we at the Federal Aviation Administration (FAA) are doing to manage the system while planning for the future.

As you all know, September 11 triggered a severe downturn in aviation. However, based on our recent forecasts, aviation is rebounding, and we are taking steps to be ready for its resurgence. We are already working with the aviation community to stay ahead of the curve. In the near term, we have taken several concrete steps to ensure that delays are kept to a minimum. In March, we convened "Growth without Gridlock," an unprecedented three-day conference with aviation decision makers to develop a strategy to reduce delays this summer. We sat down with representatives of the airlines, pilots, controllers, military, business, regional and GA airports, and a collection of aviation organizations. As a result, working together, we developed a new approach. We agreed on "express lanes," that allow for reduced departure delays by keeping certain parts of the airspace around congested airports clear to allow for more rapid departures. The group also agreed to "delay triggers" that can reduce bottlenecks at our busiest airports by imposing minor delays on the ground at airports sending flights into a congested area until our controllers can clear the congestion. The theory is that by imposing minimal delays when necessary, where necessary, we can reduce major delays that clog the entire system. I must emphasize that these near-term steps do not resolve long-term capacity issues. We must continue to build runways where needed, improve our airspace designs, and field new capital investments, and improve our management of the air

traffic system. We at the FAA must act more like a business with a customer focus. This will pay real dividends.

That's why we are working to transform the way the FAA's Air Traffic Organization (ATO) does business. We have designed the ATO to be a more streamlined, effective means of providing the safest air traffic control in the world to the most complex airspace in the world. The ATO will execute our Flight Plan, implement our Operational Evolution Plan (OEP) and lead us into the future with the Joint Planning Development Office (JDPO). As you know, last August, after a long and comprehensive search, Russ Chew became the ATO's first Chief Operating Officer (COO), a position created by statute under the leadership of this Committee. He is primarily responsible for all aspects of providing air traffic services and products.

Our foundation has not changed: any conversation about air traffic is premised upon the uncompromising commitment to safety by Secretary Mineta and me. Every decision we make is done with the safety of the flying public in mind. I am pleased to announce that the three-year commercial airline accident rate is the lowest in history. That's a tribute to the highly skilled men and women of the FAA and the industry we support.

Air Traffic Organization

Thanks in large part to the continuing support from this Committee, the FAA is completely restructuring how we manage air traffic services. Congressional support for greater efficiency and accountability at the FAA has enabled FAA to be more flexible, adaptable, and business-like. Today, I want to briefly describe how our recent changes will position us to meet once again a growing aviation system.

Those who use our system want an agile organization that can create greater access—and that is what we intend to provide. Indeed, with every change, we will continue to ensure that safety remains our top priority. Accordingly, we have added a new office—the Air Traffic Safety Oversight Service—to monitor the safety of our air traffic operations and help us ensure accountability. We have placed this office outside the ATO to ensure its independence, locating it within the FAA's Office of Regulations and Certification. We have also added a Vice President for Safety Services inside the ATO, and we will conduct risk-targeted, data-informed audits that will provide trend analysis and review systemic issues.

To obtain a more results-oriented, more accountable process that will reduce future operational costs, we are also integrating the authority and accountability for capital investments within the ATO. In the past, capital programs and operations have been managed separately, and success had been driven and defined by building the system, not measuring the operational benefit. Thus, the definition of success was not always results oriented. Further, from a fiscal perspective, the capital budget was inadequately linked to the future operating costs of any given procurement. Consequently, operational costs have increased year after year with little consequence to capital decisions or the program portfolio.

Through a more integrated approach to managing capital and operations, past mistakes will be corrected and the ATO will have greater fiscal insight to make long-term investments. We expect to be able to reduce our unit operating costs and fund near term operational improvements that pay the biggest dividends.

To do this, we are developing new financial management tools to pinpoint unit cost and productivity, which will enhance our fiscal effectiveness. Field managers need to know the full import of their financial decisions and headquarters' managers need to know which facilities are most efficient. In the future, each Vice President will know the value of their decisions by measuring their service performance—in terms of safety and efficiency—and what resources are required to achieve it. To that end, we are developing new cost reports that include labor distribution information. Timely reporting on safety, costs, and operational performance will give us a better understanding where our resources are being used.

The ATO must ensure the highest rate of return for each dollar invested. Ensuring organizational excellence means more people actually providing the products and services, with fewer, more effective people managing them. Russ Chew, our COO, has already flattened the organization, which has resulted in better communication and more efficient decision-making. He now is six management layers from the controller or technician versus 11 in the original structure. We arc increasing our target average ratio of the number of eight staff employees per manager. But streamlining the organization, in and of itself, means little unless you empower the managers by creating new financial reports and processes that give them the information necessary to make informed, data driven decisions, *and then* be accountable for them. We are not waiting for our final realignment before making changes. No longer will one line of business make purchasing decisions for another line of business to use. Even though the ATO was only started in February, we are optimistic

about seeing some early productivity and efficiency improvements by the end of this Fiscal Year.

Future Aviation Capacity and Delays

We have put in place an even more effective organization that will help us meet the air traffic demands of this century. This more agile organization will be better positioned to implement our Flight Plan and the Operational Evolution Plan. The Flight Plan links the agency's activities through 2008 to our budget requests. It aligns all of our business plans to ensure accountability at all levels. Beyond the Flight Plan, the OEP, a rolling ten-year plan, takes our capacity and efficiency plans out a decade to 2014. Looking even further into the future, the JPDO is crafting a plan for the Next Generation Air Transportation System to meet air traffic demand in the long-term, out to 2025.

The OEP's objective is to add capacity enhancements that will accommodate a 30 percent increase in demand over the ten-year period. Since the plan's inception in 2001, there has been a 6.5 percent increase in effective capacity (*i.e.,* the amount of traffic that can be handled within a 14 minute delay) due to OEP activities and industry changes. The OEP's capacity solutions are divided into four core areas: Arrival/Departure Rates, Airport Weather, En Route Congestion, and En Route Severe Weather. Within each core area, we have identified specific strategies for addressing known or projected capacity problems. The OEP also tracks 35 airports that are the most heavily traveled and located in the most densely populated areas because the OEP activities at these airports will have the greatest positive effect on the system.

We are increasing capacity and reducing delays in a number of ways. First, let me start with runways, for they are the means to provide the single most significant capacity increases and delay reduction. Runways are expected to account for a significant part of the overall expected 30 percent gain in capacity over next ten years. In the last five years, eight new runways have opened at the 35 OEP airports allowing almost a million more operations annually. The OEP currently includes seven runway projects (six new runways and one runway extension) that will be commissioned in the next five years allowing these airports to accommodate an additional 840,000 more operations annually. Taken together, these 15 runway projects represent a 12 percent increase in capacity over the period from 1999 through 2008.

New runway construction and runway extensions are the most effective method of increasing passenger throughput, or "arrival and departure rates". Because the 35 OEP airports account for 73 percent of all passenger enplanements, by increasing the throughput of those passengers' flights, we affect the entire system. We know that runways themselves are just one part of the solution and cannot maximize capacity alone. For example, studies have shown that 40 to 60 percent of the projected capacity gained from new concrete will be lost without the necessary changes to terminal and en route airspace. The OEP is instrumental in attaining the maximum capacity increases from a new runway. It provides a coordination mechanism to ensure that all procedures, navigational equipment and pilot training are ready when new runways are opened.

A second critical element of the OEP, and of particular interest to this Committee, is our ongoing National Airspace Redesign (NAR). The U.S. airspace has remained largely unchanged while technology, demand and diversity of aircraft using the system have advanced. The NAR is a multi-year initiative to review, redesign, and restructure the nation's airspace to meet the increasing operational demands on the national airspace system. This effort is addressing, both locally and system-wide, the congestion, complexity and limited departure points in the current airspace that cause operation.

In addition, next January, we plan to implement a program in the airspace over the continental U.S. that will enable us to reduce vertical separation at certain altitudes that will make six additional, more fuel efficient, flight levels available for aircraft operations. It will enhance both air traffic control flexibility and efficiencies for our customers. Canada and Mexico are planning for full implementation at the same time. This program, known as the Reduced Vertical Separation Minimum (RVSM), has been successfully implemented in Europe, the Pacific Ocean, Australia and parts of Canadian airspace already.

Redesign efforts will occur at the higher altitudes as well as in the terminal area, taking advantage of new navigational technologies such as advanced area navigation (RNAV) and Required Navigational Performance (RNP) that increase the potential for pilots to fly more efficient routes and altitudes they select. This is in contrast to the more rigid assigned routes and altitudes that have been the basis for air traffic control in congested airspace. Performance procedures will also allow for more efficient use of the constrained terminal airspace. Benefits associated with these changes will be dependent on the level of equipage of aircraft. While non-equipped

aircraft will still be accommodated, airspace and procedures will be designed to offer additional benefits for those aircraft having additional capabilities.

Recent airspace redesign has already proven its value in several critical regions of the country. For instance, because airspace between Chicago and the New York often clog capacity, we created new sectors to mitigate these bottlenecks. A new departure fix at Philadelphia has increased aircraft arrivals and departures to the west. Modeling to support this new route projected departure increases of up to 4 to 5 aircraft an hour, thus reducing delays at a critical east coast hub airport. Moreover, two new off-shore radar sectors created for our New York Center have permitted 65 percent of departures to leave on time. They otherwise would have been delayed or cancelled due to sever weather. These and other near-term solutions show a real benefit to the traveling public and have already provided FAA customers with $100 million per year in savings.

Recognizing that there are limited resources, the OEP examines solutions that would make use of existing systems, especially aircraft avionics. At the same time we continue to pursue new technology that brings capacity enhancements. In some cases, we are just beginning implementation of new tools and making investment decisions so that our customers can expect to see increased benefits over time. For example, we are providing improved weather products to ATC facilities that can help our controllers minimize traffic flow disruption from fast moving weather by optimizing safe routes that avoid the storm. We are also providing our controllers with new tools to help them manage traffic levels and the predicted traffic increases. Some of our controllers now have the tools to predict spacing conflicts, with the User Request Evaluation Tool, known as URET. At the ten sites where URET has been deployed, airlines are saving both time and fuel and other operating costs. We are in the process of equipping the rest of our en route centers with this technology. Once that phase is complete, we project an increase of direct routings by 15 percent which will further reduce users operating costs. Also, controllers at five of our facilities can sequence arriving and departing aircraft with technology known as Traffic Management Advisor (TMA). At each location where TMA is now in use, we get a three to five percent increase in capacity. All of these tools ultimately reduce delays.

We are also seeing the safety and capacity benefits from technology that supplements radar coverage. Pilots and air traffic controllers can "see" aircraft and ground vehicle traffic with greater precision creating additional airspace, runway and taxiway efficiencies. What this means is that we can now provide "radar like" service in remote airspace. Alaska's *Capstone* program is using this technology and seeing the benefits of shorter, more efficient routings during inclement weather. We also expect to use this technology to increase the arrival and departure rate at some airports. The diverse application of this technology may also allow visual approaches to continue into marginal visual flight rules conditions as bad weather moves into the approach airspace, reducing the need to divert aircraft.

We are always working to anticipate changes in aviation trends that require us to adjust our strategies for increasing capacity. Today, the OEP focuses on 35 of the Nation's busiest airports, but it will be expanded to include other airports needing capacity in the future. Just over a year ago, we began assessing the capacity of the Nation's airports given the anticipated demand for air travel. This analysis, *A Look into the Future: An Analysis of Airport Demand and Operational Capacity Across the NAS,* should be released this month. We looked at socioeconomic trends in demand with changes in population and income and compared those to existing and forecast capacity. We identified locations where additional capacity is needed now, and where capacity would be needed in 2013 and in 2020. We also found that if certain OEP capacity targets are not met, then we will experience even greater than anticipated capacity constraints at airports already identified as needing capacity in 2013 and 2020. The long-term projections of the *Capacity Study* support the OEP initiatives as well as the JPDO's efforts to assess system growth out to 2025. The *Capacity Study* tells us that the FAA and the aviation industry must continue to work together to ensure that adequate capacity is in place when and where needed, and reinforces the importance of keeping pace with current and future demand, and publishing a formal plan to identify and track our improvements.

For the development of longer-term plans and concepts, and under the direction of *Vision 100,* we have established the JPDO. Its mandate is to coordinate goals, priorities, and research activities within the Federal Government as well as with United States aviation and aeronautical firms to create a National Plan-a roadmap for our future aviation system in furtherance of the Next Generation Air Transportation System Initiative.

In developing the National Plan, the JPDO will establish the 2025 target and capture the major priorities that represent the coordinated decisions of member agencies. While these decisions will be in broad four-to-five year windows, it will be the

individual agencies that will prioritize the specific projects and programs needed to carry out their individual portions of the National Plan. Both the Secretary and I believe that the combination of these plans and programs will position us to meet future needs of the system. This would not be possible without the unprecedented commitments of support provided by the Departments of Defense, Commerce, and Homeland Security, NASA and the White House Office of Science and Technology Policy. Even the JPDO motto—"New Ideas Are Welcome"-demonstrates a willingness to think beyond what otherwise might be considered "traditional" as they create the roadmap for the future. These efforts represent unprecedented collaboration among all aviation system stakeholders ranging from government to industry.

At the forefront of the National Plan's goals for the future air transportation system, is the goal of increased capacity. While we are still building the plan that will take us to 2025 and beyond we expect to see an "early victory" for future capacity. As you know full well, weather creates significant delays—delays that we can't eliminate but delays that can be "managed" with skill, technology and procedures. To this end, the JPDO is developing an Integrated Plan for Aviation Weather, the first step toward bringing all of these efforts together for maximum benefit.

We are encouraged by this early success but it represents a fraction of the work that must be done to maintain our leadership role in aviation and to create the infrastructure for the future system.

Cape Town Treaty

Finally, Mr. Chairman, you had requested that we briefly address an issue that is particularly important to the aviation community: the Cape Town Treaty, which is now awaiting action by the Senate Foreign Relations Committee. The Treaty is composed of two instruments: the Cape Town Convention, containing the basic terms and provisions that underlie the regime that reflects modern asset-based financing practices in this country, and the Aircraft Protocol, which makes the Treaty operational specifically as to aircraft, aircraft engines and helicopters above a certain size. Once in force, the Treaty will provide significant economic benefits both here at home and abroad. By creating an internationally recognized system of rights and enforceable remedies in aircraft equipment, the Treaty reduces the risk assumed by creditors in financing transactions and thus should reduce the costs of those transactions.

For countries such as the U.S. that manufacture aircraft, those reduced costs should encourage increased exports and export-related economic growth—not just by major manufacturers, but also by smaller companies that make the parts and provide related aviation services. In addition, the Convention and Aircraft Protocol will benefit the companies that provide the capital that finance the sale of such equipment around the world. U.S. financial institutions are major players in aircraft financing. The creditor protections provided for by the Convention and Protocol will benefit them by significantly reducing the risk they now incur when financing aircraft in countries whose laws do not meaningfully protect creditors in the event of a default or insolvency.

The full implementation of this Treaty should hasten the replacement of older equipment with state-of-the-art aircraft, making the world's skies safer and cleaner as newer equipment is acquired and brought into service. This will benefit aviation both within the United States and abroad, particularly in developing countries whose carriers have had to pay high interest rates or who have not been able to access the commercial credit markets at all because of their credit risk. In short, Mr. Chairman, this Treaty is a "win-win-win" proposition. It is a fine example of how international legal cooperation can benefit all parties. I want to highlight the extraordinary collaborative nature of the Cape Town Treaty effort. It is an example of what a strong government/industry partnership can produce.

The financing provisions on secured interests under the Treaty do not require any implementing legislation here in the U.S., because they are fully consistent with U.S. law under the Uniform Commercial Code. To this extent, the Treaty is self-executing. However, certain technical amendments to the FAA's Civil Aircraft Registry functions are required to fully integrate our Registry with the new, fully computerized International Registry that will be established under the Treaty. Last week, the House Transportation and Infrastructure Committee favorably reported a *bill* that we support, H.R. 4226. Although it is somewhat different from the Administration's proposal that we sent to Congress last fall, it nevertheless accomplishes essentially the same goal full implementation of the Treaty. The bill designates the FAA's Registry as the "entry point" for authorizing filings to the International Registry while maintaining the full documentation system of the FAA registry. It also provides for expedited rulemaking so that the FAA may quickly update its regulations and put into place all requirements for implementing the Treaty.

And importantly, to avoid any confusion over what legal standards apply during the rulemaking process, the bill provides that the Treaty's provisions would supercede inconsistent FAA regulations. We support the bill and look forward to working with this Committee as the Treaty and legislation advance.

That concludes my testimony, Mr. Chairman. I would be pleased to answer any questions you may have.

Senator LOTT. Thank you, Ms. Blakey.

Mr. Mead, welcome back.

STATEMENT OF HON. KENNETH M. MEAD, INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION

Mr. MEAD. Thank you, Mr. Chairman. You'll recall that our office was heavily engaged during the summer of 2000 when we experienced gridlock and during that time we reported on that situation as well as a host of airline customer service issues. This summer we probably won't see the same magnitude of system-wide disruption that we saw in the summer of 2000 when nearly 30 percent of flights were delayed or canceled, but the potential for congestion and delays this summer in some key airports is very real and will approach 2000 levels.

Today I want to address four areas, current traffic and delay conditions, the changing drivers of conditions. They're different than they were in 2000 to some extent, and FAA's actions in the past 4 years, and some recommendations for next steps. I'd like to emphasize though, as we did in the summer of 2000 and its aftermath, that while the focus as we approach the summer is necessarily on Band-Aids and quick fixes to get you through the summer, you can't afford to postpone the quest for longer-term solutions, and DOT and FAA have welcome initiatives on the way in that regard, and they're clearly steps in the right direction. The key is going to be follow-through and closure on the actions to be taken.

Also, you have important issues of controller retirement. A big bubble is approaching, and that's because a lot of the controllers that were hired right after the strike are now retirement eligible. Another big issue is the adequacy of revenues inflowing to the trust fund. They're not materializing as had been anticipated 2 or 3 years ago, and as a result of that, you've got multi-billion dollar declines.

A couple reasons, Mr. Chairman. One is, a large component of the trust fund revenues is derived from the ticket tax, which is 7.5 percent applied to the ticket price. In the summer of 2000, for example, there were a lot of $1,000, $2,000 tickets that business travelers were paying. That market has—the bottom has fallen out of that market. So you have the 7.5 percent being applied to a much smaller ticket base.

Second, there are a lot—there's a recurrence of point-to-point service in the system. Part of the trust fund's revenue is based on a lot of segments, and as you reduce the number of segments, so too goes the revenue.

Traffic is nearly back to the 2000 levels and delays are emerging in several key markets. Twenty-one percent of flights delayed system-wide in the first quarter of 2004, the average delay is about 46 minutes. Still below 2000 levels, but delays are up 24 percent

in the first quarter of 2004 compared to the first quarter of 2003. The story is worse at some individual airports. Administrator Blakey mentioned Chicago O'Hare. Thirty-seven percent of the flights were delayed there in the first quarter of 2004, average delay 64 minutes. That was worse than 2000. Another airport that bears watching is our own Washington Dulles Airport. Independence Air, formerly Atlantic Coast, has announced its intent to add as many as 300 new flights by the end of the summer. If that occurs, passenger and traffic levels will stress the airport's runways, gates, security checkpoints, and the air traffic control system.

Other airports to watch this summer are listed on the handout. You have it front of you. This is the one with yellow, and that's on page 4 of my testimony. Of particular note are Philadelphia, Atlanta, LaGuardia, and Cincinnati. All of those airports have more traffic than they did in 2000, had at least one in five flights delayed last summer, and are further increasing their schedules this summer.

New factors are contributing to the delays that did not exist or were less prominent four summers ago. Those forces include increased reliance on regional jets, new and expanded low-cost carrier service, and post-9/11 security screening requirements.

Take regional jet growth. Since May 2000, scheduled regional jet departures have increased by 180 percent system-wide. In 2000, 9 percent of flights were on regional jets. Now it's 29 percent of flights. These aircraft use the same runways as larger jets, but they can cause heavy congestion at some airports and in airspace and they carry fewer passengers. That's why system operations can be up but emplacements can still be down.

Low-cost carrier expansion. Contrary to the situation in 2000, low-cost carriers are now entering the weakened legacy or network carriers' hubs and are expanding into transcontinental markets. Low-cost carriers now control 21 percent of the domestic market, up from 15 percent just 4 years ago.

Passenger security screening delays. When the TSA instituted new post-9/11 screening procedures at airports, Secretary Mineta established a wait-time goal of 10 minutes or less at screening checkpoints. The TSA is now under, of course, the Department of Homeland Security, and they report that their national wait time in April was 3.8 minutes during off-peak hours and about 8 minutes during peak hours, but they correctly note that those averages are quite misleading in that they don't represent the peak times within a week or seasonal fluctuations.

Just some examples. Atlanta, the news media reported, had a half-mile line last week. LaGuardia terminal B routinely on weekdays evenings 30 to 60 minutes. There is a host of other airports we can get into in a Q&A period that are experiencing times that go well over 10 minutes.

I think that information on all parts of the travel experience is necessary for consumers to make decisions based on door-to-door trip times, not just takeoff to landing times. Therefore, we're recommending that the government, just like the airlines are required to report their on-time performance, we think the Transportation Department, in coordination with DHS, ought to be reporting monthly airport-specific wait times at security screening check-

points for peak and off-peak hours. And I also want to tell you that yesterday Secretary Mineta directed the appropriate departmental officers to take the steps necessary to do that.

I'd like to speak to some of the FAA actions over the past 4 years. I think you have a pretty good report card on steps the FAA has taken in the last 4 years, and it should help this summer. Steps taken by the FAA and the Department include negotiating, directing, or brokering or scheduling reductions with the carriers at Chicago O'Hare. That was clearly not the case in the summer of 2000. I think there was a lack of willingness to do that.

