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#### 16. Abstract

This report is intended to identify costs and estimates for the improvements identified for Louisiana airports participating in the five-year planning horizon. A database was developed from airport master plans and standard unit costs from recent Louisiana Department of Transportation and Development construction projects in the area of each airport in order to determine the cost estimates. The planning process has also attempted to identify the development needs for the airports.

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#### LASP DEVELOPMENT COSTS

#### **PROGRAM OBJECTIVES**

Improvements identified in the Louisiana Airport System Plan (LASP) have been classified by the program objective that they address. The LASP objectives are identified in Table 1.

#### Table 1

#### LASP Capital Improvement Program Objectives

#### **Projects for Existing Airports:**

1. Special Programs	Items required by rule; congressional mandated items; airport hazard removal or marking; vertical visual guidance systems on all primary runways and runway lights, taxiway lighting and sign systems, and marking for all commercial service airports. These are the items listed as Safety (SAFE) on the development worksheets.
2. Reconstruction	Development required to preserve, repair, or restore the functional integrity of the landing area. These items are listed

as Reconstruction (RECN) and Preservation (PSRV) on the development worksheets.

3. Standards Improvements required to bring the airport up to recommended standards.

4. Upgrade Development which provides for accommodating larger aircraft on longer nonstop routes.

5. Capacity Expansion required to accommodate more aircraft or higher activity levels.

6. Planning Airport master planning, noise compatibility planning, and system planning.

### **Projects for New Airports:**

7. New Airport (Access) A new airport providing air access to a previously unserved area.

8. New Airport (Capacity) A new airport needed to add capacity to relieve congestion at other airports.

#### DEVELOPMENT NEEDS BY TIME PERIOD

The development needs of the system airports are identified for three time frames, based on expected aviation activity. These are:

- Short-term; 0-5 years.
- Intermediate-term; 6-10 years.
- Long-term; 11-20 years.

All costs are estimates and are given in 1992 dollars. The improvements and costs from the earlier time periods are more detailed and reflect current planning by the sponsors. However, some of the needs identified for the first five years may, and probably will, be shifted into later time periods. Some projects shown for later time periods may also be moved forward to an earlier time period.

In determining the cost estimates, a cost database was developed from airport master plans and standard unit costs from recent Louisiana Department of Transportation and Development construction projects in the area of each airport. An effort was made, without success, to develop standard unit costs based on 1990-91 contracts. Standard unit costs were developed based on the best information available; these data were then modified by cost information taken from Louisiana airport master plans and pre-applications. When developing costs for a specific airport, the airport master plan or pre-application cost information was used, where available. In some cases, the airport managers were contacted to obtain cost information. Worksheets with development items and their costs were sent to airport managers and sponsors for their review and comments. Based on their comments, the development items and costs were revised.

Development items have been identified according to the type of funding they are eligible to receive. Federal funding is available for eligible project items for airports which are included in the National Plan of Integrated Airport Systems (NPIAS). Of the 69 current and three future airports which are part of the Louisiana Airport System Plan, 54 are included in the NPIAS. The new airport to serve Plaquemines Parish is currently being evaluated. Because this airport is in the preliminary planning stages, the airport role and development costs are not known at this time. This location is included in the LASP, but in this document is not included in terms of the funding requirements. Improvements for the 17 airports which are not part of the NPIAS will be funded by the state Aviation Trust Fund. In addition, there are improvements required at some airports which the FAA will not fund. The FAA will not provide assistance for revenue generating development items such as T-hangars, fuel facilities, and paid parking spaces. The current state policy is also not to fund revenue generating items. These items require funding from the local government.

The planning process has attempted to identify the development needs for each airport. However, it is recognized that not all sponsors may be able to implement the improvements for their airport as shown. There may also be improvements that have not been identified in the plan which may become desirable in the future due to changing conditions.

#### COMMERCIAL SERVICE AIRPORTS

Commercial service airports account for the largest share of improvement costs required over the next twenty years. The cost for the next five years alone amounts to \$545.9 million. Table 2 shows the cost breakdown and 1991 enplanements for the seven Commercial Service Airports.

Table 2

Commercial Service Airports

0-5 Year Costs and 1991 Enplanements

AIRPORT	0-5 YEAR COST	1991 ENPLANEMENTS
New Orleans International	\$432,523,600	3,274,089
Baton Rouge Metropolitan	\$ 56,518,100	448,534
Shreveport Regional	\$ 27,970,000	310,938
Monroe Regional	\$ 12,661,300	112,441
Lafayette Regional	\$ 6,470,800	130,163
Lake Charles Regional	\$ 5,089,600	61,862
Alexandria-Esler Regional	\$ 4,647,000	68,873
TOTAL	\$545,880,400	4,406,900

The costs over the next twenty years for commercial service airports amount to \$784.7 million which is 78 percent of the overall projected cost of \$1 billion for all LASP airport improvements. About 60 percent of all the improvements for commercial service airports are programmed for the New Orleans International Airport, which accounts for 74 percent of the enplanements in Louisiana. The Transportation Infrastructure Model for Economic Development (TIME) program established by the state legislature will provide \$75 million to support a capital improvement program at New Orleans International Airport. This is a five-year program which will be in effect from 1990 through 1994. After 1994, capital improvements at New Orleans International Airport will be funded from the Aviation Trust Fund. A breakdown of development costs by program objective for the three time periods is given for New Orleans International Airport in Table 3. Table 4 gives these costs for the other six commercial service airports. In this table, the Special Programs project in the 6-10 year time period is to rehabilitate an Airport Rescue and Fire Fighting (ARFF) Vehicle and to renovate the ARFF building at Esler Regional Airport in Alexandria. Table 5 gives the development costs for all seven commercial service airports by program objective for the three time periods. Commercial airport development items which will upgrade the airport account for the largest share of the improvement costs. In the tables throughout the financial plan, N/A indicates Not Applicable because the program objective does not have any projects during the given time period.

Table 3

New Orleans International Airport

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years*	11-20 Years*	Totals
Special Programs	\$3,885,000	N/A	N/A	\$3,885,000
Reconstruction	\$2,266,000	N/A	N/A	\$2,266,000
Standards	\$1,655,000	N/A	N/A	\$1,655,000
Upgrade	\$423,222,600	\$49,903,500	N/A	<b>\$</b> 473,126,100
Planning	\$1,495,000	N/A	N/A	\$1,495,000
TOTAL	<b>\$</b> 432,523,600	\$49,903,500	N/A	\$482,427,100

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 4

Commercial Service Airports\*

(Excluding New Orleans International Airport)

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years**	11-20 Years"	Totals
Special Programs	\$5,675,200	\$190,000	N/A	\$5,865,200
Reconstruction	\$21,862,000	\$2,689,500	\$923,500	\$25,475,000
Standards	\$14,536,500	\$384,000	N/A	\$14,920,500
Upgrade	\$35,940,600	\$92,426,400	\$79,126,700	\$207,493,700
Planning	\$60,000	N/A	N/A	\$60,000
Capacity	\$35,282,500	\$10,461,300	\$2,706,700	\$48,450,500
TOTAL	\$113,356,800	\$106,151,200	\$82,756,900	\$302,264,900

