

GAO

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Before the Subcommittee on Aviation,  
Senate Committee on Commerce,  
Science, and Transportation

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## AIRPORT FINANCE

# Past Funding Levels May Not Be Sufficient to Cover Airports' Planned Capital Development

Statement of Gerald L. Dillingham  
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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss airport financing issues, which are particularly important as you prepare to reauthorize the Wendell H. Ford Aviation Investment and Reform Act for the 21 Century (AIR-21). Much has changed since the Congress enacted AIR-21 3 years ago. At that time, the focus was on reducing congestion and flight delays. Today, flights are being canceled for lack of business, two major air carriers are in bankruptcy, and attention has shifted from increasing the capacity of the national airspace system to enhancing aviation security. Furthermore, as the federal budget deficit has increased, competition for federal resources has intensified, and the costs of airport capital development are growing, especially with the new requirements for security. Nonetheless, analysts expect the demand for air traffic services to rebound. Until that time, the unexpected slump in air traffic creates a window of opportunity to improve the safety and efficiency of the national airport system.

My statement today is based on our ongoing and completed work on airport funding and addresses the following questions:

1. What are the estimated costs of airports' planned capital development?
2. How much funding did airports receive for planned capital development in recent years, and what were their principal sources of funding?
3. If past funding levels continue, will they be sufficient to meet estimates of planned capital development?
4. What options are available to address any potential difference between planned development and available funding?

Because our information on planned airport capital development, including the information we obtained from surveying 400 smaller airports, is preliminary, it is subject to change as we finalize our ongoing work.

In summary:

- Although there is general consensus among stakeholders that maintaining the integrity of the national airport system requires continual capital investment, estimates vary as to the type and cost of planned airport capital development required to ensure a safe and

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efficient system. For 2001 through 2005, FAA has estimated annual planned capital development costs of about \$9 billion, while the Airport Council International (ACI), a key organization representing the airport industry, has estimated annual costs of about \$15 billion for 2002 through 2006. The estimates differ primarily because FAA's includes only projects that are eligible for federal funding, whereas ACI's includes projects that may or may not be eligible for federal funding. Neither FAA's nor ACI's estimate covers the airport terminal modifications needed to accommodate the new explosives detection systems required to screen checked baggage. According to ACI, the total cost of these modifications could be \$3 billion to \$5 billion over the next 5 years.

- From 1999 through 2001, airports received an average of about \$12 billion a year for planned capital development. The primary source of this funding was bonds, which accounted for almost \$7 billion, followed by federal grants and passenger facility charges, which accounted for \$2.4 billion and \$1.6 billion, respectively. The amounts and types of funding also varied by airport type. Of the \$12 billion, large- and medium-hub airports received over \$9 billion, and smaller airports received over \$2 billion.
- If airports continue to receive about \$12 billion a year for planned capital development, they would be able to fund all of the projects included in FAA's estimate, but they would not be able to fund about \$3 billion in planned development estimated by ACI. While this projected shortfall could change with revisions in future funding, planned development, or both, it nevertheless indicates where funding differences may be the greatest.
- Options are available to increase or make better use of the funding for airport development, and these options would benefit different types of airports to varying degrees. For example, raising the current cap on passenger facility charges would primarily benefit larger airports, while increasing or redistributing Airport Improvement Program grant funds would be more likely to help smaller airports.

## FAA's and the Airport Industry's Estimates of Airports' Planned Capital Development Vary Substantially

The estimated costs of planned airport capital development vary depending on which projects are included in the estimates. According to FAA's estimate, which includes only projects that are eligible for Airport Improvement Program (AIP) grants, the total cost of airport development will be about \$46 billion, or about \$9 billion per year, for 2001 through 2005. FAA's estimate is based on the agency's National Plan of Integrated Airport Systems, which FAA published in August 2002. ACI's estimate includes all of the projects in FAA's estimate, plus other planned airport capital projects that may or may not be eligible for AIP grants. ACI estimates a total cost of almost \$75 billion, or nearly \$15 billion per year for 2002 through 2006. Projects that are eligible for AIP grants include runways, taxiways, and noise mitigation and noise reduction efforts; projects that are not eligible for AIP funding include parking garages, hangars, and expansions of commercial space in terminals.

Both FAA's and ACI's estimates cover projects for every type of airport. As table 1 indicates, the estimates are identical for all but the large- and medium-hub airports, which are responsible for transporting about 90 percent of the traveling public. For these airports, ACI's estimate of planned development costs is about twice as large as FAA's.

