S. Hrg. 112-411

# STATUS OF THE AIRPORT AND AIRWAY TRUST FUND

## HEARING

BEFORE THE

# COMMITTEE ON FINANCE UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

FEBRUARY 3, 2011



Printed for the use of the Committee on Finance

U.S. GOVERNMENT PRINTING OFFICE

74–373—PDF

WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing 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

#### COMMITTEE ON FINANCE

MAX BAUCUS, Montana, Chairman

MAX BAUCUS, M JOHN D. ROCKEFELLER IV, West Virginia KENT CONRAD, North Dakota JEFF BINGAMAN, New Mexico JOHN F. KERRY, Massachusetts RON WYDEN, Oregon CHARLES E. SCHUMER, New York DEBBIE STABENOW, Michigan MARIA CANTWELL, Washington BILL NELSON, Florida ROBERT MENENDEZ, New Jersey THOMAS R. CARPER, Delaware BENJAMIN L. CARDIN, Maryland

fontana, Chairman ORRIN G. HATCH, Utah CHUCK GRASSLEY, Iowa OLYMPIA J. SNOWE, Maine JON KYL, Arizona MIKE CRAPO, Idaho PAT ROBERTS, Kansas JOHN ENSIGN, Nevada MICHAEL B. ENZI, Wyoming JOHN CORNYN, Texas TOM COBURN, Oklahoma JOHN THUNE, South Dakota

RUSSELL SULLIVAN, Staff Director CHRIS CAMPBELL, Republican Staff Director

(II)

## CONTENTS

#### OPENING STATEMENTS

Damara	11	Ман	_	ΠG	Genetari	£	Mandana	-h -:	Committee	Page
on Fin	ance									1, 4
Kyl, Hor	ı. Jon,	a U.S.	Se	enator	r from Ar	izona				3

#### WITNESS

Dillingham, Dr. Gerald, Director of Physical	Infrastructure Issues, Govern-	
ment Accountability Office, Washington, DC		8

#### ALPHABETICAL LISTING AND APPENDIX MATERIAL

Baucus, Hon. Max:	
Opening statements	1, 4
Prepared statement	19
Dillingham, Dr. Gerald:	
Testimony	8
Prepared statement	22
Prepared statement Responses to questions from committee members	37
Grassley, Hon. Chuck:	
Prepared statement	46
Hatch, Ĥon. Orrin G.:	
Opening statements	2, 6
Prepared statement	47
Kyl, Hon. Jon:	
Opening statement	3

(III)

### STATUS OF THE AIRPORT AND AIRWAY TRUST FUND

#### THURSDAY, FEBRUARY 3, 2011

U.S. SENATE, COMMITTEE ON FINANCE, *Washington, DC*.

The hearing was convened, pursuant to notice, at 10:02 a.m., in room SD–215, Dirksen Senate Office Building, Hon. Max Baucus (chairman of the committee) presiding.

Present: Senators Cardin, Hatch, Snowe, Kyl, Roberts, and Thune.

Also present: Democratic Staff: Russ Sullivan, Staff Director; Lilly Batchelder, Chief Tax Counsel; and Pat Bousliman, Natural Resource Advisor. Republican Staff: Chris Campbell, Staff Director; Mark Prater, Deputy Chief of Staff and Chief Tax Counsel; Nick Wyatt, Tax and Nomination Professional Staff Member; and Jay Khosla, Chief Health Counsel.

#### OPENING STATEMENT OF HON. MAX BAUCUS, A U.S. SENATOR FROM MONTANA, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. The committee will come to order.

This morning, before we turn to our scheduled business, we have an important task. Today we welcome the new ranking member of the Finance Committee, my colleague, my friend, Orrin Hatch. Only four Senators from Utah have served on the Finance Committee, and Senator Hatch is the third of those to serve as either chairman or ranking member.

After Utah attained Statehood in 1896, Senator Reed Smoot was the first member from Utah to join the committee in 1909. Since then, Utah has had a member on the committee a remarkable 73 out of the last 102 years. In fact, there are only two periods of time when Utah did not have a member on the committee, from 1941 to 1952, between Senators William King and Wallace Bennett, and 1975 to June 1991, between Senators Bennett and Hatch.

Remarkably, each member of the Utah delegation has served at least 18 years on the committee. This June, Senator Hatch will celebrate 20 years of service on the committee.

By assuming this dual role as ranking member, Senator Hatch joins an exclusive club. You will have the 4th-longest stretch of time from an initial appointment to the committee until attaining either chairman or ranking member status. It will have taken him just under 20 years to do so. [Laughter.] Only three members have taken more time, and that record of 22 years is jointly held by Senator Roth, Senator Byrd, Sr., and me. [Laughter.]

Both Senator Hatch and I come from western States, where practicality and pragmatism are a way of life. We like to deliver results for our constituents. That connection is one reason we have been able to partner on the committee to get things done.

Senator Hatch and I have been partners in the effort to make the Research and Development Tax Credit permanent and give businesses the certainty they need to grow. We worked together to reauthorize the Children's Health Insurance Program, sometimes called CHIP. CHIP ensures that kids in working families can see a doctor and get the medicines that they need.

Together, we produced a robust bipartisan bill in 2007, and I am proud to say that that legislation provided a strong foundation for the CHIP bill which was finally signed into law. Those are great examples of the Finance Committee's long history of working together and building consensus to get things done, and I am confident that tradition will continue.

Now I would like to take a moment to unveil Senator Hatch's official photo, which will welcome guests to the Finance Committee. [Applause.]

Thank you all. You are a very valued friend, and I look forward to serving with you.

Senator HATCH. Thank you. I appreciate it.

The CHAIRMAN. Would you like to say something?

#### OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM UTAH

Senator HATCH. I want to thank my friend, Max Baucus, for this kindness. When I walked in and saw that, I knew there was something wrong here. [Laughter.]

It is a great honor to serve on this committee.

I am happy to see my friend Ben Cardin come on this committee, and two new ones on our side, Senator Thune and Senator Coburn, both excellent Senators, as well as Senator Cardin. Senator Cardin and I both graduated from the University of Pittsburgh School of Law.

I just want you to know that I have served with Max Baucus for a long time. He is an excellent chairman. He is fair, he is honest; he does a good job. He is from the west, the intermountain west, which I think brings a certain amount of clarity to the committee.

I am also deeply moved to see so many former staffers and others here on the sides today. It means a lot to me. I do not want to talk about it or I will start to get tears in my eyes, but it means a lot to me. I did not know this was going to happen, to be honest with you, and it is embarrassing. [Laughter.]

But it is such an honor to serve on this committee. This is the most important committee in the Senate. It is not a knock on any other committees, but just because of its jurisdiction. It is an absolutely crucial committee, and I feel very honored to work with Max Baucus, our Democrats, and of course the wonderful Republicans we have on our side. It is a committee where I hope we can work together in the best interests of our country. I will be doing the very best I can to do that, and feel very honored by this. I want to thank all of you for being here today. Like I said, it means a great deal to me. I did not realize this was going to happen.

Max, we will work very well together as we have in the past. We have passed a lot of things together and have done a lot on this committee together. It is just a privilege to serve here, and not just on this committee, but in the Senate as a whole, and to serve with the type of people we have here. I look at Senator Kyl here. There is not a better Senator in the Senate than Senator Kyl, or a harder worker, or one who really does such an intellectually honest and good job.

And I can say good comments about everybody on this committee, because I like everybody on this committee and appreciate everybody on this committee. So I do not want to say anything more. I just want to thank all of you for being here. It is a great honor for me. I will just tell you I will do the very best I can. As you all know, that means a lot of work for staff and everybody else. So, we will do our best, and we hope you will all be helping from the outside, those of you who are outside. Those who are inside, life is going to get even rougher. You know what that means with me. So, thank you, Max. Thanks for taking the time.

The CHAIRMAN. You are welcome. You are welcome, Senator.

Senator HATCH. Thanks to all of you. Thanks very much. [Applause.]

The CHAIRMAN. I think Senator Kyl would like to say something.

#### OPENING STATEMENT OF HON. JON KYL, A U.S. SENATOR FROM ARIZONA

Senator KYL. Yes. Thank you, Mr. Chairman. It is tradition, of course, when someone ascends to the position of the chair or ranking member, to say a few things. I, Orrin, very much appreciate what you said about me.

But, Mr. Chairman, maybe we should reveal the results of the election, that is to say, how Senator Hatch's colleagues voted to put him in this position. This is not an automatic proposition. This is not a matter of just being old. [Laughter.]

Of course, Orrin came to the Senate when he was hardly of age. [Laughter.]

We actually had an election on this. I hesitate to get into a lot of detail about the debate that occurred and the candidates that ran, and so on, but the election took approximately  $2\frac{1}{2}$  seconds; it was unanimous. That, obviously, is a testament to the esteem with which his Republican colleagues hold Senator Hatch.

Just to reiterate something that is frequently said on this committee: everybody on this committee thinks it is pretty special, and historically it has been, because there has been a lot of working together, but that is not to say that people on both sides of the aisle do not bring to the committee very strongly held views that may differ with each other. It is just that we have found ways to ultimately work together to produce good results, and I am hopeful, even based on the conversation the chairman and I had last night on the Senate floor, that that kind of comity will continue to exist. I know that it will between the chairman and our now-ranking member Senator Hatch, so I am pleased to acknowledge as a real leader on the Republican side Senator Hatch as our ranking member. It is going to make it fun for the next couple of years, working on this committee, to have the two of you as the leaders on the committee. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator, very much. Thank you.

Again, welcome, Senator Hatch.

I also want to take this opportunity to welcome our three new members to the committee: Senator Cardin, Senator Coburn, and Senator Thune.

Senator Cardin is the 8th Senator from the Old Line State to serve on the Finance Committee. The last Marylander to serve on the committee was Senator John Marshall Butler, who concluded his service in 1962. Senator James Pearce had the longest service in the committee, with 11 years, 3 months. He first served with the Whig Party. When that party dissolved, he joined the Opposition Party, before eventually joining the Democratic Party in 1859.

Senator Coburn is the 7th Senator from the Sooner State to serve on the committee. The Oklahoman with the highest seniority in the committee was Senator Robert Kerr. He ascended to the second seat behind Chairman Harry Flood Byrd, Sr.

The last Oklahoman to serve on the committee was Senator Don Nickles. Senator Nickles was appointed to this committee in 1995. I served with him on the committee for nearly a decade. I might say, too, another Oklahoman we are proud to have served with is Senator David Boren, who joined the committees the same year I did. We were both elected in 1978, and he began in January of 1979. Now he is the president of the University of Oklahoma. We are very pleased today, though, to see Senator Coburn on the committee.

Senator Thune is the 4th Senator from the Mt. Rushmore State to serve on the Finance Committee. Senator Harlan Bushfield was the first South Dakotan to sit on the Finance Committee. He joined the committee in 1945. While it took South Dakota 56 years to obtain a seat on the committee, it took Montana longer. It took an incredible 77 years for my State to get a seat in this committee. I welcome Senator Cardin, Senator Coburn, and Senator Thune.

I welcome Senator Cardin, Senator Coburn, and Senator Thune. I very much appreciate your joining this committee. You are very, very valuable, important members of the U.S. Senate and represent your States terribly well, and I just thank you very much for deciding that you wanted to join this committee, and making that choice instead of serving on some other committee. Thank you very much.

All right. Down to business. Now I would like to turn to the topic of the hearing, the status of the Airport and Airway Trust Fund.

I want to thank all of you who came to honor Senator Hatch. Thank you very, very much. I know he appreciates it.

#### OPENING STATEMENT OF HON. MAX BAUCUS, A U.S. SENATOR FROM MONTANA, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. Turning to the business present before the committee, Captain A.G. Lamplugh, a British World War I pilot, once said, "Aviation itself is not inherently dangerous, but to an even greater degree than the sea, it is terribly unforgiving of carelessness, incapacity, or neglect."

Today as we explore the state of the Airport and Airway Trust Fund, also known as the Aviation Trust Fund, we must remember just how dangerous and careless incapacity and neglect can be when it comes to aviation. We cannot afford to neglect our aviation infrastructure. Modernizing our runways and our air traffic control will improve safety, protect consumers, and create jobs. Strong and efficient aviation will reduce delays, lower costs, and improve access to rural communities, including those in my home State of Montana.

We thank our witness for joining us today, Dr. Dillingham, particularly on such short notice. We deeply appreciate your appearance.

