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BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

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Developing A National Airport System: Additional Congressional Guidance Needed

In the next decade, over \$10 billion will be needed to develop a national airport system. Of this, about \$3 billion is needed to develop some 2,600 general aviation airports to serve business and pleasure flying. However, additional congressional guidance is needed to help identify those general aviation airports essential to a national airport system.

State and local airport planning financed with Federal grants was to support development of the national airport system; this has not occurred. Federal legislation should be enacted to require State and local airport plans as a prerequisite for Federal airport development grants.

Sufficient grant funds have not been available to finance airport improvements. Also, the existing method for funding such improvements has not been effective in implementing a national airport system. The Congress should establish priorities for distributing Federal airport development grants.



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COMPTROLLER GENERAL OF THE UNITED STATES
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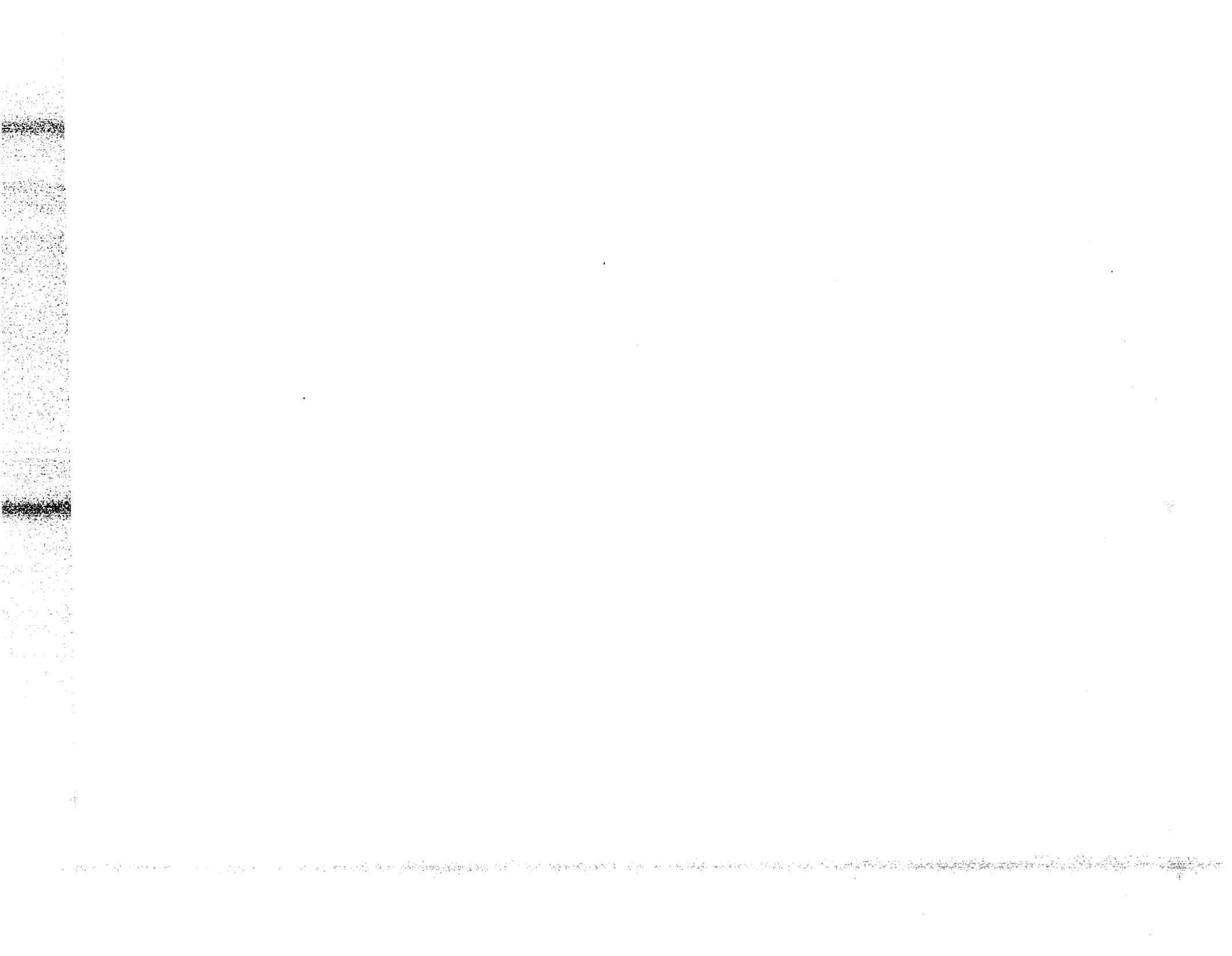
To the President of the Senate and the
Speaker of the House of Representatives *CWO 00001*

This is our report on the need for additional congressional guidance in developing a national airport system. The report discusses national, State, and local airport planning and the funding of airport improvements with Federal grants under the Airport and Airway Development Act of 1970, as amended, and contains several recommendations for amending the act when the Congress considers whether to extend it beyond 1980.

Copies of this report are being sent to the Director, Office of Management and Budget; the Secretary of Transportation; the Chairman of the Civil Aeronautics Board; the National Transportation Safety Board; interested congressional committees; and other parties.

James B. Stacks

Comptroller General
of the United States



D I G E S T

Additional congressional guidance is needed to help identify those general aviation airports essential to development of a national airport system. Federal legislation also is needed to:

- Improve State/local airport planning so that these plans can be integrated into a national plan consistent with congressional objectives.
- Establish priorities for distributing Federal airport development grants to develop the national system effectively.

GENERAL AVIATION AIRPORTS

In January 1978, the Department of Transportation's ^{The} Federal Aviation Administration (FAA) issued a national airport system plan. This showed that over \$10 billion will be needed in the next decade to improve 3,100 of the Nation's airports and to build almost 500 new ones. Airports must be included in this plan to be eligible for Federal airport development grants.

The national plan includes about \$2.9 billion to improve some 2,600 general aviation airports (those basically serving business/corporate and pleasure flying). About 2,500 of these airports were included because of their "significant national interest."

FAA defined general aviation airports having significant national interest as those with 10 based aircraft and situated 30 minutes or more from another airport in the national plan. It believed this definition provided as many citizens as possible with reasonable access to a safe and adequate airport and that this was, in effect, the national interest. *was FD*

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a/c.
Using this definition, FAA reduced by about 400 the number of general aviation airports included in the 1978 national plan as compared to the old national plan. *However,* This reduction may not have been as large as the Congress intended and further reductions were possible. An additional 500 general aviation airports could have been eliminated had FAA used 20 based aircraft instead of 10 in its definition of significant national interest. (See p. 10.)

Reductions could also have been made had FAA included more regional general aviation airports in the national plan. In two regions, GAO identified 18 general aviation airports that could have been combined to form 8 regional airports. FAA has attempted to promote regional airports but has had limited success because of community opposition. (See p. 16.)

Two aviation groups--one representing general aviation and the other State aviation officials--objected to the FAA definition of significant national interest because it resulted in fewer general aviation airports in the national plan. In fact, over 1,000 more airports are in State plans than are in the national plan.

Airport representatives and Federal Aviation Administration regional officials also have objected to the definition. (See p. 13.)

Including too many general aviation airports in the national plan overstates development cost and can result in unnecessary development. However, including too few airports could result in a less than adequate national airport system.

Rec.
Thus, the Congress should review the Federal Aviation Administration definition to determine its acceptability. If unacceptable, the Congress should incorporate an acceptable definition in the authorizing legislation. (See p. 21.)

STATE/LOCAL AIRPORT PLANNING

FAA's airport planning grant program was established to

- promote an integrated planning process whereby State and local airport plans could be used to develop the national plan,
- promote the effective location and development of airports, and
- improve airport planning.

At the time the 1978 national plan was prepared, less than one-fourth of the 2,868 public airports included in the national plan had completed airport master plans.

F/C

FAA recognizes the importance of airport planning and has developed basic planning guidelines. However, airport master plans are not required as a condition for Federal airport development grants. Also, in recent years planning grant funds have not been sufficient to fund all requests. (See p. 23.)

Most States have developed State airport system plans, but in the two regions GAO reviewed State plans were either too old, lacked the necessary data, or were otherwise not useful in developing the national plan. FAA's planning guidelines were not always adhered to when State plans were prepared, nor had grant funds been used to any great extent, at least until 1977, to maintain a continuous planning process. (See p. 26)

F/C

Improvements in Federal Aviation Administration planning guidelines are needed to focus greater attention on the merits of regional airports and to assure that airport noise problems are adequately considered and plans are fully coordinated with State and local interests. (See pp. 28 and 31.)

The agency recognizes that planning needs improvement and has acted to do this. (See p. 35.)

However, more stringent requirements are needed and the Congress should:

- Dec* --Require airports to have an approved master plan and be included in an acceptable State or regional system plan as a condition for eligibility to receive Federal airport development grants.
- Determine whether funding will be sufficient to pay for a higher level of planning.
- Require future revisions in the national plan to be based on FAA-approved or acceptable State/local airport plans. (See p. 42.)

AIRPORT DEVELOPMENT GRANTS

Grant funds have not been sufficient to finance airport development needs; about \$1.2 billion is needed annually, but airport development grants are adequate to cover only half of these needs. In addition, airport improvements, some of which are considered safety related, have been left unfunded while grants at other airports have been used to retire bond debts.

Most airport representatives were optimistic that their needs would be funded in the next 10 years, but past experience does not support such optimism. In the first 7 years of the airport development aid program, only about 47 percent of airports included in the national plan received development grants. (See p. 44.)

Under current legislation, FAA has not been able to effectively use development grant funds to carry out the national plan or assure that important airport needs, such as safety, were met. (See p. 44.)

Priorities are needed to distribute airport development grant funds to assure that they

are used effectively. Even if funding were increased, priorities would provide a mechanism to implement the national plan systematically and to measure progress. Priorities also could assure that grant funds are used at those airports with the greatest financial need. (See p. 52.)

Rec The Congress should establish priorities to distribute airport development grants. (See p. 52.)

AGENCY COMMENTS

FAA officials expressed some concern with GAO's recommendations, but overall they believed the recommendations were appropriate for consideration in formulating legislation to extend the Airport and Airway Development Act beyond 1980.



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C o n t e n t s

		<u>Page</u>
DIGEST		i
CHAPTER		
1	INTRODUCTION	1
	National airport system plan	1
	State and local airport planning	3
	Airport development aid program	6
	Trust fund	8
	Scope of review	8
2	BETTER GUIDANCE NEEDED TO DEFINE NATIONAL INTEREST IN GENERAL AVIATION AIRPORTS	10
	Number of NASP airports has been reduced	11
	Significant national interest has not been adequately defined	13
	Potential exists for regional general aviation airports	16
	Conclusions	21
	Recommendations to the Congress	21
	Agency comments and our evaluation	22
3	IMPROVEMENTS NEEDED IN STATE AND LOCAL AIRPORT PLANNING	23
	Many airports lack a master plan	24
	Usefulness of State system plans is questionable	26
	Airport plans are not adequate to promote regional airports	28
	Good airport planning can assure that noise problems are addressed	28
	Airport plans should be coordinated with public interest groups	31
	NASP development needs were not fully coordinated with airport sponsors	32
	FAA recognition of planning deficiencies and efforts to resolve them	35
	Conclusions	38
	Agency comments and our evaluation	40
	Recommendations to the Congress	42
	Recommendations to the Secretary of Transportation	43

	<u>Page</u>
CHANGES NEEDED IN THE DISTRIBUTION OF AIRPORT DEVELOPMENT GRANT FUNDS	44
Airport improvement funds are inadequate for needs	44
FAA has little control over enplanement funds	46
Unused enplanement funds hinder effective use of discretionary funds	48
Enplanement funding provides funds in inverse proportion to air- port's need	49
Relationship of NASP development to airport problems	50
Funding alternatives	51
Conclusions	52
Agency comments and our evaluation	53
Recommendations to the Congress	53

APPENDIXES

I	Questionnaire methodology	55
II	Questionnaire results	56
III	Benefit/cost criteria for certain general aviation airports	64

ABBREVIATIONS

ADAP	Airport development aid program
CAB	Civil Aeronautics Board
FAA	Federal Aviation Administration
GAO	General Accounting Office
NASP	National Airport System Plan

CHAPTER 1

INTRODUCTION

In enacting title I of Public Law 91-258, known as the Airport and Airway Development Act of 1970 (49 U.S.C. 1701), the Congress found that the U.S. airport and airways system was inadequate to meet current and projected growth in aviation and declared that substantial expansion and improvement were needed to meet the demands of interstate commerce, the postal service, and national defense. To help rectify these problems, the act

- directed the Secretary of Transportation to prepare a national airport system plan (NASP) to develop airports,
- established an expanded program of Federal matching grants to fund airport development and airport planning, and
- set authorized funding levels for the grant programs and established formulas for their distribution.

The 1970 act has been amended three times--in 1971, 1973, and 1976--to increase and extend authorized funding, increase the types of airport improvement projects eligible for funding, revise the formulas for distributing funds, and require revisions in the NASP.

Title II of Public Law 91-258, known as the Airport and Airway Revenue Act of 1970 (49 U.S.C. 1742), established a trust fund, financed from certain aviation taxes, to assure a long-term source of funding for the grant program authorized by title I.

NATIONAL AIRPORT SYSTEM PLAN

The Airport and Airway Development Act of 1970 directed that the NASP set forth, for at least a 10-year period, the type and amount of airport development considered necessary to meet civil aviation and postal service needs and national defense requirements. Further, the act provided that the NASP should consider the needs of all segments of civil aviation and should not be limited to any class or category of public airport.

The 1976 amendments to the act directed the Secretary to issue a revised NASP by January 1978. Besides meeting the requirements of the 1970 act, the revised NASP was to

- contain estimated costs that were accurate enough to be used to make future year apportionments for airport development grants,
- identify the levels of public service and use made of each airport, and
- identify the projected development necessary to fulfill the level of service and use of each airport during the succeeding 10-year period, 1978-87.

The revised January 1978 NASP, which was prepared by the Department of Transportation's Federal Aviation Administration (FAA), states that 3,137 of the Nation's 13,380 existing airports (2,868 public and 269 private) are essential to the Nation's air transportation system. The NASP shows that \$10.6 billion will be needed in the next decade to improve existing airports and to build 483 new airports. Private airports are not eligible for Federal airport assistance grants, but grants are given to public entities to purchase such airports. In total, the NASP provides for the development of 635 air carrier, 193 commuter, 204 reliever, and 2,571 general aviation airports. The NASP shows that some \$7.5 billion, or 70 percent of the 10-year total, will be required in the first 5-year period, 1978-82.

The NASP states that there seems to be a clear legislative intent to describe the Federal interest in airports as participation in a broad and balanced system and that the Federal intent of assuring a balanced airport system was a commonly used objective in national airport planning. According to the NASP, this objective suggests taking into account the diverse needs of communities with respect to all segments of aviation and implies that Federal interest extends beyond Civil Aeronautics Board- (CAB-) certificated air carriers and into the broad category of general aviation, so that all communities with a need for air transportation will have reasonable access to an adequate airport.