<sup>\*</sup> The six commercial service airports (excluding New Orleans International) are:
Alexandria-Esler Regional
Baton Rouge Metropolitan
Lafayette Regional
Lake Charles Regional
Shreveport Regional

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 5 **Commercial Service Airports Development Costs by Program Objective** 

Time Period	0-5 Years	6-10 Years*	11-20 Years'	Totals
Special Programs	\$9,560,200	\$190,000	N/A	\$9,750,200
Reconstruction	\$24,128,000	\$2,689,500	\$923,500	\$27,741,000
Standards	\$16,191,500	<b>\$</b> 384,000	N/A	<b>\$</b> 16,575,500
Upgrade	\$459,163,200	\$142,329,900	\$79,126,700	\$680,619,800
Planning	\$1,555,000	N/A	N/A	\$1,555,000
Capacity	\$35,282,500	\$10,461,300	\$2,706,700	\$48,450,500
TOTAL	\$545,880,400	\$156,054,700	\$82,756,900	\$784,692,000

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### RELIEVER AIRPORTS

There are seven airports which have been designated as reliever airports by the FAA. Three of these airports (False River Airpark, Hammond Municipal Airport, and New Orleans Lakefront) are currently transport airports. Ascension-St. James is a new airport which has recently been completed. Shreveport Downtown Airport and Slidell Airport are currently utility airports which have capital improvement projects in the 0-5 year time period which would upgrade them to transport airports. St. John the Baptist Parish Airport is a utility airport which has capital improvement projects which would upgrade it to a transport airport by 2010. Reliever airports are eligible for funding from a FAA Trust Fund allocation set-aside for reliever airports, therefore the development costs for the seven reliever airports have been tabulated separately. The development costs for the three time periods are presented by objective code for the reliever airports in Table 6. Reliever airports represent four percent of the twenty-year development costs for the entire system.

Table 6

Reliever Airports\*

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years"	11-20 Years"	Totals
Special Programs	\$40,000	N/A	N/A	\$40,000
Reconstruction	\$9,692,300	\$332,000	N/A	\$10,024,300
Standards	\$4,502,800	\$202,200	N/A	\$4,705,000
Upgrade	\$5,092,100	\$5,005,600	\$354,400	\$10,452,100
Planning	\$224,300	N/A	N/A	\$224,300
Capacity	\$4,743,900	\$4,053,700	\$1,922,300	\$10,719,900
TOTAL	\$24,295,400	\$9,593,500	\$2,276,700	\$36,165,600

Ascension-St. James (new transport airport)

False River Airpark (currently a transport airport)

Hammond Municipal (currently a transport airport)

New Orleans Lakefront (currently a transport airport)

Shreveport Downtown Airport (transport airport within five years)

Slidell Airport (transport airport within five years)

St. John the Baptist Parish Airport (transport airport by 2010)

<sup>\*</sup> The seven reliever airports are:

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### **GENERAL AVIATION - Transport Airports**

There are 17 airports classified as transport airports. Within the next five years, six airports will be designated as transport airports; Vicksburg-Tallulah is a new airport and five are utility airports which have capital improvement projects in the 0-5 year time period which would upgrade the airport. There are also three utility airports with capital improvement projects which would upgrade them to transport by the year 2010. Improvement costs for these 26 transport airports represent 15 percent of the twenty-year development costs for the entire system. The seventeen airports which are currently transport airports will receive 77 percent of the twenty-year improvement costs for transport airports.

The development costs for the three time periods are presented by objective codes for transport airports in Tables 7 through 10. The development costs for the three time periods are presented by objective codes for the 17 current transport airports in Table 7. Table 8 lists the development costs for the five general aviation airports scheduled to become transport airports within the next five years and for the new Vicksburg-Tallulah transport airport. There are no Special Programs projects for these airports. Vicksburg-Tallulah's projects are listed under New Airport (Access). Table 9 lists the development costs for the three utility airports which could become transport airports by 2010. Table 10 lists the development costs for all 26 transport airports by program objective for the three time periods. The improvements to these transport airports are essential for the LASP to achieve its goal of providing adequate air access to the economic centers of the state.

Table 7

General Aviation - Transport Airports in 1990\*

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years**	11-20 Years**	Totals
Special Programs	\$2,281,000	N/A	N/A	\$2,281,000
Reconstruction	\$16,768,860	\$1,678,800	\$881,200	\$19,328,860
Standards	\$20,002,000	\$2,316,200	\$2,104,000	\$24,422,200
Upgrade	\$7,085,900	\$6,580,000	<b>\$14,732,800</b>	\$28,398,700
Planning	\$598,700	\$40,000	N/A	<b>\$</b> 638,700
Capacity	\$41,872,300	\$2,576,100	\$821,400	<b>\$45,269,800</b>
TOTAL	\$88,608,760	\$13,191,100	\$18,539,400	\$120,339,260

<sup>\*</sup> The 17 airports that are currently transport airports (but not reliever airports) are:

Abbeville Municipal

Acadiana Regional

Beauregard Parish

Allen Parish Airport

Chennault Industrial

DeQuincy Industrial Airpark

DeSoto Parish

Eunice Airport

George R. Carr Memorial Airport

Harry P. Williams Memorial

Houma-Terrebonne

Jennings Airport

Minden-Webster

Natchitoches Regional

Red River Parish

Southland Field

St. Landry Parish - Ahart Field

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 8

General Aviation Transport Airports Within 5 Years\*

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years**	11-20 Years"	Totals
Reconstruction	\$914,400	N/A	N/A	<b>\$</b> 914,400
Standards	\$466,700	\$217,500	N/A	<b>\$</b> 68 <b>4,2</b> 00
Upgrade	\$2,404,400	\$1,168,000	\$557,900	<b>\$4,130,300</b>
Planning	\$50,000	N/A	N/A	\$50,000
Capacity	\$870,700	\$2,148,500	\$350,000	\$3,369,200
New Airport (Access)	\$18,917,600	N/A	N/A	\$18,917,600
TOTAL	\$23,623,800	\$3,534,000	\$907,900	\$28,065,700

Hart Airport

Marksville Municipal

Morehouse Memorial

Ruston Municipal -----New transport airport being built to replace general aviation airport.

South Lafourche Airport

Vicksburg-Tallulah Airport -----New transport (access) airport scheduled to be completed within the next five years.

<sup>\*</sup>The six general aviation utility airports with capital improvements in the 0-5 year time period which would upgrade them to transport airports are:

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 9

General Aviation Transport Airports by 2010\*

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years**	11-20 Years**	Totals
Special Programs	\$94,300	N/A	N/A	<b>\$</b> 94,300
Reconstruction	\$866,800	\$338,600	N/A	\$1,205,400
Standards	\$2,338,800	\$556,100	N/A	\$2,894,900
Upgrade	\$1,901,100	\$701,700	N/A	\$2,602,800
Planning	\$35,000	N/A	N/A	\$35,000
Capacity	\$163,000	\$125,000	N/A	\$288,000
TOTAL	\$5,399,000	\$1,721,400	N/A	\$7,120,400

<sup>\*</sup> The three general aviation utility airports with capital improvements which would upgrade them to transport airports by 2010 are: 1.) David G. Joyce Airport, 2.) Jonesboro Airport, and 3.) Springhill Airport.

