

A. INTRODUCTION

This chapter details the various projects required for the development of the Virginia Highlands Airport over the 20-year planning period. These projects, by phase (time period), include estimates of probable construction costs in constant 2002 dollars. These estimates are intended as **order of magnitude costs only**. They represent not only construction costs, but allowances for incidental expenses such as engineering, administration, surveying, testing, and legal fees. Also, since these are order of magnitude estimates for planning purposes, a contingency amount was added to cover unforeseen conditions which may occur during actual development. This approach is an industry standard used to prepare preliminary estimates and it may reduce the likelihood of budget overruns when detailed design is completed and bids are received. More detailed project definitions and associated estimates must be developed prior to the implementation of any project identified herein.

The 20-year Airport Improvement Program has three (3) development phases:

- **PHASE I (2002-2007)**
- **PHASE II (2008-2012)**
- **PHASE III (2013-2022)**

Each development item is shown on the Airport Layout Plan and was discussed in Chapters Three, Four and/or Five. The phasing of the projects is a recommendation since changes in demand; local priorities, economy, or funding may alter the need or timing of any proposed project. This chapter also includes a funding description of the four (4) primary sources of funds.



B. FUNDING SOURCES

There are four (4) potential funding sources for development at Virginia Highlands Airport. These sources include the Federal Aviation Administration (FAA), the Virginia Department of Aviation (DOAV), local funding, and private developers.

1. Federal Aviation Administration

An aviation trust fund was created by Congress during the 1960s. Airline ticket fares, aviation fuel taxes, and other aviation “user” taxes have since been collected to provide capital resources for the trust fund. The FAA provides 95 percent funding for eligible items under the current Airport Improvement Program (AIP). The funding breakdown is based on a particular project’s funding eligibility and does not represent a commitment of funds by the FAA. When AIP was last authorized, GA airports were included in the “entitlement” category, based on numbers of aircraft, up to the maximum of \$150,000. Although this provision is anticipated in future legislation, it is not absolute.

2. Virginia Department of Aviation

The Virginia Department of Aviation administers funding for airport improvements for the Commonwealth of Virginia as authorized by the Virginia Aviation Board. Similar to the federal trust fund, funding from the State is derived from user fees (aircraft fuel tax and state sales tax on aircraft). On a larger scale, a percentage of gasoline tax is assigned to fund aviation infrastructure development.

The Virginia Department of Aviation can fund eighty (80) percent of the non-Federal share for AIP projects. It is the goal of the Commonwealth to assist airport sponsors in maximizing federal financial assistance to Virginia’s airports. When an airport sponsor is not eligible for federal funding, or federal funds are not available, the Department may provide up to eighty (80) percent of the total eligible project costs. The Sponsor would then provide the remaining twenty (20) percent.



State funding for general aviation terminals can be up to 100 percent for “public use” space. Public use space includes all areas of the terminal building that are non-revenue producing such as lobby areas, conference rooms, rest rooms, and pilot lounges. Areas considered as revenue producing are office space, food service, and vending machine areas.

3. Local Funding

Local funding must be used to make up the balance after FAA and State participation has been established. When outside funding cannot be obtained, the Airport Commission can construct projects with local funding as long as they comply with the ALP. These funds have three (3) principal sources: airport revenues, taxes for the support of local government as a whole, and sale of general obligation bonds.

4. Private Funding

Private funding sources are usually relegated to the development of hangar facilities on land leased from the airport. These custom-built facilities are normally financed by the tenant(s) with the ownership of the facility reverting to airport ownership after a specified period, associated with investment authorization.

5. Funding Sources

The total development costs for the Virginia Highlands Airport is approximately \$29,136,000. This development is projected to accommodate the aviation demand for the 20-year planning horizon. The following tables (**Table 6-1, 6-2, and 6-3**) contain the order of magnitude costs for Phases I, II, and III. **Table 6-4** contains a summary of all three (3) phases.

C. FAA REMARKS AND CONCLUSIONS

The CIP development program was revised on February 20, 2004 to reflect the increased cost associated with the 470 foot runway shift.



