



7

PHASED AIRPORT DEVELOPMENT PLAN

INTRODUCTION

This narrative incorporates the facility requirements for the Jefferson County International Airport Master Plan Update into a 20-year phased development plan as consistent with the preferred design alternative(s). The purpose of the airport development plan is to provide a strategic approach for continued airport operations, the maintenance, upgrade and expansion of facilities, and the appropriate development of neighboring properties owned or acquired by the Port.

PHASE ONE (0-5 YEAR) AIRPORT DEVELOPMENT PLAN

The airport development plan at JCIA is an orderly series of improvements intended to provide a safe, efficient and attractive public facility providing flexibility to meet the short and long-range needs of the Airport in a timely and economical manner. The Airport Layout Plan (ALP) drawings, to be completed later in the master plan study process, will depict the existing and proposed developments as identified by the JCIA Master Plan program.

Projects have been identified in order to satisfy airport design criteria and to allow for facility needs based on existing and ultimate spatial requirements. Therefore, one individual development phase should not be considered a single project, but rather a series of projects that contribute to the ultimate airport development concept. The scheduling of projects within the development plan has been prioritized to permit improvements in a coordinated approach. Each project is prioritized with respect to existing and projected facility needs, as identified by 1) airport safety and efficiency, 2) environmental coordination and preservation, 3) preservation of airport infrastructure, 4) federal aviation regulation compliance, and 5) terminal and landside capacity expansion. The development plan is structured so projects can be re-prioritized to meet specific design and funding considerations.

It should be noted that the development plan does not represent an obligation of local, state, or federal funds, nor does it require a funding commitment without justification of aviation demand activity levels. In addition, the expressed desire, intent, and ability of the Port of Port Townsend to achieve airport land use compatibility, coupled with favorable community and business support of the airport, remains an important consideration in the future development of JCIA.



AIRSIDE DEVELOPMENT

AIRPORT PAVED SURFACES

An important part of the phased development plan is to assess existing pavement conditions in order to develop an understanding of future maintenance and rehabilitation requirements for the Runway 9-27, taxiway system, as well as aircraft parking apron. Current physical conditions through on-site observations as well as functional life-cycles indicate the need for nominal pavement maintenance at JCIA in the short-term planning period (0-5 years). **Table 7.1** depicts the airport development history and pavement maintenance at JCIA over the past two (2) decades.

<p align="center"><i>Table 7.1 Grant Assisted Airport Development Project History Jefferson County International Airport</i></p>		
Decade	Airfield Project Description	Total Cost
2000s	2002: Airport Master Plan Update and Environmental Assessment (EA).	\$150,000
1990s	1996: Construct general aviation tiedown apron; Construct six taxilanes and one taxiway; Rehabilitate five taxilanes.	\$1,061,231
	1992: Improve drainage.	\$264,648
	1992: Conduct master plan update.	\$29,970
1980s	1990: Construct R/W 9-27 (3,000' x 75'); Construct parallel T/W; Construct 2 connecting T/W's; Construct tiedown apron; Construct segmented circle; Relocate wind cone.	\$1,174,603
	1989: Acquire land for approaches and development (Parcels 28-1A, 28-2A, 32-2, 32-JA, 33-F, J3-3A, 33-5, 33-6, 33-7, 33-8A, 33-9, 33-10A, 34-3, JC-3A) including relocation assistance.	\$936,828
	1988: Obstruction removal, R/W 7-25, including project formulation cost for ALP and environmental assessment; preparation of a site selection study for a new airport in the vicinity of Port Townsend, Washington.	\$818,886
		\$9,933
Total		\$4,446,099
<p>Note: Project costs reflect only eligible projects under the federal airport aid program(s), and do not include routine operational and maintenance costs assumed by the Port or private investors.</p>		

Source: FAA Grant Assurance Agreements, FAA Northwest Mountain Region, Seattle Airports District Office.

RECOMMENDATION: A combination of pavement improvements is proposed for the mid to latter part of Phase I of the airport development plan, including crack seals and slurry seals of Runway 9-27, as well as Taxiways A, B, and C as preventive maintenance to improve surface ride. Additional pavement maintenance required during Phase I of airport development includes crack seal and slurry seal of the main and eastern tie-down apron areas. This would include seal coating the apron area in the immediate vicinity of the fueling facilities to reduce the potential solvent action by aviation fuel and oil on the surrounding paved asphalt surface. Given the physical condition of the



runway surface, as well as the taxiway and apron surfaces, overlay maintenance projects will not be required for the runway or taxiway surfaces until the latter stages of Phase II of airport development.