Table 10

Total General Aviation Transport Airports
Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years*	11-20 Years*	Totals
Special Programs	\$2,375,300	N/A	N/A	\$2,375,300
Reconstruction	\$18,550,060	\$2,017,400	\$881,200	\$21,448,660
Standards	\$22,807,500	\$3,089,800	\$2,104,000	\$28,001,300
Upgrade	\$11,391,400	\$8,449,700	\$15,290,700	\$35,131,800
Planning	\$683,700	\$40,000	N/A	\$723,700
Capacity	\$42,906,000	\$4,849,600	\$1,171,400	\$48,927,000
New Airport (Access)	\$18,917,600	N/A	N/A	\$18,917,600
TOTAL	\$117,631,560	\$18,446,500	\$19,447,300	\$155,525,360

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### GENERAL AVIATION UTILITY AIRPORTS

There are 14 general aviation utility airports in the National Plan of Integrated Airport Systems (NPIAS) and 17 general aviation airports which are not in the NPIAS. Improvement costs for the general aviation utility airports are budgeted at \$25.2 million for the next twenty years. Table 11 shows development costs by program objective for the 14 airports in the NPIAS. Table 12 shows development costs by program objective for the 17 airports not in the NPIAS. Table 13 shows the development costs by program objective for all 31 airports.

Table 11 General Aviation Utility Airports in the NPIAS\* **Development Costs by Program Objective** 

Time Period	0-5 Years	6-10 Years**	11-20 Years**	Totals
Special Programs	\$802,500	N/A	N/A	\$802,500
Reconstruction	\$2,495,800	N/A	N/A	\$2,495,800
Standards	\$7,113,200	\$57,600	N/A	\$7,170,800
Upgrade	\$3,680,500	\$1,388,200	\$113,100	\$5,181,800
Planning	\$35,000	N/A	N/A	\$35,000
Capacity	\$737,600	\$332,000	\$392,700	\$1,462,300
TOTAL	\$14,864,600	\$1,777,800	\$505,800	\$17,148,200

\* General Aviation utility airports in the NPIAS are:

Byerley Airport Farmerville Homer Municipal

Kelly Airport Legros Memorial

Scott

Vivian

Concordia Parish

Greater St. Tammany Airport

Jena Airport Leesville Airport Rayville Municipal

Thibodaux

Winnsboro Municipal

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 12

General Aviation Utility Airports Not in the NPIAS\*

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years**	11-20 Years**	Totals
Special Programs	<b>\$743,500</b>	N/A	N/A	<b>\$743,500</b>
Reconstruction	\$2,303,100	<b>\$</b> 349,500	N/A	\$2,652,600
Standards	\$3,037,000	\$23,000	N/A	\$3,060,000
Upgrade	\$986,400	\$61,700	N/A	\$1,048,100
Planning	\$85,000	N/A	N/A	\$85,000
Capacity	\$408,200	N/A	N/A	\$408,200
TOTAL	\$7,563,200	\$434,200	N/A	\$7,997,400

<sup>\*</sup> General Aviation utility airports not in the NPIAS are:

Arcadia-Bienville

Bunkie Municipal

Columbia Airport

Delhi Municipal

Franklinton Airport

Haynesville Airport

Jackson Airport

Jonesville Airport

Lemaire Memorial Airport

Mamou Municipal

Newellton Airport

Olla Airport

Pineville Airport

Pollock Municipal

Tensas Parish

Welsh Airport

Woodworth

<sup>\*\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 13

Total General Aviation Utility Airports

Development Costs by Program Objective

Time Period	0-5 Years	6-10 Years*	11-20 Years*	Totals
Special Programs	\$1,546,000	N/A	N/A	\$1,546,000
Reconstruction	<b>\$4,798,900</b>	<b>\$</b> 349,500	N/A	<b>\$</b> 5,148,400
Standards	\$10,150,200	\$80,600	N/A	\$10,230,800
Upgrade	\$4,666,900	\$1,449,900	\$113,100	\$6,229,900
Planning	\$120,000	N/A	N/A	\$120,000
Capacity	\$1,145,800	\$332,000	\$392,700	\$1,870,500
TOTAL	\$22,427,800	\$2,212,000	\$505,800	\$25,145,600

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### SUMMARY OF DEVELOPMENT COSTS

The total twenty-year improvement costs for all 71 airports are \$1 billion. The twenty-year improvement costs for commercial service airports are \$785 million. The twenty-year improvement costs for reliever airports are \$36 million. The twenty-year improvement costs for general aviation airports are \$181 million, of which \$156 million is for transport airports and \$25 million is for utility airports. A breakdown of these costs by airport service level is shown in Table 14. A breakdown of these twenty-year costs by program objective is provided in Table 15. The total development costs for the 0-5 year time period are provided in Table 16. The development costs for projects eligible for federal funding in the 0-5 year time period are provided in Table 17.

Table 14
Summary
Total Funding Requirements

		9 4			
Time Period	0-5 Years	6-10 Years	11-20 Years	Totals	Percentage
New Orleans	\$432,523,600	\$49,903,500	N/A	\$482,427,100	48.2%
Six Commercial	\$113,356,800	\$106,151,200	\$82,756,900	\$302,264,900	30.2%
TOTAL SCH. SVC.	\$545,880,400	\$156,054,700	\$82,756,900	\$784,692,000	78.3%
RELIEVER	\$24,295,400	\$9,593,500	\$2,276,700	36,165,600	3.6%
General Aviation					
GA-Transport in 1990	\$88,608,760	\$13,191,100	\$18,539,400	\$120,339,260	12.0%
GA-Transport within 5 Years	\$23,623,800	\$3,534,000	\$907,900	\$28,065,700	2.8%
GA-Transport by 2010	\$5,399,000	\$1,721,400	N/A	\$7,120,400	0.7%
Sub-Total GA Transport	\$117,631,560	\$18,446,500	\$19,447,300	\$155,525,360	15.5%
GA Utility NPIAS	\$14,864,600	\$1,777,800	\$505,800	\$17,148,200	1.7%
GA Utility Non-NPIAS	\$7,563,200	\$434,200	N/A	\$7,997,400	0.8%
Sub-Total GA-Utility	\$22,427,800	\$2,212,000	\$505,800	\$25,145,600	2.5%
TOTAL GENERAL AVIATION	140,059,360	20,658,500	19,953,100	180,670,960	18.0%
TOTAL ALL AIRPORTS	\$710,235,160	\$186,306,700	\$104,986,700	\$1,001,528,560	100%

<sup>\*</sup> N/A (Not Applicable)- the program objective does not have any projects during the given time period.