Plans for this summer include, as the Administrator was noting, express lanes in the sky, holding flights at origin airports when delays at a destination airport reach 90 minutes or more. FAA and the airlines now have traffic management calls daily and FAA completed its choke point initiative to address bottlenecks between Chicago, Washington, D.C., and Boston. New runways provide the largest increases in capacity. In the last several years, six of them have been built at key hub and destinations airports and they will help this summer. Seven new ones are expected to be completed between now and 2008. But of the five airports that are experiencing the most congestion, only one of them's going to have one in the next couple years, and that would be Atlanta.

Also, a number of airspace redesign and technology-related efforts, such as a new precision landing system, were advanced in the aftermath of the summer of 2000. For the most part, those efforts have not progressed sufficiently to help out this summer.

Now, with summer fast approaching and traffic back to 2000 levels at a dozen airports, an action item we're recommending FAA move forward on promptly is to complete and publish its revised capacity benchmarks, preferably before the end of this month. These benchmarks were first developed in the aftermath of the summer of 2000 and set forth the number of flights an airport can support within the constraints of the airport and air traffic system under good and bad weather conditions. They are useful for, among other things, disclosing capacity levels at that airport in relation to what the airlines are scheduling, and by comparing capacity to scheduling, FAA and the airlines are in a much better position to anticipate and ameliorate delays before they materialize.

And finally, Mr. Chairman, as air traffic operations increase, it's important not to lose sight of safety. Two key areas to watch, runway incursions, potential collisions, which are potential collisions on the ground, and operational errors, which are when planes are allowed to come close together in the air.

There has been progress in both of these areas over the past year, but the numbers are much too high and as the traffic is increasing with those numbers really must come down.

Thank you.

[The prepared statement of Mr. Mead follows:]

PREPARED STATEMENT OF HON. KENNETH M. MEAD, INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION

Short and Long-term Efforts to Mitigate Flight Delays and Congestion

Mr. Chairman,

Thank you for inviting us to testify today. As the Subcommittee will recall, our office was heavily engaged during the summer of 2000 when congestion and delays created gridlock conditions in some parts of the aviation system. We were also directed, by statute, to review airline customer service issues that grew out of the delay problems. Since then, we have regularly reported on air traffic control modernization and industry operations and finances. Our next report updating the performance of the aviation system will be issued in June. Our testimony today is based on this body of work.

Given the difficult financial circumstances within parts of the airline industry, it seems counterintuitive that we would be here today talking once more about some of the same congestion and delay problems that existed 4 years ago as a result of the economic *robustness* of the industry. Although we are unlikely to see the same levels of disruption that we saw during 2000, when nearly 1 in 4 flights were delayed or cancelled, the potential for congestion and delays this summer in some key airports is very real and the highest it has been since that terrible summer in 2000.

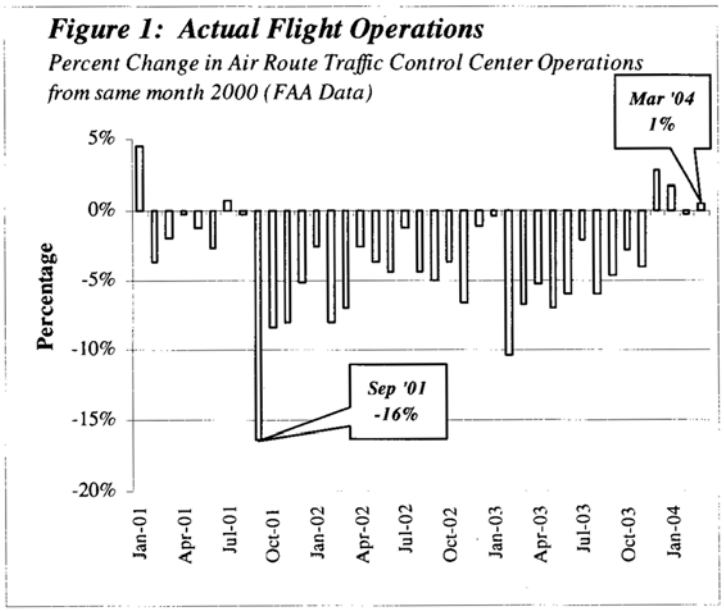
Today we would like to address four areas: current traffic and delay conditions, the changing drivers of congestion—including new security-related airport congestion, FAA's actions in the past 4 years, and what these all mean as we move forward this summer and beyond. This summer, our focus will necessarily be on finding quick fixes when problems surface. That will help us through the short term, but at the same time, we cannot afford to postpone the quest for long-term solutions to address the underlying root problems. We note that for the longer term, the Department and Federal Aviation Administration (FAA) have established a Joint Planning and Development Office to develop a longer term vision for the next generation air transportation system.

In addition to the Department's efforts to move forward this summer, we are making two recommendations today.

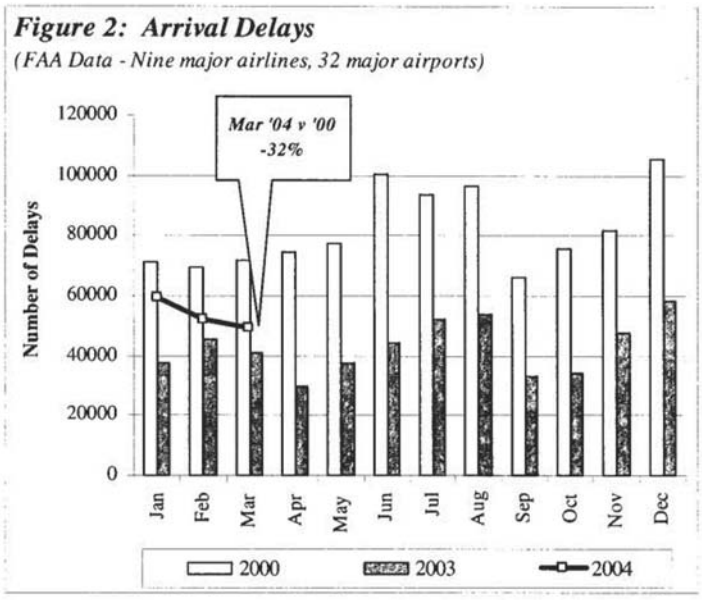
- First, FAA should complete and publish its revised capacity benchmarks as soon as possible, preferably before the end of May. These benchmarks were first developed in the aftermath of the summer of 2000 and set forth the number of flights a specific airport could support within the constraints of the airport's runways and the air traffic control system under varying weather conditions. As such, they were useful for disclosing capacity levels at specific airports in relation to proposed airline scheduling as well as for projecting additional capacity that could be gained through new runways, technology, and procedures.
- Second, the Department of Transportation, in collaboration with the Department of Homeland Security, should collect and report, on a monthly basis, airport-specific data disclosing wait-times at airport passenger security screening checkpoints, just as the airlines are required to report their on-time performance to the Department of Transportation. Secretary Mineta has directed DOT's Office of Aviation and International Affairs and the Bureau of Transportation Statistics to develop a statistically valid means to measure and report on security wait-times at the Nation's most congested airports. Such information, in conjunction with currently collected causation data, will form a complete picture of delays in the aviation system and pinpoint where action is needed.

Current Conditions: Traffic is Rebounding and Existing Delays Are Likely to Worsen This Summer

Even though we are not yet into the summer months—typically the busiest for the airlines—we are already seeing delays and congestion resulting from the rebound in airline traffic. As Figure 1 illustrates, traffic levels in the past few months have come very close to or exceeded levels for comparable months in 2000.



As traffic has grown, so have delays. Although average arrival delays [1] in the first quarter of 2004 of 21.3 percent were below those experienced in the first quarter of 2000 (23.7 percent), they are up 24 percent from the same period in 2003.



This recent delay growth is particularly pronounced at some key airports. At Chicago-O'Hare, 37 percent of flights were delayed in the first quarter of 2004 com-

[1] At the *55* Airports tracked by the FAA in the Aviation System Performance Metrics (ASPM) database.

pared to a delay rate of 21 percent in the first quarter of 2003. The average length of delay in the first quarter of 2004 at O'Hare totaled 64 minutes versus an average delay of 54 minutes in the first quarter of 2003. In the first quarter of 2000, 27 percent of flights at O'Hare were delayed for an average of 50 minutes.

One situation that bears watching, in particular, is the impact of the expected service growth at Washington's Dulles airport. In June, when Independence Air is launched by former regional carrier Atlantic Coast Airlines as a new low-cost carrier, traffic at Dulles will increase significantly. With Independence Air's announced intent to add as many as 300 additional daily flights by the end of the summer, and United's intent to bring new regional partners to Dulles to replace the flights once operated by Atlantic Coast, the level of operations will increase significantly. Security lines are likely to be an issue in addition to airside congestion.

Other airports to watch include Philadelphia, Atlanta, New York-LaGuardia, and Cincinnati. All have operations levels that exceed those of the summer of 2000, experienced delay rates greater than 20 percent *last* summer, and are increasing their schedules this summer by more than 6 percent. Figure 3 identifies other airports that experienced delays last summer that are expecting increased operations in the summer of 2004.

Figure 3: Airports With Delays Last Summer That are Increasing Schedules for Summer 2004*

	Airport	Percent Flights Delayed Summer 2003	Average Delay (Minutes)	Percent Increase in Flights Summer 2004 vs. Summer 2003
1	Newark	27.00	59.19	7%
2	**Philadelphia**	**25.40**	**51.27**	**9%**
3	NY-Kennedy	25.13	56.36	20%
4	West Palm Beach	24.47	46.49	12%
5	**Atlanta**	**24.24**	**48.78**	**9%**
6	Raleigh-Durham	23.45	48.29	13%
7	**Fort Lauderdale**	**22.95**	**49.12**	**10%**
8	Washington-Dulles	22.53	51.59	17%
9	Orlando	21.76	49.28	9%
10	**NY-LaGuardia**	**21.66**	**59.66**	**8%**
11	Baltimore	21.65	53.45	5%
12	**San Antonio**	**21.28**	**45.55**	**6%**
13	**Chicago-O'Hare**	**21.18**	**64.26**	**9%**
14	Boston	20.97	49.74	9%
15	**Cincinnati**	**19.57**	**48.41**	**6%**

*Airports in boldface all have scheduled operations for the summer of 2004 that exceed schedules filed in the summer of 2000.

As Operations Increase, Focus Must be Kept on Safety

As air traffic operations increases, it is important not to lose sight of safety. There are two key areas to watch—runway incursions (potential collisions on the ground) and operational errors (when air traffic controllers allow planes to come too close together in the air). Operational errors pose a significant safety risk, with an average of three operational errors per day and one serious error (those rated as high risk) every 7 days in Fiscal Year (FY) 2003. We have seen some progress on runway incursions during the first 7 months of FY 2004; however, the most serious runway incursions have continued to increase. In addition, although operational errors decreased marginally, they are still much too high.

Runway Incursions and Operational Errors

For the 7 month PeriodOctober 1, 2003 through April 30, 2004*

	Total Incidents			Most Serious Incidents		
	FY 2003	FY 2004	Percent Change	FY 2003	FY 2004	Percent Change
Runway Incursions	185	182	(2)	13	19	46
Operational Errors	601	589	(2)	32	22	(31)

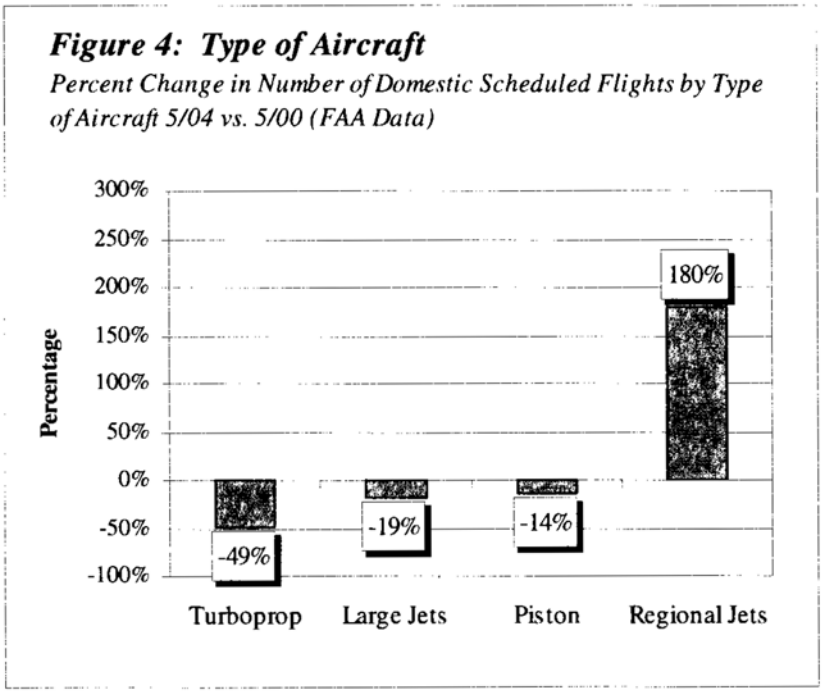
*FY 2004 information is preliminary as all incidents may not have received a final severity rating. Serious incidents for runway incursions include category A and B incidents. Serious incidents for operational errors include high severity incidents.

Changing Drivers of Congestion: Regional Jets, Low-Cost Carrier Expansion, and New Security Screening Procedures

In addition to the traditional causes of delays, including weather and over-scheduling, there are new forces in place this summer that did not exist or were less prominent four summers ago. These forces, including significantly increased reliance on regional jets, new and expanded service by low-cost carriers, and post-9/11 security screening requirements, are presenting new challenges for our airports and airways.

- *Regional Jet Growth Places Heavy Demands On Airports and Air Traffic Control.*

  In recent years, the network carriers have begun to rely more heavily on their regional partners to serve smaller markets with their fleets of smaller regional jets. In May 2000, scheduled flights aboard regional jets accounted for only 9 percent of all flights. In May 2004, scheduled flights aboard regional jets will account for 29 percent of all offered flights. Since May 2000, scheduled regional jet departures have increased by 180 percent.



Data from all 31 large hub airports that are tracked by the FAA indicate that the growth is more pronounced on an airport-by-airport basis. In 12 of the 31 airports, including some of those that experienced serious delays in 2000, the number of scheduled flights in May 2004 exceeded the number of scheduled flights in May 2000. In 9 of those 12 airports, however, the number of available

seats scheduled still lagged behind the number of available seats offered in May 2000, indicating, at least in part, how smaller number of passengers.

- *Low-Cost Carrier Expansion Adds New Flights to Large and Medium-sized Markets*

  Low-cost carriers, which once opted to operate at alternative, but more affordable secondary airports, are now challenging legacy carriers in their hubs in most large and medium-sized markets, and in transcontinental markets which they had previously not served. Earlier this month Southwest Airlines began operations at Philadelphia International Airport, going head-to-head against incumbent carrier U.S. Airways on several of its most profitable routes. Frontier Airlines is scheduled to begin serving Philadelphia from Los Angeles later this month.

  Low-cost carriers together now control about 21 percent of domestic air capacity-up from 15 percent 4 years ago. From a consumer standpoint, the impact of a low-cost carrier entering a market is often a sudden and significant reduction in average airfares. In fact, most low-cost carrier strategies are built on generating new passenger demand rather than shifting existing passengers from incumbent carriers. As a result, from an operational standpoint, the low-cost carriers new operations, coupled with incumbent carriers' competitive response to new entry can produce significant additional demands on an airport's runways and airspace.

- *Post 9–11 Security Screening Process Increases Travel Complexity.*

  When the Transportation Security Administration (TSA) was created within the Department of Transportation after September 11, Secretary Mineta established a goal that airline passengers be processed through new Federally-staffed airport passenger screening checkpoints in 10 minutes or less; a standard that was considered appropriate to meet the dual needs of ensuring secure airways while maintaining national mobility.

  TSA is periodically collecting data at a rotating list of selected airports. In April, TSA reports that average national wait time in April was 3.8 minutes during off-peak hours and 7.9 minutes during peak hours, although TSA advises that these numbers may be misleading as they do not reflect particular peaks during the week or in different seasons.

  Meanwhile, many airports, airlines, and consumers are becoming very vocal about lines at security checkpoints that routinely extend an hour or longer. For example, at Atlanta-Hartsfield Airport last week, news media reported that security lines stretched 1/2-mile long on one morning. At LaGuardia's "B" terminal, which houses all of the airport's low-cost carriers, security lines routinely stretch 30 to 60 minutes long in the evenings. With an anticipated growth in passengers during the busy summer season-some predict even longer delays.



At Phoenix-Sky Harbor International Airport, lines at security checkpoints averaged nearly 30 minutes in April 2004.

Passengers, airlines, and airports need accurate information concerning all aspects of the travel experience. It is time for detailed airport-specific data to be collected and reported, similar to the process used by the airlines to report delay occurrences and causes. If there are problems such as those being anecdotally reported, the first step to addressing them is to adequately quantify them.

The national goal is to provide high quality security in such a way that recognizes the importance of passenger mobility. In our work related to airline customer service commitments, one of the key shortfalls by the airlines was in how frequently and accurately they communicated with passengers about the occurrence of delays. The airlines made significant investments in systems to improve communications and the Government should adhere to the same standard.

Since 2000, FAA Has Made Progress in Managing and Enhancing Capacity, But Additional Actions Need to Be Taken

An important lesson from the summer of 2000 is that it is very difficult to make decisions and take action in the middle of a busy travel season. FAA and the airlines have taken a number of actions since the summer of 2000 that will help to enhance the flow of air travel this summer. Nevertheless, several efforts, including a new precision and approach landing system, that FAA believed held promise in the aftermath of the summer of 2000 have not materialized.

Actions Taken

- The Department and FAA have demonstrated a willingness to work with airlines at Chicago O'Hare to adjust airline schedules when flights exceeded the physical capacity of the airport. This willingness to take a hands-on approach to address delays was not present in 2000.
- FAA and the airlines have worked together to develop plans specifically for this summer. These include establishing express lanes in the sky and establishing a 90-minute delay trigger. When delays at an airport reach 90 minutes or more, other airports sending flights into the congested area will hold until congestion clears.

- FAA and the airlines now have daily conference calls about the status of the National Airspace System and expected weather patterns to help manage traffic, which provides an automatic feedback mechanism.
- FAA completed its "choke point" initiative to address bottlenecks in airspace that caused delays in the heavily traveled airspace triangle between Chicago, Washington DC, and Boston.
- New runways have been built at Phoenix, Detroit, Miami, Denver, Houston, and Orlando airports. The first phase of a runway project in Cleveland was also completed last year. Without a doubt, congestion would be much worse this summer without the new capacity in the system, particularly since five of the new runways are at hubs for network carriers and Orlando is a destination airport for much of the Eastern U.S.
- We note that for the longer term, the Department and FAA have established a Joint Planning and Development Office to develop a longer-term vision for the next generation air transportation system.

Actions Needed

During the summer of 2000, it was clear that a number of factors, including airline scheduling, impact of weather on various runway configurations, and air traffic control considerations determined how many aircraft an airport could handle under good and bad weather conditions. In 2000, FAA did not coordinate these data.

This was highlighted in Congressional hearings, and the Agency developed and published capacity benchmarks for the 31 busiest airports in 2001. These benchmarks set forth the number of flights a specific airport could support within the constraints of the airport's runways and air traffic control system under varying weather conditions. As such, they were useful for disclosing capacity levels at specific airports in relation to proposed airline scheduling as well as for projecting additional capacity that could be gained through new runways, technology, and procedures. Because of the reduced traffic that followed the economic downturn and 9111, the benchmarks were not as critical to FAA for decision-making purposes in 2002 and 2003.

As of today, we do not have updated capacity benchmarks but we understand that they are almost done. FAA has been updating its capacity benchmarks for months, and has expanded its analysis to include 35 airports, but has not yet released them. FAA should move to finalize and publish these updated benchmarks as soon as possible, preferably before the end of May 2004.

A number of efforts were advanced in the 2000–2001 time-frame for enhancing capacity in the near-term, including airspace redesign, the Local Area Augmentation System (a new precision landing system), and Controller-Pilot Data Link Communications (a new way for controllers and pilots to exchange information). There was even some discussion about accelerating the development of the Local Area Augmentation System. Since then, all three of these efforts have experienced problems.

While FAA completed its choke point initiative, our recent work shows that much work remains to get airspace redesign efforts on track and determine what can be accomplished in the near-and long-term. For example, FAA has over 40 ongoing airspace redesign projects but many of the them are not on schedule due to environmental issues, changes in the scope of projects, and/or difficulties in developing new procedures. In addition, the Local Area Augmentation System and Controller-Pilot Data Link Communications clearly had merit but they faced fundamental problems with respect to misjudging technological maturity or unexpected cost growth that needed to be addressed before they could move forward.

New runways provide the largest increases in capacity, and seven new runways are expected to be completed between now and 2008. There are about 10 other new runway projects in various planning stages, including a major effort at Chicago O'Hare, but FAA does not yet have firm completion dates for them. While the six recently completed runways will enhance capacity and limit delays at those airports, only one of the five airports (Atlanta) currently seeing the most delays is expected to have a new runway within the next 2 years. It is important that FAA continue to monitor the status of new runway projects to ensure they come on line.

Status of Major New Runway Projects—May 2004

Airport	Estimated Completion Date (Calendar Year)	Phase(s)	Cost Estimate (Millions)	Observations and Challenges to Timely Completion (as provided by the airport)
Cincinnati	2005	Construction	$250	None cited.
Minneapolis	2005	Construction	$618	The runway was delayed from 2003 to 2005 because of the economic situation of the air carriers serving the airport. The current challenges are: ✓ Having NAVAIDS operational. ✓ Relocating tenants.
Atlanta	2006	Construction	$1,250	The runway was delayed from 2005 to 2006 due to lawsuits related to fill dirt. The current challenge is: ✓ Complexity of the project.
Boston	2006	Construction	$78	The runway was delayed from 2005 to 2006 because of public opposition and lawsuits. The current challenge is: ✓ Maintaining current operations during construction.
St. Louis	2006	Construction	$1,023	The runway was delayed for 6 months due to airport contract delays and soil settlement concerns. Current challenges are: ✓ Weather and potentially unknown site conditions.
Dulles	2008	Environmental	$247	The runway was delayed from 2007 to 2008 due to economic concerns with the major hub airline. The airport did not cite any current challenges.
Seattle	2008	Environmental and Construction	$1,200	The runway was delayed from 2006 to 2008 due to environmental concerns. The current challenge is: ✓ Pending citizen lawsuits.