The criteria used to include airports in the NASP were the principal means of assuring a balanced system. In general, these criteria provided for including in the NASP those airports

- served regularly by airlines holding a certificate of public convenience and necessity from CAB (air carrier airports);
- enplaning not less than 2,500 passengers by CAB-registered commuter air carriers and air taxi

operators and certain intrastate carriers during the preceding calendar year (commuter airports);

- having the primary function of relieving congestion by attracting general aviation traffic away from air carrier airports (reliever airports); and
- regularly serving aircraft transporting U.S. mail, regularly used by aircraft of the Air National Guard or Army reserves, or having a significant national interest (general aviation airports).

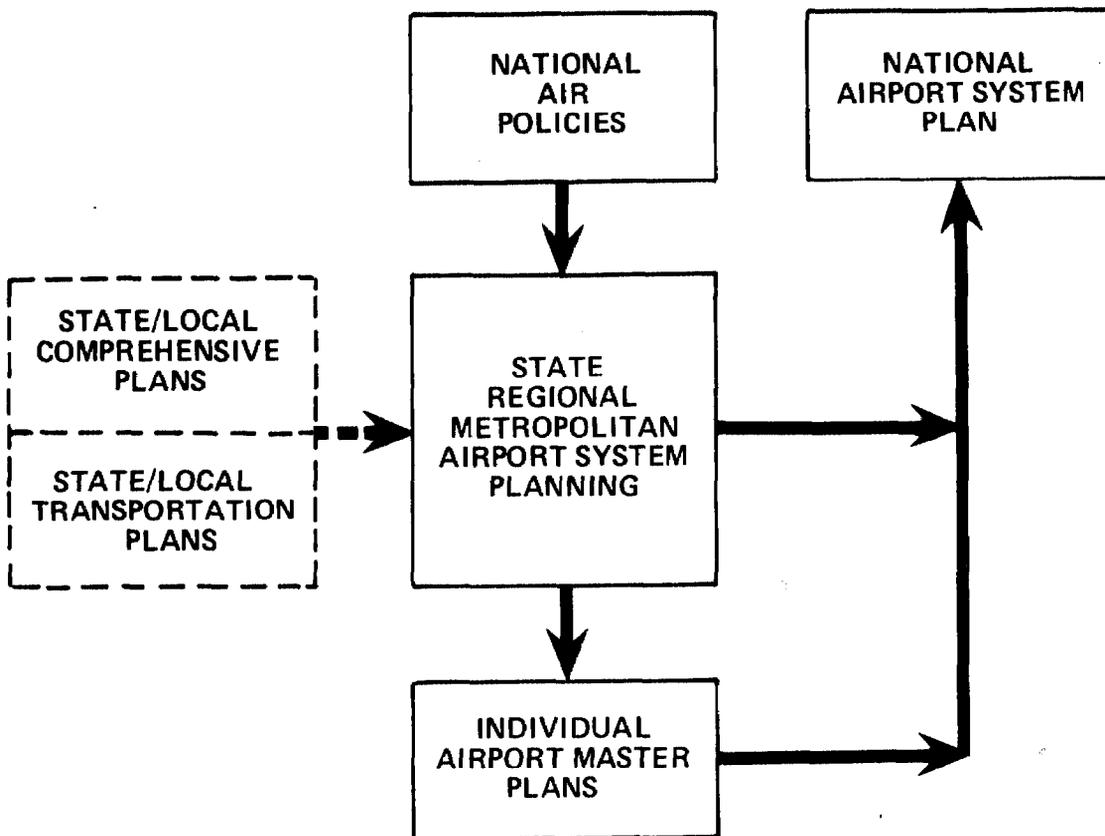
STATE AND LOCAL AIRPORT PLANNING

To provide for an integrated planning process in support of the NASP and to promote the effective location and development of airports, the act authorized FAA to make grants to finance the development of State, regional, and metropolitan airport system plans and individual airport master plans. According to FAA planning guidelines:

- State airport system plans represent the aviation facilities needed immediately and in the future to meet the State's air transportation needs and overall goals. They recommend the general location and characteristics of new airports and the nature and expansion for existing ones. They show the timing and estimated cost of development, relate airport system planning to the State's economic development and environmental goals, incorporate regional/metropolitan airport system planning, and provide the basis for definitive and detailed individual airport planning.
- Regional/metropolitan airport system plans serve much the same purpose as, and are considered a subsystem of, State system plans. Such plans are useful for regional/metropolitan areas forecasted to have a population of 500,000 during the planning period.
- Airport master plans present the planner's conception of the ultimate development of a specific airport and the research and logic from which the plan evolved, and they display the plan in a graphic and written report. Master plans are prepared to modernize and expand existing airports and to select sites for and plan new airports within the framework of regional/metropolitan and State airport system plans.

An integrated airport planning process requires a State's airport system plan to be properly coordinated with appropriate regional/metropolitan airport system plans, individual airport master plans, the State comprehensive plan, local comprehensive plans, and the airport planning efforts of adjacent States. FAA has illustrated this concept as follows:

THE BUILDING BLOCKS OF AIRPORT PLANNING



Problems encountered by State and local governments and organizations involved in coordinating and integrating the various federally assisted planning programs were addressed in our report "Federal Assisted Areawide Planning: Need to Simplify Policies and Practices" (GGD-77-24, Mar. 28, 1977). In that report, we recommended that the Congress establish a national policy on areawide planning and provide a basis for strengthening planning focal points at the area-wide level. In addition, we recommended that the Office of Management and Budget:

- Require federally funded State agencies to use the designated areawide comprehensive planning agencies to carry out and coordinate areawide planning.
- Require Federal planning assistance recipients to coordinate their planning activities with designated planning organizations and with other organizations doing similar planning.
- Continue its efforts to remove impediments to coordination and integration of planning activities.
- Develop planning principles and require that they be used in federally assisted planning programs.

We stated that improvements were essential if the present fragmented Federal approach to planning assistance was continued but that planning would be considerably better if the number of federally assisted planning programs was reduced.

Legislation to establish a national policy on areawide planning was considered by the 95th Congress but was not enacted. This matter will probably be considered by the 96th Congress. The Office of Management and Budget agreed to study our recommendations.

One way to reduce the number of federally assisted planning programs and at the same time promote intermodal planning by State and local agencies would be to consolidate the Department of Transportation's airport, highway, railroad, and transit planning grant programs into a block grant for transportation planning. We recommended this to the Secretary of Transportation in our report "Making Future Transportation Decisions: Intermodal Planning Needed" (CED-78-74, Mar. 16, 1978). In addition, we recommended that the Secretary

- merge existing modal planning staffs into a single, all mode field capability to assist State and local transportation agencies;
- develop unified planning regulations for all transportation planning;
- sponsor the development of, and serve as a clearinghouse for, examples of intermodal planning; and
- conduct training programs for State and local transportation planners to acquaint them with proven intermodal planning methods.

The Department of Transportation agreed that additional steps were needed to promote intermodal planning by State and local governments. It said that the President's January 26, 1978, legislative proposal, the Highway and Public Transportation Improvement Act of 1978, would consolidate highway and transit planning funds for use in all transportation planning activities. It also stated that airport and railroad planning funds were not included in this proposed consolidation but that they would be considered when the Department of Transportation takes up authorizing legislation for those modes.

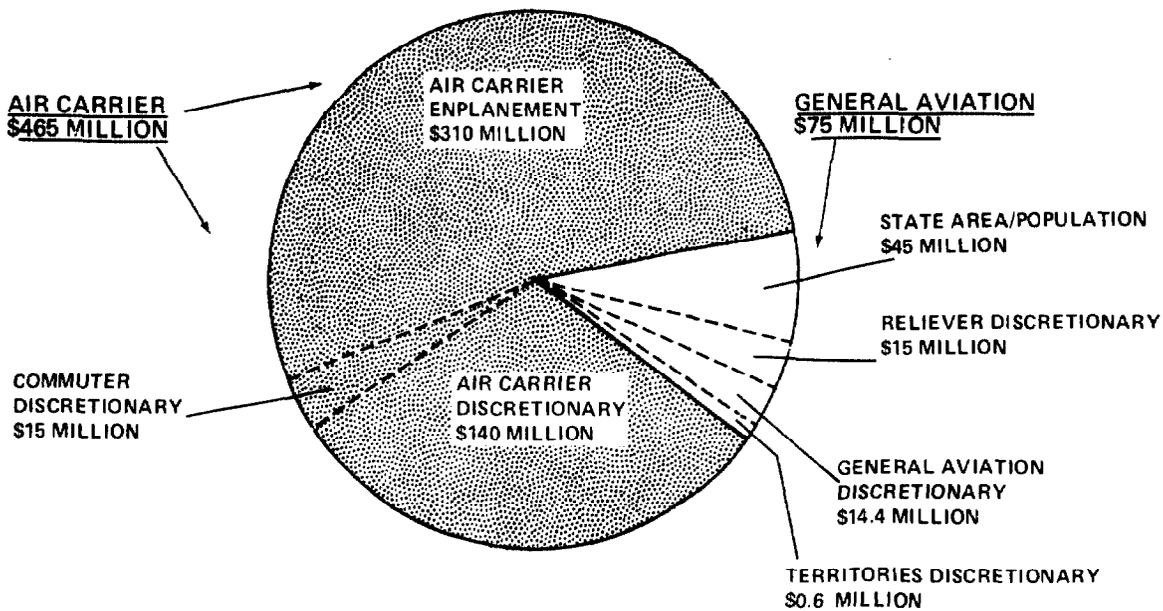
In enacting the Surface Transportation Assistance Act of 1978 (Public Law 95-599, Nov. 6, 1978), the Congress did not consolidate highway and transit planning funds as requested in the President's January 1978 legislative proposal. However, according to a Department of Transportation official, the act requires comprehensive, coordinated, and continuous planning for highway and transit planning which should promote increased coordination with other transportation modes and increased intermodal planning. In addition, the Department is considering consolidating the highway and the transit administrations.

AIRPORT DEVELOPMENT AID PROGRAM

In order to establish, in conformity with the NASP, a nationwide system of public airports adequate to meet present and future civil aeronautics needs, the 1970 act authorized FAA to grant \$2.4 billion for airport development through September 30, 1977, and an additional \$1.7 billion through fiscal year 1980. Under this airport development aid program (ADAP), public airports included in the NASP are eligible for matching Federal grants for a wide variety of projects to improve their safety and capacity. Eligible projects include such activities as land acquisition; runway, apron, and taxiway construction; airport lighting; the

non-revenue-producing parts of terminal buildings--baggage-handling facilities, gates, etc.; airport roads; and electronic and visual approach aids. The Federal share of project cost is generally 90 percent. ^{1/} However, at large and medium size air carrier airports, the Federal share of project cost is limited to 75 percent and the Federal share for the construction of terminal buildings is limited to 50 percent.

The following chart shows the distribution of fiscal year 1978 authorized funding levels for ADAP grants. Under the distribution formulas provided for in the act, two-thirds of the funds available for air carrier development is distributed to airports based on enplaned passengers, and the remaining one-third distributed at the Secretary's discretion with \$15 million specifically earmarked for use at commuter airports. Authorized funds for general aviation development grants are distributed to airports at the Secretary's discretion, provided \$15 million is used at reliever airports with any remaining funds divided as follows: 75 percent to airports on the basis of State population and areas, 1 percent to airports in U.S. territories, and 24 percent at the Secretary's discretion.



TOTAL FUNDS AUTHORIZED - \$540 MILLION
FISCAL YEAR 1978

^{1/}Eighty percent for fiscal years 1979-80

TRUST FUND

The Airport and Airway Revenue Act of 1970 established a trust fund to provide an assured long-term source of funding for airport and airway programs. Amounts equivalent to taxes received by the Department of the Treasury on airline passenger tickets, waybills, aviation fuel, and aircraft tires and tubes are deposited in the trust fund.

Programs financed from the trust fund fall into four basic categories:

- FAA's airport planning grant and ADAP programs.
- FAA's facility and equipment program which provides funds for air navigation aids.
- FAA's operations.
- FAA's research and development program.

As of September 30, 1978, about \$9.8 billion had been deposited in the trust fund of which \$6.1 billion, or 63 percent, came from taxes on airline passenger tickets. Outlays from the fund have totaled about \$6.1 billion and commitments against the fund account for another \$1.5 billion, leaving an uncommitted balance or surplus of about \$2.2 billion. The largest amount of outlays, about \$2.1 billion or 34 percent, has been for grants for airport planning and development.

According to FAA, air carrier activity has generated about 93.5 percent of trust fund revenue and air carrier airports have received about 86 percent of ADAP funds. In contrast, general aviation has generated 6.5 percent of trust fund revenue, but general aviation airports received about 14 percent of ADAP funds.

SCOPE OF REVIEW

We reviewed pertinent legislation; related congressional reports and hearings; FAA and CAB policies, procedures, and records; and reports and studies from numerous sources on the planning and development of airports, Federal airport assistance programs, and the Airport and Airway Trust Fund. We interviewed FAA, CAB, State, and regional planning officials; local airport representatives; and officials from various associations interested in the operation and development of airports.

A questionnaire was used to obtain a random sampling of the views of airport representatives on some of the problems facing their airports and various aspects of the Federal airport assistance program and the NASP. Appendix I contains our questionnaire methodology, and appendix II summarizes the questionnaire results.

Our review was made at FAA and CAB headquarters in Washington, D.C., and in FAA's central and western regions located in Kansas City, Missouri, and Los Angeles, California, respectively.

CHAPTER 2

BETTER GUIDANCE NEEDED TO DEFINE

NATIONAL INTEREST IN GENERAL AVIATION AIRPORTS

The 1978 NASP shows that \$2.9 billion is needed to improve 2,571 general aviation airports. FAA included 2,485 of the 2,571 airports, thus making them eligible for FAA development grants, because it believed that they had significant national interest. Whether this number is adequate for a national airport system depends on the acceptability of FAA's definition of significant national interest.

Using its definition of significant national interest, FAA was able to reduce the number of airports included in the NASP by 438 compared to the number included in the old NASP. But this reduction, some of which was merely a book-keeping reduction, may not have been as large as the Congress intended. Congressional committees had criticized the old NASP because it included too many airports.

Further reductions could have been achieved had FAA adopted a more stringent definition as to what constitutes a general aviation airport of significant national interest or provided for more regional general aviation airports. Many areas of the country are served by two or more airports located in close proximity to one another when only one airport would suffice to serve the region's aviation needs. FAA has attempted to promote regional airports in such situations but with limited success because of community opposition to the concept.

At least two aviation groups have objected to FAA's definition of significant national interest because it resulted in fewer general aviation airports being included in the NASP. Airport representatives and FAA regional officials have also objected to the definition.

