

**United States General Accounting Office** 

Fact Sheet for the Chairman, Subcommittee on Transportation and Related Agencies, Committee on Appropriations, U.S. Senate

October 1993

## AIRPORT IMPROVEMENT PROGRAM

Allocation of Funds From 1982 to 1992



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#### United States General Accounting Office Washington, D.C. 20548

#### Resources, Community, and Economic Development Division

**B-253440** 

October 19, 1993

The Honorable Frank R. Lautenberg Chairman, Subcommittee on Transportation and Related Agencies Committee on Appropriations United States Senate

Dear Mr. Chairman:

In your August 11, 1992, letter, and subsequent discussions with your office, you requested that we provide you with information on the Airport Improvement Program (AIP) and the Federal Aviation Administration's (FAA) management of this program. This fact sheet provides information on FAA's allocation of AIP funds—since its inception in 1982—by region, type of airport, and type of project. This work also provides a foundation for ongoing assignments we are performing for you in the AIP area, namely, work assessing the impact of investments made through the Military Airport Program (MAP) and reliever airport set-asides on reducing systemwide congestion.

In summary, FAA uses AIP funds to support airport planning and development projects that enhance capacity, safety, security, and noise mitigation at airports included in FAA's <u>National Plan of Integrated Airport</u> Systems (NPIAS).<sup>1</sup> FAA allocates most AIP funding on the basis of a legislated entitlement formula and set-aside categories earmarked for specific types of airports or projects. FAA has discretionary authority to allocate the remaining AIP funds on the basis of needs identified by individual airports. From 1982 to 1992, AIP has provided about \$13 billion for airport improvements at 2,655, or about 80 percent, of the approximately 3,300 existing airports listed in NPIAS. Some general characteristics of AIP we identified include the following:

• The percentage of AIP funds allocated through the entitlement formula has decreased, from 65.1 percent in 1982 to 56.5 percent in 1992. In contrast, the percentage of AIP funding allocated to set-aside categories increased from 24.5 percent in 1982 to 27.75 percent in 1992, and discretionary funding rose from 10.4 to 15.75 percent during the same period. However, the amount of funds available for use at FAA's "true" discretion has actually

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<sup>&</sup>lt;sup>1</sup>NPIAS is FAA's 10-year planning document intended to identify airports and projects critical to the national system. NPIAS describes the type and the estimated cost of airport development projects proposed by the approximately 3,300 public-use airports eligible for federal aid. The estimated cost for all projects contained in NPIAS exceeds \$40 billion.

decreased over time because the Congress specified in 1987 that 75 percent of the discretionary funds be used for capacity, safety, security, and noise mitigation projects.

- The amount of AIP funding distributed to FAA's nine regions has fluctuated since 1982, but the percentage of AIP funds received by each region has remained relatively constant. On average, the Southern region has received the highest percentage of AIP funds, about 20 percent, while Alaska and New England both averaged less than 4 percent.
- Larger passenger service airports, which constitute 12 percent of all AIP-eligible airports, have received about 69 percent of AIP funds from 1982 through 1992. These airports serve 99.6 percent of the passengers enplaned annually.
- FAA directed 55 percent of AIP funds to 3 of its 16 different project categories—runway, taxiway, and apron pavement. The annual distribution of AIP funding for most project categories remained relatively constant from 1982 to 1992. However, the percentage of AIP funding allocated to some categories, including the State Block Grant Program (SBG) and security, increased in certain years because of the creation of a new program and new program requirements, respectively. Airports were more likely to use entitlement funds rather than discretionary funds for terminal and roadway development, while discretionary funds were more often used for noise related and capacity projects.

The data presented in this fact sheet segment information on an annual basis by region and by individual airports. Regional and individual airport data depict more precisely where FAA has invested AIP funds and provide more information about the allocation process. For this fact sheet, we have extracted information from FAA's data base and from other sources that allow year-to-year comparisons across FAA's nine regions by airport category and by specific project type.

For our analysis, we obtained FAA'S AIP data base for fiscal years 1982 through 1992 and reviewed past annual accomplishment reports and the most recent edition of NPIAS—for 1990-91. All dollar amounts are in nominal terms and have not been adjusted for inflation or changes in the value of the dollar over the 11-year period. The AIP data represent the year in which FAA obligated (awarded) funds to a specific airport project and not the year in which the airport actually used the funds. We obtained additional information on FAA's process for allocating AIP funds, as discussed in section 2, and its impact on congressional goals from FAA officials in headquarters and FAA's four regions; our review of FAA's internal guidance; and our past work in this area.<sup>2</sup> We conducted our review from February to September 1993.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this fact sheet until 10 days after the date of this letter. At that time, we will send copies to the Secretary of Transportation; the Administrator, FAA; the Director, Office of Management and Budget; and other interested parties. We will make copies available to others upon request. If you have questions about this fact sheet, please contact me at (202) 512-6001. Major contributors to this fact sheet are listed in appendix II.