Where Do We Go From Here?

Increased flights and the onset of summer weather disturbances are likely to exacerbate the problems already apparent in the system. Summer schedules filed by the airlines indicate significant increases in flight operations, including those in markets already experiencing significant delays. Also, passenger counts are likely to increase during the airlines' busiest season, further exacerbating security-related delays.

- *FAA Needs to Complete and Publish Revised Capacity Benchmarks.* FAA needs to complete its updates and finalize its work on airport capacity benchmarks and publicly release them. These benchmarks show the maximum number of flights that can be handled each hour for both good and bad weather at the airports analyzed.

  If the airlines' scheduled flights at an airport exceed its good weather capacity or far exceed its bad weather capacity (particularly if it is an airport that can be expected to experience many days of severe weather in the summer), then we can expect delays radiating out into the aviation system from this airport. But by having updated benchmarks and using them to analyze scheduled operations, the Department and FAA will be in a position where they can anticipate and attempt to ameliorate delays before they materialize this summer.
- *Accurate and Specific Airport Security Wait-time Data Needs to be Collected and Publicly Disclosed.* Information on all parts of the travel experience is necessary for consumers who make travel decisions based on total door-to-door trip times—not just take-off to landing times. Both the Department of Transportation and the Department of Homeland Security have mandates concerning air transportation. DOT has a mandate to ensure safety and mobility, while DHS has a mandate to ensure security. The two agencies need to work collaboratively to find a way to meet these missions. As a start, a reasonable wait-time standard needs to be developed at each airport, for peak and off-peak hours. Data measuring performance against this standard should be submitted to the De-

partment of Transportation, similar to the monthly delay data the Department required from the air carriers following the gridlock experienced in 2000.

The collection of this data has had some positive impacts on the industry. Monitoring and publishing performance statistics has exerted pressure on the airlines to publish more realistic schedules and improve on-time performance.

In response to this emerging problem, Secretary Mineta has directed the Office of Aviation and International Affairs and the Bureau of Transportation Statistics to develop a statistically valid means to measure and report on security wait-times at the Nation's most congested airports. Such information, in conjunction with currently collected causation data, will form a complete picture of delays in the aviation system and pinpoint where action is needed.

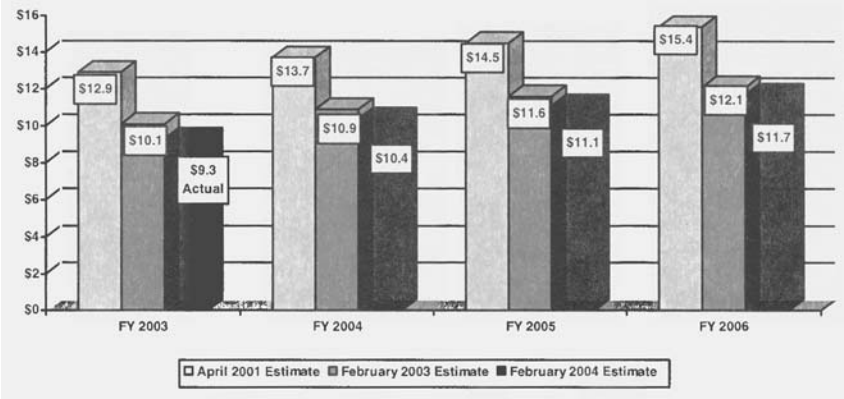
- *Short-term Allocation of Capacity.* We are likely to see travel disruptions this summer as demand once again exceeds capacity in some markets. The Administration has several options for addressing the problems. It could take a "hands-off' approach and rely on airlines to take actions to match schedules to available capacity. In recent years, some major airlines have taken actions to depeak their dominated hubs to alleviate self-imposed congestion and the self-imposed penalties of delays and cancellations that result.

  At airports where no single carrier dominates, airlines are reluctant to voluntarily reduce schedules for fear of ceding market share to competitors. In these situations, the Administration could take a more interventionist, command and control approach such as brokering or ordering schedule adjustments. The Administration has shown that it is willing to do so by its actions to deal with the spiraling delays at Chicago O'Hare earlier this year, although it is still too early to tell whether the most recent round of schedule reductions will have its desired impact. Administrative intervention within a competitive marketplace is not an ideal long-term solution, but given the severity of delays in Chicago, there were few other options available with potential for immediate relief.

  If neither of these options provides relief, and the situation continues to get worse, the time may be appropriate to begin to identify and evaluate market-based solutions. Even if administrative solutions work this summer to reduce queuing and customers' dissatisfaction with uncertain and unreliable service, their continued use would introduce distortions into aviation markets over time.
- *Long-Term Solutions Will Require Rethinking of How System is Funded.* One of the most significant changes between 2000 and 2004 is the loss of the premium business passengers. In addition to hurting the industry's revenues, the Aviation Trust Fund took a hard hit when the market for thousand dollar unrestricted tickets dried up. The Trust Fund's primary funding source the 7.5 percent ticket tax—applied to lower average fares results in lower tax revenue to the trust fund. In 2001, FAA estimated that Trust Fund revenues in 2005 would be about $14.5 billion. That estimate has now been reduced to $11.1 billion.

Figure 6: Aviation Trust Fund: Comparison of Trust Fund Receipts

$ in billions



It is against this backdrop that aviation funding is constrained and any material increases are going to require either a change in the tax structure, *i.e.,* how revenue is generated for the Trust Fund, or a greater reliance on the General Fund.

Mr. Chairman, this concludes my statement. I am happy to answer any questions that you might have.

Senator LOTT. Ms. Hecker, thank you for being here.

STATEMENT OF JAYETTA Z. HECKER, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, U.S. GENERAL ACCOUNTING OFFICE

Ms. HECKER. Thank you very much. I'm very pleased to be here, really honored to represent a long-term body of work on a number of issues. My focus today will be a little longer-term perspective than you've heard, focusing on the challenges that FAA faces in transitioning into a performance-based organization.

Basically, I'll cover three issues, the context being, the first, the major challenges in the environment that FAA is in. The second will be some of the promise and status of the major implementation reforms, including acquisition reform, personnel reform, and the establishment of a performance-based organization. And then finally drawing on some best practices work I'll discuss some critical success factors that are key to FAA transforming into a performance-based organization.

The first point on the challenges really is captured in some ways by the front page of my statement, which has a chart on it, which basically outlines, graphs on an index, FAA expenses relative to air carrier operating expenses. As we know, this industry is still recovering from financial losses of unseen proportions, and as a result, tax receipts are also falling by significant levels, over 20 percent since 1999. Yet during that same period, we see an escalation of clear proportions relative to air carrier costs.

Now, these cost pressures on FAA and the decline in the trust fund really have to be taken in the context of really what is a grave financial crisis facing the country and the obvious pressure that is on any general fund contributions to any sector of the economy. Basically, the bottom line of this is that cost cutting really has to be a watch word of FAA. It is, there's no doubt that it's a critical part of a lot of the plans and that's really an extremely important environment that the FAA has recognized that it's in.

Now, looking to the types of improvements that have been put in place, both administratively and by legislative direction, of acquisition reform, personnel reform, and the ATO, it's interesting because we have nearly 10 years since the first two of those initiatives were in place, and yet despite those reforms, systemic management issues, including inadequate management controls and oversight of human capital issues have continued to contribute to cost overruns, schedule delays, and performance shortfalls.

Quickly in the personnel area, FAA has in fact used some of its extensive new authority and implemented another many reforms, but those are far from fully implemented, and notably, the organization is still working to implement tools that are absolutely essential to tracking cost and workforce data.

In the acquisition area, similarly, reforms have been introduced, improvements in oversight of investment risk, but again, continued weaknesses impede FAA's ability to manage investments effectively and make sound decisions. It perhaps in some ways explains why despite billions of dollars in investments in both ongoing and completed ATC modernization projects, there's really very little expectation of improvements in operating efficiencies as a result of these modernization efforts in controlling or reducing overall costs.

So clearly we haven't had a cost-conscious management of the capital budgeting. In fact, Administrator Blakey recently noted the core problem is that the operational outcome of capital investments hasn't been measured, the definition of success of these projects was not results-oriented, and in particular, the capital budget was not linked to future operating costs.

All of that sets the stage for perhaps one of the most significant reforms for the organization and it's the establishment of an air traffic organization with the focusing on becoming a performance-based organization. It clearly holds promise for needed change and long overdue improvements in many areas. But while it has just gotten started really in February, it's just beginning to be staffed up, progress has been slow relative to some initial milestones, and moreover, the office faces extraordinary challenges in implementing reforms.

Again the Administrator has recognized this, said that success of the ATO is absolutely crucial to the future of air travel, noting, this is a quote from one of your statements, we can't be more accountable, cost efficient, and customer service oriented unless we change our way of doing business.

That brings us to the third point that I have in this best practices and global panel that we had, bringing together high performing organizations and honed in an what the critical success factors are for organizations transforming to be more performance oriented. The four characteristics are the clear mission, effective use of partnerships, a clear client focus, and strategic management of human capital.

Our past work has shown, however, that while there has been real progress in defining the mission and even quantifying it and having performance goals, that employee behaviors have not reflected a strong commitment to the mission focus.

In the strategic partnership area, while there have been efforts in this area, it has always been difficult and really time consuming to form effective partnerships.

On the client focus, FAA has clearly recognized that it has failed to have a consistent and clear customer focus, again noting that the Administrator has said, we must be more customer-driven in all our activities.

The strategic management of people is absolutely critical. They've begun to put in place a pay-for-performance system, and one of the more important early challenges will be to watch the new contract negotiations with air traffic controllers. Again, because of the bottom line of personnel costs, the Agency cannot control operational costs without taking a look at making more effective use and ensuring productivity of its people.

In summary, then, while FAA has taken promising steps through the creation of the ATO, and is working to restructure itself, it still faces significant and long-standing systemic management challenges. The core of these challenges and the focus of continuing oversight and the focus of these activities already within FAA are assuring that the costs of its services are well understood, effectively tracking and documenting improvements in productivity of both its acquisition and control of work force, and better aligning capital decisions with measurable customer valued performance outcomes.

That concludes my statement. We have a number of ongoing assignments in many of these areas for you and others and we hope we can be of support to the Congress in providing oversight of these critical reforms. Thank you.

[The prepared statement of Ms. Hecker follows:]

GAO HIGHLIGHTS

Federal Aviation Administration

CHALLENGES FOR TRANSFORMING INTO A HIGH-PERFORMING ORGANIZATION

Why GAO Did This Study

Over the last two decades, FAA has experienced difficulties meeting the demands of the aviation industry while also attempting to operate efficiently and effectively. Now, as air traffic returns to pre-9/11 levels, concerns have again arisen as to how prepared FAA may be to meet increasing demands for capacity, safety, and efficiency.

FAA's air traffic control (ATC) modernization efforts are designed to enhance the national airspace system through the acquisition of a vast network of radar, navigation, and communication systems. Nine years have passed since Congress provided FAA with personnel and acquisition reforms. However, projects continue to experience cost, schedule and performance problems. FAA's Air Traffic Organization (ATO) is its most current reform effort. Expectations are that the ATO will bring a performance management approach to ATC modernization.

This statement focuses on three main questions: (1) What are some of the major challenges and demands that confront FAA? (2) What is the status of FAA's implementation of reforms and/or procedural relief that Congress provided? and (3) What are some of the critical success factors that will enable FAA to become a high-performing organization?

What GAO Recommends

GAO is making no recommendations.

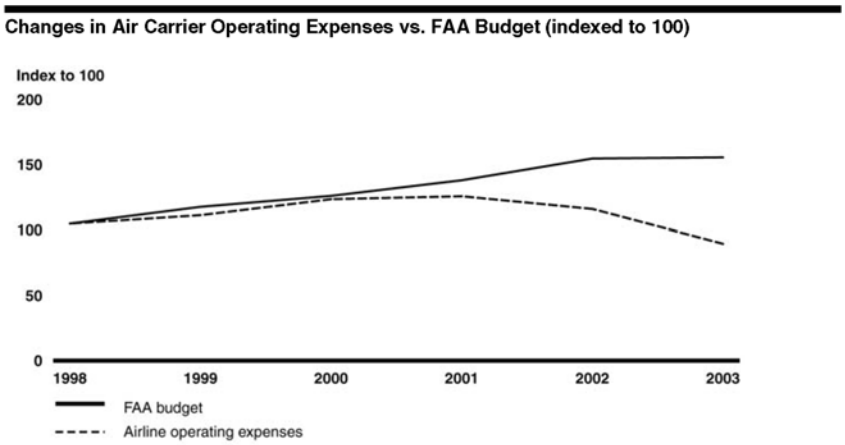
What GAO Found

A forecasted increase in air traffic coupled with budgetary constraints will challenge FAA's ability to meet current and evolving operational needs. The commercial aviation industry is still recovering from financial losses exceeding $20 billion over the past 3 years. Many airlines cut their operating expenses, but FAA's budget continued to rise (see figure). However, transportation tax receipts into the Airport and Airways Trust Fund, from which FAA draws the majority of its budget, have fallen by $2.0 billion (nearly 20 percent) since 1999 (in constant 2002 dollars). Cost-cutting and cost-control will need to be watchwords for FAA from this point forward.

FAA has implemented many of the reforms authorized by Congress 9 years ago, but achieved mixed results. Despite personnel and acquisition reforms the agency contended were critical to modernizing the Nation's air traffic control (ATC) system, systemic management issues continue to contribute to the cost overruns, schedule delays, and performance shortfalls. FAA's most current reform effort, the Air Traffic Organization (ATO)—a new performance-based organization mandated by AIR–21 that is operating the ATC system—is just now being put in place.

To meet its new challenges, FAA must fundamentally transform itself into a high-performing organization. The key characteristics and capabilities of high-performing organizations fall into four themes: (1) a clear, well articulated, and compelling mission; (2) strategic use of partnerships; (3) focus on the needs of clients and cus-

tomers; and (4) strategic management of people. FAA has taken some promising steps through its new ATO to restructure itself like high-performing organizations, but still faces significant and longstanding systemic management challenges. Even modest organizational and operational changes at FAA can be difficult and time consuming.



Source: GAO analysis of data from the U.S. Office of Management and Budget and the DOT Bureau of Transportation Statistics.

STATEMENT OF JAYETTA Z. HECKER, DIRECTOR, PHYSICAL INFRASTRUCTURE TEAM, UNITED STATES GENERAL ACCOUNTING OFFICE

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to participate in today's hearing to discuss the challenges that FAA faces both in the immediate environment and over the next decade. We all recall that in the summer of 2000, the air traffic control system lacked the capacity to handle demand efficiently, and flight delays produced near-gridlock conditions at several U.S. airports. A combination of factors—the downturn in travel caused by the general economic slowdown, SARS, and of course the crises instigated by the events of 9/11—reduced traffic significantly and reduced pressure on the air traffic control system.

Passenger traffic and airline operations are slowly returning to previous levels, making this an appropriate time to re-examine the status of nation's aviation leadership and infrastructure and its preparations for the future of air transport over the next decade. FAA's budget request for 2005 provides a starting point from which to review the agency's direction.

My statement today focuses on three main questions: (1) What are some of the major challenges and demands that confront FAA? (2) What is the status of FAA's implementation of reforms and/or procedural relief that Congress provided? And (3) What are some of the critical success factors that will enable FAA to become a high-performing organization? Our statement is based on our past reports on ATC modernization and airline competition work—updated to reflect important milestones and recent interviews with key stakeholders in the aviation community, including several current and former FAA officials. We performed our work in accordance with generally accepted government auditing standards.

In summary:

Significant external and internal demands will challenge FAA's ability to meet current operational needs and require it to adapt to meet the evolving needs of the aviation industry. The commercial aviation industry is still recovering from financial losses exceeding $20 billion over the past 3 years. The downturn in travel has affected the Airport and Airways Trust Fund, from which FAA draws the majority of its budget. Transportation tax receipts into the Trust Fund fell by a total of $2.0 billion (19.6 percent) between 1999 and 2003. The overall condition of the Federal budget adds more pressure on FAA's budget. Taken together, cost-cutting and cost-control need to be watchwords for FAA from this point forward. To meet the demands of the aviation industry for safe, secure, and efficient operations and for ad-

ditional capacity to meet forecasted growth, FAA will need to continue to improve its management controls. Traditionally, FAA's ability to operate efficiently and effectively—particularly regarding its air traffic control modernization projects—have been hampered by inadequate management of information technology and financial management controls.

Nine years have passed since Congress provided FAA with the personnel and acquisition reforms the agency contended were critical to successfully modernizing the Nation's air traffic control (ATC) system. Despite these reforms, systemic management issues, including inadequate management controls and human capital issues continue to contribute to the cost overruns, schedule delays, and performance shortfalls that FAA's major ATC projects have consistently experienced in the past.

- Personnel reforms addressed three broad areas: (1) compensation and performance management, (2) workforce management, and (3) labor and employee relations. FAA has taken steps to implement a number of reforms in each of the three areas.[1] For example, in the area of labor and employee relations, FAA implemented initiatives establishing new partnership forums for union and nonunion employees and a new model work environment program.[2] However, in February 2003, we found that the agency had not fully incorporated elements that are important to effective human capital management, including data collection and analysis, performance goals and measures, and establishing links between reform goals and program goals.
- As part of its procurement reforms, FAA introduced a new acquisition management system in 1996 to reduce the time and cost to deploy new products and services. To FAA's credit, our work has shown improvements in the agency's oversight of investment risk, tracking key information from the investment selection process in a management information system, and implementation of guidance for validating costs, benefits, and risks. However, in estimating the costs of new projects, FAA has not yet incorporated actual costs from developing related systems. Moreover, the agency has not yet implemented processes for evaluating projects after implementation in order to identify lessons learned and improve the investment management process. These weaknesses have impeded FAA's ability to manage its investments effectively and make sound decisions about continuing, modifying, or canceling projects.
- FAA's Air Traffic Organization (ATO) is one of its most current reform effort. Under the leadership of a Chief Operating Officer, the ATO is a new performance-based organization that is operating the ATC system. While the ATO holds promise for laying the foundation for much needed and overdue organizational change, progress has been slow, and the office still faces significant challenges to implementing reform.

To meet the challenges of the 21st century, FAA must fundamentally transform itself to become a high-performing organization. Our work has shown that high-performing organizations have adopted management controls, processes, practices, and systems that are consistent with prevailing best practices and contribute to concrete organizational results. Specifically, the key characteristics and capabilities of high-performing organizations fall into four themes (1) a clear, well articulated, and compelling mission; (2) strategic use of partnerships; (3) focus on the needs of clients and customers; and (4) strategic management of people. To facilitate the transformation of Federal agencies to high performing organizations, we have also recommended that agencies apply the Chief Operating Officer concept to provide long-term attention and focus on management issues and transformational change. FAA has begun implementing this concept. While FAA has taken some promising steps through its new ATO to restructure itself in a manner consistent with high-performing organizations, the agency still faces significant and longstanding systemic management challenges which must be overcome if it is to meet the demands and match the pace of ongoing changes in the aviation industry and transform itself into a world-class organization. Our work for more than two decades has shown that even modest organizational and operational changes at FAA can be difficult and time consuming, which underscores the difficult road ahead for FAA's leadership.

---

[1] *FAA's Modernization Efforts—Past, Present, and Future* (GAO–04–227T): October 30, 2003.

[2] *Human Capital Management: FAA's Reform Effort Requires a More Strategic Approach,* GAO–03–156, February 2003.

Significant External and Internal Demands Will Challenge FAA's Current and Evolving Operations

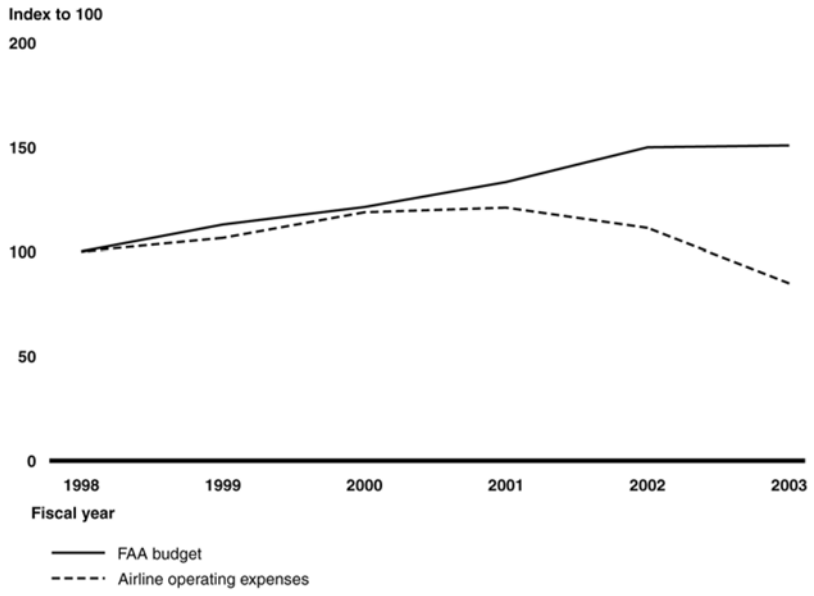
FAA faces significant demands that will challenge its ability to operate both in the current environment and in what it expects to encounter in the coming decade. With the industry still attempting to recover from the most tumultuous period in its history, FAA's funding is constrained by lowered Airports and Airways Trust Fund receipts and increased pressure on the contribution from the General Fund. To meet its current and future operational challenges, FAA is facing demands for greater efficiency and accountability. And it goes without saying that FAA must continue to meet demands for maintaining safety standards.

