

# **Chapter 8 - Airport Financial Plan**



### Introduction

The purpose of this chapter is to present the projects identified in the twenty-year Airport Capital Improvement Program (ACIP) defined based on the analyses conducted in the Facility Requirements and Development Alternatives evaluations (Chapters Four and Five). The ACIP projects are summarized in Table 8-1 later in the chapter. The ACIP is organized into short, intermediate, and long-term planning periods that reflect both project prioritization and financial capabilities. Several factors were considered in determining project prioritization, including safety, forecast demand, the need to maintain/replace existing airfield facilities, and financial capabilities of both the Airport and FAA to support the development program based on existing funding sources.

The Master Plan preferred alternative includes both airside elements and landside elements. Minor pavement maintenance items such as vegetation removal and crack filling are not included in the ACIP, but will need to be undertaken by the Airport on an annual or semi-annual basis.

A brief environmental review was prepared and is included in the airport master plan (see Appendix - B). The review provides an overview of areas of potential concern associated with proposed development. In addition, all federally funded projects will require project-specific environmental study to support the proposed federal action. The level of environmental analysis will be determined by FAA on a project by project basis.

Individual projects for the first five years of the planning period are listed in order of priority by year. Projects for the intermediate and long-term phases of the planning period (years 6-20) are listed in order of priority but have not been assigned a year. Each project's eligibility for FAA funding is noted, based on current federal legislation and funding formulas. Specific project details are depicted on the updated Airport Layout Plan and Terminal Area Plan drawings contained in Chapter Six.





A primary source of potential funding identified in this plan is the FAA's Airport Improvement Program (AIP). As proposed, approximately 90 percent of the airport's twenty-year ACIP will be eligible for federal funding. Funds from this program are derived from the Aviation Trust Fund, which is the depository for all federal aviation taxes collected on such items as airline tickets, aviation fuel, lubricants, tires, aircraft registrations, and other aviation related fees. These funds are distributed by FAA under appropriations set by Congress for all airports in the United States included in the federal airport system (National Plan of Integrated Airport Systems – NPIAS).

However, as noted in Table 8-1, the projected twenty-year total for FAA eligible projects in the ACIP significantly exceeds current FAA funding levels through the non-primary entitlement program, which is \$150,000 annually. While other types of FAA funding may be available for some projects, it is reasonable to assume not all eligible projects are likely to be funded despite establishing FAA funding eligibility. The Airport must maximize the use of available FAA and other outside funding sources as it manages its ACIP. In some cases, the limited availability of outside funds may require deferring some projects, or increasing funding with additional local, state, or private funding.

### **Airport Development Schedule and Cost Estimates**

Cost estimates for each individual project were developed in 2019 dollars based on typical construction costs associated with the specific type of project. The project costs listed in the ACIP represent order-of-magnitude estimates that approximate design, engineering, environmental, other related costs, and contingencies. The estimates are intended only for preliminary planning and programming purposes. Specific project analysis and detailed engineering design will be required prior to project implementation to provide more refined and detailed estimates of the development costs.

These cost estimates can continue to assist management through adjustments to the 2019-dollar amounts to account for subsequent inflation as the plan is carried out in future years. This can be accomplished by converting the appropriate change in the United States Consumer Price Index (USCPI) to a multiplier using the following formula:





$$\frac{x}{I} = y$$

Where:

X = USCPI in any given future year

Y = Change Ratio

I = Current Index (USCPI)<sup>1</sup>

USCPI-U

270.957 (1982-1984 = 100) June 2019

Multiplying the change ratio (Y) times any 2019-based cost estimate presented in this study will yield the adjusted dollar amounts appropriate in any future year evaluation. Several different CPI-based indices are available for use and any applicable index may be substituted by the airport sponsor in its financial management program.

The following sections outline the recommended development program and funding assumptions for the short-term, intermediate, and long-term projects. Overall project scheduling is defined based on the facility requirements needs identified in the master plan evaluation. The projected staging of development projects is based on a combination of needs and development priorities.

