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Transportation and Infrastructure, House of  
Representatives

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AIRPORT FINANCING

Comparing Funding  
Sources With Planned  
Development

Statement of Gerald L. Dillingham,  
Associate Director, Transportation Issues,  
Resources, Community, and Economic  
Development Division



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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss airport funding issues. Over the last 2 years, since the Airport Improvement Program (AIP)<sup>1</sup> was last reauthorized in October 1996, your Committee and others have asked us to study these issues in considerable depth. My testimony today, which is drawn from our study of these issues,<sup>2</sup> focuses on three questions: (1) How much are airports spending on capital development, and where is the money coming from? (2) If current funding levels continue, will they be sufficient to meet airports' planned development? (3) What effect will various proposals to increase airport funding have on airports' ability to fulfill capital development plans?

In summary, our answers to these questions are as follows:

- In 1996, the 3,304 airports that make up the national airport system obtained about \$7 billion for capital development. More than 90 percent of this funding came from three sources: airport and special facility bonds (\$4.1 billion), the Airport Improvement Program (\$1.4 billion), and passenger facility charges paid on each airline ticket (\$1.1 billion). The magnitude and type of funding varies with each airport's size. The nation's 71 largest airports accounted for nearly 80 percent of this funding. As a group, these airports received only about 10 percent of their funding from the Airport Improvement Program. By contrast, the remaining 3,233 smaller airports that complete the national system rely on the Airport Improvement Program for half of their funding.
- Airports planned as much as \$10 billion per year in development for the years 1997 through 2001, or \$3 billion per year more than they spent in 1996. About \$1.4 billion per year of that development is planned for safety, security, environmental, and reconstruction projects—the Federal Aviation Administration's (FAA) highest priorities. Another \$1.4 billion per year of that development is planned for other high-priority projects, primarily adding airport capacity. Other projects of a relatively lower priority, such as bringing airports up to the Federal Aviation Administration's design standards, add another \$3.3 billion per year. Airports anticipate another \$3.9 billion per year for projects that are not eligible for funding from the Airport Improvement Program, such as expanding commercial space in terminals and constructing parking garages. The difference between current funding and planned

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<sup>1</sup>AIP provides federal funding for airport capital development.

<sup>2</sup>Airport Development Needs: Estimating Future Costs (GAO/RCED-97-99, Apr. 7, 1997) and Airport Financing: Funding Sources for Airport Development (GAO/RCED-98-71, Mar. 12, 1998)

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development is especially acute for smaller commercial and general aviation airports. Their 1996 funding would cover only about half of their total planned development.

- Several proposals to increase airport funding have emerged in recent years. These include increasing the amount of funding for the Airport Improvement Program, raising or eliminating the ceiling on passenger facility charges, and better leveraging of existing funding sources. These proposals vary in the degree to which they help specific types of airports. For example, increasing the amount of funding for the Airport Improvement Program would help small airports more, while raising passenger facility charges would help larger airports more.

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## Airports' Funding Sources Vary

In 1996, bonds, AIP, and passenger facility charges provided about \$6.6 billion of the \$7 billion in airport funding. State grants and airport revenue contributed the remaining funding for airports. Table 1 lists these sources of funding and their amounts in 1996.

**Table 1: Sources of Airport Funding**

<b>Funding source</b>	<b>1996 amount (dollars in billions)</b>	<b>Percent of total</b>	<b>Source of funds</b>
Tax-exempt bonds	\$4.104 <sup>a</sup>	58	Tax-exempt bonds are issued by state and local governments or airport authorities.
Airport Improvement Program (AIP)	\$1.372	20	Funds are made available by Congress from the Airport and Airway Trust Fund, which receives revenues from taxes on domestic and international travel, domestic cargo transported by air, and noncommercial aviation fuel.
Passenger facility charges (PFC)	\$1.114	16	Funds come from passenger fees of \$1, \$2, or \$3 per trip segment at commercial airports, up to a maximum of four trip segments per round trip.
State and local contributions	\$0.285 <sup>b</sup>	4	Funds come from such sources as state aviation fuel and airline property taxes, aircraft registration fees, state bonds, and state general fund appropriations. The extent to which these sources are used varies by state.
Airport revenue	\$0.153 <sup>c</sup>	2	Funds are generated from (1) revenues derived from the operation and landing of aircraft, passengers, or freight and (2) revenues derived from concessions and leases.
<b>Total</b>	<b>\$7.028</b>	<b>100</b>	

<sup>a</sup>Net of refinancing. Of this total, a little over \$400 million is special facility bonds issued on the behalf of nonairport beneficiaries, such as airlines.