The U.S. Commercial Aviation Industry Is Still Recovering From Unprecedented Financial Chaos

Since 2001, the U.S. airline industry has confronted financial losses of previously unseen proportions. Between 2001 and 2003, the airline industry reported losses in excess of $20 billion. A number of factors—including the economic slowdown, a shift in business travel buying behavior, and the aftermath of the September 11, 2001 terrorist attacks—contributed to these losses by reducing passenger and cargo volumes and depressing fares. The industry has reported smaller losses since 2001, but still may not generate net profits for 2004.

To improve their financial position, many airlines cut costs by various means, notably by reducing labor expenditures and by decreasing capacity through cutting flight frequencies, using smaller aircraft, or eliminating service to some communities. According to data from the Bureau of Transportation Statistics, large U.S. air carriers cut their operating expenses by $7.8 billion from 2000 through 2002. The drop in total large air carrier operating expenses stands in sharp contrast to increases in FAA's budget. (See Figure 1.)

Figure 1: Changes in Air Carrier Operating Expenses Compared to Changes in FAA Budget, 1998 – 2003 (nominal dollars, indexed to 100)



Source: GAO analysis of data from the U.S. Office of Management and Budget and the DOT Bureau of Transportation Statistics.

Budgetary Pressure on FAA Will Increase Over Time

FAA's budget—which has increased from $9 billion in 1998 to $14 billion in 2004—will be under pressure for the foreseeable future. Over the past 10 years, FAA has received on average approximately 80 percent of its annual funding from the Airports and Airways Trust Fund (Trust Fund), which derives its receipts from

taxes and fees levied on airlines and passengers.[3] The downturn in passenger travel, accompanied by decreases

Contributions from the General Fund have averaged about 20 percent of FAA's budget since 1994, but total Federal spending is under increasing stress because of growing budget deficits. According to the March 2004 analysis from the Congressional Budget Office, the Federal deficit under the President's fiscal 2005 budget will be $358 billion.

Clearly, a major challenge for FAA both now and into the future will be cost-cutting and cost control.

- Operating costs represent over half of FAA's budget. For 2005, the Administration has requested $7.8 billion for Operations. Because salaries and benefits make up 73 percent of that total, restraining the growth in operations spending will be extremely difficult, even with improvements in workforce productivity.
- Capital expenses (*i.e.,* the Facilities and Equipment account) represent less than 20 percent of FAA's budget, but virtually none of the projects requested for funding for 2005 is expected to generate any savings in the Operations account.
- Funds for airports' capital development have more than doubled since 1998, rising from $1.6 billion (18.3 percent of the total) to a requested $3.5 billion (25.1 percent of the total) in 2005. Current funding levels are sufficient to cover much of the estimated cost of planned capital development. However, building new runways is not always a practicable way to increase capacity. FAA must decide how to increase capacity and service, as well as improve system efficiency and safety.

Financial Pressure Adds Premium to Improving Management Controls

FAA's ability to operate efficiently and effectively—particularly regarding its air traffic control modernization projects—have been hampered over time by inadequate management of information technology and financial management controls. FAA's ATC modernization projects have consistently experienced cost, schedule, and performance problems that we and others have attributed to systemic management issues.

The effect has been extraordinary cost growth and a persistent failure to deploy systems. FAA initially estimated that its ATC modernization efforts could be completed over 10 years at a cost of $12 billion. Two decades and $35 billion later, FAA still has not completed key projects, and expects to need another $16 billion thru 2007, for a total cost of $51 billion. GAO has kept major FAA modernization systems on the watch list of high-risk Federal programs since 1995.

We believe that, in the current budget environment, cost growth and schedule problems with ongoing modernization efforts can have serious negative consequences: postponed benefits, costly interim systems, other systems not being funded, or a reduction in the number of units purchased.

Forecasts of Future Aviation Activity Add Further Demands for Immediate Improvements in FAA Operations

FAA recognizes that future U.S. air transport activity will likely place significant demands on its ability to keep the system operating. FAA's most recent forecasts project significant increases in overall system activity by 2015. Along with increased movements of aircraft and passengers comes an increased workload for FAA, as well as demands for more efficient operations and/or an expansion of capacity. (See Table 1).

---

[3] The Trust Fund was established by the Airport and Airway Revenue Act of 1970 (P.L. 91–258) to help fund the development of a nationwide airport and airway system and to fund FAA investments in air traffic control facilities. It provides all of the funding for the Airport Improvement Program, which provides grants for construction and safety projects at airports; the Facilities and Equipment account that funds technological improvements to the air traffic control system; and a Research, Engineering, and Development account, which supports aviation safety, mobility, and environmental goals. In Fiscal Year 2002, the Trust Fund provided 79 percent of the funding for FAA Operations, which represented almost 50 percent of Trust Fund expenditures. The Trust Fund is supported by 10 dedicated excise taxes. In Fiscal Year 2002, the Trust Fund received about $10 billion in revenue from these taxes and interest. in average yields, has resulted in lowered receipts into the Trust Fund. On average, domestic yields have fallen since 2000, and are at their lowest levels since 1987. As a result, the total amount of transportation taxes that were remitted to the Trust Fund declined by $2.0 billion (19.6 percent) between Fiscal Years 1999 and 2003 (in 2002 dollars).

Table 1.—Forecasted Increase in Commercial Air Passengers, Operations, and FAA Workload

		2003	2015 (est.)	Percent change
Industry activity measure	Enplanements (millions)	641.4	1057.6	65.0
	Large carrier fleet	4,090	5,732	40.1
	Regional carrier fleet	2,672	4,303	61.0
FAA workload measure	Instrument operations (millions)	26.3	36.8	39.9
	Commercial instrument flight rule aircraft handled at Air Route Traffic Control Centers (millions)	31.9	44.9	40.8

Source: FAA.

Evidence of FAA's inability to meet system capacity demands already exists from the experience at Chicago O'Hare earlier this year. To reduce flight delays, FAA asked American Airlines and United Airlines to reduce their peak scheduled operations by 7.5 percent by June 10. As Secretary Mineta has already recognized, unless system capacity expands, the nation will face ". . . more and more O'Hares as [the] economy continues to grow, and as new technology and competition bring even greater demand." It seems clear, however, that FAA's Operational Evolution Plan,[4] a few additional runways, and updating more controller workstations with the Standard Terminal Automation Replacement System (STARS)[5] are not the answer to the system's need for capacity. We cannot pave our way to the year 2025.

Despite Personnel and Acquisition Reforms, Systematic Management Issues Continue to Impede ATC Modernization

Over the years, systematic management issues, including inadequate management controls and human capital issues have contributed to the cost overruns, schedule delays, and performance shortfalls that FAA has consistently experienced in acquiring its major ATC modernization systems. Historically, some of the major factors impeding ATC acquisitions included an ineffective budget process and an inability to provide good cost and schedule estimates. A number of cultural problems including widely diffused responsibility and accountability, inadequate coordination, and poor contract management/oversight also slowed the progress of individual projects. Problems within FAA's acquisition and procurement processes included an inability to obligate and spend appropriate funds in a timely manner, a complicated procurement and acquisition cycle, failure to field systems in a timely fashion, and an inability to field current technology systems. FAA lacked a means to strategically analyze and control requirements, and good cost and schedule estimates were often not effectively developed and integrated into acquisition plans. To address many of these issues, Congress passed legislation in 1995 exempting FAA from many of the existing Federal personnel and procurement laws and regulations and directed the agency to develop and implement new acquisition and personnel systems. More recently, in 2000, the Congress and the administration together provided for a new oversight and management structure and a new air traffic organization to bring the benefits of performance management to ATC modernization.

FAA Has Taken Steps to Implement Human Capital Strategies, but Further Efforts are Needed

According to FAA, burdensome government-wide human capital rules impeded its ability to hire, train, and deploy personnel and thereby hampered its capacity to manage ATC modernization projects efficiently. In response to these concerns, Congress granted FAA broad exemptions from Federal personnel laws and directed the agency to develop and implement a new personnel management system.

- *Human capital reforms:* Following the human capital exemptions granted by Congress in 1995, FAA initiated reforms in three primary areas: compensation and performance management, workforce management, and labor and employee relations. In the area of compensation and performance management, FAA introduced two initiatives—a new, more flexible pay system in which compensation levels are set within broad ranges, called pay bands, and a new perform-

[4] The Operational Evolution Plan is an ongoing 10-year plan developed by the FAA to increase the capacity and efficiency of the national airspace system, while enhancing safety and security.

[5] STARS will replace controller workstations with new color displays, processors, and computer software at FAA and DOD terminal air traffic control facilities—within 5 to 50 nautical miles of an airport.

ance management system intended to improve employees' performance through more frequent feedback with no summary rating. Both new systems required an exemption from laws governing Federal civilian personnel management found in title 5 of the United States Code. In the area of workforce management, FAA implemented a number of initiatives in 1996 through the establishment of agency-wide flexibilities for hiring and training employees. In the area of labor and employee relations, FAA established partnership forums for union and nonunion employees and a new model work environment program. Other human capital initiatives have included restructuring FAA's organizational culture and implementing means to provide sustained leadership.

- *Organizational culture:* FAA issued an organizational culture framework in 1997 that attempted to address some of the vertical "stovepipes" that conflicted with the horizontal structure of ATC acquisition team operations. A key piece of this framework included the establishment of integrated product teams in an attempt to improve collaboration among technical experts and users. Moreover, integrated teams have not worked as intended. For example, competing priorities between two key organizations that were part of the Wide Area Augmentation System's integrated team ultimately negated its effectiveness and undermined its ability to meet the agency's goals for the system.
- *Sustained leadership:* Until former Administrator Garvey completed her 5-year term in 2002,[6] FAA had been hampered by a lack of sustained leadership at FAA was also problematic.[7] During the first 10 years of the ATC modernization effort, the agency had seven different Administrators and Acting Administrators, whose average tenure was less than 2 years. Such frequent turnover at the top contributed to an agency culture that focused on short-term initiatives, avoided accountability, and resisted fundamental improvements to the acquisition process.

Nine years have passed since the agency received broad exemptions from laws governing Federal civilian personnel management. While FAA has taken a number of steps since personnel reforms were implemented, it is not clear whether and to what extent these flexibilities have helped FAA to more effectively manage its workforce and achieve its mission. The agency did not initially define clear links between reform goals and program goals, making it difficult to fully assess the impacts of personnel reform. FAA has not yet fully implemented all of its human capital initiatives and continues to face a number of key challenges with regard to personnel issues. In our February 2003 report, we found that the agency had not fully incorporated elements that are important to effective human capital management into its overall reform effort, including data collection and analysis and establishing concrete performance goals and measures. Currently, the agency is still working to implement tools to keep accurate cost and workforce data. The new Air Traffic Organization has announced plans for establishing cost accounting and labor distribution systems, but they are not yet in place. More comprehensive cost accounting systems and improved labor distribution systems are necessary to maximize workforce productivity and to plan for anticipated controller retirements. More broadly, taking a more strategic approach to reform will allow the agency to better evaluate the effects of human capital initiatives, which it sees as essential to its ATC modernization effort.

ATC Projects Continue to Experience Cost, Schedule, and Performance Problems

FAA established its current acquisition management system (AMS) in 1996 following acquisition reform. The agency has reported taking steps to overseeing investment risk and capturing key information from the investment selection process in a management information system. It has also implemented guidance for validating costs, benefits, and risks.

FAA has also taken steps to improve the management of its ATC modernization efforts. For example, it implemented an incremental, "build a little, test a little" approach that improved its management by providing for mid-course corrections and thus helping FAA to avoid costly late-stage changes. In the area of management controls, FAA has (1) developed a blueprint for modernization (systems architecture) to manage the development of ATC systems; (2) established processes for selecting and controlling information technology investments, (3) introduced an integrated framework for improving software and system acquisition processes, and (4) im-

[6] To provide FAA's ATC modernization efforts with needed direction and stability, the Congress established a 5-year term for the FAA Administrator in 1994. Former Administrator Garvey was the first to complete a term of this length in 2002.

[7] Congress established a 5-year term for the FAA Administrator in 1994.

proved its cost-estimating and cost-accounting practices. Nonetheless, ATC modernization efforts continue to experience cost, schedule, and performance problems.

FAA is not yet incorporating actual costs from related system development efforts in its processes for estimating the costs of new projects. Further, the agency has not yet fully implemented processes for evaluating projects after implementation in order to identify lessons learned and improve the investment management process. Reliable cost and schedule estimates are essential to addressing some of the ongoing problems with ATC acquisitions.

In addition to controlling cost and schedule overruns, FAA needs to take concrete steps to identify and eliminate redundancies in the National Airspace System (NAS). FAA must review its long-term ATC modernization priorities to assess their relative importance and feasibility in light of current economic constraints, security requirements, and other issues. The ongoing challenges facing air traffic control modernization efforts led Congress and the administration to create a new oversight and management structure through the new Air Traffic Organization (ATO) in order to bring the benefits of performance management to ATC modernization.

Progress in Establishing the New Air Traffic Organization Has Been Slow

The ATO was created by an executive order in 2000 to operate the air traffic control system. In the same year, Congress enacted legislation establishing the Air Traffic Services Subcommittee, a five-member board to oversee the ATO and a chief operating officer to manage the organization. The ATO was designed to bring a performance management approach to ATC modernization efforts.

The Air Traffic Services Subcommittee has made some initial efforts with regard to the establishment of the ATO. They have taken steps to focus on the structure of the ATC system, including reviewing and approving performance metrics for the ATO, establishing a budget, and approving three large procurements that FAA initiated.

However, progress in establishing the organization has been slow, given that FAA received the mandate to establish the ATO nearly four years ago. FAA encountered difficulties finding a qualified candidate to take the position of chief operating officer, and did not fill the vacancy until June 2003. The final executive positions for the organization including the Vice-Presidents of Safety and Communications were just filled last month.

Key tasks for the ATO will include organizational restructuring, implementing effective financial management and cost-accounting systems, evaluating day-to-day business practices, and fostering growth with efficiency. Rapidly changing technology, limited financial resources, and the critical importance of meeting client needs will present significant challenges in order for the ATO to truly evolve into a high performing organization.

FAA's Future Success Hinges on Several Critical Success Factors

To successfully meet the challenges of the 21st century, FAA must fundamentally transform its people, processes, technology, and environment to build a high-performing organization. Our work has shown that high-performing organizations have adopted management controls, processes, practices, and systems that are consistent with prevailing best practices and contribute to concrete organizational results. Specifically, the key characteristics and capabilities of high-performing organizations fall into four themes as follows:

- *A clear, well-articulated, and compelling mission.* High-performing organizations have a clear, well-articulated, and compelling mission, strategic goals to achieve it and a performance management system that aligns with these goals to show employees how their performance can contribute to overall organizational results. FAA has taken its first steps toward creating a performance management system by aligning its goals and budgetary resources through its Flight Plan—blueprint for action for Fiscal Year 2004 through 2008—and its Fiscal Year 2005 budget submission. In addition, the new ATO has published both its vision and mission statement.

  Our past work has found that FAA's ability to acquire new ATC modernization systems has been hampered by its organizational culture, including employee behaviors that did not reflect a strong commitment to mission focus. Given the central role that FAA's employees will play in achieving these performance goals and overall agency results, it is critical for them to both embrace and implement the agency's mission in the course of their daily work. In addition, our work has found regularly communicating a clear and consistent message about the importance of fulfilling the organization's mission helps engage employees, clients, customers, partners, and other stakeholders in achieving higher performance.

- *Strategic use of partnerships.* Since the Federal Government is increasingly reliant on partners to achieve its outcomes, becoming a high-performing organization requires that Federal agencies effectively manage relationships with other organizations outside of their direct control. FAA is currently working to forge strategic partnerships with its external customers in a number of ways. For example, the agency recently announced a program to create "express lanes in the sky" to reduce air traffic delays this spring and summer and is in the early stages of working with selected Federal partners to develop a long-term plan for the national aerospace system (2025) and to leverage Federal research funds to conduct mutually beneficial research. In addition, FAA has ongoing partnerships with the aviation community to assess and address flight safety issues (*e.g.,* development of technology to prevent fuel tank explosions and to reduce the potential for aircraft wiring problems through development of a "smart circuit breaker").

  However, our past work has shown that forging strategic partnerships with organizations outside of FAA can be difficult and time-consuming. For example, FAA's efforts to establish voluntary data sharing agreements with airlines—Flight Operational Quality Assurance Program (FOQA)—spanned more than a decade, due in part, to tremendous resistance from aviation community stakeholders who formed a rare alliance to oppose several of FAA's proposals. In addition, when attempting to increase airport capacity (*e.g.,* new runways), FAA and airport operators have frequently faced opposition from the residents of surrounding communities and environmental groups. Residents are often concerned about the potential for increases in airport noise, air pollutant emissions, and traffic congestion.
- *Focus on needs of clients and customers.* Serving the needs of clients and customers involves identifying their needs, striving to meet them, measuring performance, and publicly reporting on progress to help assure appropriate transparency and accountability. To better serve the needs of its clients and customers, FAA published *Flight Plan,* which provides a vehicle for identifying needs, measuring performance, and publicly reporting progress. Flight Plan includes performance goals in the areas of safety, greater capacity, international leadership, and organizational excellence, which are linked to the agency's budget and progress monitored through a Web-based tracking system.

  However, over the years, FAA's efforts to meet client and customer needs have not always been successful, and some have had a long lasting negative impact. FAA has had particular difficulty fielding new ATC modernization systems within cost, schedule and performance goals to meet the needs of the aviation community. Agency promises to deliver new capabilities to airlines via improvements to the ATC system led some airlines to install expensive equipment in their aircraft to position themselves to benefit from expected FAA services; however, when the agency failed to deliver on those promises, participating air carriers were left with equipment that they could not use—no return on their investment. In addition, shifting agency priorities have made it difficult for the aviation industry to anticipate future requirements and plan for them in a cost-effective manner (*e.g.,* providing air carriers with adequate lead time to purchase new equipment and airframe manufacturers with lead time to incorporate changes into new commercial airplane designs). Furthermore, the absence of a full-functioning cost-accounting system makes it difficult for FAA to assess the actual cost of providing services to users of the National Airspace System.
- *Strategic management of people.* Most high-performing organizations have strong, charismatic, visionary, and sustained leadership, the capability to identify what skills and competencies the employees and the organization need, and other key characteristics including effective recruiting, comprehensive training and development, retention of high-performing employees, and a streamlined hiring process. Toward this end, FAA has hired a Chief Operating Officer (COO) to stand up its new ATO. Our work on high-performing organizations has recommended use of the COO concept to facilitate transformational change in Federal agencies and to provide long-term attention and focus on management issues. Furthermore, FAA has placed 78 percent of its workforce under a pay-for-performance system[8] and implemented a training approach for its acquisition workforce which reflects four of the six elements used by leading organiza-

[8] Inspector General, U.S. Department of Transportation, Key Issues for the Federal Aviation Administration's FY 2005 Budget, CC–2004–038 (April 22, 2004).

tions to deliver training effectively.[9] However, it is too soon to know the extent to which these elements of effective training will be incorporated into the new ATO. Finally, FAA is currently conducting an Activity Value Analysis, a bottoms-up effort to establish a baseline of ATO headquarters activities and their value to stakeholders. The results of this analysis are intended to help FAA's leadership target cost-cutting and cost savings efforts.

Despite FAA's efforts to date, our past work has found the agency's strategic management of human capital lacking. For example, organizational culture issues at FAA (*e.g.,* its vertical, stovepiped structure) have discouraged collaboration among technical experts and users of the ATC system and contributed to the agency's inability to deliver new ATC systems within cost, schedule and performance goals. One of the most significant early challenges facing the ATO will be negotiating a new contract with air traffic controllers, which is due to expire in September 2005. The DOT IG has repeatedly noted that despite the importance of controllers' jobs, that FAA simply cannot sustain the continued salary cost growth for this workforce, which rose from an average salary of $72,000 in 1998 to $106,000 in 2003. Given the inextricable link between FAA's operating costs and its controller workforce, striking an acceptable balance between controllers' contract demands and controlling spiraling operating costs will be a strong determinant of the ATO's credibility both within FAA and across the aviation industry.

While FAA has taken some promising steps through its new ATO to restructure itself in a manner consistent with high-performing organizations, the agency still faces significant and longstanding systemic management challenges. These challenges must be overcome if FAA is to keep pace with ongoing changes in the aviation industry and transform itself into a world-class organization. Our work for more than two decades has shown that even modest organizational, operational, and technological changes at FAA can be difficult and time consuming, all of which underscores the difficult road ahead for FAA and its new ATO.

This concludes my statement. I would be pleased to respond to any questions that you or other Members of the Subcommittee may have at this time.

Senator LOTT. Thank you, Ms. Hecker. Your testimony was very interesting. I look forward to having a chance to ask you some questions, but in order to accommodate my colleagues, I'll save my questions for a little later. Senator Wyden, would you like to go now?

STATEMENT OF HON. RON WYDEN,
U.S. SENATOR FROM OREGON

Senator WYDEN. Thank you for your thoughtfulness, Chairman Lott, and for holding this hearing. Ms. Blakey, as you know, we have this huge problem in the West with respect to fires. We're hundreds of millions of dollars short in terms of the Forest Service budget for reducing the acreage that's at risk. We already have had fires there. We need to know what you're doing now with the Forest Service in cooperation to deal with this air tanker situation. As you know, a lot of the tankers the Forest Service relies on are not airworthy. The agency is scrambling to find alternative plans, and I would like you to start by telling us exactly what the plan is that you're pursuing with the Forest Service to turn this around.