Table 15

Twenty-Year Development Costs by Program Objective for All LASP Airports

Time Period	Commercial*	Reliever*	<u>Genera</u> Transport	l Aviation* Utility	Totals	Percent
Special Programs	\$9,750,200	\$40,000	\$2,375,300	\$1,546,000	\$13,711,500	1.4%
Reconstruction	\$27,741,000	\$10,024,300	\$21,448,660	\$5,148,400	<b>\$</b> 64,362,360	6.4%
Standards	\$16,575,500	\$4,705,000	\$28,001,300	10,230,800	\$59,512,600	5.9%
Upgrade	\$680,619,800	\$10,452,100	<b>\$</b> 35,131,800	\$6,229,900	\$732,433,600	73.1%
Planning	\$1,555,000	\$224,300	\$723,700	\$120,000	\$2,623,000	0.3%
Capacity	\$48,450,500	\$10,719,900	\$48,927,000	\$1,870,500	\$109,967,900	11.0%
New Airport (Access)	N/A	N/A	\$18,917,600	N/A	\$18,917,600	2.0%
TOTAL	\$784,692,000	\$36,165,600	\$155,525,360	\$25,145,600	\$1,001,528,560	100%

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 16

Summary

Five-Year Development Costs by Program Objective for All LASP Airports

Time Period	Commercial*	Reliever*	General Transpo	Aviation* ort Utility	Totals	Percentage
Special Programs	<b>\$</b> 9,560,200	\$40,000	\$2,375,300	\$1,546,000	<b>\$</b> 13,521,500	1.9%
Reconstruction	on \$24,128,000	\$9,692,300	\$18,550,060	\$4,798,900	\$57,169,260	8.1%
Standards	\$16,191,500	\$4,502,800	\$22,807,500	\$10,150,200	\$53,652,000	7.6%
Upgrade	\$459,163,200	\$5,092,100	\$11,391,400	\$4,666,900	\$480,313,600	67.6%
Planning	\$1,555,000	\$224,300	\$683,700	\$120,000	\$2,583,000	0.4%
Capacity	\$35,282,500	\$4,743,900	\$42,906,000	\$1,145,800	\$84,078,200	11.8%
New Airport (Access)	N/A	N/A	\$18,917,600	N/A	\$18,917,600	2.7%
TOTAL	\$545,880,400	\$24,295,400	\$117,631,560	\$22,427,800	<b>\$710,235,160</b>	100%

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 17

Summary

Five-Year Development Costs by Program Objective for Projects Eligible for Federal Funding for All LASP Airports

Time Period	Commercial*	Reliever*	<u>Gener</u> Transp	al Aviation* ort Utility	Totals	Percentage
Special Programs	<b>\$</b> 9,560,200	\$40,000	\$2,375,300	\$802,500	\$12,778,000	1.950%
Reconstruction	\$24,128,000	\$9,692,300	\$18,492,060	\$2,495,800	\$54,808,160	8.380%
Standards	\$16,191,500	\$4,086,300	\$21,034,800	\$6,790,000	\$48,102,600	7.360%
Upgrade	\$459,163,200	\$4,954,600	\$11,391,400	\$2,711,500	\$478,220,700	73.130%
Planning	\$1,555,000	\$224,300	\$683,700	\$35,000	\$2,498,000	0.380%
Capacity	\$35,282,500	\$2,508,700	\$8,765,100	\$589,800	\$47,146,100	7.210%
New Airport (Access)	N/A	N/A	\$10,361,300	N/A	\$10,361,300	1.580%
TOTAL	\$545,880,400	\$21,506,200	\$73,103,660	\$13,424,600	\$653,914,860	100.000%

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### **FUNDING IMPLICATIONS**

Federal government financial assistance programs, together with the Louisiana Aviation Trust Fund, will play a major role in funding the LASP's implementation. This section discusses these funding roles and how they contribute to financing the LASP improvements.

#### THE FEDERAL ROLE

The federal government through the Federal Aviation Administration has played a major role in airport improvement. The Airport and Airway Development Act of 1970 established the Aviation and Airways Trust Fund into which aviation user fees are paid. Improvements to the airport and airway system are financed from the fund through grants to eligible public airport sponsors. The 1970 Act was substantially revised by the 1982 Airport and Airway Improvement Act. That act established the present Airport Improvement Program (AIP), which has provided assistance to many of the LASP airports. The Airport and Airway Safety and Capacity Act of 1987 is the most recent amendment to the 1982 Act. The AIP provides funding through FY 1992 from the Trust Fund for airport development, airport planning, and funding to plan and implement noise compatibility programs.

#### AIRPORT IMPROVEMENT PROGRAM

The Airport Improvement Program uses federal Trust Fund monies to assist local sponsors with airport improvements. Trust Fund revenues come from an assortment of aviation user fees, including a ten percent tax on airline tickets, a \$3 head tax on international enplanements, and taxes on general aviation fuel. Annual allocations from the Trust Fund are made by Congress. The annual allocation for the 1992 fiscal year was \$1.9 billion; a breakdown of the grant allocation for 1992 is shown in Table 18.

Grants are made by the FAA to eligible recipients. Not all airports are eligible for federal AIP grants. Airports must be included in the National Plan of Integrated Airport Systems (NPIAS), which is prepared by the FAA. The NPIAS airports are those that the FAA believes are the most essential to the national air transportation system. Private airports are included in the NPIAS if they are essential to the system. All Louisiana airports in the NPIAS are also in the LASP. However, not all of the LASP airports have been included in the NPIAS. Of the 69 existing and three new airports in the LASP, 18 general aviation utility airports are not in the NPIAS.

The fact that a general aviation airport is included in the NPIAS does not ensure that it will receive federal grants. The limit on AIP appropriations and FAA program priorities determines where the available funding is allocated. The FAA allocation is divided into two types of funding, entitlements and discretionary funding.

## Table 18 FY 1992 (Oct 91-92) AIP Grant Agreements U.S. Totals

Appropriation Limitation	\$1,900,000,000
ENTITLEMENTS	
Primary Airports	\$620,000,000
Cargo (Commercial Service Airports)	\$50,000,000
Alaska Supplemental	\$10,481,121
States (for General Aviation Airports)	\$228,000,000
Subtotal Entitlements	\$908,481,121
DISCRETIONARY	
Noise <sup>1</sup>	\$190,000,000
Relievers <sup>2</sup>	\$190,000,000
Commercial Service <sup>3</sup>	\$47,500,000
System Planning4	\$9,500,000
Military Airports	\$28,500,000
Carry-over Entitlements	\$155,984,363
Capacity/Safety/Security/Noise5	\$277,525,887
Remaining Discretionary <sup>6</sup>	\$92,508,629
Subtotal Discretionary	\$991,518,879
TOTAL ALL AIRPORTS	\$1,900,000,000*

Assumes:

\$620M full formula entitlements

\$ utility carry-over

- 1. 10 percent of total \$1.9 billion for planning and implementing noise compatibility programs under the Aviation Safety and Noise Abatement Act of 1979.
- 10 percent of total \$1.9 billion for reliever airports.
- 3. 2.5 percent of total \$1.9 billion for utility commercial service airports. (Louisiana does not have any utility commercial service airports.)
- 0.5 percent of total \$1.9 billion for the preparation of integrated airport system plans. 4.
- 5. 75 percent of the remainder of the discretionary funds for capacity, safety, security, or noise compatibility projects at primary airports and relievers.
- 6. 25 percent of the remainder of the discretionary funds for any eligible project at any airport.

<sup>\*</sup> May not add due to internal rounding

#### ENTITLEMENTS

**Primary Airports** - Under the 1987 Act, commercial service airports enplaning at least 10,000 passengers annually are considered primary commercial service airports and are entitled to grants based on the number of passengers enplaned. The maximum grant is \$16 million annually with a minimum entitlement of \$300,000 per airport. Airports enplaning fewer than 38,000 passengers annually receive the minimum allocation.