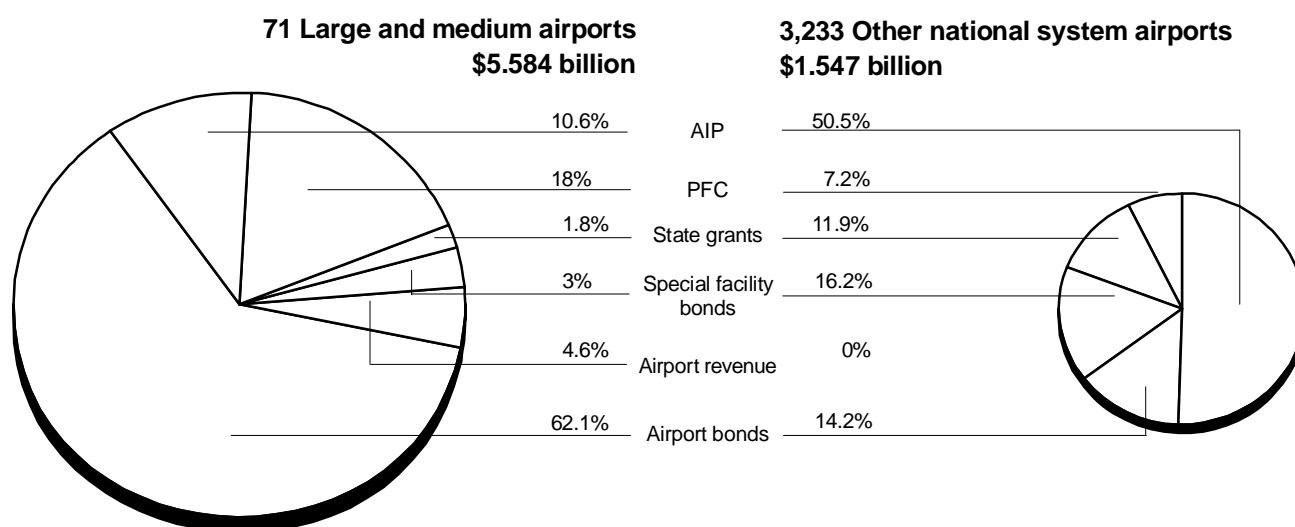
<sup>b</sup>State grants only. The amounts for local capital subsidies are unknown, but we believe that they are minimal.

<sup>c</sup>Net operating revenue in excess of a minimum coverage ratio of 125 percent of debt service (principal and interest payments).

The amount and type of funding vary considerably by the type of airport. The nation's 71 largest (large and medium hub) airports, which accounted for almost 90 percent of all passenger traffic, had more than \$5.5 billion in funding in 1996, while the 3,233 other national system airports had about \$1.5 billion. As shown in figure 1, large and medium hub airports rely most heavily on airport bonds, which account for roughly 62 percent of their total funding. By contrast, the other 3,233 smaller national system airports obtained just 14 percent of their funding from bonds. For these smaller

airports, AIP funding constitutes a much larger portion of their overall funding—about half.