PRIMARY RUNWAY 9-27

Currently, Runway 9-27 experiences and accommodates an annual operational level of approximately 47,000 operations. Although constructed in 1990, Runway 9-27's pavement surface is in very good physical condition, having a Pavement Condition Index (PCI) rating of 85. This fact, coupled with a load bearing pavement strength of 12,500 pounds (SWG), indicates that Runway 9-27 will not require an overlay until the mid to latter stages of Phase II development and will require mere slurry seal and crack repair projects during Phase I.

RECOMMENDATION: Slurry seal and crack seal Runway 9-27 (3,000' x 75'). Additional pavement maintenance includes marking the Runway surface with Basic Visual Approach markings per applicable Advisory Circulars (AC) 150/5340-1H. In order to accommodate potential published instrument approaches, Runway 9-27 will require a 200 foot extension to take place at the Runway 9 threshold (3,200' x 75'). This project includes relocation of the threshold lighting for Runway 9, removal of non-standard and installation of standard REILs, and reconfiguration of the airfield signage at the Runway 9 threshold. Additionally, a recommendation is being made to remove the existing non-standard Runway End Indicator Lights (REILs) at the approach end of Runway 27. These REILs should also be replaced and upgraded with standard REIL lighting. Also, the PAPI-2I at the Runway 9 end is recommended to be removed and relocated approximately 200 feet to the west. Finally, the current airfield signage is non-standard and is recommended to be replaced by a standard signage plan per applicable AC 150/5340-18C.

TAXIWAY SYSTEM (TAXIWAYS A, B, and C)

Constructed in 1990, Taxiways A, B, and C pavement surfaces are in excellent physical condition, having a Pavement Condition Index (PCI) rating of 97. Like Runway 9-27, Taxiways A, B and C will not require an overlay until the mid to latter stages of Phase II development and will require mere slurry seal and crack repair projects during Phase I.

RECOMMENDATION: Taxiways A, B, and C are recommended to be slurry sealed and crack sealed during the latter stages of Phase I of airport development. Additionally, as the 200-foot extension occurs at the Runway 9 threshold, Taxiway A will require expansion by 200 in length feet and 25 feet in width. Installation of Medium Intensity Taxiway Lighting (MITL) is recommended along the entire length of Taxiway A, while the retro-reflective markers are to be removed from Taxiway A and remain in place for Taxiways B and C. In addition to slurry seal and crack repair, Taxiways A, B, and C are also recommended to be marked in accordance with AC 150/5340-1H.



LANDSIDE/TERMINAL AREA DEVELOPMENT

AIRPORT APRON AREAS

Like the runway and taxiways at JCIA, the main tie-down apron area, as well as the eastern tie-down apron extension area, are in excellent physical condition having been given a PCI rating of 93. From a planning - as well as an aviation demand - standpoint, the apron area(s) at JCIA will not require future expansion to accommodate aviation demand activity, but mere pavement maintenance projects to ensure further efficient utilization.

RECOMMENDATION: Slurry seal and perform crack repair to the main tie-down apron area (10,976 S.Y.), as well as the eastern tie-down extension area (4,869 S.Y.). Additionally, following slurry seal and crack repair, both apron areas are to be marked in accordance with AC 150/ 5340-1H. In addition, the western terminal area taxilanes, constructed/rehabilitated in 1996, are recommended to be slurry sealed, crack sealed and marked.

AIRCRAFT HANGAR EXPANSION

Development of additional hangars, primarily nested T-hangars, for single and twin-engine aircraft (2, 4 and 6 seat airplanes) will be needed to accommodate the hangar waiting list, as well as the future based aircraft demand at JCIA. Due to the volume of aircraft storage space required for the 20-year planning period, careful consideration should be given to the siting and placement of future nested T-hangars, as well as clear span hangars to minimize potential environmental affects and adhere to airport design standards and criteria.