Cargo Entitlements - Primary airports are also entitled to funds based on their share of the total U.S. freight tonnage if they land at least 100 million tons annually.

Alaska Supplemental - Alaskan airports are apportioned at least as much money as they were apportioned in fiscal year 1980 under the previous legislation. This amounts to an additional \$10.5 million for the Alaskan airports each fiscal year.

**State Apportionment** - A total of 12 percent of the annual authorization is for use within the states and insular areas. An area/population formula is used to distribute 99 percent of these funds to the 50 states. The remainder of these funds are for projects at airports in the insular areas.

#### **DISCRETIONARY FUNDING**

The remaining funds are defined as discretionary, which means they can generally be used at any NPIAS airport in the U.S. However, a sizeable portion must be used to achieve specific funding minimums. A minimum of 10 percent of all funds is for reliever airports, 2.5 percent is for non-primary commercial service airports, 10 percent is for planning and implementing noise compatibility programs under the Aviation Safety and Noise Abatement Act of 1979, and 0.5 percent is for the preparation of integrated airport system plans. The remainder (about 15 percent) is to be used as follows: 1.) 75 percent at primary airports and relievers for capacity, safety, security, or noise compatibility projects 2.) 25 percent at any airport for any eligible project.

Projects eligible for discretionary funding compete on a national level. The amount of discretionary funding which a state might receive will vary each year. The 1992 fiscal year AIP funding for Louisiana is listed in Table 19.

Table 19 FY 1992 (Oct 91-92) AIP Grant Agreements

for Louisiana

#### **ENTITLEMENTS Primary Airports** \$8,678,790 Cargo (for Commercial Service \$240,825 Airports) State (for General Aviation Airports) \$3,398,294 Subtotal Entitlements \$12,317,909 DISCRETIONARY Noise<sup>1</sup> \$14,921,520 Relievers<sup>2</sup> \$3,449,016 Commercial Service<sup>3</sup> N/A\* System Planning \$200,000 N/A\* Military Airports N/A\* Carry-over Entitlements Remaining Discretionary **Primary Airports** \$13,287,282 Subtotal Discretionary \$31,857,818 TOTAL LOUISIANA \$44,175,727

For 1992 these funds went to Baton Rouge Metropolitan Airport and New Orleans International 1. Airport for major noise compatibility projects.

Louisiana generally receives about \$3.5 million per year.

Louisiana does not have any non-primary commercial service airports.

<sup>\*</sup> N/A (Not Applicable)- Louisiana does not have any commercial service or military airports and did not receive any carry-over entitlements in FY 1992.

#### **COMMERCIAL SERVICE AIRPORTS**

The largest percentage of AIP funds goes to the airports that have commercial service. Louisiana has seven primary commercial service airports. These airports receive AIP funding from entitlements for primary airports and cargo airports. In addition, they are eligible for discretionary funding for noise compatibility programs under the Aviation Safety and Noise Abatement Act of 1979 and for capacity, safety, security, or noise compatibility projects. In FY 1990 the commercial service airports received \$58.8 million in AIP funding. in FY 1991 they received \$11 million, and in FY 1992 they received \$22.2 million. Funding levels vary, as evident from the funding for the past three years. Commercial service airports in Louisiana receive about nine million dollars each year from FAA entitlements. Commercial service airports are also eligible to receive discretionary funds for noise compatibility and for capacity, safety, and security projects. The AIP funding has only been authorized through 1992. A re-authorization of the AIP funding is being decided by Congress. Based on previous AIP funding, and assuming that AIP funding is re-authorized at its current funding, it is estimated that annual funding for the seven primary commercial service airports will range between \$10 and \$60 million per year, with an average funding of \$40 million per year. For the five-year Capital Improvement Program, this would provide a low, medium, and high estimate of funding of \$55.6 million, \$222.2 million and \$333.3 million. Table 20 provides a breakdown of the funds required and the three different ranges of funding levels.

Table 20

Five-Year Commercial Service Airport Development Needs

and Estimated Federal AIP Funding

Possible Range of Funding	Low	Medium	High
PROJECT NEEDS IDENTIFIED <sup>1</sup>	\$545,880,400	\$545,880,400	\$545,880,400
Estimated AIP Funding Available	\$50,000,000	\$200,000,000	\$300,000,000
Estimated State/Local <sup>2</sup>	\$14,359,300	\$57,437,400	\$86,156,000
Project Needs Funded with Federal AIP	\$64,359,300	\$257,434,400	\$386,156,000
Project Needs Unfunded by Federal AIP	\$481,521,100	\$288,443,300	\$159,724,700

- 1. New Orleans International \$432,523,600 Other Six Commercial Service Airports \$113,356,800
- 2. A 25 percent local match is required for FAA funds at New Orleans International Airport. The other six air carrier airports must provide a 10 percent match. For this table, it was assumed that New Orleans International Airport will receive a proportionate share (79 percent) of the total FAA funding for commercial service airports.

All of the development items at the commercial service airports are eligible for funding. The system plan identified costs of \$432 million for the New Orleans International Airport and \$113.4 million for the other six commercial service airports over the next five years. As noted earlier, the New Orleans International Airport will receive \$75 million from the TIME program for improvements from 1990 to 1995. A breakdown of the improvement costs by objective code is given in Table 21. As shown in Table 20, the project needs unfunded by the federal AIP will be between \$160 million and \$481 million.

Table 21

Commercial Service Airports

Five-Year Development Costs by Program Objective for Projects Eligible for Federal Funding

Time Period	0-5 Years New Orleans <sup>1</sup>	0-5 Years Other Six <sup>2</sup> *	Total Commercial <sup>3</sup>
SPECIAL	\$3,885,000	\$5,675,200	\$9,560,200
PROGRAMS	40,000,000	40,010,200	47,000,200
Percentage	0.9%	5.0%	1.8%
RECONSTRUCTION	\$2,266,000	\$21,862,000	\$24,128,000
Percentage	0.5%	19.2%	4.5%
STANDARDS	\$1,655,000	\$14,536,500	\$16,191,500
Percentage	0.4%	12.8%	3.0%
UPGRADE	\$423,222,600	\$35,940,600	\$459,163,200
Percentage	97.9%	31.6%	84.1%
PLANNING	\$1,495,000	\$60,000	\$1,555,000
Percentage	0.4%	0.1%	0.3%
CAPACITY	N/A	\$35,282,500	\$35,282,500
Percentage	N/A	31.0%	65%
TOTAL	\$432,523,600	\$113,356,800	\$545,880,400

- 1. Percent of \$432,523,600 total for New Orleans International Airport.
- 2. Percent of \$113,356,800 total for six commercial service airports.
- 3. Percent of \$545,880,400 total for seven commercial service airports.

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

#### RELIEVER AIRPORTS

Reliever airports are eligible for funding from the FAA Trust Fund allocation set-aside for reliever airports. As part of the national emphasis on increasing capacity at major airports, additional grant money has become available for urban reliever airports. Reliever airports are eligible to compete with primary commercial service airports for discretionary funding for capacity, safety, security, or noise capability projects and also receive a set-aside from the discretionary funds amounting to 10 percent of the total funding.