The trust fund was enacted more than 40 years ago to help finance the capital and operating costs of our aviation infrastructure. Much has changed in aviation over the past 4 decades. From airline deregulation in the 1970s to the arrival of the Internet in the 1990s, air travel has undergone a dramatic transformation in the 4 decades since the trust fund was born.

So has the trust fund. Revenues paid into the fund have risen from about \$1 billion in 1971 to a projected \$11 billion this year, and a dramatic increase in air travel made clear the importance of this fund.

By 2030, the U.S. air traffic system will handle an estimated 191,000 flights every day. This is a daily increase of about 49,000 flights. The number of passengers on U.S. flights will increase from about 645 million this year to 1 billion per year by 2030.

The revenues from the Aviation Trust Fund are paying for different things than they used to, including new technologies like NextGen. NextGen is the new GPS-based air traffic system that will help us better use our airspace. NextGen's precision will allow us to significantly upgrade. Proper and careful implementation of NextGen is critical—critical for improving safety, for improving aviation efficiency, for creating jobs, and for advancing U.S. competitiveness.

A word about safety. Until now, our air traffic control system has relied on 1950s air radar that pilots use to navigate from point to point. The use of NextGen's GPS technology will allow for more precise traffic control of aircraft. This will improve safety by letting the air traffic controllers and pilots know the exact location of every aircraft at every moment. With NextGen, both pilots and controllers would have virtual maps in front of them to explain flights and weather in real time.

NextGen will also improve air traffic efficiency. The GPS system will let aircraft maneuver safely much closer together. This will allow airports to maximize the use of existing runways and build future runways closer together, reducing delays. Those delays are costly and frustrating to passengers.

Consider an FAA Commission report issued last year which found that flight delays cost our economy about \$33 billion in the year 2007. Passengers lost billions through time wasted at airports, meals purchased while waiting for flights, hotels rented due to cancellations, and missed connections. Some of that is because of the weather, but also some of it is because we do not have NextGen. Implementation of NextGen will also create jobs. According to a

Implementation of NextGen will also create jobs. According to a report last October from the Treasury Department, more than 60 percent of the jobs created by infrastructure investments such as NextGen occur in the construction sector. We all know that the construction sector was the hardest hit by the recession, with an average unemployment rate of over 15 percent.

Reauthorizing FAA legislation with investments in NextGen will help improve the construction industry's bleak situation and create an estimated 250,000 jobs in airports across the country. Finally, implementation of NextGen will improve U.S. competitiveness. We simply cannot continue to lead the world economy if we do not invest in infrastructure, including our transportation infrastructure.

According to the same Treasury report, the U.S. spends approximately 2 percent of our GDP on infrastructure, a 50-percent decline from 1960. Meanwhile, China spends close to 9 percent of its GDP on infrastructure, and Europe spends about 5 percent. We cannot continue to ignore our roads, our runways, and our railways if we want to compete in the global economy.

Today's hearing is an important step this committee will take toward improving the air traffic system. Through that process, we will be working to fund an air traffic system that is safer and more efficient, one that sustains and creates jobs, and one that enhances our international competitiveness through investments in vital infrastructure.

We reported legislation to that end in the last two Congresses, and last year the Senate passed that product by a vote of 93–0. But unfortunately, those efforts did not result in the bill becoming law, so we need to act again, and I urge us to do so very quickly. After this hearing, I hope to mark up this bill within a matter of days so we can get this bill on the floor and passed.

[The prepared statement of Chairman Baucus appears in the appendix.]

The CHAIRMAN. Senator Hatch?

#### OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM UTAH

Senator HATCH. Well, thank you, Mr. Chairman. Thank you for scheduling this hearing. It is an important one.

I would like to welcome our three new members to the committee: Senators Coburn, Thune, and Cardin. Each of you brings different strengths and perspectives to the committee, and all three of you are known as serious legislators. All of you, each one of you, has a reputation for very hard work, and that means a lot to me.

You engage fully in the fiscal issues that challenge our Nation. The Finance Committee is smack-dab in the middle of these issues, and I look forward to working with all three of you, and of course everybody else on this committee.

There is something to be said for experience. Just try and tell the passengers that were on the plane that Captain Sullenberger guided safely into the Hudson that years of experience do not count for anything. Mr. Chairman, we have had a lot of experience dealing with reauthorizing the Federal Aviation Administration legislation. This legislation has taken off but never quite fully landed. It is time to finish the flight plan and complete our multi-year reauthorization.

Millions of travelers on literally millions of flights each year help to sustain and benefit from the services paid for out of the Airport and Airway Trust Fund. The trust fund, however, has not received the sustained and thorough attention from Congress that most of our constituents probably expect.

The last reauthorization of the FAA program was done way back in the 108th Congress, and expired at the end of fiscal year 2007. Fiscal year 2007 ended at the end of September 2007. Since then, for more than 3 years, Congress has passed 17 short-term FAA extension bills. Now, these extensions have been necessary to both replenish the Airport and Airway Trust Fund and to authorize the use of the trust fund to continue to pay for aviation programs.

The Airport and Airway Trust Fund is used to fund the FAA's Airport Improvement Program, Facilities and Equipment Program, and Research, Engineering, and Development Program. The trust fund also pays for most FAA operations and maintenance. The services and facilities maintained by the FAA are utilized by literally millions of Americans and people from all over the world every year.

According to data from the FAA, in 2009 FAA air route traffic control centers handled more than 39 million aircraft, and there are almost 20,000 airports in the United States. Air travel may be frustrating in many ways, but a lot of us take it for granted that we can travel across our country very quickly without too much trouble. It is absolutely shocking that Congress should go for so long, more than 3 years, without reauthorizing a program relied upon by so many people and of such critical importance to our economy.

Getting back to the FAA programs the trust fund pays for, these include grants for airport planning development, and also programs to fund the improvement of the air traffic control system, such as the NextGeneration Air Transportation System, or NextGen, as the distinguished chairman has pointed out. I doubt there is anyone who would say that they do not want our airports or air traffic control systems to safely handle the unfettered flow of people and goods across the country and the world.

Now, we expect that our national airport and airway system will be a catalyst for economic growth and for the simple freedom to travel whenever one desires to. In order for that to continue to be the case, we need to make sure we are doing our jobs and not kicking the can down the road. We have kicked the FAA can now 17 times. We have done that by extending an expired FAA reauthorization 17 times and not completing the work on new legislation. Airplanes are still taking off and landing, and cargo is still being transported. We should be careful not to take that as a sign that we can continue to indefinitely put off a long-term FAA reauthorization.

The Airport and Airway Trust Fund is dependent on several aviation-related excise taxes in order to distribute the burden of funding the FAA. These taxes include passenger ticket taxes, taxes on cargo, and taxes on fuel. Fuel taxes are different for commercial aircraft than domestic general aviation. The distribution of these excise taxes is meant to approximate the burdens different users of our airports and airway systems place on our system.

The reason it is important that real FAA reauthorization is completed, as opposed to extending an expired law, is this: we cannot expect that the package of excise taxes that worked several Congresses ago will continue to be the best way to fund our airport and airway system today based on how it is being used today.

This is why I welcome the opportunity this hearing provides to carefully examine the status of the Airport and Airway Trust Fund. It is an opportunity to examine the series of excise taxes that fund the trust fund. We must understand how our airport and airway system functions now, we must understand how we expect it to function in the future, and we need to understand who uses our airway system and ensure that costs are imposed fairly and are representative of the burdens placed on the system.

Mr. Chairman, I am glad that we are taking off on another FAA reauthorization bill. This time we need to reach our final destination and complete the legislation, and I know you are dedicated to doing that, and I am dedicated to helping you.

The CHAIRMAN. Thank you, Senator, very much.

[The prepared statement of Senator Hatch appears in the appendix.]

The CHAIRMAN. I would now like to introduce our witness, Dr. Gerald Dillingham, who is the Director of Physical Infrastructure Issues at the Government Accountability Office. Thank you again, Dr. Dillingham, for coming in on such short notice.

As you probably know, it is our practice here to include all written statements in the record and encourage our witnesses to summarize those statements for a period of about 5 minutes. So we would like you to follow that procedure, if you would, please.

Dr. Dillingham, the time is yours.

#### STATEMENT OF DR. GERALD DILLINGHAM, DIRECTOR OF PHYSICAL INFRASTRUCTURE ISSUES, GOVERNMENT AC-COUNTABILITY OFFICE, WASHINGTON, DC

Dr. DILLINGHAM. Thank you, Chairman Baucus, Ranking Member Hatch, members of the committee. My statement today focuses on three areas: first, the current financial condition of the Airport and Airway Trust Fund; second, the role of the trust fund in supporting the new satellite-based air traffic management system known as NextGen; and third, some options for promoting the health and long-term sustainability of the trust fund.

With regard to the financial condition of the trust fund, since fiscal year 2000, revenues to the trust fund have fluctuated, often in response to general economic conditions and international events. For example, during the recent recession, domestic passenger traffic declined, and the trust fund revenues fell from \$12.4 billion in fiscal year 2008 to \$10.9 billion in fiscal year 2009.

Overall, since the trust fund's creation in 1970, aggregate revenues have exceeded spending commitments from FAA's appropriation, resulting in an uncommitted trust fund balance. However, our work shows that the uncommitted balance has generally declined since the end of fiscal year 2001, when it exceeded \$7.3 billion, and, at the end of 2009, it dropped to a low of \$299 million.

The principal reason for this decline is the uncertainty associated with forecasting trust fund revenues. These revenue forecasts are based on projections made a year in advance, and appropriation amounts for the next fiscal year are being based on those forecasts.

In the interim, many significant events can affect the demand for air travel, fuel usage, and other factors that affect the trust fund revenues. When Congress became concerned about the declining uncommitted balance in fiscal year 2009, it appropriated an additional \$1 billion from the general fund and decreased FAA's appropriation from the trust fund by \$1 billion. This general fund contribution reduced the risk that revenues would not be sufficient to cover all of FAA's obligations. In addition, it reduced the potential for delays in planned projects and programs, including NextGen.

With regard to the trust fund and support for NextGen, NextGen is intended to meet forecasted increases in demand for air travel and is designed to enhance the capacity, efficiency, and safety of the Nation's air transportation system. NextGen has been identified as a national priority, and FAA has proposed substantial funding increases for it related to airport improvement in the coming years.

For example, in fiscal year 2011, FAA's proposed budget for NextGen activities is \$1.1 billion. This is up from \$868 million spent in fiscal year 2010. According to FAA's capital improvement plan, the agency plans to spend \$8 billion for NextGen through fiscal year 2016. In addition, FAA plans to build or expand runways at the Nation's 35 busiest airports so they can accommodate the capacity increases that NextGen will allow.

Yet even these planned runway improvements will not be enough. FAA has determined that 14 airports will need additional capacity. Much of the funding for runway construction and maintenance will come from the trust fund, and, although runway improvements will be costly, they will not only increase the aviation system's efficiency, but will also support jobs and help stimulate the economy.

Turning to our last area: options to promote the health and longterm sustainability of the trust fund. Given the inherent uncertainty of forecasting revenues and the overall decline in the uncommitted balance of the trust fund, we have suggested that Congress work with FAA to develop ways to reduce the risk of overcommitting budgetary resources from the trust fund.

For example, Congress could appropriate less than 100 percent of the forecasted revenues, especially until a large enough surplus is built up to protect against potential disruption in revenue collections, and thereby reduce the risk of delaying or terminating projects.

Another option would be to target a minimum level of the trust fund's uncommitted balance and base appropriations on the goal of maintaining that target level. A third option would be to increase the general funds contribution or take actions to increase trust fund revenues. For example, if Congress determines that the benefits of added revenues to the trust fund warrant taxation of optional airline service fees, such as baggage fees, it could amend the Internal Revenue Code to require that those fees be taxed and require that the revenue be deposited in the trust fund.

Mr. Chairman and members of the committee, the continued financial health and long-term sustainability of the trust fund are critical to ensuring both the continued development of a safe and efficient national air transport system and the continued contribution of that system to strengthening key sectors of the U.S. economy.

Thank you, Mr. Chairman and members of the committee. That concludes my statement. I would be pleased to answer any questions that you may have.

[The prepared statement of Dr. Dillingham appears in the appendix.]

The CHAIRMAN. Thank you, Dr. Dillingham.

How much will the increase in general aviation fees that are in this bill help the viability of the fund?