RECOMMENDATION: Construct one (1) 10-unit nested T-hangar (12,500 S.F.) including two 20'-wide taxilanes to provide nested T-hangar access. The placement of this, as well as future nested T-hangars, will be located to the southeast of the eastern tie-down extension apron adjacent to Taxiway B. As the initial nested T-hangar is developed, the six individual T-hangar units located to the north of the eastern tie-down extension are to be removed and demolished. The tenants of these hangar units may be relocated to the newly developed 12-unit nested T-hangar structure. Additionally, two (2) clear span/common box hangars (10,850 S.F.) are recommended to be developed immediately north of the eastern tie-down extension apron.

AIRPORT PASSENGER TERMINAL BUILDING

JCIA does not currently have a dedicated passenger terminal building. The Spruce Goose Café acts as a terminal building for airport patrons and transient passengers, but does not necessarily provide the amenities of a terminal building. The general aviation passenger demand for JCIA indicates that approximately 2,500 S.F. is required to accommodate the peak hour passenger at JCIA. Should frequent on-demand commercial service operational activity



take place at JCIA in the short-term, the necessary terminal building space requirements increase to 2,800 S.F.

RECOMMENDATION: Construct a dedicated passenger terminal building (2,800 S.F.) to accommodate general aviation and potential commercial service passengers, as well as local airport patrons. This terminal building should include a pilot/passenger lounge, flight planning area, public restroom and telephone access, passenger meeting/greeting area, and limited office space for a possible FBO operation. The passenger terminal building would be ideally located to the immediate north of the main aircraft tie-down apron, adjacent to the airport fuel facilities.

Additional projects associated with construction of a terminal building would be to demolish the structure housing the Spruce Goose Café, and, ideally, relocate this business into the current 2,000 S.F. airport administration building.

AIRPORT ACCESS AND VEHICULAR AUTO PARKING

The current automobile parking area measures approximately 13,900 S.F. and accommodates nearly 40 auto parking spaces. However, during peak hour vehicular activity, the auto parking area becomes congested due to the decentralized nature of the parking area, as well as lack of clearly defined and marked parking spaces. In addition, during peak periods of airport activity, vehicular traffic also becomes congested at the intersection of the Airport Road and Highway 19. This increased ground traffic activity is viewed as creating potential hazards with regard to ingress and egress at JCIA.

RECOMMENDATION: For future auto parking space requirements, approximately 28 auto parking spaces (13,860 S.F.) should be set aside for general aviation passenger use with one (1) parking space being handicapped designated, as well as one (1) parking space being van accessible for disabled passengers. In addition, auto parking area is recommended to be remarked and reconfigured to adequately provide for existing and future demand at the airport during peak periods of activity.

With regard to traffic congestion at the Airport Road and State Highway 19 intersection, it is recommended that a traffic signal warrant analysis be conducted to determine the feasibility of installing a directional/ traffic signal at this intersection to reduce potential hazards to vehicular travelers, as well as reduce congestion on the airport entrance road.

OTHER CAPITAL DEVELOPMENT/EXPANSION

Perimeter fencing, electronic gate access, and terminal area fencing between airport property and public (along the airport property boundary/perimeter) areas are recommended to discourage unauthorized access by people and wildlife to the airfield operating environment. In



addition, the terminal area is recommended to be outfitted with medium intensity pole mounted lighting that will supplement fencing as an added element of security.

RECOMMENDATION: Installation of terminal area, as well as airfield perimeter, fencing, at minimum, is recommended for JCIA within the initial phase of airport development. Terminal area fencing and electronic access gates, including installation of additional terminal area lights, are also recommended within the initial to mid phase of airport development to further safeguard the general aviation and potential commercial service venue within the terminal area complex. Airfield perimeter fencing is recommended to have several control/access points secured with a padlock and chain.

Development of property owned or acquired by the Port south of the runway should be utilized for rural level development activities that directly or indirectly support the operation of the airport as a self-sustaining economic enterprise. This will not only reduce or eliminate the need for operating subsidies, but will promote more compatible land uses and provide for further economic development opportunities in the County. Future development plans should include provisions for additional hangar space as well as job generating, light manufacturing or industrial uses that generate revenues to support airport operations. All development activities must be rural in character, only requiring rural levels of service, and must comply with FAA safety requirements for height, light, smoke, etc. All supportive development activities must also comply with the provisions of the Jefferson County Comprehensive Plan and Unified Development Code. A strict set of design standards will be adopted to insure compatibility with surrounding land uses and to further visually screen the low profile buildings.