**Figure 1: Distribution of 1996 Funding Sources for Large and Medium Hub and Other National System Airports**



## Past Funding Levels Are Less Than Planned Development

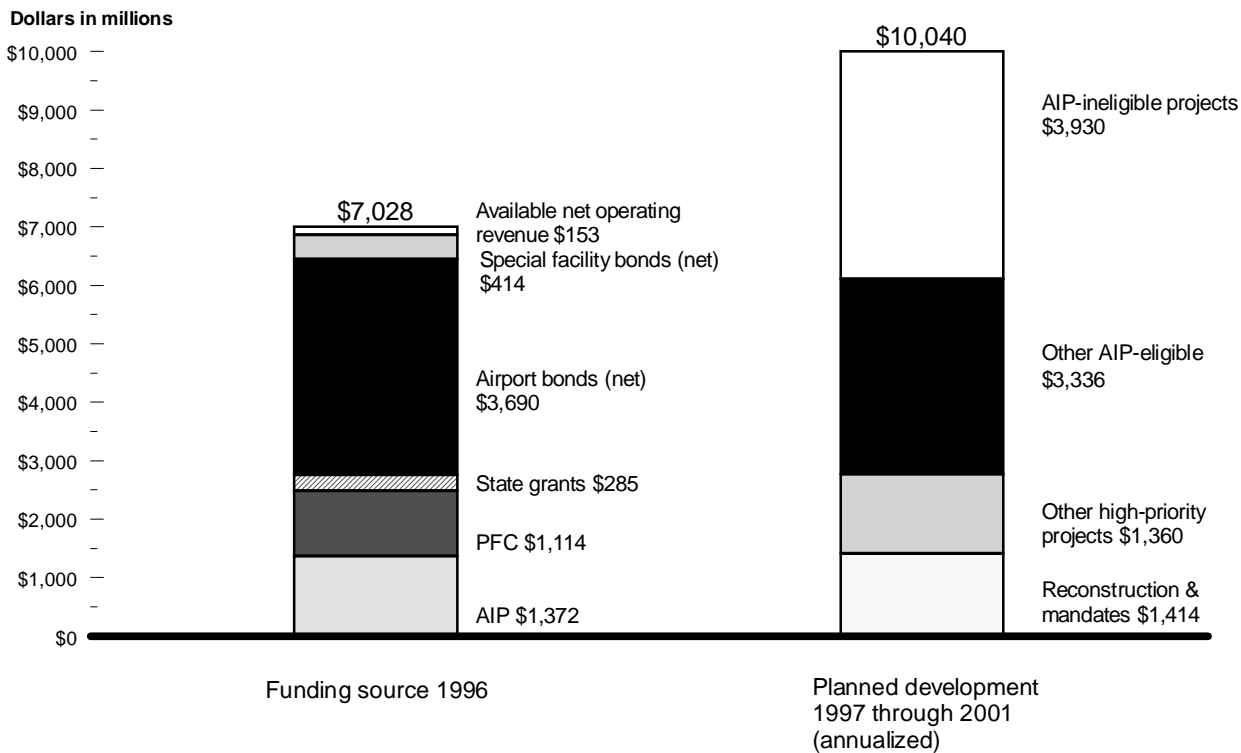
Airports' planned capital development over the next 5 years may total as much as \$10 billion per year, or \$3 billion more per year than their 1996 funding.<sup>3</sup> Figure 2 compares airports' total capital development funding in 1996 with their annual planned development over the next 5 years. Funding for 1996 is shown by source. Planned spending for future years is shown by the relative priority of the projects, as follows:

- FAA's highest priorities (shown as reconstruction and mandates) total \$1.4 billion per year and are for projects to meet safety, security, and environmental requirements, including noise mitigation, and for projects that maintain the existing infrastructure (reconstruction).
- Other high-priority projects—primarily, those adding capacity—add another \$1.4 billion per year.

<sup>3</sup>Estimates of planned development are based on our April 1997 report on airport capital development (Airport Development Needs: Estimating Future Costs, GAO/RCED-97-99, Apr. 7, 1997). As that report noted, estimating future development is fraught with complications. Problems with the data's accuracy, unanticipated needs, and political and financial feasibility affect the actual cost of development.

- Other projects of a relatively lower priority—such as those bringing airports up to FAA’s design standards—add another \$3.3 billion per year, for a total of \$6.1 billion per year.
- Finally, airports anticipate another \$3.9 billion per year in projects that are not eligible for AIP—such as those expanding commercial space in terminals and constructing parking garages.

**Figure 2: 1996 Funding Compared to Planned Development**



Although a sizable difference may exist in total, when a comparison of 1996 funding to planned future development is made, there is a much closer match if the comparison is restricted to comparing AIP funding and planned spending on FAA’s highest-priority projects (reconstruction and mandates). In the aggregate, the \$1.372 billion in AIP funding in 1996 roughly equates to the \$1.414 billion in estimated development planned for

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the highest priority projects. However, because about one-third of AIP funds are awarded to airports on the basis of the number of passengers enplaned and not necessarily on the basis of the project's priority, the full amount of AIP funds may not be going to the highest-priority projects.