Sincerely yours,

Kennett le head

Kenneth M. Mead Director, Transportation Issues

<sup>&</sup>lt;sup>2</sup>Airport Improvement Program: Opportunity to Consider FAA's Role in Meeting Airport System Needs (GAO/T-RCED-93-43, May 26, 1993).

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AIP	Airport Improvement Program
FAA	Federal Aviation Administration
GAO	General Accounting Office
MAP	Military Airport Program
NPIAS	National Plan of Integrated Airport Systems
SBG	State Block Grant Program

Abbreviations

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# Background

Section 1 discusses the types of airports eligible to receive Airport Improvement Program (AIP) funds and illustrates legislative changes to AIP since 1982.

Through AIP, the federal government provides grants to airports to help sustain or increase their capacity through facility expansion and improvement. About 3,300 existing airports are included in the 1990-99 National Plan of Integrated Airport Systems (NPIAS); the majority of the airports fall into three categories:

<u>Commercial service</u>. Airports that board at least 2,500 passengers are designated as commercial service airports. Airports that board between 2,500 and 10,000 passengers each year are designated as small commercial service airports. Primary airports are commercial service airports that board more than 10,000 passengers annually. Primaries are further divided into hubs—the smallest (called a nonhub) boards between 10,000 and 241,545 passengers annually, and the largest (called a large hub) boards over 4.83 million passengers annually. Many primary airports also qualify as cargo airports, which serve aircraft carrying an aggregate landed weight of over 100 millon pounds of property or mail only. NPIAS lists 582 commercial service airports; 178 are small commercial service airports and 404 are primary airports.

General aviation. This category comprises the majority of the smaller airports that operate primarily to support small aircraft operations. General aviation includes unscheduled passenger taxi and cargo airlines, as well as charters, transport, and recreational aircraft. NPIAS lists 2,426 airports in the general aviation category.

<u>Relievers</u>. Relievers are those general aviation airports that FAA has designated in metropolitan areas to reduce congestion at large primary airports. Relievers provide alternative landing sites for general aviation and other aircraft that might otherwise use commercial service airports. NPIAS lists 266 reliever airports.

Since 1982, the Congress has requested that FAA consider several broad national airport goals, such as enhancing capacity and mitigating noise, when calculating AIP funds. To attain these goals, FAA allocates AIP funds to airports using three types of legislated funding arrangements:

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Source: The Airport and Airway Improvement Act of 1982 (P.L. 97-248).

Figure 1.2 illustrates several changes to the 1982 AIP. Most significantly, the Congress lowered the eligibility criteria for small commercial airports to be considered primary airports and thus eligible for entitlement funds.

Set-aside



Relievers (10%)

Noise (8%)

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65.1%

Entitlement



Source: The Airport and Airway Safety and Capacity Expansion Act of 1987 (P.L. 100-233).

Figures 1.3 and 1.4 show a new set-aside category for the Military Airport Program (MAP) and an increase in the noise set-aside, respectively.

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Source: The Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508).



Source: The Airport and Airway Safety, Capacity, Noise Improvement, and Intermodal Transportation Act of 1992 (P.L. 102-581).

## FAA's AIP Legislative Funding and Allocation Process

Section 2 discusses AIP funding by allocation method and the process FAA uses to allocate AIP funds to airports.

As shown in section 1, the Congress has periodically changed the funding percentages assigned to the three methods used to allocate AIP funds. Figure 2.1 shows that the entitlement category has decreased slightly over time while the discretionary category increased and the set-aside category remained relatively constant.





Source: FAA's AIP data base.

Although it appears that in figure 2.1 the discretionary category has increased over time, the amount of funds available for FAA's own

Section 2
FAA's AIP Legislative Funding and
Allocation Process

	discretion has actually decreased. Since 1987, the Congress has directed FAA to use 75 percent of its discretionary funds for projects that enhance capacity, safety, security, and mitigate noise, leaving only 25 percent of the remaining funds for use at FAA's "true discretion." FAA has further reduced
	the amount of discretionary funds available by obligating future discretionary funds to airport projects through letters of intent. <sup>3</sup>
FAA's Funding Allocation Process	Although the Congress establishes national AIP goals, funding categories, and program limitations, FAA administers the program based on the needs that individual airports identify. FAA requests that local airport sponsors—in conjunction with local, metropolitan, or state planning agencies—identify their own annual capital improvement needs and submit project proposals to be included in FAA's 10-year planning document—NPIAS. An airport and project must be listed in NPIAS to be eligible for AIP funding. FAA must first determine if the airport is eligible to be included in NPIAS and whether the proposed project is eligible for AIP funding. If the airport and proposed project are eligible, FAA includes the airport, type of development, and cost of development in NPIAS. However, not all projects listed in NPIAS automatically receive AIP funding because there are generally many more projects than available funds.
	While some airports are "entitled" to receive a portion of the federal funding each year based on the AIP formula, the airport sponsors must still submit an application for a specific project before FAA will award these grants. All airports requesting discretionary and set-aside funding must also submit an application for FAA's review. FAA will often fund a project using a combination of entitlement and discretionary or set-aside funds to best meet the needs of the airport. In addition, all airports receiving AIP funds must demonstrate their ability to provide a "matching share," ranging from 10 to 25 percent of the total project cost, before FAA will award a grant.
	Because there are always more eligible airport projects than available AIP funds, FAA attempts to prioritize proposed projects. FAA developed a priority system to evaluate projects competing for AIP funds based on standardized criteria. On the basis of this priority system, FAA assigns an alpha/numeric code to each project, with the number indicating the type of