Dr. DILLINGHAM. Mr. Chairman, we have not analyzed the bill, but generally the increase in the gas tax for general aviation is relatively a small part of the trust fund. It will increase it, but over the last decade or so about 70 percent of the trust fund revenues have come from the excise tax.

There are a couple of other factors that need to be considered, too. It depends in terms of if you get, say, more fuel-efficient GA aircraft into the system, maybe that is going to lessen the amount of tax that would be going into the trust fund. If you get more into the system, you are going to have that sort of trade-off with regard to its contribution to the trust fund.

The CHAIRMAN. But if you compare the Highway Trust Fund, say, with the Aviation Trust Fund, how much more time do we have with the Aviation Fund? I do not know if you know much about the Highway Trust Fund. That has been depleted dramatically. We do not have nearly as much as we have had in the past in the Highway Trust Fund. It is very difficult to find ways to maintain a sufficient balance in the Highway Trust Fund to maintain past expenditures. So, if we could compare, to the degree you know about the highway, the aviation—

Dr. DILLINGHAM. Just a little bit, Mr. Chairman. The Aviation Trust Fund is in much better shape than the Highway Trust Fund. To keep the Aviation Trust Fund solvent, I guess the major thing is matching up forecasts with appropriations so that you do not over-obligate it. That is a much different situation than the Highway Trust Fund, although you hear about both of them in terms of being in trouble. But there is just a great deal of difference there.

The CHAIRMAN. How much of additional expenditures of the Aviation Trust Fund would be due to NextGen as opposed to the financing of the Aviation Trust Fund to pay for runways and the like?

Dr. DILLINGHAM. Well, almost all of NextGen, because it is facilities and equipment, will be paid for out of the trust fund.

The CHAIRMAN. But how much more does NextGen add to projected expenses out of the trust fund? On a percentage basis, how much is NextGen?

Dr. DILLINGHAM. I would have to get back to you on that, Mr. Chairman.

The CHAIRMAN. But could you give me a rough sense?

Dr. DILLINGHAM. I know that FAA has projected that it is \$8 billion over the next few years, but in terms of percentage, I could not tell you off the top of my head.

The CHAIRMAN. Could you get a little bit, though, into the esti-mates of the cost of NextGen? Because to budget, it helps to know what we think NextGen is going to cost. Almost always there are cost overruns, so it is being just honest about it. What is NextGen going to cost, and how can we be sure that NextGen really is the cutting-edge technology and not something that is run-of-the-mill technology? That is, to make sure we absolutely are getting the best bang for our buck.

Dr. DILLINGHAM. Yes, sir. You raise an issue that has been raised ever since NextGen was brought to the table. I would say that FAA is now making some positive steps to address those issues. By that, I mean they recently have put in place the Deputy Administrator at FAA as the person in charge so you now know who is in charge and who is accountable for NextGen. They have also now begun to integrate industry as stakeholders in deciding what needs to be a part of NextGen. You are now getting a closer approximation of what needs to be there, and therefore the cost.

In the longer term, as you know, the closer you are to a particular program or implementing a program, you have better esti-mates. In the long term, past 2015, 2018, they have just begun to develop scenarios with regard to the implementation, the timing, and the cost. That kind of information will soon be available and will certainly help to hone in on what the costs will be in the longer term.

The CHAIRMAN. All right. I just want to make sure, again, we are getting the best product here.

Dr. DILLINGHAM. Yes, sir. In the early stages of NextGen, almost everything was NextGen. That, too, is being addressed now. FAA has identified six cutting-edge technologies which are the foundation for NextGen, and those will be integrated with some of the older technologies, or what we call legacy technologies. But we have moved along the path of knowing exactly what NextGen is, and in fact it is going to be those six foundational technologies/ cutting-edge technologies.

The CHAIRMAN. One quick question, if you could keep your answer short, too. What is the current treatment of baggage fees? Are baggage fees taxed or do the airlines collect baggage fees and not have to pay tax on those baggage fees?

Dr. DILLINGHAM. They do not pay tax on baggage fees. They do not pay the tax, the 7.5 percent. The CHAIRMAN. And if they were to pay, how much would that

vield?

Dr. DILLINGHAM. We did a study last year, and I think it was about \$180 million. The update that we have is that it is now around \$240 million that would have gone into the trust fund, and that only represents the baggage fees. There are other fees that, because of the way the money is reported, we were not able to get a number on. If airlines continue to use fees, the expectation is that the monies available for the trust fund would also increase if they were taxable. At this point they are not taxable by the current Internal Revenue Code.

The CHAIRMAN. Thank you, sir.

Senator Hatch?

Senator HATCH. Thank you, Mr. Chairman.

I am very happy to welcome you here. I appreciate your testimony. You are really helping us to understand this better.

Has the FAA or the GAO studied the benefits in terms of rate of return to passengers from NextGen spending? Dr. DILLINGHAM. There has been some modeling done. What you

Dr. DILLINGHAM. There has been some modeling done. What you get, Senator, is, in terms of delays, reduced inefficiencies within the system. So they have, in fact, done some of that early modeling, and it comes out on the plus side.

Senator HATCH. How will the average passenger benefit from NextGen, and how closely are those benefits specifically tied to marginal spending on NextGen?

Dr. DILLINGHAM. Most of the individual passenger's benefit will come from what the chairman said early on, the delays that will be eliminated, the efficiency of the system. I think there are also environmental benefits that are associated with the implementation of NextGen as well.

Senator HATCH. All right. Would passenger benefits be consistent across all dollars spent on NextGen, or would certain dollars spent in certain places generate more return to consumers than others?

Dr. DILLINGHAM. I think, Senator Hatch, you are going to get some across the board. But, of course, if you focus the implementation of NextGen in areas where there are the greatest delays, like in the northeast corridor or perhaps on the West Coast, you are going to get more system and individual benefit from the implementation of NextGen.

Senator HATCH. As I am sure you are aware, there has been longstanding discussion as to whether different groups or users of FAA services are paying proportionate costs for those services. The tax title of the FAA reauthorization bill, the one that is currently under Senate consideration, represents a compromise to ensure different FAA customers pay for the services that they consume. Now, taxes are paid into the Airport and Airway Trust Fund right now. In your opinion, how closely does the tax burden upon user groups, such as general aviation and commercial, mirror costs placed upon the FAA by those same user groups?

Dr. DILLINGHAM. Senator Hatch, as you indicated, this has been an ongoing issue of who pays with regard to how much they use the system. The work that we did—I guess I should say, traditionally there has been a public benefit associated with aviation, and that supports the notion of a general fund contribution.

When you move to talk about individual groups that use the system, what we said is that, if FAA is going to impose or in some way indicate pay-by-your-use, that there were some things that needed to be in place, like there needed to be a solid cost allocation model so that one could see on what basis the charges were being made, as well as some other factors that should be considered: equity, efficiency, ability to pay, and even the international guidelines on this. We have not seen that come to fruition yet.

Senator HATCH. All right. Now, the tax title in the current FAA reauthorization bill raises the tax on general aviation jet fuel, classifies fractional aircraft as general aviation, and imposes an additional surtax. Could you give us your assessment of the burden of trust fund taxes versus costs imposed on the FAA?

Dr. DILLINGHAM. We have not done that work, Senator Hatch, but we could work with your staff to develop that kind of information and provide it to you and for the record.

Senator HATCH. All right. Thank you.

Thank you, Mr. Chairman. The CHAIRMAN. Thank you, Senator. Senator Cardin?

Senator CARDIN. First, Mr. Chairman, let me thank you very much for your warm welcome. I am really looking forward to working with the Senate Finance Committee. Senator Hatch, I see, is leaving. I just want to say, Senator Hatch, first of all, thank you for your kind comments. I enjoyed very much working with you on the Judiciary Committee. You were always a person who brought your knowledge of an issue to the committee in a very constructive way and reached across party lines so that we could try to deal with issues, and I very much appreciate that. I was not surprised, knowing your background at the University of Pittsburgh, but I very much appreciate the relationship we had on the Judiciary Committee, and I look forward to working with you on the Finance Committee. So, thank you for your kind comments.

Senator HATCH. Thank you, Senator.

Senator CARDIN. And Senator Baucus, I want you to know that I am really looking forward to working with you and with all the members of the committee, and I again thank you for the warm welcome to the committee.

The CHAIRMAN. You bet.

Senator CARDIN. Let me say, if I might, in regards to the issue we have before us today, NextGen is very important. There is important progress we need to make on air safety in this country. It will not only mean more efficient air service so people can get to their destinations quicker, but we can handle a greater volume of air traffic, which is critically important knowing the volume levels that we are now confronting. It will save us in fuel, which is important for our energy policy and for our environmental policy. For all those reasons, this is very important progress that we make.

But as you point out, the cost involved, the investment, will be substantial. You said FAA is estimating that it will be \$8 billion over the next couple of years. As I understand it, the total revenue of the existing trust fund is about \$10–11 billion a year. So obviously, even if we extend existing revenues, they are going to be inadequate to deal with current needs, and they will not be able to meet the investments we need in NextGen.

Then, as you mentioned, you have the new airports that are being scheduled, the new runways. I can tell you, at BWI-Thurgood Marshall International, we can tell you a whole list of projects that we have for our runways, for our terminal modernization, that are critically important for us to meet the demands at that important airport to Maryland and to our Nation. So as I understand it, the uncommitted funds have been reduced over the last decade, from

somewhere around \$7–8 billion to virtually nothing that is remaining today.

So, if we are going to modernize our air system in this country, if we are going to meet the current demands of our airports around the Nation, we need to either enhance the revenues going into the trust fund or be prepared to subsidize it through the general funds. It seems to me they are the two things that are going to need to be done if we want to make the investment in NextGen, if we want to modernize our airports, if we want to meet the expectations of how the funds have been used in the past to keep our system modernized.

Dr. DILLINGHAM. Yes, Senator Cardin, you are right in laying out the landscape for NextGen. I think one of the important variables or factors here is the timing and the sequencing of what we do for NextGen. One of the things that is going on now is FAA, in consultation with Mitre, is developing various scenarios by which we can, in fact, get to NextGen, different times, different situations. The same thing is going on with the major carriers, and so forth. You are getting the stakeholders involved. So it is a big investment, and it is going to be a matter of what we think is important, and the sequence in which we do those things.

Senator CARDIN. Looking at your report here, it indicates that the total cost of NextGen could be as high as \$40 billion. Now, I understand some of that is private sector investment, but it could be at the \$40-billion level. I just really want to underscore this. NextGen, I think, is very important and we should move forward on it, but it is also important to meet the needs of our airports around the Nation.

I look at what is happening at my major airport, at BWI-Thurgood Marshall, and I look at what is happening at some of our regional airports in Maryland. They depend upon this trust fund funding in order to meet the needs. They are growing needs, and they are growing every year. So NextGen is important and we have to get it done, but we also need to meet the other needs that are out there.

Dr. DILLINGHAM. Yes, sir. One part of what is now being called NowGen is getting the maximum benefit from the technologies that are already in place in the aircraft, getting the maximum benefit from the runways that we currently have by developing procedures to allow us to use them more efficiently and more effectively. So there are a number of scenarios that are being modeled and evaluated with that in mind, both NextGen and NowGen, for the system.

Senator CARDIN. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Thune?

Senator THUNE. Thank you, Mr. Chairman. I, too, am delighted to be on your committee and appreciate the warm welcome. There are lots of things that have to be done and dealt with on this committee and some big challenges ahead. But I look forward to working with you and the distinguished ranking member Senator Hatch as well, and other members of the committee. So, I appreciate the opportunity to be here.

Let me, if I might, follow up on a question that the chairman asked, Dr. Dillingham. I know you talked a little bit about what

the cost of lost revenue is with regard to some of the additional fees that are being charged, and specifically he talked about the baggage fee. But do you see this as causing issues when it comes to adequately funding the trust fund needs, both in the short term and the long term?

Dr. DILLINGHAM. Senator, I think the amount of money that we are talking about is relatively small. That is the extent to which it is impacting the trust fund. The ongoing question is, to what extent is this going to be a growing segment of money that is available, or potentially available, for the trust fund? But as it stands now, it is a relatively small piece of the pie.

Senator THUNE. All right. And you said about a quarter of a million, roughly?

Dr. DILLINGHAM. About a quarter of a million.

Senator THUNE. A quarter billion, I should say.

Dr. DILLINGHAM. Right. Right. This time around.

Senator THUNE. Right.