It is recognized that actual activity levels may vary from projected levels. Therefore, the staging of development presented in the ACIP should be viewed as a general guide. The implementation of development projects should occur when demand warrants, rather than according to the estimated staging presented in this chapter. If the assumptions made in the master plan remain valid, the project prioritization reflected in the ACIP will provide a reliable guide for development. When activity deviates from projected levels, program adjustments may be made. The annual Joint Planning Conference (JPC) coordinated by WSDOT Aviation and the FAA, provides the ability to adjust the Airport's near term development priorities through updates of the State Capital Improvement Program (SCIP) to reflect changes in demand and to move longer term projects forward intermediate as other projects are completed.

In addition to major capital projects, the airport will continue to require regular facility maintenance such as pavement maintenance, vegetation control, sweeping, lighting repair, and fuel system maintenance.

<sup>&</sup>lt;sup>1</sup> U.S. Consumer Price Index for All Urban Consumers (USCPI-U)





### **SHORT-TERM PROJECTS**

The short-term program contains highest priority work items including safety related improvements. These items will need to be incorporated into the State Capital Improvement Program (SCIP) managed by the FAA Seattle Airport District Office and the Washington State Department of Transportation, Aviation Division (WSDOT). To assist with this process, the short-term projects are scheduled in specific calendar years for the first six years of the planning period (2019-2024).

The primary focus for short-term development projects is to address existing conditions for Runway 12/30. The initial project work includes a programmatic environmental study of near term development projects identified in CIP, followed by obstruction removal, site mitigation, design, and runway reconstruction.

The Airport is also planning a project to replace its two underground fuel storage tanks with two new double wall aboveground tanks. The tanks will be installed in the same area as the existing fuel system and all existing control systems will be removed. Modification of the existing fueling apron may be performed as needed to increase access to the fuel pumps.

### Short-Term Projects (0-6 years)

- 1. Design and construct the runway rehabilitation including crack fill, sealcoat, and new NPI markings; major taxiways crack fill and sealcoats (completed in 2019).
- 2. Replace underground aviation fuel storage tanks with two new above ground tanks (non-FAA project). The capacity of the tanks will be determined during design (9,000 to 12,000 gallons each, typical) and the existing PCC (concrete) fueling apron will be used to site the new tanks. Future expansion of the fueling apron is planned to connect the area with the adjacent north apron (requires grade adjustment). The existing underground tanks will be decommissioned with required remediation.
- 3. Environmental Assessment for FAA development program projects included in the short term period. The primary projects include runway rehabilitation, runway OFA grading, wetland fill & mitigation, and obstruction removal.
- 4. Design and construction for the obstruction removal, wetland mitigation, runway OFA grading and fill, and fencing improvements for security.
- 5. Design for Runway 12/30 reconstruction including runway narrowing (to 75 feet), reconfiguration of exit taxiway fillets, new runway underdrains, and new (replacement) lighting systems and lighted airfield signs:
  - a. Medium intensity runway edge lighting (MIRL)
  - b. Runway end identifier lighting (REILs)
  - c. Precision Approach Path Indicators (PAPI)





- d. Internally lighted airfield signage (runway, taxiway, distance remaining)
- e. NPI runway markings

#### **INTERMEDIATE & LONG-TERM PROJECTS**

Several intermediate or long-term projects are considered to be current needs. However, it was necessary to shift some projects to subsequent planning periods based on the limited funding resources available. Individual projects may be completed sooner in the event additional funding can be obtained.

### Intermediate-Term Projects (6-10 years) & Long-Term Projects (11-20 years):

- 1. Construction of the Runway 12/30 project including reconstruction of the runway section (narrowed to 75 feet and new asphalt surface course), new underdrains, new runway edge lighting (MIRL) and runway end identifier lighting (REILs), new Precision Approach Path Indicator (PAPI) lighting, new lighted mandatory instruction signs, location signs, directional signs, and runway distance remaining signs, and new markings.
- 2. Grade Runway 12/30 safety area (RSA) and object free area (OFA), including relocating the BNSF staging area outside of the OFA.
- 3. Design the west taxiway project.
- 4. Conduct an AWOS relocation study.