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<sup>&</sup>lt;sup>3</sup>FAA can award a letter of intent stating its intent to reimburse a primary or reliever airport's sponsor in the future for eligible costs the sponsor incurs on a current improvement project. In doing so, FAA establishes a schedule for reimbursing the sponsor over several years, as funds become available. Typically, the federal financing of a letter of intent requires some combination of an airport's projected future AIP entitlements with discretionary or set-aside funds.

Section 2 FAA's AIP Legislative Funding and Allocation Process

work (e.g., repavement of landing surfaces) and the letter designating the type of airport (e.g., large primary airport). The highest priority codes are assigned to larger airports and projects required by the Congress or by FAA rule, reconstruction of existing facilities, or development to bring existing airports up to recommended standards. In FAA's priority matrix, higher numbers and letters equate to lower-priority projects. For example, a large primary airport runway resurfacing project would be assigned a priority code "2W"—with "2" indicating the priority assigned to that type of project and "W" indicating the size of the airport. A general aviation airport with a similar project would be assigned a lower priority code of "7Z"—"7" designating the priority assigned to the project at this type of airport and "Z" indicating a general aviation airport. (See app. I for AIP's priority matrix.)

Using the priority system, local FAA officials initially assign a priority code for chosen projects proposed by airports in their district and send a list of ranked projects to the FAA regional office. Officials at the FAA regional office review and synthesize the lists from all of the local offices and then send their list to FAA headquarters. FAA headquarters officials review all regional lists to determine how AIP funds should be allocated. FAA officials told us that in the absence of a major airport project, like the new Denver airport development project, the regional allocations are based on formula outcomes (for entitlements) and historical allocation levels (for discretionary and set-aside funds). Headquarters officials send the funding allocations to the regions. Regional officials told us that they compare the regional AIP allocation to the requests from the local FAA offices and determine a priority cut-off point for eligible projects. FAA officials told us that most projects must have a five or higher priority to receive AIP funds.

FAA uses its priority criteria to develop a cut-off point for allocating project funds during the year and to facilitate some comparison among the many diverse projects competing for AIP funding. However, this criteria does not allow FAA to weigh the importance of similar projects at similarly sized airports in the same or different regions. While FAA officials said that they rely on institutional knowledge to determine priorities among competing local projects, there is no such method for comparing similar projects in different regions. Also, the priority matrix does not provide criteria to determine the necessary timing of a project. For example, a runway resurfacing project at a large hub airport may receive higher priority according to the matrix, but other more time critical resurfacing projects at smaller airports may receive lower priority. ì

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Section 3 provides information on trends in AIP regional funding levels from 1982 to 1992, showing variations across FAA's nine regions and fluctuations within regions from year to year.

Figure 3.1 shows that total AIP funding to the nine regions varies greatly, ranging on average from a high of 19.6 percent going to the Southern region to 3.3 percent for Alaska and 3.6 percent to the New England region. The Southern region has received over 3.5 percent more AIP funding than the next three highest funded regions—Great Lakes (16.1 percent), Western-Pacific (15 percent), and Eastern (14.5 percent).



Source: FAA's AIP data base.

Figure 3.2 shows the total number of eligible airports contained in each FAA region, with a high of 604 in the Great Lakes region to a low of 109 in



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the New England region. Four regions—Great Lakes, Northwest-Mountain, Southern, and Southwest—contain almost 62 percent of all airports eligible for AIP funding. ٩.

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Source: FAA's National Plan of Integrated Airport Systems (1990-99).

All eligible airports in each region are further broken out by category in table 3.1. This table indicates that about 61 percent of eligible primary airports are located in four regions, Eastern, Great Lakes, Southern, and Western-Pacific—with the Southern region having the highest number (80).

