CBO MEMORANDUM

CHARGES FOR INTERNATIONAL AIR TRAFFIC CONTROL AND PROJECTED BALANCES IN THE AIRPORT AND AIRWAY TRUST FUND

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CONGRESSIONAL BUDGET OFFICE
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This Congressional Budget Office (CBO) memorandum compares the revenues and costs associated with air traffic control of flights between the United States and the rest of the world. It also examines the ability of the Airport and Airway Trust Fund to finance the activities of the Federal Aviation Administration in the future under varying economic assumptions. The analysis was conducted in response to a request from the Senate Budget Committee.

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INTRODUCTION AND SUMMARY

Concern about the budget deficit has put increasing pressure on the federal government to contain discretionary spending. In response to this pressure, the Congress has shown greater interest in using user charges to finance certain programs. One such program is the system of airports and airways controlled by the Federal Aviation Administration (FAA).

In response to Congressional concerns, this memorandum compares the taxes and fees paid by commercial aircraft on international flights that use the international or domestic segments of the air traffic control (ATC) system with the costs to the FAA of providing those air traffic control services. (Social costs, such as those of congestion, pollution, and noise, are not included.) In particular, the memorandum examines three questions:

- Do U.S. taxpayers subsidize international flights that use the ATC system?

- Do aviation taxes paid by passengers on domestic flights subsidize ATC costs for international flights?

- Do U.S. air carriers operating international flights suffer a competitive disadvantage because of the present system of ATC charges?

Based on cost allocation studies by the FAA, the Congressional Budget Office finds that the estimated costs to the FAA of providing ATC services to international flights are covered by international departure taxes. This means that international flights using the ATC system are not being subsidized by U.S. taxpayers or by passengers on domestic flights. In addition, U.S. air carriers do not face a competitive disadvantage when operating overseas because of the way other countries charge for ATC services in their airspace.

The second part of this memorandum projects the financial condition of the Airport and Airway Trust Fund (AATF) over the next five years under varying economic assumptions. These assumptions include changes in forecasts of the demand for passenger air travel and changes in the share of FAA operations paid from the trust fund. The projections show that the AATF will maintain its positive cash balance through fiscal year 1998, even if economic growth is slow and withdrawals from the fund for FAA activities increase. The fund's uncommitted balance could show a deficit, however, when unpaid commitments--obligated money that has not been

spent and outstanding budget authority that has not yet been obligated--are subtracted from the cash balance.

BACKGROUND ON AVIATION, FAA ACTIVITIES, AND INTERNATIONAL ATC CHARGES

Answering questions about subsidies and competitive factors affecting international air travel requires knowing about aviation charges and who pays them. It also requires an understanding of the costs associated with various categories of flights, air carriers, and passengers.

Distinctions Between International and Domestic Flights, Air Carriers, and Passengers

An international flight refers essentially to a flight between the United States and another country.[1] An international flight may be provided by an air carrier flying the U.S. flag or a foreign flag. Domestic flights are ones within the continental United States; under cabotage laws, only U.S.-flag carriers may carry passengers whose origin and destination are within the

1. The statutory definition is somewhat more complicated (see 26 U.S.C. 4262). For example, the statute has specific provisions for flights to or from Alaska or Hawaii and for flights in Mexico and Canada within 225 miles of the United States.

United States.[2] Most U.S.-flag air carriers (also referred to as domestic air carriers) offer both domestic and international flights. An overflight is defined as a flight over U.S.-controlled airspace that neither takes off nor lands in the United States.

A domestic airline passenger is a passenger on a domestic flight, and an international passenger is one on an international flight, regardless of whether the flight is by a U.S.-flag or foreign-flag carrier. Under these definitions, the citizenship of the passenger does not matter.

Although passengers pay the aviation taxes, the entity that generates costs for the air traffic control system is the aircraft. To the ATC system, it is immaterial whether a plane is half or fully loaded with passengers or whether it belongs to a domestic or foreign carrier; the costs of handling the flight are the same. The revenues from aviation taxes may differ, however, depending on the status of the carrier.

2. Thus, a U.S.-flag air carrier on a flight from London to Chicago with a stopover in New York may take on passengers in New York and carry them to Chicago. A foreign-flag carrier is not permitted to do so.