Access to the property south of the runway should be provided through the Port easement onto Four Corners Road, a designated County Arterial. This will enable vehicles to access Highways 19 and 20 from controlled intersections and will avoid the potential adverse traffic impacts associated with turning movements into additional driveway accesses. This new point of access shall be designed and constructed in accordance with specific design standards to provide adequate turning movements, safe ingress and egress, and to be visually attractive. In addition, the Port shall, in consultation with the County, WSDOT, Fire District 6, and neighboring property owners, explore the feasibility of installing a traffic signal at the intersection of Highway 19 and Prospect Road. This would provide a second means of ingress and egress to the area south of the runway, could improve response times by the Fire Department should a new facility be built on District property, and could facilitate access to Providence Point as well as regional traffic flows.

In addition, it should be noted that some property owners, given their immediate proximity to the airport may seek to sell their property to the Port. If the resources exist to do so, the Port will give careful consideration to opportunities to purchase additional property between Highways 19 and 20 and Four Corners Road. This would provide the highest level of assurance that future land uses are compatible with safe airport operations, and would minimize potential adverse effects on the private use and enjoyment of neighboring properties. This could also provide additional revenue generating opportunities to support the airport as a self-sustaining economic



enterprise. Any additional property acquired by the Port would be served by rural levels of service and would be subject to Port design standards.

RECOMMENDATION: In order to promote the orderly and compatible development of property owned or acquired by the Port, south of the runways the Port shall continue with the following planning activities, pending specific development plans for individual parcels:

1. Continue planning with Fire District 6 and/or its Contractors or assignees, to finalize a site, site layout, and timelines for a new fire facility serving the airport and surrounding neighborhoods, such as Providence Point. These joint planning efforts shall emphasize the joint use of access roads, and promote safe traffic flows, and as appropriate, may include the analysis of installing a signal at the intersection of Highway 19 and Prospect Road.
2. Finalize preliminary design plans for access onto Four Corners Road.
3. Incorporate into the County Unified Development Code specific design standards to guide future development south of the airport runway.
4. Continue to analyze septic system requirements to ensure that adequate areas for drain fields and replacement reserves have been set aside. This can be removed if accomplished prior to plan adoption.

PHASED DEVELOPMENT PROGRAM

This section of the Master Plan incorporates the facility requirements for the Jefferson County International Airport into a phased development program intended to provide guidance for the maintenance, improvement and expansion of the airfield and terminal area over the 20-year planning period. Projects have been identified in order to satisfy airport design criteria and to allow for facility needs based on existing and ultimate demand activity and spatial requirements. In addition, the expressed desire, intent and ability of local community (Port and City of Port Townsend and Jefferson County) and businesses to lend support to the airport development program is an important funding consideration.

Each phase, as follows, consists of projects and improvements categorized by one of four groups as identified on the following page, including: 1) property and easements acquisition needs; 2) runway and taxiway needs; 3) terminal area needs; and 4) other, if applicable.

Phase One (0-5 Years) - Short-term development projects

Phase Two (6-10 Years) - Mid-term development projects

Phase Three (11-20 Years) - Long-term development projects



AIRPORT CAPITAL DEVELOPMENT COSTS

Table 7.2 shows the 20-year phased airport development costs for the JCIA. Projects are summarized by funding category, and include eligible and ineligible items, with *total* costs reflecting a 25 percent fee for engineering, administration and legal services as a reasonable contingency for implementation and construction of the development plan. Eligible airport development projects are shown to be funded under the FAA program at 90 percent federal and 10 percent local.