Ms. BLAKEY. Well, I'm very pleased to respond, Senator Wyden, because I do understand that this is a significant problem from the standpoint of the upcoming season as well as a long-term problem that we've been aware of for some time. I must start by testimony

[9] To deliver training effectively, leading organizations' training approaches generally include six elements: (1) prioritize initiatives most important to the agency; (2) demonstrate top-level commitment and provide resources; (3) identify those who need training on specific initiatives and set training requirements; (4) tailor training to meet the needs of the workforce; (5) track training to ensure it reaches the right people; and (6) measure effectiveness of training. GAO found that FAA's acquisition organization has highly developed processes for elements 1, 2, 4, and 5.

on this though by pointing out that the FAA has no public authority over public use aircraft.

Senator WYDEN. We understand that. What we need to know is what you're doing though with the Forest Service cooperatively to turn this situation around.

Ms. BLAKEY. Well, with the understanding that the Forest Service, of course, has the lead on this, and we're doing our best to help them from a technical standpoint, I would say this, that we have pulled together a highly experienced technical group from our aviation, regulation, and certification staff. We have sat down with the Forest Service, looked at the history to the best degree we know it of these aircraft, and I would stress that because what you're really up against here is former military aircraft that were close to the end of their useful life when they were mustered out of the military, and at that point it was extremely difficult to judge issues of fatigue, issues of corrosion, what may have been the kind of flight history that they have had.

But nevertheless, at that point, of course, they came into the fire fighting fleet, and in many cases have served extremely well. But as I say, there is a background lack of data which hampers all of us. Recently we sat down, in fact, in the last couple of days, with one of the contractors who is providing service to the Forest Service and learned that they have a system where they're able by instrumentation on board these aircraft as well as further mining data, in this case from the Navy, to try to get a more accurate picture of what the upcoming maintenance, what the upcoming repair requirements may be from the standpoint of these aircraft. So there are some measures that we are looking into that we can take beyond providing technical advice and as much skilled review with the Forest Service as we can. Ultimately it will be up to the Forest Service to determine the resources that are necessary.

Senator WYDEN. Would you assume someone who would work with Senator Smith and I on an ongoing basis until we turn this situation around? He and I are very concerned about it. We're going to be asking Chairman Lott's staff if we can have a field hearing on it. Would you assign someone who can work with us and report to us even weekly now until we get this turned around?

Ms. BLAKEY. We have some dedicated people already and I'd be delighted to have one of our senior people work with you, absolutely.

Senator WYDEN. Very good. Question for you, Mr. Mead, and I appreciate the Chairman's thoughtfulness. You know, before the tragedy of 9/11, we had these huge service problems and this whole question of people being bumped and overbooking and the like. I'm hearing constantly again about these kinds of problems. Have there been improvements made that you know of to deal with these kinds of problems when people are being bumped?

I just had a constituent tell me about this horror where they basically spent days floating around the countryside trying to get a flight when they were bumped without any notice, a large family.

Mr. MEAD. Our report recommended the Department of Transportation issue some regulations on this bumping area, and just to summarize what some of the problems we found——

Senator WYDEN. Have they done that?

Mr. MEAD. No, they have not.

Senator WYDEN. So today there are no additional rights. If you get bumped this summer, there are no additional rights and the Department of Transportation did not follow your recommendations with respect to bumping?

Mr. MEAD. They did not implement those recommendations. I cannot say what individuals airlines may have done on their own. We'd have to go out and do another follow up review on that. You know, one of the problems was, if you are a voluntary bumpee, you get more money or more compensation than if you end up being, if you hold out and you ultimately become an involuntary bumpee.

Another issue, which was a case, was I think three or four airlines, was where the airlines would decide their bumping process would—customers that were paying, for example, full coach or were paying business would not be bumped or they would not follow the order of check-in, which is, reverse order of check-in is the normal process for selecting bumpees. So, yes, I can—the Department—we had asked the Department to issue some regulations and they didn't.

Senator WYDEN. My time is about up. One last question if I might, Ms. Blakey. Repair station oversight, that was identified as a problem by Mr. Mead in the past. It's an outsourcing issue. We talk about jobs being outsourced. Some of this stuff is being done by foreign companies, foreign governments as well. You all are late with respect to the report that was required earlier by the legislation. When are we going to be getting that?

Ms. BLAKEY. I'll have to check and make sure that we have it on the way. What I am proud to tell you is that we've issued the regulations, a revised set of regulations having to do with repair stations in January in fact, which really does a comprehensive overhaul of the way we are exercising oversight in this area.

We're also reorganizing the way we have structured our staff to more closely match where the actual work is now being done, because as you correctly note, much of it has moved from the airlines' own maintenance shops to the floor of repair stations. Much of it in this country, I would point out, there has been tremendous growth in terms of repair stations here in the U.S., but we are exercising greater oversight here and abroad as a result of these new regulations.

Senator WYDEN. My time is up, but if you would, I do think that seeing the report that documents how the Agency is responding to the criticisms that Mr. Mead talked about is important. It sounds like what you've done is constructive, and we appreciate that, but we really do need to have the report that describes how the Agency is responding to what Mr. Mead said earlier. Thank you, Mr. Chairman.

Senator LOTT. Thank you, Senator Wyden. Senator Burns.

STATEMENT OF HON. CONRAD BURNS,
U.S. SENATOR FROM MONTANA

Senator BURNS. Thank you, Mr. Chairman. I've just got a couple questions. You know, they always define public service as trying to accommodate, and I'm getting the feeling here with these tankers that we're not trying to accommodate to take care to relieve this

problem. Can you tell me when you—when all airplanes that fly in this country other than military you don't have any supervision or jurisdiction over? Is that what you're telling me?

Ms. BLAKEY. No, not at all. In fact, we have jurisdiction over most aircraft that fly in this country, certainly in the civil airspace, civil aviation, absolutely. What we do not have, and this is the case by statute, we do not have authority over public use aircraft, those that are operated by other entities of government.

Now, having said that, Senator Burns, I would say this, that in many, many cases we are asked by agencies, and this is the case with the Forest Service as well, to review the aircraft that they acquire into their fleets at the point they do so and we will review them and issue a type certificate, meaning that we determine as best we can, given the fact that these do not have a history that we know from the point of design and production all the way through, but we determine as best we can what the operational characteristics of those aircraft should be, flight hours, ability or not to carry cargo, ability or not to carry passengers, all sorts of operational issues. And we will issue a type certificate at that point which gives at least the government entity guidelines if you will, but from that point on, the operation of those, the maintenance of those, it is the authority for the public government agency, not the FAA.

Senator BURNS. Well, I know when you go down this path, that'd be fine, but these airplanes are not owned by the Forest Service, the Forest Service do not pay the pilots. I guess I don't, I just don't understand where that line is one way or another. I'm just amazed that we can't get together and certify these airplanes to be airworthy. I think we've got a fire season that's coming up that's going to be a dandy and I think we need airplanes. Now, I don't think we need unsafe airplanes. That's not to say at any cost. But if we knew what the problems were in these airplanes, we could fix them before we get right into the heart of the fire service. That's what I'm saying. Somebody has to be calling somebody and making some accommodations for the public here and public service and that's kind of what I'm—I'm really concerned about this, and I think we're trying to push something off we don't want anything to do about and we're doing it with a definition of under a statute that's very fuzzy at best.

Ms. BLAKEY. Well——

Senator BURNS. Am I wrong on that?

Ms. BLAKEY. I think the statute is clear in terms of authority. The—at this point, as I say, the FAA, and this has been true since the beginning of the FAA's existence has not had authority over other government agencies' aircraft.

That said, we have set up a group of our staff who are very expert in issues of fatigue and corrosion to work with the Forest Service on this particular problem, and I think they are making progress together. There was a big meeting this morning, in fact, up here with some other colleagues of yours on the Hill with the idea of trying to step through the specifics on this, and I'd be happy to share with you a briefing on this whenever that works for you.

Senator BURNS. Well, I think it's going to have to happen one way or the other. Now, I have another question. Ever since I've

been in the Senate, which is 15 years, we're still looking for a radar system between Bozeman, Butte, and Helena.

Senator LOTT. There's not one big enough, I guess.

Senator BURNS. Well, I tell you what, we still have a dark spot out there, and I don't know how may times we got to request it, and I don't know how many other places in the country is like that, but I don't like that situation too much because I fly through that zone a little bit.

Ms. BLAKEY. All right. I made a note, I took an assignment here. Let me get back to you on the specifics.

Senator BURNS. I would certainly appreciate that, because we've been trying to get that out there. There's just a dark spot in that little triangle right there and there shouldn't be, and we've been trying to get that all fixed up. Thank you, Mr. Chairman.

Senator LOTT. Well, thank you, Senator Burns, and having flown with Senator Burns in that area, I can say it is scary and we need to do something about it and I don't intend to do it again until we get some coverage.

Senator BURNS. Actually, you know what he's complaining about, we had to fly rather low for about an hour and a half and he didn't like to look at water tanks or read brands.

Senator LOTT. He landed me in a cow pasture, Madam Administrator. I'm sure he broke every rule in the book. I started to call you right then.

Senator BURNS. That's why they have cow pastures.

Senator LOTT. In all seriousness, several years ago we did try to get the Forest Service to try to take a look at their fleet and upgrade and modernize the planes that they have for fighting fires and to go with affordable planes designed specifically for fire fighting, and we could not get them to do that, and that was several years ago, and now obviously there's a real problem with fatigue and corrosion. It's a serious one. I think the Forest Service is going to have to face up to getting some aircraft for this purpose, because they could do a lot more good, a lot more efficiency and more affordable, I think.

Let me ask you, Madam Administrator, a couple of questions that I know we need to get on the record here. FAA is requesting nearly $500 million less than the authorized levels for the facilities and equipment account for Fiscal Year 2005 and these authorizations were based on language FAA submitted to us for the multi-year reauthorization bill. The cuts have caused concern at FAA. Modernization is seriously underfunded and further delays to the schedule that many of the projects we're counting on, and they could certainly have delays as a result.

Can you justify this decrease in funding for projects and explain how you're coping with it? Now, I know how it works. OMB, you go up through the chain of command and you make your request and you get a number back at some point. I can imagine you're not happy with this, but it's a fact of life, $500 million for your agency is a significant blow. What do you have to say about that?

Ms. BLAKEY. The capital account, what we call F&E, is one that has a number of different programs in it, some of which are fairly immediate in terms of modernization, others of which are longer term, further out on the horizon. What I can assure you is that the

modernization programs, our major capital programs, are proceeding. This is the terminal modernization, the deployment of STARS, the change that we need to make in the host system, the brains if you will, for air traffic control, it's called ERAM, and again, that is on track, and the early stages of this, I'm happy to report, are also on schedule. So those are funded and we are moving ahead with this.

We also have a number of other critical programs that we are moving very smartly ahead with and I think will show real results in the near term. There are several programs that we have essentially deferred at this point. They are what I would characterize as the further-out programs, much more R&D is the way I believe they should be looked at.

But this is not a function solely of funding. It is also a function of the maturity of the technology involved. One of them is called LAAS, Local Area Augmentation System, and this goes to the issue of providing a very precise signal to aircraft to achieve ideally 2 and 3 instrument landings. Right now we are finding that the actual ability to have a verified signal that has real integrity has been elusive. We have not been able to achieve that yet. These are going where no one's gone before. I would really stress that some of this technology, it's not as though this is off the shelf. It is something that has to be developed and smart, scientific brains are working it.

Another program we've deferred is called——

Senator LOTT. Now, you did say you were deferring this LAAS program?

Ms. BLAKEY. We are, we are, and that is a very substantial program. It was projected to cost as much as $900 million over the life span of the development.

Senator LOTT. But you could—you'd be replacing as many as 8 to 10 instrument landing systems with one LAAS, so while it costs $1 million per system, over the long run it would save you a lot of money and they're a lot more efficient. Isn't that correct? Why was the decision made not to fund this project?

Ms. BLAKEY. Well, that is what it is intended to do, we would like for it to do, but that does not mean it is what it can do at this point, and we are moving ahead with research in this area, but we do not feel that there is any justification at this stage for a full-scale deployment in this area because I say, it cannot——

Senator LOTT. So it's not a cost factor, you're saying? You're saying that you're not convinced the system is yet ready for full acquisition and deployment?

Ms. BLAKEY. I'm confident the system is not ready for full deployment, in fact. Yes, that's correct. And we have several others. I mean, I could tick through several that we have essentially at this point put on hold. One of them has to do with the fact that we're not running out of spectrum as quickly as we thought we were. That's a next generation communications system, another controller pilot data link, essentially e-mail between the cockpit and the ground, which in the long run certainly will reduce the amount of voice transmission between air traffic controllers and pilots.

But again, we just completed a pilot study in Miami. There are factors involved with that that meant it was going to be a very ex-

pensive system if we pursued the system that we piloted there. It's time to step back, take a look at what we can do, learn from that, and then go forward with one that will be frankly more capable and more cost efficient.

Senator LOTT. Madam Administrator, I am concerned about this summer. You've all testified that we expect traffic to be back up to 2000 levels. There are a lot of explanations for the delays. I guess it begins when you get to the airport. TSA obviously is having problems. There are articles today in the news media, TSA to shift screeners to ease airport lines. Maybe that'll help. I know of instances where people have gotten to the airport in plenty of time to wait in line, but by the time they waited in line, 30, 40, 50 minutes, they get up to the counter and it's sorry, it's too late to screen your baggage, you don't get to go on.

So the problem begins with TSA and we're going to be aggressively pursuing them. I still think TSA is not employing common sense with their screeners and we'll have to get into that. But the delays at the airports is a whole other thing. This is ridiculous, average delay minutes 59 minutes, 51 minutes, 53 minutes. What in the world is going on? I think a lot of it is attitudinal. I don't think that the airlines, the workers, the air traffic controllers, any of them have a mentality, we've got a job to do here, we need to do it efficiently, on time, and with a lot of energy and enthusiasm. But what are we going to do about the increased traffic and the delays, and particularly at Dulles Airport I understand they'll have three runways closed for construction throughout the summer at the same time the airport expected an additional 300 flights a day. How do you make that work?

Ms. BLAKEY. It's going to be challenging. I think that's the honest truth. Although we have done everything we know in terms of both assigning sufficient controllers to Dulles as well as the consolidated Potomac TRACON, which was put in place and funded such that it is now operational, and this has allowed us to redesign the airspace around Dulles to have a much more efficient system, if you will, in the upper airspace.

So these are things that certainly are handling the needs at Dulles now, and we are cautiously optimistic about Dulles this summer as these operations come in. I will tell you that we're watching it very carefully, there's no question about it.

Senator LOTT. Well, maybe Dulles is unique, but where is the problem? I mean, you say, like at Chicago and Atlanta there are just too many flights, too many people for the system. But I cannot understand how the airlines or anybody feels like they're gaining when they make everybody fly mad, you know. It's just a miserable experience. And I've warned the airlines and everybody in this industry, you got to be careful because this is the one industry we all have to endure as Members of Congress, and if we get mad, if our constituents get mad enough, we will do some things that won't be very pretty.

Now, let me ask you, Ms. Hecker, a couple of questions if my colleagues will bear with me. Your testimony I found very interesting. You're saying employee performance has not shown support for the changes or something to that effect that you must be customer driven. Exactly who were you referring to? Is it air traffic control?

When you say employee performance has not shown support, who are you talking about?

Ms. HECKER. Well, controllers in particular and their performance and their linkage to the actual performance of the system is really just a new undertaking at the Agency, so the idea of what kind of linkage there is of individual controllers, the information is limited. It has been limited in part by contract and that's one of the reasons that the new contract will be so important to enable the Agency to proceed to get the kind of measurement of employee performance and reward performance in a more comprehensive and systematic way than they've been able to within the constraints of the current contract.

Senator LOTT. Are you saying there's no control of the controllers? Is that what I thought I heard you saying?

Ms. HECKER. There is no systematic measurement of their contribution to the goals. There has been a new initiative to begin to try to document their——

Senator LOTT. Are you saying there's not a clear commitment to the new goals that are being set? Is that what you're saying?

Ms. HECKER. That the data isn't there of what kind of contribution is made and that that is just a new initiative to improve the data, but part of it is also a constraint in the contract. There's a new provision for certain increments of extra bonus. I think Ken has done work that documents it's about two-tenths of 1 percent of the overall salary, but 4.9 percent increase is given automatically. So the linkage of pay to performance is extremely weak.

Senator LOTT. Madam Administrator, I did think that you had a significant percentage of your pay that was linked to performance. Now, isn't that correct?

Ms. BLAKEY. We have just moved in that direction, Senator Lott, and I would point out that there are very few places in government where this is the case, so in fact we're really the leading edge on this, and we did just negotiate a new extension of our contract with air traffic controllers, which in fact does link a percentage of their pay to four key metrics-driven performance measures so you can see whether you hit the numbers or not.

So I would suggest that we in fact are moving out on this. Seventy-five percent of the FAA's workforce is no under a pay-for-performance system. I will grant you the percentages are small, but again, in government, we're doing something that really very few others are even attempting.

Senator LOTT. That's good. Mr. Mead, your testimony is always interesting, but let me ask you the same question I asked the Administrator, only just more direct. Why the big increase in delays? I know that there's a multiple answer. What are they?

Mr. MEAD. One big one is the increased use of regional jets. They're much more cost-effective——

Senator LOTT. They're clogging the system up just by numbers?

Mr. MEAD. I don't want to be negative on the use of regional jets. I mean, they definitely serve their purpose. But yes, because they carry fewer passengers and the growth has been huge, as I mentioned, 180 percent growth in just 4 years, and a lot of the larger air frames that can carry more people are off parked in the desert. That's one reason.

And another—I noticed you were looking at the charts, it's on page 4 of my testimony, the one in yellow—you know, I mentioned that FAA needs to get out its capacity benchmarks and they need to get them out soon. Those basically say how many flights an airport can handle at peak hours in good and bad weather conditions. Now somebody ought to be looking at those capacity benchmarks and comparing them to the projected airline schedules this summer, and if they're totally out of kilter, I don't mean just by a little bit, but materially out of kilter, I think that the government and the airlines ought to sit down and have a face-to-face.

Senator LOTT. Madam Administrator, are you doing that?

Ms. BLAKEY. I would point out that the benchmarks for airports are publicly available right now. The study that the Inspector General is referring to is one that we will be bringing out in June so that—and it will be a much expanded study. In fact, it gives a good bit more information than before.

Senator LOTT. He did suggest that you have a sit-down, face-to-face meeting on this. Sounds like a good idea to me.

Ms. BLAKEY. Well, we have, as you know, very actively worked with the airlines in terms of Chicago O'Hare, which is where we are having truly excessive delays, 90 minutes or more in may cases.

I would point out that a lot of the weather delays we have, of course, are due to weather, and we do need to see that with the convective weather season coming this spring and summer, some of this is inevitable regardless of the overall capacity.

The other thing I would say is this, that while we do believe that there are situations in which we have to step in, we'd like to see the market work. This is a market-based system, and so therefore, for the government to reach in wherever we're experiencing delays is something that we want to do very, very carefully.

Mr. MEAD. Mr. Chairman, may I add something?

Senator LOTT. Yes, Mr. Mead, go ahead, because I interrupted you to get the Administrator's response.

Mr. MEAD. I didn't think you interrupted me. Let's go deja-vu back to the summer of 2000. There was an extreme reluctance, extreme, to get into the issue of airline scheduling, so we had situations all across the country. Chicago O'Hare was just one of several poster children where airlines were scheduling routinely more flights to depart at a given time of day than could physically be handled at the airport and FAA knew it. But there was this reluctance because of the system of deregulation we have to interfere.

Now, this time around, the Administration has showed a willingness, at least at O'Hare, to intervene, and I think in the short term, since you can't construct a runway overnight, the new technologies aren't going to be in place, that we have to do something.

Senator LOTT. Well, let me respond to your comment and maybe the Administrator will hear me. I understand about letting the market work, but we know there's a problem coming. And we also know, and I've got a proven record of trying to be supportive of the airlines and the aviation industry, they are not able to control themselves. They cannot help themselves until we make it very clear to them you're creating a mess here that we're going to have answer for, I don't think they're going to deal with it, and I think

somebody's going to have to be very aggressive in trying to get their attention. I'll try to do it, but I would think that the government is going to have to step in, not make them do this or that, but make them understand we cannot have this kind of chaos and delay, 90 minute delays, that's ridiculous.

This is the United States of America 2004 and they're creating a guaranteed mess and I'm not going to take the blame for it. And so I'll go on the record right now, say it's coming, let's do something about it. Airlines do it, airports do it, FAA do it. Somebody's got to do it because we've got a problem coming here.

Ms. BLAKEY. Senator Lott, may I point out one thing, because this really is a credit to this committee. You all have given us a new tool with Vision 100 and that is the ability to convene the carriers on a spot basis looking at a particular airport and set some targets on schedule that we would like to see them step up to if we really run into difficulties, so that is a new tool.

Senator LOTT. I hope you will. It's just human nature. I found, even in the Senate, if you can get Senators of different persuasion to sit down it's amazing how many problems are resolved or go away. It works in every walk of life. Senator Rockefeller.

STATEMENT OF HON. JOHN D. ROCKEFELLER IV,
U.S. SENATOR FROM WEST VIRGINIA

Senator ROCKEFELLER. Thank you, Mr. Chairman, and I want to follow on line with your questioning, because I agreed with everything that you said. I'm actually very interested in your phrase, Ms. Blakey, it is after all a free enterprise system, and therefore it's not the place of the government, with the exception of O'Hare in a later part, to enter in. How does that balance with the needs of the public?

In other words, you have something called eminent domain. People have to get from Washington to Clarksburg, West Virginia and somebody wants to build an interstate, the government intervenes and has eminent domain and takes people's property, and that's because there's a higher order here.

And I think what we've all decided is that aviation is more a part of the future than roads in terms of location of business and international traffic and all the rest of it. So what is the derivation of your statement? From whence does that come that the public interest follows the—that is, delays, which are just stunning here, just stunning, that it follows, the public interest follows entrepreneurship's rights. I mean, I think that's a very basic question here.