**Table 1: Average Annual Planned Development Costs Estimated by FAA and ACI, by Airport Type, 2001-2006**

Dollars in millions

Airport type	Number of airports	Estimated average annual costs	
		FAA	ACI
Large hub	31	\$4,855	\$8,554
Medium hub	37	1,073	3,109
Small hub	71	675	675
Nonhub	280	807	807
Other commercial service	124	142	142
Reliever	260	526	526
General aviation	2,558	1,167	1,167
<b>Total</b>	<b>3,364</b>	<b>\$9,245</b>	<b>\$14,980</b>

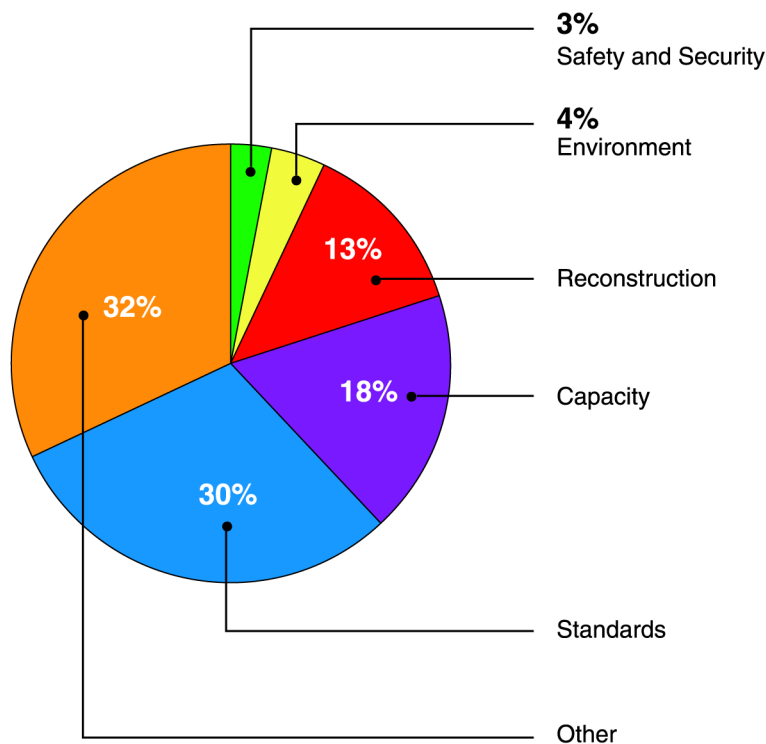
Source: FAA and ACI.

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According to FAA's analysis of the planned capital development for 2001 through 2005, airports will use 61 percent of the \$46 billion for capacity enhancement, reconstruction, and modifications to bring airports up to the agency's design standards and 39 percent to fund safety, security, environmental, and other projects. See figure 1.

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**Figure 1: Distribution of FAA's Estimated \$46 Billion for Planned Capital Development at Airports by Project Type, 2001-2005**



Source: FAA.

Note: "Standards" includes projects to bring airports up to FAA's design criteria. "Other" includes projects to, for example, develop terminals to accommodate more passengers or larger aircraft and to enhance airfield capacity.

Neither ACI's nor FAA's estimate includes funding for the terminal modification projects that are needed to accommodate the new explosives detection systems required to screen checked baggage. ACI estimates that these projects will cost a total of about \$3 billion to \$5 billion over the next 5 years. A key reauthorization issue facing the Congress is how these

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terminal modification projects will be funded. In 2001, the Congress allowed FAA to use AIP funds to help pay for some new security projects; however, this use of AIP funds affected the amount of funding that was available for some development projects. Specifically, in fiscal year 2002, FAA used \$561 million in AIP grant funds for security projects, or about 17 percent of the \$3.3 billion available. The use of AIP grant funds for new security projects in fiscal year 2002 reduced the funding available for other airport development projects, such as projects to bring airports up to FAA's design standards and reconstruction projects. The use of AIP grant funds for security also caused FAA to defer three letter-of-intent payments totaling \$28 million to three airports until fiscal year 2003 or later.<sup>1</sup>

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## **Airports Recently Received About \$12 Billion a Year, Mostly from Bonds and Federal Sources**

From 1999 through 2001, the 3,364 airports that make up the national airport system received an average of about \$12 billion per year for planned capital development. The single largest source of these funds was bonds, followed by AIP grants and passenger facility charges. (See table 2.) It is important to note that the authorized AIP funding for fiscal years 2002 and 2003 totaled \$3.3 billion and \$3.4 billion, respectively. However, because data for funding from other sources were not available for these years, we used the figures from 1999 through 2001, the most recent years for which consistent data were available.

