

PAGE MUNICIPAL  
AIRPORT  
**MASTER PLAN  
UPDATE**  
2000-2020



# Implementation Plan

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## CHAPTER 9

## IMPLEMENTATION PLAN

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### 9.1 INTRODUCTION

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The objective of this chapter is to examine the financial implementation of proposed improvements at the Page Municipal Airport.

### 9.2 CAPITAL IMPROVEMENT PROGRAM

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**Table 9-1** summarizes the 20-year airport capital improvement program (CIP) for Page. These projects are derived from the "Preferred Development Plan" selected and "Beyond 2020 Contingency Plan" documented earlier in Chapter 5. Preliminary cost estimates, in 2000 dollars, have been prepared for each project (including 10 to 20 percent for engineering and contingencies, where appropriate). A 5-percent project administration fee has also been added to the total CIP costs. As shown, the 20-year CIP totals approximately \$16.4 million.

Projects have been scheduled according to anticipated demand and allocated to one of three phases during the twenty-year planning period -- two five-year phases and one ten-year phase. Phase I projects are outlined on an annual basis through 2005, while Phase II and Phase III projects are only identified by phase and listed by anticipated order of priority. **Exhibit 9-1** illustrates the proposed three-phase development program. Phase I projects, illustrated in red, represent the Airport's highest priorities such as the 450-foot Runway 15-33 extension. Phase II projects, such as the reconstruction of auto parking by the old terminal building are color-coded green (solid). Blue (solid) identifies Phase III development -- the last phase of the master planning window.

Projects depicted with green and blue hatching also represent programmed development in Phase II (2006-2010 ) and III (2011-2020), respectively. However, these improvements are identified as Beyond 2020 (i.e. Phase IV) development in all preceding chapters. They have been incorporated into the 20-year Plan here for long-range FAA programming purposes, contingent on the findings of the Site Selection Study Update, which will determine the feasibility of relocating the airport. These projects include a second Runway 15-33 extension to 6,620 feet as well as Eastside development. Following Table 9-1 and Exhibit 9-1, a brief narrative description of each project is provided.

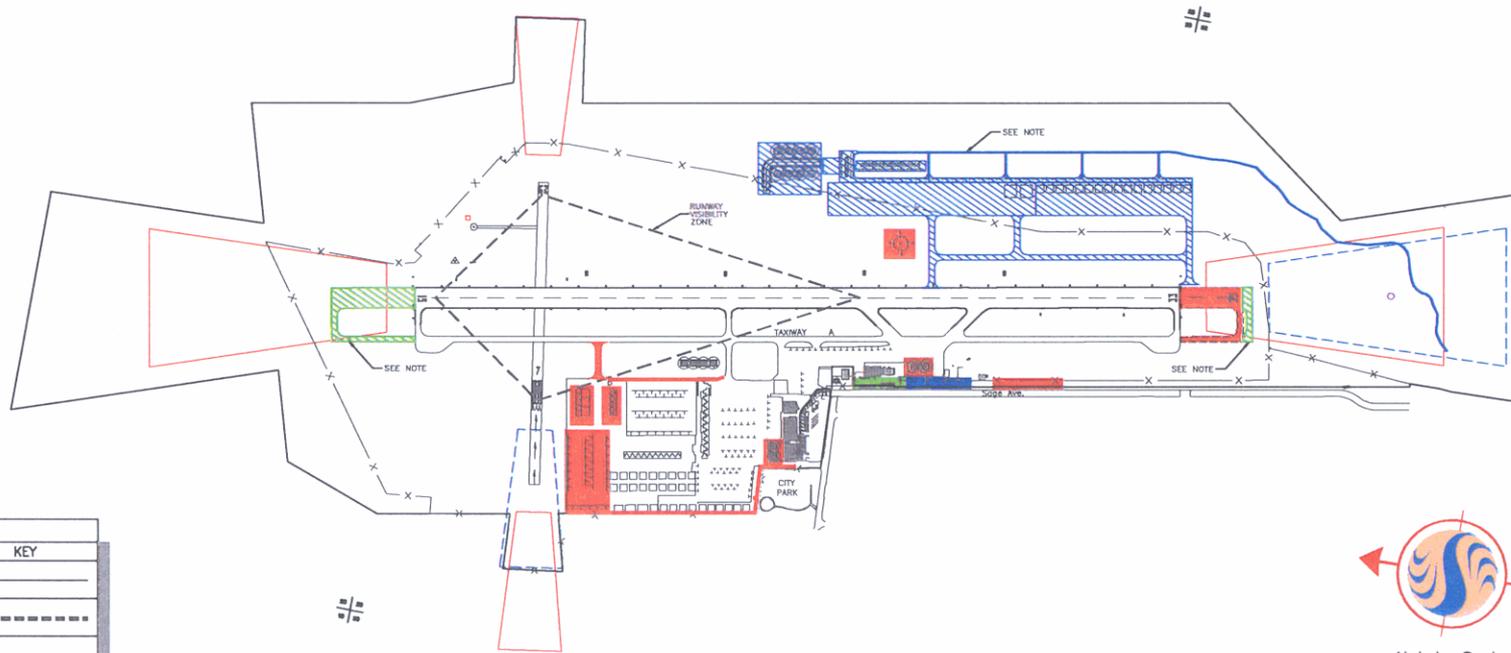
Table 9 - 1: Capital Improvement Program