Including too many general aviation airports in the national plan can result in excessive airport development and an overstatement of the cost of developing a national system, whereas too few airports results in an understatement of cost and a less than adequate national airport system.

NUMBER OF NASP AIRPORTS
HAS BEEN REDUCED

In amending the Airport and Airway Development Act in 1976, the House and Senate reports ^{1/} stated that the number of airports included in the NASP had steadily increased and stated that the Secretary of Transportation needed to be more selective in designating airports for inclusion in the NASP. Further, the reports stated that the NASP should only include airports which have a role in the national system.

The House and Senate reports recognized that the Secretary had not been given adequate guidance on the types of airports that should be included in the NASP, and to help rectify this problem the 1976 amendments established specific entry criteria for including airports in the NASP. (See p. 2.) However, this action left the Secretary with little discretion, except for reliever airports and general aviation airports, for reducing the number of airports contained in the NASP.

The 1978 NASP contains 438 fewer airports, mostly general aviation airports, than contained in the NASP on June 30, 1975. However, 140 of the airports eliminated, or about 32 percent, were merely bookkeeping reductions. For example, in its environmental impact statement on the NASP, FAA stated that

"The apparent decline in General Aviation (GA) airports is basically (in part) a matter of bookkeeping. In the earlier NASP, when a replacement airport was included, the airport to be replaced was also left in the NASP. In the updated NASP, the airport to be replaced is eliminated and the new GA airport included."

Our review in FAA's central and western regions confirmed FAA's statement. In the central region, 29 of the 59 general aviation airports dropped from the previous NASP were new airports needed to replace an existing airport or an existing airport that was to be replaced by a new one, both of which were included in the previous NASP but not in the new one. In the western region, 22 of the 79 airports deleted from the previous NASP were deleted for this same reason. Although only the existing airport or the new replacement airport is shown in the 1978 NASP, development cost for the airport shown includes improvements for both the existing and replacement airports.

^{1/}H.R. Rep. No. 594, 94th Cong., 1st Sess. (1975) and S. Rep. No. 643 and 975, 94th Cong. 2d Sess. (1976).

Of the 2,571 general aviation airports included in the 1978 NASP, 2,485 were included because they were believed to have significant national interest. The remaining 86 general aviation airports were required to meet Postal Service needs or national defense requirements.

FAA has defined airports of significant national interest basically as ones having at least 10 based aircraft (or engines) and serving a community located 30 minutes or more from another existing or proposed NASP airport. Also, basically all airports had to be included in an acceptable State or regional system plan to be included the 1978 NASP.

Airports were also considered to have significant national interest, and therefore were eligible for inclusion in the 1978 NASP, if they were (1) included in the previous NASP and (2) obligated 1/ to the Federal Government as a result of a prior FAA development grant. Although 1,362 of the 2,485 general aviation airports met this requirement, airports had to have at least 10 aircraft (or engines) and be located 30 minutes or more from another NASP airport to have been included in the previous NASP. Further, an airport's obligation to the Federal Government was not considered a basis for inclusion in the preparation of the 1972 NASP.

An additional 251 of the 2,485 airports were included on the basis of special justification, such as serving an isolated area or Indian tribe or having benefits that exceeded the cost of the airport. Appendix III contains FAA's criteria for determining whether an airport could be expected to have benefits exceeding its cost.

FAA believes its definition of 10 based aircraft and 30 minutes ground travel time provides as many citizens as possible with reasonable access to a safe and adequate airport and that this, in essence, was the national interest. The 30-minute distance was intended to provide communities with reasonable access to an airport to fulfill Congress intent to develop a broad and balanced system of airports. Ten based aircraft (or engines) was used to identify airports that had sufficient aircraft operations (takeoffs and landings) to justify and support an airport, thus assuring to some degree the airport's viability.

1/Obligations include such commitments as operating the airport in a safe, economical, and efficient manner and refraining from certain discriminatory practices.

In defining significant national interest, FAA attempted to establish a stringent definition which, if used, would have limited further the number of general aviation airports included in the 1978 NASP. Initially, FAA considered using 20 based aircraft instead of 10, but it dropped this definition because FAA believed it was too restrictive.

FAA's environmental impact statement on the 1978 NASP indicated that use of 20 based aircraft instead of 10 could have reduced further the number of general aviation airports included in the 1978 NASP by about 500 airports.

SIGNIFICANT NATIONAL INTEREST
HAS NOT BEEN ADEQUATELY DEFINED

State aviation and FAA regional officials questioned whether FAA's definition was adequate to measure significant national interest. For example, in response to FAA's proposal to use 20 based aircraft instead of 10, some FAA regional officials responsible for preparing the NASP stated that the numbers of aircraft alone did not show national interest. An FAA official in one region stated that little correlation, if any, existed between an airport's national role and the number of based aircraft. Most FAA regional officials believed that significant national interest had not been adequately defined but needed to be.

The Aircraft Owners and Pilots Association, in commenting to FAA on the 1978 NASP entry criteria (10 based aircraft), stated "The NASP entry criteria for general aviation airports that your staff has created simply does not reflect the intent of Congress." The association also stated

"Significant national interest in a particular airport must be considered in the light of the greater national interest in and need for a complete system of airports which provides ready access to all communities by general aviation users."

The National Association of State Aviation Officials commented to FAA on the 1978 NASP entry criteria that "A continuing problem with all NASP reduction exercises is confusion over the definition of "national interest" versus "State or local interest."

Both associations have strongly objected to reducing the number of general aviation airports included in the NASP. According to the Aircraft Owners and Pilots Association, it and other aviation organizations have continually asked why FAA has felt compelled to constrain general aviation by

limiting the number of general aviation airports included in the revised NASP. Association officials told us that use of the fixed based aircraft criteria is meaningless since many airports have a lot of traffic but no based aircraft. They believed all airports which provide a connection to the Nation's airport system are of significant national interest and should be included in the NASP.

Response from airport representatives to our questionnaire showed that 48 percent agreed, while 19 percent disagreed, with FAA's definition of general aviation airports of significant national interest. Respondents who disagreed believed other factors should also be considered, citing such things as service and facilities provided by an airport, uses of aircraft, community needs and resources, population, and community attitude toward the airport. As shown in the following table, there was little difference in opinion between all respondents and those representing general aviation airports.

	<u>Percentage of respondents</u>			
	<u>Agreed</u>	<u>Disagreed</u>	<u>No opinion</u>	<u>No response</u>
All respondents	48	19	26	7
General aviation respondents	46	19	27	8

State aviation officials in one of the five States we contacted said:

--We don't know what FAA means by significant national interest.

--FAA's criteria of 10 based aircraft and 30 minutes driving time to the nearest general aviation airport already in the NASP are not economical. It might be nice to use their criteria if we had unlimited funds, but we have to look at what we can afford.

In response to the latter comment, an FAA official said this is by far the minority view and that most communities and State agencies fight for airports to serve each separate town, regardless of the distance from a neighboring airport or how many based aircraft they have.

In comparing this State's airport system plan with the NASP, we found that the NASP contained more airports than State officials had originally included in their plan. State officials said 18 airports were added to their plan because FAA told them their plan should have at least the

same number of airports as the NASP, although FAA officials denied telling the State this. State officials also said they changed their plan to agree with the NASP because FAA was paying for two-thirds of the cost of preparing the State's plan. Airport development needs shown in the NASP for these 18 airports accounted for about \$20 million of \$160 million in airport development needs for the State. State officials said they were planning to update their State plan and to classify airports as either primary or secondary airports. They said that the 18 airports would probably be classified as secondary and that only primary airports would be eligible for State development aid.

A State Director of Aviation in another State said that FAA's definition gave little or no consideration to the airport's importance. He said that other factors, such as aircraft use, community interest, and vital needs, should be considered and that FAA's definition did not adequately reflect actual need. He cited an example of a small community that had a great interest in its airport because of its importance to the community. However, because this airport did not have the required number of aircraft, it was not included in the NASP. In contrast, he said another airport at a nearby community where there was little community interest or need was included in the NASP because it had the required number of aircraft.

In developing State system plans, States considered some but not all of the following factors: aeronautical need, aircraft engines, registered pilots, 30-minute ground travel time to another general aviation airport and 60-minute travel time to an air carrier airport, all airports in the State, an airport's economic growth, and population. In total, State system plans contain about 1,000 more airports than shown in the NASP.

At an FAA consultative planning conference held on June 1, 1978, on post-1980 airport and airway development legislation, FAA stated that the Federal role in airport and airways development will be examined extensively in the months ahead because the legislative authority for the Airport and Airways Trust Fund and several important programs financed by the fund will expire in 1980. Regarding general aviation, FAA stated that

"Consideration should also be given to dropping, partially or fully, general aviation from ADAP funding. If general aviation airport financing were turned over to State and local governments, in conjunction with

the private sector, and they were able to generate sufficient revenue through State and local taxes and various tax incentives (in lieu of trust fund taxes) it might be advantageous to drop partially or totally funding of general aviation airport projects through ADAP. Removing these airports from ADAP eligibility might mean they are not part of a national system."

POTENTIAL EXISTS FOR REGIONAL GENERAL AVIATION AIRPORTS

Many areas of the country are served by two or more airports located close to one another when only one airport would suffice to serve the needs of the region. The NASP, however, contains few provisions for regional airports although the potential for more exists especially among general aviation airports. Regional airports can eliminate or reduce development needs at adjacent airports.

FAA advocates and encourages regional airports. It believes the concept has appeal because, among other benefits, it is the lowest cost solution to the Federal Government as fewer airports would be eligible for FAA development grants. FAA recognizes, however, that when communities examine their airport needs, the lowest cost to the Federal Government, or even to the community itself, may not be their governing consideration. According to FAA, this is exemplified by the numerous regional airports that were never built under the unsuccessful FAA/CAB joint policy adopted in 1961 to promote regional airports and the number of regional airport proposals rejected by local decisionmakers during the past 8 years. These included regional air carrier airports to serve New Orleans-Baton Rouge, Louisiana; Buffalo-Niagara, New York; Lewiston, Idaho, and Clarkston, Washington; Farmington, New Mexico, and Durango-Cortez, Colorado; and a regional general aviation airport to serve Shenandoah-Red Oak-Clarinda, Iowa, for which planning in all but one of these efforts was funded under FAA's airport planning grant program.

FAA officials said that FAA has received correspondence from communities which are against the regional airport concept and have written their representatives in the Congress to object. For example, the mayor of Mountain View, Missouri, objected to a proposed regional airport in Pomona, Missouri. This proposal would have resulted in removing the Mountain View Memorial Airport from the NASP, thus making it ineligible for FAA development grants; an action the mayor believed would have an adverse economic impact on Mountain View.

Opportunities for regional air carrier and commuter airports have become increasingly limited. Air carrier and commuter airports replaced by a regional airport lose their status as either an air carrier or commuter airport. Since the 1976 amendments to section 12(a) of the Airport and Airway Development Act were made, such downgrading in air carrier or commuter status has been precluded. Section 12(a) of the act requires FAA to include in the NASP

--as air carrier airports, all airports served regularly by airlines certificated by CAB, and

--as commuter airports, all airports served by commuter airlines registered with CAB and generating 2,500 or more passengers annually.

In addition, the Airline Deregulation Act of 1978 (Public Law 95-504) further limits consideration of regional airports for cities served by air carriers. The act, through amendments to the Federal Aviation Act of 1958 (49 U.S.C. 1301 et seq.), guarantees that "essential air transportation" will continue for at least 10 years to all cities listed on air carrier certificates issued by CAB including cities at which an air carrier has suspended service. It defines essential air transportation as not less than two daily round trips, 5 days a week, or the level of service provided during calendar year 1977, whichever is less. The act prohibits a termination in service until suitable replacement service can be found and charges CAB with the responsibility for finding replacement service. The act also authorizes a new subsidy program for air carriers and commuters to assure that essential air transportation will be provided. On January 1, 1985, the act would transfer these responsibilities and programs to the Department of Transportation.

Despite the limited potential for regional air carrier or commuter airports, a potential exists for regional general aviation airports. For example, in FAA's central and western regions, we identified a potential for at least eight regional general aviation airports. More may be possible in these regions, but we did not expand the scope of our work to identify all potential locations.

The 8 regional general aviation airports were derived by pairing 18 general aviation airports, as shown in the following table. The table shows each airport's maximum annual capacity in terms of operations--takeoffs and landings--and, as reported by the NASP, the number of current annual operations and the forecasted number of annual operations expected in 10 years.

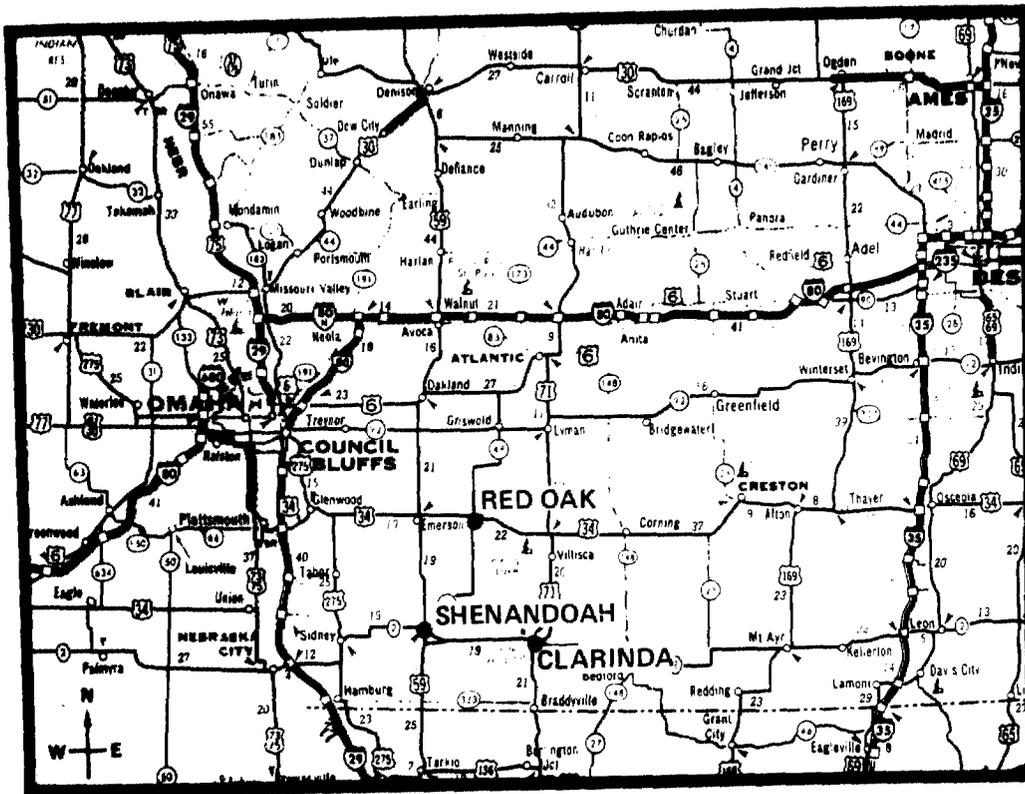
General aviation airports	Operations			Combined 10-year
	Capacity	Current	10-year	
Sikeston, Missouri	180,000	26,000	36,000	
Dexter, Missouri	250,000	20,000	38,000	
Charleston, Missouri	140,000	3,000	12,000	86,000
Shenandoah, Iowa	130,000	12,000	17,000	
Red Oak, Iowa	150,000	12,000	21,000	
Clarinda, Iowa	180,000	9,000	15,000	53,000
Russell, Kansas	161,000	14,000	22,000	
LaCrosse, Kansas	187,000	4,000	7,000	29,000
Cozad, Nebraska	160,000	10,000	14,000	
Lexington, Nebraska	150,000	17,000	22,000	36,000
Yucca Valley, California				
Twenty Nine Palms, California	160,000 162,000	19,000 19,000	30,000 30,000	60,000
Yuba City, California	215,000	46,000	73,000	
Marysville, California	160,000	56,000	94,000	167,000
Woodland, California	235,000	39,000	62,000	
Davis, California	220,000	45,000	71,000	133,000
Marana, Arizona				
Tucson (Avra Valley), Arizona	121,000 152,000	13,000 61,000	23,000 107,000	130,000

The conditions at these airports basically meet FAA's criteria used in preparing the 1972 NASP, which emphasized, more so than the 1978 NASP, the development of regional general aviation airports. In its instructions for preparing the 1972 NASP, FAA instructed its offices to consolidate general aviation airports into regional airports located in such a way that a single airport would not degrade existing and potential demand. FAA also instructed its offices to use 30 minutes or less by ground from another NASP airport as a principal consideration in recommending regional general aviation airports. As can be seen from the table above, at least one airport in each pairing has the capacity to handle the combined operations forecasted in 10 years for all the airports paired. Also, travel time between the paired airports was about 30 minutes or less by road. In addition and more importantly, FAA's 1972 instructions stated that a community's unwillingness to participate in regional airport development was not to be a controlling factor for not recommending a regional airport.