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**Potential Funding  
Difference at Smaller  
Airports Is More  
Significant Than at Larger  
Airports**

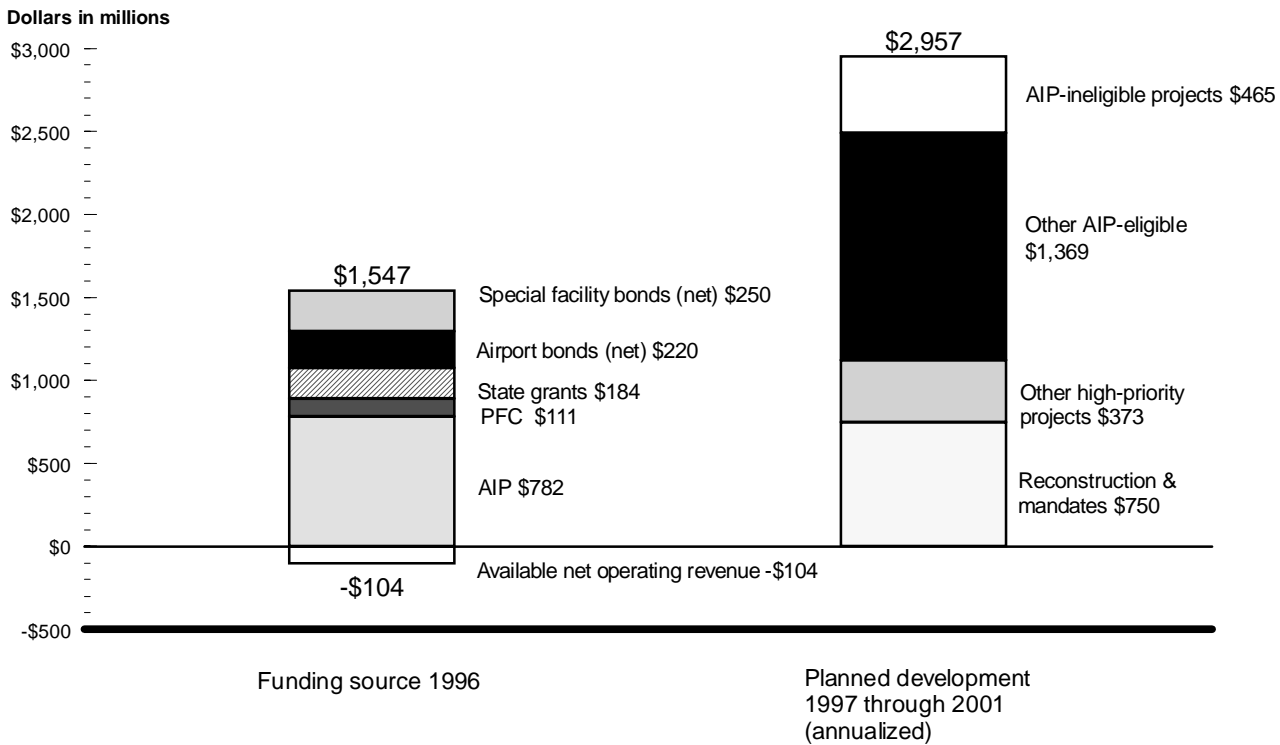
The funding difference between current funding and planned development for smaller airports is bigger, in percentage terms, than for larger airports. Current funding at the 3,233 small, nonhub, other commercial service and at general aviation airports is a little over half of the estimated cost of their planned development, thus producing a difference of about \$1.4 billion. (See fig. 3.) The difference might actually be even greater if it were not for \$250 million in special facility bonding for a single cargo/general aviation airport.<sup>4</sup> For this group of airports, the \$782 million in 1996 AIP funding surpasses the annual estimate of \$750 million for reconstruction, noise, and federally mandated projects.

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<sup>4</sup>Fort Worth Alliance Airport, a general aviation-cargo airport, issued \$250 million in special facility bonds in 1996.