		Project Description	TOTAL	
<b>Phase I</b>	2000	Upgrade MIRL and MITL	669,900	
	2000-01	Rwy 15-33 Overlay and Re-striping	1,044,400	
	2000-01	Rwy 07-25 Paving and Drainage Improvements	1,220,000	
	2001	Rwy Sweeper	140,000	
	2001	Replace 2 existing Gates with Automated Sliding Gates, Card Readers	50,000	
	2001	Environmental Assessment/Site Selection Study	110,000	
	2001-02	Pavement Preservation – Phase I	470,000	
	2002-03	Construct 450-foot Extension to Rwy 15-33 and Twy A	1,427,300	
	2003-04	Construct GA Apron and Strengthen 4 Helipads	450,000	
	2004	Apply Soil Cement to Rwy, Txwy, and Helipad edges (Infield)	94,900	
	2004	Drainage Master Plan	175,000	
	2004	Pave Vehicle Access (East) and Fire Access Road (West)	135,000	
	2004	Upgrade Segmented Circle	75,000	
	2004	Install Fire Protection System (Hydrants)	386,650	
	2004	Install Additional Security Lighting (4)	60,000	
	2004-05	Construct Auto Parking	358,250	
	2005	Drainage Design and Improvements	900,000	
	2005	Construct 16 Hangars	240,000	
			Subtotal	8,006,400
			<b>TOTAL w/ Administration @ 5.0%</b>	<b>\$8,406,720</b>
<b>Phase II</b>		Environmental Assessment	75,000	
		Install Automated Sliding Gates w/ Card Readers (Eastside)	50,000	
		Master Plan Update	174,190	
		Install Additional Security Lighting (2)	30,000	
		Construct/Re-stripe 670-foot Extension to Rwy 15-33	2,785,600	
		Construct Auto Parking and Marking (East Side)	45,300	
		Construct Vehicle Access to the East	335,500	
		Install Security Fencing Eastside/Southside	156,000	
		Pavement Preservation (Rwy 15-33) – Phase II	115,000	
		Reconfigure Term. Layout (Concession Space)	5,000	
		Reconfigure Term. Layout (Self-Claim Baggage Area)	2,700	
		Reconstruct/Expand Parking Area (Old Term. Bldg.)	75,000	
		Pavement Preservation (GA Apron) - Phase III	25,000	
			Subtotal	3,874,290
		<b>TOTAL w/ Administration @ 5.0%</b>	<b>\$ 4,068,005</b>	
<b>Phase III</b>		Construct Aircraft Parking Apron to the East	1,263,000	
		Drainage Improvements	125,000	
		Environmental Assessment	25,000	
		Construct Heliport with 6 Helipads	809,780	
		Pavement Preservation Project – Phase IV	565,500	
		Master Plan Update (2018)	225,000	
		Expand Auto Parking Area along Sage Avenue	187,315	
		Upgrade ARFF	450,000	
		Install Additional Security Lighting (4)	60,000	
			Subtotal	3,710,595
		<b>TOTAL w/ Administration @ 5.0%</b>	<b>\$ 3,896,125</b>	
		Note: Figures are estimates. Costs are in 2000 dollars.		
		<b>Total 20-Year CIP</b>	<b>\$16,370,850</b>	

Note:

Development shown in hatch for Phase II and Phase III was previously identified as "Beyond 2020 Contingency Plan", Chapter 5, Exhibit 5-2. This development was moved into the 20-year Capital Improvement Program for FAA long-range programming purposes only.