<p align="center"><i>Table 7.2</i> <i>Estimated Airport Project Development Costs (Federal and Local Funding)</i> <i>Jefferson County International Airport</i></p>				
Funding Source	(0-5 Year) Project Cost	(6-10 Year) Project Cost	(11-20 Year) Project Cost	Total Project Cost
<i>AIP Eligible Improvement Projects (90%-10% Funding Program)</i>				
Total Federal Funding	\$1,695,194	\$1,457,800	\$1,907,919	\$5,060,913
Total Local Funding	\$1,567,566	\$1,100,700	\$1,615,491	\$4,283,757
Total Project Cost	\$3,262,760	\$2,558,500	\$3,523,410	\$9,344,670
Total AIP Eligible Costs	\$1,857,760	\$1,599,400	\$2,077,810	\$5,534,970
<i>AIP Ineligible Improvement Projects (100% Local Funding)</i>				
Total Ineligible Costs	\$1,405,000	\$959,100	\$1,445,600	\$3,809,700
<p>Note: FBO and private hangar/building construction cost assumed under private financing.</p> <p>Note: Hangar and building costs for commercial aircraft repair/service company expansion is assumed to be financed using state obligation funds/grants, local-only funds, and private investment financing.</p> <p>Note: Projects not eligible for federal grants associated with the construction, alteration, or repair of the following: 1.) public parking facilities for passenger automobiles; 2.) hangars 3.) fuel facilities.</p>				

Source: BWR Airport Development Cost Estimates (Federal vs. Local), November 2002.



**PHASE ONE - AIRPORT DEVELOPMENT PLAN
SHORT-TERM (0-5 YEARS)**

RUNWAY & TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)

- Crack seal/ slurry seal/ mark Runway 9-27 (3,000' x 75')
- Crack seal/ slurry seal/ mark Taxiways A, B and C
- Extend Runway 9-27 200' by 75' to accommodate non-precision instrument (NPI) approach procedures (3,200' x 75'; NPI)
 - Relocate Runway 9 threshold lights/ REILs
 - Replace non-standard/ install standard REILs to Runway 9
 - Extend Taxiway A 200' by 25' to the west to serve Runway 9 threshold
 - Install Medium Intensity Taxiway Lighting (MITL) for Taxiway A
 - Remove/ relocate PAPI-2L at Runway 9 end 200 feet to the west
 - Reconfigure airfield signage at Runway 9 threshold
 - Close road transecting Runway 9's inner approach area to public access (Install barriers)
- Remove/ replace non-standard REILs to Runway 27
 - Install standard REILs for Runway 27
- Remove/ replace non-standard airfield signage
 - Install standard signage plan

TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)

- Crack seal/ slurry seal/ mark main tie-down apron area (12,230 S.Y.)
- Crack seal/slurry seal/ mark east tie-down extension (5,550 S.Y.)
- Seal coat apron in vicinity of airport fueling facilities (2,090 S.Y.)
- Crack seal/ slurry seal/ mark western terminal area taxilane(s) (28,400 S.Y.)
- Construct one (1) 10-unit nested T-hangar (12,500 S.F.)
 - Construct two (2) 20'-wide taxilanes to provide hangar access
- Remove/ demolish the seven (7) individual T-hangar units located to the north of the eastern tie-down extension
 - Construct two (2) clear span/ common hangars (10,850 S.F.)
 - Reconstruct T-hangar area taxilane
- Construct 2,800 S.F. passenger terminal building
 - Dismantle/ remove restaurant structure (Spruce Goose Café)
 - Relocate restaurant business to airport administration building
- Reconfigure/ pave/ mark automobile parking area to accommodate 23 parking spaces (11,385 S.F.)



OTHER CAPITAL EXPANSION/ DEVELOPMENT

- Install left turn pocket, traffic signal, or other improvements as may be necessary to ensure safe ingress and egress at the Highway 19 and airport access road intersection.
- Install wildlife/ security perimeter fencing (7 feet high) adjacent to airside and landside portions of the airport.
- Identify and acquire site(s) suitable for the offsite mitigation of impacts to onsite wetlands and buffers. Prepare and implement an offsite wetland enhancement plan in consultation with the appropriate State and Federal agencies and potential local non-profit stewards, in accordance with the provisions of the County Unified Development Regulations.
- Finalize design and install an access road onto Four Corners Road.
- Continue to explore the feasibility of installing a traffic signal at the intersection of SR 19 and Prospect Road.
- Carefully consider opportunities to acquire additional properties between Highways 19 and 20, and Four Corners Road to promote orderly and compatible development around the airport.

Note: Clear span/common hangar and nested T-hangar and public auto parking facilities financing is assumed through conventional methods using local (airport) and private investment options.