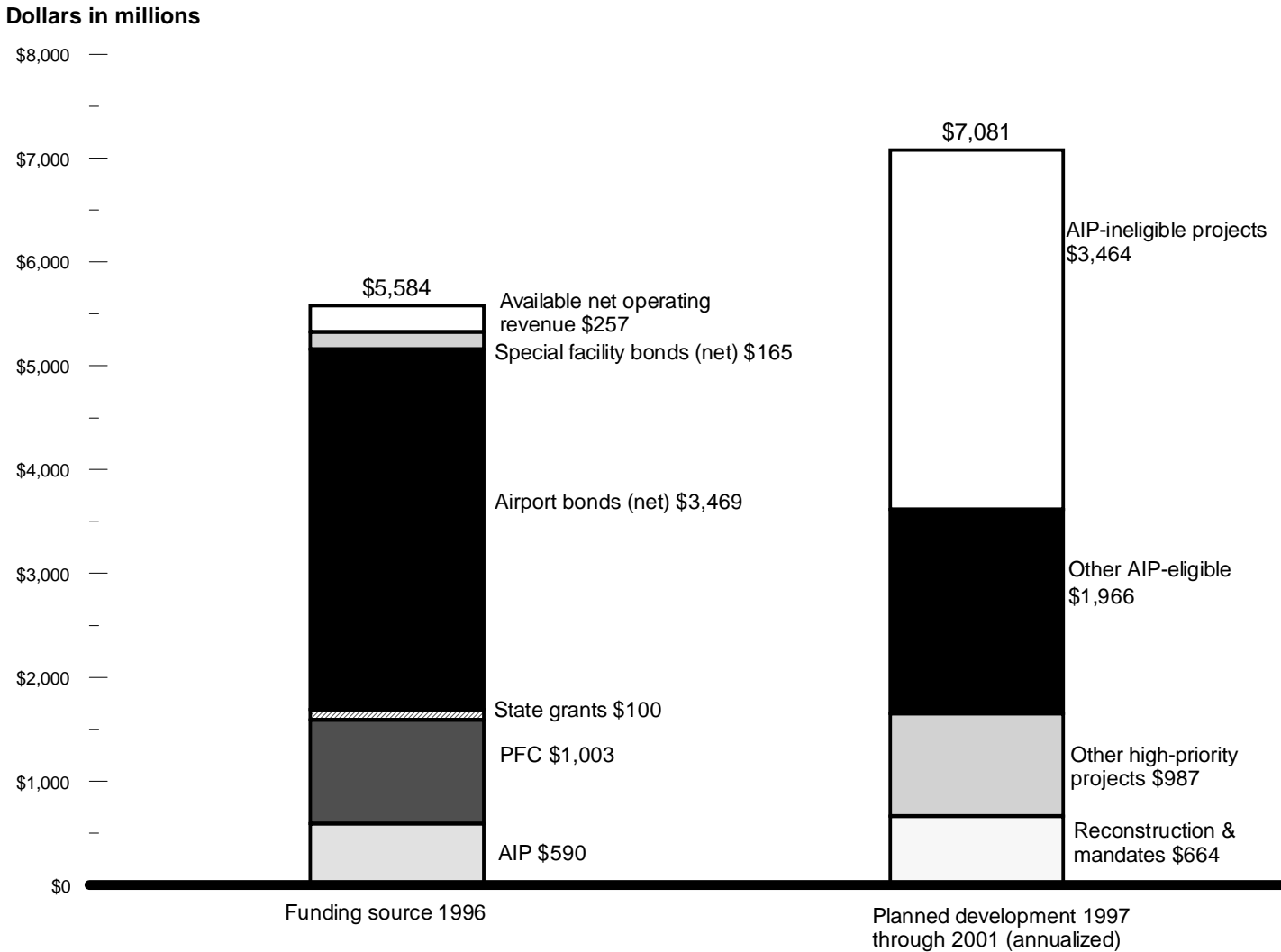


**Figure 3: 1996 Funding Compared to Planned Development for Smaller Airports**



As a portion of total funding, the potential funding difference for the 71 large and medium hub airports is comparatively less than it is for their smaller counterparts. (See fig. 4.) However, because total expenditures for capital projects are so much greater for these airports, this potential dollar shortfall is \$1.5 billion, or \$87 million greater than other airports' collective shortfall. Figure 4 also indicates that \$590 million in AIP funding falls \$74 million short of the estimated cost to meet FAA's highest-priority development—meeting federal mandates and maintaining the current infrastructure.