Paying for Air Traffic Control Services

The Federal Aviation Administration is responsible for controlling air traffic in U.S. airspace. The cost of providing air traffic control is covered in part from the general fund of the U.S. Treasury and in part from the Airport and Airway Trust Fund. For the purpose of addressing the questions at hand, the specific funding mechanism is less important than the amounts of revenue generated from users of air traffic control services.[3]

Passengers on domestic flights are subject to a tax of 10 percent of the amount paid for the ticket--referred to as the passenger ticket tax. Passengers leaving the United States on international flights are subject to a $6 tax known as the international departure tax. No U.S. tax is imposed on passengers arriving in the United States from other countries, nor on passengers on overflights.[4]

In fiscal year 1992, revenues from the passenger ticket tax were nearly $4 billion, and revenues from the international departure tax about $231 million. Total aviation taxes collected in 1992 were roughly $4.7

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3. For a more detailed discussion of funding mechanisms, see Congressional Budget Office, *Paying for Highways, Airways, and Waterways: How Can Users Be Charged?* (May 1992), and *The Status of the Airport and Airway Trust Fund* (December 1988).

4. The passenger ticket tax and the international departure tax are set forth in 26 U.S.C. 4261(a) and 4261(c), respectively. Sections 4262 and 4263 provide specific definitions of taxable transportation and special rules.

billion. (Other taxes that go into the aviation trust fund are the waybill tax and the aviation and jet fuel taxes for noncommercial users; see Box 1 for details.) Outlays incurred by the FAA, however, were about $8.2 billion in 1992. Thus, revenues from aviation taxes covered only about 57 percent of FAA spending; general fund revenues made up the difference.

Foreign countries differ from the United States in the way they charge airlines for air traffic control services. Most Western European nations use a specific formula to charge for use of air navigation facilities: the formula takes the square root of the maximum takeoff weight (in tons) of the plane, divided by 50, and multiplies it by the distance (in hundreds of kilometers) that the aircraft travels over area controlled by the facility. This quantity is then multiplied by a rate that the air traffic control authorities set based on the number of operations at the facility.[5] Most countries other than the United States impose charges for overflights as well as for aircraft landing at or taking off from their airports.

Although the structure of charges differs between the United States and other countries, the important factor from the standpoint of subsidies or unfair competition is that the charges treat similar flights similarly. The

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5. Countries using this system include Austria, Belgium, France, Germany, Greece, Iceland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Switzerland, Turkey, and the United Kingdom; see International Civil Aviation Organization, *Manual of Airport and Air Navigation Facility Tariffs*, 1990 ed. (Montreal: ICAO, 1990).

BOX 1.
OTHER TAXES AND FEES PAID BY USERS OF THE AIRPORT AND AIRWAY SYSTEM

Besides passenger ticket taxes and international departure taxes, the Airport and Airway Trust Fund receives aviation taxes paid by other users of the aviation system. The waybill tax of 6.25 percent is levied on freight transported by air. Aviation gasoline and jet fuel for noncommercial users are subject to taxes of 15 cents a gallon and 17.5 cents a gallon, respectively.[1]

Passengers and airlines also pay a variety of fees for aviation services that are not credited to the Airport and Airway Trust Fund. Passengers arriving from Canada and Mexico pay a $5 immigration fee, and those arriving from elsewhere pay a $10 customs and immigration fee. All passengers arriving in the United States pay a $1.45 animal and plant inspection fee.

Airports, which are not federal facilities, also collect fees from aviation users. Passengers on both domestic and international flights pay a $3 passenger facility charge (PFC) at some airports.[2] PFC revenues can be used by airports to improve the services they provide.

Airlines also pay landing fees at airports. These fees, which vary by airport, are used to defray some of the cost of building and maintaining airports.

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1. The Omnibus Budget Reconciliation Act of 1993 imposes a tax of 4.3 cents a gallon on fuel used by aircraft (and other types of transportation); commercial passenger aircraft are exempt until 1995, but other users of jet and aviation fuel will start paying the tax from October 1993. These taxes will not, however, go into the aviation trust fund; they are to be used for deficit reduction.

2. 49 U.S.C. 1513(e). An airport wishing to levy a PFC must obtain approval from the FAA.

United States imposes the $6 international departure tax on all passengers leaving the country, regardless of whether they are flying on a U.S.-flag or foreign-flag airline. Western European nations apply the above formula to all international flights crossing their airspace, regardless of national flag.