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### Table 3.1: Categories of AIP-EligibleAirports by Region

	Primary	Small commercial	Reliever	General aviation	Total
Overal Lalvas					604
Great Lakes	58	38	52	456	004
Southern	80	7	48	454	589
Southwest	36	21	36	385	478
Northwest	50	16	15	265	346
Central	21	9	15	261	306
Western-Pacific	53	21	44	181	299
Eastern	57	15	48	171	291
Alaska	28	43	0	181	252
New England	21	8	8	72	109
Total	404	178	266	2,426	3,274

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Source: FAA's National Plan of Integrated Airport Systems (1990-99).

FAA officials told us that AIP funds are allocated in part based on historical funding levels and do not fluctuate much from year to year. Tables 3.2 and 3.3 indicate that while the dollar amounts of AIP funding to FAA regions have fluctuated from year to year, the percentage of total annual funding going to each region has remained relatively constant.

		New					Western	Great		
Year	Alaska	England	Central	Northwest	Southwest	Eastern	Pacific	Lakes	Southern	Total
1982	\$8.1	\$18.1	\$38.7	\$43.6	\$50.5	\$57.9	\$72.8	\$71.6	\$101.5	\$462.8
1983	33.0	24.2	48.9	64.6	137. <del>9</del>	98.2	115.9	126.7	145.3	794.7
1984	37.5	37.3	40.6	82.6	128.2	104,1	120.3	136.7	133.8	821.1
1985	21.3	29.6	50.7	80.4	124.9	123.3	180.3	141.0	198.9	950.4
1986	39.0	33.5	54.7	78.2	91.6	137.0	114.9	144.0	167.6	860.5
1987	41.6	31.5	51.5	89.8	106.4	135.7	147.0	156.4	146.9	906.8
1988	39.1	51.7	67.5	107.9	179.6	208.3	232.4	248.1	340.5	1,475.1
1989	37.0	44.3	74.2	162.0	156.2	245.8	202.6	226.5	266.6	1,415.2
1990	44.5	53.2	87.6	191.9	118.4	1 <del>9</del> 8.2	223.9	227.1	275.2	1,420.0
1991	59.3	68.8	91.2	183.1	203.6	268.2	274.1	276.2	352.6	1,777.1
1992	61.9	62.7	98.5	207.4	227.7	254.2	215.9	287.0	347.8	1,763.1
Total	\$422.3	\$454.9	\$704.1	\$1,291.5	\$1,525.0	\$1,830.9	\$1,900.1	\$2,041.3	\$2,476.7	\$12,646.8

Table 3.3 shows the percentage of total annual AIP funds received in each region from 1982 through 1992.

## Section 3 Distribution of AIP Funding by Region

		New					Western	Great		
Year	Alaska	England	Central	Northwest	Southwest	Eastern	Pacific	Lakes	Southern	Total
1982	1.8	3.9	8.4	9.4	10.9	12.5	15.7	15.5	21.9	100
1983	4.2	3.0	6.2	8.1	17.4	12.4	14.6	15.9	18.3	100
1984	4.6	4.5	4.9	10.1	15.6	12.7	14.7	16.6	16.3	100
1985	2.2	3.1	5.3	8.5	13.1	13.0	19.0	14.8	20.9	100
1986	4.5	3.9	6.4	9.1	10.6	15.9	13.4	16.7	19.5	100
1987	4.6	3.5	5.7	9.9	11.7	15.0	16.2	17.2	16.2	100
1988	2.7	3.5	4.6	7.3	12.2	14.1	15.8	16.8	23.1	100
1989	2.6	3.1	5.2	11.4	11.0	17.4	14.3	16.0	18.8	100
1990	3.1	3.7	6.2	13.5	8.3	14.0	15.8	16.0	19.4	100
1 <b>991</b>	3.3	3.9	5.1	10.3	11.5	15.1	15.4	15.5	19.8	100
1992	3.5	3.6	5.6	11.8	12.9	14.4	12.2	16.3	19.7	100
Average Percentage,										
1982-92	3.3	3.6	5.6	10.2	12.1	14.5	15.0	16.1	19.6	100

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## AIP Funding Levels by Airport Category

Section 4 provides information on the types of airports funded with AIP grants from 1982 to 1992. As shown in figure 4.1, general aviation airports constitute the majority of all existing airports listed in NPIAS and thus eligible for AIP funding.



Figure 4.2 breaks out AIP funding by airport category in the 4 years in which legislative changes were made to the program—1982, 1987, 1990, and 1992—as discussed in section 1. AIP funding to all airport categories remained fairly consistent from 1982 through 1987, after which total AIP funding increased by more than 60 percent and continued to grow through 1992.

#### Section 4 AIP Funding Levels by Airport Category



Note: AIP funding for primary airports in the years 1982, 1987, 1990, and 1992 includes the total amount of any multiyear grant awarded to airports even though those grants are paid out in both the current as well as future years.

Source: FAA's AIP data base.