There are seven reliever airports in the LASP. Based on the 1992 allocation and previous AIP funding and assuming that AIP funding is re-authorized at its current level, it is estimated that annual funding for the seven reliever airports will be approximately \$3.5 million per year, which is \$17.5 million over the next five years. The total improvement costs for the 0-5 year time period are \$24,295,400. Of these improvement costs, \$21,506,200 are eligible for federal funding and \$2,789,200 are for revenue generating projects which are not eligible for state or federal funding. Table 22 gives a breakdown of the funds required. Table 23 gives a breakdown of improvement costs that are eligible for federal funding. Table 24 gives a breakdown of improvement costs that are not eligible for federal funding.

Table 22

# Five-Year Reliever Airport Development Needs and Estimated Federal AIP Funding

PROJECT NEEDS IDENTIFIED	
Total 0-5 Year Funding Required	\$24,295,400
Local Funding Only	\$2,789,200
Eligible for Federal Funding	\$21,506,200
Estimated AIP Funding Available (90%)	\$17,500,000
Estimated State/Local (10%)	<b>\$</b> 1,944,444
Project Needs Funded with Federal AIP	\$19,444,444
Project Needs Unfunded by Federal AIP	\$2,061,756

According to the projection of \$3.5 million available for funding federal projects for reliever airports, \$2,061,756 may not be funded. The breakdown of the improvement costs eligible for federal funding is given in Table 23.

Table 23

Reliever Airports

Five-Year Development Costs by Program Objective for Projects Eligible for Federal Funding

Time Period	0-5 Years	Percentage of Total
Special Programs	\$40,000	0.2%
Reconstruction	\$9,692,300	45.1%
Standards	\$4,086,300	19.0%
Upgrade	\$4,954,600	23.0%
Planning	\$224,300	1.0%
Capacity	\$2,508,700	11.7%
TOTAL	\$21,506,200	100%

Table 24 shows the breakdown by objective code of the \$2.8 million airport development costs at reliever airports which are not eligible for federal (or state) funding. These are primarily for revenue-generating projects. Of the \$2.2 million in the capacity program objective, \$1.7 million is for the construction of T-hangars and/or their access taxiways and \$0.5 million is for the construction of auto parking. The standards objective consists of \$215,000 for fuel facilities and \$175,000 for terminal buildings. The upgrade program objective is for T-hangars at an airport which is to be upgraded. These are primarily revenue-generating improvements that can be designed to pay for themselves.

Table 24

Reliever Airports

Five-Year Development Costs by Program Objective
for Projects Not Eligible for Federal Funding

Time Period	0-5 Years	Percentage of Total
Standards	\$416,500	14.9%
Upgrade	\$137,500	4.9%
Capacity	\$2,235,200	80.1%
TOTAL	\$2,789,200	100%

#### **GENERAL AVIATION AIRPORTS**

Funding for general aviation airports is more limited than for commercial service airports. AIP grants for general aviation airports are made from the state's apportionment of the Trust Fund allocation set-aside for general aviation airports. General aviation airports include transport airports and utility airports in the NPIAS. Presently, Louisiana expects to receive about \$3.4 million annually from the state apportionment. Additional funding will be available from discretionary funding. In FY 1990 general aviation airports received a total of \$22 million, in FY 1991 they received \$10 million, and in FY 1992 they received \$3.4 million.

The development needs identified by the LASP for general aviation airports in the next five years and the expected amount of AIP funding are shown in Table 25. Based on previous AIP funding, and assuming that AIP funding is re-authorized at its current level of funding, it is estimated that annual funding for general aviation airports will range between \$3.4 and \$15 million per year with an average funding of nine million dollars. For the five-year capital improvement program this would provide a low, medium, and high estimate of funding of \$19 million, \$50 million and \$83 million. Table 25 provides a breakdown of the funds required for the three different ranges of funding levels.

Table 25
General Aviation Airport
Development Needs For 0-5 Years and Estimated Federal AIP Funding

Possible Range of Funding		<u>Low</u>	<u>Medium</u>	<u>High</u>
PROJECT NEEDS IDENTIFIED				
Total 0-5 Year Funding <sup>1</sup>		\$140,109,360	\$140,109,360	\$140,109,360
Amount Eligible for Federal Funding <sup>2</sup>		\$86,528,260	\$86,528,260	\$86,528,260
Estimated AIP Funding Available (90	%)	\$17,000,000	\$45,000,000	\$75,000,000
Estimated State/Local (10%)		\$1,900,000	\$5,000,000	\$8,300,000
Project Needs Funded with Federal A	IP	\$18,900,000	\$50,000,000	\$83,300,000
Project Needs Unfunded by Federal	AIP	\$67,628,260	\$36,528,260	\$3,228,260
1 Total Funding	Transport Utility	\$117,647,560 \$22,443,800		
2 Eligible for Federal Funding	Transport Utility	\$73,103,660 \$13,424,600		

If these airports receive only \$3.4 million per year, there will be \$68 million in projects not funded by the FAA. At the medium level of funding, there will be \$37 million in projects not funded by the FAA. If the high estimate of FAA funding were received, all but three million dollars could be funded.

Table 26

Transport and General Aviation Airports Five-Year Development Costs by Program Objective for Projects Eligible for Federal Funding

Time Period	Transport in 1990 <sup>1</sup>	Transport within 5 Years <sup>2</sup>	Transport by 2010 <sup>3</sup>	Utility in NPIAS**	GA in NPIAS <sup>5</sup>
SPECIAL PROGRAMS	\$2,281,000	N/A	\$94,300	\$802,500	\$3,177,800
Percentage	4.3%	N/A	1.8%	6.0%	3.7%
RECONSTRUCTION	\$16,710,860	\$914,400	\$866,800	\$2,495,800	\$20,987,860
Percentage	31.2%	6.3%	16.7%	18.6%	24.3%
STANDARDS	\$18,525,300	\$377,000	\$2,132,500	\$6,790,000	\$27,824,800
Percentage	34.7%	2.6%	41.1%	50.6%	32.2%
UPGRADE	\$7,085,900	\$2,404,400	\$1,901,100	\$2,711,500	\$14,102,900
Percentage	13.3%	16.7%	36.6%	20.2%	16.3%
PLANNING	\$598,700	\$50,000	\$35,000	\$35,000	\$718,700
Percentage	1.1%	0.4%	0.7%	0.3%	0.9%
CAPACITY	\$8,275,900	\$326,200	\$163,000	\$589,800	<b>*0</b> 254 000
Percentage	15.5%	2.3%	3.2%	4.4%	<b>\$</b> 9,354,900 10.8%
NEW APT (ACCESS)	N/A	\$10,361,300	N/A	NI/A	£10.261.000
Percentage	N/A	71.8%	N/A N/A	N/A N/A	\$10,361,300 12.0%
TOTAL	\$53,477,660	\$14,433,300	\$5,192,700	\$13,424,600	86,528,260

<sup>1.</sup> Percent of \$53,477,660

<sup>2.</sup> Percent of \$14,433,300

<sup>3.</sup> Percent of \$ 5,192,700

<sup>4.</sup> Percent of \$13,424,600

<sup>5.</sup> Percent of \$86,528,260

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

The development costs which are not eligible for federal funding for all general aviation airports in the NPIAS are given in Tables 27 and 28. Currently the state policy is to fund modular terminal buildings and minimal parking areas even though these projects are not eligible for FAA funds. Table 27 gives the breakdown by program objective for the development costs which the state will fund. Of the \$94,800 which is eligible for state funding, \$64,000 (68 percent) is for the construction of modular terminal buildings and \$30,800 (32 percent) is for paving minimal parking areas.

