### **COST ESTIMATES AND FUNDING**

#### A. GENERAL

This chapter delineates the recommended 2005–2024 Sussex County Airport Capital Improvement Program (CIP). It further identifies probable construction costs, in constant 2005 dollars, and establishes a preliminary funding scenario for each recommended project. Projects are presented in three development phases:

•	Phase I	2005-2009
•	Phase II	2010-2014
•	Phase III	2015-2024

The budget data provided herein represents an order of magnitude estimate of the total project cost, including construction and additional expenses such as engineering, administration, surveying, and testing. Also, as these are preliminary estimates for planning purposes, a contingency amount has been added to each item to address unforeseen miscellaneous costs. It should be noted that more detailed project definitions and associated cost estimates must be developed prior to the implementation of a project in order to ensure that sufficient funding is available to complete the identified scope of work. To this end, project cost estimates should be periodically reviewed and updated to reflect annual inflation and other changing conditions.

Major project categories are offered for each development phase in Section G of this chapter. Projects are described in more detail in Chapter Six and are depicted on the Airport Layout Plan (ALP) drawing set. The recommended phasing plan should be evaluated periodically and adjusted accordingly to reflect changes in demand, local priorities, economic conditions and/or availability of funding.



It is anticipated that four primary sources of funding will be utilized to implement the Sussex County Airport CIP. These sources include the Federal Aviation Administration (FAA), Delaware Department of Aeronautics, local (County) funding, and private investment. Each governmental source may have specific eligibility criteria and application guidelines that require diligent planning and administration to ensure that sufficient funds are received to implement this program.

#### В. FEDERAL AVIATION ADMINISTRATION FUNDING

The principal source of Federal funding for airport development is the FAA's Airport Improvement Program (AIP). This program was initially established by the Airport and Airway Improvement Act of 1982 and has been periodically reauthorized since that date. 2004, FAA Reauthorization Legislation was signed into law as the 'Vision 100 - Century of Aviation Reauthorization Act'.

The AIP Program provides entitlement funds and discretionary funds, which are allocated based on ranked priority airport development needs within the U.S. Aviation System. Sussex County Airport is currently classified as a general aviation airport and thus receives approximately \$150,000 each year through entitlements.

The funding for the Aviation Trust Fund that supports AIP occurs through a flight segment tax and airline ticket tax, a tax on cargo waybills, an international departure fee, and a per gallon tax on aviation fuel sales.

Given current statutory provisions of the FAA Reauthorization Act, AIP will provide 95 percent funding for all eligible project costs at small and non-hub airports through federal fiscal year 2007; thereafter, this level of participation will be reduced to 90 percent. In order for a project to be eligible for AIP funding, it must be depicted on the airport's FAA approved Airport Layout Drawing (ALD) and the airport must be currently included as an approved airport in the National Plan of Integrated Airport Systems (NPIAS). In general, airfield improvements, airfield safety



SUSSEX COUNTY AIRPORT

and security equipment, airport ground access, public use areas of the terminal, and land acquisition for eligible airport facilities, runway protection zones, and certain noise mitigation purposes are eligible. Airport master planning and environmental assessments are also eligible; however, revenue producing space and facility developments for parking, car rental, concession space, private tenant hangars, etc. are not eligible.

AIP discretionary funds are also made available to the Airport for high priority capacity, safety, and security projects such as the proposed Runway 4 extension project, airfield pavement rehabilitation projects, and expansion of general aviation apron areas. As a general aviation facility, the airport is also able to access additional discretionary funds that are "earmarked" by the FAA for certain safety projects such as expansion of runway safety areas to meet FAA design standards.

### C. DELAWARE DEPARTMENT OF AERONAUTICS FUNDS

Funding for airport improvements by the State of Delaware is administered by the Delaware Aeronautics Administration. Currently, State matching grants are available for airport development projects that are federally eligible. Typically, the State will match one-half of the local share, or 2.5 percent. This money is budgeted by Delaware Department of Transportation (DelDOT) through the legislative process on a year-to-year basis. It is important, therefore, for the County to submit current Airport Capital Improvement Program budgets to DelDOT well in advance of the fiscal year budgeting process (prior to May each year).