Details on the Shenandoah, Red Oak, and Clarinda airports are presented below to show the effect regional airports can have on NASP development needs and the reluctance of communities to accept the concept even when this course of action is suggested through the local airport planning process.

Shenandoah, Red Oak, and Clarinda Airports

In the central region, general aviation airports at Shenandoah, Red Oak, and Clarinda are located in a triangular pattern in southwest Iowa about 20 road-miles apart, as shown in the following illustration.



FAA has awarded about \$56,000 in grants at the three airports, including an \$8,400 grant for a joint airport planning study. This joint study showed that a regional airport should be developed to serve the three communities. Although none of the existing airports was recommended for development as a regional airport, the proposal died when Clarinda withdrew its support because the recommended site for the regional airport was about 5 miles closer to Shenandoah than to Clarinda.

In the 1978 NASP, FAA estimated that about \$3.3 million would be needed in the next 10 years to improve these three airports. FAA has already approved a planning grant for the Shenandoah airport to plan future development. Although development for all three airports is provided for in the NASP, the projected activity levels of the three airports 10 years from now, if concentrated at Shenandoah, would bring it up to only 41 percent of the capacity of its current facilities. Development of the Shenandoah airport as a regional general aviation airport would eliminate about \$2 million from the NASP for improvements at the Clarinda and Red Oak airports. This does not mean that those airports would have to be closed. If State and local interests are served by these airports, support from these entities would be appropriate.

CONCLUSIONS

FAA's definition of significant national interest determines the number of general aviation airports needed for a national airport system. The Congress needs to review this definition to determine whether the number of general aviation airports included in the 1978 NASP provides for the development of an adequate and efficient national airport system.

The number of general aviation airports included in the 1978 NASP could be sufficient, but if too many airports were included, the cost to develop a national airport system would be overstated and unnecessary development could result. Fewer general aviation airports could have been included in the plan, and such reductions may even be desirable based on congressional criticism of the old NASP. In contrast, too few general aviation airports could result in a less than adequate national airport system. More airports could be needed as evidenced by the concerns of general aviation interest groups and the provisions in State airport system plans for 1,000 more general aviation airports than contained in the NASP.

Regional general aviation airports have the potential of providing, with fewer airports than currently exist, an adequate yet efficient national airport system. Therefore, the Congress should consider the contributions of regional general aviation airports in determining the acceptability of FAA's definition of significant national interest and provide FAA with appropriate guidance on the extent to which it should pursue the development of such airports.

RECOMMENDATIONS TO THE CONGRESS

We recommend that the Congress, to provide better guidance on the Federal role in developing general aviation airports:

- Review FAA's definition of significant national interest to determine its acceptability and, if unacceptable, incorporate an acceptable definition into section 11 of the Airport and Airway Development Act (49 U.S.C. 1711).
- Provide FAA with appropriate guidance on the extent to which it should pursue the development of regional general aviation airports.

AGENCY COMMENTS AND OUR EVALUATION

FAA agreed that additional guidance from the Congress was needed to define significant national interest. However, FAA considered our questionnaire results--48 percent of airport representatives agreed with FAA's definition in contrast to 19 percent that disagreed--as a vote of confidence in FAA's definition. Also, FAA believed the Congress should provide criteria sufficient to promote regional airports.

We recognize that airport representatives' agreeing with FAA's definition could be considered a vote of confidence. However, our questionnaire was not sent to general aviation airports that were excluded from the NASP. In total, 6,900 public and privately owned airports are open to the public, but less than half, about 3,100, are included in the NASP. No doubt some of the excluded airports would believe they should be included in the NASP because inclusion is necessary to be eligible for Federal grants.

CHAPTER 3

IMPROVEMENTS NEEDED IN STATE

AND LOCAL AIRPORT PLANNING

State and local airport planning needs to be improved to accomplish FAA's airport planning grant program objectives and improve the NASP's reliability. The Congress established FAA's airport planning grant program in 1970 to promote an integrated planning process whereby State and local plans could be used to develop the NASP, promote the effective location and development of airports, and improve airport planning. (See p. 3.) Our review showed that:

- Many airports contained in the NASP were not covered by airport master plans. Plans had not been required as a condition for FAA development grants, nor were funds sufficient to fund all requests for planning grants.
- State system plans were either too old, lacked the necessary data, or were otherwise unacceptable to be useful in developing the NASP. FAA had not required adherence to its planning guidelines, nor had planning grant funds been given to States, at least until 1977, to maintain a continuous planning process.

Airport planning also needs to be improved to focus more attention on the merits of regional airports and assure that airport noise problems are adequately addressed and plans are fully coordinated with State and local interests. Improvements in FAA planning guidelines and adherence to these guidelines will be needed to accomplish this.

Although State/local airport plans were generally not available or useful to aid in development of the NASP, FAA had not fully determined what airport improvements airport representatives believed were needed and when. Our questionnaire showed that many airport representatives

- had not been contacted by FAA during the year preceding publication of the NASP,
- were unaware of what FAA had recommended for their airport, and

--disagreed with the timing of the FAA-recommended improvements.

FAA recognizes that planning needs to be improved, and it has taken action and is considering several other options for doing so.

MANY AIRPORTS LACK A MASTER PLAN

According to data FAA gathered in 1977 when it prepared the NASP, less than one-third of the 2,868 existing public airports included in the NASP had a completed master plan or had one under way. Completed master plans were available for use in preparing the NASP for only 616, or about 21 percent, of the existing public airports. An additional 287 airports had plans under way. Although the NASP includes 483 new airports for the next decade and about \$1.5 billion to begin their development, plans for only 46 new airports had been completed. Plans for an additional 68 new airports were under way.

FAA planning requirements

FAA's airport planning guidelines state that:

"If future airport developments are to be successful, they must be based on guidelines established as the result of comprehensive airport system plan studies and airport master plan studies."

According to the guidelines, the overall objective of the airport master plan is to provide a basis for future development that will satisfy aviation demand and be compatible with the environment, community development, other modes of transportation, and other airports. More specifically, the master plan:

- Provides an effective graphic presentation of ultimate airport development (airport layout plan) and anticipated land uses adjacent to the airport (land use plan).
- Establishes a schedule of priorities and phasing for various improvements proposed in the plan.
- Presents the pertinent backup information and data which were essential to the plan's development.
- Describes the various concepts and alternatives which were considered in establishing the plan.

--Provides a concise and descriptive report so that the impact and logic of the plan's recommendations can be clearly understood by all concerned with the airport's development.

FAA recognizes the importance of airport planning but does not require an airport to have a master plan. The only requirement for an FAA grant is that the airport have an approved airport layout plan and be included in the NASP. An airport layout plan is a graphic presentation, or blueprint, of existing and proposed airport development. It is one element of a master plan, but most layout plans have been developed without the benefit of a master plan.

Because master plans provide the detail documentation necessary to support development, airport layout plans developed without the benefit of master plans may contain projects whose development is uncertain, according to FAA officials. FAA officials said that the validity of an airport layout plan prepared without a master plan depends on a number of factors, including the experience of the person preparing it, the availability of other plans such as State system or area comprehensive plans, and the complexity of the location. FAA officials also said that an airport layout plan prepared by an experienced aviation planner with the benefit of a State system plan may well suffice for a low activity general aviation airport.

At a January 1978 meeting concerning transportation, FAA's Director, Office of Aviation System Plans, stated:

"On the planning side, I would require plans (master) as a prerequisite for ADAP funding in the air carrier system. Similarly, on all new air carrier/commuter/reliever airports, a system plan showing the need for the airport would be required before a master plan could be initiated. In the general aviation program, I would levy a requirement on states to develop system plans and subsequently master plans for all airports falling within the system plan. Emphasis would be placed on establishing a continuous planning process, with supportive funding, designed to prepare and update system and master plans for: (a) defining the need and timing of projects; (b) estimating project costs; (c) allocating resources on the basis of project worth; and (d) identifying projects proposed to be undertaken with Federal funds." (Underscoring added.)

Planning funds are inadequate
to meet demands

According to FAA's August 1977 report "Establishment of New Major Public Airports in the United States," FAA's airport planning grant program has been the primary source for funding airport planning. From inception of the program in 1970 through fiscal year 1978, FAA had about \$72 million available for airport planning grants of which \$55.2 million was used for airport master planning grants at 1,330 airports with the remainder used for system planning. Although FAA's planning grant program has been the primary source of funds for planning, airports have developed master plans, or parts thereof, without FAA planning grants. FAA said this was especially true at major air carrier airports.

For fiscal years 1971-74, excess funds were available for planning grants. According to FAA, of the \$60 million authorized by the Airport and Airway Development Act (\$15 million a year for 4 years), \$40 million was actually appropriated of which \$30 million was obligated. FAA attributed the excess to the newness of the program. However, as the program has matured and become more sophisticated and as communities have demanded improved planning, the demands for planning funds have exceeded available funding.

Since fiscal year 1975, all available funds have been used; many requests have not been acted upon because of insufficient funds. At the end of September 1978, unfunded requests for master and system planning grants totaled about \$4 million. This demand for planning grants is probably understated. FAA officials in the central and western regions said that they had not encouraged, and sometimes even discouraged, eligible applicants from applying because of the shortage of funds.

USEFULNESS OF STATE SYSTEM PLANS
IS QUESTIONABLE

State airport system plans are designed to provide decisionmakers with an effective tool to direct and influence airport development to assure achievement of State goals and objectives, control development of the State's resources, integrate the various transportation modes into an effective and efficient total transportation system, and maximize system benefits for all citizens.

According to FAA planning guidelines, which were developed jointly by FAA and the National Association of State Aviation Officials, a primary goal of a State

airport system plan, from a national level, is to ensure compatibility with the content, format, standards, and criteria of the NASP so that applicable portions may be integrated into the national plan. The guidelines suggest that FAA regulations and advisory circulars on such things as airport design, runways, and paving should be used to identify needed airport improvements. Also, the guidelines emphasize that State system planning should be continuous so that plans remain current and valid.

Other important goals of the State system plan included, but are not limited to, the following:

- Provide a basis for coordination with other State and regional planning and involve local, State, and national political and individual interest in a comprehensive and systems approach to airport planning and development.
- Provide a product for use at the local level in regional/metropolitan system and master planning.
- Identify the general location of all airports (by type and size) and recommended development (with estimated cost) that will be required to make air transportation reasonably accessible and compatible with community goals.
- Provide priorities for State resource allocation.

At the time the 1978 NASP was prepared, 1,930 of the 2,868 existing public airports, about 67 percent, and 308 of the 483 new airports were included in State system plans. According to FAA, only five States had not received a grant for system planning.

Although many airports were covered by a State airport system plan, such plans were not very useful in developing the NASP in the two regions we reviewed. For example, the December 1976 airport system plan for Kansas did not show needed improvements for each airport in a form FAA could use. Nebraska's July 1977 State-funded plan contained very limited data on needed improvements and failed to use FAA airport standards to identify improvements. Missouri's December 1969 airport system plan was prepared before FAA's planning grant program began and was considered too old by FAA. Iowa's May 1976 airport system plan, although considered good by FAA, was limited to improvements for which funding was expected to be available.

In FAA's western region, California was working on but did not yet have a completed plan. Aviation officials in Arizona told us that its State plan had been prepared by consultants without any community involvement and that they considered the plan worthless.

FAA's guidelines are basically sound but adherence to them is not required. In addition, FAA had not provided sufficient planning grant funds for continuous airport system planning until fiscal year 1977. According to FAA, system plans that are not continuously maintained usually have a 5-year life, after which time a complete update of the system plan would be necessary.

In fiscal year 1974, FAA started to make grants to fund continuous airport system planning. Through the fiscal year 1976 transitional quarter, only six sponsors had received grants for such planning. In fiscal years 1977-78, 19 sponsors received grants for continuous system planning. According to an FAA official, sponsors have been reluctant to request grants for such planning because they have no assurance that additional funds will be provided yearly, which makes it difficult for them to maintain an adequate staff.

AIRPORT PLANS ARE NOT ADEQUATE TO PROMOTE REGIONAL AIRPORTS

As noted in chapter 2, development of regional airports could reduce the number of general aviation airports needed for a national airport system. FAA recognizes the merits of, and has attempted to promote, regional airports (see p. 16), but its planning guidelines do not mention the merits of such airports. Despite this, some States have considered regional airports. For example, Michigan's State airport system plan attempted to evaluate potential regional airport locations. Kansas' State airport system plan recognized that a potential existed for regional airports but failed to identify possible locations. In addition, FAA has made a number of grants to finance joint planning studies for regional airports (see p. 16), although such studies have not always been implemented.

GOOD AIRPORT PLANNING CAN ASSURE THAT NOISE PROBLEMS ARE ADDRESSED

Land use incompatibilities, attributed to ineffective zoning and other land use controls, have contributed to the unavailability of land for airport expansion and increased exposure to unacceptable noise levels. Adherence to FAA's planning guidelines is needed to assure that noise control and land use compatibility studies are made at airports.