### Long-Term Projects (11-20 years):

- 1. Conduct an EA for the east parallel taxiway relocation project.
- 2. Property acquisition for the north end of the east parallel taxiway and taxiway object free area (TOFA) improvement project.
- 3. Property acquisition for the south end of the east parallel taxiway and taxiway object free area (TOFA) improvement project.
- 4. Design and construct shifted (40') east parallel taxiway (4,391' x 35') with modified connector taxiways (A-D) and replacement taxiway edge reflectors. The parallel taxiway construction may be completed in phases depending on funding availability and the ability to construct sections with/without property acquisition.
- 5. Relocate Taxiway B approximately 150 feet north to eliminate an existing "direct taxi route" between the south apron and the runway.
- 6. Construct (rehabilitate) the west hangar taxilane (Phase 1 915' x 25').
- 7. Construct the west hangar taxilane north extension (Phase  $2 640' \times 25'$ ).
- 8. Reconfigure and expand the north apron and modify two taxilane connectors to the east parallel taxiway.





- 9. Reconfigure the south apron taxilanes and install/relocate new aircraft tiedown anchors (13). Modify three taxilane connectors to the east parallel taxiway.
- 10. Modify the Fixed Base Operator (FBO) apron (expand north section of aircraft fueling apron).
- 11. Reconfigure the terminal area vehicle parking including grading, drainage improvements, paving, and markings.
- 12. Construct new FBO hangar (demolish existing FBO hangar).
- 13. Replace and relocate the AWOS.
- 14. Reconfigure the east T-hangar taxilanes; remove the north-south hangar taxilane; extend the six taxilane connectors to the east parallel taxiway; and install aircraft tiedown anchors (12 total);
- 15. Construct an east T-hangar vehicle parking area.
- 16. Periodic pavement maintenance taxilanes, aprons (crackfill, sealcoat).
- 17. Conduct pavement maintenance on Runway 12/30 (4,391' x 75') including crackfill, sealcoat, and repaint markings.
- 18. Conduct pavement maintenance on major taxiways (A and Al-A4) including crackfill, sealcoat, and repaint markings.
- 19. Environmental for hangar site development (8 units south of the existing T-hangar rows) including site fill, drainage improvements, wetland mitigation, stub taxilane, and vehicle parking area.
- 20. Design & construction for new hangar site development (8 units south of the existing T-hangar rows) including site fill, drainage improvements, wetland mitigation, stub taxilane, and vehicle parking area.
- 21. Reconfigure and replace T-hangar taxilanes (390' x 25') (Note This project replaces three existing stub taxilanes when two existing T-hangars are demolished and replaces them with two new one-sided multi-unit hangars).



# Southwest Washington Regional Airport 20-YEAR CAPITAL IMPROVEMENT PROGRAM

Prepared by Century West Engineering, Updated 12.03.19

FY2020 NPE \$ Accumulation:

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Short-Term		Project	Project Category	Unit	Quantity	Unit Cost	Subtotal Cost	Contingency (Env./Eng/Tax.)	Total Cost	FAA GA Entitlement	Other FAA **	Local Costs ***		
								(see note)						
2020		No FAA Projects (NPE Carry Over)											FY 2020 NPE + Accum	. \$150,000
		Replace Fuel Storage Tanks (Above-ground 12,000-gallon)	Facilities	LS	2	\$375,000	\$750,000	\$0	\$750,000	\$0	\$0	φ.εο,σσσ		
Subs	total - Ye	200 A							\$750,000	\$0	\$0		NPE Used NPE Remaining	\$0 \$150,000
Subi	iotai - 1 t	cal v							\$750,000	φU	Φυ	\$730,000	NFE Kemaning	\$150,000
2021		Environmental Assessment (Airspace & OFA Obstruction Removal, Wetlands, OFA Grading, Fencing/Security)	Environmental	LS	1	\$500,000	\$500,000	\$0	\$500,000	\$300,000	\$150,000	\$50,000	FY 2020 NPE + Accum	
Cube	total - Ye	20m 1							\$500,000	\$300,000	\$150,000	\$50,000	NPE Used NPE Remaining	\$300,000 \$0
Subi	iotai - 16	ear 1							\$300,000	\$300,000	\$130,000	\$30,000	NPE Remaining	ΦU
2022		Obstruction Removal & Wetland Mitigation	Design	LS	1	\$250,000	\$250,000	\$0	\$250,000	\$150,000	\$75,000		FY 2021 NPE + Accum	
									<b>*2 *</b> 2 000	#1. <b>7</b> 0.000	<b>***</b> *********************************		NPE Used	\$150,000
Subt	total - Ye	ear 2							\$250,000	\$150,000	\$75,000	\$25,000	NPE Remaining	\$0
2023		Obstruction Removal, OFA Grading & Wetland Mitigation	Construction	LS	1	\$1,400,000	\$1,400,000	\$0	\$1,400,000	\$150,000	\$1,110,000		FY 2022 NPE +Accum. NPE Used	\$150,000 \$150,000
Subt	total - Ye	ear 3							\$1,400,000	\$150,000	\$1,110,000		NPE Remaining	\$0
2024		No Projects (NPE Carry Over)											FY 2023 NPE + Accum	
Subt	total - Ye	ear 4							\$0	\$0	\$0	\$0	NPE Used NPE Remaining	\$0 \$150,000
													C	,
2025		Runway 12/30 Reconstruction (4,391 x 75'); New Underdrains; New MIRL, PAPIs, and REILs (Rwy 12 & 30); Signage; NPI Mkgs.	Design	LS	1	\$765,000	\$765,000	\$0	\$765,000	\$300,000	\$388,500	\$76,500	FY 2024 NPE + Accum	. \$300,000
C1-4	total - Ye								\$765,000	\$300,000	\$388,500		NPE Used NPE Remaining	\$300,000
Subi	iotai - Ye	ear 5				Years 0-5			\$765,000	\$300,000 <b>\$900,000</b>	\$388,500		NE Kemaining	\$0

<sup>\*\*</sup> Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

Short-Term CIP Note: Project engineering and environmental contingencies are included in lump sum project costs, unless otherwise noted (and calculated separately)

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

AC = Asphalt Concrete; PCC - Portland Cement Concrete

<sup>\*\*\*</sup> Local (City) costs at 10% (City may apply for a WSDOT grant for a portion of matching funds)

# Southwest Washington Regional Airport 20-YEAR CAPITAL IMPROVEMENT PROGRAM

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Intermediate-30% Contingency FAA GA Project **Project Category** Unit Quantity Unit Cost **Subtotal Cost Total Cost** FAA Eligible \*\* Local Costs\*\*\* Term (Env./Eng./Tax) Entitlement Non-Primary Entitlements Accumulation Total (5-Years) \$750,000 2026-2030 No Projects (NPE Carry Over) Runway 12/30 Reconstruction (4,391 x 75'); New Underdrains; New MIRL, \$1,530,000 LS \$5,100,000 \$5,100,000 \$6,630,000 \$663,000 Construction PAPIs, and REILs (Rwy 12 & 30); Signage; NPI Mkgs. Runway 12/30 RSA, OFA Grading; Relocate BNSF Staging Area outside LS Construction \$1,220,000 \$1,220,000 \$366,000 \$1,586,000 \$158,600 OFA West Taxiway Design (Phase 1) LS \$222,222 \$222,222 \$222,222 \$22,222 Design \$7,000 AWOS Relocation Study Feasibility/ Planning LS \$70,000 \$70,000 \$0 \$70,000 Subtotal - Year 7-10 \$8,508,222 \$750,000 \$6,907,400 \$850,822

FY2020 NPE \$ Accumulation:

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

AC = Asphalt Concrete; PCC - Portland Cement Concrete

Long-Term	Project	Project Category	Unit	Quantity	Unit Cost	Subtotal Cost	30% Contingency (Env./Eng./Tax)	Total Coast	FAA GA Entitlement	FAA Eligible **	Local Costs***
Non-Primary Ent	itlements Accumulation Total (10-Years)								\$1,500,000		
2031-2040	Relocate/Construct East Parallel Taxiway (4,391 x 35'); modify connector taxiways (A1-A4); replace taxiway edge reflectors	Construction	LS	1	\$2,450,000	\$2,450,000	\$735,000	\$3,185,000			\$318,500
	West Parallel Taxiway/North Hangar Taxilane Reconfiguration/Rehabilitation (Phase 1 - 440' x 35')	Construction	LS	1	\$200,000	\$200,000	\$60,000	\$260,000			\$26,000
	West Parallel Taxiway/Taxilane North Extension (Phase 2 - 150' x 25')	Construction	LS	1	\$1,500,000	\$1,500,000	\$450,000	\$1,950,000			\$195,000
	Reconfigure/Expand North Apron; Modify Taxilane (2) Connectors to East Parallel Taxiway	Construction	LS	1	\$500,000	\$500,000	\$150,000	\$650,000			\$65,000
	Reconfigure/Expand South Apron; Install AC Tiedown Anchors (13); Modify Taxilane (3) Connectors to East Parallel Taxiway	Construction	LS	1	\$200,000	\$200,000	\$60,000	\$260,000			\$26,000
	Modify FBO Apron; Relocate Aircraft Fueling Positions; Relocate Taxilane Connection (1) to East Parallel Taxiway	Construction	LS	1	\$450,000	\$450,000	\$135,000	\$585,000			\$58,500
	Reconfigure Terminal Area Vehicle Parking (grading, drainage, paving, striping)	Construction	LS	1	\$355,000	\$355,000	\$106,500	\$461,500			\$46,150
	Property Acquisition (North End: East Parallel Taxiway/TOFA)	Property Acquisition	AC	0.85	\$250,000	\$212,500	\$106,250	\$318,750			\$31,875
	Property Acquisition (South End: East Parallel Taxiway/TOFA)	Property Acquisition	AC	0.41	\$250,000	\$102,500	\$51,250	\$153,750			\$15,375
	New (Relocated) AWOS	NAVAIDS	LS	1	\$450,000	\$450,000	\$135,000	\$585,000			\$58,500
	Reconfigure East T-Hangar Taxilanes; Eliminate N/S Hangar Taxilane; Extend Stub Taxilane Connections (6) to East Parallel Taxiway; Install AC Tiedown Anchors (12)	Construction	LS	1	\$725,000	\$725,000	\$217,500	\$942,500			\$94,250
	East T-Hangar Area Vehicle Parking	Construction	LS	1	\$175,000.00	\$175,000	\$52,500	\$227,500			\$22,750
	Aboveground Aviation Fuel Tanks (2 - 12,000-gallon)	Aviation Fuel	EA	2	\$40,000.00	\$80,000	\$24,000	\$104,000			\$10,400
	Environmental Assessment for East Parallel Taxiway Relocation	Environmental	LS	1	\$150,000	\$150,000	\$45,000	\$195,000			\$19,500
	Sealcoat East T-Hangar Taxilanes (6) & AC Tiedowns	Rehabilitation	SY	14,500	\$10.00	\$145,000	\$43,500	\$188,500			\$18,850
	Sealcoat North Apron	Rehabilitation	SY	15,000	\$10.00	\$150,000	\$45,000	\$195,000			\$19,500
	Sealcoat South Apron	Rehabilitation	SY	10,500	\$10.00	\$105,000	\$31,500	\$136,500			\$13,650
	AC Pavement Maintenance (RWY 12/30 4,391'x75') Crackfill, Sealcoat, and Repaint NPI Markings	Rehabilitation	LS	1	\$570,000	\$570,000	\$171,000	\$741,000			\$74,100
	Pavement Maintenance (Taxiways A, A1-A4) Crackfill, Sealcoat, and Repaint Markings (2022 PCI 92; AC Hold: 84)	Rehabilitation	LS	1	\$275,000	\$275,000	\$82,500	\$357,500			\$35,750
	Sealcoat West Taxiways	Rehabilitation	SY	9,000	\$10	\$90,000	\$27,000	\$117,000			\$11,700

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<sup>\*\*</sup> Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

<sup>\*\*\*</sup> Local (City) costs at 10% (City may apply for a WSDOT grant for a portion of matching funds)