## D. LOCAL FUNDS

Local funding for the Sussex County Airport is provided by the Sussex County government. Airport operations and fiscal planning is performed by the Sussex County Engineering Department under review and approval of the Sussex County Council. The County is responsible for the remainder of the local share not covered by Federal or State funding sources noted above.



#### E. OTHER CAPITAL FUNDS

In addition to local funds previously outlined, airports have the ability to seek private funds to construct projects. These are funds typically used to construct hangars and other revenue producing facilities of the airport.

### F. AIRPORT DEVELOPMENT PROGRAM

This section identifies the projects and associated timeline required for the continued improvement and operation of Sussex County Airport during the 20-year planning period. The projects are listed by phase (time period), estimated cost, funding service, and estimated AIP eligibility. Estimated costs include design and engineering fees and a project contingency and are intended only to identify "order of magnitude of costs" for planning purposes. Changes in airport operations or demand, implementation priorities, funding availability, or economic conditions may alter the need or timing of the proposed development.

The current estimated cost of each phase and the total cost of the program are as follows:

•	Phase I -	\$38,365,000
•	Phase II -	\$ 8,550,000
•	Phase III -	\$ 8,550,000
•	Total -	\$55,465,000

Each project in the development program is included in Chapter Six, Airport Layout Plan, or is shown on the Airport Layout Plan, the Phased Development Drawing, or Terminal Area Plan sheets.



# **1.** Phase I Development (2005-2009)

Phase I of the airport development program is focused on improving operational control of the airfield, obstruction removal, land acquisition for airport development, extension of Runway 4, apron expansion, and hangar construction. Design and construction for the snow removal equipment (SRE) building and expansion of the terminal auto parking are also included in Phase I. Land acquisition is required for the extension of Runway 4, control of the RPZs, and for the realignment of Park Avenue.

An Environmental Assessment has been included in Phase I to facilitate the airport development projects. The cornerstone projects of this phase are the reconstruction of Runway 10-28, the extension of Runway 4 and the realignment of Park Avenue. The total estimate of probable costs for Phase I development is approximately \$38 million. Phase I development estimates, complete with potential funding sources, are presented in **Table 7-1**.

Table 7-1 Sussex County Airport Phase I (2005-2009) Cost Estimates

			Federal		FAA	DelDOT		Private or
Ref.		<b>Facility</b>	Fiscal		Eligible	Eligible	Local	Other
No.	<b>Project Description</b>	No.	Year	<b>Total Cost</b>	Funding	Funding	Funding	Investment
1	Airport Development Environmental Assessment		2006	\$500,000	\$475,000	\$12,500	\$12,500	
2	Construct Snow Removal Equipment Building	36	2006	\$700,000	\$665,000	\$17,500	\$17,500	
3	Construct Conventional Hangars	43	2006	\$3,000,000	\$0	\$0	\$0	\$3,000,000
4	Reconstruct Runway 10-28 - install PAPIs & REILs		2006-2007	\$9,875,000	\$9,381,250	\$246,875	\$246,875	
5	Obstruction Removal		2006-2007	\$2,000,000	\$1,900,000	\$50,000	\$50,000	
6	Design Rwy 4 Extension & Park Ave Realignment		2007	\$800,000	\$760,000	\$20,000	\$20,000	
7	Construct T-hangar (10 unit)	32,33	2007	\$1,000,000	\$0	\$0	\$1,000,000	
8	Land Acquisition - Rwy 4 Extension & Realign Park Ave		2007-2009	\$4,000,000	\$3,800,000	\$100,000	\$100,000	
9	Construct Park Avenue Realignment		2008	\$5,000,000	\$4,750,000	\$125,000	\$125,000	
10	Expand Terminal Auto Parking		2008	\$500,000	\$0	\$0	\$500,000	
11	Construct Rwy 4 Extension - 1,300' w/ Parallel Taxiway		2009	\$7,000,000	\$6,650,000	\$175,000	\$175,000	
		37,38,3						
12	Construct Conventional Hangars	9	2009	\$3,240,000	\$0	\$0	\$0	\$3,240,000
13	Expand Aircraft Parking Apron		2009	\$750,000	\$712,500	\$18,750	\$18,750	
	TOTAL PHASE I:			\$38,365,000	\$29,093,750	\$765,625	\$2,265,625	\$6,240,000