Note: Future projections are provided for planning purposes only. The rate of actual build-out experienced at the airport will occur based on market factors consistent with the provisions of this plan.

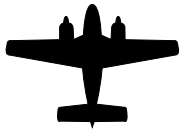


PHASE ONE (0-5 YEARS) AIRPORT CAPITAL DEVELOPMENT COSTS

Table 7.3 provides a summary of the Phase One (0-5 years) development costs projected for the Jefferson County International Airport. Refer to the **Appendix E** for detailed cost estimates for Phase One capital development.

<p align="center"><i>Table 7.3</i> <i>Phase One (0-5 Years) Capital Development Cost Estimates</i> <i>Jefferson County International Airport</i></p>			
Capital Improvement Project	Local Funding	AIP/ FAA Funding	Total Project Cost
<i>RUNWAY AND TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)</i>			
Crack Seal/ Slurry Seal/ Mark Runway 9-27 (3,000' x 75')	\$19,900	\$178,900	\$198,800
Crack Seal/ Slurry Seal/ Mark Taxiways A, B, and C	\$9,366	\$83,994	\$93,360
Extend Runway 9-27 200' (3,200' x 75'; NPI)	\$55,600	\$501,100	\$556,600
Remove/ Replace Non-Standard REILs (Runway 27)	\$3,100	\$27,600	\$30,600
Remove/ Replace Non-Standard Airfield Signage	\$2,900	\$25,400	\$28,100
Total Estimated Costs (Airside Improvements)	\$90,866	\$816,994	\$907,860
<i>TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)</i>			
<i>Apron/ Pavement Improvements</i>			
Crack Seal/ Slurry Seal/ Mark Main Apron (12,230 S.Y.)	\$5,500	\$49,100	\$54,600
Crack Seal/ Slurry Seal/ Mark Eastern Apron (5,550 S.Y.)	\$3,100	\$28,100	\$31,300
Seal Coat Apron in Vicinity of Fueling Facilities (2,090 S.Y.)	\$2,900	\$25,900	\$28,800
Crack Seal/ Slurry Seal/ Mark West Terminal Taxilanes	\$10,800	\$96,400	\$107,100
<i>Hangar & Structure Development</i>			
Construct (1) 10-Unit Nested T-Hangar (12,500 S.F.)	\$332,900	\$126,800	\$459,700
Construct (2) Clear Span/ Common Hangars (10,850 S.F.)	\$278,800	\$107,300	\$386,000
Construct Passenger Terminal Building (2,800 S.F.)	\$446,000	\$0.00	\$446,000
<i>Additional Terminal Area Development</i>			
Reconfigure/ Pave/ Mark Automobile Parking Area (11,385 S.F.)	\$347,300	\$0.00	\$347,300
Total Estimated Costs (Landside Improvements)	\$1,427,300	\$433,700	\$1,861,000
<i>OTHER AIRPORT CAPITAL EXPANSION/ DEVELOPMENT</i>			
Install Automobile Traffic Signal at Junction of Highway 19 and Airport Access Road	\$15,600	\$140,600	\$156,200
Install Wildlife Security Perimeter Fencing (7 Foot Height)	\$33,800	\$303,900	\$337,700
Total Estimated Costs (Other Capital Expansion)	\$49,400	\$444,500	\$493,900
Total Phase One (0-5 Year) Estimated Development Costs	\$1,567,566	\$1,695,194	\$3,262,760

Source: BWR, Airport Capital Development Cost Estimates, December 2002.



PHASE TWO - AIRPORT DEVELOPMENT PLAN MID-TERM (6-10 YEARS)

RUNWAY and TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)

- Overlay/ mark Runway 9-27 (3,000' x 75'; NPI)
- Overlay/ mark Taxiways A, B, and C
- Construct two connector taxiways (25' wide) providing access/ egress from Runway 9-27
 - Refurbish/ retrofit airfield signage as required
- Expand aircraft holding bay/ apron at Runway 27 end (3,200 S.F.)

TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)

- Overlay/ mark main tie-down apron area (12,230 S.Y.)
- Seal coat apron in vicinity of airport fueling facilities (2,090 S.Y.)
- Slurry seal/ crack seal/ mark eastern tie-down extension area (5,550 S.Y.)
- Construct two (2) 10-unit nested T-hangars (25,000 S.F.)
 - Construct three (3) 20'-wide taxilanes to provide hangar access
- Expand passenger terminal building by an additional 1,100 S.F. (3,890 S.F. total)
- Install one (1) 1,500 gallon capacity UST accommodating Jet A aviation fuel
- Expand/ pave/ mark auto parking area to accommodate an additional 10 parking spaces (4,950 S.F.) to total 33 parking spaces
- Pave (asphalt) western airport access road from State Highway 20 (20' wide)
- Construct taxiway (25' wide) connecting Taxiway B and C linking the eastern and western terminal area complex

Note: Clear span/common hangar and nested T-hangar and public auto parking facilities financing is assumed through conventional methods using local (airport) and private investment options.

Note: Future projections are provided for planning purposes only. The rate of actual build-out experienced at the airport will occur based on market factors consistent with the provisions of this plan.



PHASE TWO (6-10 YEARS) AIRPORT CAPITAL DEVELOPMENT COSTS

Table 7.4 provides a summary of the Phase Two (6-10 years) development costs projected for the JCIA. Refer to the **Appendix E** for detailed cost estimates for Phase Two capital development.

<i>Table 7.4 Phase Two (6-10 Years) Capital Development Cost Estimates Jefferson County International Airport</i>			
Capital Improvement Project	Local Funding	AIP/ FAA Funding	Total Project Cost
<i>RUNWAY AND TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)</i>			
Overlay/ Mark Runway 9-27 (3,000' x 75'; NPI)	\$41,500	\$373,600	\$415,100
Overlay/ Mark Taxiways A, B, and C (20,120 S.Y.)	\$16,100	\$145,500	\$161,700
Construct (2) Connector Taxiways (25' Wide)	\$18,100	\$162,900	\$181,100
Expand Runway 27 Aircraft Holding Bay (3,200 S.F.)	\$3,800	\$33,300	\$36,900
Total Estimated Costs (Airside Improvements)	\$79,500	\$715,300	\$794,800
<i>TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)</i>			
<i>Apron/ Pavement Improvements</i>			
Overlay/ Mark Main Tie-Down Apron (12,230 S.Y.)	\$16,000	\$144,000	\$160,000
Crack Seal/ Slurry Seal/ Mark Eastern Apron (5,550 S.Y.)	\$3,100	\$28,100	\$31,300
Seal Coat Apron in Vicinity of Fueling Facilities (2,090 S.Y.)	\$2,900	\$25,900	\$28,800
<i>Hangar & Structure Development</i>			
Construct (2) 10-Unit Nested T-Hangar (25,000 S.F.)	\$707,300	\$184,900	\$892,100
Expand Passenger Terminal building by 1,100 S.F. (3,870 S.F.-Total)	\$172,300	\$0.00	\$172,300
Install 1,500 Gal. Jet A Fuel Facility (Skid Mounted)	\$50,000	\$0.00	\$50,000
<i>Additional Terminal Area Development</i>			
Expand/ Pave/ Automobile Parking Area to Accommodate 10 Additional Spaces (4,950 S.F.) to Total 33 Parking Spaces	\$29,500	\$0.00	\$29,500
Reconstruct/ Pave Western Airport Access Road From State Highway 20	\$23,800	\$213,300	\$237,000
Construct Access Taxiway Linking Taxiways B and C	\$16,300	\$146,300	\$162,600
Total Estimated Costs (Landside Improvements)	\$1,021,200	\$742,500	\$1,763,600
Total Phase Two (6-10 Year) Estimated Development Costs	\$1,100,700	\$1,457,800	\$2,558,500

Source: BWR, Airport Capital Development Cost Estimates, December 2002.