Allocating Costs of Air Traffic Control

The FAA periodically conducts studies that attempt to identify the costs of providing ATC services to different users of the system. Besides domestic and foreign air carriers, the FAA also serves commuter carriers, freight carriers, general aviation, and military and other government aircraft.[6]

The agency conducted a comprehensive cost allocation study in 1985 and updated it in 1991 to reflect changes in the volume of traffic by the various users. Some types of costs are clearly attributable to a specific category of user; many others, however, are not. For these joint costs, allocation is essentially an arbitrary procedure. The FAA allocated the joint costs according to several criteria, including the frequency of each group's use of the aviation system, the marginal costs associated with each

6. Commuter airlines use aircraft that carry fewer than 60 passengers. General aviation represents civil aviation activity other than that of the certified commercial air carriers. General aviation aircraft cover a wide spectrum--from corporate, multiengine jet aircraft piloted by professional crews to amateur-built, single-engine piston planes and balloons.

group, and a markup based on the elasticity of each group's demand.[7] Overhead and other costs not directly associated with operations were assigned to users in much the same way as direct joint costs.

Costs and Revenues

Comparing the costs of domestic and international flights, as allocated by the FAA, with the revenues collected from the domestic passenger ticket tax and the international departure tax suggests that revenues from each type of flight more than cover the costs of providing air traffic control for it (see Table 1).

These results should be interpreted with some caution, however. First, they hinge on the cost allocation study performed for the FAA in 1985. The structure of air traffic control costs may have changed since then, as a result of such factors as technological changes that reduce the cost of controlling international flights and changes in the relative shares of international and domestic flights. Although the study was updated in 1991 to reflect changes in the volume of air traffic, structural changes are not reflected in the updated model. Hence, the current surplus in revenues

7. For a more detailed examination of the FAA's cost allocation study, see Congressional Budget Office, *Paying for Highways, Airways, and Waterways.*

TABLE 1. COSTS AND TAX REVENUES OF DOMESTIC AND INTERNATIONAL FLIGHTS IN U.S. AIRSPACE, FISCAL YEARS 1985 AND 1990-1992
(In millions of current dollars)

	1985	1990	1991	1992
Domestic Flights				
Total Costs to FAA of Domestic Operations[a,b]	2,176	2,896	3,300	3,604
Revenue from Passenger Ticket Taxes[c]	2,336	3,215	3,668	3,801
Revenue Surplus	160	319	368	197
Surplus as a Percentage of Costs	7	11	11	6
International Flights				
Total Costs to FAA of International Operations[b]	121	166	189	206
Revenue from International Departure Taxes	90	182	223	231
Revenue Surplus	-31	16	34	25
Surplus as a Percentage of Costs	-26	10	18	12

SOURCES: Daniel Taylor, "Allocation and Recovery of Federal Airport and Airway Costs, 1991," FAA-APO-91-4 (Federal Aviation Administration, February 1992). Revenue figures come from the Congressional Budget Office based on data from the Internal Revenue Service and the Department of Transportation.

NOTES: Figures exclude overflights, which are a small proportion of flights in U.S. airspace. Numbers may not add to totals because of rounding. FAA = Federal Aviation Administration.

a. Operations include both scheduled and unscheduled (for example, charter) flights by U.S. carriers but exclude commuter flights.

b. The domestic and international operations costs for 1990 and 1992 were estimated using the same proportion of operations costs to total FAA costs (not shown in Table 1) as was the case in 1991.

c. Excludes revenues from passenger ticket tax on commuter flights.

from international flights is subject to revision, should structural factors be found to have changed the allocation formula. The surplus in the domestic flight account is part of a longer-lasting trend and is more certain.

A second point about these findings is that the international departure tax was raised from $3 to $6 a head in 1990. This resulted in much larger revenues than in previous years (for example, 1985 in Table 1) since the demand for international air travel was hardly affected by the $3 rise in its price. Third, the increase in revenues from the passenger ticket tax in 1991 is partly attributable to a rate increase (from 8 percent to 10 percent) that occurred at the end of 1990. Fourth, the cost allocation study did not include the costs of overflights, which the FAA assumed to be an insignificant proportion of the total number of flights in the system.[8]

Since the purpose of this memorandum is to answer questions about air carriers, Table 1 excludes costs and revenues associated with other aircraft operations--commuters, general aviation, freight carriers, and the government (including the military). If these categories were included, the table would show that tax revenues from commuter aircraft and general

8. Based on telephone conversations with employees of the Federal Aviation Administration, the International Civil Aviation Organization, and the Department of Transportation.

aviation do not cover costs allocated to them by the FAA.[9] Any subsidy that exists, therefore, is likely to come from the passenger ticket tax and international departure tax to finance the activities of commuters and general aviation, rather than from domestic to international travelers.