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<sup>1</sup>Letters of intent represent a nonbinding commitment from FAA to provide multiyear funding to airports beyond the current authorization period. This commitment enables airports to proceed with projects without waiting for future AIP grant funds because it provides reasonable assurance of reimbursement for allowable costs.

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**Table 2: Sources of Airport Funding**

Dollars in billions

Funding source	1999-2001 average annual funding <sup>a</sup>	Percent of total	Source of funds
Airport bonds	\$6.90 <sup>b</sup>	59	Usually, state and local governments or airport authorities issue tax-exempt debt. Funds also include notes.
Airport Improvement Program grants	2.42 <sup>c</sup>	21	The Congress makes funds available from the Airport and Airway Trust Fund, which receives revenue from various aviation-related taxes.
Passenger facility charges	1.59 <sup>d</sup>	13	Funds come from passenger fees of up to \$4.50 per trip segment at commercial airports.
State and local contributions	.44 <sup>e</sup>	4	Funds include state and local grants, loans, and matching funds for AIP grants.
Airport revenue	.42 <sup>f</sup>	4	Funds are generated from (1) "airside" revenues derived from the operation and landing of aircraft, passengers, or freight and (2) "landside" revenues derived from concessions and leases.
<b>Total</b>	<b>\$11.78</b>	<b>100</b>	

Source: GAO, FAA, and Thomson Financial.

Note: Totals may not add because of rounding.

<sup>a</sup>Amounts expressed in inflation-adjusted 2001 dollars.

<sup>b</sup>Net of refinancing. Of this total, \$1.43 billion per year represented the proceeds of special facility bonds, which are secured by revenue pledges from the indebted facility and issued on behalf of nonairport beneficiaries, such as airlines.

<sup>c</sup>Since the passage of AIR-21 in 2000, annual AIP funding has been at or above \$3.2 billion. Before that, it was less than \$2 billion.

<sup>d</sup>Airports have been eligible to charge \$4.50 since fiscal year 2001. Before that, the ceiling was \$3.00.

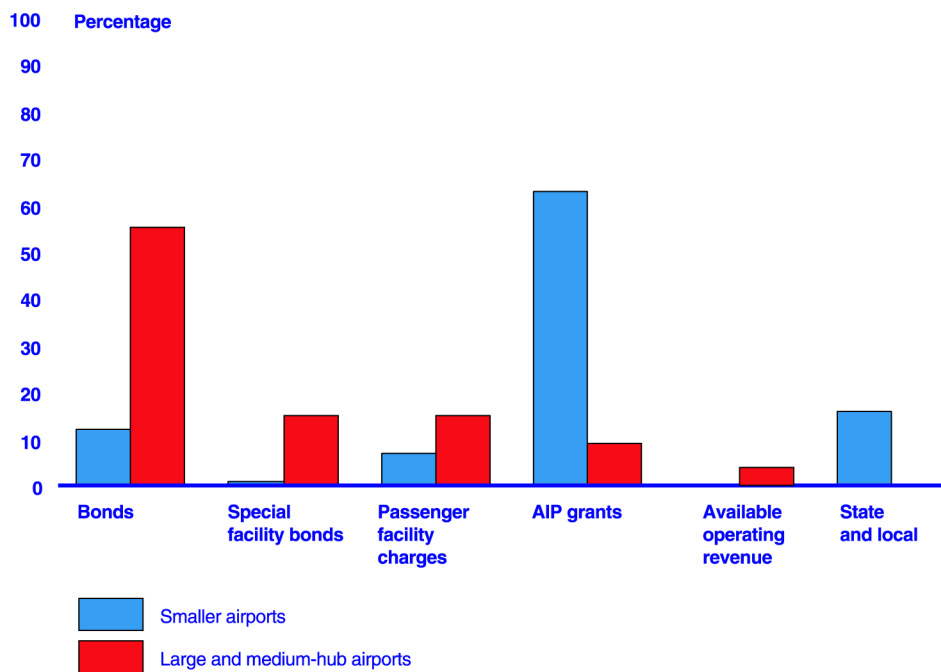
<sup>e</sup>Net operating revenue in excess of a minimum coverage ratio of 125 percent of the debt service (principal and interest payments) for commercial-service airports. For general aviation and reliever airports, amounts are calculated as net operating revenue.