Table 27

General Aviation Airports

Development Costs by Program Objective

Projects Eligible for State Funding (but not Federal Funding)

Time Period	Transport in 1990	Transport within 5 Years	Transport by 2010	General Aviation NPIAS	Total GA in the NPIAS
STANDARDS	\$16,000	\$19,200	\$18,800	\$40,800	\$94,800
Percentage	16.9%	20.3%	19.8%	43.0%	100%

Neither the federal nor the state government will fund projects that have revenue-generating potential. Table 28 gives a breakdown by program objective and airport type for the \$45.8 million in development costs for these projects. Table 29 gives a breakdown of these development costs by type of project. Most of the costs (71 percent) are for the construction of T-hangars. The access road construction is for construction or improvements to roads outside the airport property, which is not eligible for federal or state aviation funding.

Table 28

General Aviation Airports

Five-Year Development Costs by Program Objective

Projects Eligible for Local Funding Only

Time Period	Transport in 1990 <sup>1</sup> *	Transport within 5 Years <sup>2</sup>	Transport by 2010 <sup>3</sup>	Utility NPIAS**	Total GA in NPIAS <sup>5</sup>
Reconstruction	\$58,000	N/A	N/A	N/A	\$58,000
Percentage	0.2%	N/A	N/A	N/A	0.1%
Standards	\$1,460,700	\$70,500	\$187,500	\$282,400	\$2,001,100
Percentage	4.2%	0.8%	100%	20.2%	4.4%
Upgrade	N/A	N/A	N/A	\$969,000	\$969,000
Percentage	N/A	N/A	N/A	69.3%	2.1%
Capacity	\$33,596,400	\$544,500	N/A	\$147,800	\$34,288,700
Percentage	95.7%	6.0%	N/A	10.6%	74.7%
New Airport (Access)	N/A	\$8,556,300	N/A	N/A	\$8,556,3000
Percentage	N/A	93.3%	N/A	N/A	18.7%
TOTAL	\$35,115,100	\$9,171,300	\$187,500	\$1,399,200	\$45,873,100

<sup>1.</sup> Percent of \$35,115,100

<sup>2.</sup> Percent of \$9,171,300

<sup>3.</sup> Percent of \$187,500

<sup>4.</sup> Percent of \$1,399,200

<sup>5.</sup> Percent of \$45,873,100

<sup>\*</sup> N/A (Not Applicable) - the program objective does not have any projects during the given time period.

Table 29

General Aviation Airports

Five-Year Development Costs

Projects Eligible for Local Funding Only

Time Period	Transport in 1990*	Transport within 5 Years*	Transport by 2010*	Utility NPIAS*	Total GA in NPIAS	Percent of Total
Construct T- Hangars	\$27,155,000	\$4,781,400	N/A	\$519,000	\$32,455,400	70.89%
Construct Auto Parking	\$61,400	\$489,400	N/A	\$38,800	\$589,600	1.29%
Install Fuel Facilities	\$73,000	\$300,500	N/A	\$315,000	\$688,500	1.50%
Construct Terminal Building	\$474,000	\$300,000	N/A	\$440,000	\$1,214,000	2.65%
Construct Access Road	\$816,700	N/A	\$187,500	\$36,400	\$1,040,600	2.27%
Construct Facilities for New Air Cargo Center	\$6,470,000	N/A	N/A	N/A	\$6,470,000	14.13%
Construct Training Facility for LA Tech	N/A	\$3,300,000	N/A	N/A	\$3,300,000	7.21%
Install Water and Sewer Lines	N/A	N/A	N/A	\$50,000	50,000	0.11%
Construct Wash Rack	\$55,000	N/A	N/A	N/A	\$55,000	0.12%
Improve Signage & Aesthetics	\$10,000	N/A	N/A	N/A	\$10,000	0.02%
Total	\$35,115,100	\$9,171,300	\$187,500	\$1,399,200	\$45,873,100	100%

<sup>\*</sup> N/A (Not Applicable) - there were no projects for this category during the given time period.

## GENERAL AVIATION (NOT IN THE NPIAS)

There are 17 general aviation utility airports which are not in the NPIAS and therefore are not eligible for federal funding. The capital improvement costs over the next five years are listed by objective code in Table 30.

Table 30

General Aviation Airports Not in the NPIAS

Development Costs by Program Objective

Time Period	State	Local	0-5 Years	Percentage of Total
Special Programs	\$743,500	N/A	<b>\$743,500</b>	9.8%
Reconstruction	\$2,258,100	\$45,000	\$2,303,100	30.4%
Standards	\$2,810,000	\$227,000	\$3,037,000	40.1%
Upgrade	\$986,400	N/A	\$986,400	13.0%
Planning	\$85,000	N/A	\$85,000	1.1%
Capacity	\$138,200	\$270,000	\$408,200	5.4%
TOTAL	\$7,021,200	\$542,000	\$7,563,200	100%

For these utility airports which are not in the NPIAS, the state will fund projects which would be eligible for federal funding if the airport were part of the NPIAS. The local government must fund revenue generating projects. Of the \$542,000 of local projects, the \$270,000 in the capacity objective code is for the construction of T-hangars, the \$45,000 in the reconstruction objective code is for the replacement of a fuel system, and the \$227,000 in the standards objective code is for the construction of concrete fueling aprons (\$25,000), the construction of taxiways to T-hangars (\$15,300), and the construction of an access road (\$186,700).

The fact that most general aviation airports are unable to finance their capital improvements is certainly not an indication that their existence and improvement is not justified. Nor is the fact that the federal government is unable to fund all airport improvements an indication that the airports are not important to the communities they serve. As with other parts of the public infrastructure, there is a role for federal, state, local, and private involvement. The role of the state of Louisiana in implementing the LASP is discussed in the following section.

#### THE STATE ROLE

The value of an airport is not just in the on-site airport jobs created, the personal property taxes collected, or just as a place to enjoy the fun of flying. The real value of an airport is that it provides a foundation upon which a community can maintain, develop, and diversify its economy. The LASP is structured to provide reasonable air access to all parts of the state, the state's population, its economic resources, and its industrial base.

Businesses are using general aviation to a far greater extent than ever before. The scheduling, speed, direct routing, and security advantages for both domestic and international travel have made business aviation the fastest growing segment of the general aviation community. Business aviation, as reflected in sales and hours flown, has continued to show modest growth and is expected to grow at a faster rate than the other segments of general aviation. The use of business aviation will have a dominant effect not only on the aviation industry but on the entire state economy into the next century.

All of this strongly suggests that the state needs a program that will foster the development of the general aviation airports that can be expected to support the state's economic development.