DO U.S. TAXPAYERS SUBSIDIZE THE INTERNATIONAL FLIGHTS THAT USE THE AIR TRAFFIC CONTROL SYSTEM?

As Table 1 showed, revenues from the international departure tax more than cover the costs allocated to international flights by the FAA studies. On the basis of that information, one must conclude that there is no overall subsidy from the U.S. taxpayer to international flights that use the U.S. air traffic control system.

DO PASSENGERS ON DOMESTIC FLIGHTS SUBSIDIZE INTERNATIONAL TRAVELERS?

As shown above, revenues from the domestic passenger ticket tax are greater than the allocated cost of domestic passenger flights (see Table 1).

9. See Daniel Taylor, "Allocation and Recovery of Federal Airport and Airway Costs, 1991," FAA-APO-91-4 (Federal Aviation Administration, February 1992), and "Airport and Airway Costs: Allocation and Recovery in the 1980s," FAA-APO-87-7 (Federal Aviation Administration, February 1987).

But revenues from the international departure tax are also greater than the allocated costs of providing air traffic control to international flights. This suggests that passengers on U.S. domestic airlines are not subsidizing international travelers.

Passengers on domestic flights, along with all U.S. taxpayers, apparently subsidize other classes of domestic users. Commuter carriers pay far less in ticket taxes, and general aviation far less in fuel taxes, than the estimated cost of handling these aircraft--only about 16 percent and 7 percent of their costs, respectively.

The surplus in the international account is relatively recent and results primarily from the doubling of the international departure tax in 1990. International traffic is rising as a fraction of all operations handled by the FAA. Thus, a revision in the cost allocation study could result in a higher share of fixed costs being attributed to international flights in the future.

Passengers leaving on international flights from the United States may argue that they are subsidizing arriving flights and overflights. But most passengers leaving the country either arrived previously or will arrive back in the United States after some time. Their costs are covered in the

international departure tax. Thus, it is not accurate to claim that passengers departing on international flights are subsidizing air traffic control of arriving flights. These passengers appear to be subsidizing only overflights of land or sea controlled by U.S. air traffic control; but, as mentioned above, overflights are a small proportion of the traffic being handled.

DOES THE PRESENT SYSTEM PUT U.S. CARRIERS AT A COMPETITIVE DISADVANTAGE?

The short answer is that U.S. air carriers do not appear to suffer a competitive disadvantage against foreign carriers because of the system of air traffic control charges. The same structure of charges applies to all flights within each country, regardless of whether the airline is domestic or foreign. Therefore, airlines competing on any individual route would face the same costs, and no one would be at a competitive disadvantage.

Some U.S. airlines, however, complain that the European formula of charges based on weight discriminates against them. Transatlantic flights typically use jumbo jets, while shorter, intra-European flights generally use smaller aircraft. Thus, a U.S.-flag carrier traveling across Europe on a flight from the United States would typically incur higher charges than a

European carrier on a shorter flight. These two flights are not in competition, however. The competition with the U.S. carrier would come from a foreign-flag carrier on the same transatlantic route, and since it probably would use similar aircraft (a jumbo jet), it would face the same charges for air traffic control.

THE PROJECTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND

Projections of the financial condition of the Airport and Airway Trust Fund over the next five years show that the AATF will maintain its positive cash balance, even assuming that the economy grows slowly and withdrawals from the fund for activities of the FAA increase. The uncommitted balance--the cash balance less unpaid commitments and unspent budget authority--could turn negative, however, if economic growth is moderate or low and withdrawals from the fund are increased beyond the present percentage.

Changes in AATF Revenues

Trust fund revenues vary mainly with the revenues from the passenger ticket tax. These revenues, in turn, are directly related to demand for air travel by business and vacation travelers. Passenger demand for air travel depends on the state of the economy: when the economy is growing, demand for business and vacation flights usually grows, too. Conversely, when the economy is contracting, demand for air travel also falls. Thus, an important factor in forecasting the demand for air travel is annual changes in the gross domestic product (GDP).