<sup>f</sup>Does not include local grants and loans for commercial-service airports because we found no data to document the amounts from these sources.

The amount and type of funding vary depending on the airport's size. For example, as shown in figure 2, the large- and medium-hub airports depend primarily on bonds, while the smaller airports rely principally on AIP

grants. Passenger facility charges are a more important source of revenue for the large- and medium-hub airports because they have the majority of commercial-service passengers.

**Figure 2: Distribution of Sources of Funding, by Airport Type**



Source: GAO.

Notes: The 1999 and 2000 figures were converted to inflation-adjusted 2001 dollars.

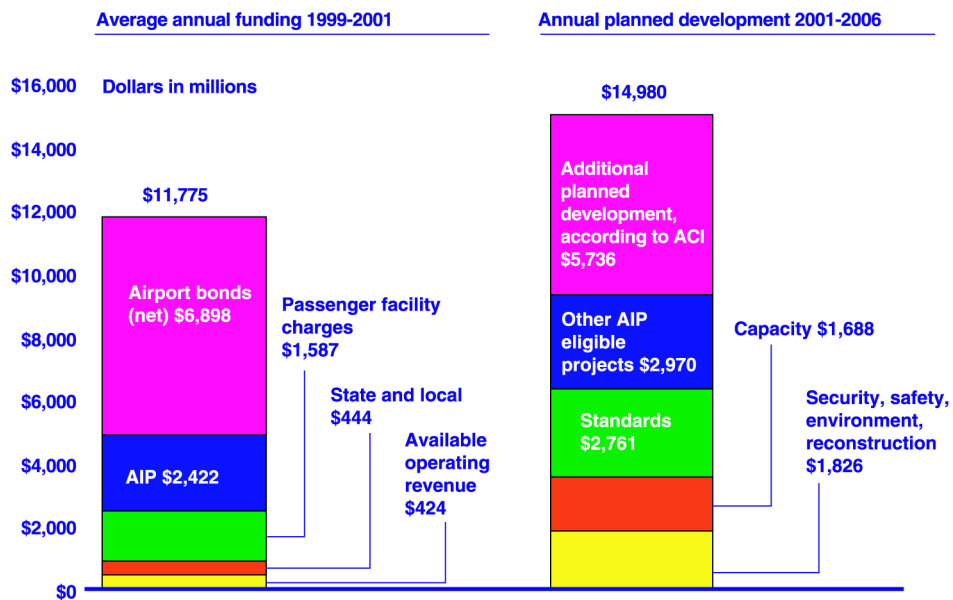
Special facility bonds are secured by the revenue from the indebted facility for projects such as terminals, hangars, and maintenance facilities, rather than by the airport's general revenue.



## Past Funding Levels Would Cover All of FAA's Planned Development Estimate but Would Fall About \$3 Billion Short of ACI's Estimate

If the funding for airport capital development remains at about \$12 billion a year over the next 5 years, it would cover all of the projects in FAA's estimate. However, it would be about \$3 billion less per year than ACI's estimate. Figure 3 compares the average annual funding airports received from 1999 through 2001 with FAA's and ACI's estimated annual planned development costs for 2001 through 2006. This difference is not an absolute predictor of future funding shortfalls; both funding and planned development may change in the future. However, it does provide a useful indication of where funding differences may be the greatest.