**TABLE 6-1
VIRGINIA HIGHLANDS AIRPORT
PHASE I (2002-2007) DEVELOPMENT PROGRAM**

NO.	PROJECT	TOTAL ESTIMATED COST	FAA ELIGIBLE	DOAV ELIGIBLE	MINIMUM LOCAL	PRIVATE AND OTHER
1	East Side Corporate Hangar (#15)	\$ 1,400,000	\$ -	\$ 104,000	\$ 26,000	\$ 1,270,000
2	Construct Access Road (West)	\$ 450,000	\$ 427,500	\$ 18,000	\$ 4,500	\$ -
3	West Side Site Prep & Connector Taxiway	\$ 1,100,000	\$ 1,045,000	\$ 44,000	\$ 11,000	\$ -
4	Security Fencing West Side	\$ 50,000	\$ -	\$ 45,000	\$ 5,000	\$ -
5	Two (2) West Side Corporate Hangars (#17, 19)	\$ 3,400,000	\$ -	\$ 240,000	\$ 60,000	\$ 3,100,000
6	West Side T-Hangar (10 unit) (#21)	\$ 500,000	\$ -	\$ 120,000	\$ 380,000	\$ -
7	Land Acquisition (Fee/Easements - Obstructions)	\$ 600,000	\$ 570,000	\$ 24,000	\$ 6,000	\$ -
8	Obstruction Removal (34:1 Approach Trees)	\$ 650,000	\$ 617,500	\$ 26,000	\$ 6,500	\$ -
9	Environmental Assessment (Runway 6 Extension)	\$ 400,000	\$ 380,000	\$ 16,000	\$ 4,000	\$ -
10	Land Acquisition (Runway Extension)	\$ 850,000	\$ 807,500	\$ 34,000	\$ 8,500	\$ -
11	Land Acquisition (Parcels 14, 15 and 87 - Wright)	\$ 1,000,000	\$ 950,000	\$ 40,000	\$ 10,000	\$ -
12	Land Acquisition (Parcel 39 - Livestock Market)	\$ 260,000	\$ 247,000	\$ 10,400	\$ 2,600	\$ -
13	Relocate State Route 611	\$ 650,000	\$ 617,500	\$ 26,000	\$ 6,500	\$ -
TOTAL PHASE I		\$ 11,310,000	\$ 5,662,000	\$ 747,400	\$ 530,600	\$ 4,370,000

Source: Delta Airport Consultants, Inc. Analysis

ACIP - Airport Capital Improvement Project - Project is recommended for AIP funding
NPIAS - National Plan of Integrated Airport System - Project is eligible for AIP funding



TABLE 6-2
 VIRGINIA HIGHLANDS AIRPORT
 PHASE II (2008-2012) DEVELOPMENT PROGRAM

NO.	PROJECT	TOTAL ESTIMATED COST	FAA ELIGIBLE	DOAV ELIGIBLE	MINIMUM LOCAL	PRIVATE AND OTHER
1	West Side Corporate Hangar (#16)	\$ 1,700,000	\$ -	\$ 136,000	\$ 34,000	\$ 1,530,000
2	Runway Extension (1,399' x 75')	\$ 5,800,000	\$ 5,220,000	\$ 464,000	\$ 116,000	\$ -
3	West Partial Parallel Taxiway Construction	\$ 2,000,000	\$ 1,800,000	\$ 160,000	\$ 40,000	\$ -
4	West Side T-Hangar (10 unit) (#20)	\$ 700,000	\$ 77,400	\$ 216,640	\$ 405,960	\$ -
5	Security Fencing Runway/Taxiway Extension	\$ 250,000	\$ 237,500	\$ 10,000	\$ 2,500	\$ -
6	Relocate Runway 6 Localizer (600' from Threshold)	\$ 250,000	\$ 237,500	\$ 10,000	\$ 2,500	\$ -
7	Relocate/Upgrade AWOS-III	\$ 120,000	\$ 108,000	\$ 9,600	\$ 2,400	\$ -
8	Relocate Runway 24 ODALS	\$ 60,000	\$ 57,000	\$ 2,400	\$ 600	\$ -
9	Install Runway 6 PAPI-4/Relocate Runway 24 PAPI	\$ 75,000	\$ 71,250	\$ 3,000	\$ 750	\$ -
10	Install REILs Runway 6	\$ 50,000	\$ 47,500	\$ 2,000	\$ 500	\$ -
TOTAL PHASE II		\$ 11,005,000	\$ 7,856,150	\$ 1,013,640	\$ 605,210	\$ 1,530,000