Although AIP funding increased by more than 60 percent in 1988, the amount of funding allocated to general aviation and reliever airports remained relatively constant, while funding increased for primary airports and was reduced for small commercial airports as shown in table 4.1.<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup>In 1987, the Congress changed the percentage of AIP funding directed to small commercial airports from 5.5 percent to 2.5 percent to correspond to a change in the eligibility requirements enabling smaller airports to claim primary airport status. This change in eligibility requirements resulted in the number of small commercial service airports falling from 272 in 1987 to 147 in 1988, while the number of primary airports increased from 278 to 419.

### Table 4.1: AIP Funding by AirportCategory, 1982-92

Dollars in Millions					
Year	Small commercial	Reliever	General aviation	Primary	Total
1982	\$ 31	\$ 50	\$ 63	\$ 315	\$ 459
1983	70	101	155	465	791
1984	62	104	147	503	816
1985	52	112	155	624	943
1986	59	102	147	544	852
1987	72	130	156	541	899
1988	47	136	190	1,096	1,469
1989	44	171	177	1,015	1,407
1990	44	138	169	1,022	1,373
1991	46	210	248	1,215	1,719
1992	56	165	251	1,219	1,691
Total	\$583	\$1,419	\$1,858	\$8,559	\$12,419

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<sup>a</sup>FAA allocated an additional \$223 million in AIP funds directly to local, regional, and state planning agencies for airport planning.

As noted in figure 4.1, primary airports comprise 12 percent of total AIP-eligible airports; however, they received about 69 percent of AIP funds from 1982 to 1992. Primary airports serve about 99.6 percent of all passengers each year, according to FAA officials. Table 4.2 shows the percentage of total AIP funds allocated to each airport category during the years 1982 to 1992. While the amount of funding doubled for primary airports in 1988 (as shown on table 4.1), the percentage of total AIP funds received by primary airports increased from 60 to 75 percent. The proportion of total AIP funds received by all other airport categories decreased during the same period.

#### Section 4 AIP Funding Levels by Airport Category

### Table 4.2: AIP Funding by AirportCategory, 1982-92

Year	Small commercial	Reliever	General aviation	Primary	Total
1982	7	11	14	68	100
1983	9	13	20	59	100
1984	8	13	18	62	100
1985	5	12	16	66	100
1986	7	12	17	63	100
1987	8	14	17	60	100
1988	3	9	13	75	100
1989	3	12	13	72	100
1990	3	10	12	74	100
1991	3	12	14	71	100
1992	3	10	15	72	100

FAA allocated about \$4.9 billion, or about 39 percent, of all funds to projects at 49 primary airports and one State Block Grant (SBG) state from 1982 to 1992 as shown in table 4.3.

### Table 4.3: AIP Funding to the Top 50Recipients, 1982-92

			Set aside/	
Airport	Size	Entitlement	discretionary	Total
1. Hartsfield- Atlanta	PLª	\$149.2	\$71.0	\$220.2
2. Denver (New)	PL	67.7	152.1	219.8
3. Kennedy (NY)	PL	150.5	60.4	210.9
4. Los Angeles	PL	146.4	34.7	181.1
5. Dallas/Ft. Worth	PL	134.5	37.7	172.2
6. Chicago O'Hare	PL_	108.3	58.4	166.7
7. Lambert/St. Louis	PL	72.3	83.0	155.3
8. Orlando	PL.	52.8	98.1	150.9
9. Seattle/Tacoma	PL.	60.7	79.0	139.7
10. Pittsburgh	PL	61.8	77.4	139.2
11. Miami	PL_	91.1	38.4	129.5
12. Sky Harbor (AZ)	PL	63.0	65.2	128.2
13. Nashville	PM <sup>b</sup>	28.8	94.3	123.1
14. Philadelphia	PL	52.7	65.5	118.2
15. McCarran (NV)	PL	55.3	57.0	112.3
16. Logan (MA)	PL	81.1	29.4	110.5

(continued)

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#### Section 4 AIP Funding Levels by Airport Category