**Figure 3: Recent Average Annual Funding Compared with Estimates of Annual Planned Development Costs**



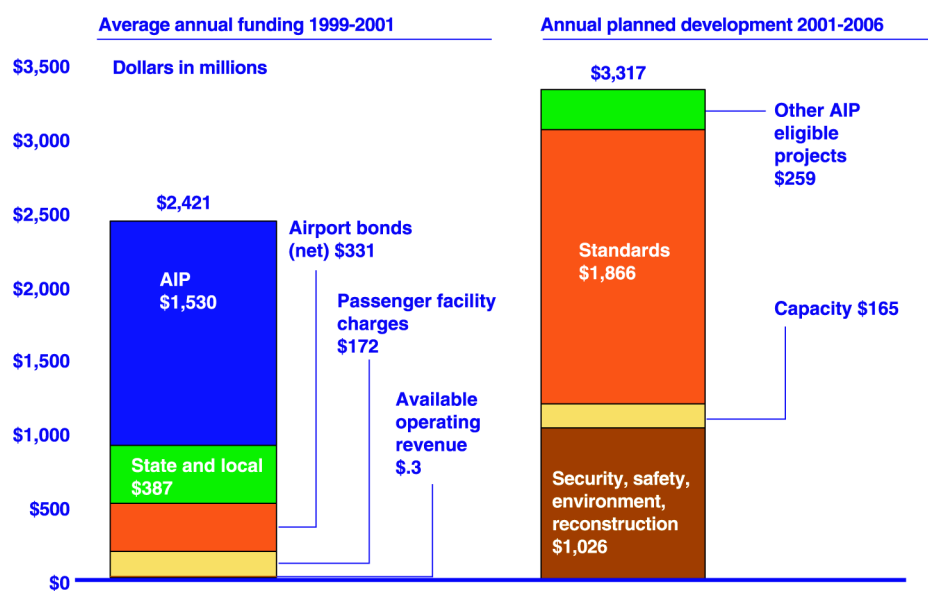
Sources: FAA and ACI (data), GAO (analysis).

## Funding Difference Would Affect Smaller Airports Proportionally More Than Larger Airports

In percentage terms, the difference between recent funding levels and ACI's estimate of planned capital development is somewhat greater for smaller airports than it is for large- and medium-hub airports. From 1999 through 2001, smaller airports received an average of about \$2.4 billion a year for planned capital development while large- and medium-hub airports

received an average of about \$9.4 billion. If these funding levels continued, smaller airports would not be able to fund about 27 percent of their planned development, while large- and medium-hub airports would not be able to fund about 20 percent of their planned development. Figures 4 and 5 illustrate the differences between recent funding levels and the costs of planned capital development projected for smaller and for large- and medium-hub airports.

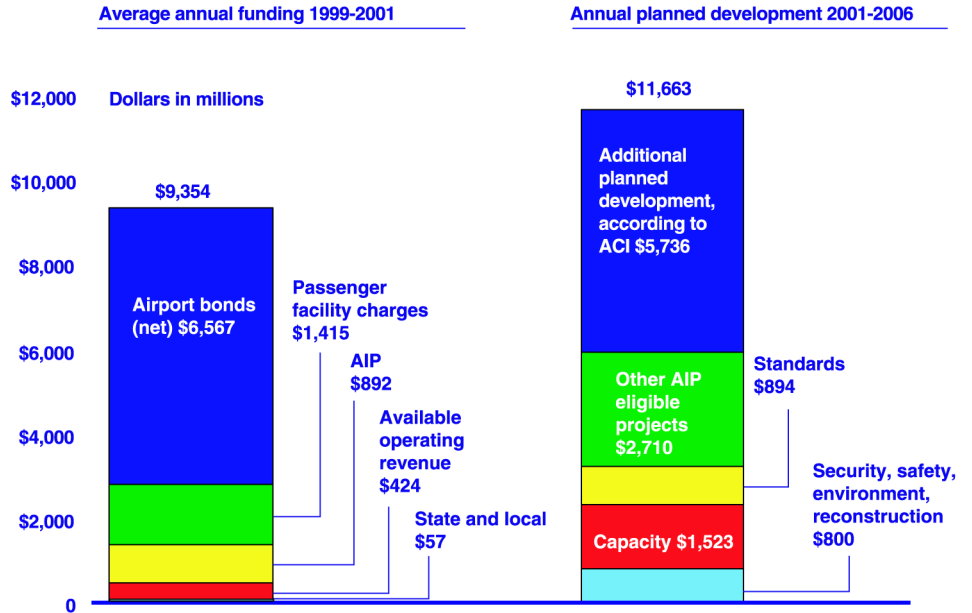
**Figure 4: Average Annual Funding Compared with Estimated Annual Planned Capital Development for Smaller Airports**



Sources: FAA and ACI (data), GAO (analysis).

Note: Totals may not add because of rounding.

**Figure 5: Average Annual Funding Compared with Estimated Annual Planned Capital Development for Large- and Medium-Hub Airports**



Sources: FAA and ACI (data), GAO (analysis).

Note: The total for average annual funding may not add because of rounding.