According to the Department of Transportation's November 1976 Aviation Noise Abatement Policy statement, aircraft noise is a significant annoyance for 6 to 7 million Americans. This annoyance was considered particularly serious at 23 major airports where about 500,000 people were severely bothered by aircraft noise.

The statement recognizes that the magnitude of the noise problem at any particular airport depends on many factors and that the number of noisy airports will vary, depending on the criteria used to define airport noise. For example, in contrast to the 23 major airports identified in the statement, the Air Transport Association of America had identified 26 airports as noise sensitive. The Airport Operators Council International believed all airports served by jet air carrier service were, or would soon be, affected by noise. Based on an analysis of complaints, airport use restrictions, litigation, and the number of people affected, FAA had identified 100 airports where noise was an issue in varying degrees. However, the statement stated that by any definition it was clear that an acute noise problem exists at many airports located in metropolitan areas.

Federal noise standards have been implemented to control aircraft noise at its source. Under these standards, air carriers will have until 1985 to replace or retrofit their noisy aircraft to bring them into compliance with the noise standards. The noise abatement policy statement indicates that the replacement and retrofitting of noisy aircraft should significantly reduce noise levels at the 25 largest air carrier airports as well as benefit many other air carrier airports. However, the statement recognizes that this action alone will not suffice and that airport proprietors and local governments will also need to acquire land and assure compatible land use in areas surrounding the airport to confine severe noise exposure within airport boundaries and to minimize the impact of noise beyond those boundaries.

Airport master plans which include land use and noise abatement studies provide the means for accomplishing this objective. However, many airports do not have a master plan. (See p. 24.) Also, according to State aviation officials, land use or noise abatement studies were not included in many of the existing master plans.

According to FAA's airport planning guidelines, a land use study identifies noise impacted areas and land uses in the vicinity of the airport and develops, through coordination with jurisdictions surrounding the airport, a strategy for achieving land use compatibility. Land use

studies have been mentioned in the FAA guidelines as an element of master planning almost since inception of the planning grant program.

FAA attributes the absence of master plans and land use studies therein to several factors. It stated that the planning grant program is voluntary and that sponsors may elect not to participate. It also said that total adherence to its published guidelines is not required to assure sufficient latitude in the planning process, since extensive land use planning may not be appropriate in some cases.

Because jurisdictional control is often fragmented, FAA said it strongly suggests that all master plans that are to include analysis of land use off the airport be cosponsored by the airport and involved jurisdictions or that letters of agreement be obtained. FAA said difficulties in making these arrangements have also contributed to the absence of land use studies in master planning.

In fiscal year 1977, FAA began a 2-year pilot program to fund, as one aspect of the master planning process, airport noise control and land use compatibility studies with its planning grant funds. The noise control study is designed to identify physical and procedural changes, such as the installation of noise suppression barriers and use of preferential runways, that can be made to reduce noise. The land use compatibility study is, in effect, a land use study.

Participation in this pilot program is also voluntary. Grants for such studies were to be limited to airports having or preparing up-to-date master plans because of the interrelationships that exist between this element and other elements of the master plan and the necessity for evaluating trade-offs, such as changes that lessen noise impacts but adversely affect airport capacity.

According to FAA's implementing instructions, detailed land use planning is not mandatory, but when it is desired, the jurisdiction with the authority to control land use should be involved in the study. If this is not possible, then involving the areawide/metropolitan planning organization in the study or limiting the study's work scope to generalized land use planning should be considered. A generalized land use study should consider broad policies and recommend ways to reduce and control noise.

FAA had funded 29 studies as of September 1978, at which time the pilot program expired. However, FAA plans to continue funding noise control and land use compatibility studies as an eligible master planning activity.

The proposed Aircraft and Airport Noise Reduction Act of 1978 (H.R. 8729 and S. 3279) would have authorized grants for developing noise impact maps and noise compatibility plans for individual air carrier airports. Noise impact maps, by using a single system to measure noise impacts as established by the Secretary of Transportation, would identify existing incompatible land uses and describe aircraft operations expected at the airport during 1985 and how those operations would affect such a map. Revised maps would be required if changes in airport operations would create new incompatible land uses. Noise compatibility plans would identify ways to reduce existing and prevent additional incompatible land uses within the area covered by the maps. Developing maps and plans would be purely voluntary. The act also would have authorized grants to carry out noise compatibility plans. The Congress adjourned without enacting this legislation, but this matter is expected to come up again in the 96th Congress.

AIRPORT PLANS SHOULD BE COORDINATED
WITH PUBLIC INTEREST GROUPS

FAA's master planning guidelines state that airport master plans draw widespread interest from citizens, community organizations, airport users, areawide planning agencies, conservation groups, ground transit officials, and others. The guidelines state that the plan must be coordinated with these groups during the critical stages of its development so that it will receive public acceptance.

To help accomplish this task, FAA has issued separate advisory circulars on obtaining community participation. In addition, FAA's guidelines state that airport master plans of areawide significance will be required to be incorporated in the community's unified work program. The unified work program aims to coordinate and integrate all transportation and transportation-related planning activities within a metropolitan area. The development of unified work programs, although underwritten by the Department of Transportation, is a joint responsibility of areawide planning agencies, State departments of transportation or highways, and other planning or operating agencies authorized to carry out transportation-related planning.

FAA's planning guidelines provide for developing a study design for the master plan and suggest that the study design include (1) mechanisms for obtaining citizen participation and informing the general public of the progress and results of the planning process and (2) procedures for coordination and review activities by participating and nonparticipating public and private agencies.

Similarly, FAA's guidelines for system planning state that coordination is essential. They state that the airport policies and plans of the State and municipalities should be made compatible with total transportation planning, urban land use, environmental and conservation planning, fiscal and economic policy development, and airport and aviation plans of adjoining geographic areas.

Examples we found where plans had not always been adequately coordinated follow.

In developing the master plan for Arizona's Glendale Municipal Airport, the consulting firm hired by the city to prepare the plan recommended that a new airport be built within the adjacent City of Peoria. The plan had not been coordinated with Peoria; when the plan was completed, the City of Peoria opposed it and initiated action to block building the airport there.

The master plan for development of the Pulliam Airport in Flagstaff, Arizona, called for extensive runway construction to allow the airport to handle jet aircraft. According to Arizona State officials, the plan had not been coordinated with the State, which subsequently found that the only air carrier using the airport had no intention of using jets at this airport.

NASP DEVELOPMENT NEEDS WERE NOT FULLY COORDINATED WITH AIRPORT SPONSORS

Although few airport master plans were available and airport system plans were not always useful to support development of the NASP, FAA had not fully coordinated with airport sponsors to determine their needs. Such coordination was specifically provided for in the 1976 amendments to the Airport and Airway Development Act, which directed the Secretary to consult with each airport sponsor.

In preparing the NASP, FAA instructed its regional and district offices to coordinate with State and local governments and other interested parties as appropriate, including airport operators and/or sponsors, aviation commissions, and other local planning agencies.

In the central region, FAA officials said their coordination procedures included sending each airport listed in the central region's portion of the NASP a letter outlining FAA-recommended improvements based on FAA's airport design standards. The central region's letter requested each airport to contact the region if they had any questions about FAA's recommended improvements. Although our test of these

procedures for one State indicated that the region had copies of the letters it sent to each airport, our questionnaire results in the central region showed that 27 percent of the airport representatives could recall having no contact from FAA in the year preceding publication of the 1978 NASP.

Our questionnaire showed that about 44 percent of the airport representatives nationwide could recall having no contact from FAA in the year preceding publication of the NASP requesting comments on the FAA-recommended improvements for their airports. More important, most of these representatives, and a number of representatives interviewed, contended that no one associated with their airport knew what projects FAA had recommended for their airport.

Forty-eight percent of the questionnaire respondents said they knew what projects FAA recommended for their airports. However, many of these respondents disagreed with the FAA-recommended development needs or their timing. Specifically:

- 80 percent believed one or more additional projects 1/ were needed at their airport.
- 9 percent believed some of the projects recommended were not needed.
- 13 percent believed one or more of the projects recommended by FAA for the first 5 years, 1978-82, should be deferred until later.
- 27 percent believed one or more of the projects recommended by FAA for the 6- to 10-year planning period, 1983-87, should be developed earlier in the 1978-82 time period.

FAA stated that by and large, coordination with State and local officials during preparation of the NASP was adequate. It stated that our questionnaire results understated the true level of coordination because:

1/Response to our questionnaire could not be analyzed to determine whether the additional projects needed were eligible for FAA development grants and therefore eligible for inclusion in the NASP. However, a cross analysis of our questionnaire results (questions 12 and 24) showed that at least 10 percent of all respondents had additional needs for airport improvements which were eligible for FAA development grants.

- The person receiving the questionnaire was not the same person contacted during coordination.
- In some cases, a recently published master plan was consulted in lieu of personal contact.
- In some cases, when it was felt that State aviation authorities were more familiar with the airport's needs than the county or town, coordination went through the State office.
- In many cases, the coordination may not have occurred in the past year because at small airports coordination every 2 years is deemed adequate.

We mailed our questionnaire to airport representatives, using FAA's records to identify the appropriate addressee. Our cover letter requested the respondent to obtain answers from other knowledgeable airport officials if the respondent could not reasonably answer any of the questions.

In our pretest of the questionnaire, two of the six airports we contacted stated that they had disagreed with the timing of FAA's recommended improvements and had called FAA's central region on this. However, FAA had not changed the timing for these improvements.

Various State officials and airport representatives said that they had no intention of improving their airports to the extent recommended in the NASP. For example, the NASP includes the cost for paving crosswind runways at many general aviation airports. One State official told us that most general aviation airports in his State have turf crosswind runways and that the airport sponsors simply cannot afford to pave them.

One airport representative told us that his community could develop a suitable airport without Federal aid for less money than it would cost the city to participate in a federally funded project. He said that the NASP recommended over \$1 million to improve this airport. An FAA-financed planning grant study prepared by an engineering consulting firm recommended improvements costing about \$500,000. However, the city plans to develop a suitable airport with local funds for about \$140,000.

At other airports NASP improvements were not always consistent with airport sponsor needs or with development already underway. One airport sponsor told us that a runway safety area and clear zone were needed but were not provided for in the NASP. This sponsor also planned

to improve the passenger terminal and expand the airport's aprons at a cost of \$310,000. The NASP, however, included about \$800,000 for this project. At the time the January 1978 NASP was prepared, this sponsor had a master plan study underway and according to FAA, the NASP has been revised since then to incorporate recommendations contained in the completed study.

At another airport, the NASP included \$4.2 million for terminal development; however, construction of this building began in April 1977 with a grant from the Economic Development Administration.

FAA stated that the NASP contains preliminary data which is subject to modification both in scope and estimated costs as projects move from planning to design stages. It stated that because the NASP was updated over a 2-year cycle, it may contain some stale data, such as costs for a project already under construction, or carry rough cost estimates when more accurate engineering estimates are available. However, it stated that in all cases the NASP is never far behind in adjusting its recommendations and consequently remains a realistic, reliable, and conservative national estimate.

FAA RECOGNITION OF PLANNING DEFICIENCIES AND EFFORTS TO RESOLVE THEM

In its August 1977 report "Establishment of New Major Public Airports in the United States," FAA acknowledged that:

- No mechanism exists to effectively incorporate regional planning and implementation agencies into airport master planning programs.
- Development plans usually do not address the airport environs as a system because of piecemeal planning by various agencies, although imbalances exist between airside and landside capacity.
- Mechanisms do not exist for effectively incorporating citizen participation into the airport planning process before formal public hearings are held.
- Zoning ordinances and other forms of land use controls have been ineffective.

The report suggested a number of changes for the Federal role in the airport planning process to resolve these deficiencies as follows:

- Better coordination should take place between the four levels of airport system planning (national, State, regional or metropolitan, and master plan), and consistency should be achieved at the national level.
- FAA could establish and distribute annually a set of comprehensive planning guidelines and 20-year traffic projections based on a common set of demographic, economic, and technological assumptions to ensure continuity among plans.
- Existing federally coordinated planning programs for metropolitan areas could be improved or modified as appropriate to elicit the direct cooperation and involvement of all levels of government in airport planning programs.
- Further research could be performed dealing with current questions, such as potential airport capacity increases available through implementation of non-capital innovations (for example, hourly quotas or peak-hour pricing) and the development of a long-term planning process for major new airports.
- The Department of Transportation could encourage the use of a common noise rating system.
- FAA's present efforts could be expanded to provide additional guidance on citizen involvement in airport planning and to design a program to educate the general public on positive and negative public impacts.
- Airport system planning programs could include detailed assessments of the benefits and costs of adapting military airfields for civilian use.

In response to the proposed changes recommended in the Federal role in the airport planning process, an FAA official told us that FAA:

- Was currently working with the military to obtain greater civilian use of military airfields and had several projects underway.
- Had issued advisory circulars on citizen participation, used an estimated 10 percent of planning grant funds to support citizen participation, and required in particular situations provisions for obtaining citizen participation to be included in the study designs for airport plans.

- Requires use of an integrated noise model for environmental impact statements but did not advocate any one common measurement system, such as Noise Exposure Forecast.
- Had made or sponsored numerous assessments of non-capital alternatives, had a workshop composed of system users underway to study this matter further, and used its planning grants to determine requirements for new airports.
- Gave most of its metropolitan airport system planning grants to metropolitan planning organizations, which are also responsible for surface transportation planning, and required airports to be in a system plan as a condition for a master planning grant.
- Provides terminal area forecast and technical assistance and advisory circulars and reconciles forecasts in system plans when they do not agree with the Federal forecast.
- Devised the planning process and set up a system for integrating and coordinating planning.

FAA's options for extending the act beyond 1980

In its ongoing efforts to develop a legislative proposal for extending the Airport and Airway Development Act beyond 1980, FAA had four options under consideration in June 1978.

One option would continue the existing planning grant program with some minor modifications to provide more annual funding and special emphasis on noise control/land use compatibility and access planning.

Another option would tie system and master planning more closely together by passing all planning grant funds through States and metropolitan planning organizations to strengthen the planning coordination process. Because airport sponsors are often independent or semiautonomous authorities or special districts, this approach would more closely tie airport master planning to the regional decision-making process.

FAA is also considering whether to consolidate airport system planning into a total transportation planning program. Consolidation of transportation planning programs was recommended in another of our reports. (See p. 5.) Under this option, airport system planning funds would be combined

with other Federal transportation planning funds and apportioned to recipients to be used for any type of transportation planning activities to assure a broad, intermodal approach to solving related problems; remove competition among the modes; and provide flexibility to sponsors. To minimize the potential of aviation planning being overshadowed by surface transportation activities, maximum or minimum levels for modal planning could be specified. Because of limited intermodal trade-offs during master planning, FAA did not consider it appropriate to integrate master planning into this intermodal program. Instead, under this option master planning could either be administered as it is currently or incorporated into ADAP as an eligible work activity.