# Southwest Washington Regional Airport 20-YEAR CAPITAL IMPROVEMENT PROGRAM

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Overlay East T-Hangar Taxilanes (3) & AC Tiedowns LS \$290,000 \$290,000 \$87,000 \$377,000 \$37,700 Rehabilitation New Wind Cone (lighted) NAVAIDS LS \$15,000 \$15,000 \$4,500 \$19,500 \$1,950 Sealcoat East T-Hangar Taxilanes (6) & AC Tiedowns SY 14,500 \$43,500 \$188,500 Rehabilitation \$10 \$145,000 \$18,850 Sealcoat North Apron Rehabilitation SY 15,000 \$10 \$150,000 \$45,000 \$195,000 \$19,500 Rehabilitation SY 10,500 \$105,000 \$31,500 \$136,500 \$13,650 Sealcoat South Apron \$10 AC Pavement Maintenance (RWY 12/30 4,391'x75') Crackfill, Sealcoat, and Rehabilitation LS \$570,000 \$570,000 \$171,000 \$741,000 \$74,100 Repaint NPI Markings Pavement Maintenance (Taxiways A, A1-A4) Crackfill, Sealcoat, and Repaint LS \$82,500 \$357,500 Rehabilitation \$275,000 \$275,000 \$35,750 Markings (2022 PCI 92; AC Hold: 84) Sealcoat West Taxiways Rehabilitation SY 9,000 \$10.00 \$90,000 \$27,000 \$117,000 \$11,700 Hangar Site Development (8 units south of existing T-hangar rows); Site Fill, Site Preparation LS \$4,200,000 \$4,200,000 \$1,260,000 \$5,460,000 \$546,000 Drainage, Wetland Mitigation, Stub Taxilane; Vehicle Parking) Reconfigure/Replace T-Hangar Taxilanes (2) (390' x 25') (This project replaces 3 existing stub taxilanes when 2 existing T-hangars are demolished Rehabilitation LS \$2,750,000 \$2,750,000 \$825,000 \$3,575,000 \$357,500 and replaced with 2 new one-sided multi-unit hangars) Airport Master Plan Update LS \$500,000 \$500,000 \$150,000 \$650,000 \$65,000 Planning \$2,343,050 \$23,430,500 \$1,500,000 \$19,587,450 Subtotal Year 11-20 \$35,603,722 \$3,150,000 \$28,218,350 \$4,235,372 20-Yr Total

FY2020 NPE \$ Accumulation:

Lump sum project costs include contingency for engineering and environmental, unless otherwise calculated separately

Unit: LS=Lump Sum, LF=Linear Foot, SY=Square Yard, EA=Each

 $AC = Asphalt\ Concrete;\ PCC\ -\ Portland\ Cement\ Concrete$ 

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<sup>\*\*</sup> Other FAA Funding Total listed for reference only based on general project eligibility; FAA funding levels are expected to be below projected needs.

<sup>\*\*\*</sup> Local (City) costs at 10% (City may apply for a WSDOT grant for a portion of matching funds)



# **Capital Funding Sources & Programs**

#### **FEDERAL GRANTS**

Federal funding is provided through the Federal Airport Improvement Program (AIP). The Airport Improvement Program is the latest evolution of a funding program originally authorized by Congress in 1946 as the Federal Aid to Airports Program (FAAP). Other appropriations of AIP funds go to states, general aviation airports, commercial service airports, and for noise compatibility planning. Any remaining AIP funds at the national level are designated as Discretionary funds and may be used by the FAA to fund eligible projects. Discretionary funds are typically used to enhance airport capacity, safety, and/or security and are often directed to specific national priorities such as the recent program to improve runway safety areas. AIP funds can only be used for eligible capital improvement projects and may not be used to support airport operation and maintenance costs.

The FAA Reauthorization Act of 2018 was signed into law on October 5, 2018. The 2018 reauthorization extends funding through fiscal year 2023. AIP funding programs include:

- AIP Entitlement Grants: The AIP provides Entitlement funds for commercial service and cargo airports based on the number of annual enplaned passengers and amount of air cargo handled.
- AIP General Aviation Non-Primary Entitlement (NPE) Grants: The AIP provides Non-Primary Entitlement (NPE) funds for general aviation airports such as Hermiston Municipal, based on fixed amount of \$150,000 per year. The NPE funds can carried over for up to four years, or a maximum of \$600,000. Unused NPEs may be "donated" to other GA airports within the state through the ADO, or the funds revert into a national pot for reallocation among all FAA regions.
- AIP Discretionary Grants: The AIP provides Discretionary funds to airports for projects that have a high federal priority or to enhance safety, security, or capacity. These grants are over and above Entitlement/NPE funding. Discretionary grant amounts can vary significantly compared to Entitlements/NPE and are awarded at the FAA's sole discretion. Discretionary grant applications are evaluated based on:
  - o Need;
  - o The FAA's project priority ranking system; and
  - o The FAA's assessment of a project's significance within the national airport and airway system.
- FAA Facilities and Equipment Funds: Additional funds are available under the FAA Facilities and Equipment (F&E) program to purchase navigational aids and air safety-related technical equipment, including Airport Traffic Control Towers (ATCTs) for use at commercial service airports in the National Airport System. Each F&E project is evaluated independently using a cost-