Dr. DILLINGHAM. But that is a growth, now, which goes with what we were saying, that these fees have been growing. At some point, though, they will reach a level where that is it, there is nothing else to charge for and there is no more raising them. But it is a billion-dollar piece of the industry at this point.

Senator THUNE. All right. It strikes me that we have so many trust funds in the government, whether it is this one, or the Highway Trust Fund, or the Medicare or Social Security Trust Funds. In many cases, we are now transferring from the general fund to deal with the costs that are not being met by the trust funds, which seems to sort of contradict the whole idea of a trust fund.

It also seems that that is going to be very hard to, going forward, be able to defend. I think the general fund, as we all know, is facing some serious budgetary constraints, so it strikes me that we are going to have to figure out ways to make these trust funds selfsufficient in terms of meeting the needs, the requirements, of, in this case, aviation capital improvements and those sorts of things.

But what do you think are some options for improving the health of the trust fund? I mean, if you had to look at how we get this trust fund so it is more sustainable—I think last year's number was about 24 percent of the total expenditures were general fund transfers. I think that is ballpark. But anyway, what are your views about how we—

Dr. DILLINGHAM. Senator Thune, I think, again, the major point is the way the forecasts are used to determine what the appropriations are. That takes place a year before you know what the actual revenues are. So FAA is making obligations during that period of time, and once they make those obligations, by law, then they have to adhere to that. So that brings in the general fund to keep them from going into an anti-deficiency.

So our major suggestion is, let us look at the way we do forecasting and let us try to prevent this over-commitment. I mean, most recently the forecasting has moved from FAA to Treasury. Treasury has a lot more experience and responsibilities for these kinds of things. This would be their first one this time around.

So we are hoping that that will be a major part of it, along with some practical sorts of things. As we had mentioned, do not appropriate 100 percent of what you think are going to be the revenues. Have a cushion in there so that, if in fact the revenues do not come in as expected, you are not dipping into the general fund. As you say, the general fund can only support so much because of the whole deficit issue.

Senator THUNE. When do you see the NextGen transition being complete?

Dr. DILLINGHAM. I think it is going to be ongoing. I mean, the schedule is 2025, but by 2025 we will be looking at the next NextGen to keep our system on the cutting edge, as such. So 2025 is the target for the six foundational systems that we are talking about that will give us better weather information, better surveillance and navigation. But that is always going to be reaching for the next improvement.

Senator THUNE. All right.

Thank you, Mr. Chairman. The CHAIRMAN. Thank you, Senator Thune.

Senator Roberts?

Senator ROBERTS. Well, thank you, Mr. Chairman. I associate myself with the remarks of the members, welcoming our new ranking member and, as always, sir, your leadership on the committee, and friendship. Thank you for holding this hearing. Thank you, Dr. Dillingham, for your long service and your testimony, sir. I know you are a busy man.

This is not only a top national priority, but I want to indicate for the record, it is a top priority for my home State of Kansas. Three years ago when we tried to pass this bill, Dr. Dillingham, we had 40,000 employees in Wichita, which we like to think of as the air capital of the world, and the surrounding counties. Now we are down to 25,000. That shows you the rough economic times that we have gone through and what we are facing.

We have 3,200 aviation and manufacturing businesses, including Cessna, Hawker-Beechcraft, Bombardier, Lear Jet, Boeing, Spirit Aerosystems, Garmin, and Honeywell, just to name a few. It is a part of our history, really. It is a way of life and it is part of our future, and it is part of the entrepreneurial spirit. I wish somehow we could translate that into some kind of revenue that could help NextGen, because that is going to obviously affect our economic situation out there.

I just want to point out that general aviation has been called to increase its contribution to the Airport and Airway Trust Funds. I think that, without question, GA has stepped up to the plate. They have agreed to pay for the necessary increases to move our aviation infrastructure into the NextGen technology.

Mr. Chairman, I cannot recall a time when industry has come to me and said, we want to help and we are willing to support an increase in our taxes to do so, but that is what general aviation did. Their only request is that they be able to pay through the current efficient and effective tax structure of the fuel tax. One thing about it, you do not have to worry about any baggage fees in regard to general aviation. I hope. [Laughter.]

Anyway, they raised the general aviation jet fuel tax by nearly 61 percent, from 35.9, or 40 cents a gallon, adding 20.9 cents per gallon. They will contribute an estimated \$113 million to updating NextGen, so I think that is certainly noteworthy.

In conclusion, I am hopeful that the Senate will continue to work in this spirit of bipartisanship on this bill. Mr. Chairman, are we going to do this next Tuesday? Are we going to do this, or is it going to be pushed down the road?

The CHAIRMAN. Well, my hope, Senator, is we mark it up on Tuesday.

Senator ROBERTS. I would hope that would be the case.

Dr. Dillingham, pardon my lack of understanding on this. You have stated, on page 12 of your testimony, "One approach would be to appropriate less than 100 percent of the forecasted revenues, especially until a sufficient surplus is established to protect against potential disruptions." How can you have a surplus if you are going to appropriate less than 100 percent of the forecasted revenues?

Dr. DILLINGHAM. What happens, Senator, is, when the forecasts are made, that is when the appropriations are made, if in fact the appropriations are made based on 90 percent of the forecast, then you would have a cushion if the revenues did not come in a year later as you had predicted they would. So you would not be in a situation of running into a negative or zero on the trust fund. It is the timing of the situation that creates the possibility or probability of going negative and not having a surplus. I did not make that clear. did I?

Senator ROBERTS. Well, yes, you did. You might want to consider moving over to OMB. [Laughter.]

I will just take it at that. We can go into that. I am sure staff can figure that out so I understand this.

Dr. DILLINGHAM. I am still working on understanding it, too.

Senator ROBERTS. All right. Thank you. Thank you, Dr. Dillingham.

Mr. Chairman, are you ready for a tax on baggage fees?

The CHAIRMAN. No. But I am just wondering if the tickets are taxed

Senator ROBERTS. Then why not the bags?

The CHAIRMAN. Yes. Then why not the bags?

Senator ROBERTS. Have you seen the ads by Southwest? You are going to get Southwest employees all over you.

The CHAIRMAN. No, they do not tax bags. Senator ROBERTS. Yes, I know. That is the whole point. I think that just gets passed on to the consumer.

The CHAIRMAN. It is.

Senator ROBERTS. Why don't we fine the TSA employees who get a little too personal?

The CHAIRMAN. I like that.

Senator ROBERTS. I have a knee replacement, and I have to tell you, it is a wonderful experience. You have to put 15 minutes into your schedule to get through the whole mess. Depending on the personality—if they have any—of the TSA employees, that could be a possibility. You would have to hire somebody else to look and say, oops, you get another one. I am wandering into things I should not be wandering into. [Laughter.]

Staff will really chastise me. But somehow I would just like to have a say about the people who are doing that. Maybe you could have the TSA employees charge another \$5 to the person instead of these just terribly personal pat-downs and just do a body massage. [Laughter.]

Just a thought. It makes as much sense as your tax on bags.

The CHAIRMAN. I am not going to go there. Senator ROBERTS. I am not either, anymore. [Laughter.]

I am done. Thank you. The CHAIRMAN. Thank you, Senator Roberts. Thank you, Dr. Dillingham, very, very much for your time with the hearing. It will help us all by getting this bill reported out and passed very quickly. Thank you very much. The hearing is concluded.

[Whereupon, at 11:05 a.m., the hearing was concluded.]

## **A P P E N D I X**

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Hearing Statement of Senator Max Baucus (D-Mont.) Regarding the Status of the Airport and Airway Trust Fund

Captain A. G. Lamplugh, a British World War I pilot, once said:

"Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terribly unforgiving of carelessness, incapacity, or neglect."

Today as we explore the state of the Airport and Airway Trust Fund – also known as the Aviation Trust Fund – we must remember just how dangerous carelessness, incapacity, or neglect can be when it comes to aviation.

We cannot afford to neglect our aviation infrastructure. Modernizing our runways and air-traffic control will improve safety, protect consumers, and create jobs.

Strong and efficient aviation will reduce delays, lower costs, and improve access to rural communities, including those in my home state of Montana.

We want to thank our witness for joining us today, particularly on such short notice. We look forward to his testimony.

The Aviation Trust Fund was enacted more than 40 years ago, to help finance the capital and operating costs of our aviation infrastructure.

Much has changed in aviation over the past four decades.

From airline deregulation in the 1970s to the arrival of the Internet in the 1990s, air travel has undergone a dramatic transformation in the four decades since the Trust Fund was born.

And so has the Trust Fund.

Revenues paid into the fund have risen from about \$1 billion in 1971 to a projected \$11 billion this year. And a dramatic increase in air travel has made clear the importance of this trust fund.

By 2030, the U.S. air-traffic system will handle an estimated 191,000 flights every day. This is a daily increase of about 49,000 flights. The number of passengers on U.S. flights will increase from about 645 million this year to one billion per year by 2030.

The revenues from the Aviation Trust Fund are paying for far different things than they used to, including new technologies like NextGen. NextGen is the new GPS-based air-traffic system that will help us better use our airspace. NextGen's precision will allow us to significantly upgrade our aviation system.

Proper and careful implementation of the NextGen system is critical. It is critical for improving safety, for improving aviation efficiency, for creating jobs and for advancing U.S. competitiveness.

Let's start with safety.

Until now, our air-traffic system has relied on 1950s-era radar that pilots use to navigate from point to point. The use of NextGen's GPS technology will allow for more precise tracking of aircraft. This will improve safety by letting air-traffic controllers and pilots know the exact location of every aircraft at every moment.

With NextGen, both pilots and controllers will have virtual maps in front of them displaying flights and weather in real time.

NextGen will also improve air-traffic efficiency.

The GPS-based system will let aircraft maneuver safely much closer together. This will allow airports to maximize the use of existing runways and build future runways closer together, reducing delays. Those delays are costly and frustrating for passengers.

Consider an FAA-commissioned report issued last year, which found flight delays cost our economy \$32.9 billion in 2007. Passengers lost billions of dollars, through time wasted at the airport, meals purchased while waiting for flights, and hotels rented due to cancellations and missed connections. That's unacceptable, and NextGen can help fix it.

Implementation of NextGen will also create jobs.

According to a report last October from the Treasury Department, more than 60 percent of the jobs created by infrastructure investments – such as NextGen – occur in the construction sector. And we all know that the construction sector was one of the hardest-hit by the recession, with an average unemployment rate of over 15 percent. Reauthorizing FAA legislation, with investments in NextGen, will help improve the construction industry's bleak situation and create an estimated 280,000 jobs in airports across the country.

Finally, implementation of NextGen will improve U.S. competitiveness.

We simply cannot continue to lead the world economy if we don't invest in infrastructure – including our transportation infrastructure. According to the same Treasury report, the U.S. spends approximately two percent of our GDP on infrastructure, a 50 percent decline from 1960. Meanwhile, China spends close to nine percent of its GDP on infrastructure. Europe spends five percent.

We can't continue to ignore our roads, runways and railways if we want to compete in the global economy.

Today's hearing is an important step this Committee will take toward improving our air-traffic system.

Through that process we'll be working to fund an air-traffic system that is safer and more efficient, one that sustains and creates jobs, and one that enhances our international competitiveness through investments in vital infrastructure.

We reported legislation to that end in the last two Congresses, and last year the Senate passed that product by a vote of 93 to zero. But unfortunately those efforts didn't result in a bill becoming law.

So we need to act again, and I urge us to do so quickly.

###

GAO	United States Government Accountability Office Testimony Before the Committee on Finance, U.S. Senate		
	AIRPORT AND AIRWAY TRUST FUND		
	Declining Balance Raises Concerns over Ability to Meet Future Demands		
	Statement of Gerald Dillingham, Director Physical Infrastructure		



GAO-11-358T

22

#### Mr. Chairman and Members of the Committee:

We appreciate the opportunity to participate in today's hearing on the status of the Airport and Airway Trust Fund (Trust Fund). Established in 1970, the Trust Fund helps finance the Federal Aviation Administration's (FAA) investments in the airport and airway system, such as construction and safety improvements at airports and technological upgrades to the air traffic control system, as well as FAA operations, such as providing air traffic control and conducting safety inspections.<sup>1</sup> FAA, the Trust Fund, and the excise taxes that support the Trust Fund (which are discussed later in this statement) must all be periodically reauthorized. The most recent reauthorization expired at the end of fiscal year 2007.<sup>2</sup> Proposed reauthorization legislation was considered but not enacted in the 110th and 111th Congresses, although several short-term measures were passed to extend the authorization of aviation programs, funding, and Trust Fund revenue collections. The latest of these extensions-the Airport and Airway Extension Act of 2010, Part IV-was enacted on December 22, 2010, extending FAA programs, expenditure authority, and aviation trust fund revenue collections through March 31, 2011.3 The financial health of the Trust Fund is important to ensure sustainable funding for a safe and efficient aviation system without increasing demands on general revenues.