# **2. Phase II Development (2010-2014)**

Phase II of the planning period is focused on the overlay of existing Runway 4-22 (5,000 feet) construction of a parallel taxiway for Runway 10-28, and demolition of existing Runway 13-31. The remaining items proposed in this phase of development include construction of conventional hangars and T-hangars, as well as expansion of the aircraft parking apron. The total estimate of probable costs for Phase II development is approximately \$10 million. Phase II development estimates and potential funding sources are presented in **Table 7-2**.



Table 7-2 Sussex County Airport Phase II (2010-2014) Cost Estimates

Ref.			Federal Fiscal		FAA Eligible	DelDOT Eligible	Local	Private or Other
No.	<b>Project Description</b>	Facility No.	Year	<b>Total Cost</b>	Funding	Funding	Funding	Investment
1	Overlay Rwy 4-22 - 5,000'		2010	\$2,000,000	\$1,900,000	\$50,000	\$50,000	
2	Construct Rwy 10-28 Parallel Taxiway / Demo Rwy 13-							
2	31		2010	\$4,200,000	\$3,990,000	\$105,000	\$105,000	
3	Construct Conventional Hangars	34,35,41,42	2010-2014	\$2,600,000	\$2,470,000	\$65,000	\$65,000	
4	Construct T-Hangars (10 unit)	49	2012	\$500,000	\$475,000	\$12,500	\$12,500	
5	Expand Aircraft Parking Apron		2014	\$750,000	\$0	\$0	\$0	
	TOTAL PHASE II:			\$10,050,000	\$8,835,000	\$232,500	\$232,500	<b>\$0</b>



# 3. Phase III Development (2015-2024)

Projects in Phase III focus on establishing Runway 4-22 as a precision instrument runway. The development includes installation of an Instrument Landing System (ILS), an approach lighting system (MALSR), and upgrade of the runway lights and electrical vault. Construction of Runway 4-22's parallel taxiway, 400 feet to the west of the runway centerline, is also recommended. It is anticipated that additional terminal space will be required during this period as well. The estimated cost of Phase III development is approximately \$8.6 million. Phase III development estimates, along with potential funding sources are presented in **Table 7-3.** 



Table 7-3 Sussex County Airport Phase III (2015-2024) Cost Estimates

					FAA	DelDOT		Private
Ref.		Facility	Federal		Eligible	Eligible	Local	or Other
No.	Project Description	No.	Fiscal Year	<b>Total Cost</b>	Funding	Funding	Funding	Investment
1	Install HIRLs Rwy 4-22 & Upgrade Electrical Vault		2015	\$500,000	\$475,000	\$12,500	\$12,500	_
2	Install ILS Rwy 4 w/ Precision Marking		2015	\$2,000,000	\$1,900,000	\$50,000	\$50,000	
3	Install MALSR Rwy 4		2015	\$800,000	\$760,000	\$20,000	\$20,000	
4	Construct Rwy 4-22 Parallel Taxiway & Exit Taxiways		2020	\$5,000,000	\$4,750,000	\$125,000	\$125,000	
5	Expand Terminal Building		2020	\$250,000	\$0	\$0	\$250,000	
	TOTAL PHASE III:			\$8,550,000	\$7,885,000	\$207,500	\$457,500	<b>\$0</b>



## G. SUMMARY

Sussex County Airport provides critical general aviation services to the National Airport System. It is imperative for the airport to maintain modern facilities for long-term development and operate as a safe, dependable aviation facility for Sussex County and the surrounding area.

The ALP depicts approximately \$55 million in future airport improvements required to accommodate the existing and future aviation demand for the 20-year planning period (2005-2024). Based on existing funding programs, the County is eligible for approximately \$44 million from the FAA and approximately \$1 million from the Delaware Aeronautics Administration. Combined with other local and private funding, the Sussex County Airport has a strong capital program to meet future development needs.