PHASING TABLE	
PHASE	KEY
PHASE I (2000-2005)	
PHASE II (2006-2010)	
PHASE III (2011-2020)	



LEGEND	
DESCRIPTION	KEY
PROPERTY LINE	
RUNWAY VISIBILITY ZONE	
EXISTING RPZ	
FUTURE RPZ	



Not to Scale



**Stantec**

**PAGE MUNICIPAL AIRPORT**  
Master Plan Update

**EXHIBIT 9-1**  
**Airport Development Phasing**

### 9.2.1 Phase I Development

Phase I development will focus on accommodating the most immediate needs of the airfield and landside facilities. The program is presented year-by-year for the first five years (2000-2005). Many of the projects included in Phase I are designed to increase and enhance operational efficiency and safety. Phase I improvements, described here, are estimated at over \$8.4 million.

**2000 – Upgrade MIRL and MITL \$ 669,900**

The existing runway lighting system (MIRL) has the original direct-buried electrical wiring which needs to be upgraded in conduit and the existing electrical vault upgraded to handle changes in the electrical loads.

**2000-01 – Runway 15-33 Overlay and Re-striping \$ 1,044,400**

This project consists of overlaying Runway 15-33 with asphalt. This project includes the re-striping of all areas that have been overlaid.

**2000-01 – Runway 07-25 Paving and Drainage Improvements \$ 1,220,000**

This project consists of reconstructing the existing gravel Runway 07-25 with asphalt to extend the life and use of this crosswind runway and prevent damage to aircraft. The project will include drainage improvements to the runway safety areas to provide protection from storm water runoff. This construction project will provide the airport with a paved crosswind runway to alleviate safety concerns and minimize future aircraft incidents.

**2001 – Runway Sweeper \$ 140,000**

As indicated by an FAA inspection done in early 2000, a runway sweeper is needed to keep the runway and taxiways clear of foreign objects and debris.

**2001 – Replace 2 Existing Gates with Automated Sliding Gates, Card Readers \$ 50,000**

The replacement of existing non-electric sliding gates (2) located at the main and emergency fire entries to the airport will protect the Air Operations Area (AOA) and improve airfield security and safety. The card readers will enhance airfield security by allowing access to airport users only.

**2001 – Environmental Assessment/Site Selection Study \$ 110,000**

This project consists of preparing an environmental assessment (EA) in accordance with FAA Order 5050.4A, the Airport Environmental Handbook (FAA, 1985). The EA would address the potential environmental impacts associated with the proposed Runway 15-33 extension by 450 feet for a total runway length of 5,950 feet, including taxiway extension and associated lighting modifications/relocations. This project also includes a site selection study. The City of Page conducted a site selection study in 1992. However, the findings of the study are outdated due to changing events and conditions. Further, the PAC selected a preferred development alternative for the existing airport based on the premise that the City would revisit the possibility of an airport relocation. The Site Selection Update would incorporate and expand on the applicable findings of the previous study as well as use the findings of the current Airport Master Plan Update.

**2001-2002 – Pavement Preservation – Phase I** **\$ 470,000**

A pavement preservation program will guide airport owners and sponsors with prioritized maintenance and repair of their airfield facilities. The project includes preservation efforts specifically for the Terminal apron and Taxiway A.

**2002-03 – Construct 450-foot Extension to Runway 15-33 and Taxiway A** **\$ 1,427,300**

Runway 15-33's current length (5,500 feet) is inadequate to accommodate 100 percent of the small aircraft fleet as well as a portion of the larger B-II aircraft fleet currently operating at the airport. This project would remedy that constraint by extending the runway by 450 feet for a total length of 5,950 feet. Further, this project includes the extension of the runway's parallel taxiway, all associated lighting extensions/ relocations (i.e. REILs, threshold lights, nav aids), resulting airfield marking and signage requirements, and partial relocation of the fence and perimeter road to the south impacted by the extension.