Other economic factors that influence demand for air travel are changes in the payments to airline labor and management. Recently, fare wars between the major airlines have also created changes in demand for air travel, especially during the peak summer months.[10] In addition, AATF revenues depend on the inflation rate: when the rate of inflation is high, revenues will be larger than when it is low. The FAA's aviation forecast model specifies relationships between these variables and their rates of change to predict AATF revenues.

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10. The effect of price reductions on tax revenues depends on the responsiveness of travelers to the deep discounts. Discounts can increase the number of miles traveled, but since the tax is 10 percent of the ticket price, the tax collected on each ticket is reduced. Whether tax revenues go up or down depends on how much demand increases relative to the price reduction.

Changes in FAA Spending

Balances in the aviation trust fund are also affected by the amount appropriated for FAA expenses each year by the Congress. The AATF was created in 1971 to finance large capital expenditures by the FAA (the accounts for facilities and equipment, airport improvement, and research and development). Later legislation provided for trust fund revenues to be used to finance part of the FAA's operations as well.[11]

Legislators interested in aviation have argued that spending from the Airport and Airway Trust Fund should correspond to the costs imposed by aviation users. In 1990, responding in part to these arguments, the Congress increased the authorized share of FAA operations spending that is paid from the trust fund to 75 percent. The actual share in each year, however, is still determined through the annual appropriation process, and for fiscal year 1993, about 50 percent of FAA operations were funded by withdrawals from the AATF.

How much of the FAA's expenses can be attributed to private users of the aviation system? Cost allocation studies by the agency estimate that

11. The Airport and Airway Development Act Amendments of 1976 (Public Law 94-353), the Airport and Airway Improvement Act of 1982 (P.L. 97-248), and the Airport and Airway Safety and Capacity Expansion Act of 1987 (P.L. 100-223). For a history of the AATF to 1988, see Congressional Budget Office, *The Status of the Airport and Airway Trust Fund.*

the public sector (including the military) is responsible for about 15 percent of FAA costs. Private-sector users (commercial domestic and international air carriers, commuters, and general aviation) generate the remaining 85 percent of FAA costs.

Trust Fund Balances

When the economy is projected to grow quickly over the next five years, both the cash and uncommitted balances in the AATF remain positive (see Table 2). By contrast, when economic growth is expected to be moderate or slow, the uncommitted balance turns negative if funding of FAA operations from the trust fund is increased to 75 percent or more (see Tables 3 and 4).

The combination of moderate or low growth and increased withdrawals from the AATF to finance a larger percentage of FAA operations causes a faster drawdown of the aviation trust fund. If AATF funding of FAA operations stays at 50 percent through fiscal year 1998, the uncommitted balance will remain positive regardless of economic growth.

TABLE 2. PROJECTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1993-1998, HIGH-GROWTH SCENARIO
(In billions of dollars)

	1993 (Estimate)	1994	1995	1996	1997	1998
50 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	7.2	7.4	7.6	7.8	8.0
Outlays	6.5	6.6	6.8	7.1	7.4	7.6
Receipts[b]	4.4	7.0	7.8	8.8	9.8	11.0
AATF Cash Balance	13.1	13.5	14.5	16.1	18.6	22.1
AATF Uncommitted Balance[c]	4.4	4.2	4.7	5.8	7.9	10.8
75 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.4	8.6	8.9	9.1	9.4
Outlays	6.5	7.8	8.1	8.4	8.7	8.9
Receipts[b]	4.4	7.0	7.7	8.5	9.5	10.6
AATF Cash Balance	13.1	12.3	11.9	12.1	12.9	14.6
AATF Uncommitted Balance[c]	4.4	3.0	2.1	1.8	2.1	3.3
85 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.8	9.1	9.4	9.7	10.0
Outlays	6.5	8.2	8.6	8.9	9.2	9.5
Receipts[b]	4.4	7.0	7.6	8.5	9.4	10.4
AATF Cash Balance	13.1	11.8	10.9	10.4	10.6	11.6
AATF Uncommitted Balance[c]	4.4	2.5	1.1	0.1	-0.1	0.3

SOURCE: Congressional Budget Office.

NOTES: Numbers may not add to totals because of rounding. FAA = Federal Aviation Administration; AATF = Airport and Airway Trust Fund.

The high-growth scenario is based on the optimistic scenario of the DRI/McGraw-Hill *Review of the U.S. Economy*, August 1993. It assumes that gross domestic product grows at an average rate of 3 percent a year and inflation averages about 2.5 percent a year.