The fourth option would integrate master planning with ADAP, thereby eliminating separate grant program requirements and constraints on the amount of available planning funds. This option, however, would allow sponsors to use all their funds for development at the expense of planning unless master plans were required before development projects could proceed.

Other options being considered include

- seeking increased planning authorization and appropriations, earmarking a percentage of planning funds for system planning, or combining airport system planning into a consolidated planning program to promote continuous system planning; and
- requiring airport development to proceed in accordance with an adopted master plan as a condition for Federal airport development aid.

CONCLUSIONS

More stringent requirements are needed to improve State and local airport planning if the objectives of FAA's planning grant program are to be accomplished. Airport master plans and acceptable State, regional, and metropolitan system plans should be required as a condition for Federal airport development grants to help assure that airport planning is accomplished. FAA approval of master plans and acceptance of system plans are needed to assure that plans adhere to FAA's airport planning guidelines and thus are useful in developing a reliable NASP. To assure that such plans are in fact used to support the NASP, future NASP revisions should include the condition that State and local airport plans must be used.

Adherence to and improvements in FAA planning guidelines are also needed to promote the effective location and development of airports. Guidelines should be strengthened to focus greater attention on the potential and merits of developing regional general aviation airports. Adherence is necessary to assure that proper attention is given to this matter and to assure that plans are adequately coordinated and address noise problems.

More planning grant funds will probably be needed if

- all airports are required to be covered by airport master plans and included in State and local system plans,
- adherence to FAA's planning guidelines is required, and
- a continuous system planning process is maintained.

Even with enough funds, sufficient time would be required to develop required plans. Consequently, a time limit should be set beyond which Federal airport development grants will not be provided until required plans are submitted. This time limit would also be useful in establishing a date for development of a revised NASP based on State and local planning. After the time specified, airports, especially small general aviation airports, could be exempted from having a master plan as a condition for Federal assistance if only safety or emergency improvements were needed or existing equipment or facilities needed replacement, providing the latter projects would not enlarge the airport, expand its capacity, or noticeably increase its existing activity.

Airports where noise is a problem should be required to include airport noise control and land use compatibility studies in their master planning. Noise impact maps, such as those contained in the proposed Aircraft and Airport Noise Reduction Act of 1978, could be useful in helping the airport identify whether it had a noise problem and to what extent. A general land use study would be appropriate in those instances where cooperation from adjacent jurisdictions could not be obtained. A noise control and land use compatibility study would assure that the noise problem is addressed. If acceptable reductions in noise cannot be made, then other alternatives, such as construction of a new airport, would have to be considered.

AGENCY COMMENTS AND OUR EVALUATION

FAA agreed that planning grant program objectives had not been completely achieved but believed substantial progress had been made with the appropriations available. As evidence of this, it said that industrial representatives have stated that the 1978 NASP was the best yet as a result of FAA's planning grant program.

FAA stated that its current policy was to lean heavily on airport system and master plans in developing the NASP. However, they are not always available or may be outdated or contain recommendations which for various reasons are not appropriate for a conservative statement of national airport needs. Further, it stated that the NASP is a Federal document, represents a Federal evaluation, contains implied Federal recommendations, and is clearly a Federal responsibility.

FAA stated that State system plans list the aviation facilities needed to meet the State's air transportation needs and goals and represent the State's perspective. In the ideal situation, FAA believed everything recommended in the NASP would be supported in principle by the States and localities, but it believed that in reality divergence in objectives between a national plan and State/local plans was to be expected because of differences in Federal, State, and local priorities. However, FAA believed it would be abdicating its responsibility to the Congress to deliver a professional evaluation of national needs if the NASP were reduced to a mere compilation of local desires. For this reason, FAA believed it must retain discretion to review and coordinate State and local plans, not simply package them. Because of this, FAA stated that it primarily uses the State system plans as information which it considers and evaluates in preparing the NASP.

FAA believed that its existing guidelines were sufficient to support the NASP and allow sponsors to explore a range of planning alternatives. It was opposed to conditioning plan approval and acceptability on adherence to its guidelines. It believed this would lead many airports to adopt a "cookbook" approach to planning, while in fact each planning situation has its own unique circumstances and set of solutions. It said that it currently approves major study outputs, such as the airport layout plan and the environmental impact assessment, but not elements such as the airport owner's financial plans.

Further, FAA stated that the NASP's reliability and validity is not based primarily on the sponsor's acceptance of FAA recommendations any more than the validity of State and local planning is dependent on FAA concurrence with the findings in such plans and the ability to provide Federal aid. It stated that coordination implies review--opportunity to comment and discuss--not necessarily acceptance or agreement.

We recognize that the NASP is a Federal document, but it also is to be a document supported by State and local airport plans. This was one objective of FAA's airport planning grant program and is clearly recognized in FAA's planning guidelines. According to the guidelines, State and regional airport system plans were to be structured so that applicable parts, not necessarily the whole plan, could be integrated into the NASP.

Because State plans are designed to reflect State needs, goals, and priorities, differences are expected to exist between Federal and State/local plans. However, we believe FAA approval or acceptance of State/local plans would provide a good opportunity not only for identifying such differences but for resolving them, to the extent possible, based on the logic and facts in each case. Further, when parts of airport system plans are integrated into the NASP, we believe any unresolved differences should be shown so that the realities of NASP implementation can be fully understood. We believe the Congress needs to know when plans do not exist at the State/local level for implementing NASP recommendations. Such disclosures would give the Congress a more realistic basis on which to apportion funds and identify additional areas where Federal actions might be needed to develop a national airport system.

We believe FAA's planning guidelines are for the most part sound and adherence to them would provide a methodical approach to planning, thus assuring some degree of consistency. We believe adherence to the guidelines will not restrict needed flexibility. FAA's planning guidelines identify the basic elements of planning--such as forecasts of aviation demand, demand/capacity analysis, airport layout plan as in the case of a master plan--and the basic factors and tasks necessary to accomplish them. However, the actual work undertaken is largely dictated by the circumstances at each airport, thus assuring needed flexibility. For example, the scope of a noise control and land use compatibility study would be dictated by the degree of noise at the airport. Such a study would not even be required if the airport had no noise problem, but the rationale for such a deviation should be discussed in the final plan to show it was appropriately considered.

We also believe that Federal review and approval of financing plans are appropriate and necessary not only to determine whether anticipated resources are realistic to carry out plan implementation, but to determine whether the anticipated demand for Federal assistance is consistent with Federal perspectives and priorities.

We recognize that coordination does not imply acceptance or agreement but it does imply resolving to the extent possible any differences, and we believe such differences can be resolved best in the review and approval of State and local plans. This also would provide a good opportunity to make Federal perspectives and priorities known to State/local governments so they can develop more realistic plans.

RECOMMENDATIONS TO THE CONGRESS

In considering whether to extend the Airport and Airway Development Act beyond fiscal year 1980, we recommend that the Congress, to improve State and local airport planning and to facilitate the integration of these plans into the NASP:

--Require airports to have an FAA-approved master plan and be included in an FAA acceptable State or local system plan as a condition for FAA airport development grants, unless such grants are needed to alleviate an emergency or safety problem or replace existing equipment and facilities. This can be accomplished by adding a new subsection to section 16 of the act (49 U.S.C. 1716) to read as follows:

"No airport development project shall be approved by the Secretary subsequent to (some specified date as determined by the Congress) unless (1) the airport has an airport master plan approved by the Secretary and is included in a State, regional, or metropolitan system plan acceptable to the Secretary or unless (2) the development project is needed to alleviate an emergency or safety problem or replace existing equipment and facilities which will not enlarge or expand the capacity of the airport or noticeably increase aviation activity."

--Determine whether funding levels will be sufficient to fund a higher level of planning.

--Require the Secretary to prepare another revised NASP based on the airport development needs identified in FAA-approved airport master plans and acceptable system plans. This can be accomplished by amending

section 12(i) of the act (49 U.S.C. 1712) to read as follows:

"No later than (some specified date as determined by the Congress) the Secretary shall * * * prepare and publish a revised national airport system plan for the development of public airports in the United States. * * * In addition to the information required by subsection (a), the revised plan shall include an identification of the levels of public service and the uses made of each public airport and the projected airport development necessary to fulfill the levels of services and uses of such airports during the succeeding 10-year period, as provided for in acceptable airport system and approved master plans prepared pursuant to section 16 (appropriate subsection as amended above)."

RECOMMENDATIONS TO THE
SECRETARY OF TRANSPORTATION

We recommend that the Secretary of Transportation direct the FAA Administrator to:

- Strengthen FAA planning guidelines to focus greater attention on the potential and merits of developing regional general aviation airports.
- Make, concurrent with any action taken by the Congress to require airport plans, compliance with FAA's planning guidelines a condition for approval or acceptance of airport plans.

CHAPTER 4

CHANGES NEEDED IN THE DISTRIBUTION

OF AIRPORT DEVELOPMENT GRANT FUNDS

Sufficient airport development grant funds have not been available to fund all requests for airport development; and millions of dollars in needed improvements, some of which are considered safety related, have been left unfunded. In contrast, FAA has not been able to use airport development grant funds effectively to implement the NASP or assure that important needs are addressed. Our review showed that:

- Under current legislation FAA has little control over grant funds distributed to airports based on passenger enplanements (boardings).
- Unused enplanement funds from prior years have hindered the use of discretionary funds.
- Enplanement funding provides airports with funds in inverse proportion to the airport's capability to fund its own development.

Distributing grant funds according to priorities could assure that funds are used systematically to implement the NASP and address important airport needs. The NASP, however, does not identify in a manner sufficient to set priorities important airport needs. FAA has acted to better relate NASP development needs to specific airport problems but more needs to be done.

AIRPORT IMPROVEMENT FUNDS ARE INADEQUATE FOR NEEDS

According to House Report 95-836 on the proposed Aircraft and Airport Noise Reduction Act of 1978 (H.R. 8729), about \$1.2 billion will be needed annually to eliminate the chronic backlog of safety- and capacity-related projects based on NASP development needs and current funding ratios. The report stated that authorized funding levels through fiscal year 1980, which range from about \$500 million to \$600 million a year, were adequate to cover only half the yearly development needs. Although House Bill 8729 would have increased authorized funding levels for fiscal years 1979 and 1980 to about \$800 million, this would still have been \$400 million less than annual development needs.

Further, this bill was not enacted by the 95th Congress; thus, funding remains at the \$500 million to \$600 million level.

Despite the shortage in funds, many airport sponsors are optimistic that inclusion of their airport in the NASP guarantees that FAA will be able to fund their airport development needs. For example, in anticipation of receiving an FAA grant because its airport was included in the previous NASP, the City of Smith Center, Kansas, held an election in 1976 to obtain approval for a bond issuance of \$125,000 to provide its share of the cost for runway paving and other improvements. The bond issuance passed overwhelmingly due to community recognition of the necessity for the improvements. However, after the city sold the bonds, it found that Federal aid would not be available for years. FAA was unable to fund Smith Center's airport development project during fiscal year 1978 because its discretionary funds had been allocated or assigned to higher priority projects.

Because FAA funding appears unlikely, Smith Center officials were trying to obtain funding from other sources. FAA officials said that they encouraged and in fact helped Smith Center in its efforts to obtain other funding and thus understand that Smith Center will receive aid during fiscal year 1979 from another source.

Other airport sponsors are likewise optimistic that inclusion of their airports in the NASP will assure them of funding. For example, our questionnaire showed that about 70 percent of the airport representatives believed they had a good chance of obtaining Federal funds to develop their airports in the next 10 years. In contrast to this optimism, over the past 7 years only about 47 percent of the existing NASP airports had received FAA grants for airport development.

In FAA's central region, applications for 40 projects, totaling \$38 million, could not be funded as of April 1977 because the region did not have sufficient funds. Thirty-three of the applications, totaling \$24 million, were for safety-related projects--6 projects for \$8 million were for air carrier airports, and 27 projects for \$16 million were for other classes of airports. As of October 1978, unfunded project applications totaled about \$27 million. In FAA's western region, the backlog of unfunded project applications in September 1978 was \$228 million.

According to FAA officials, safety-related needs are those improvements needed to enhance safety of current operations on the aircraft operating side of the airport. They include such items as fire/rescue vehicles and buildings, snow removal equipment, security equipment, approach and navigational aids, runway grooving, airport hazard removal, lighting, safety areas, and touchdown and centerline lighting.

FAA HAS LITTLE CONTROL
OVER ENPLANEMENT FUNDS

FAA has little control over the use of enplanement funds. For example, it cannot divert one airport sponsor's enplanement funds to another nor can it tell an airport sponsor on which project it can use its enplanement funds so long as the project is eligible for assistance under the act. During fiscal year 1978, enplanement grant funds totaled \$310 million and represented about 57 percent of all grants. (See p. 7.)

Under the Airport and Airway Development Act, as amended in 1976, two-thirds of the development grant funds authorized for air carrier airports are distributed based on passenger enplanements with each sponsor of an air carrier airport receiving

- \$6 for each of the first 50,000 passengers enplaned,
- \$4 for each of the next 50,000 passengers enplaned,
- \$2 for each of the next 400,000 passengers enplaned,
and
- \$0.50 for each passenger enplaned over 500,000.

For fiscal years 1977-80, small air carrier airports were guaranteed a minimum of \$150,000 annually, while larger air carrier airports were limited to \$10 million. The annual enplanement funds apportioned to airports are to be available to the airport sponsor for 2 succeeding years, thus enabling annual enplanement funds to be accumulated for up to 3 years to finance larger or more expensive projects. Enplanement funds can be used only for projects eligible for assistance under the act.

Prior to the 1976 amendments, FAA had denied the City of Los Angeles enplanement grant funds for its Los Angeles International Airport. The city intended to use these funds to reimburse itself for \$9.6 million previously incurred in

expanding its airport. Although FAA acknowledged that such reimbursement was eligible for a grant, FAA denied the grant on the grounds that grant funds would be exhausted on higher priority projects at other airports under the priority system it had instituted to handle the then-existing limited funds.

In response to FAA's denial, the city filed a suit ^{1/} to obtain its enplanement grant funds. On appeal, the Court of Appeals ruled in favor of the city, holding that airports are entitled under the Airport and Airway Development Act to their enplanement grant funds regardless of higher priorities elsewhere. Although the formulas for distributing enplanement grant funds were different before the 1976 amendments, enplanement funds under both the pre- and post-1976 amendments were to be apportioned to airport sponsors each fiscal year and were to remain available to the sponsor for 2 succeeding fiscal years.