**2003-04 – Construct GA Apron and Strengthen 4 Helipads** **\$ 450,000**

This project proposes construction of approximately 25,000 square yards of apron area to accommodate additional aircraft parking to meet demand through the master planning period. This project includes the associated taxiway connector, taxilanes, markings and lighting to serve this development area. Further, pavements adjacent to Classic Hangar and SE of the old terminal building need to be strengthened to accommodate four helipads. The four existing helipads just west of and parallel to Taxiway A also require improvements to meet separation standards, but will be achieved under the leaseholder's efforts in accordance with lease terms.

**2004 – Apply Soil Cement to Runway, Taxiway, and Helipad Edges (infield)** **\$ 94,900**

This project will apply Soil Cement in infield areas to stabilize and prevent erosion.

**2004 – Drainage Master Plan** **\$ 175,000**

An inventory and extensive drainage analysis of existing and proposed improvements will be conducted. The project will include data collection, surveying, review of existing condition hydrology and drainage, and recommended improvements airport wide.

**2004 – Pave Vehicle Access (East) and Fire Access Road (West)** **\$ 135,000**

This project will consist of paving the existing dirt road located east of the GA apron with asphalt and allow operations personnel to circulate clear of aircraft and improve vehicular traffic around the airport. This project also includes the construction of a small (20-foot wide) fire access road from the gate entry to the existing hangars (approximately 1755 linear feet) along the western boundary of the airport. The roadway access would be controlled and limited to emergency vehicle and some private vehicle use.

**2005 – Upgrade Segmented Circle** **\$ 75,000**

The upgrade to the existing Segmented Circle uses an outdated system. An upgrade to equipment standards will allow for easier maintenance.

**2004 – Install Fire Protection System (Hydrants) \$ 386,650**

The fire protection system will consist of water supply and distribution elements to provide fire fighting capability in the aircraft parking aprons and terminal areas. The hydrant distribution system will encircle the aprons and provide sufficient flows to combat aircraft and hangar fires.

**2004 – Install Additional Security Lighting (4) \$ 60,000**

Additional security lighting is needed near the hangars and GA apron including the terminal and aircraft parking apron areas. This project proposes the installation of four additional light poles.

**2004-2005 – Construct Auto Parking \$ 358,250**

The City has a waiting list for approximately 20 spaces beyond the 35 existing long-term parking spaces available. This proposed auto parking project (approximately 11,864 square yards) will pave and expand the existing parking area to accommodate the projected long-term parking needs through the planning period.

**2005 – Drainage Design and Improvements \$ 900,000**

Drainage improvements recommended for the airport in the Drainage Master Plan will be designed and constructed.

**2005 – Construct 16 Hangars \$ 240,000**

Based on the aviation demand forecasts, 16 hangars should be constructed North of the new GA apron area. These hangars will vary in size with a total addition of approximately 135,000 square feet of hangar development. This project includes the associated taxiways to serve this development area.

### **9.2.2 Phase II Development**

Following is a detailed description of each project in the Phase II (2006-2010) development period.

**Environmental Assessment \$ 75,000**

In accordance with FAA guidelines, this Environmental Assessment (EA) will review specific impacts associated with projects in Phase II such as the runway extension and major changes in airport entrance or access roads.

**Install Automated Sliding Gates w/ Card Readers \$ 50,000**

Additional gates (2) located east to the airport will provide security to protect the Air Operations Area (AOA) and improve airfield security and safety when the new apron to the east is constructed.

**Master Plan Update (2006) \$ 174,900**

The Page Municipal Airport Master Plan will likely require an update in Phase II of the planning period. The update should include a review of the existing conditions, aviation demand forecasts, and development alternatives (related to any changes in demand). Necessary adjustments to the future capital development program should also be determined.

**Install Additional Security Lighting** **\$ 30,000**

Additional security lighting will be needed as the GA aircraft parking apron areas are expanded. This project proposes the installation of two additional light poles and power source extensions.

**Construct 670-foot Extension to Runway 15-33 and Taxiway A** **\$ 2,785,600**

To accommodate 60 percent of the large aircraft fleet as well as 100 percent of the small B-II aircraft fleet currently operating at the airport. This project would remedy that constraint by extending the runway by an additional 670 feet for a total length of 6,620 feet. Further, this project includes the extension of the runway's parallel taxiway, all associated lighting extensions/ relocations (i.e. REILs, threshold lights, nav aids), and resulting airfield marking and signage requirements.