### Ability to Fund Planned Capital Development Has Improved for Both Smaller and Larger Airports

The difference between past funding and planned development has declined over the past 5 years, and, at recent funding levels, airports would be able to fund a higher percentage of their planned capital development than they could fund in 1998. At that time, we reported that smaller airports could fund about 52 percent of their planned capital development, compared with about 73 percent today, which represents an increase of 21 percent. We also reported that large- and medium-hub airports were able to fund about 80 percent of their development and are able to fund the same amount today.<sup>2</sup> See figure 6.

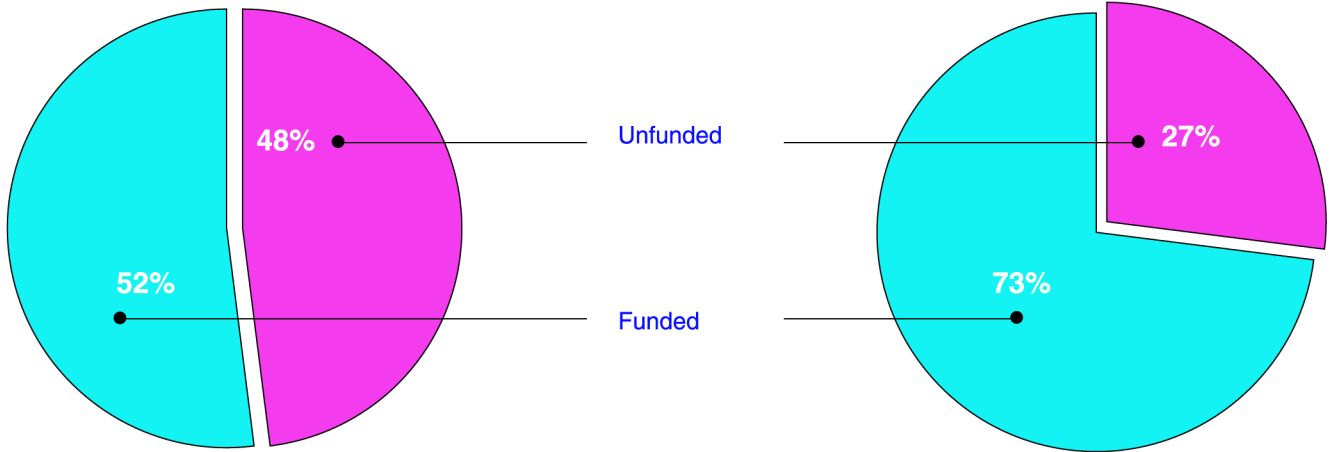
<sup>2</sup>U.S. General Accounting Office, *Airport Financing: Annual Funding As Much As \$3 Billion Less Than Planned Development*, GAO/T-RCED-99-84 (Washington, D.C.: Feb. 10, 1999).

Figure 6: Ability of Smaller and Larger Airports to Fund Estimated Planned Capital Development in 1998 and 2003