**Figure 4: 1996 Funding Compared to Planned Development for Large and Medium Hub Airports**



## Effect of Proposals to Increase Airport Funding Varies

Evaluating the various proposals to provide additional funding for airport development involves the consideration of the trade-offs among the various funding types as well as the potential effect that each proposal would have on airports. Initiatives to increase funding for airport development include increasing AIP funding, raising the ceiling on PFCs, and other less conventional steps, such as FAA's innovative finance and

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privatization pilot programs. In addition, we examined the potential benefits of state-administered revolving funds.

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### Emphasizing One Funding Source Over Another Requires Trade-Offs

Choosing to increase one source of airport funding instead of another involves making trade-offs because the current funding sources differ in several key characteristics. For example, increasing AIP funding increases the extent to which the government can specify the recipient, the project, and the amount of funds that will be awarded. However, because grant programs in general are relatively costly to administer, increasing funding in this manner would increase administrative costs more than some other funding mechanisms. Conversely, increasing PFCs reduces the extent to which the government or airlines can specify how funds are used. Finally, compelling airports to raise more funding through the bond markets limits governmental control over investments.

The funding mechanisms also differ with respect to who bears the cost of airport financing. These differences affect the extent to which beneficiaries pay in proportion to the benefits they receive. For example, grants are funded through AIP, which is, in turn, funded primarily by the ticket tax. Thus, users pay for grants to airports. In contrast, part of the cost of tax-exempt bonds is borne by nonusers of airports because the interest earned by bondholders is exempt from federal income taxation. As a result, more of the cost of bond financing is borne by nonusers of airports than in the case of grants. However, it is uncertain whether using bonds to increase funding would improve or worsen the overall efficiency and equity of airport financing because nonusers may benefit from the local economy stimulated by airport development.

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### Increasing AIP Would Help Smaller Airports Most

Increasing total AIP funding would proportionately help smaller airports more than large and medium hub airports under the existing distribution formula. Increasing the level of AIP under the existing distribution formula appears to provide a slightly increasing share of AIP funds to the smaller airports and a concomitant decrease for the larger airports. AIP funding for fiscal year 1998 stands at \$1.7 billion; large and medium hub airports get nearly 40 percent of this amount, and all other airports get about 60 percent. We calculated how this percentage split would be affected at funding levels of \$2 billion and \$2.347 billion. The National Civil Aviation Review Commission and the Air Transport Association (ATA), the commercial airline trade association, have recommended that future AIP funding levels be stabilized at a minimum of \$2 billion annually. The level

of \$2.347 billion, which is the maximum amount authorized for fiscal year 1998, is supported by the airport trade groups—American Association of Airport Executives and Airports Council International-North America. Table 2 shows the results. Under existing funding formulas, the proportion of AIP funds going to smaller airports would rise.

**Table 2: Estimated Distribution of AIP Funds at Different Funding Levels**

Dollars in millions

AIP funding level	Large and medium hub airports <sup>a</sup>		Small, nonhub, other commercial service, and general aviation <sup>a</sup>	
	Amount <sup>b</sup>	Percent of total	Amount <sup>b</sup>	Percent of total
\$1,700.0	\$628.9	39.4	\$965.8	60.6
\$2,000.0	\$718.1	37.9	\$1,176.7	62.1
\$2,347.0	\$821.2	36.6	\$1,420.6	63.4

<sup>a</sup>Dollar amounts are based on 1996 enplanements and exclude about \$105.2 million in estimated carryover amounts.

<sup>b</sup>The distribution of funds for the cargo entitlement, the noise set-aside, and remaining discretionary funds (discretionary funds other than those for the noise set-aside, the general aviation/reliever/other commercial service set-aside, the small hub set-aside, and letters of intent), were based on the proportional distribution of those funds during fiscal year 1997, the first year under the revised distribution formula established in the 1996 reauthorization.

