

Implementation Program and Phasing

Introduction

The improvements necessary to efficiently accommodate the forecast aviation demands for King County International Airport have been placed into three phases: phase one (0-5 years), phase two (5-10 years), and phase three (10-15 years). The proposed improvements are illustrated graphically by time period on the *PHASING PLAN* (see Figure F1), along with the project cost estimates that are presented on the following pages.

Project List

A list of capital improvement projects has been assembled from the facility requirements documentation previously presented. The project list has been coordinated with the Airport Layout Plan drawing set and the Capital Improvement Program that is continuously updated by airport management and the Federal Aviation Administration.

Cost Estimates

Cost estimates for individual projects based on current dollars have been prepared for improvements which have been identified as necessary during the 20-year planning period. Facility costs have been formulated using unit prices extended by the size of the particular facility and tempered with specific considerations related to Seattle, the airport, and the development site. That being said, these estimates are intended to be used for planning purposes only and should not be construed as detailed construction cost estimates, which can only be compiled following the preparation of detailed design documentation.

Phasing Plan

The following illustration, entitled *PHASING PLAN*, along with the project/cost estimate list (Tables F1, F2, and F3) indicates the suggested phasing for improvement projects throughout the 20-year planning period. These are suggested schedules and variance from them may be necessary, especially during the latter time periods. Special attention has been given to the first five years because the projects outlined in this time frame include many critical improvements. The demand for certain facilities, especially in the latter time frame, and the economic feasibility of their development are to be the prime factors influencing the timing of individual project construction. Care must be taken to provide for adequate lead-time for detailed planning and construction of facilities in order to meet aviation demands. It is also important to minimize the disruptive scheduling where a portion of the facility may become inoperative due to construction and to prevent extra costs resulting from improper project scheduling.

Relationship to FAA Capital Improvement Program

The projects, phasing, and costs presented in this Airport Master Plan Update are the best projections that can be made at the time of formulation. The purpose of the project list, phasing, and costs listed here is to provide a reasonable projection of capital needs, which can then be utilized in financial programming to test for financial feasibility. As soon as it is published, the project list starts to be out of date and, therefore, it will always differ to some degree with the airport's 5-year CIP on file with the FAA.

Table F1

PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS

King County International Airport Master Plan

Project Description		Funding Notes	Total Costs
2000			
A.1	Storm Water Permit	Airport	\$200,000.00
A.2	Construct New Steam Plant Access Road & Building Relocation	Airport	\$495,000.00
A.3	West Side Redevelopment Design	Airport	\$190,000.00
A.4	Terminal Building Remodel Design	Airport	\$500,000.00
A.5	Preparation of Pavement Management Program w/Pavement Strength Analysis	Airport	\$60,000.00
A.6	Preparation of Utility Improvement Plans (water, sanitary sewer, electric, storm sewer)	Airport	\$200,000.00
A.7	Runway 13L/31R Resurfacing, Signs, and REILS	AIP (90/10)	\$1,650,000.00
A.8	Pavement Rehabilitation - Miscellaneous	Airport	\$88,000.00
A.9	Install/Upgrade Fuel/Oil Separators	Airport	\$500,000.00
2000 Total			\$3,883,000.00
2001			
A.10	Stormwater Monitoring Stations (4 stations/5-year program)	Airport	\$26,000.00
A.11	Westside Development - Phase I (2 hangar/office structures, ramp, auto parking, utilities, etc.) total \$4,800,000; anticipated airport funded 50%(\$2,400,000)	Private/Airport 50/50	\$4,800,000.00
A.12	Museum of Flight Expansion and Hangar Relocation	Private Third Party	\$0.00
A.13	Construct Taxiway A3	AIP 90/10	\$1,185,000.00
A.14	Terminal Building Remodel (Phase 1 - Old Building)	Airport	\$4,500,000.00
A.15	Air Cargo Facility Improvements	Private Third Party	\$0.00
A.16	Pavement Rehab (replaced with specific description as soon as Pavement Management Program complete)	AIP 90/10	\$799,000.00
A.17	Transponder Landing System (see Note 1)	100% FAA F&E	\$750,000.00
A.18	Construct Runway Shift, Implement Declared Distances, Improved Blast Pads (both ends of runway), Buffer Wall, Relocation of Taxiway A11, and Construct Taxiway A3 (Phase I)	AIP 90/10	\$3,100,000.00
2001 Total			\$15,160,000.00

Notes

- 1 Feasibility and benefit study to be completed before implementation schedule can be established. Benefit to be analyzed In Part 150 Study.
- 2 Projects related to noise remedy program implementation will not be determined until completion of Part 150 Study that is currently underway. Projects could include the design and construction of a run-up noise enclosure, noise insulation, land purchase, etc. Most severe impacts addressed first.
- 3 Cost estimates, based upon 1999 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.