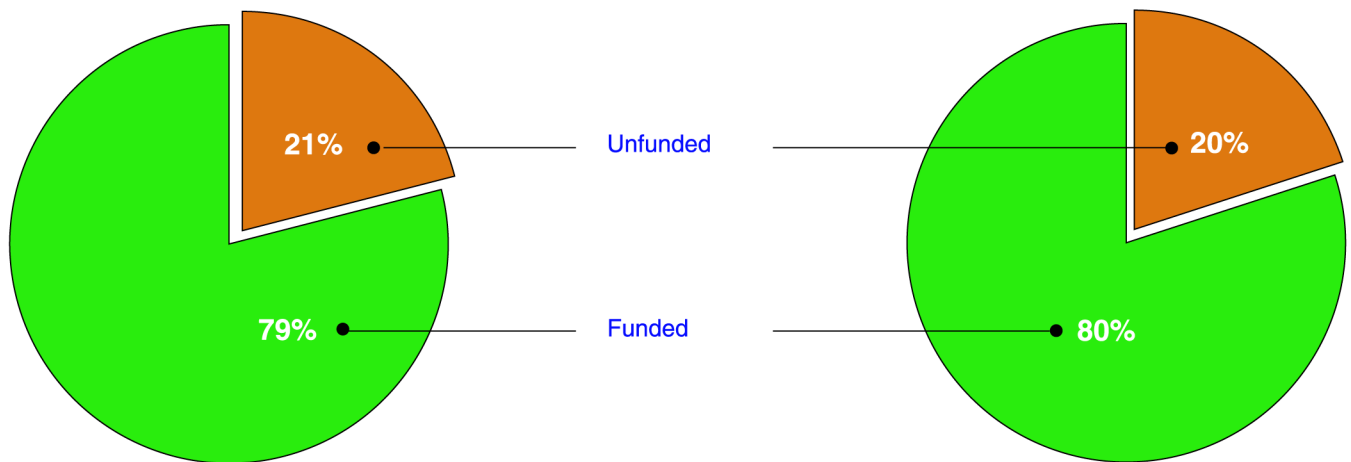
1998

2003

Smaller airports



Larger airports



Source: GAO.

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The primary reason why smaller airports can fund more of their planned capital development today than they could in 1998 is that AIR-21 increased both the total amount of funding for AIP grants and the proportion of AIP funding that went to smaller airports. Specifically, AIR-21 increased the funding for two AIP funds that primarily or exclusively benefit smaller airports—the state apportionment fund and the small airport fund—and it created general aviation entitlement grants, which also benefit smaller airports.<sup>3</sup> As a result of these changes, smaller airports received almost 63 percent of the \$2.4 billion in AIP grant funds that airports received each year, on average, from 1999 through 2001. Large- and medium-hub airports can also fund more of their planned development today than they could in 1998 primarily because they are able to issue more bonds and to charge a higher passenger facility fee.

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## Options Are Available to Address Difference between Funding and Planned Development

Options are available to increase airport funding or to make better use of the existing funding. These options, some of which were authorized or implemented as part of AIR-21, include increasing the AIP grant funding for smaller airports, increasing passenger facility charges, creating a separate fund for new security projects, and using innovative financing approaches. The various options would benefit different types of airports to varying degrees. It is also important to note that even though the airlines may be experiencing financial problems, most large airports have very solid credit ratings and could, if necessary, issue more debt without facing exorbitant interest rates.

To help address the difference between funding and planned development, AIR-21 provided that up to \$150,000 a year in AIP grant funds be made available to all general aviation airports for up to 3 years for airfield capital projects, such as runways, taxiways, and airfield construction and maintenance projects. On February 11, 2003, we reported that since the

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<sup>3</sup>Moreover, if we replaced the AIP figures for 1999 through 2001 with the AIP figures appropriated for fiscal year 2002 and authorized for fiscal year 2003 in our analysis, assuming no changes in the distribution of AIP funds, smaller airports would be able to cover even more of the estimated cost of their planned development because AIP grant funds for fiscal years 2002 and 2003 are about \$1 billion more than the average annual AIP funding for 1999 through 2001. Because data for funding from other sources were not available for these years, we used the figures from 1999 through 2001, the most recent years for which consistent data were available.

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program's inception in fiscal year 2001, general aviation airports have received about \$325 million, which they have used primarily to help build runways, purchase navigational aids, and maintain pavements and airfield lighting.<sup>4</sup> Most of the state aviation officials and general aviation airport managers we surveyed said the grants were useful in meeting their needs, and some suggested that the \$150,000 grant limit be increased so that general aviation airports could undertake larger projects. However, a number of state officials cautioned that an increase in the general aviation entitlement grant could cause a decrease in the state apportionment fund that states use to address their aviation priorities.

Another option would be to increase or eliminate the cap on passenger facility charges. This option would primarily benefit larger airports, because passenger facility charges are a function of the volume of passenger traffic. However, under AIP, large- and medium-hub airports that collect passenger facility charges must forfeit a certain percentage of their AIP formula funds. These forfeited funds are subsequently divided between the small airport fund, which is to receive 87.5 percent, and the discretionary fund, which is to receive 12.5 percent. Thus, smaller airports would benefit indirectly from any increase in passenger facility charges. In our 1999 report on passenger facility charges,<sup>5</sup> we estimated that a small increase in these charges would have a modest effect on passenger traffic. At that time, we estimated that each \$1 increase would reduce passenger levels by about 0.5 to 1.8 percent, with a midrange estimate of 0.85 percent. Since AIR-21 raised the cap on passenger facility charges from \$3.00 to \$4.50, the full effect of the increase has not been realized because only 17 of the 31 large-hub airports (55 percent) and 11 of the 37 medium-hub airports (30 percent) have increased their rates to \$4.50. Additionally, 3 large-hub airports and 6 medium-hub airports do not charge a passenger facility fee. The reluctance to raise passenger facility charges is likely the result of several factors, including the views of airlines, which are opposed to any increase in passenger facility charges because such an increase would raise passenger costs and reduce passenger traffic. Nonetheless, if all airports were to increase passenger facility charges to the current ceiling, additional revenue could be generated.