Because FAA has little control over the use of enplanement funds, airport sponsors have used these funds, as in the case at Los Angeles, for projects of less importance than development needs at other airports. For example, in 1977 FAA awarded a \$9.3 million grant, all in enplanement funds, to the Port Authority of New York and New Jersey, the sponsor of the John F. Kennedy, La Guardia, and Newark International Airports, to retire bonds for airport terminal development. Bond debts are incurred with specific plans for their repayment, such as from operating revenues. Federal grants thus enable the airport to use funds reserved for bond debt retirement for other purposes. Airport sponsors must assure FAA that they have no need for a safety project before the grant can be used to retire bond debts.

According to April 1978 testimony by the Aircraft Owners and Pilots Association before the Subcommittee on Transportation, House Committee on Appropriations, 13 airports had received grants to retire bonds for terminal development, a practice the Association believed should be discontinued.

In June 1978, FAA reported that about \$32 million had or would be used during fiscal years 1976-78 for bond indebtedness retirement.

^{1/}City of Los Angeles v. Coleman, 397 F Supp. 547 (D.D.C. 1975), remanded sub nom City of Los Angeles v. Adams (D.C. Cir. 1977) 556 F. 2d 40.

UNUSED ENPLANEMENT FUNDS HINDER
EFFECTIVE USE OF DISCRETIONARY FUNDS

The use of discretionary funds has been hindered by unused enplanement funds from prior years. Under the Airport and Airway Development Act, enplanement funds not used in the year authorized were to be carried over and available for use by air carrier airports for 2 succeeding years. However, the Department of Transportation's annual appropriation acts have generally limited funding to the annual amounts contained in the authorizing legislation without making appropriate provisions for funding unused enplanement funds from prior years. To compensate for this, FAA has used its discretionary funds to (1) encourage airport sponsors to use enplanement funds in the years authorized to minimize the amount of unused enplanement funds and (2) fund to a limited extent, airport sponsors' requests for their prior year unused enplanement funds.

For example, the Airport and Airway Development Act authorized \$540 million in airport development grants for fiscal year 1978 of which \$450 million was for the development of air carrier airports--\$310 million in enplanement funds and \$140 million in discretionary funds. Together with \$85.5 million in unused enplanement funds from fiscal years 1976-77, FAA should have had available \$625.5 million. However, the fiscal year 1978 appropriation act for the Department of Transportation limited funds to the \$540 million authorized for fiscal year 1978, leaving the \$85.5 million in unused enplanement funds from fiscal years 1976-77 unfunded.

FAA is legally obligated to fund requests for prior year unused enplanement funds. To assure that funds would be available during fiscal year 1978, FAA set aside \$85.5 million of the \$140 million in fiscal year 1978 discretionary funds to cover this contingency. As the fiscal year progressed, FAA realized that about \$65.5 million in fiscal year 1978 enplanement funds would go unused, thereby enabling it to release an equivalent amount in discretionary funds. However, FAA estimates that the remaining \$20 million in discretionary funds set aside to fund requests for prior year unused enplanement funds will still be needed for this purpose.

FAA officials told us that discretionary funds will sometimes be used to augment enplanement funds to encourage the airport to use its enplanement funds, thereby minimizing the amount of unused enplanement funds. For example, in fiscal year 1977, FAA awarded a grant of \$4.25 million for development of the Lindberg Field in San Diego, California.

This grant consisted of \$1.9 million in unused enplanement funds from fiscal year 1976, about \$2 million in enplanement funds for fiscal year 1977, and \$290,000 in discretionary funds. Although the airport's accumulated enplanement funds would have been sufficient to start the project in fiscal year 1978, FAA's use of discretionary funds to start the project in fiscal year 1977 reduced by \$3.9 million the amount of unused enplanement funds carried over into fiscal year 1978.

An FAA official told us that the use of discretionary funds to encourage airports to use their enplanement funds could result in projects of lesser significance being funded before projects of greater significance.

ENPLANEMENT FUNDING PROVIDES FUNDS IN INVERSE PROPORTION TO AIRPORT'S NEED

Larger air carrier airports, although better able to pay their own way, receive more enplanement grant funds than smaller ones. The largest air carrier airport is entitled to receive up to \$10 million annually, the maximum in enplanement funds provided for under the act. In contrast, a number of air carrier airports are so small that they receive only the minimum amount of enplanement funds guaranteed by the act, or \$150,000.

According to FAA's August 1977 report "Airport Land Banking," many small airports cannot meet all their operating expenses. The report stated that based on an FAA analysis of the financial reports of 47 airports, airports did not consistently break even on operating expenses until enplanements reached about 97,000 annually. Also, airports were generally not able to meet their debt service requirements without local contributions, head taxes, or other extraordinary income until annual enplanements reached 275,000.

In testifying before the Oversight Subcommittee of the House Ways and Means Committee in January 1978, the Director of Engineering and Air Safety, Air Line Pilots Association, stated the following concerning the need for and use of Federal funds:

" * * * the ADAP formula as currently written means the rich get richer and the poor stay that way, in terms of Federal airport assistance. Large, already heavily, endowed airports continue to get the lions share of airport aid."

"Under the current formula, cities like Detroit and Dallas-Fort Worth receive heavy commitments for terminals and other nonsafety-related facilities."

"Every community, no matter its size, if served by an air carrier, is entitled to the same consideration as every other community."

RELATIONSHIP OF NASP
DEVELOPMENT TO AIRPORT PROBLEMS

Safety, capacity, and environmental (primarily noise) problems exist at many airports, but the NASP does not disclose why \$10.6 billion in development will be needed in the next decade nor what airport problems or deficiencies this \$10.6 billion will address. Knowing why NASP development is needed or the problems it will address would facilitate a better understanding of system needs and provide a rational basis for establishing system priorities.

We believe the Congress desired a better understanding of system needs on which to establish priorities when it amended the Airport and Airway Development Act in 1976. Both the House and Senate reports on the 1976 amendments (H. Rept. 94-594 and S. Rept. 94-643) criticized the old NASP as inadequate to identify system needs and determine system priorities. This criticism applies to the new NASP as well.

Instead of classifying the \$10.6 billion in NASP development needs according to airport problems, FAA classified them by type of work; that is, \$2.8 billion for land, \$5.3 billion for paving and lighting, \$375 million for approach aids, \$1 billion for terminal development, and \$1.1 billion for other items. The \$2.8 billion for land includes land necessary for a number of purposes such as noise buffer zones, safety and clear zone areas, and airport expansion. Similarly, the \$5.3 billion for paving and lighting includes grooved runways for airport safety and new or larger runways to expand airport capacity.

In June 1978, FAA directed its regional offices to reclassify NASP development needs into three cost categories and several subcategories to better relate NASP development needs to program objectives, including safety and capacity needs. A summary of the 10-year NASP development needs by program objectives follows.

	Maintain system condition		Bring airports up to standards	Expand the system			Total
	Safety/security	Reconstruction (note a)		Upgrade airports	Capacity development	New airports	
(000,000 omitted)							
Air carrier	\$420	\$640	\$1,230	\$ 920	\$2,790	\$ 500	\$ 6,500
Commuter	40	50	90	90	90	20	380
Reliever	60	50	240	140	190	220	900
General aviation	<u>300</u>	<u>240</u>	<u>580</u>	<u>610</u>	<u>380</u>	<u>730</u>	<u>2,840</u>
Total	<u>\$820</u>	<u>\$980</u>	<u>\$2,140</u>	<u>\$1,760</u>	<u>\$3,450</u>	<u>\$1,470</u>	<u>\$10,620</u>

a/Development required to maintain the functional integrity of the landing area, such as rehabilitation of pavements and replacement of lighting systems.

In reclassifying NASP development needs, FAA did not attempt to identify airport improvements needed to address noise problems. Projects for reducing airport noise such as noise buffer zones and noise suppressing equipment were made eligible for airport development grants, and thus eligible for inclusion in the NASP, by the 1976 amendments to the Airport and Airway Development Act.

FAA officials told us that they have no prescribed standards, similar to FAA airport design standards, to identify airport improvements needed to reduce noise and that they must rely on airport sponsors to identify these needs. Few airports, however, have performed airport noise control and land use compatibility studies to identify such improvements. (See p. 28.)

FAA officials believe the needs to address the noise problem could be considerable, possibly totaling billions of dollars. Our questionnaire results showed that 20 percent of airport representatives believed they had potential needs relating to noise which they considered a medium to high priority.

FUNDING ALTERNATIVES

During FAA's June 1, 1978, Consultative Planning Conference on post-1980 airport and airway development legislation, several alternatives relating to the distribution of grant funds were discussed, as follows.

- Increase or decrease percentage of discretionary funds.
- Maintain current system of distributing air carrier enplanement and discretionary funds or increase minimum enplanement funds.
- Continue current distribution of funds between air carriers and general aviation airports or increase share to general aviation airports.
- Continue distribution to general aviation on basis of area/population formula or introduce an aeronautical factor which would consider estimated activity counts, general aviation development included in the NASP, number of registered general aviation aircraft and licensed airmen by State, or the number of general aviation airports in the NASP by State.

Also discussed were several methods of financing airport development, as follows:

Direct Federal assistance option

Block grants
 Categorical grants
 Loans
 Loan guarantees

Federal facilitating legislation

Allowance
 of airport passenger
 "head taxes"
 Special Federal tax
 incentives for
 development of
 airports

CONCLUSIONS

Priorities are needed to distribute airport development grant funds, so that grant funds are effectively utilized to meet airport problems consistent with Federal goals and objectives for implementing the NASP, such as making airports safer, maintaining the existing airport system, bringing airports up to FAA standards, developing reliever airports to relieve congestion at air carrier airports, expanding the air carrier/commuter system, or making airports more compatible with their environment. Even if funding were increased, priorities would be useful to systematize implementation of the NASP and to measure progress.

The use of priorities, instead of enplanements, could also assure that airport development grants are used at airports having the greatest financial need. In addition,

the use of priorities could enable airport sponsors to determine better the likelihood that their development needs will be funded and thus promote more effective planning at the State and local levels.

FAA's reclassification of NASP development needs (see p. 50) and its study on the financial resources of airports (see p. 49) could be useful as a basis for establishing priorities. Although airport noise needs have not been adequately identified in the NASP or considered in FAA's reclassification of NASP development needs, this problem could be resolved for future revisions to the NASP and priorities refined accordingly if the recommendations in chapter 3 were fully implemented and if FAA were required to classify future NASP development needs according to airport problems.

AGENCY COMMENTS AND OUR EVALUATION

FAA stated that establishment of a priority system based on, among other things, the financial resources of an airport would be discriminatory as larger airports would probably be penalized because of their revenue producing capability. FAA also stated that it planned to revise the NASP in July 1979 and would classify NASP improvements in it according to program objectives.

We agree that such a system would be discriminatory. However, a number of Federal assistance programs, which have financial or income limits as a condition for eligibility, are likewise discriminatory. Passenger ticket taxes account for most of the receipts to the Airport and Airway Trust Fund (see p. 8), and for the most part they are collected from passengers enplaned at the largest air carrier airports. However, we see no reason why such taxes should not be re-distributed to other airports that have development needs beyond their revenue producing potential yet are essential to development of a national airport system.

RECOMMENDATIONS TO THE CONGRESS

In determining whether to expand the Airport and Airway Development Act beyond fiscal year 1980, we recommend that the Congress:

- Establish a system of priorities to implement the NASP considering airport problems and related development needs and the financial resources of airports.

--Amend section 15 of the act (49 U.S.C. 1715) to provide for distributing program funds according to established priorities.

--Require future revisions of the NASP, as recommended on page 42, to classify development needs according to airport problems, including noise.

This can be accomplished by further amending section 12(i) of the act (49 U.S.C. 1721) by adding the following after the last sentence:

"Further, projected airport development needs shall be classified according to the problems confronting airports."

QUESTIONNAIRE METHODOLOGY

We selected a random sample of 783 airports from a universe of 2,868 existing public airports listed in the NASP. We eliminated 20 of those initially selected because FAA officials told us 14 were unattended and 6 were planned new airports. We eliminated 28 more after finding that the airport sponsor/manager was responsible for multiple airports and had already been selected as part of our sample. We mailed questionnaires to a final sample of 735 airport sponsors/managers and received 614 responses, an 84-percent response rate. The final sample size and response rate by airport service level was:

<u>Service level</u>	<u>Sample size</u>	<u>Responses</u>	<u>Response rate</u> (percent)
Large air carriers	35	35	100
Other air carriers	170	148	87
Commuters	122	104	85
Relievers	113	103	91
General aviation airports	<u>295</u>	<u>224</u>	76
Total	<u>735</u>	<u>614</u>	84

We projected the data collected to the universe of existing public airports in the NASP. Because the projections are based on a statistical sample rather than the whole universe, the figures are subject to variation. To determine whether relationships existed between responses to questions, we applied a statistical test called the Mantel-Haenszel test. We used the 95-percent confidence level for these tests.

Although we directed the questionnaire to airport managers, we requested them to solicit input from other knowledgeable representatives. Thus, we believe the experiences and opinions expressed by the respondents are representative of all sponsors of existing public airports listed in the NASP.

The percentages presented in the summary questionnaire (see app. II) were based on answers given by all 614 airport representatives who responded to the questionnaire. Some of the percentages presented in the body of this report may differ from those shown in appendix II because they were computed from a base other than the total number of respondents.

QUESTIONNAIRE RESULTS (note a)

AIRPORT DEVELOPMENT SURVEY
U. S. GENERAL ACCOUNTING OFFICE



INSTRUCTIONS

Thru this questionnaire the U. S. General Accounting Office seeks to obtain information about the effect of some FAA programs on airports which are part of the National Airport System Plan. Please answer each of the following questions as completely as possible.

Space has been provided at the end of the questionnaire for any comments you have concerning this questionnaire or any other related topics.

The questionnaire is numbered only to permit us to delete your name from our mailing list when we receive your questionnaire and thus avoid sending an unnecessary follow-up request.

Please return this questionnaire in the enclosed stamped self-addressed envelope within 5 days of receiving it. If you have any questions, please call Mr. George L. Jones (816) - 374-4641.

NOTE: In filling out this questionnaire, please disregard the numbers in parenthesis to the right of a question/item; they are included to facilitate keypunching.

RESPONDENT INFORMATION:

PERSON FILLING OUT QUESTIONNAIRE: _____

TITLE: _____

TELEPHONE () _____ (number)

Section I - The Airport Development Aid Program (ADAP)

1. Since 1970 has your airport applied for a development grant under the Airport Development Aid Program? (6)

77 1. Yes

27 2. No (Skip to question 8)
 2 No Response

2. Does your airport currently have an application pending with FAA? (7)

44 1. Yes

31 2. No
 25 No Response

3. Excluding any application which is currently pending, has your airport ever been denied a grant? (8)

9 1. Yes

68 2. No
 23 No Response

4. Were your applications for Federal assistance prepared by a consulting firm rather than by you or a member of your staff? (9)

44 1. Yes

24 2. No
 6 Both
 26 No Response

a/Data expressed in percentages.

5. Please indicate the extent of your agreement or disagreement with each of the following statements concerning FAA application procedures for ADAP grants. (Check one block for each statement.)