**Construct Auto Parking and Marking (East-Side)** **\$ 45,300**

Based on the "Beyond 2020 Contingency Development Plan" for the airport, additional airport services will be located east of the runway. This proposed auto parking development project (approximately 148 automobile parking spaces) is part of the airport facilities planned for the east side and will accommodate future needs well beyond projected long-term parking requirements.

**Construct Vehicle Access to the East** **\$ 335,500**

New access to the planned facilities east of the runway, additional vehicle access (approximately 1.1 miles) from the main airport road (Sage Avenue) will be constructed under this project.

**Install Security Fencing (Eastside/Southside)** **\$ 156,000**

Additional security fencing will be required at the new Eastside facilities. This project proposes the installation of approximately 7,800 linear feet of new fencing.

**Pavement Preservation Project for Runway 15-33 - Phase II** **\$ 115,000**

Pavement preservation is necessary as part of an effective pavement maintenance program. Pavement preservation in the CIP is proposed every five years for specific parts of the airfield throughout the planning period.

**Reconfigure Terminal Layout for Concession Space Expansion** **\$ 5,000**

Based on the aviation demand forecasts, it is anticipated that a second car rental agency will require a 48-square foot area during Phase II of the master planning period. Further, projected growth anticipates demand for approximately 175 additional square feet of space to accommodate food, beverage, gift, and miscellaneous service concessions within the existing terminal. Thus, this project proposes that the terminal layout be reconfigured to accommodate these concessions within the existing confines of the terminal.

**Reconfigure Terminal Layout to Provide Self-Claim Baggage Area** **\$ 2,700**

Since the airport is currently serving and is projected to continue serving scheduled passenger service, a self-claim baggage area is required. This project proposes that a 48-square-foot area be designated for this purpose.

**Reconstruct and Expand the Parking Area Adjacent to the Old Terminal Bldg. \$ 75,000**

Aviation activity projections indicate that additional short-term auto parking is needed. This project proposes to reconstruct and expand the parking area adjacent to the old terminal building to accommodate an additional 58 parking spaces (22,320 square feet).

**Pavement Preservation Project for GA Apron – Phase III \$ 25,000**

Pavement preservation is necessary as part of an effective pavement maintenance program. This project proposes a surface treatment for the GA apron area totaling approximately 10,184 square yards. Pavement preservation projects in the CIP are proposed for specific areas on the airfield every five years throughout the planning period.

### 9.2.3 Phase III Development

Following is a detailed description of each project in the Phase III (2011-2020) development period.

**Construct Aircraft Parking Apron to the East \$1,263,000**

This project includes construction of a new aircraft apron (approximately 95,000 square yards), grading and drainage, apron tiedown markings, the taxiway connector to the new apron, and taxiway connector signage.

**Drainage Improvements \$ 125,000**

Drainage improvements recommended for the airport in the Drainage Master Plan will be designed and constructed.

**Environmental Assessment \$ 25,000**

In accordance with FAA guidelines, this environmental Assessment (EA) will consider the specific impact of any project that involves major changes such as the construction of a Heliport and other improvements included this phase.

**Construct Heliport with Six Helipads \$ 809,780**

This project consists of constructing a heliport (including earthwork, drainage, lighting and markings) and six helipads east of Runway 15-33 to accommodate future rotorcraft operations.

**Pavement Preservation Project for – Phase IV \$ 565,500**

In Phase IV, all areas not included in the previous preservation efforts will require surface treatments as part of the airport's pavement maintenance program. Pavement preservation projects in the CIP are proposed every five years throughout the planning period.

**Master Plan Update (2018) \$ 225,000**

The Page Municipal Airport Master Plan will require another update in Phase III of the planning period. Similar to Phase II, a review of the existing conditions, aviation demand forecasts, and development alternatives (related to any changes in demand) should be conducted. Necessary adjustments to the future capital development program should also be determined.

**Expand Short-term Auto Parking Area along Sage Avenue** **\$ 187,315**

Phase III aviation demand projects that an additional 81 short-term parking spaces will be needed. This project proposes expansion of the short-term parking area along Sage Avenue to provide approximately 30,960 total square feet to meet this demand.