My statement today provides an update on the status of the Airport and Airway Trust Fund, including the current financial condition of the Trust Fund, anticipated Trust Fund expenditures for planning and implementing improvements in the nation's air traffic management system that are expected to enhance the safety and capacity of the air transport system, and options for ensuring a sustainable Trust Fund. This statement draws on our body of work on these issues, supplemented with updated information on the Trust Fund from FAA and the Congressional Budget Office.<sup>4</sup> All dollars reported in this statement are nominal, unless otherwise noted.

<sup>1</sup>Airport and Airway Revenue Act of 1970, Pub. L. No. 91-258, 84 Stat. 236 (1970). <sup>3</sup>Vision 100—Century of Aviation Reauthorization Act (Vision 100), Pub. L. No. 108-176, 117 Stat. 2490 (2003).

<sup>3</sup>Pub. L. No. 111-329, 124 Stat. 3566 (2010). While the majority of the extensions expire March 31, 2011, certain authorities were extended until April 1, 2011, or June 30, 2011.

<sup>4</sup>Commercial Aviation: Consumers Could Benefit from Better Information about Airline-Imposed Fees and Refundability of Government-Imposed Taxes and Fees,

GAO-11-358T

#### Background

Revenues

Sources of Trust Fund The Trust Fund provides the primary source of funding for FAA and receives revenues principally from a variety of excise taxes paid by users of the national airspace system. The excise taxes are imposed on airline ticket purchases and aviation fuel, as well as the shipment of cargo. Revenues deposited in the Trust Fund are subject to congressional appropriations. In addition to Trust Fund revenues, in most years, General Fund revenues have been used to help fund FAA operations.

Source	Rates effective as of January 1, 2011
Domestic passenger ticket tax	7.5 percent
Domestic flight segment tax	\$3.70 per passenger per segment; indexed to the Consumer Price Index
(excluding flights to or from rural airports)	
Tax on flights between the continental United States and Alaska or Hawaii (or between Alaska and Hawaii)	\$8.20 per passenger; indexed to the Consumer Price Index
Tax on international arrivals and departures	\$16.30 per person; indexed to the Consumer Price Index
Tax on mileage awards (frequent flyer awards tax)	7.5 percent of value of miles
Domestic commercial fuel tax	\$0.043 per gallon
Domestic general aviation gasoline tax	\$0.193 per gallon
Domestic general aviation jet fuel tax	\$0.218 per gallon
Tax on domestic cargo or mail	6.25 percent on the price paid for transportation of domestic cargo or ma

Source: GAO presentation of FAA and IRS data.

Note: The Trust Fund also earns interest on its cash balance along with refunds or credits, such as refunds of taxes on aviation fuel other than gas (noncommercial) and refunds of taxes on aviation gasoline (noncommercial).

GAO-10-785 (Washington, D.C.: July 14, 2010); Next Generation Air Transportation System: FAA Faces Challenges Responding to Task Force Recommendations, GAO-10-188T (Washington, D.C.: Oct. 28, 2009); Commercial Aviation: Airline Industry Contraction Due to Volatile Fuel Prices and Falling Demand Affects Airports, Passengers, and Federal Government Revenues, GAO-09-393 (Washington, D.C.: Apr. 21, 2009); Next Generation Air Transportation System: Status of Systems Acquisition and the Transition to the Next Generation Air Transportation System, GAO-09-1078 (Washington, D.C.: Sept. 11, 2008); Aviation Finance: Observations on Potential FAA Funding Options, GAO-06-973 (Washington, D.C.: September 29, 2006); and Airport and Airway Trust Fund: Preliminary Observations on Past, Present, and Future, GAO-05-657T; (Washington, D.C.: May 4, 2005).

GAO-11-358T





Note: Taxes related to passenger tickets, including the ticket tax, made up about 65 percent to 69 percent of the revenues going into the Trust Fund in fiscal years 2000 through 2010.

<sup>5</sup>Although figure 1 shows Trust Fund receipts fluctuating, these receipts are in nominal dollars; if the numbers were adjusted for inflation, the value of receipts in fiscal year 2010 would be considerably lower than the value of the receipts in fiscal year 2000.

GAO-11-358T

Uses of Airport and Airway Trust Fund Revenues

The Trust Fund is the primary source of funding for FAA's capital programs and also provides funds for FAA's Operations account. The capital accounts include (1) the Facilities and Equipment (F&E) account, which funds technological improvements to the air traffic control system, including the modernization of the air traffic control system, called the Next Generation Air Transportation System (NextGen); (2) the Research, Engineering, and Development (RE&D) account, which funds research on issues related to aviation safety, mobility, and NextGen technologies; and (3) the Airport Improvement Program (AIP), which provides grants for airport planning and development. In addition, the Trust Fund has provided all or some portion of the funding for FAA's Operations account, which funds the operation of the air traffic control system and safety inspections, among other activities. Finally, the Trust Fund is used to pay for the Essential Air Service (EAS) program.<sup>6</sup> In fiscal year 2010, FAA's expenditures totaled about \$15.5 billion, with Trust Fund revenues covering about \$10.2 billion, or 66 percent, of those expenditures. As figure 2 shows, while total FAA expenditures grew about 60 percent from fiscal year 2000 through fiscal year 2010, the Trust Fund's revenue contribution only increased 12 percent, while the contribution of general revenues from the U.S. Treasury has increased to cover a larger share of FAA's operations expenditures. We discuss this change in more detail in the next section of this statement.

 $^6\text{EAS}$  was established when the airline industry was deregulated in 1978. Airline Deregulation Act of 1978, Pub. L. No. 95-504, § 33(a), 92 Stat. 1705, 1732-39 (1978) (codified as amended at 40 U.S.C. § 34 1731–41748). Since then, the program has subsidized air service to eligible communities that would otherwise not have scheduled service.

GAO-11-358T

26



<sup>6</sup>GAO annually audits the excise tax contributions to the Trust Fund, and the most recent audit was published in November 2010. See GAO, *Applying Agreed-Upon Procedures: Fiscal Year 2010 Airport and Airvay Trust Fund Excise Taxes*, GAO-11-120R (Washington, D.C.: Nov. 4, 2010).

Page 5

GAO-11-358T





<sup>9</sup>Pub. L. No. 106-181, 114 Stat. 61 (2000).
<sup>10</sup>Pub. L. No. 108-176, 117 Stat. 2490 (2003).

GAO-11-358T





Until recently, FAA generated a forecast for the President's budget using models based on historical relationships between key economic variables, such as the growth rate of the economy, and aviation measures, such as passenger traffic levels and passenger fares, that affect Trust Fund revenues. The responsibility for forecasting Trust Fund revenues shifted

<sup>11</sup>As previously noted, the Trust Fund also earns interest on its cash balances.

Page 7

GAO-11-358T



the authority to incur.<sup>15</sup> A low uncommitted balance signals to FAA that limited revenues are available to incur new obligations while still covering expenditures on existing obligations and increases FAA's challenge in moving forward with planned projects and programs. FAA officials have noted that they closely monitor the Trust Fund's available cash and FAA's obligations to ensure that enough cash and budget authority are available to cover FAA's expenditures and obligations. In the short term, if there were a risk of overcommitting Trust Fund resources, FAA officials noted that they might delay obligations for capital programs if the Trust Fund did not have adequate revenues to cover those obligations without additional funding authorized and appropriated from the General Fund. According to FAA officials, they would first defer some capital program obligations so they could continue to fund operations, such as air traffic control and safety inspections. These actions would ensure that the agency did not incur obligations or expenditures in excess of the Trust Fund's cash balance, which could potentially lead to a violation of the Antideficiency Act.<sup>16</sup> Later this month, in the President's budget, the administration will release its newest estimate of the Trust Fund's fiscal year 2011 year-end uncommitted balance.

<sup>15</sup>An obligation is an action that creates a legal liability or definite commitment on the part of the government to make a disbursement at some later date. FAA's fiscal year appropriations and authorization provide the legal authority for FAA to incur obligations and make payments out of the Trust Fund (through the Treasury).

<sup>16</sup>The Antideficiency Act prohibits an officer or employee of the federal government from incurring an obligation, or making an expenditure, in advance or in excess of an appropriation or fund. 31 U.S.C. § 1341(a)(1). However, FAA's aviation programs are partly funded with contract authority, which is an exemption to the Antideficiency Act and authorizes FAA to incur obligations in advance or in excess of an appropriation. This authorizes FAA to incur obligations in advance or in excess of the revenue in the Trust Fund. However, FAA must receive an appropriation from the Trust Fund in order to liquidate these obligations. If there is not adequate revenue in the Trust Fund, the obligation cannot be liquidated. Because of the uncertainty in forecasting, the addition of revenues into the Trust Fund throughout the fiscal year, and the mix of FAA programs funded through contract authority and through regular appropriations, it may be difficult for FAA to determine at what point it would violate the Antideficiency Act. Accordingly, FAA must carefully manage its obligations and expenditures so that it can take action before it reaches the point where it could potentially incur an Antideficiency Act violation.

GAO-11-358T

Anticipated Future Expenditures for NextGen Congress may choose to increase FAA's authorized funding level in the near term to allow FAA to further develop NextGen, the new satellitebased air traffic management system that is designed to replace the current radar-based system. NextGen improvements include new integrated systems, procedures, aircraft performance capabilities, and supporting infrastructure needed for a performance-based air transportation system that uses satellite-based surveillance and navigation and network-centric operations. These improvements are intended to improve the efficiency and capacity of the air transportation system while maintaining its safety so that it can accommodate anticipated future growth. FAA has generally identified the NextGen capabilities that it plans to implement in the near term to midterm, through 2018. FAA's capital investment is expected to be \$11 billion to \$12 billion through 2018. This cost does not include research, the airport and associated airfield improvements, or the aircraft equipage that is necessary to realize all benefits. In addition to FAA's capital investment costs, FAA estimates that the equipage necessary to realize significant capabilities implemented through 2018 will cost in the range of \$5 billion to \$7 billion. Decisions about the long-term direction for NextGen (beyond 2018) have yet to be made, and two key planning documents—the NextGen Integrated Work Plan and Enterprise Architecture—contain a wide variety of possible ideas and approaches. Therefore, the costs of the system over the long term are uncertain, but have been estimated to be in the \$40 billion range (combined public and private investment in ground infrastructure and avionics). FAA's proposed budget for NextGen activities is \$1.14 billion in fiscal year 2011, up from the \$700 million spent in fiscal year 2009 and the \$868 million spent in fiscal year 2010. In addition, as we have previously reported, NextGen's ability to enhance capacity will partly depend on how well airports can handle greater capacity." FAA's plans call for building or expanding runways at the nation's 35 busiest airports to help meet the expected increases. However, even with these planned runway improvements and the additional capacity gained through NextGen technologies and procedures, FAA analyses indicate that 14 more airports will still need additional capacity, which could require additional Trust Fund resources.

17GAO-08-1078.

Page 10

GAO-11-358T

32
Additionally, the Future of Aviation Advisory Committee<sup>18</sup> recently proposed to the Secretary of Transportation that the federal government undertake a significant financial investment to accelerate efforts to equip aircraft and train staff to use key NextGen technologies and operational capabilities, including performance-based navigation (PBN), automatic dependent surveillance-broadcast (ADS-B), ground-based augmentation system (GBAS) and data communications. The amount of investment required will depend on how any financial incentives are structured. Financial assistance can come in a variety of forms, including grants, costsharing arrangements, loans, loan guarantees, tax incentives, and other innovative financing arrangements. One financing option proposed by the NextGen Midterm Implementation Task Force<sup>19</sup> to encourage the purchase of aircraft equipment is the use of equipage banks, which would provide federal loans to operators to equip their aircraft. Another financing option, proposed in various forms by a variety of stakeholders, would involve setting up an equipage fund using private equity backed by federal loan guarantees. While the details of different proposals vary, they would all allow operators who purchase equipment through the fund to defer payments on the equipment until FAA makes improvements required for the operators to benefit from the equipment. As we have previously reported, prudent use of taxpayer dollars is always important; therefore, any financial incentives should be applied carefully and in accordance with key principles.<sup>20</sup> For example, mechanisms for financial assistance should be designed so as to effectively target parts of the fleet and geographical locations where benefits are deemed to be greatest, avoid unnecessarily equipping aircraft (e.g., those that are about to be retired), and not displace private investment that would otherwise occur. Furthermore, it is preferable that the mechanism used for federal financial

<sup>18</sup>On March 24, 2010, the Secretary of Transportation authorized the establishment of a Federal Advisory Committee to address aviation issues. The Future of Aviation Advisory Committee (FAAC) was set up to develop information, advice, and recommendations to the Secretary of Transportation on ensuring the competitiveness of the U.S. aviation industry and its capability to address the evolving transportation needs, challenges, and opportunities of the global economy. On December 15, 2010, the committee presented its recommendations to the Secretary of Transportation.