Budget authority and outlay figures are for FAA expenditures paid from the AATF. The remaining portion of FAA operations is not included in these figures. Projections assume that total FAA spending will remain at the current year's level, with adjustments for inflation.

a. Budget authority is based on CBO's August 1993 baseline. It includes contract authority provided in authorization acts for the Airport Improvement Program and Payment to Air Carriers. For all other programs, budget authority is provided in appropriation acts.

b. Receipts include both aviation tax revenues and the interest income from the cash balance in the fund at the end of the year. The present tax rates expire on December 31, 1995; the projections assume rates will be extended without change at that time.

c. The uncommitted balance deducts from the cash balance the amounts obligated but not yet spent, as well as outstanding budget authority not yet obligated.

TABLE 3. PROJECTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1993-1998, MODERATE-GROWTH SCENARIO
(In billions of dollars)

	1993 (Estimate)	1994	1995	1996	1997	1998
50 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	7.2	7.4	7.6	7.8	8.0
Outlays	6.5	6.6	6.8	7.1	7.4	7.6
Receipts[b]	4.4	6.5	7.0	7.5	8.0	8.6
AATF Cash Balance	13.0	13.0	13.1	13.5	14.1	15.1
AATF Uncommitted Balance[c]	4.3	3.7	3.3	3.2	3.4	3.9
75 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.4	8.6	8.9	9.1	9.4
Outlays	6.5	7.8	8.1	8.4	8.7	8.9
Receipts[b]	4.4	6.5	6.9	7.3	7.7	8.1
AATF Cash Balance	13.0	11.7	10.5	9.4	8.4	7.6
AATF Uncommitted Balance[c]	4.3	2.5	0.7	-0.9	-2.3	-3.6
85 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.8	9.1	9.4	9.7	10.0
Outlays	6.5	8.2	8.6	8.9	9.2	9.5
Receipts[b]	4.4	6.5	6.8	7.2	7.6	8.0
AATF Cash Balance	13.0	11.2	9.5	7.8	6.1	4.6
AATF Uncommitted Balance[c]	4.3	2.0	-0.3	-2.5	-4.6	-6.6

SOURCE: Congressional Budget Office.

NOTES: Numbers may not add to totals because of rounding. FAA = Federal Aviation Administration; AATF = Airport and Airway Trust Fund.

The moderate-growth scenario is based on CBO's baseline projections of July 1993, which assume that gross domestic product grows at an average rate of 2.5 percent a year and inflation averages about 2.6 percent.

Budget authority and outlay figures are for FAA expenditures paid from the AATF. The remaining portion of FAA operations is not included in these figures. Projections assume that total FAA spending will remain at the current year's level, with adjustments for inflation.

a. Budget authority is based on CBO's August 1993 baseline. It includes contract authority provided in authorization acts for the Airport Improvement Program and Payment to Air Carriers. For all other programs, budget authority is provided in appropriation acts.

b. Receipts include both aviation tax revenues and the interest income from the cash balance in the fund at the end of the year. The present tax rates expire on December 31, 1995; the projections assume rates will be extended without change at that time.

c. The uncommitted balance deducts from the cash balance the amounts obligated but not yet spent, as well as outstanding budget authority not yet obligated.

TABLE 4. PROJECTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1993-1998, LOW-GROWTH SCENARIO
(In billions of dollars)

	1993 (Estimate)	1994	1995	1996	1997	1998
50 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	7.2	7.4	7.6	7.8	8.0
Outlays	6.5	6.6	6.8	7.1	7.4	7.6
Receipts[b]	4.3	6.5	7.0	7.3	7.8	8.4
AATF Cash Balance	13.0	12.9	13.0	13.2	13.7	14.5
AATF Uncommitted Balance[c]	4.3	3.6	3.2	2.9	2.9	3.3
75 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.4	8.6	8.9	9.1	9.4
Outlays	6.5	7.8	8.1	8.4	8.7	8.9
Receipts[b]	4.3	6.5	6.8	7.1	7.5	8.0
AATF Cash Balance	13.0	11.7	10.4	9.2	8.0	7.0
AATF Uncommitted Balance[c]	4.3	2.4	0.6	-1.1	-2.8	-4.2
85 Percent of FAA Operations Funded from the AATF						
Budget Authority[a]	6.9	8.8	9.1	9.4	9.7	10.0
Outlays	6.5	8.2	8.6	8.9	9.2	9.5
Receipts[b]	4.3	6.5	6.8	7.0	7.4	7.8
AATF Cash Balance	13.0	11.2	9.4	7.5	5.7	4.0
AATF Uncommitted Balance[c]	4.3	1.9	-0.4	-2.8	-5.1	-7.2

SOURCE: Congressional Budget Office.