Ms. BLAKEY. I certainly would say that the intent that we're operating from the FAA standpoint is to support the public's interest in every way that we know how to do so. And I think that we have seen a great deal of good public result from deregulation of the airline industry and from the kind of proliferation we've seen.

Senator ROCKEFELLER. But you're not answering my question. The philosophy that causes you to ad lib that statement that you just made, which I thought was the most important thing you said——

Ms. BLAKEY. What I would say is this, that I think there's a balance that you have to achieve and you also have to look at of course the cause of delays and whether or not the government in

intervening is going to be effective in those situations. I think there are situations such as O'Hare where it is the responsibility of the government to reach in because we do believe it is an over-scheduling, pure and simple. At other airports, it is a function of a multiplicity of factors, a lot of which can be weather, and that is a variable that is much harder to therefore be arbitrarily setting the rates and capacity and schedule at those airports. So it's a balance is what I would suggest to you.

Senator ROCKEFELLER. So you're saying that weather is not a problem, or that where the delays, which after—I mean, O'Hare is up there at the top, but so are a lot of other places, and they're all shocking, that you would just let it rest unless it was—it was God-given.

Ms. BLAKEY. No, we wouldn't let it rest.

Senator ROCKEFELLER. Whatever the result was, you'd let it just go.

Ms. BLAKEY. In fact, let me tell you what we have just done, because I think it's a good example of where the government really can step in and exercise significant influence on this. We had a conference in March where we brought together all the players, literally all of the major carriers, as well as air traffic control, as well as the general aviation community, and said, look, we're all going to have to take a step back for the good of the system. Everyone is going to have to compromise a little bit to make this system run better.

And that was what we achieved in 3 days, and it was not easy hammering out with folks to say that, look, when we're taking significant delays at one airport, we're going to ask everybody else to hold back. Significant delays, the group came together and said, OK, 90 minutes, that's too long. At that point, its exercise of what we call a delay trigger, and that means that other airports are going to have ground delays until we can flush the one that is experiencing significant delay out.

Senator ROCKEFELLER. So the airport triggers were in fact a government solution?

Ms. BLAKEY. They were. But I want to point out we worked very closely in collaboration with all of the interest parts of the aviation community to try to achieve this. We did the same thing in terms of establishing express lanes, where if the traffic flow all needs to go in one direction, a handful of folks wanting to go in the opposite direction cross-wise are going to have to fly high or low, they're going to have to fly on a different pattern, and it may not be optimal from their standpoint, but that's because we want to move passengers, we want to move the public as efficiently as is possible, and that does mean that others may have to stand down.

Senator ROCKEFELLER. OK.

Ms. BLAKEY. So that's two key examples where—and this is for the system as a whole. This affects airports all over the country. When we run into a problem, we now have a better mechanism to do it. And what I think is that with this on board, if this works this summer, I think we can achieve some other measures as well operationally.

Senator ROCKEFELLER. And I understand, Madam Administrator, I would just caution you not to use that phrase publicly.

Ms. BLAKEY. OK. I must have misspoken and I apologize.

Senator ROCKEFELLER. Oh, you didn't misspeak. I think you said what you felt, and I'm not going to argue with you because you have a right to your views, but I just wouldn't use that publicly where the convenience is up to the airlines and the government will step in in a couple of cases but not otherwise. I don't think you want to get into that.

Second question is Secretary Mineta, you said he wanted to triple the capacity of air traffic within the next two decades. Now, we are all well aware and accustomed to people coming up, administrators coming up and sloughing off $500 million cuts because OMB has to review your testimony, you can't come up here unless they've looked at your testimony and they made the cuts, but you asked for the money, and you asked for them for such things as facilities and equipment, the F&E account, safety, modernization, capacity programs, things of this sort.

I'm trying to pin you down a little bit here. You walked away from the fact that you'd been deprived of money that you had asked for for specific programs, and you said, well, the LAAS program, you said, well, that's not really ready yet, and that was the end of that.

What I want to know, what is it that you were not able to get as a result of the $500 million which you requested which the OMB declined to give you after the Secretary set out as his ambition the tripling of all of this in 10 to 20 years, some examples?

Ms. BLAKEY. I was going to say I could provide you with a more comprehensive list than I probably can do here, but I would say this, that in some cases we are slowing down some of the deployment of specific systems, the deployment, for example, in the area of WAAS is somewhat slower. This is the Wide Area Augmentation System, the most advanced radar deployment. This is somewhat slower than it might have been otherwise. So there are a number of steps that we're taking throughout.

Senator ROCKEFELLER. Is that Herndon style the most advanced radar?

Ms. BLAKEY. It's ASR–11. That is—that's the specific system that I have in mind. But certainly there are a number of areas——

Senator ROCKEFELLER. What does Herndon use?

Ms. BLAKEY. I think it's an ASR–11, but I'd have to check. There may be someone here that——

Senator ROCKEFELLER. Because that's the state-of-the-art.

Ms. BLAKEY. Is Herndon, does it—I don't think Herndon has an ASR–11, right? Herndon has the contribution of a number of different radar sources. So I'll tell you where ASR–11 is most prominently is Willow Grove, Pennsylvania. That was the first deployment we'd made of that back about 6, 7 months ago now. So it's a new radar and it's beginning to come online. It links up with the STARS terminal modernization program, and it's an enabler from that standpoint.

Senator ROCKEFELLER. But you're not saying that you were pleased when your budget was cut?

Ms. BLAKEY. What I would suggest is this, that these are tight budget times. It's something that I think we all understand that not only from the standpoint of the Federal Government as a

whole, but we are working with a much diminished trust fund. Our industry is down, and that does mean that there therefore is a diminution of resources to draw on, and I think we have to adapt when the budget climate shifts, and that's what we're doing.

Senator ROCKEFELLER. Well, I mean, you could also argue that the airline industry is absolutely crucial to the Nation, the security of the nation, could be a danger to the Nation as we've already seen. When the President decides he is going to go to war in a certain place or whatever, money is not an object, he just goes around to the appropriators and gets it very quietly, something which Senator Lott and I are not thrilled about. So that's the priority. It seems to me aviation is a clear national priority and it doesn't occur to me that the Administrator of the FAA ought to be saying, well, we have to adjust to fiscal realities. I would have thought that your job was to fight for every single darn nickel you could get and go face to face with OMB and raise a stink, short of getting fired. I mean that. Do you want to comment, Mr. Mead?

Senator LOTT. She's from Tupelo, Mississippi originally, so I'm sure she raised a huge stink.

[Laughter.]

Senator ROCKEFELLER. I like her very much and she's very good, but I'm still asking these questions.

Mr. MEAD. I would like to offer a perspective on the half a billion dollars that you were referring to. First, the Administrator was correct when she described where the things that were the objects of the cuts were in terms of their development. FAA had been representing that one of the precision landing systems, for example, that they were purchasing, was capable of doing precision landings 1, 2, and 3. That was not so. Categories 2 and 3 were ones that had to go, that had to go, need to go to R&D. I think that they would be using that money for R&D if they had it.

Second point I'd like to make is if you look at the size of the cut, it correlates almost exactly with the increase in the operations account, which is the salaries account. The salary base at FAA is rather high, it's very generous, and on page 13 of my testimony there's a chart about what's happening to the aviation trust fund, and there are about $3 billion less money going into it than they thought was going to be going into it 3 years ago. But I think you're going to be looking at very tight fiscal times for the foreseeable future, unless you're prepared to go make greater incursions into the general fund at the Treasury.

Senator ROCKEFELLER. I'll accept that. The second question I was going to ask will be vigorously opposed by one Senator who's here now, and that is that some of us really, and obviously you do too, Ms. Blakey, that O'Hare is a major, major national priority, that those runways are not laid out efficiently, and that until they are, along with other adjustments that are made, it's going to clog up the entire system, and I don't think there's a huge coincidence between the 64 percent average, minutes average delay, and the layout of those runways.

Now, that was a big subject last year. I remember waiting 3 hours on the floor to give a speech on it, but the other Senator here present other than the Chairman was talking all during that time so I wasn't able to do that. Now, where does that stand and how

hard are you fighting for doing O'Hare correctly? What happens at O'Hare directly affects what happens in Charleston, in Huntington, in Beckley, West Virginia.

Ms. BLAKEY. I couldn't agree more. In fact, O'Hare has proven at this point to be the central, if you will, nerve center for the aviation system these days because so many carriers are hubbing through there and so much of our population either as destination or must go through there.

At this point, we have established a program office, a dedicated office to focus explicitly on the modernization program there and looking at the plans that have been advanced there from the airport authority, working closely of course with both the city and the state on this. Our expectation is that we will be able to put out for public comment as of February of this year the environmental impact statement, which is one of the key, as you know, steps in terms of being able to move forward with that modernization.

I don't know what that is going to tell us right now. We're working on that and the design of the airport layout plan. But our expectation is to move this as fast as we can doing it well and carefully. I must stress though that this is the most complex airport project bar none in history, $6.6 billion is what the city is projecting will be the cost involved here. And as a result of that, we are moving forward intensely.

But as I say, we have to do this right and we have to do the correct analysis and modeling, and so that does mean that it will probably be—in fact, it will be—September 2005 before we expect to issue a final record of decision on it, and that will of course be what triggers the ability to move forward with the construction work, and I can't prejudge what that will look like at that point and how that will be put together.

Senator LOTT. Speaking of Chicago, Illinois, Senator Rockefeller, maybe it'd be a good time to hear the questions from the Senator from Illinois.

STATEMENT OF HON. PETER G. FITZGERALD, U.S. SENATOR FROM ILLINOIS

Senator FITZGERALD. Thank you, Mr. Chairman, and boy, I don't know where to begin with all this stuff. I want to compliment the Chairman and the Ranking Member for doing this hearing, want to compliment Ms. Blakey for the wonderful job she's doing and Director Mead and Ms. Hecker.

First on delays, though, let me urge the members of this committee to think back to 1999 when this committee passed legislation which later cleared the Senate and then the House lifting the FAA's regulation that imposed delay controls. That regulation had been in effect since 1969 and it stopped delays at O'Hare, at Newark, and at LaGuardia. And it did that by limiting the scheduled takeoffs and departures and arrivals to the capacity of each of those airports.

And I was a freshman Senator at the time and I remember standing on the floor of the Senate with an internal chart from the FAA that had been prepared by an FAA consultant that said if Congress lifts, or if the FAA lifts the delay controls at these airports, delays will go up exponentially. Well, Congress went ahead

and lifted the delay controls and immediately by the summer of 2000, passengers were brought to their knees all around the country. So it's not the FAA's fault, those delays, it's Congress' fault. We lifted the delay controls.

Now, O'Hare has capacity to do three takeoffs and landings a minute, and if the airlines are only allowed to schedule three takeoffs and landings a minute, there will be no delays. But after those delay controls were lifted, United and American were scheduling as many as 25 to 30 takeoffs at the same on-minute period, 8:45 in the morning there will be 25 to 30 planes scheduled to take off, and everybody knows only three of them are going to be able to take off. So it's Congress' fault, specifically it's this committee's fault for the delays, and so if Americans are angry at delays, they should look right back here.

And I want to compliment the FAA for going back this year and trying to put some delay controls back on at O'Hare. I want to urge you to be tougher though because you have only put those delay controls on United and American. They do have 87 percent of the capacity at O'Hare, or the flights at O'Hare, but the other airlines have then just filled the void, and so we're really not reducing the number of flights to match the capacity of the airport.

And I hate to sound like Cassandra, but I think in this case I am. If we go back to my speech on the floor of the Senate, I predicted all this would happen and it immediately did happen. That's why I'm asking you to take me seriously when I try to rebut Senator Rockefeller on O'Hare. We can spend—and it's not $6 billion, it's $6.6 billion for the runways—but the full project is $15 billion at O'Hare. It's going to drain all the AIP funds from everybody else's airports in the country for the next 10 years, and my prediction is we will get almost no additional capacity at O'Hare because the limiting space, the limiting factor is not runway capacity at O'Hare, it's airspace. We have the most congested airspace in the country, the class B airspace over Chicago O'Hare, and you can spend all that money and you're not going to get much more capacity because they can't put—stuff any more planes in that.

And also I have to fault the Clinton administration. Governor Thompson back in the 1980s in Illinois started following up on an FAA mandate. FAA ordered Chicago in 1984 to build another airport, and Governor Thompson and then Governor Edgar, they got the ball rolling. In 1993, Mayor Daley called President Clinton and asked him to remove the Chicago third airport from the NPIAS list, the National Plant for—otherwise, that third airport would have been up and running by the year 2000. We wouldn't be talking about delays in O'Hare. And we still have a viable—we have now restored the third airport to the NPIAS list. I hope the FAA will give due consideration to that proposal.

Also, airlines block new airports all over the country. We've only built one new airport, and that's in Denver, even though passenger travel has increased 400 percent since deregulation. The hub carriers have blocked every new airport because they don't want—in Chicago, for example, United doesn't want any new entrants coming in and competing with their effective monopoly.

And anyway, I've got to go to my questions, but I wanted to take some of the heat off the FAA on those delays, because I think it's

Congress' fault. On the O'Hare expansion, I'm just wondering, and maybe Mr. Mead or Ms. Blakey can answer this question. I know you're considering that proposal, the environmental study is underway, and you're also looking at this suburban airport. I'm wondering, I don't think there's anything in the statutes that allows you to consider the economic forces at play in analyzing O'Hare's proposal. I don't know if you can look at market realities, but I'm urging you if you have that statutory ability to look at market realities.

The average ticket price at O'Hare has dropped from $170 in 1999 to $140 last year. Meanwhile, this O'Hare expansion plan will raise the current per passenger landing fees from $8.70 currently to about $26, even assuming a $5 billion contribution from the AIP fund toward the expansion program. And this is all at a time while the main carrier at O'Hare, United, is in bankruptcy, has a $5 billion unfunded pension liability and has even defaulted on the bonds issued 20 years ago to build their terminal at O'Hare, and yet they're being relied on to pay this $26 per passenger along with American, which is also in poor financial shape.

To what extent can you look at economics and the feasibility of this being paid for when you consider the O'Hare expansion project, either of you?

Mr. MEAD. Senator, you know we have a letter of inquiry from you on the O'Hare project, and we can't look at the cost effectiveness per se, but you mentioned earlier the delta between what are the stated costs of the runway per se, and all the supporting collateral projects that are in the modernization plan.

I think Chicago should be prepared to demonstrate where the money's going to come from and how much they are going to be relying on the Federal Government for, and they should be able to perform a cash-flow analysis. And that is one of the key issues that we're currently exploring.

We've seen this issue develop in other modes of transportation. Virginia is a recent example where there are a bunch of highway, highway bridge projects in the Virginia State transportation plan, but we were interested in is, well, Wilson Bridge was there in Springfield and when we looked closely at the plan, the same dollar bill was going to three or four different projects.

And in response to your inquiry, a core issue we're examining is just how much of the modernization plan are they prepared to go forward with, and if they are prepared to go forward with, where is the money going to come from?

Senator FITZGERALD. So to that extent you are looking at the economics. They have to demonstrate a cash-flow.

Mr. MEAD. The financials, yes.

Senator FITZGERALD. As a former banker, let me just remind you, I've never seen a poorer pro forma submitted by a potential borrower, so I wouldn't be surprised if they're able to put something together that looks plausible, we——

Mr. MEAD. Well, we've had experience with these, Senator, and a lot of other projects in this country, so I think we know what rocks to turn over.

Senator FITZGERALD. With respect to air traffic control at Chicago, the controllers in my area, and they're meeting with me

today, they complain, they believe there's a dangerous understaffing at Chicago TRACON. The delays and operational errors have increased. Chicago TRACON has 100 authorized controllers, but only 75 are now employed, and I'm told that a third of those are eligible to retire within the next 2 years.

Ms. Blakey, have you looked at that understaffing situation at Chicago TRACON and do you have any ideas about that?

Ms. BLAKEY. We have as a matter of fact. In fact, we sent a team in because the issue of operational errors certainly had got our attention back in January, and so we sent in a team to look on a very intensive basis at all aspects of the operation as well as question some staffing, training, what might be the issues to be addressed there.

That report is currently in the works and I think we're going to have some good results out of that. But I can tell you it is not a staffing issue. I'd be happy to get you the numbers. In fact, if you're having a meeting today, that might be helpful if I turned that around for you fairly quickly.

Senator FITZGERALD. If we could get them real quickly, I think my meeting's in about an hour, so maybe if somebody could shoot them to Robin in my office.

Ms. BLAKEY. I'd be delighted to.

Senator FITZGERALD. I'd appreciate that. And Mr. Mead, you did mention my inquiry to your office. Do you have any idea of when we might be able to expect a report back from you on that?

Mr. MEAD. Let me get back to you.

Senator FITZGERALD. OK.

Mr. MEAD. I don't want to publicly state a date and then have to recant it.

Senator FITZGERALD. I understand that. Now, the City of Chicago has recently publicly accused the FAA of moving too slowly in completing the environmental impact statement, and says that the FAA has greatly expanded the scope of studies to be completed before it rules. And I understand that the FAA has denied these charges, and I was personally unaware of any expansion of the scope of the studies that you're requiring, and I'm wondering, has the FAA changed the scope? And if the scope of the studies has been changed, can I see any FAA documents that do in fact expand the scope?

Ms. BLAKEY. I believe the FAA is pursuing the kind of analysis and the kind of review that's really required by both our approach to the airport layout plan as well as the EIS. So we consider this to be important, and as I said, something that has to be done with real care, because it must be something at the end of the day that I think will withstand criticism from all sides, and certainly something that because many of these airport projects, as you well know, have been delayed by litigation for many, many years thereafter. It is better for us to do the up-front work and to do it with rigor than to later be trying to fill in things that should have happened initially, and so I would argue for that.

Senator LOTT. Madam Administrator, on that point, if you'll yield for this, in Vision 100, we specifically provided the FAA with a number of new tools aimed to streamlining the environmental review process for key airport capacity projects. This is a good exam-

ple here of hopefully how that could be helpful. Is it helping, those new tools?

I know you don't want to have lawsuits, but I was in hopes that new language would give you authority to cut through some of the ridiculous environmental delays and impediments.

Ms. BLAKEY. What streamlining has allowed us to do—we are applying increasingly. But essentially what it has allowed us to do is to not have sequential review where everything has to line up trunk to tail, and therefore have a very prolonged process. We can do concurrent review. We can also look at issues of redundancy and try to achieve where we may be requiring, or other agencies are requiring similar or some kinds of analysis. Let's pull it together and be certain that we are performing what's important here, but not doing it time and time again.

So that's what I would say we've got with this, and certainly we're trying to do everything that is smart and efficient in Chicago. It's a big project and we want to make sure that we're doing that.

Mr. MEAD. I can't speak to the scope of the environmental impact assessment, but I do know that one of the concerns about the timing, the FAA's timing of this, is that the September 2005 conclusion of that effectively means a loss of a construction season, because there isn't much time before the cold sets in in Chicago and so there's that concern that, well, can it be accelerated somehow or completed earlier so that they can, if they're going to build another set of runways, that they can get construction underway when they have good weather.

Senator FITZGERALD. We're talking about the delays caused by construction at Dulles. Wait until Chicago is torn up for 10 years with a 10 year unremitting construction season.

One final question, Mr. Chairman, if I may. The city I guess has already applied for hundreds of millions of dollars of airport improvement programs grants, and my prediction is eventually to do this whole project they'll have to take all the AIP funds for years so that there will be no money for any other airport in the country.

But my question is, will concerned communities around O'Hare and individuals like myself have an opportunity to comment as the grant review process goes forward? I'd like to make arguments, for example, that it would not be a wise usage to drain all the AIP funds for the next 10 years into this project, which I ultimately argue won't increase capacity, it's just an expenditure of money.

Ms. BLAKEY. Well, I can tell you this, that they've got some other folks who are ahead of them in the queue in terms of use of those funds to the extent they are discretionary. As you know, a great deal of this is essentially entitlement money, and therefore is allotted throughout the airports in the system on a formula basis.

But to the extent there is discretionary money there, there are some very vigorous competitors for it, and in fact, we have lots of calls on that. So that said, the rationale is certainly something that we are very willing to make public, in fact, we do make public on a regular basis.

Senator FITZGERALD. Can other people—can individuals like myself who are concerned about the issue comment on their application for a grant?

Ms. BLAKEY. So far as I know, this is all public documentation and certainly one can comment. There is not a formal comment period in the sense you have with the rulemaking, for example, or an environmental impact statement.

Senator FITZGERALD. OK.

Ms. BLAKEY. But the documents are public.

Senator FITZGERALD. OK. Well, Mr. Chairman, thanks for doing this. You're a great Chairman of the Aviation Subcommittee. You love aviation and you're engaged in it, and Madam Blakey, thank you, and Mr. Mead, Ms. Hecker, thank you all very much.

Senator LOTT. Thank you, Senator Fitzgerald. Let me just say I want the record to reflect since you did foretell what would happen, I supported you all the way on this issue.

[Laughter.]

Senator LOTT. One last question, Ms. Blakey, and maybe Ms. Hecker might want to respond on this too. AIP funds, I've been very concerned about how the AIP funds have been rated for legitimate reasons in the immediate aftermath of 9/11 for security costs, but we stopped that in the FAA reauthorization I believe. But I'm still worried about FAA funds being used for noise abatement projects well beyond what had been indicated or called for earlier. And I'm worried that it's going for commercial portions of terminals like perhaps shop concessions, parking garages, off-airport road construction, and things of that nature.

Are those things happening? And in the alternative, are we limiting these hopefully to where we really need planning instruction for runways, taxiways, aprons, and things that really are needed for safety and to expand the capability of the airport?