<sup>19</sup>Recognizing the importance of near-term and midterm solutions, FAA requested that RTCA, Inc.—a private, not-for-profit corporation that develops consensus-based recommendations on communications, navigation, surveillance, and air traffic management system issues—create a NextGen Midterm Implementation Task Force to reach consensus within the aviation community on the operational improvements that can be implemented between now and 2018. The Task Force issued its recommendations in September 2009. <sup>20</sup>GAO-10-18ST.

GAO-11-358T

33

Page 11

	assistance result in minimizing the use of government resources (e.g., some mechanisms may cost the government more to implement or may place the government at greater risk than others).
Options for Ensuring a Sustainable Trust Fund	Given the uncertainty inherent in forecasting revenues and the decline in the uncommitted balance of the Trust Fund, we have suggested that Congress should work with FAA to develop alternative ways to reduce the risk of overcommitting budgetary resources from the Trust Fund. <sup>21</sup> Better matching of actual revenues to the appropriation from the Trust Fund would help to ensure that Trust Fund revenues are sufficient to cover all the obligations that FAA has the authority to incur, thereby reducing the risk of disruptions in funding for aviation projects and programs. One approach would be to appropriate less than 100 percent of the forecasted revenues, especially until a sufficient surplus is established to protect against potential disruptions in revenue collection. This change would reduce the likelihood that FAA would incur obligations in excess of the cash needed to liquidate these obligations and thus reduce the risk of delaying or terminating projects. The House of Representatives' FAA reauthorization bill proposed in the 111th Congress includes a provision that would limit the budgetary resources initially made available each fiscal year from the Trust Fund to 90 percent, rather than 100 percent, of forecasted revenues for that year; then 2 fiscal years later, when actual revenues would be known, any amount that exceeded 90 percent of from the Trust Fund to FAA. <sup>22</sup> Congress would need to provide additional general revenues in the first 2 years to make up the difference. Another approach would be to target a minimum level for the Trust Fund's uncommitted balance and base appropriations on the goal of maintaining that target level. This change would make it more likely that uncommitted resources would be available to FAA in the event that actual revenues fell short of forecasted revenues in a future year. Either approach would resu in fewer Trust Fund resources available for FAA for some period of time, requiring additional general revenues to make up the difference, unless FAA's overall resources are reduce

<sup>25</sup>This provision is contained in H.R. 915, 111th Cong. (2009), introduced on February 9, 2009, but was amended from 95 percent to 90 percent on March 5, 2009. H.R. 2881, 110<sup>th</sup> Cong. (2007), which was introduced two sessions ago, passed in the House on September 20, 2007, and included a provision to limit FAA's budget authority to 95 percent.

GAO-11-358T

34

Page 12

In the longer term, future Trust Fund revenues under the current tax structure may be lower than previously anticipated. For example, in January 2011, the Congressional Budget Office forecast about \$25 billion less in Trust Fund revenues over the next 6 years (through fiscal year 2017) than it forecast in 2007 for that same time period. Given the decline in expected future revenues, appropriations from the Trust Fund under current law will be lower in future years than previously projected unless new revenue sources are found. To maintain appropriations consistent with what earlier revenue forecasts would have afforded, Congress could take action such as increasing general revenue contributions or increasing Trust Fund revenues. For example, we suggested that if Congress determines that the benefit of added revenue to the Trust Fund warrants taxation of optional airline service fees, such as baggage fees, then it should consider amending the Internal Revenue Code to make mandatory the taxation of certain or all airline-imposed fees and require that the revenue be deposited in the Trust Fund.<sup>26</sup>

The Future of Aviation Advisory Committee also recommended that the Secretary of Transportation commission an independent study of the federal aviation tax burden on passengers, airlines, and general aviation to determine if existing levels of taxes and fees sufficiently balance the Department's statutory mandates to "encourage efficient and wellmanaged air carriers to earn adequate profits and attract capital...;" "promot[e], encourag[e], and develop civil aeronautics and a viable, privately-owned United States air transport industry;" and "ensur[e] that consumers in all regions of the United States, including those in small communities and rural remote areas, have access to affordable, regularly

<sup>23</sup>As we reported in GAO-10-785, while fares have decreased, airlines have imposed fees for a variety of passenger services, most notably for a first or second checked bag, for which separate charges did not previously exist. Fees have also been imposed for early boarding, seat selection, and meals, among other services. Under governing Treasury regulations and Internal Revenue Service (IRS) guidance, charges for services beyond those mandatory charges necessary to transport passengers, such as checked baggage, are not subject to the 7.5 percent excise tax, and consequently, those revenues are not deposited into the Trust Fund. See Rev. Rul. 73-508, 1973-22, C.B. 366, See also Rev. Rul. 30-31, 1980-1, C.B. 251, Priv. Ltr. Rul. 118216-09 (Sept. 28, 2009); 26 C.F.R. § 84 40-261-7, 49.4261-8. To the extent that airlines continue to rely on revenues from optional services, such as baggage fees, the Trust Fund will not benefit because many of these additional fees, in accordance with Treasury regulations and IRS guidance, are not included in the tax base. If baggage fees alone had been subject to the 7.5 percent excise at in fiscal year 2010, the Trust Fund would have received approximately an additional \$248 million in revenues. This amount is expected to grow in future years if airlines continue to shift toward more fee revenue

Page 13

GAO-11-358T

35

. 1		
	scheduled air service."24 The committee recomm	unded that the study
	address the following questions:	lended that the study
•	How do the federal taxes imposed on the U.S. ar to those imposed on other modes of transportat Is the existing level of aviation taxes and fees le effectively for the services provided by the feder Are there more efficient ways to collect and adn taxes and fees that would save taxpayer and avi Would regular consultation between those depa administer aviation taxes and fees prior to imple tax rates and policies result in (1) a more efficie system and (2) the desired industry and social o What is the appropriate balance between Gener. Trust Fund financing of capital and operating co system, recognizing the significant role commer play in fostering economic growth and developm	ion? vied efficiently and ral government? ninister existing aviation ation industry dollars? rtments and agencies that ementing any changes to nt and rational aviation tax utcome? al Fund financing and sets of the national aviation cial and general aviation
	Based on the results of the study, the committee Secretary pursue appropriate legislative and reg be needed to ensure that existing and any new a applied to passengers, airlines, and general avial collected efficiently, appropriately recognizing t general aviation play in fostering economic grow	ulatory actions that may wation taxes and fees tion are effective and he role commercial and
	Thank you, Mr. Chairman, that concludes my sta to answer any questions that you or other Memb might have.	
Contacts and Staff Acknowledgments	For future questions about this statement, pleas 2834 or dillinghamg@gao.gov. Individuals makin report were Paul Aussendorf, Assistant Director Bryant-Bertail; Lauren Calhoun; Carol Henn; Be Krause; Hannah Laufe; Maureen Luna-Long; and	g key contributions to this ; Amy Abramowitz; Jessica ss Eisenstadt; Heather
	<sup>24</sup> 49 U.S.C. § 40101(a).	
	<sup>25</sup> The committee's recommendations are currently under co Transportation.	onsideration by the Secretary of
(540224)	Page 14	GAO-11-358T

### Responses to Post-Hearing Questions for the Record "Status of the Airport and Airway Trust Fund" Committee on Finance U.S. Senate Hearing held on February 3, 2011 Physical Infrastructure Issues U.S. Government Accountability Office

# **Questions from Senator Max Baucus**

 Up until a few years ago airlines didn't charge for checked baggage. Now nearly all major airlines, except Southwest Airlines and Jet Blue, charge fees for the first two pieces of checked luggage. And last week the Associated Press ran a story about airlines imposing fuel surcharges. The AP reported, "For the first time since late 2008, U.S. airlines are adding fuel surcharges to ticket prices. They've already raised fares five times since December to offset a 25 percent increase in the price of jet fuel."

How much do airlines collect on baggage fees and fuel surcharges on an annual basis? If those fees and surcharges were taxed like tickets, at a rate of 7.5%, how much would the Airport and Airway Trust Fund receive in a typical year?

Fuel surcharges are subject to the 7.5 percent excise tax, but are not reported separately, so it is not possible to determine how much the airlines collected just from fuel or other surcharges. Baggage fees, however, are reported separately and, as we reported in our testimony, would have yielded \$248 million in tax revenue during fiscal year 2010 if they had been subject to the 7.5 percent excise tax. In fiscal year 2009, taxing baggage fees would have yielded \$186 million. The amount of potential tax revenue is likely to increase in future years as baggage fees become more common. In addition to baggage fees, many other airline fees are not subject to the 7.5 percent excise tax, such as early boarding, phone reservation, and seat preference fees.

2) Some aviation taxes – such as the one for international flights – are indexed for inflation. If taxes on aviation fuels – both for commercial and general aviation – had been indexed for inflation when the Airport and Airway Trust Fund was enacted in 1970, how much more revenue would the Trust Fund have collected over that period? What would those fuel tax rates be today if they had been adjusted for inflation?

The Airport and Airway Revenue Act of 1970 established an excise tax of 7 cents per gallon for noncommercial jet fuel and 3 cents per gallon for noncommercial gasoline. From 1970 until 1993, commercial aviation jet fuel was not taxed. In 1993, Congress

# 37

<sup>&</sup>lt;sup>1</sup>See <u>GAO</u>, Commercial Aviation: Consumers Could Benefit from Better Information about Airline-Imposed Fees and Refundability of Government-Imposed Taxes and Fees, GAO-10-785 (Washington, D.C.: July 14, 2010), table 1, for a full list of taxable and nontaxable airline fees.

imposed a tax of 4.3 cents per gallon on commercial aviation jet fuel, to be deposited into the Treasury's general fund. Since 1997, this 4.3-cent commercial aviation excise fuel tax has been deposited into the Airport and Airway Trust Fund. Using the Consumer Price Index (CPI), we calculated that \$1 in 1970 would be worth \$5.68 in 2011. If the various tax rates in place in 1970 had kept pace with the CPI, then the various fuel tax rates in 2011 would be 40 cents for noncommercial jet fuel and 17 cents for noncommercial gasoline (see table below). Over time, however, Congress has established different tax rates for different categories of aviation fuels and has revised these rates numerous times. Recently, for example, the Senate Finance Committee approved an increase in the general aviation jet fuel tax rate to 35.9 cents per gallon (not including a 14.1-cent surcharge on fuel for fractional aircraft<sup>2</sup>) as part of the FAA reauthorization legislation. The tax rate for noncommercial gasoline remains unchanged at 19.3 cents per gallon, and the tax rate for commercial jet fuel remains at 4.3 cents per gallon.

#### Aviation Excise Fuel Tax Rates, 1970 and Current

Fuel type	Tax rate in 1970 (cents per gallon)	1970 inflation-adjusted tax rate (cents per gallon)	Existing tax rate (cents per gallon)
Noncommercial jet fuel	7	40	21.8
Noncommercial gasoline	3	17	19.3
Commercial jet fuel*	0	0	4.4 <sup>b</sup>

Source: GAO analysis of aviation statutes.

\*Commercial aviation jet fuel taxes were not imposed between 1970 and 1993.

<sup>b</sup>Includes 0.1 cent for the Leaking Underground Storage Tank (LUST) Trust Fund.

Data are not readily available on fuel usage over the past 40 years. Such data are necessary to compute the revenue that would have been collected under an indexed rate. In addition, certain assumptions would need to be made about how usage might have changed under a different tax rate. Nevertheless, we would be happy to work with the Committee to develop an estimate if that information would still be of interest.