**PHASE THREE - AIRPORT DEVELOPMENT PLAN
LONG-TERM (11-20 YEARS)**

RUNWAY and TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)

- Crack seal/ slurry seal/ mark Runway 9-27 (3,200' x 75'; NPI)
- Crack seal/ slurry seal/ mark Taxiways A, B and C
- Remove/ relocate lighted wind cone and segmented circle

TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)

- Overlay/ mark eastern tie-down extension area (5,550 S.Y.)
- Reconstruct western terminal area taxilanes (28,200 S.Y.)
- Slurry seal/ crack seal/ mark eastern terminal area taxilanes (3,190 S.Y.)
- Slurry seal/ crack seal/ mark main tie-down apron area (12,230 S.Y.)
- Seal coat apron in vicinity of airport fueling facilities (2,090 S.Y.)
- Construct three (3) 10-unit nested T-hangars (37,500 S.F.)
 - Construct five (5) 20'-wide taxilanes to provide hangar access
 - Construct taxiway (25' wide) connecting eastern nested T-hangar expansion area with Taxiway A
- Construct two (2) clear span/ common hangars (9,750 S.F.)
- Expand passenger terminal building by an additional 2,010 S.F. (5,900 S.F. total)
- Expand/ pave/ mark auto parking area to accommodate an additional 17 parking spaces (8,415 S.F.) to total 50 parking spaces

Note: Clear span/common hangar and nested T-hangar and public auto parking facilities financing is assumed through conventional methods using local (airport) and private investment options.

Note: Future projections are provided for planning purposes only. The rate of actual build-out experienced at the airport will occur based on market factors consistent with the provisions of this plan.

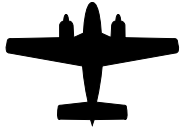


PHASE THREE (11-20 YEARS) AIRPORT CAPITAL DEVELOPMENT COSTS

Table 7.5 provides a summary of the Phase Three (11-20 years) development costs projected for the JCIA. Refer to the **Appendix E** for detailed cost estimates for Phase Three capital development.

<i>Table 7.5 Phase Three (11-20 Years) Capital Development Cost Estimates Jefferson County International Airport</i>			
Capital Improvement Project	Local Funding	AIP/ FAA Funding	Total Project Cost
<i>RUNWAY AND TAXIWAY NEEDS (AIRSIDE IMPROVEMENTS)</i>			
Crack Seal/ Slurry Seal/ Mark Runway 9-27 (3,200' x 75'; NPI)	\$20,500	\$184,000	\$204,000
Crack Seal/ Slurry Seal/ Mark Taxiways A, B, and C	\$11,191	\$101,119	\$112,410
Remove/ Relocate Lighted Wind Cone and Segmented Circle	\$2,600	\$23,900	\$26,600
Total Estimated Costs (Airside Improvements)	\$34,291	\$309,019	\$343,310
<i>TERMINAL AREA NEEDS (LANDSIDE IMPROVEMENTS)</i>			
<i>Apron/ Pavement Improvements</i>			
Overlay/ Mark Eastern Tie-Down Apron (5,550 S.Y.)	\$16,000	\$144,000	\$160,000
Reconstruct Western Terminal Area Taxilanes (28,400 S.Y.)	\$109,100	\$982,500	\$1,091,600
Crack Seal/ Slurry Seal/ Mark Main Apron (12,230 S.Y.)	\$5,500	\$49,100	\$54,600
Crack Seal/ Slurry Seal/ Mark East Terminal Area Taxilanes (3,190 S.Y.)	\$2,000	\$18,500	\$20,600
Seal Coat Apron in Vicinity of Fueling Facilities (2,090 S.Y.)	\$2,900	\$25,900	\$28,800
<i>Hangar & Structure Development</i>			
Construct (3) 10-Unit Nested T-Hangars (37,500 S.F.)	\$741,500	\$271,600	\$1,013,100
Construct (2) Clear Span/ Common Hangars (9,750 S.F.)	\$278,800	\$107,300	\$386,000
Expand Passenger Terminal Building by 2,010 S.F. (5,900 S.F.-Total)	\$297,000	\$0.00	\$297,000
<i>Additional Terminal Area Development</i>			
Expand/ Pave/ Automobile Parking Area to Accommodate 17 Additional Spaces (8,415 S.F.) to Total 50 Parking Spaces	\$128,300	\$0.00	\$128,300
Total Estimated Costs (Landside Improvements)	\$1,581,200	\$1,598,900	\$3,180,100
Total Phase Three (11-20 Year) Estimated Development Costs	\$1,615,491	\$1,907,919	\$3,523,410

Source: BWR, Airport Capital Development Cost Estimates, December 2002.



JEFFERSON COUNTY INTERNATIONAL AIRPORT (JCIA)

**Airport Master Plan Update
Port of Port Townsend, Washington**

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