Ms. BLAKEY. I'll tell you, we are guarding those AIP funds pretty jealously these days, because we do understand how much the actual fundamental infrastructure, as you say, the runways, the taxiways, are going to make calls on them. The Vision 100 did give a bit more flexibility for small airports, but as you know, that's a relatively small amount of the money as well, and that's the only place where I think you will see a bit of expansion in terms of applicability, and part of that is to let those small airports be more economically viable, because again, for the growth of the system in the long run, that's what they need as well. But that was the new statutory allowance.

Senator LOTT. Well, we are going to be having a vote on the floor in a few minutes. Senator Fitzgerald, do you have any more questions? One other thing is that, you know, who's going to keep an eye on what's going on in Chicago at O'Hare when the Senator from Illinois is not with us? I worry about that.

Senator FITZGERALD. That's a very good question.

Senator LOTT. Very good question. I'll suspect you'll keep on eye on it no matter where you are.

Senator FITZGERALD. I'll try.

Senator LOTT. Thank you all for being here and this will be a part of our continuing effort to be supportive and to keep up with what you're doing and make sure that we're providing the assistance you need from Congress. Thank you very much.

[Whereupon, at 11:08 a.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA

Four years ago, the biggest problem facing the Nation's aviation system appeared to be the congestion. The system could not keep up with demand.

Since then, we have rightfully concerned ourselves with security and the financial state of the airline industry. I am convinced, however, that aviation will never fully recover unless the Federal Aviation Administration (FAA) can provide an air traffic control system that will accommodate the predicted growth in air travel. Without an adequate aviation system, airlines will be constrained from true competition. And without competition, consumers will suffer. Already we have seen that the Secretary of Transportation has imposed flight restrictions at Chicago's O'Hare airport. I would hope such reductions are temporary and that the FAA, the airport, and the airlines can find a better solution. Hopefully we have used the breathing room afforded by the downturn in traffic to prepare for the future.

I am also convinced that the FAA will only be able to develop and provide an air traffic control system that can meet future demand, if the FAA itself starts doing its job differently. We must ensure that the FAA spends its resources wisely and that it manages its modernization program to ensure projects are on budget, on time, and delivers the benefits promised.

Over the last 10 years, the Congress has passed legislation to reform the FAA The FAA has been removed from the Federal procurement and personnel rules, it has been given a board of directors, and has recently hired a Chief Operating Officer to oversee the operation and modernization of the air traffic control system. I am eager to hear today how these steps are working.

I believe that this is a critical juncture for an aviation community which is facing very difficult times. However, we must be equally concerned about the FAA and its programs and work to ensure that our Nation's aviation system has proper oversight. Our aviation system is the leader in safety and efficiency. We must ensure that this remains the case.

I thank the witnesses for coming and look forward to their testimony.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN D. ROCKEFELLER IV TO MARION C. BLAKEY

Question 1. At the start of this year, DOT Secretary Mineta expressed a desire to triple the capacity of air traffic within the next two decades, and indicated the need to "modernize and transform our global transportation system, starting right now." Less than a month after the Secretary's statement, the Administration released a budget plan that would cut more than $350 million from last year's funding level for the FAA's Facilities and Equipment (F&E) account—which funds air traffic modernization and capacity programs.

- What steps are you taking at the FAA to ensure that gutting funding for modernization and safety programs by such a drastic amount will not have an adverse impact on the system?
- If Congress provides more funding than requested, where will it be used?

Answer. The President's FY 2005 request includes sufficient funding to safely operate and maintain the existing NAS infrastructure. There is no significant impact to our major modernization programs, including the Terminal Automation Modernization Program, the En Route Automation Modernization (ERAM) program, and the Wide Area Augmentation System (WAAS), which are budgeted and continuing as planned. Program reductions were carefully considered and limited to projects that had minimal benefits or could not be implemented in the near term due to economic downturn and aircraft equipage. Among projects deferred as a result of the lower budget request were the Local Area Augmentation System (LAAS), the Controller-Pilot Data Link Communications (CPDLC), and the Next Generation Air to

Ground Communications System (NEXCOM 1B). Delaying funding for these systems will have no near-term impact on the operation or the safety of the NAS. Consideration for any additional capital funding would be given to infrastructure modernization and facility projects that help reduce FAA operations and maintenance costs and system outages and/or projects providing near-term user benefits.

Question 2. Air traffic and passenger levels are expected to continue to rise as we head into the busy travel season. We are starting to see indications that delays could be bad this summer. Already, the Administration has pushed American and United to reduce their schedules at O'Hare by five percent and down to 7.5 percent by mid-June, in an effort to reduce traffic. At the same time, FAA has released a report indicating that O'Hare is one of five airports that need additional flight capacity immediately to meet passenger demands and alleviate delays across the country.

(a) How have the cuts to United and American Airlines schedules affected traffic at O'Hare?

Answer. Beginning November 2003, significant increases in scheduled operations led to major delays and flight cancellations at O'Hare. In order to reduce delays and improve on-time performance, the FAA separately obtained the agreement of the two largest operators at O'Hare, American Airlines and United Airlines, to reduce proposed scheduled flights during peak hours by five percent by early March 2004 and an additional 2.5 percent by mid-June 2004. FAA's Orders subsequently implementing the reductions applied only to those two hu carriers since their flights account for most of the growth since the phase-out of the High Density Rule. The Orders will expire October 30, 2004.

In June, both carriers complied with the 2.5 percent reduction during peak hours, while slightly increasing their total daily operations over May schedules. Even after the combined 7.5 percent peak hour reductions from proposed schedules, preliminary analysis indicates that delays are still excessive.

(b) Are you looking at staffing levels and procedures in an effort to develop a solution to this problem?

Answer. We will be reviewing facility by facility staffing over the next several months as we work on the development of a "Comprehensive Workforce Plan for Air Traffic Controllers", due to Congress this December. O'Hare and the other OEP airports are likely to be reviewed for appropriate staffing levels.

(c) After some fighting, locals agreed to move forward on increasing capacity at O'Hare and we provided FAA the authority to take action promptly by enacting airport construction streamlining legislation. What is the status of this effort? Why has the FAA not been able to move faster to address this situation?

Answer. The City of Chicago is pursuing an aggressive construction schedule for their proposed O'Hare Modernization Program (OMP). The start of OMP construction, however, is dependent on the FAA's completion of an Environmental Impact Statement (EIS) and issuance of a favorable Record of Decision (ROD).

Considerable effort has been made by the FAA to streamline the EIS process and schedule for the proposed OMP project. Even prior to the passage of Vision 100 Reauthorization legislation last fall, the FAA had already applied its best practices from past lessons learned to assemble adequate resources and put in place a process that would result in timely and successful completion of the OMP EIS. We have continued to look for opportunities to work even more effectively at our task. The resulting OMP EIS schedule is the product of extensive coordination between the FAA and its consultants and other agencies. The Chicago OMP is a large and complex undertaking unlike any other airport expansion in the U.S. Therefore, certain planning and environmental analyses associated with the OMP EIS are some of the most complex and detailed work undertaken by the FAA to date. The FAA views the projected EIS schedule as an aggressive yet achievable schedule. The OMP EIS schedule projects a draft EIS by February 2005 and the EIS ROD by September 2005.

Significant effort has and will continue to be devoted to applying EIS streamlining provisions while still ensuring full compliance with the National Environmental Policy Act (NEPA) to produce a defendable EIS. FAA's streamlining efforts have included the development of written agreements with other governmental agencies involved in the OMP EIS process. These agreements have and will continue to yield efficiencies in our streamlining efforts towards a successful and accelerated environmental assessment of the OMP proposal.

The FAA and those involved with the O'Hare EIS process schedule have moved to address the O'Hare proposal faster than any other major FAA Operational Evolutionary Plan (OEP) proposal. The FAA Administrator has established a dedicated

Chicago Area Modernization Program Office to provide corporate oversight for the integration of all necessary FAA activities.

Question 3. The Aviation Daily on May 18, 2004, reports that Administrator Blakey is considering charging fees to controllers for classes. Reports indicate that up to 7,000 controllers may retire in the next several years, and it takes up to 3 years to fully train a controller.

(a) What analysis has the FAA done on a fee proposal? Please provide any such reports or analysis.

Answer. The Air Traffic Organization has been looking at alternative methods for lowering training costs for newly hired air traffic control specialists. One of the options being considered is charging tuition for newly hired candidates attending the Federal Aviation Administration Academy in Oklahoma City. To date no in-depth analysis has been conducted on the feasibility of this proposal.

(b) Please provide any reports and analysis on staffing recruitment efforts.

Answer. The agency has nine different sources from which it can hire controllers. These sources include students from special college programs, veterans, retired military controllers and other former controllers. Recently, we have opened the door to the broader population of individuals with no aviation background or prior training to apply for employment as a controller. To be considered for employment from other than the traditional sources, applicants must pass a comprehensive test that evaluates skills necessary to perform air traffic duties. This test is called the Air Traffic–Selection and Training (AT–SAT) examination. Candidates for AT–SAT would be recruited mostly at job fairs or locations near air traffic facilities where hiring is most needed.

(c) Please provide any reports and analysis on how the FAA intends to address future staffing needs, and its analysis and projections of staffing retirements.

Answer. Per direction from Congress under section 221(b) of Vision 100 (P.L. 108–176, Dec. 12, 2004), FAA will provide Congress by December 2004 a detailed report on how the agency plans to meet its future controller staffing needs. This report will include plans on how the FAA will address expected increases in controller retirements.

Question 4. I was concerned to learn that an arbitrator recently found the FAA in violation of an agreement with PASS to maintain systems specialist staffing at a minimum of 6,100. As a result, the arbitrator ordered the FAA to immediately raise the total number of technical employees to the minimum staffing level of 6,100. The systems specialist workforce is already stretched thin, and it is my understanding that 6,100 systems specialists is the absolute minimum number necessary to safely maintain the air traffic control system.

(a) How many systems specialists is the agency below 6,100?

Answer. As of 06/07/2004, there are 5861 PASS technical employees on board which is 239 under the agreed upon staffing level of 6,100. Additionally, there are 172 PASS technical employees on board in the Operations Control Centers that are not counted in that number.

(b) How quickly can the agency hire the systems specialists necessary to meet its agreement of 6,100?

Answer. Pending availability of funds, it is anticipated that the agency can hire this number of PASS technical employees within 180 days of initiating the process. Currently, funding to support the increased number of employees is not available.

(c) What are the agency's plans to prevent falling below 6,100 systems specialists in the future?

Answer. Pending availability of funds, the agency intends to hire on a continual basis throughout next Fiscal Year to ensure that the number agreed upon is met. It is anticipated that attrition of current PASS technical employees will require the agency to hire approximately 300 specialists on an annual basis to sustain the number agreed upon.

Question 5. I understand that the agency intends to hand over the inspections and reviews required by the Aging Aircraft Safety Rules to private individuals known as designees.

In light of the agency's decision to hand over these [aging aircraft] inspections to private individuals, is there really an adequate number of FAA Inspectors? If so, why was it necessary for the agency to designate these inspections?

Answer. Yes, there are an adequate number of inspectors. The FAA safety mission requires the FAA to promote aviation safety by establishing standards and ensuring compliance to those standards. Ensuring compliance with standards is a shared responsibility between industry and the FAA. The FAA relies on qualified private persons designated by the FAA to leverage our safety workforce.

Section 506(c) of Vision 100 directed the agency to have the National Academy of Sciences (NAS) conduct a study of the methods used by the FAA to estimate staffing standards for inspectors to ensure proper safety oversight. On June 5, 2004, FAA and NAS reached final agreement on the study and NAS will submit a final report to Congress within 20 months. Meanwhile, the agency will continue to review aviation safety inspector (ASI) staffing levels necessary to accomplish its safety mission as part of Fiscal Year 2006 budget submission.

Regarding the aging aircraft inspections, FAA intends to perform these inspections through the use of a combination of ASIs and designees. There are approximately 2,500 aircraft requiring inspections in the next 4 years.

The Aging Aircraft Statute of 1991 requires the Administrator to perform the records review and airplane inspections and allows for the use of designees. FAA is not handing over the records reviews and airplane inspections to its designees. However, FAA is supplementing the current workforce with the use of designees, specifically designated airworthiness representatives, or organizational designated airworthiness representatives, to conduct inspections and records reviews in conjunction with the ASI workforce.

(b) How many inspectors does the agency plan to hire in FY 2005?

Answer. The current number of inspectors is 3,547. The FAA will maintain current levels of inspector staffing. FAA anticipates losing approximately 180 inspectors in FY–05 due to attrition. New inspectors will be hired as required to fill vacancies.

(c) In 2002, the FAA produced a document called "Workforce Planning and Restructuring" which included demographics on the FAA workforce. According to the document, the average age of an FAA Inspector is 52.3 years old with significant retirements expected over the next several years. I understand that it takes a minimum of three years to train an FAA Inspector, what are your plans to ensure that we have an adequate number of FAA Inspectors?

Answer. The Flight Standards' aviation safety inspector (ASI) workforce has an average age of 52.9 years. FAA's Flight Standards Office hires new ASIs with demonstrated skills and experiences and gives them an extensive formal training curriculum. In addition, an ASI receives on-the-job training before he or she is considered fully qualified to perform the job tasks of an aviation safety inspector. At a maximum, a new ASI completes both aspects of training within three years.

In order to ensure an adequate number of ASIs, FAA has developed a Human Capital Plan that is a proactive approach to succession planning for retiring inspectors. This plan takes into account various demographic and geographical data and identifies the appropriate skill sets required to perform the job. FAA has a centralized applicant pool with a registry of approximately 3,300 qualified applicants that we use to fill our vacancies. Attrition rates are consistent within the inspector work force. Our manufacturer inspector attrition rate for the past 5 years has been 5 percent per year. The rate for aviation safety inspectors is 4.7 percent for this same time frame. We closely monitor both of these rates.

Question 6. At least 70 FAA Operational Supervisors have recently written the National Transportation Safety Board (NTSB) expressing their opposition to the FAA's plans to consolidate the Center Weather Service Units (CWSUs) at the 20 Air Route Traffic Control Centers in the continental United States into five Units. It appears that very few if any ARTCC managers or supervisors were ever consulted about the feasibility of such a consolidation of the CWSUs or whether this consolidation would affect the real operational environment. Is the FAA continuing with its plans to consolidate the 20 CWSUs in the face of opposition from the agency personnel who rely on their services on a day to day basis?

Answer. Although some FAA supervisors are on record as opposing any change to the *status quo,* the National Transportation Safety Board (NTSB), the National Research Council (NRC), and our site visits (as summarized in the *Assessment of Current Operations)* have made it clear that the *status quo* is unacceptable. Therefore, FAA leadership and management are developing a proposal for the safe, efficient, and most cost-effective change to provide weather support to the FAA. Expert opinions from field supervisors will be considered as the proposal is developed. No decisions have been made, and we certainly understand the National Weather Service employees' anxiety and the need for timely weather advisories to be available to all air traffic controllers. One of the plans being considered would consolidate and enhance the weather products being disseminated to the entire National Airspace System (centers and other air traffic facilities). This proposal would provide the latest technology to forecast and distribute weather products 24 hours a day, seven days per week. We believe that safety can be enhanced by implementing some version of the recommendations in the NWS report "Integrated Concept for Enhanc-

ing Weather Support," dated December 2003. Again, no decision has been made on the proposed concept.

Question 7. In a January 20 letter to the National Weather Service Employees Organization, the NTSB wrote that "the loss of CWSU staffing at the majority of ARTCCs, the lack of face-to-face interaction between meteorologists and controllers, and the potential for deficiencies in the timeliness of information dissemination during critical events could negatively impact safety" if the CWSUs were consolidated and that the NTSB was withholding judgment on the FAA's plans to consolidate the CWSUs until the FAA addressed these issues. What has the FAA done to satisfy the NTSB's serious concerns about your plans to consolidate the CWSUs and leave 15 ARTCCS without any meteorologists? Will you proceed with your consolidation plans without the approval of the NTSB?

Answer. In response to recommendations from the NTSB concerning the Center Weather Service Units (CWSUs), the FAA has prepared reports to the NTSB every 6 months for the past 8 years—most recently on November 21, 2003, and June 8, 2004 (draft). In addition, the FAA prepares informal briefings to the NTSB staff, held March 5, 2002, and most recently on June 29, 2004. In all of these discussions, the FAA and the NTSB have realistically assessed the current operations of the CWSUs, and the FAA has been consistently candid in stating its intentions. The FAA is proceeding with planning the restructuring of the CWSUs while maintaining an open and transparent relationship with the NTSB. It is our desire that the NTSB will support the final plan selected for restructuring the CWSUs.

Question 8. From time to time, small general aviation or commercial aircraft experience difficulty, either due to weather conditions, or problems within the aircraft itself such as instrumentation failures. During these events when weather is degraded, requiring flight under instrument flight rules (IFR), aircrews contact the Air Route Traffic Control Centers (ARTCC) for assistance to locate an airport with favorable weather conditions so they can operate under visual flight rules (VFR) to enable the aircraft to land safely. Air traffic controllers depend on the immediate advice of the on-site meteorologist who knows what airports are VFR and, more importantly, will remain VFR for an aircraft in distress to be directed to. In some of these cases, aircraft have been low on fuel, and every second counts in getting the right information to the air traffic controller to relay to the aircrew.

How realistic is it to believe that an air traffic controller who is controlling other aircraft within a sector he is operating to stop and make a phone call to, or set up a video conference with, a remotely located meteorologist?

How much time would be needed for that remotely located meteorologist, who is responsible for a vastly larger area of airspace than under the present configuration of CWSUs, to become familiar with the weather situation in a particular area?

Answer. There are abundant weather information sources available to pilots at automated flight service stations (AFSS), at Flight Watch offices, at terminal radar approach controls (TRACON), and lastly, even from the air route traffic control center (ARTCC) coordinators.

The time that it would take for a meteorologist to respond to a request for weather information will depend entirely on what CWSU resources are available at the time of the request, and the available weather information from other sources. The plan the FAA accepts for restructuring the CWSUs will seek to reduce the time required to retrieve and respond to all requests for current weather information and forecasts.

Question 9. The National Transportation Safety Board has recommended that the FAA provide meteorological coverage at all times during forecasted significant weather. The FAA has claimed that it cannot afford to hire the 42 additional meteorologists it would take to keep all the CWSUs open 24 hours a day.

Rather than reducing the number of CWSU's in the continental United States from 20 to 5 so that they can be staffed 24 hours a day, has the FAA given consideration to staffing 5 CWSUs on a 24/7 basis to cover the minimal aircraft operations overnight across the country and leave the remaining CWSU staffed as they are?

The National Weather Service has offered a number of improvements for the CWSU program including products, services, training, and cost sharing. As for cost sharing, the NWS has offered to provide the FAA with AWIPS, their weather communication system. Won't this cover the cost of the 10 additional meteorologists needed to keep 5 Centers open 24 hours a day?

Answer. The suggestion of operating the national Center Weather Service Unit program with five centers, 7 days a week and 24 hours a day, will be given thoughtful consideration. The concept of remote meteorological support is used throughout the industry and the private sector. As we consider several options, our concern for safety remains paramount.

The FAA will carefully examine the potential contributions from the National Weather Service and the potential savings from any proposed replacement to the current Weather and Radar Processor (WARP) display system. Any potential cost savings that could be realized would be used to develop, jointly with the NWS, a substantially improved and efficient Federal program that operates 7 days a week and 24 hours a day.

Question 10. With trust fund revenues down, the AIP process has obviously been affected. At the same time the Airbus A–380 will require significant changes at many of the airport s in the U.S. that it would serve. How much money is the FAA providing through the AIP process to accommodate the A–380? How much funding is being provided by airport and project?

Answer. The FAA has provided $37.5 million of AIP funds for projects needed to accommodate the A–380. In FY03, the FAA issued a Letter of Intent to the Anchorage International Airport (ANC) of which $37.5 million is for improvements related to the A380 ($15 million for rehabilitating runways 6R/24L and $22.5 million for construction of taxiway Y).

The FAA also anticipates funding projects related to the A380 at the following two airports:

- Memphis International Airport (MEM): $34 million in FY06–07 to widen two runways, Runways 18L/36R and 18C/36C
- San Francisco International Airport (SFO): $17 million in FY05 and $4 million in FY06 for rehabilitating and widening Runway and Taxiways.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO MARION C. BLAKEY

Question 1. What are the expected costs of extending mandatory retirement ages for air traffic controllers, rather than hiring newly trained controllers? Are there safety implications extending mandatory retirement ages for air traffic controllers?

Answer. The agency has conducted an extensive review of the feasibility of extending the employment of controllers who reach the mandatory retirement age of 56 as an alternative to hiring new controllers. The major parameters involved in such a review are: (1) the salaries of the senior controllers and new hires; (2) the cost of overtime while new hires are being trained; and (3) training costs. Because of the myriad of variables involved, it is not feasible to ascertain the cost/benefit of this option with any practical level of certainty. However, of the various scenarios studied, we found that the high cost of senior controller salaries indicated that a clear case could not be made to support the economic feasibility of this approach. However, the agency does believe that, primarily at large high volume facilities, operational needs will clearly justify retaining some controllers on duty past age 56. To that end the agency has developed controller selection criteria, which is currently being reviewed by the Office of Personnel Management (OPM) that can be used for this effort. Once approved, the criteria will be used on an as needed basis, but such retentions will not have a major effect on our need to hire new controllers. Although safety implications have not been looked at in a separate review, we believe that the selection criteria developed will make this a non-issue. Furthermore, because exemptions under current law, we now have 540 en route and terminal controllers over the age of 56 in our system. Of that number, approximately 350 were PATCO rehires. Many of them are either exempt from mandatory separation or came back under FERS which allows them to remain in a covered position until they have 20 years of covered service before being separated.

Question 2. Is FAA in complete compliance with the terms of OMB Circular A–76 in preparing for the competition of this [sic] contract?