**Upgrade ARFF** **\$ 450,000**

Part 139 airports are mandated by FAA. Larger aircraft projected to operate at Page will require an upgrade to ARFF equipment.

**Install Additional Security Lighting** **\$ 60,000**

Additional security lighting will be needed at the new Eastside aircraft parking apron areas. This project proposes the installation of four additional light poles and power source extensions.

At the completion of Phase III, Page Municipal Airport will be completely capable of accommodating the aviation activity anticipated through the planning period and beyond with the widest range of operating conditions.

**9.3 FINANCIAL ANALYSIS**

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The overall financial ability of Page was reviewed relative to future capital expenditures required for the proposed projects. In addition to the earlier identification of capital outlays, airport revenues and expenses were projected through the end of the planning period. These projections were based on historical and current budget estimates for revenues and expenses provided by the City of Page.

**9.3.1 Revenues**

Local operating revenues for Page Municipal Airport include airport leases, tiedown fees, fuel sales, and other miscellaneous revenues. Airport leases contribute the largest portion (48%) of total airport revenues. Revenue projections for the master planning period are based on a conservative 1.5 percent annual growth rate (beginning in 2001) plus estimated lease revenues for new hangar development, fees for additional tiedowns, and increases in fuel sales associated with increased operations.

**9.3.2 Expenses**

Airport expenses include maintenance and operating, administrative (including contracts), equipment, and other/miscellaneous expenses. Operating expenses are projected using a 1.0 percent increase annually.

**9.3.3 Cash Flow**

Table 9-2 outlines the estimated cash flow by phase at Page Municipal Airport through the planning period. As shown, the airport operates and will continue to operate at a deficit -- the City of Page subsidizes the shortfall. The projections presented translate to an average annual deficit of \$25,856.

Table 9 - 2: Projected Cash Flow Summary

Year	Total Revenues	Total Expenses	Net Cash Flow
Baseline	172,000	255,350	(83,350)
Phase I (2000-2005)	\$ 1,466,225	\$ 1,782,700	\$ (316,475)
Phase II (2006-2010)	\$ 1,446,107	\$ 1,569,079	\$ (122,972)
Phase III (2011- 2020)	\$ 3,278,835	\$ 3,382,358	\$ (103,523)
Total	\$ 6,191,168	\$ 6,734,137	\$ (542,970)

Notes: Historical figures (1998) are estimated using information provided by City of Page. Revenue and Expense projections through 2020 are in 2000 dollars.

### 9.3.4 Funding Sources

Historically, capital funding for Page Municipal Airport has primarily been Federal AIP, State Aviation Grants, and local (City) funding. These and other funding sources are described here.

#### ***Federal***

The primary source of airport funding for proposed capital improvements is the Federal Airport Improvement Program (AIP). The Airport and Airway Trust Fund supports the AIP. The Trust Fund provides a stable funding source whereby users pay for the services they receive. The Trust Fund is built on user fees/taxes derived from the aviation community off fuel, aircraft tires, airline tickets, domestic air cargo, and international departure fees. Congress prepares a budget for the outflows of this fund as part of the annual Federal Budget negotiations.

The Trust Fund appropriations peaked at \$2.264 billion in 1992, and then declined to a low of \$1.372 billion in 1996. Responding to concerns within the aviation community, AIP appropriations were increased to \$1.46 billion in 1997, \$1.7 billion in 1998, and \$1.95 billion in 2000.

The funding identified for Page's 20-year CIP assumes the continued distribution of airport improvement funds based on the same formula used in the past. In Arizona, the standard AIP grant share is 91.06 percent of the project cost. Projects that are eligible for grants include airport planning, airport capacity enhancement/ preservation projects, noise compatibility programs, and some airport development projects.

Eligible development projects include facilities or equipment associated with the construction, improvement, or repair (excluding routine maintenance) of an airport. Hangars, auto parking areas, most airport buildings, art objects, and decorative landscaping are ineligible. With certain restrictions, buildings that house Aircraft Rescue and Firefighting (ARFF), security, and certain types of maintenance equipment, as well as terminal buildings, may be eligible for federal funding.