NOTES: Numbers may not add to totals because of rounding. FAA = Federal Aviation Administration; AATF = Airport and Airway Trust Fund.

The low-growth scenario is based on the policy danger scenario of the DRI/McGraw-Hill *Review of the U.S. Economy*, August 1993. It assumes that gross domestic product grows at an average rate of 1.8 percent a year and inflation averages about 3.2 percent a year.

Budget authority and outlay figures are for FAA expenditures paid from the AATF. The remaining portion of FAA operations is not included in these figures. Projections assume that total FAA spending will remain at the current year's level, with adjustments for inflation.

a. Budget authority is based on CBO's August 1993 baseline. It includes contract authority provided in authorization acts for the Airport Improvement Program and Payment to Air Carriers. For all other programs, budget authority is provided in appropriation acts.

b. Receipts include both aviation tax revenues and the interest income from the cash balance in the fund at the end of the year. The present tax rates expire on December 31, 1995; the projections assume rates will be extended without change at that time.

c. The uncommitted balance deducts from the cash balance the amounts obligated but not yet spent, as well as outstanding budget authority not yet obligated.

As funding for FAA operations changes, interest payments on the remaining cash balance in the trust fund--and hence receipts--change, too. For example, in Table 2, receipts in fiscal year 1996 with 50 percent of FAA operations funded from the AATF are projected to be $8.8 billion; with 85 percent of FAA operations funded from the trust fund, receipts fall to $8.5 billion.

Because the FAA can draw on large balances of unobligated appropriations for facilities and equipment, increases in appropriations for capital programs beyond the baseline are not part of this scenario. Although appropriations for some of these programs might increase in the future, no provision has been made for such an increase.

Receipts are fairly low in 1993 compared with later years because in that year a one-time transfer of about $1.6 billion was made from the AATF to the general fund. This transfer represented the revenues corresponding to the 25 percent increase in aviation taxes that the Congress had intended for deficit reduction. Those revenues were instead deposited in the AATF for fiscal years 1991 and 1992. After 1993, all aviation taxes will be deposited in the trust fund.

The difference in receipts between the moderate- and low-growth scenarios is fairly small; this results partly from the assumption in the low-growth projection that inflation rates will be high while real growth in GDP is low (stagflation). The higher inflation rate (relative to the moderate-growth scenario) raises nominal aviation tax revenues and hence trust fund balances, narrowing the difference in balances between the two scenarios.

Conclusion

The projected cash balances of the AATF remain positive through fiscal year 1998 in all three scenarios and under differing assumptions about the percentage of FAA operations financed by the fund. Even under the assumption of low economic growth and increased withdrawals from the AATF, cash balances in the trust fund should remain positive over the next five years. However, when unpaid commitments--amounts obligated but not yet spent, as well as outstanding budget authority not yet obligated--are deducted from the cash balance, the balance becomes negative after fiscal year 1995, assuming that 75 percent or more of FAA operations are financed by withdrawals from the AATF and economic growth is moderate or low over the next five years.

What does it mean when future commitments and unspent budget authority exceed the cash balance in the fund? A negative balance means that future years' revenues will be needed to cover spending from budget authority already provided.[12] Because of the long lags between budget authority and actual spending on FAA activities, a negative uncommitted balance in any given year need not be a cause for concern. Future revenues may be sufficient to defray the outlays when they occur.

Money is appropriated for many FAA expenditures from both the aviation trust fund and the general fund of the U.S. Treasury. Withdrawals from the trust fund show how much of FAA expenditures are coming from aviation users. A negative uncommitted balance would only mean that the share from the general fund could rise in the future. But in itself, a negative uncommitted balance does not signify that changes in spending or taxes are needed. Such changes should be predicated on the costs and benefits associated with specific aviation programs.

12. The Byrd rule for the Highway Trust Fund allows two years of future revenues to be counted for this purpose. If that were done in the tables above, projected balances would not be negative in any of the scenarios.