Answer. FAA is in complete compliance with OMB Circular A–76. Pursuant to Public Law 104–50 (the 1996 DOT Appropriations Act), Congress directed FAA to develop and implement a new acquisition management system. The FAA Acquisition Management System (AMS) took effect on April 1, 1996, pursuant to 49 U.S.C. 40110(d). FAA has since amended the AMS to accommodate use of the OMB Circular A–76. Therefore, where the OMB Circular refers to the Federal Acquisition Regulation (FAR), the Agency will apply the AMS.

FAA requested and OMB granted three deviations from the Circular specifically for the Automated Flight Service Station (AFSS) public-private competition. Deviations include permission for:

- a performance period that exceeds five years;

- a waiver from the requirement that the evaluation factor for cost must equal at least 50 percent of the weight of all evaluation factors; and
- provision for staggering the submission of technical and cost proposals for all offerors and tenders.

In accordance with the Circular, the Competitive Sourcing Official (CSO) also granted two waivers for the AFSS public-private competition:

- an extension of the timeline from 12 to 15 months from the date of Public Announcement; and
- use of the trade-off source selection method.

Question 3. What is FAA doing to address the problem of dense, continuous smoke in the cockpit?

Answer. The FAA's transport airplane airworthiness requirements address protection of the flight crew from smoke in the cockpit. The emphasis is to prevent or control small fires before they erupt and cause catastrophic conditions. Smoke goggles and oxygen masks are required for the flight crew and flight deck smoke evacuation procedures must be developed and presented in the FAA approved airplane flight manual (AFM).

An Emergency Vision Assurance System (EVAS) from Vision Safe Corporation has been approved by the FAA for installation on a number of airplane models. The device was neither evaluated in flight nor in the presence of dense smoke and was approved on what is known as a non-interference basis. This approach is used by the FAA to evaluate certain types of equipment that are not required and for which no defined minimum safety standard exists, to ensure that the equipment does not adversely affect any of the required equipment on board necessary for the aircraft's safe operation.

EVAS addresses a very rare event where multiple failures of smoke detection and fire suppression must occur to the extent of defeating the normal smoke evacuation process allowing very dense smoke to accumulate. Accident case history indicates that aircraft fire scenarios that progress to the point that the flight crew vision is impaired usually are catastrophic for reasons other than flight crew not being able to see the instruments. The FAA has not mandated EVAS installation because data does not support imposing such a design concept at this time given the current operational concerns and the outstanding safety record of the existing fleet.

Question 4. Why does FAA equip its own fleet of aircraft with smoke-protection systems to allow pilots to fly under conditions of dense, continuous smoke in the cockpit?

Answer. The FAA currently has equipped a portion of its fleet with a smoke protection system that allows the flight crew, in the unlikely event of a smoke filled environment, an unobstructed view of the flight path and primary instruments was well as the ability to read approach plates and emergency procedures.

Question 5. A recent Washington Post article ("Airline Safety Costs a) Billions or b) Pennies. Answer Below" by David Evans on April 4, 2004) cites the cost of equipping the U.S. commercial fleet of planes with FAA-certified smoke protection equipment at about three pennies per ticket. Do you agree with that assessment? If not, what is the cost estimate based on both current and future technology to provide protection from dense continuous smoke in the cockpit?

Answer. The FAA is not currently considering a smoke protection rule and consequently has not estimated the cost of such a proposal. However, the principles employed by the agency in rulemaking are much broader than simply "cost per ticket."

It is in the interest of the aviation industry to provide a safe transportation system, and it provides many safety improvements without regulation. The FAA promulgates only such regulations as are required by law or that address a compelling need to protect public health and/or safety.

When a rule is considered, cost and benefit analysis is a primary tool the FAA employs to evaluate its likely consequences. It provides a formal way to assist in finding the most efficient way to achieve the desired objective and to help determine if the benefits of a proposed rule justify the costs. Economic analysis is just one factor in making the final judgment on whether to promulgate a rule.

Question 6. How will allowing designees to perform inspections and reviews required by the Aging Aircraft Safety Rules affect the safety of operations of these aircraft? Will designees have the same training and experience that their FAA counterparts have?

Answer. The safety of aging airplanes will not be affected in any way by the use of designees to perform a portion of the inspections and records reviews mandated by the Aging Airplane Safety Act of 1991. FAA is revising guidance and developing

training for implementation in FY 05 so that designees will have the same training and experience as their FAA counterparts.

The FAA has been using designees to augment FAA functions for approximately 60 years. Under 49 U.S.C. 44702(d), the Administrator may delegate these functions. To become a designee of the Administrator, applicants must meet stringent requirements for experience and training, present three letters of recommendation and finally, be screened by the National Examiner Board (NEB). The designees must also attend specific training and recurrent training every two years.

Through a designee oversight system, the FAA conducts surveillance activities on all designees to determine continued compliance with their authorized functions. The FAA retains the authority to terminate designations upon a finding that the designee has not properly performed his/her duties under the designation or for any reason that the Administrator deems appropriate.

Question 7. Is the FAA evaluating whether to extend mandatory retirement ages for pilots?

Answer. No. The FAA is not currently evaluating whether to extend the mandatory retirement age for pilots. The FAA has reviewed the rule multiple times over the years and on each occasion has decided to retain the rule.

Some background information may be helpful. The "Age 60 Rule" first went into effect in 1959 because of the growing complexity of commercial aviation and the recognition that aging is associated with a progressive deterioration of certain abilities necessary for flying. It is clear that there is progressive anatomic, physiological and cognitive decline associated with aging. While it is variable in severity and onset among individuals, impairment cannot yet be predicted in a specific individual.

In 1993, the FAA released the report of an extensive study that correlated available accident data with the amount of flying by pilots, as a function of age. After conducting a public hearing and considering thousands of written comments, it was again decided to retain the rule. In 1997 an appeals court ruled in favor of the FAA's decision not to initiate a rulemaking to change the Age 60 rule. On May 18, 1998 the U.S. Supreme Court refused to hear an appeal of that decision by the Professional Pilots Federation and others. The FAA, upon request by Congress, once again assessed accident and incident data in respect to pilot age and provided a final report of this study to Congress in March 2003. Because it is unacceptable to work as a pilot until failure or obvious impairment, the age of 60 has served well as a regulatory limit.

Question 8. How many systems specialists does the FAA currently employ?

Answer. As of 06/07/2004, there are 5861 PASS technical employees on board which is 239 under the agreed upon staffing level of 6,100. Additionally, there are 172 PASS technical employees on board in the Operations Control Centers that are not counted in that number.

Question 9. When does the FAA plan to submit its air traffic controller staffing plan per paragraph (a) of Section 221 of P.L. 108–176?

Answer. That plan is under development and we expect to meet the December 12, 2004 deadline for submission to Congress.

Question 10. Does the FAA have any plans to require equivalent safety standards and safety reporting standards for both air traffic control towers operated under the contract tower program and FAA-operated towers?

Answer. The safety standards and safety reporting standards required for FAA-operated air traffic control towers are currently required for air traffic control towers operated under the contract tower program.

More specifically, FAA contract tower employees are required to possess an FAA control tower operator certificate, and a qualified FAA certifying official performs certification of contract employees. Each contractor is required to submit a Quality Assurance Plan to the FAA for each contract facility, which is reviewed and approved by the FAA.

Each facility is subject to the FAA quality assurance and evaluation program. Each undergoes a full facility evaluation conducted separately by the contractor and by the FAA. In addition, the facilities are covered by and required to comply with all FAA processes relative to incident and accident reporting investigation and follow-up. Finally, each contract facility falls under an FAA parent hub facility and is subject to oversight by the FAA Hub Manager.

Question 11. Why does the FAA allow repair stations not subject to its regulation to perform work on U.S. aircraft?

Answer. Under controlled circumstances, an FAA-certificated repair station can outsource maintenance if it has procedures in place to assure the airworthiness of the articles that are being maintained. The recently revised repair station rules require FAA approval of maintenance functions outsourced to non-certificated facili-

ties. The following requirements must be met before an item may be returned to service:

- The FAA-certificated repair station remains directly in charge of the work performed.
- The non-certificated facility must follow a quality control system equivalent to the system followed by the certificated repair station.
- The certificated repair station verifies, by test and/or inspection, that the work has been performed satisfactorily and is airworthy.

Certificate holders use non-certificated maintenance facilities to perform maintenance functions that require precise skills such as machining operations or heat-treating that are not limited to aviation applications. Often there is not a certificated person that can perform these functions in the vicinity of an FAA certificate holder. FAA surveillance can now be conducted at the non-certificated facility in accordance with 14 CFR 145.223(b) and the certificated repair station cannot return the article to service if the non-certificated source does not permit the FAA to inspect the facility.

Question 12. The FAA was scheduled to award a contract on the flight service A–76 study on March 17, 2005. Is this still the case?

Answer. Yes, the contract will be awarded on or before March 17, 2005. The exact date is contingent upon the number of potential service providers who will actually submit proposals.

Question 13. Do you intend to seek any form of Congressional approval or briefings before awarding this contract?

Answer. The AFSS public-private competition performance award will be handled like any other FAA major system acquisition. The established Congressional notification system will apply.

Question 14. FAA's own training plan called for 80 percent of the Airways Facilities workforce to receive basic core skills training and certification by this year, but I understand less than 40 percent of the workforce has been fully trained and received their certification. How does FAA plan to accomplish this goal of 80 percent?

Answer. The initial Memorandum of Agreement (MOA), Appendix V attachment to the *Professional Airways Systems Specialists (PASS) and Airway Facilities (AF) Bargaining Unit Agreement, 2000–2005,* established a goal of 80 percent for achieving A+ and Network+ certification for technical bargaining unit employees.

However, under a subsequent agreement made in 2003 between a joint FAA and PASS workgroup, the agency shifted from tracking the percentage of the entire workforce receiving this training, to ensuring that only the employees who need this training based on their respective areas of responsibility are required to complete it. The annual training requirement based upon employees' area of responsibility was completed.

At present, we are ensuring, on case-by-case bases, that those technicians that need this certification for their job performance are receiving it.

Question 15. How much money is included in the agency's FY 05 budget for this task?

Answer. Approximately $5,000,000 has been spent during the past three years to accomplish these certifications, which, as noted above, has been completed. In the future, this funding level will vary as it relates to prerequisite training for new equipment training courses and, therefore, depends upon the number of deployments of such equipment. There is not a separate line in our budget for this training, rather it is part of the agency's overall training program. We expect that the FY05 funding level to be approximately $2,000,000.

Question 16. What core skills training has the agency scheduled for FY05?

Answer. In addition to the A+/Network+ coursework, the FAA academy has classes scheduled in telecommunications, internetworking, applications, and personal computer hardware. Various technical training courses also have instruction on information technology skills specific to a particular type of equipment (such as programming language, *e.g.,* UNIX), imbedded within the curriculum.

Question 17. What are FAA's plans for using the Traffic Management Advisor (TMA) tool, which was designed to address bottlenecks, in areas outside of Chicago? Does FAA plan to continue to replicate its use in other areas?

Answer. Traffic Management Advisor (TMA) has been installed at seven Air Route Traffic Control Centers: Denver, Minneapolis, Los Angeles, Miami, Atlanta, Oakland, and Houston. TMA has also been installed at Chicago and upcoming installations are planned at Albuquerque and Memphis. Initial daily use of the Chicago TMA is expected during September 2005.

Question 18. You testified that "we have designed the ATO to be a more streamlined, effective means of providing the safest air traffic control in the world to the most complex airspace in the world." Is this FAA's goal for the safety level of the operations of the U.S. air traffic control system? If so, which metrics does FAA intend to use to compare levels of safety? If not, what safety levels are sought by FAA in the design of the ATO and how will they be gauged?

Answer. On March 8, 2004, the Administrator announced the establishment of the Air Traffic Safety Oversight Service (AOV). The primary mission of the AOV will be oversight of the safety related issues pertaining to the provision of air traffic services. This includes establishing safety standards for air traffic services provided by the FAA nationally and internationally and monitoring the system for compliance with those standards. The Service is also responsible for developing and maintaining the policy and requirements for the Safety Management System (SMS), monitoring compliance with the SMS, providing leadership and direction in planning and managing audits and evaluating SMS performance and assessing the adequacy of the follow-up recommendations in accordance with approved safety standards and SMS criteria.

Concurrent with the establishment of the AOV, the level of safety of the NAS was baselined via a comparative gap analysis of ICAO requirements and FAA standards. We determined that FAA meets, and in many cases exceeds, ICAO safety requirements. This baseline will serve for future measurement of safety performance. Changes to the existing safety standards will be accepted provided they are in compliance with the SMS. Additionally, any changes to existing aircraft separation standards require specific approval that will only be granted when the SMS documentation indicates they are safe.

Question 19. Your testimony infers that the head of the new Air Traffic Safety Oversight Service office director will report directly to the Director of the Office of Regulations and Certification. If this new office is to remain independent in its oversight capacity, why doesn't its director report directly to the FAA Administrator?

Answer. The new organization will essentially regulate the ATO in much the same way that the agency regulates the airlines. As one of its first tasks, it will approve a standardized way to assess the safety ramifications of changes to air traffic standards and procedures. Its duties will also include approving those procedures, stopping procedures if safety issues are involved and issuing safety directives.

To guarantee independence, the director will not be a part of the ATO, meaning he/she will not be subject to the Chief Operating Officer of the ATO, but will instead report to the Associate Administrator for Regulation and Certification. That Office has a long history of regulating airlines and other service providers. This organizational approach complies with a recommendation from the National Civil Aviation Review Commission in 1997 that safety oversight of the FAA's air traffic function be provided by a separate part of the agency.

Question 20. How will ATO be able to "correct past mistakes" in managing capital and operations? Do you mean that this organization will not repeat past mistakes?

Answer. The Air Traffic Organization (ATO) is structured to improve management, accountability and communication at all levels and to operate in a more business-like manner. The business service unit concept has been implemented to push accountability for spending down to the lower operational service units. A Senior Vice President for Finance has been hired who is responsible for financial oversight, standards and practices of the ATO as a whole. He is responsible for the entire finances of the ATO, including the Research, Engineering & Development (R,E&D), Facilities & Equipment (F&E), and Operations (Ops) accounts. FAA will now have significantly more coordination across appropriations. Metrics are being implemented to push cost controls down to the lowest level and measure one facility's performance against another. We are restructuring our Acquisition Management System (AMS) to add additional justification for projects prior to initiating them. Business units now have a vested interest in ensuring that large capital projects are delivered on time and under budget. Finally, five levels of management have been eliminated, thereby allowing issues to surface in time to address them.

The organizational changes made under the ATO are intended to improve both the efficiency of delivery and the quality of services provided to our customers. The potential for repeating past mistakes has been mitigated by the new organizational structure that takes into account lessons learned from the past.

Question 21. What standards are the agency complying with in its contract competition for the maintenance and operation of flight service stations: Federal Acquisition Regulations, OMB Circular A–76, or other guidance?

Answer. FAA is utilizing OMB Circular A–76 and FAA's Acquisition Management System, as appropriate.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO HON. KENNETH M. MEAD

Question 1. What are the expected costs of extending mandatory retirement ages for air traffic controllers, rather than hiring newly trained controllers? Are there safety implications for extending mandatory retirement ages for air traffic controllers?

Answer. FAA has not estimated the additional costs of extending mandatory retirement ages for air traffic controllers rather than hiring newly trained controllers. However, at best, extending the mandatory retirement age is only a short-term solution and the costs would be greater as career air traffic controllers are paid at a higher rate than newly certified controllers. FAA is working on a rulemaking that establishes procedures for extending the retirement age based on a controller's qualifications, and the Agency is establishing a process to review each controller's request for a waiver. The waiver process should minimize any safety risk.

Question 2. Is FAA in complete compliance with the terms of the OMB Circular A–76 in preparing for the competition of this contract?

Answer. FAA is in the process of conducting an A–76 competition of the Flight Service Stations. We are receiving regular briefings but have not conducted an audit of the competition process. According to FAA's Office of Competitive Sourcing, the Agency has been working closely with OMB to ensure that the process strictly adheres to OMB's terms and that any deviations from the A–76 circular are approved by OMB.

Question 3. What is FAA doing to address the problem of dense, continuous smoke in the cockpit?

Answer. While we have not conducted any audit work on this safety issue, we do know that FAA has approved the use of one device, the Emergency Vision Assurance System (EVAS), to protect pilots from continuous smoke in the cockpit. The EVAS can be procured by operators; however, FAA has not mandated the system for commercial aircraft and has no plans to do so. FAA has also issued an advisory circular to the industry recommending (but not mandating) that operators test various ways to protect against smoke in the cockpit.

Question 4. Why does FAA equip its own fleet of aircraft with smoke-protection systems to allow pilots to fly under conditions of dense, continuous smoke in the cockpit?

Answer. According to FAA, the agency has equipped some of its aircraft with smoke protection equipment. It is perplexing that FAA has equipped its own aircraft but has not mandated similar action for the commercial transport fleet. FAA has not provided us with the specific information we requested on this (number of aircraft equipped) or the agency's rational, other than receiving a discount for FAA aircraft.

Question 5. A recent Washington Post article ("Airline Safety Costs a) Billions or b) Pennies. Answer Below" by David Evans on April 4, 2004) cites the cost of equipping the U.S. commercial fleet of planes with FAA-certified smoke protection equipment at about three pennies per ticket. Do you agree with that assessment? If not, what is the cost estimate based on both current and future technology to provide protection from dense, continuous smoke in the cockpit?

Answer. We cannot make judgments on the cost to equip the U.S. transport fleet with smoke protection equipment as presented in the article because reliable cost estimates do not exist, and we have not done work specifically on this matter. FAA is not planning to mandate that commercial air carriers equip their aircraft with smoke protection equipment at this time. Consequently, FAA has not conducted a formal cost and benefit analysis, which would be required for a rulemaking action.

Question 6. How will allowing designees to perform inspections and reviews required by the Aging Aircraft Safety Rules affect the safety of the operations of these aircraft? Will designees have the same training and experience that their FAA counter parts have?

Answer. The pending agency aircraft safety rules require aircraft to undergo inspections and record reviews after the 14th year of service, with an emphasis on detecting fatigue cracking. Given the anticipated workload from the rule, FAA envisions that Agency maintenance inspectors as well as designees will be used to perform the required inspections for the aging aircraft program. The details of exactly how this will work have yet to be determined. We note that air carriers must obtain approval from FAA before they can use a designee. FAA has established specific requirements for the experience and training of designees. For example, designees must have 5 years of applicable experience. In a related area, FAA has relied on designees to help certify aircraft and aircraft components for a number of years. As

with other important safety issues, follow through and oversight will be critical once these changes for older aircraft have been mandated.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. FRANK R. LAUTENBERG TO JAYETTA Z. HECKER

Question. What are the expected costs of extending mandatory retirement ages for air traffic controllers, rather than hiring newly trained controllers? Are there safety implications for extending mandatory retirement ages for air traffic controllers?

Answer. In June 2002, we issued a report *Air Traffic Control: FAA Needs to Better Prepare for Impending Wave of Controller Attrition* (GAO–02–591) that examined air traffic controller attrition issues, including a discussion of the mandatory retirement age. In this work we did not attempt to assess the costs of extending the mandatory retirement age for controllers beyond age 56. However, controllers approaching the mandatory retirement age would most likely have accrued extensive years in service as an air traffic controller, and thus there is a good possibility that they would be approaching the upper end of the salary scale at their specific facility. We note that FAA generally restricts hiring to those 30 and younger. Thus the salary of those at age 56 would be much higher than a newly trained controller. As such, there could be short-term costs of extending the mandatory retirement age. The actual extent of these costs would also depend on how many controllers actually choose to stay beyond age 56, given the opportunity. In our report, we found that about 30 percent of the controllers responding to our survey indicated that they would consider delaying their retirement date if they could obtain an age waiver.

With regard to the potential safety issues associated with extending the mandatory retirement age, the report notes that the House Report associated with establishing the age 56 provision in 1972, justified the provision by stating that "air traffic control is a young man's business . . . and that because of the natural forces of aging, magnified by the stresses of control functions, the productive and proficient life of the controller is substantially less than that which prevails in most other occupations." The House Report further states "as the controller approaches age 50 his mental faculties of alertness, rapid decision making, and instantaneous reaction . . . begin a definite decline." In addition, the associated Senate Report states "like skilled athletes, most controllers lose proficiency to some degree after age 40, and in the interest of the public's safety, should not be retained as controllers in busy facilities beyond the time they can perform satisfactorily."

While safety was cited a reason for establishing the age 56 separation age, a number of controllers continue to control traffic beyond that age. For example, we found that as of June 30, 2001, about 700 of the nearly 18,000 active controllers were beyond age 56 because of various exemptions. According to FAA, 287 of those controllers were appointed before May 16, 1972 and were thus exempt from the separation provision. There are also some exemptions related to FERS employees. As a result of the exemptions, there will likely be additional controllers in the future who will exceed age 56. For example, our report noted that FAA had rehired about 850 controllers that were fired in 1981, after President Clinton in 1993, lifted the ban on hiring former striking employees. FAA officials told us that most of the rehires are exempt from the mandatory separation provisions because they were originally hired before May 16, 1972. We found that the oldest such controller was 69, as of June 30, 2001.

Only limited actions are taken to assess whether those controllers who are exempted from the age 56 provision have adequately retained the skills and abilities necessary to perform their duties. FAA requires all controllers to pass annual physical examinations that test sight, hearing, and overall health conditions but no additional tests—such as those for mental acuity or changes in reaction time—are given controllers who surpass age 56.

We concluded in the report that the safety and equity issues associated with the age 56 separation exemptions could affect morale of the controller workforce and the safety of air traffic. As a result, we recommended that FAA study the safety and equity impacts of allowing controllers to work past the age of 56. Recently, FAA testified that in response to the Congress it is preparing regulations that would permit controllers, under certain conditions, to work beyond the mandatory separation age of 56. In addition, FAA was directed by the Congress in Vision 100 to prepare a workforce plan consistent with our earlier recommendations. FAA expects to complete the report in December 2004.

○

This page intentionally left blank.

This page intentionally left blank.

This page intentionally left blank.