	No Response	Strongly Agree 1.	Agree 2.	Uncertain 3.	Disagree 4.	Strongly Disagree 5.	
A. Instructions for filling out the application were very clear and understandable.	32	4	38	14	11	1	(10)
B. Too much information was requested on the application and supporting documents.	31	10	27	12	19	1	(11)
C. Assistance provided by Federal Aviation Administration officials was helpful.	31	23	35	7	3	1	(12)
D. The entire procedure of applying and obtaining a grant (or being rejected) took longer than it should.	30	22	24	11	12	1	(13)
E. The time, effort, and dollars we devoted to applying for a grant were substantial.	31	20	32	7	9	1	(14)

6. Has the FAA's application procedure ever caused lengthy delays in the installation of needed safety equipment at your airport? (15)

- 8 1. Yes
- 65 2. No (Skip to question 8)
- 27 No Response

7. If yes, please specify the equipment delayed and the length of the delay (from date of application for grant).

<u>Equipment</u>	<u>Length of Delay</u>
1. _____	_____ months
2. _____	_____ months
3. _____	_____ months

8. Please indicate the priority of the following potential airport needs at your airport. (Check one for each listed need.)

	<u>NO</u> <u>Response</u>	<u>Very high</u> <u>priority</u> 1.	<u>High</u> <u>priority</u> 2.	<u>Medium</u> <u>priority</u> 3.	<u>Low</u> <u>priority</u> 4.	<u>Very low</u> <u>priority</u> 5.	<u>Unknown</u> 6.	
A. Safety needs relating to aircraft operating areas	5	37	22	18	8	5	5	(16)
B. Other than safety needs relating to aircraft operating areas	8	16	30	28	9	4	5	(17)
C. Vehicle parking	8	8	15	23	26	18	2	(18)
D. Ground access needs	6	11	14	23	23	19	4	(19)
E. Needs relating to noise pollution	10	4	6	10	24	39	7	(20)
F. Needs relating to air pollution	11	1	2	6	25	45	10	(21)
G. Terminal needs	10	17	18	19	17	16	3	(22)
H. Other needs (Please specify)	55	25	10	1	1	1	7	(23)

9. In your opinion, what is the likelihood that in the next 10 years your airport will receive funds through the Airport Development Aid Program to meet each of the listed needs? (Check one for each need.)

	<u>No</u> <u>Response</u>	<u>Extremely</u> <u>good</u> 1.	<u>Good</u> 2.	<u>Fair</u> 3.	<u>Poor</u> 4.	<u>Extremely</u> <u>poor</u> 5.	<u>Not</u> <u>applicable</u> <u>to my</u> <u>airport</u> 6.	
A. Safety needs relating to aircraft operating areas	5	26	31	17	9	7	5	(24)
B. Other than safety needs relating to aircraft operating areas	9	15	34	17	12	8	5	(25)
C. Vehicle parking	10	4	9	21	22	23	11	(26)
D. Ground access needs	10	6	15	18	19	21	11	(27)
E. Needs relating to noise pollution	11	4	8	13	17	20	27	(28)
F. Needs relating to air pollution	12	2	5	11	19	22	29	(29)
G. Terminal needs	10	7	19	14	17	20	13	(30)
H. Other (as specified in <u>question 8</u> above)	56	8	10	8	4	7	7	(31)

10. How satisfied are you with what has been accomplished at your airport through the Airport Development Aid Program (ADAP)? (32)
- 28 1. Very satisfied (Skip to question 12)
 - 21 2. Satisfied (Skip to question 12)
 - 18 3. Neither satisfied nor dissatisfied (Skip to question 12)
 - 14 4. Dissatisfied
 - 4 5. Very dissatisfied
 - 9 NO Response

11. If you are not satisfied, please tell us why by checking each of the following statements which applies to your airport: (Check all that apply.)
- 9 My airport has requested but not received funds. (33)
 - 6 My airport has not requested funds due to the unlikelihood of receiving them. (34)
 - 4 My airport has not requested funds due to the red tape required. (35)
 - 6 My airport has received funds, but they were not sufficient. (36)
 - 10 Some of the important needs at my airport are not eligible for funding under the Airport Development Aid Program. (37)
 - 5 FAA standards require more development than my airport needs. (38)
 - 6 FAA standards require more development than my community can afford. (39)
 - 6 Other (Please specify) (40)
-
-
-

- 12A. Are there any important needs at your airport which are not eligible for funding under the Airport Development Aid Program? (41)
- 49 1. Yes
 - 21 2. No
 - 26 3. Don't know
 - 4 No Response
- B. If yes, what are those needs?
-
-
-
-

13. If yours is an air carrier airport, has FAA encouraged you to use your entitlement (enplanement) funds according to any priorities? (42)
- 80 1. My airport is not an air carrier airport
 - 13 2. Yes
 - 6 3. No
 - 1 No Response
- 14A. Has your airport used ADAP funds to procure air navigation aids? (43)
- 17 1. Yes
 - 76 2. No (Skip to question 15)
 - 7 No Response
- B. If yes, were these aids eligible for the FAA Facilities and Equipment Program? (44)
- 11 1. Yes
 - 2 2. No
 - 5 3. Don't know } (Skip to question 15)
 - 82 No Response
- C. If yes, were these aids purchased thru ADAP funds, primarily because: (Check one.) (45)
- 6 1. Our management preferred to use ADAP funds
 - 6 2. FAA encouraged us to use ADAP funds
 - 1 Other
 - 87 No Response

15. Please indicate the funding priority which you believe FAA gives to the following types of projects. (Check one for each type of project.)

	No Response	Very high priority 1.	High priority 2.	Medium priority 3.	Low priority 4.	Very low priority 5.	Unknown 6.	
A. Parking facilities	11	<u>1</u>	<u>4</u>	<u>16</u>	<u>25</u>	<u>22</u>	<u>21</u>	(46)
B. Ground access projects	11	<u>2</u>	<u>7</u>	<u>23</u>	<u>24</u>	<u>15</u>	<u>18</u>	(47)
C. Projects relating to safety of aircraft operating areas	11	<u>42</u>	<u>26</u>	<u>6</u>	<u>1</u>	<u>1</u>	<u>13</u>	(48)
D. Noise pollution projects	12	<u>12</u>	<u>23</u>	<u>18</u>	<u>7</u>	<u>3</u>	<u>25</u>	(49)
E. Air pollution projects	12	<u>9</u>	<u>22</u>	<u>15</u>	<u>11</u>	<u>3</u>	<u>28</u>	(50)
F. Terminal development	12	<u>4</u>	<u>9</u>	<u>26</u>	<u>16</u>	<u>14</u>	<u>19</u>	(51)
G. Projects (other than those relating to safety) concerning aircraft operating areas	26	<u>4</u>	<u>16</u>	<u>22</u>	<u>10</u>	<u>3</u>	<u>19</u>	(52)

16. If yours is an air carrier airport, have you always used your entitlement (enplanement) funds in the year they became available? (53)

- 80 1. My airport is not an air carrier airport (Skip to question 18)
- 10 2. No, my airport has not always used entitlement funds in the year they became available
- 9 3. Yes, my airport has always used entitlement funds in the year they became available (Skip to question 18)
- 1 No Response

17. If no, why were the funds not used in the year they became available? (54)

- * 1. Because of delays due to environmental requirements
- 1 2. Because of a lack of local funding
- 4 3. Because our proposed projects required more than one year's entitlement
- * 4. Because we had no immediate use for the funds
- 2 5. Other (Please specify) _____
2 Combination of above
91 No Response

Section II - The Planning Grant Program

18. Has your airport ever applied for a planning grant (as opposed to a development grant)? (55)

- 44 1. Yes
- 40 2. No (Skip to Section III)
- 9 3. Don't know (Skip to Section III)
- 7 No Response

*Less than one percent.

19. Has your airport ever received a planning grant? (56)

- 41 1. Yes
- 16 2. No (Skip to Section III)
- 4 3. Don't know (Skip to Section III)
- 39 No Response

20. If yes, how satisfied are you with the effect of the grant on planning for the development of your airport? (57)

- 14 1. Very satisfied (Skip to section III)
- 16 2. Satisfied (Skip to section III)
- 5 3. Neither satisfied nor dissatisfied (Skip to section III)
- 4 4. Dissatisfied
- 1 5. Very dissatisfied
- 60 No Response

21. If not satisfied, why not?

Section III - The National Airport System Plan

To qualify for planning and development grants, an airport must be included in the National Airport System Plan. The Plan is a document prepared by FAA to identify airport development projects of potential national interest. The original plan was published in 1972 and FAA is currently preparing an undated version. Because your airport is included in the revised plan, we would like to obtain some information on your airport's input into the plan.

22. During the past year has FAA contacted you or anyone associated with your airport (by letter, telephone, personal interview, etc.) to request your comments on the recommended development needs of your airport during the next 10 years?

- 51 1. Yes (58)
- 44 2. No
- 5 No Response

23. Does anyone associated with your airport know what projects FAA recommended for your airport?

- 48 1. Yes (59)
- 44 2. No
- 8 No Response

24. Regarding development items recommended by FAA for your airport, which of the following statements applies? (Check one.)

- 48 1. Items recommended by FAA plus some additional items are needed at my airport (60)
- 6 2. All items recommended by FAA are needed at my airport. No additional items are needed.
- 5 3. One or more items listed by FAA are not needed at my airport; but some items are needed other than those listed.
- 1 4. One or more items listed by FAA are not needed at my airport. No additional items are needed.
- 40 No Response

25. FAA recommends some items be developed during the 1978-82 time period and other items during the 1983-87 time period. Do you agree or disagree with the following statements concerning the timing FAA has recommended for the projects at your airport? (Check one for each statement.)

<u>Agree</u>	<u>Disagree</u>	<u>Don't Know</u>	<u>No Response</u>	
1.	2.	3.		
<input type="checkbox"/> 24	<input type="checkbox"/> 10	<input type="checkbox"/> 38	28	All items recommended by FAA are likely to be completed by the end of 1987. (61)
<input type="checkbox"/> 8	<input type="checkbox"/> 18	<input type="checkbox"/> 84	40	One or more items recommended by FAA during the 1978-82 period should be deferred until later (62)
<input type="checkbox"/> 16	<input type="checkbox"/> 7	<input type="checkbox"/> 86	41	One or more items recommended by FAA during the 1983-87 period should be developed earlier. (63)

26. When you determined the development needs for your airport, did local community leaders (other than those who manage your airport) provide input? (64)

- 31 1. Yes, a great deal
- 41 2. Yes, some
- 11 3. None
- 6 4. Don't know
- 11 No Response

27. What are the attitudes of the local communities around your airport toward the development plans you have for your airport? (65)

- 73 1. Generally favorable (Skip to question 29)
- 9 2. Generally unfavorable
- 10 3. Don't know (Skip to question 29)
- 8 No Response

28. If generally unfavorable, please briefly explain what, in your opinion, the community is opposed to and why.

29. Generally, FAA uses number of based aircraft and travel time to the nearest airport already listed in the National Airport System Plan in determining whether a general aviation airport is to be placed in the National Airport System Plan? Do you agree or disagree with this criteria? (66)

- 48 1. Agree (Skip to Section IV)
- 19 2. Disagree
- 26 3. Don't know (Skip to Section IV)
- 7 No Response

30. If you disagree, what do you believe the criteria should be, or on what should it be based?

- To 31 -

Section IV - Land Use Planning and Zoning Around Your Airport

31. Please indicate the number and type of governmental entities that have jurisdiction for land use planning and zoning of land bordering your airport.

- A. Number of city governments _____ (67-68)
- B. Number of county governments _____ (69-70)
- C. Number of other authorities (Please specify these other authorities) _____ (71-72)

32. How would you assess the cooperation given your airport by the authorities who have jurisdiction over land bordering your airport? (73)

- 33 1. Very cooperative
- 38 2. Cooperative
- 14 3. Neither cooperative nor uncooperative
- 4 4. Uncooperative
- 2 5. Very uncooperative
- 9 No Response

33. How adequate is land use planning and zoning bordering your airport? (74)

- 55 1. Adequate (Skip to Section V)
- 27 2. Inadequate
- 10 3. Don't know (Skip to Section V)
- 8 No Response

34. If you believe land use planning and zoning of land bordering your airport has been inadequate, please tell us the effect on your airport now and in the future. (Check one for each statement.)

	No Response	True now and likely to be true in the future	True now, but <u>not</u> likely to be true in the future	Not true now, but probably true in the future	Not true now and <u>not</u> likely to be true in the future	
		1.	2.	3.	4.	
A. People near my airport are unreasonably endangered	59	<u>2</u>	<u>1</u>	<u>9</u>	<u>29</u>	(75)
B. My airport is boxed-in making future expansion nearly impossible	59	<u>8</u>	<u>1</u>	<u>15</u>	<u>17</u>	(76)
C. The successful completion of an environmental impact statement is more difficult	61	<u>11</u>	<u>2</u>	<u>13</u>	<u>13</u>	(77)
D. Significant Federal and local dollars already invested in my airport could be placed in jeopardy, or may be wasted, because expansion of my airport is no longer possible	60	<u>3</u>	<u>2</u>	<u>12</u>	<u>23</u>	(78)

Card No. 1 (80)

Section V - General Information

35. Has a master plan been completed for development on and around your airport? (6)

59 1. Yes

37 2. No

4 No Response

36. Have public hearings concerning your airport been held during the last two years? (7)

46 1. Yes

49 2. No (Skip to question 38)

5 No Response

37. If yes, what was the subject of the hearings? (Check all that apply.)

20 Environmental issues (8)

24 Zoning of land bordering your airport (9)

12 Safety conditions (10)

16 Other (Please specify) (11)

38. Do you favor allowing states, rather than FAA, to administer the Airport Development Aid Program for general aviation airports? (12)

40 1. Yes

36 2. No (Skip to question 40)

20 3. No opinion (Skip to question 40)

4 No Response

39. If yes, why?

40. If you have any comments about this questionnaire, any of the subjects addressed, or other related subjects, please give your views in the space provided below. (13)

Card No. 2 (80)

BENEFIT/COST CRITERIA FOR CERTAINGENERAL AVIATION AIRPORTSExisting Airports

<u>Minutes to alternate airport</u>	<u>Based aircraft required</u>
23-27	22
28-32	12
33-37	8
38-42	6
43-47	5

New Airports

<u>Costing more than \$500,000</u>		<u>Costing more than \$1,000,000</u>	
<u>Minutes to alternate airport</u>	<u>Based aircraft required</u>	<u>Minutes to alternate airport</u>	<u>Based aircraft required</u>
23-27	32	23-27	58
28-32	18	28-32	32
33-37	12	33-37	22
38-42	10	38-42	17
43-47	8	43-47	14
48-52	6	48-52	12
53-62	5	53-57	10
		58-62	9
		63-67	8
		68-72	7
		73-82	6
		83-92	5

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