3) I understand that Australia, Canada and a number of European nations are already using advanced air traffic control technology. What can the United States learn from other countries that have experience implementing satellite technology similar to NextGen? Are we collaborating with these countries to find out what works, and what doesn't?

To varying degrees, Australia, Canada, and a number of European nations are using advanced air traffic control technology, as are other countries, including the United States. For example, many countries have begun to implement a satellite-based NextGen surveillance technology, Automatic Dependence Surveillance-Broadcast (ADS-B), which

<sup>&</sup>lt;sup>2</sup>A fractional jet is a common term for fractional ownership of aircraft. With fractional jets, customers (referred to as "owners") buy a "share" of an aircraft, rather than an entire plane. The price is prorated from the market price of a full aircraft. Owners then have guaranteed access (50 to 400 hours annually or a certain number of days per year, depending on share size) to that aircraft.

is being developed and deployed in stages. When complete and installed at air traffic control facilities and on board aircraft, ADS-B will provide air traffic controllers with the precise location and direction for every aircraft in the airspace system and will allow each aircraft in the system to know where other aircraft are operating. Both Australia and Canada are using the initial capabilities of ADS-B in the management of selected parts of their airspace systems. Similarly, FAA facilities and aircraft equipped with ADS-B are using this technology, most notably in the Gulf of Mexico and Alaska. FAA is also incorporating ADS-B into its testing and planning of future NextGen initiatives.

Other countries may appear to be ahead of the United States in their adoption and implementation of advanced air traffic control technologies. What appears to be a disparity in the pace of adoption is not necessarily a real disparity and can be attributed to differences in the size and complexity of the U.S. and other airspace systems and to the "leap-frog factor." As you know, the U.S. airspace system is the largest and most complex in the world, with more airports and more air traffic to manage safely. Consequently, the full testing and adoption of a new technology takes longer than it does in a smaller, less complex system. The leap frog factor comes into play when a nation with a relatively unsophisticated air traffic control system skips-or leaps overintermediate developments in a technology, such as improvements in ground radars, and moves directly to an advanced technology, such as ADS-B, which uses satellites for navigation. This effect is can be seen in countries such as India, China, and some African nations. FAA and the European Union formally signed an agreement in March 2011 to work together on research related to air traffic service to aircraft flying between the United States and Europe. According to FAA officials, the agreement encourages industry participation on both sides of the Atlantic, ensuring the development, harmonization and use of the best technologies available.

We have recently begun a study of FAA's efforts to collaborate and ensure interoperability between its own and Europe's air traffic management technologies and operating procedures.

#### **Questions from Senator Orrin Hatch**

1) In addition to the taxes that fund the Airport and Airway Trust Fund, consumers of FAA services are subject to other taxes and fees, such as the Passenger Facility Charge and security fees. Though Passenger Facility Charges are not technically federal taxes, they still add to the total cost of air travel. How do taxes and fees that aren't collected by the FAA trust fund impact trust fund revenues? Is there an impact to trust fund revenues if Passenger Facility Charges are increased by a \$1, and how could that impact be measured?

The imposition of taxes and fees indirectly affects trust fund revenues, because additional costs imposed on passengers will marginally reduce the demand for air travel and correspondingly reduce tax collections. The extent of reduction depends on (1) the amount of the additional tax, (2) the extent to which that tax is paid by passengers—that is, some of the cost could be absorbed by airlines if they choose to reduce base fares, and

(3) passengers' price elasticity of demand, or the extent to which price changes influence passengers' travel purchase decisions. In addition, an increase in passenger facility charges would have another relevant impact by increasing the amount of Airport Improvement Program (AIP) funds available to smaller airports, since larger airports would be required to turn back to FAA a greater portion of the AIP funds that they would be entitled to receive under current AIP rules. FAA could use this money to support AIPeligible projects at smaller airports.

2) In your oral testimony you cited runway expansion undertaken as part of the implementation of NextGen as a source of job creation. Would runway expansion lead to more people overall being employed or would it provide work for people already employed? (Would construction firms hire new employees or have the work done by existing employees?) Would any new jobs that are created be long-term, or would they vanish once construction is completed?

Several factors, such as the amount of funds available for infrastructure investment, the scope of the projects, and the availability of different categories of workers in the marketplace could have an impact on the nature and scope of employment created through aviation infrastructure construction. Furthermore, when the economy is at less than full employment, investments in infrastructure projects, like airport runways, can be a source of job creation. For the next several years, the economy is expected to remain at less than full employment, but according to economic forecasts, it will move toward full employment by the end of the decade. Because much of the NextGen spending will take place over many years, including during periods of both full and less-than-full employment, it is difficult to say to what extent that spending will create new jobs. It is also difficult to estimate how long runway construction jobs would exist, since runway construction projects take place across a variety of locations over a long time frame.

3) During the hearing, I asked a question as to whether different groups of users of FAA services are paying proportionate costs for the services they use, and you indicated you were willing to work with me and my staff on this question. I am still very interested in this topic, and would appreciate any thoughts you have on how closely the burden of trust fund excise taxes on user groups mirrors the costs placed on the FAA by those same user groups. Also, how much of an impact do you believe the legislation reported by the Finance Committee on February 8, 2011, will have on the distribution of trust fund excise taxes applicable to those user groups?

Over the last decade, there has been widespread disagreement about the equity of the current aviation tax system. Many parties, particularly commercial passenger airlines, believe that the current excise tax system does not charge users equitably based on their use of the system. According to representatives of the passenger airline industry, the general aviation community does not pay its fair share because it contributes proportionally less revenue to the trust fund than commercial aviation. In response, the general aviation industry maintains that the system's design and capacity have been developed for passenger airlines and that the general aviation community does not require such an extensive system. In 2007, FAA reported on a cost accounting system that it developed based on fiscal year 2005 costs. This system was intended to more equitably

assign costs to aviation system users. However, as we noted in 2007, FAA's cost accounting system did not adequately document the basis on which it assigned costs to aircraft groups or support its assumption that all types of aircraft with the same engine type affect costs in the same manner. Another source of contention in the equity debate is how to fairly allocate costs that are not directly attributable to any particular user group (such as overhead and other fixed and common costs). To help resolve these equity issues, the Secretary of Transportation's Future of Aviation Advisory Committee (FAAC) has recently recommended an independent study of the federal aviation tax burden on passengers, airlines, and general aviation to determine if existing levels of taxes and fees sufficiently balance the Department's statutory mandates to "encourage efficient and well-managed air carriers to earn adequate profits and attract capital . . . ;" "promot[e], encourag[e], and develop civil aeronautics and a viable, privately-owned United States air transport industry;" and "ensur[e] that consumers in all regions of the United States, including those in small communities and rural remote areas, have access to affordable, regularly scheduled air service."

On February 14, as part of its FAA Reauthorization Markup, the Committee reported the Joint Committee on Taxation's revenue estimates for this bill. The revenue effects were moderately small, ranging between -\$2 million and \$88 million over the next 4 years and mostly attributable to increased fuel tax payments from the general aviation community. The Congressional Budget Office estimated that revenues would increase between \$29 million and \$103 million over the next 4 years.

## **Questions from Senator Tom Coburn**

1) How effective is the current FAA priority rating system for aviation projects? What can be done to improve it?

FAA uses a National Priority System (NPS) to prioritize airport development projects for discretionary funding.<sup>3</sup> This system is the first evaluation factor FAA uses to categorize airport development in accordance with agency goals and objectives. The NPS model generates values between 1 and 100, with a higher number indicating higher priority. Each fiscal year, an NPS threshold is established. All projects at or above the NPR threshold are consistent with FAA goals and objectives. Since 2005, this threshold has been around 41 for discretionary funds. From fiscal year 2009, 86.5 percent of AIP-funded projects had an NPS of 41 or above, excluding state block grant projects.

GAO has not evaluated the NPS. However, in developing a response to this question, we reviewed the available evaluative literature. We found that the Department of Transportation Office of Inspector General (OIG) has audited FAA's priority system several times. In October 26, 2007, the OIG reported "FAA's policies are effectively

<sup>&</sup>lt;sup>3</sup>A majority of AIP funds are awarded to airports based on statutory apportionment formulas. Remaining funds are awarded at FAA's discretion. FAA's ranking system is specified in the <u>Airport Capital Improvement Plan</u> at <u>http://www.faa.gov/airports/resources/publications/orders/media/AIP\_5100\_39A.pdf</u>.

ensuring that the highest priority rated projects are funded in accordance with regulations. However, under Vision 100 FAA can fund—and is funding—lower priority rated projects (i.e., those rated under 40)." The OIG also found that "FAA is meeting its strategic goal of funding projects that can enhance airport safety, security, and system capacity." We would be pleased to work with your staff to update and extend the information and analysis that was provided by the OIG in 2007.

2) Can you explain in greater detail how Congress has drained the Airport and Airway Trust Fund from a year-to-year basis, including how Congress took into account the uncommitted balance reserves of the Trust Fund in determining annual appropriations?

The Airport and Airway Trust Fund has declined for a number of reasons, including the process of basing appropriations from on the trust fund on forecasted trust fund revenues and other congressional actions. Except in its first 4 years, the trust fund has ended each year with an uncommitted balance. This uncommitted balance, which peaked in 1991 and again in 1999 at over \$7 billion, has since fluctuated and trended downward. According to the administration's recently released estimates, the uncommitted balance for the trust fund for fiscal year 2011 is \$121 million, and for fiscal year 2012, it is -\$3 million.

Our work has focused on the process through which Congress determines the amount of appropriations that should be made from the trust fund. Starting with the Wendell H. Ford Aviation Investment and Reform Act of the 21st Century (AIR-21)<sup>4</sup> in 2000 and continuing with Vision 100-Century of Aviation Reauthorization Act (Vision 100),<sup>5</sup> Congress has based FAA's fiscal year appropriation from the trust fund on the forecasted level of trust fund revenues, including interest on trust fund balances, as set forth in the President's baseline budget projection for the coming fiscal year. Each year's forecast, and accordingly FAA's appropriation, is based on information available in the first quarter of the preceding fiscal year. For example, the revenue forecast for fiscal year 2011 is prepared in the first quarter of fiscal year 2010. These revenue forecasts can be uncertain because it is difficult to anticipate, a year in advance, events that may significantly affect the demand for air travel or fuel usage, the fares that passengers pay, and other variables that affect trust fund revenues. In most years during the last decade, the forecasted revenues have exceeded the actual revenues, which has contributed to the decline in the trust fund's uncommitted balance.

In analyzing the decline of trust fund's uncommitted balance over the past decade, FAA officials have identified another important factor contributing to the trust fund's decline. Specifically, according to FAA, congressional decisions to deliberately spend down the trust fund's uncommitted balance during the first half of the decade, including decisions to factor the uncommitted balance into the funding equation rather than strictly following

<sup>&</sup>lt;sup>4</sup>P.L. 106-181, April 5, 2000.

<sup>&</sup>lt;sup>5</sup>P.L. 108-176, December 12, 2003.

the process set forth in AIR-21,<sup>6</sup> contributed to the decline. The following table summarizes FAA's analysis.

#### Airport and Airway Trust Fund, Fiscal Years 2000 through 2006

Dollars in billions

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Projected revenue	9.251	9.645	11.183	9.680	10.218	10.677	11.319
Appropriation from trust fund	10.055	10.438	12.699	10.242	10.861	11.030	11.692
Difference	-0.804	-0.793	-1,516	-0.562	0.642	0.353	0.373

Note: Figures may not add because of rounding.

When actual revenues fell short of projected revenues, FAA noted, the uncommitted balance declined more than Congress originally intended. We have not analyzed the relative contribution of these factors to the decline in the trust fund's uncommitted balance, nor have we identified other potential contributing factors.

#### 3) Under NextGen development, what safeguards are in place for satellite disruption events that would render GPS radar inoperable?