- **Entitlement Funds**

For those airports with scheduled commercial passenger services, federal fund appropriations from the Airport and Airway Trust Fund have been based on a legislated apportionment formula relative to the number of enplaned passengers and state population. Enplaning passengers are the paid passengers departing an airport on commercial scheduled aircraft as reported by the airline to the FAA. These funds are often referred to as "Entitlements" and are traditionally used as a source of federal funds for CIP grants for commercial service airports. Since Page Municipal Airport has scheduled air carrier service

with at least 10,000 annual enplanements, the airport is eligible for an appropriation from this funding source.

- Discretionary Funds

Federal discretionary funds are monies from the Aviation Trust Fund that may be used at any eligible airport. Discretionary allocations are a function of project need and priorities according to the FAA priority rating system and as weighed against other projects. The 1996 reauthorization of the Trust Fund revised the distribution formulas to "set aside" a greater portion of discretionary funds for special projects and noise mitigation. Further refinements to Trust Fund allocations are likely to result from congressional debate.

### **State**

The State of Arizona has an Aviation Fund built on aviation flight property taxes. The fund is administered by the Arizona Department of Transportation Aeronautics Division. These funds are available to match both appropriated federal funds and local funds programmed for capital projects. For federally funded projects, the State will contribute 4.47 percent. Other projects not funded by or ineligible for federal funds may be State-funded up to 90%.

### **Local**

In the past, the City of Page has contributed the necessary funds for capital improvement projects. In addition, the City has provided financial assistance to the Page Municipal Airport for operations and maintenance expenses. While the City maintains an Airport Fund derived from fuel sales, leases, tiedown fees, and other sources, this income is and will continue to be insufficient to cover future capital improvement costs. However, development funding could be obtained from private investment.

Projects designed and constructed by the private sector represent another possible source for development funding. Such projects can involve substantial private commitments and result in significant contributions of facilities and amenities to meet the future needs of the users. Potential projects funded through private resources include additional general aviation hangars, fixed base operator (FBO) and terminal facilities, and aviation-related industrial development.

**Table 9-3** summarizes the estimated federal, state, and local share by Phase based on current federal and state funding formulas and eligibility. As shown, the local funding requirements for Phase I total \$723,864.

Table 9 - 3: Summary of Project Funding by Phase

PHASE I	FEDERAL	STATE	LOCAL	BY OTHERS*	TOTAL
Upgrade MIRL and MITL	610,011	29,945	29,945		669,900
Rwy 15-33 Overlay and Re-striping	951,031	46,685	46,685		1,044,400
Rwy 07-25 Paving and Drainage Improvements	1,110,932	54,534	54,534		1,220,000
Rwy Sweeper	127,484	6,258	6,258		140,000
Replace 2 existing Gates with Automated Sliding Gates, Card Readers	45,530	2,235	2,235		50,000
Environmental Assessment/Site Selection Study	100,166	4,917	4,917		110,000
Pavement Preservation – Phase I	427,982	21,009	21,009		470,000
Construct 450-foot Extension to Rwy 15-33 and Twy A	1,299,699	63,800	63,800		1,427,300
Construct GA Apron and Strengthen 4 Helipads	409,770	20,115	20,115		450,000
Apply Soil Cement to Rwy, Txwy, and Helipad edges (Infield)	86,416	4,242	4,242		94,900
Drainage Master Plan	159,355	7,823	7,823		175,000
Pave Vehicle Access (East) and Fire Access Road (West)	122,931	6,035	6,035		135,000
Upgrade Segmented Circle	68,295	3,353	3,353		75,000
Install Fire Protection System (Hydrants)	352,083	17,283	17,283		386,650
Install Additional Security Lighting (4)	54,636	2,682	2,682		60,000
Construct Auto Parking			358,250		358,250
Drainage Design and Improvements	819,540	40,230	40,230		900,000
Construct 16 Hangars				240,000	240,000
Subtotal	6,745,861	331,144	689,394	240,000	8,006,400
Administration @ 5.0%	337,293	16,557	34,470	12,000	400,320
<b>TOTAL</b>	<b>7,083,154</b>	<b>347,702</b>	<b>723,864</b>	<b>252,000</b>	<b>8,406,720</b>
PHASE II	FEDERAL	STATE	LOCAL	BY OTHERS*	TOTAL
Environmental Assessment	68,295	3,353	3,353		75,000
Install Automated Sliding Gates w/ Card Readers (Eastside)	36,424	1,788	1,788		50,000
Master Plan Update	158,617	7,786	7,786		174,190
Install Additional Security Lighting (2)	27,318	1,341	1,341		30,000
Construct/Re-stripe 670-foot Extension to Rwy 15-33	1,539,460	75,570	75,570		2,785,600
Construct Auto Parking and Marking (East Side)	38,974	1,913	1,913		45,300
Construct Vehicle Access to the East	305,506	14,997	14,997		335,500
Install Security Fencing Eastside/Southside	142,054	6,973	6,973		156,000
Pavement Preservation (Rwy 15-33) – Phase II	104,719	5,141	5,141		115,000
Reconfigure Term. Layout (Concession Space)				5,000	5,000
Reconfigure Term. Layout (Self-Claim Baggage Area)				2,700	2,700
Reconstruct/Expand Parking Area (Old Term. Bldg.)	68,295	3,353	3,353		75,000
Pavement Preservation (GA Apron) - Phase III	22,765	1,118	1,118		25,000
Subtotal	2,512,427	123,333	123,333	7,700	3,874,290
Administration @ 5.0%	125,621	6,167	6,167	385	193,715
<b>TOTAL</b>	<b>\$2,638,048</b>	<b>\$129,500</b>	<b>\$129,500</b>	<b>\$ 8,085</b>	<b>\$4,068,005</b>