#### **Dollars in Millions**

Airport	Size	Entitlement	Set aside/ discretionary	Total
17. Chicago Midway	PM	73.3	29.3	102.6
18. Houston	PL.	57.1	45.1	102.2
19. San Francisco	PL	77.8	20.2	98.0
20. Memphis	PM	52.7	43.3	96.0
21. Cincinnati	PM	33.2	61.3	94.5
22. Detroit	PL	64.5	29.0	93.5
23. LaGuardia (NY)	PL	75.2	17.2	92.4
24. Cleveland	PM	37.2	52.6	89.8
25. Baltimore/ Washington	PL	36.0	52.9	88.9
26. Newark	PL	60.3	27.5	87.8
27. Indianapolis	PM	30.4	57.1	87.5
28. New Orleans	PM	33.2	46.3	79.5
29. Fort Lauderdale	PM	37.9	40.1	78.0
30. State of Illinois	SBG°	19.0	56.5	75.5
31. San Jose	PM	29.2	42.4	71.6
32. Salt Lake City	PL	42.1	28.3	70.4
33. Minneapolis/ St. Paul	PL	60.5	5.6	66.1
34. Charlotte/Douglas	PL	49.6	14.3	63.9
35. Standiford (KY)	PSd	34.2	28.5	62.7
36. King (Virgin Islands)	PN⁰	20.5	39.2	59.7
37. John Wayne/Orange Co.	PM	25.1	33.6	58.7
38. Honolulu	PL	53.0	5.6	58.6
39. Tampa	PL	43.2	15.0	58.2
40. Hobby Field (TX)	PM	36.3	19.5	55.8
41. Burbank/Glendale/ Pasadena	PM	22.6	32.4	55.0
42. Washington/Dulles	PL	37.6	17.1	54.7
43. Kansas City	PM	37.7	16.9	54.6
44. Albuquerque	PM	27.0	27.5	54.5
45. Tulsa	PM	20.7	33.6	54.3
46. Greater Buffalo	PM	22.1	30.0	52.1
47. Colorado Springs	PS	15.7	34.6	50.3
48. Adams/Little Rock	PS	18.6	31.5	50.1
49. San Diego	PL	40.9	8.8	49.7
50. Palm Beach	PM	25.6	22.9	48.
Total		\$2726.2	\$2167.3	\$4893.5

(Table notes on next page)

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\*Large primary, enplaning over 4,830,895 passengers per year.

<sup>b</sup>Medium primary, enplaning more than 1,207,724 but less than 4,830,895 passengers per year.

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<sup>o</sup>State Block Grant Program, through which FAA provides special block grants of entitlement funds to participating states.

<sup>d</sup>Small primary, enplaning more than 241,545 but less than 1,207,724 passengers per year.

Nonhub primary, enplaning more than 10,000 but less than 241,545 passengers per year.

As shown in table 4.3, 28 of the top 50 airports—those receiving the largest proportion of AIP funds—are large primary airports; 17 are medium primary airports; 3 are small primary airports; 1 is a nonhub primary airport; and 1 represents a grant to a state participating in the State Block Grant Program. Large primary airports comprise 56 percent of the top 50 airports, but they received about 68 percent of the funds allocated to these airports. Medium primaries comprise 34 percent of the top 50 airports and receive 26 percent of the funds.

Section 5 provides information on the types of projects funded with AIP grants. FAA categorizes AIP-funded projects into 16 unique classifications of airport improvements called work codes. Work codes characterize the type of project funded through the AIP—ranging from runway resurfacing to the procurement of weather equipment.

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Table 5.1 shows the distribution of AIP funds among the 16 project categories, including funds directed to three states<sup>5</sup> receiving special general aviation entitlements through SBG, from 1982 through 1992.

<sup>&</sup>lt;sup>5</sup>SBG was expanded to include four more states after fiscal year 1993.

#### Table 5.1: AIP Project Funding by Project Category, 1982-92

Project Category	1982	1983	1984	1985
Navaids	\$19.5	\$35.9	\$43.3	\$29.0
Weather Equipment	45.2	92.2	103.5	131.1
SBG	a	a	a	a
Buildings	54.9	21.3	90.0	178.9
Security	14.2	10.3	33.6	44.1
Planning	69.6	104.9	181.8	258.1
Noise	1.9	49.0	76.2	103.0
Miscellaneous	119.9	200.1	258.4	310.2
Safety	113.9	130.2	139.1	270.7
Lighting	155.1	347.2	357.0	497.4
Terminals	206.3	248.5	262.5	343.2
Roadways	341.3	490.2	613.3	597.9
Aprons	661.5	1193.2	1320.6	1622.7
Land/Noise	913.1	1194.0	1132.7	1416.2
Taxiways	704.6	1648.4	1538.8	1682.1
Runways	1208.5	2182.6	2059.3	2018.3
Total	\$4629.5	\$7948.0	\$8210.1	\$9502.9