To provide a backup in case of disruption to satellites in the Global Positioning System (GPS), FAA will retain much of its current radar system. The potential for malicious or unintentional interference with GPS satellite signals has been recognized for more than a decade. As early as 2001, the John A. Volpe National Transportation System Center conducted a study at the request of the Department of Transportation.<sup>7</sup> The study made recommendations to address potential signal interference, including maintaining a backup system. FAA intends to retain approximately one-half of the Secondary Surveillance Radar (SSR) network to serve as a backup for the GPS-based Automatic Dependent Surveillance-Broadcast (ADS-B). Under this strategy, FAA plans to retain approximately 40 terminal SSRs and 150 en route SSRs beyond 2020, or approximately one-half the number in use today. FAA has reported that the life-cycle cost for maintaining these secondary radars through 2035 will be \$442 million. In addition to the secondary radar

<sup>&</sup>lt;sup>6</sup>AIR-21 included two new spending guarantees. One made it "out-of-order" in the House or Senate to consider legislation that failed to use all trust fund receipts and interest annually. The second made it out of order to consider any bill that provided funding for research or operations if it failed to fully fund the Airport Improvement Program (AIP) and FAA's Facilities and Equipment (F& E) account at their authorized levels. These guarantees were extended through fiscal year 2007 in Vision 100. See Congressional Research Service, *Aviation Spending Guarantee Mechanisms*, Robert S. Kirk, CRS –RL333654 (Washington, D.C.: Mar. 25, 2008).

<sup>&</sup>lt;sup>7</sup>See Vulnerability Assessment of the Transportation Infrastructure Relying on the Global Positioning System – Final Report, John A. Volpe National Transportation Systems Center (Washington, D.C.: Aug. 29, 2001).

systems, 101 Air Route Surveillance Radars (ARSR) provide nationwide primary aircraft surveillance. The ARSRs currently in operation date back to the ARSR-1 and ARSR-2 systems deployed in the 1960s. The Departments of Defense (DOD) and Homeland Security (DHS) have recently assumed responsibility for operating, sustaining, and upgrading the ARSR network, although they have subcontracted technical support for the network to FAA.

For fiscal year 2011, \$5 million was requested to continue facility improvement and infrastructure upgrades at ARSRs and Long Range Radar sites. In coordination with reimbursements from DOD and DHS for activities to support the primary en route radars, this requested funding would support the repair and maintenance of the aging en route radar towers, facility grounding upgrades, and critical infrastructure upgrades and refurbishments required to sustain en route secondary beacon radar operations for an additional 20 years. In addition, for fiscal year 2011, FAA requested \$300,000 for inservice engineering activities.

# 4) What programs within FAA do you believe are the least effective? What programs within FAA are not supported by FAA's mission?

Our work has generally not made relative comparisons of FAA's program effectiveness, although GAO has reviewed FAA programs across almost every line of business. Our reviews have shown that the overwhelming majority of FAA programs generally meet their objectives. When our reviews have pointed to opportunities for improving program outcomes, we have made recommendations and FAA has generally concurred with and implemented those recommendations. For example, in December 2009, we completed a review of FAA's funding and consideration of regional planning studies in the award of Airport Improvement Program (AIP) grants to airports.<sup>8</sup> Maximizing the efficient use of, and investment in, airport capacity through regional planning efforts, especially in heavily congested regions of the country, is an important goal of these planning grants. However, we found that in 4 of the 10 metropolitan regions with airports forecast to be significantly capacity constrained by 2025, FAA had funded plans that did not meet its own criteria for regional planning, had not been reviewed by FAA, and were only used selectively by FAA and airports in making decisions about planning and funding individual airport projects. We made recommendations to FAA that, if implemented, would help to ensure that federal AIP funds are employed to achieve their maximum benefit and to improve the level of regional- and airport-level coordination. FAA concurred with our recommendations. When our reviews have indicated that FAA programs are not meeting their objectives, we have taken stronger steps to bring about improvement. For example, when we found, in the 1990s that FAA's program for acquiring air traffic control technologies was encountering serious cost and schedule problems, we placed the program on our high-risk list, where it remained for over 15 years. During that time, we made dozens of recommendations for improvement and, over time, FAA implemented most of them, earning its way off the list in 2009.

<sup>&</sup>lt;sup>8</sup>See <u>GAO</u>, National Airspace System: Regional Airport Planning Could Help Address Congestion If Plans Were Integrated with FAA and Airport Decision Making, GAO-10-120 (Washington, D.C.: Dec. 23, 2009).

5) What are your major concerns within FAA management? How can Congress practice better oversight of the FAA in these areas (e.g. requiring certain metrics to improve performance)?

My major management concern within FAA is the extent to which FAA is able to make the most effective and efficient use of available resources to carry out the agency's mission. FAA has long been challenged to meet all of its statutory responsibilities, such as certification and approval activities, pilot testing, and safety inspections and monitoring, without the assistance of the aviation industry. Hence, FAA will have to continue relying on various types of designees to supplement its core workforce and on its organization-based safety management system to meet many of its statutory responsibilities. It is therefore incumbent on FAA, through effective regulation and oversight, to ensure the quality, integrity, and effectiveness of those that carry out these responsibilities and act in the name of the FAA Administrator.

There are several avenues through which Congress can exercise oversight of FAA. Congress can continue to use GAO to monitor FAA's activities, progress, and challenges. We are currently monitoring the development and implementation of NextGen and providing Congress with "just-in-time" information through several reporting mechanisms. For example, we are reviewing FAA's acquisition of NextGen technologies to develop a baseline for providing Congress with timely oversight information. The FAA Administrator is currently considering our recent recommendation to develop a timeline and action plan for reaching agreement with stakeholders on a list of specific goals and outcome-based performance metrics for NextGen. When completed, this timeline and action plan will provide Congress with metrics for assessing FAA's progress toward agreed-upon NextGen priorities. Another oversight option for Congress would be to track FAA's progress in achieving its strategic plan, known as the Flight Plan. These outcomes are operationalized through plans for FAA's lines of business. For each line of business, the Flight Plan identifies measurable performance targets. Examples of these targets are, for Aviation Safety, to "cut the rate of fatalities per 100 million on board by FY 2025;" for Policy, Planning, and Environment, to "reduce the number of people exposed to significant noise by 4 percent a year through FY2013" and for Airports to "by FY 2010, reduce category A and B (most serious) runway incursions to a rate of no more than 0.45 operations and maintain and improve through FY 2013." FAA also posts quarterly reports of its progress in achieving these targets on its Web site. These and other metrics to be developed should provide Congress with additional tools to monitor NextGen developments and upcoming challenges.

# 45

## Statement of Senator Chuck Grassley Senate Finance Committee Hearing – February 3, 2011

Aviation is vital to all communities, whether urban or rural. It is imperative that we have efficient, affordable, and safe air travel.

The last aviation reauthorization bill expired in 2007. Since then, we have been limping along on seventeen extensions. Congress must promptly pass a multi-year reauthorization bill.

This reauthorization bill is not new to the Senate Finance Committee. Several times over the course of the past several Congresses, we have reported a revenue title out of the committee and the full Senate has overwhelming passed this legislation. However, there were outstanding issues that could not be resolved between the House and Senate versions of this bill. Unfortunately, it is our airports and the flying public that have suffered from our lack of action. It is my hope that the House and Senate will be able to reconcile the differences between the two versions of this Congress' reauthorization bill and that it will be passed into law in the near future.

An important component of the aviation reauthorization bill before the Senate is the modernization of our air traffic control system. Our country is still using 1950s equipment and technologies to manage our skies. A lot of the cars on our highways have more sophisticated equipment than our air traffic controllers. We must continue to move forward in a prudent manner to replace this old radar ground technology with real time GPS technology to enhance the safety and efficiency of our air space.

While the reauthorization bill before the Senate is needed, we know work still needs to be done. As we evaluate funding for the future, the Senate Finance Committee will need to make decisions over the funding responsibilities that should be allocated to all participants including passengers, airlines, and owners and operators of the aviation inventory across the nation. The Senate Finance Committee also has a fiduciary responsibility to try to ensure that the excise tax system is straightforward, fair, and not an administrative burden. The committee should also continue to review tax schemes and cons so wrongdoers cannot whipsaw the government trust, nor manipulate unfair competitive advantage over the honest taxpayer by scamming the trust out of excise taxes designed to fund the safety of the skies.

Today we will hear testimony regarding the status and future of the Airport and Airways Trust Fund. I sincerely believe that Congress and the American people have a vested interest to ensure a stable, dependable, and predictable revenue flow to the Airport and Airways Trust Fund. I look forward to hearing Dr. Dillingham's testimony and continuing to work with the Senate Finance Committee and Congress on this important matter.

# STATEMENT OF HON. ORRIN G. HATCH, RANKING MEMBER U.S. SENATE COMMITTEE ON FINANCE HEARING OF FEBRUARY 3, 2011 STATUS OF THE AIRPORT AND AIRWAY TRUST FUND

WASHINGTON – U.S. Senator Orrin Hatch (R-Utah), Ranking Member of the Committee on Finance, delivered the following statement, as prepared for delivery, at a committee hearing on the status of the Airport and Airway Trust Fund:

Thank you Mr. Chairman. Thank you for scheduling this hearing.

Before I address the matter before us, I'd like to welcome the three new members to the Committee. Welcome Senators Coburn, Thune, and Cardin. Each of you brings different strengths and perspectives to the Committee. All three of you are known as serious legislators. All of you bring a reputation for hard work. You engage fully in the fiscal issues that challenge our nation. The Finance Committee is smack dab in the middle of those issues. I look forward to working with you.

There is something to be said for experience. Just try and tell the passengers who were on the plane that Captain Sullenberger guided safely into the Hudson, that years of experience don't count for anything.

Mr. Chairman, we've had a lot of experience dealing with reauthorizing the Federal Aviation Administration (FAA) legislation. This legislation has taken off, but never quite fully landed. It's time to finish the flight plan and complete a multi-year reauthorization.

Millions of travelers on literally millions of flights a year help to sustain and benefit from the services paid for out of the Airport and Airway Trust Fund. The trust fund, however, has not received the sustained and thorough attention from Congress most of our constituents probably expect. The last reauthorization of FAA programs was done way back in the 108<sup>th</sup> Congress and expired at the end of fiscal year 2007. Fiscal year 2007 ended at the end of September 2007. Since then, for more than three years, Congress has passed 17 short term FAA extension bills. These extensions have been necessary to both replenish the Airport and Airway Trust Fund, and to authorize the use of the trust fund to continue to pay for aviation programs.

The Airport and Airway Trust Fund is used to fund the FAA's airport improvement program, facilities and equipment program, and research, engineering, and development program. The trust fund also pays for most FAA operations and maintenance.

The services and facilities maintained by the FAA are utilized by literally millions of Americans and people from all over the world every year. According to data from the FAA, in 2009, FAA Air Route Traffic Control Centers handled more than 39 million aircraft, and there are almost 20 thousand airports in the United States. Air travel may be frustrating in many ways, but a lot of us take it for granted that we can travel across the country very quickly without too much trouble. It's absolutely shocking that Congress could go for so long, more than three years, without reauthorizing a program relied upon by so many people and of such critical importance to our economy. Getting back to the FAA programs the trust fund pays for; these include grants for airport planning development, and also programs to fund the improvement of the air traffic control system, such as the Next Generation Air Transportation System, or NextGen. I doubt there is anyone who would say they do not want our airports or air traffic control system to safely handle the unfettered flow of people and goods across the country and the world.

We expect that our national airport and airway system will be a catalyst for economic growth and for the simple freedom to travel where one desires to. In order for that to continue to be the case we need to make sure we are doing our jobs and not kicking the can down the road.

We have kicked the FAA can now 17 times. We've done that by extending an expired FAA reauthorization 17 times and not completing work on new legislation. Airplanes are still taking off and landing and cargo is still being transported. We should be careful not to take that as a sign that we can continue to indefinitely put off a long term FAA reauthorization.

The Airport and Airway Trust Fund is dependent on several aviation related excise taxes in order to distribute the burden of funding the FAA. These taxes include passenger ticket taxes, taxes on cargo, and taxes on fuel.

Fuel taxes are different for commercial aircraft and domestic general aviation. The distribution of these excise taxes is meant to approximate the burdens different users of our airport and airway system place on that system. The reason it is important that real FAA reauthorization is completed, as opposed to extending an expired law, is this. We cannot expect that the package of excise taxes that worked several congresses ago will continue to be the best way to fund our airport and airway system today based on how it is used today.

This is why I welcome the opportunity this hearing provides to carefully examine the status of the Airport and Airway Trust Fund. It is an opportunity to examine the series of excise taxes that fund the trust fund. We must understand how our airport and airway system functions now. We must understand how we expect it to function in the future. We need to understand who uses our airway system and ensure that costs are imposed fairly and are representative of the burdens place on the system.

Mr. Chairman, I'm glad that we're taking off on another FAA reauthorization bill. This time we need to reach our final destination and complete the legislation.

## $\bigcirc$