Source: Delta Airport Consultants, Inc. Analysis
 ACIP – Airport Capital Improvement Project – Project is recommended for AIP funding
 NPIAS – National Plan of Integrated Airport System – Project is eligible for AIP funding



TABLE 6-3
 VIRGINIA HIGHLANDS AIRPORT
 PHASE III (2013-2022) DEVELOPMENT PROGRAM

NO.	PROJECT	TOTAL ESTIMATED COST	FAA ELIGIBLE	DOAV ELIGIBLE	MINIMUM LOCAL	PRIVATE AND OTHER
1	Two (2) West Side Corporate Hangars (#22, 23)	\$ 3,600,000	\$ -	\$ 400,000	\$ 100,000	\$ 3,100,000
2	Construct West Side Apron, Approx. 12,500 SY	\$ 700,000	\$ 630,000	\$ 56,000	\$ 14,000	\$ -
3	Construct Access Road (West) Extension	\$ 50,000	\$ 45,000	\$ 4,000	\$ 1,000	\$ -
4	Construct Auto Parking	\$ 60,000	\$ -	\$ 38,640	\$ 21,360	\$ -
5	West Side Security Fencing	\$ 110,000	\$ 99,000	\$ 8,800	\$ 2,200	\$ -
6	West Side T-Hangar (10 unit) (#18)	\$ 550,000	\$ 49,500	\$ 122,380	\$ 378,120	\$ -
7	Maintenance Hangar (#24)	\$ 1,600,000	\$ -	\$ 40,000	\$ 10,000	\$ 1,550,000
8	West Partial Parallel Taxiway Construction	\$ 1,700,000	\$ 1,530,000	\$ 136,000	\$ 34,000	\$ -
9	Runway Overlay/Mark/Groove	\$ 800,000	\$ 720,000	\$ 64,000	\$ 16,000	\$ -
10	Taxiway Overlay/Mark	\$ 500,000	\$ 450,000	\$ 40,000	\$ 10,000	\$ -
12	Upgrade MIRL/MITL	\$ 500,000	\$ 450,000	\$ 40,000	\$ 10,000	\$ -
TOTAL PHASE III		\$ 10,170,000	\$ 3,973,500	\$ 949,820	\$ 596,680	\$ 4,650,000

Source: Delta Airport Consultants, Inc. Analysis
 ACIP – Airport Capital Improvement Project – Project is recommended for AIP funding
 NPIAS – National Plan of Integrated Airport System – Project is eligible for AIP funding



TABLE 6-4
 VIRGINIA HIGHLANDS AIRPORT
 TOTAL DEVELOPMENT PROGRAM

NO.	PROJECT	TOTAL ESTIMATED COST	FAA ELIGIBLE	DOAV ELIGIBLE	MINIMUM LOCAL	PRIVATE AND OTHER
1	PHASE I	\$ 11,310,000	\$ 5,662,000	\$ 747,400	\$ 530,600	\$ 4,370,000
2	PHASE II	\$ 11,005,000	\$ 7,856,150	\$ 1,013,640	\$ 605,210	\$ 1,530,000
3	PHASE III	\$ 10,170,000	\$ 3,973,500	\$ 949,820	\$ 596,680	\$ 4,650,000
TOTAL		\$ 32,485,000	\$ 17,491,650	\$ 2,710,860	\$ 1,732,490	\$ 10,550,000

Source: Delta Airport Consultants, Inc. Analysis
 ACIP - Airport Capital Improvement Project - Project is recommended for AIP funding
 NPLAS - National Plan of Integrated Airport System - Project is eligible for AIP funding