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Total	1992	1991	1990	1989	1988	1987	1986
\$1056.0	\$123.4	\$116.3	\$175.1	\$229.1	\$155.2	\$88.9	\$40.3
1246.2	114.8	114.9	154.8	128.6	157.9	109.6	93.6
1491.6	605.2	487.6	398.8	a	а	а	а
1577.0	108.9	92.5	761.5	78.5	69.3	68.3	52.9
2781.2	507.3	1000.6	796.0	99.8	202.3	43.0	30.0
2817.1	441.1	362.3	322.8	299.0	282.1	244.1	251.3
3201.5	680.7	589.1	373.5	406.9	515.7	151.9	253.6
3354.2	351.9	589.2	196.6	490.0	344.2	252.1	241.6
4321.6	1257.2	624.8	327.8	527.4	390.5	335.3	204.7
4775.5	591.9	503.1	456.2	513.5	581.8	469.2	303.1
4912.8	721.5	576.4	793.8	757.6	716.5	137.0	149.5
7097.6	760.8	887.5	890.9	724.9	960.6	380.0	450.2
18142.2	1884.2	2166.8	1670.6	2288.0	2207.9	1592.0	1534.7
19237.4	2402.8	2714.0	2006.4	2283.4	2307.1	1475.5	1392.2
21796.3	2942.0	3041.2	2078.8	2350.2	2530.1	1768.7	1511.4
28671.0	4137.7	3905.3	2796.8	2973.7	3342.6	1951.2	2095.0
\$126479.2	\$17631.4	\$17771.6	\$14200.4	\$14150.6	\$14763.8	\$9066.8	\$8604.1

Note: AIP funds allocated to noise-related projects are included in the following project categories: land/noise (land purchased for noise-related purposes), lighting, navigational aids (Navaids), noise (primarily soundproofing), planning, runways, and taxiways.

<sup>a</sup>No funds allocated for this category until 1990.

As shown in table 5.2, the percentage of total AIP funds allocated to most project categories has remained relatively constant over the 11-year period. However, some project categories experienced fluctuations in certain years. For example, the implementation of SBG in 1990 created a new project category. Also, new airport security requirements established in 1988 caused an increase in airport security project funding during 1990 and 1991.

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Project												
Category	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Total
Navaids	0.4	0.5	0.5	0.3	0.5	1.0	1.1	1.6	1.2	0.7	0.7	0.8
Weather Equipment	1.0	1.2	1.3	1.4	1.1	1.2	1.1	0.9	1.1	0.6	0.7	1.0
SBG	а	а	a	a	a	a	8	a	2.8	2.7	3.4	1.2
Buildings	1.2	0.3	1.1	1.9	0.6	0.8	0.5	0.6	5.4	0.5	0.6	1.2
Security	0.3	0.1	0.4	0.5	0.3	0.5	1.4	0.7	5.6	5.6	2.9	2.2
Planning	1.5	1.3	2.2	2.7	2.9	2.7	1.9	2.1	2.3	2.0	2.5	2.2
Noise	0.0	0.6	0.9	1.1	2.9	1.7	3.5	2.9	2.6	3.3	3.9	2.5
Miscellaneous	2.6	2.5	3.1	3.3	2.8	2.8	2.3	3.5	1.4	3.3	2.0	2.7
Safety	2.5	1.6	1.7	2.8	2.4	3.7	2.6	3.7	2.3	3.5	7.1	3.4
Lighting	3.4	4.4	4.3	5.2	3.5	5.2	3.9	3.6	3.2	2.8	3.4	3.8
Terminals	4.5	3.1	3.2	3.6	1.7	1.5	4.9	5.4	5.6	3.2	4.1	3.9
Roadways	7,4	6.2	7.5	6.3	5.2	4.2	6.5	5.1	6.3	5.0	4.3	5.6
Aprons	14.3	15.0	16.1	17.1	17.8	17.6	15.0	16.2	11.8	12.2	10.7	14.3
Land/Noise	19.7	15.0	13.8	14.9	16.2	16.3	15.6	16.1	14.1	15.3	13.6	15.2
Taxiways	15.2	20.7	18.7	17.7	17.6	19.5	17.1	16.6	14.6	17.1	16.7	17.2
Runways	26.1	27.5	25.1	21.2	24,3	21.5	22.6	21.0	19.7	22.0	23.5	22.7
Total	100	100	100	100	100	100	100	100	100	100	100	100

Note: Totals may not add due to rounding.

While FAA allocates funds to 16 different types of projects, it emphasized airfield-related projects. As shown in figure 5.1 and table 5.3, FAA allocated about 55 percent of total AIP funds to runway, taxiway, and apron construction or resurfacing projects from 1982 to 1992.

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Figure 5.1: Total AIP Project Funding by Project Category, 1982-92



Source: FAA's AIP data base.

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#### Table 5.3: Total AIP Project Funding by Project Category, 1982-92

#### Dollars in Millions

Work code categories	Entitlement	Set aside/ discretionary	Total
Navaids	\$30	\$76	\$106
Weather Equipment	\$98	\$27	\$125
SBG	\$43	\$106	\$149
Buildings	\$108	\$49	\$157
Security	\$141	\$137	\$278
Planning	\$91	\$191	\$282
Noise	\$86	\$234	\$320
Miscellaneous	\$195	\$141	\$336
Safety	\$254	\$178	\$432
Lighting	\$291	\$187	\$478
Terminals	\$481	\$10	\$491
Roadways	\$570	\$140	\$710
Aprons	\$1,076	\$738	\$1,814
Land/Noise	\$753	\$1,171	\$1,924
Taxiways	\$1,233	\$947	\$2,180
Runways	\$1,477	\$1,390	\$2,867

Airports can chose to direct their entitlement funds to projects that FAA may consider to be of lower priority, according to FAA officials. Table 5.4 shows that for lower-priority projects, such as terminal and roadway development, airports fund the majority of the project using entitlement funds. Higher-priority projects, like noise and procurement of land for noise, receive the majority of funds from AIP discretionary or set-asides.