Table F1 (continued)

PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS

King County International Airport Master Plan

Project Description	Funding Notes	Total Costs
2002		
A.19 Terminal Building Remodel (Phase II - new building)	Airport	\$1,120,000.00
A.20 Noise Remedy Program Implementation (see note 2)	AIP Noise 90/10	\$5,000,000.00
A.21 Widen Taxiway B2	AIP 90/10	\$745,000.00
A.22 Construct Runway Shift, Implement Declared Distances, Improved Blast Pads (both ends of runway), Buffer Wall, Relocation of Taxiway A11, and Construct Taxiway B9 - (Phase II)	AIP 90/10	\$3,100,000.00
A.23 Transponder Landing System (see Note 1)	100% FAA F&E	\$750,000.00
A.24a Pavement Rehab (replaced with specific description as soon as Pavement Management Program complete)	AIP 90/10	\$904,000.00
A.24b Helipad Construction	AIP 90/10	\$76,000.00
2002 Total		\$11,695,000.00
2003		
A.25 Design & Construct Aircraft Deicing Station	Airport	\$510,000.00
A.26 Overlay Taxiway B	AIP 90/10	\$1,646,000.00
A.27 Noise Remedy Program Implementation (see note 3)	AIP Noise 90/10	\$5,000,000.00
A.28 Pavement Rehab (replaced with specific description as soon as Pavement Management Program complete)	AIP 90/10	\$776,000.00
2003 Total		\$7,932,000.00
2004		
A.29 Noise Remedy Program Implementation (see note 2)	AIP Noise 90/10	\$5,000,000.00
A.30 Pavement Rehab (replaced with specific description as soon as Pavement Management Program complete)	AIP 90/10	\$801,000.00
A.31 Runway 13R/31L Reconstruction	AIP 90/10	\$6,025,000.00
2004 Total		\$11,826,000.00
2005		
A.32 Construction of New Fuel Storage Facility	Private Third Party	\$0.00
A.33 Removal of Fuel Storage Facility, Reclamation of Site, and Buy-Out of Lease	AIP 90/10	\$1,000,000.00
A.34 Noise Remedy Program Implementation (see note 2)	AIP Noise 90/10	\$5,000,000.00
A.35 Westside Development Phase II - Land Purchase and Apron	AIP 90/10	\$5,680,000.00
A.36 Design of New Maintenance Facility (including Snow Removal Equipment Bldg.) & Demolition of Old Facility	Airport	\$379,000.00
A.37 Pavement Rehab (replaced with specific description as soon as Pavement Management Program complete)	AIP 90/10	\$803,000.00
2005 Total		\$12,862,000.00
Sub-Total/Phase I		\$63,358,000.00

Notes

- 1 Feasibility and benefit study to be completed before implementation schedule can be established. Benefit to be analyzed in Part 150 Study.
- 2 Projects related to noise remedy program implementation will not be determined until completion of Part 150 Study that is currently underway. Projects could include the design and construction of a run-up noise enclosure, noise insulation, land purchase, etc. Most severe impacts addressed first.
- 3 Cost estimates, based upon 1999 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.

Table F2

PHASE II (6-10 YEARS) DEVELOPMENT PLAN PROJECT COSTS

King County International Airport Master Plan

Project Description	Funding Notes	Total Costs
B.1 Airport Master Plan Update	AIP 90/10	\$350,000.00
B.2 Construct Snow Removal Equipment Building	AIP 90/10	\$818,000.00
B.3 ARFF Truck	AIP 90/10	\$175,000.00
B.4 Passenger Terminal Building and Parking Improvements (if demand for improved passenger service facilities)	Private Third Party	\$0.00
B.5 Air Cargo Facility Improvements	Private Third Party	\$0.00
B.6 Part 150 Noise Remedy Update	Noise Money	\$300,000.00
B.7 Runway/Taxiway Electrical System Improvements		\$1,000,000.00
B.8 Security Improvements (Part 107)	AIP 90/10	\$1,500,000.00
B.9 Pavement Rehab Projects (\$1.0 mil/year x 5)		\$5,000,000.00
B.10 General Aviation Hangar Construction (Infill and Redevelopment)	Private Third Party	\$0.00
B.11 Utility Improvements (\$150,000 per year)	Airport	\$750,000.00
B.12 West Side Development Phase III	Private Third Party	\$0.00
B.13 Purchase ARFF Truck (1500 Oshkosh)	AIP 90/10	\$350,000.00
B.14 New Control Tower	100% FAA	\$0.00
Sub-Total/Phase II		\$10,243,000.00

Notes

- 1 Feasibility and benefit study to be completed before implementation schedule can be established. Benefit to be analyzed in Part 150 Study.
- 2 Projects related to noise remedy program implementation will not be determined until completion of Part 150 Study that is currently underway. Projects could include the design and construction of a run-up noise enclosure, noise insulation, land purchase, etc. Most severe impacts addressed first.
- 3 Cost estimates, based upon 1999 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.

Table F3

PHASE III (11-15 YEARS) DEVELOPMENT PLAN PROJECT COSTS*King County International Airport Master Plan*

Project Description		Funding Notes	Total Costs
C.1	Pavement Rehab Projects (\$1.0 mil per year)	AIP	\$5,000,000.00
C.2	Passenger Terminal Building and Parking Improvements	Private Third Party	\$0.00
C.3	Air Cargo Facility Improvements	Private Third Party	\$0.00
C.4	General Aviation Hangar Construction (Infill and Redevelopment)	Private Third Party	\$0.00
C.5	Utility Improvements	airport	\$2,000,000.00
C.7	ARFF Facility Improvements	AIP	\$1,500,000.00
C.8	Landing Aid Improvements	100% FAA	\$0.00
C.9	Cargo Facility Improvements	Private Third Party	\$0.00
C.10	Land Acquisition	AIP	\$10,000,000.00
Sub-Total/Phase III			\$18,500,000.00
GRAND TOTALS			\$92,101,000.00

Notes

- 1 Feasibility and benefit study to be completed before implementation schedule can be established. Benefit to be analyzed in Part 150 Study.
- 2 Projects related to noise remedy program implementation will not be determined until completion of Part 150 Study that is currently underway. Projects could include the design and construction of a run-up noise enclosure, noise insulation, land purchase, etc. Most severe impacts addressed first.
- 3 Cost estimates, based upon 1999 data, are intended for preliminary planning purposes and do not reflect a detailed engineering evaluation.