#### THE LOUISIANA AVIATION TRUST FUND

In 1989, the Louisiana legislature proposed and Louisiana voters approved an addition to the constitution of the state creating a Transportation Trust Fund. The purpose of the Aviation Trust Fund is to fund improvements to Louisiana's transportation infrastructure. Public airports are an integral component of the transportation infrastructure in Louisiana. The Louisiana Transportation Trust Fund created a dedicated source of state funds for airport improvements. The Louisiana Department of Transportation and Development is responsible for administering the state's aviation program through its Division of Aviation.

The Trust Fund provides a continuing funding source for the Division of Aviation to meet its responsibilities to develop and maintain a statewide system of 69 existing public airports and three new airports. Funds generated by the trust fund provide the financial resources needed for capital improvements.

The financial support allows for applications for federal airport development assistance and makes possible an extensive capital improvements program for Louisiana public airports and for new airport development.

The provisions of the Transportation Trust Fund legislation require that funds spent for airport development be put in priority. The Division of Aviation has developed and is utilizing an Aviation Needs and Priority Process established by an act of the legislature to objectively evaluate projects to be funded each year.

Funds from the Aviation Trust Fund are generated from a sales tax on aviation fuels. This tax is levied at three percent for aviation gas and four percent for jet fuel.

This revenue is essentially a user fee, whereby the users of aviation facilities and services pay for airport development. In addition, under the TIME program, New Orleans International Airport will receive about \$75 million over a period of five years, funded by the four cents per gallon aviation fuel tax. At the end of that time, the airport will then become eligible to receive aviation trust funds.

## THE ROLE OF THE STATE IN PREVIOUS YEARS

The Louisiana Office of Aviation and Public Transportation was one of the most active and innovative state aviation agencies in the country during the 1970s and early part of the 1980s. Its leadership was recognized nationally in the areas of airport planning, development, construction, and program implementation. Primarily through the efforts of the leadership within its ranks, a balanced organizational structure resulted that was able to efficiently identify and address the critical aviation needs of the state of Louisiana during this period. The singular function of the Office of Aviation and Public Transportation and its ability to maintain an overall view of aviation interests at the local, state, and national levels were central to the successful performance of agency programs.

The Office of Aviation and Public Transportation, due to its statutory mandate and the resources at its disposal, played the lead role in state airport development. The expertise for planning and developing the airports was provided by the Office of Aviation. The state of Louisiana, through the Office of Aviation, also provided the local share of money to match the Federal Aviation Administration airport improvement grants. Because of the role played by the Office of Aviation, local airport owners and operators were not required to become familiar with the long-range system role of their airport or with the process of planning and funding local airport improvements. Their role has been only to ensure the proper management and operation of the airport facilities.

The economic problems of the state of Louisiana became progressively worse during the 1980s. Budget and manpower reductions around 1984 were extensive, resulting in a curtailment of services by many state agencies. In particular, the Department of Transportation and Development (DOTD) sustained substantial cutbacks. The independent Office of Aviation was eliminated and became a division of the DOTD. In fact, there was no state funding for airport improvements. Under the DOTD, the division is still committed to its statutory mandate. However, the division's ability to carry out that mandate continues to be limited. Today staffing is less than 20 percent of the level which existed in 1984.

As part of fiscal austerity measures, the administration enacted a policy that minimizes the involvement of state government in the affairs of cities and municipalities. The local owners and operators of airports who had depended on the state for the development of their airports found themselves without access to technical and financial assistance that they relied on. Furthermore, with some exceptions, the local owners and operators do not presently have the ability to assume the responsibilities once accepted by the state. The result has been the lack of airport development and a chronic unresponsiveness to aviation needs.

#### THE FUTURE ROLE FOR THE STATE

The Aviation Program in Louisiana, as administered by the Department of Transportation and Development, has changed tremendously in the past two decades primarily because of instability in the available funding sources for both operations and capital improvements. Only recently has this situation improved because of the passage of the Louisiana Transportation Trust Fund. The trust fund is the present source of funding for the program and has added the dimension of stability that the program needs for supporting its basic structure and providing the meaningful airport development that it currently administers.

Federal funds available through grants from the FAA account for a substantial portion of the available funding resources. At the present time, funds amount to between \$45 and \$50 million annually. The federal participating share through the grant process is typically 90 percent for all eligible airports except for New Orleans International Airport, which receives grants at a 75/25 percent federal/local ratio.

The airport system in Louisiana currently consists of 69 existing and three new public use airports. Seven of the facilities are classified commercial service and 65 are of the general aviation category. The Needs and Priority Selection process used by the Division of Aviation considers these categories separately when capital improvement projects are selected annually for funding. The Division of Aviation allocates 75 percent of the annual appropriation for projects to commercial service airports and 25 percent to general aviation airports. Additionally, the administrative costs of the division are funded through the annual aviation appropriation.

The present program philosophy and policy make a distinction between primarily revenue-producing and non-revenue-producing areas of airport development when selecting eligible projects for funding through the Division of Aviation. This is not unlike the basic criteria used by the FAA to determine project eligibility. The reasoning that resulted in this policy is rooted in the belief that local government has the basic responsibility for its airport maintenance and operations. Local government is the airport owner and should only look to higher levels of the government for assistance in areas which exceed its financial capability. If the capital improvement need is for the construction of T-hangars, fuel facilities, or auto parking for which a fee is charged, then the need can be met by means of a state loan to the local governmental entity. The fees collected by the use of such facilities may then be used to help retire the incurred debt.

Should the funding level currently available to the program remain satisfactory, then it is proposed that a loan program be implemented using a percentage of the annual appropriation available through the trust fund. This has not been implemented yet because the Division of Aviation currently needs all of its resources to bring the system of airports into compliance with state and federal regulations and standards.

## THE ROLE OF LOCAL GOVERNMENT

Local governments, cities and parishes, are the owners and sponsors of the airports that serve their communities. (There are two airports currently owned by the state.) The responsibility for implementing the LASP, therefore, actually falls on the shoulders of local government. Its leaders must initiate the process of making airport improvements and requesting financial assistance from the federal and state level.

The federal AIP requires a ten percent match to be met by the state or local government. Currently this match is set at five percent state and five percent local; however, the state may increase its portion of the match up to the full ten percent. Funding is not available for revenue generating items or for maintenance items.

The airports in the LASP represent a resource not only to the community immediately served by them but to the state as a whole. Long ago, the need to develop a statewide highway system to provide access to all parts of the state was recognized and funded. State highways serving small communities and rural areas are justified as much by the fact that they complete the system as by the actual use they receive. The same argument holds true as the rationale for a state airport development program that will benefit the state's smaller airports.

The role of local government will remain pivotal in the development of the LASP. Given the resources, it is expected that the communities served by the LASP airports will participate in the program. Communities that fail to maintain and develop their airports may find their airport dropped from future state system plans. Communities willing to support the role of their LASP airport should seek the assistance of the federal programs. To ensure funding of airport development, local communities should support the role of their community airport as defined in the LASP. For airports eligible for federal assistance, funding will be available from federal and state sources. For those airports ineligible for federal assistance, funds from the Louisiana Aviation Trust Fund may be available. The deterioration and loss of a LASP airport is a loss to the system, a loss of the public resources invested in the facility, and a lost opportunity for economic development to the state and the public.

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