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#### Table 5.4: Percentage of Total AIP Project Funding

		Set aside/	
Work code categories	Entitlement	discretionary	Total
Navaids	28	72	100
Weather Equipment	78	22	100
SBG	29	71	100
Buildings	69	31	100
Security	51	49	100
Planning	32	68	100
Noise	27	73	100
Miscellaneous	58	42	100
Safety	59	41	100
Lighting	61	39	100
Terminals	98	2	100
Roadways	80	20	100
Aprons	59	41	100
Land/Noise	39	61	100
Taxiways	57	43	100
Runways	52		100

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Over the 11-year period, airports, on the average, frequently received funding for more than one project in about every category, as shown in table 5.5.

#### Table 5.5: Ratio of AIP Projects Per Airport, 1982-92

Type of project	Total number of projects	Total number of airports	Average number of projects per airport
Navigational Aids	1,006	814	1.24
Weather Equipment	732	409	1.79
State Block Grant	9	3	3
Buildings (not terminals)	263	224	1.17
Security	597	320	1.87
Planning	2,648	1,580	1.68
Noise Compatibility	210	59	3.56
Miscellaneous	1,538	973	1.58
Safety	1,862	907	2.05
Lighting	3,110	1,621	1.92
Terminal Development	439	231	1.9
Roadways	1,194	693	1.72
Aprons	3,229	1,609	2
Land/Noise	2,278	1,174	1.94
Taxiways	4,054	1,746	2.32
Runways	3,822	1,894	2.02

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### Appendix I FAA's AIP Priority Matrix

	Primary in Large or Medium Hub # and its Relievers or Noncommercial 100 or more based Aircraft or 40,000 or More Itinerant	Primary Outside Large/Modium Hub and its Relievers or Noncommercial S0+ Based Aircraft or 20-40,000 Illinemat	Commercial Service Other than Primary or Noncommercial 20+ Based Aircraft or 820,000 Linemat	Noncommercial Less than 20 Based Aircraft or Less than 8000 lunerant Operations
	Operations	Operations	Operations	æ
	(₩)	20	(2)	(2)
PLANNING CATEGORIES, MASTER PLAN, NOISE COMPATIBILITY PLAN				
-Initial study for existing airport	1	2	3	
-Study for new airport		2 2	3	4
-Complete/continue phased projects		2	3	4
-Periodic update	2	3	4	3
-Supplemental grant for ongoing study	2	2	2	2
DEVELOPMENT CATEGORIES				
A. Special PGMS	1	1	1	Ţ
B. Reconstruction	2	2	3	7
C. Standards	2	3	4	9
D. Upgrade	3	4	5	10
E. Capacity	3	4	5	12
F. New Airport Capacity	3	5	7	12
G. New Airport Community	5	6	7	12

ADD-ON FACTORS (No Add-on Factors for SPECIAL PROGRAMS): +1 = Primary landing surface and associated taxiway, approaches +2 = Aprons, secondary landing surface and associated taxiway, approaches +3 = Fundamental configuration or for noise compatibility in DNL 75 dB +4 = CFR maintenance facilities, electronic newside, AWOS, anow removal equipment and mow removal equipment storage buildings +5 = Primary access roads, noise compatibility (DNL 65-74 dB), terminal buildings +6 = Snow abrasive/chemical storage buildings +7 = Other (such as service roads, secondary access roads, noise compatibility projects outside DNL 65 dB, fencing, etc.)

Figure 3-1.	Priority System Matrix for Airport Development, Noise Compatibility Development, Master Planning, and
	Noise Compatibility Planning

AREA TYPE	STATE OR REGION/ METROPOLITAN PLAN POR AREA WITH PRIMARY AIRPORT IN LARGE HUB	REGION/METRO PLAN FOR AREA WITH PRIMARY AIRPORT OUTSIDE LARGE HUB	REGION/METRO PLAN FOR AREA WITHOUT PRIMARY AIRPORT
SYSTEM PLAN			
-Initial Plan	1	1	3
-Continuous Planning	2	3	4
-Supplemental grant for ongoing study	2	2	2

Source: Airport Improvement Program (AIP) Handbook, Department of Transportation/FAA (Order 5100.38A, 9/24/89), p. 24.

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## Appendix II Major Contributors to This Fact Sheet

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