While the ATA has recommended a minimum \$2 billion funding level for AIP, they also recommended redefining airport categories and the distribution formulas for AIP. ATA proposes that national system airports be grouped into four categories and that a specified portion of AIP funds be distributed to airports in each category. Under ATA’s proposal, a slightly higher portion of a \$2 billion AIP would go to the larger airports and a slightly smaller portion to the smaller airports than under current categories and formulas.

**Increasing PFC-Based Funding Would Aid Larger Airports**

Increasing PFC-based funding would mainly help larger airports.

- Large and medium hub airports accounted for nearly 90 percent of all passengers in 1996.
- Large and medium hub airports are more likely to have an approved PFC in place.<sup>5</sup> As of January 1, 1998, 264 commercial service airports—almost half of all such airports—imposed a PFC, but nearly three-quarters of the large and medium hub airports have a PFC.

<sup>5</sup>PFCs are fees paid by passengers to an airport. Airports may currently impose a \$1, \$2, or \$3 fee per flight segment, up to a maximum of four segments per round trip, subject to FAA approval.

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- Finally, while the PFC program requires large and medium hub airports that impose a PFC to forgo a portion of their AIP funding so that these funds can be redirected to smaller airports,<sup>6</sup> most of these larger airports are already returning their maximum amount, according to FAA officials, and, therefore, the amount returned would not appreciably increase if the PFC ceiling were raised or eliminated.

If the airports currently charging PFCs were to increase them to \$4, \$5, or \$6 per passenger instead of the current \$3 limit, total collections would increase from the current \$1.1 billion to \$1.5 billion, \$1.9 billion, and \$2.2 billion, respectively, on the basis of 1996 enplanements and collection rates. The bulk of the increased collections would accrue to large and medium hub airports. Furthermore, if all 540 commercial service airports were to impose a PFC, collections could climb to as much as \$2.9 billion, but again, most of this would accrue to large and medium airports.

Increased PFC funding is likely to be applied differently than increased AIP funding. According to airport groups, airports require more PFC funding to reduce congestion at airports, especially for passengers trying to access the airport and moving through the terminal. For some airports, roadside and terminal congestion may be more severe than that on the airfield<sup>7</sup> and harder to finance, according to airport groups, because airlines are not as supportive of nonairfield projects and because these projects are ineligible for or are a low priority for AIP funding. As a result, a majority of PFCs are dedicated to terminal and airport access projects and interest payments on debt.<sup>8</sup>

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## Benefits of Innovative Finance Initiatives Appear Limited

The outcome of two FAA experiments, while still uncertain, is not likely to be far reaching owing to the limited participation of airports. In recent years, FAA, with congressional urging and direction, has sought to expand airports' available capital funding through more innovative methods, including more flexible application of AIP funding and attracting more

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<sup>6</sup>49 U.S.C. § 47114(f) requires that the yearly grants to large and medium hub airports be reduced by 50 percent of their annual collections or up to 50 percent of their annual apportionment, whichever is less. The forgone grants are redistributed as discretionary grants, primarily to smaller airports—one-half to nonhub airports, one-quarter to general aviation airports, one-eighth to small hubs, and the final one-eighth to any airport. Since first implemented, \$647 million in AIP funding has been redistributed under this provision.

<sup>7</sup>FAA measures airfield congestion and delay but does not gather information on the extent of congestion on the roads or in the terminals.

<sup>8</sup>Airport Improvement Program: Update of Allocation of Funds and Passenger Facility Charges, 1992-1994 (GAO/RCED-95-225FS, July 1995).

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private capital. The 1996 Federal Aviation Reauthorization Act authorized FAA to test three innovative uses for AIP funding—(1) permitting greater percentages of local matching for AIP funding, (2) paying interest costs on debt, and (3) purchasing bond insurance—for up to 10 projects.<sup>9</sup> In addition, another innovative mechanism—using AIP funding to help fund state airport revolving funds—is not currently permitted but may hold some promise. Finally, the 1996 act authorized a pilot to test the benefits of airport privatization.