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<sup>4</sup>U.S. General Accounting Office, *Aviation Finance: Implementation of General Aviation Entitlement Grants*, [GAO-03-347](#) (Washington, D.C.: Feb. 11, 2003).

<sup>5</sup>U.S. General Accounting Office, *Passenger Facility Charges: Program Implementation and the Potential Effects of Proposed Changes*, [GAO/RCED-99-138](#) (Washington, D.C.: May 19, 1999).

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Recently, the head of the Transportation Security Administration suggested setting up a separate fund for security projects. Such a fund might be comparable to AIP, which receives revenue from various aviation-related taxes through the Airport and Airway Trust Fund. Having a separate fund would be consistent with the recent separation of aviation safety and security responsibilities.

FAA has introduced other mechanisms to make better use of existing funding sources, the most successful of which has been letters of intent, a tool that has effectively leveraged private sources of funding. As noted, letters of intent represents a nonbinding commitment from FAA to provide multiyear funding to an airport beyond the current AIP authorization period. Thus, the letter allows the airport to proceed with a project without waiting for a future AIP grant because the airport and investors know that allowable costs are likely to be reimbursed. A letter of intent may also enable an airport to receive a more favorable interest rate on bonds that are sold to refinance a project because the federal government has indicated its support for the project. FAA has issued 64 letters of intent with a total commitment of about \$3 billion; large- and medium-hub airports account for the majority of the total.

Other approaches to making better use of existing funding resources were authorized under AIR-21. Specifically, the act authorized FAA to continue its innovative finance demonstration program, which is designed to test the ability of innovative financing approaches to make more efficient use of AIP funding. Under this program, FAA enabled airports to leverage additional funds or lower development costs by (1) permitting flexible local matching on some projects, (2) purchasing commercial bond insurance, (3) paying interest costs on debt, and (4) paying principal and interest debt service on terminal development costs incurred before the enactment of AIR-21. FAA has provided about \$31 million for smaller airports to test these innovative uses of AIP funding. According to FAA officials, the results of the program have been mixed. The most popular option for airports has been flexible matching, which has resulted in several creative loan arrangements.

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In conclusion, Mr. Chairman, the aviation industry and the national economy are still struggling to recover their health. Analysts nonetheless expect the demand for air travel to rebound, and the nation's aviation system must be ready to accommodate the projected growth safely and securely. As the Congress moves forward with reauthorizing FAA, it will

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have to decide on several key issues, including how it wants to consider the airports' estimate of \$15 billion a year for planned capital development over the next 5 years, how terminal modification projects will be funded, and what priorities it wants to set, both for development and security. Sustaining recent funding levels would allow the majority of planned airport capital development to move forward, but it would not cover all of the airports' estimated costs, and it would not address the costly terminal modifications needed to accommodate explosives detection systems. Options such as additional AIP grant funds, increases in passenger facility charges, or the creation of a separate fund for new security projects could make more funding available for airport improvements. However, the growing competition for federal budget dollars and concerns about the impact of higher charges on airline ticket sales may limit the practicality of these options.

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## Scope and Methodology

To determine how much planned development would cost over the next 5 years, we obtained planned development data from FAA and ACI. ACI provided its estimate to us in January 2003, and we are still analyzing the data on which the estimate is based. To determine the sources of airport funding, we obtained capital funding data from FAA, the National Association of State Aviation Officials, Thomson Financial, and our survey of 400 general aviation and reliever airports. We obtained funding data from 1999 through 2001 because these were the most recent years for which consistent data were available. We screened the planned development and funding data for accuracy and compared funding streams across databases where possible. We also clarified ambiguous development or funding source information directly with airports. We did not, however, audit how the databases were compiled, except for our own survey. However, we have not finished analyzing the results of our survey, and the results presented in this testimony are still preliminary.

We have been performing our ongoing work from May 2002 through February 2003 in accordance with generally accepted government auditing standards.

This concludes my statement. I would be pleased to answer any questions that you or other members of the Subcommittee might have.



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## Contact information

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