Table 9 - 3: Total Capital Improvement Program by Phase (continued)

PHASE III	FEDERAL	STATE	LOCAL	BY OTHERS*	TOTAL
Construct Apron Tiedown Area to the East	1,150,088	56,456	56,456		1,263,000
Drainage Improvements	113,825	5,588	5,588		125,000
Environmental Assessment	22,765	1,118	1,118		25,000
Construct Heliport with 6 Helipads	737,386	36,197	36,197		809,780
Pavement Preservation Project – Phase IV	514,944	25,278	25,278		565,500
Master Plan Update (2018)	204,885	10,058	10,058		225,000
Expand Auto Parking Area along Sage Avenue	170,569	8,373	8,373		187,315
Upgrade in ARFF equipment	409,770	20,115	20,115		450,000
Install Additional Security Lighting (4)	54,636	2,682	2,682		60,000
Subtotal	\$3,378,868	\$165,864	\$165,864		3,710,595
Administration @ 5.0%	168,943	8,293	8,293		185,530
<b>TOTAL</b>	<b>\$3,547,811</b>	<b>\$174,157</b>	<b>\$174,157</b>	<b>\$ 0</b>	<b>3,896,125</b>
<b>Total 20-Year CIP</b>	<b>\$13,269,014</b>	<b>\$651,358</b>	<b>\$1,027,521</b>	<b>\$260,085</b>	<b>16,370,850</b>

\*Represents funding from other sources such as private developer for construction of hangars and air service provider for terminal reconfiguration.

NOTE: Figures may vary due to rounding. Figures are estimates. Costs are in 2000 dollars.

### 9.3.5 Economic Feasibility

Table 9-4 summarizes the airport's cash position for each phase based on the figures presented earlier in Tables 9-2 and 9-3. These numbers represent total funding required beyond federal and state contributions. Local funds are assumed to come from the City. However, some of this financial burden can be passed on to private investors or other sources. This table is presented to determine the economic feasibility of implementing the 20-year CIP.

Table 9 - 4: Economic Feasibility

	Net Cash Flow (from Table 9-2)	Local* Funding Required for CIP (from Table 9-3)	Net Balance (Surplus/Deficit)
Phase I – 2005	\$ (316,475)	\$ 723,864	\$ (1,040,339)
Phase II – 2010	\$ (122,972)	\$ 129,500	\$ (252,472)
Phase III – 2020	\$ (103,523)	\$ 174,157	\$ (277,680)
Total	\$ (542,970)	\$ 1,027,521	\$ (1,570,491)

\* Represents total funding required beyond federal, state, and other contributions.

## 9.4 CONCLUSIONS AND RECOMMENDATIONS

The Page Municipal Airport requires a total of \$16.4 million to fund the 20-year capital improvement program. Since federal and state funding will not cover approximately \$1,287,605 of this total amount, the funding will have to come from airport revenues, local government funding sources, and private investors.