Thus far, FAA has received 30 applications and approved 5 projects totaling \$15.36 million for its innovative finance pilot. All five projects test the first innovative use of AIP funding—allowing local contributions in excess of standard grant match amounts, which for most airports and projects is otherwise fixed at 10 percent.<sup>10</sup> FAA and state aviation representatives generally support the concept of flexible matching because it means that projects that otherwise might not get under way because of a lack of FAA funding can get started sooner; in addition, flexible funding may ultimately increase funding to airports. Applicants, however, have shown less interest in the other two options, which according to FAA and investment banking officials, do not offer new or substantial benefits for airports.

Another innovative concept, not currently permitted, would be to use AIP funding to help capitalize states' revolving loan funds. Currently, FAA cannot use AIP funds to capitalize a state's loan fund because AIP construction grants can go only to a designated airport and project. However, some federal transportation, state aviation, and airport bond rating and underwriting officials believe that state revolving loan funds would help smaller airports obtain additional financing. State revolving loan funds have been successfully employed to finance other types of infrastructure projects, such as waste water projects and, more recently, drinking water and surface transportation projects.<sup>11</sup> While loan funds can be structured in various ways, basically they use federal and state moneys to capitalize the fund, from which loans are then made. Interest and

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<sup>9</sup>Section 148 of the Federal Aviation Reauthorization Act of 1996 (P.L. 104-264).

<sup>10</sup>Except terminal development, which is fixed at a 25-percent local share; airport planning and development for large and medium hub airports, fixed at 25 percent; and noise compatibility programs for large and medium hub airports, fixed at 20 percent.

<sup>11</sup>Currently, Florida is the only state with an established revolving loan program. Since 1985, the state has provided \$75 million in loans to airports for land acquisition and capital projects. While some of the loans are later reimbursed through AIP funding for eligible projects, the state funds the loan program itself. In addition, 39 states have established state infrastructure banks (SIB) using federal and state grant money to fund surface transportation projects. This same SIB structure could also be used to fund aviation projects, and at least one state—Ohio—has already authorized its SIB to fund aviation projects using state funds.

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principal payments are recycled to provide additional loans. Once established, a loan fund can expand by issuing bonds using the fund's capital and loan portfolio as collateral. These revolving funds do not create any contingent liability for the U.S. government because they would be under state control.

Declining airport grants and broader government privatization efforts spurred interest in airport privatization as another innovative means to bring more capital to airport development, but thus far, efforts have shown only limited results. As we previously reported, the sale or lease of airports in the United States faces many hurdles, including legal and economic constraints.<sup>12</sup> As a way to test privatization's potential, the Congress directed FAA to establish a limited pilot program under which some of these constraints would be eased.<sup>13</sup> Starting December 1, 1997, FAA began accepting applications from airports to participate in the pilot program on a first-come, first-served basis for up to five airports. Thus far, two airports have applied to be part of the program.<sup>14</sup>

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## Conclusions

In summary, Mr. Chairman, I would like to reiterate a point that bears on whether the federal government should take action to increase or reallocate funding for airports. We believe the difference between the \$10 billion in planned development and the \$7 billion in current funding for airports is not as important as the disparity between larger and smaller airports' capacity to finance their development. As we have said, current funding for the 71 large and medium hub airports is more than three-fourths of their planned development. For the other 3,233 smaller national system airports, however, current funding is only about half of their planned development and even less for some categories of these airports. Moreover, these smaller airports have more limited access to bond financing and, therefore, mostly rely on federal and state grants.

The Airport Improvement Program is a more significant source of funding for smaller airports than for larger ones. Therefore, a decision to increase PFCs to help finance the development of larger airports, by itself, does little to correct the imbalance between the financial capacity of larger and smaller airports. Such a move would need to be coupled with reallocating

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<sup>12</sup>See *Airport Privatization: Issues Related to the Sale or Lease of U.S. Commercial Airports* (GAO/RCED-97-3, Nov. 1996).

<sup>13</sup>Section 149 of the Federal Aviation Reauthorization Act of 1996 (P.L. 104-264).

<sup>14</sup>These airports are Brown Field—a general aviation airport—near San Diego, California, and Stewart International—a nonhub airport—in New York City.

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AIP funding in favor of smaller airports as well as considering other measures designed to help smaller airports, such as funding for state revolving funds.

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Mr. Chairman, this concludes our prepared statement. We would be happy to respond to any questions that you or the members of the Subcommittee may have.



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