benefit analysis to determine funding eligibility and priority ranking. Qualified projects are funded in total (i.e., 100 percent) by the FAA, while remaining projects would likely be eligible for funding through the AIP or PFC programs. In addition, an airport can apply for NAVAID maintenance funding through the F&E program for those facilities not funded through the F&E program.

FAA funding is limited to projects that have a clearly defined need and are identified through preparation of an FAA approved Airport Layout Plan (ALP). Periodic updates of the ALP are required when new or unanticipated project needs or opportunities exist that require use of FAA funds and to reflect the status of completed projects. The FAA will generally not participate in projects involving vehicle parking, utilities, building renovations, or projects associated with non-aviation development.

Projects such as hangar construction or fuel systems are eligible for funding, although the FAA considers these types of project as a much lower priority than other airfield needs.

Airport sponsors accept obligations (grant assurances) when accepting FAA AIP grants. A summary of the applicable grant assurances is provided in **Appendix** E.

### **STATE FUNDING**

The Washington State Department of Transportation - Aviation Division (WSDOT Aviation) provides an additional source of funding for airport projects in the form of grants through its Airport Aid Grants program. The Aviation Division has established grant criteria for airport sponsors requesting aid to define projects related to pavement, safety, maintenance, security, or planning.

Although Aviation Division funding is distributed widely to general aviation airports throughout the state, predicting any consistent level of funding for purposes of long-term financial planning is not possible. Competition for the limited grant funds is consistently high, with priority often given to airports with limited resources or to airports that are not eligible to receive FAA grants. Project funding is determined on a case-by-case basis and is affected by overall funding levels and competition among airports during any particular state budget cycle (biennium).

The current maximum grant award through the Aviation Division is \$250,000. House Bill 1018 (effective July 2017) increased the maximum grant amount from \$250,000 to \$750,000 for general aviation projects funded by WSDOT. However, despite the recent increase in funding limits, large grant awards under this program remain relatively uncommon due to the large number of applications and the limited funding pool available to the Aviation Division. House Bill 1018 subsequently became session law *Chapter 48 Airport Aid Grant Program – Maximum Amount*.

When funding levels permit, the Aviation Division attempts to assist NPIAS general aviation airports with funds needed to match FAA grants. Up to half of the 10 percent local match may be funded through





Aviation Division grants, although as noted above, the available funding within each biennial funding cycle effectively limits the ability to support large grant awards.

For these reasons, no specific level of Aviation Division funding has been assumed in the CIP presented in Table 8-1. It is recommended that the airport regularly apply for WSDOT funding for eligible projects; however, the limitations on funding availability suggest that it would not be prudent to assume that any specific level or formula percentage is available. In the instances when Aviation Division grant requests are successful, the Airport required expenditure in the form of local match for FAA grants or funding non-FAA eligible projects will be reduced.

## Community Aviation Revitalization Loan Program (description provided by WSDOT)

The new Community Aviation Revitalization Loan Program was established by EHB 1102 and funded initially with \$5 million. The revolving loan program is for revenue-producing capital projects that help public-use general aviation airports become more self-sustainable. The program funds will be distributed with the guidance of a new eight-member Community Aviation Revitalization Board (CARB).

The program provides loans up to \$750,000 at 3% interest to airports with less than 75,000 annual commercial enplanements, as reported to the FAA. Loans can have a maximum 20-year loan period and recipients can opt to have up to a 3-year loan repayment grace period. Loan recipients must commit to provide public access to the airport for a period of time equivalent to one and one-half times the length of the loan. Eligible projects can include hangars, fueling facilities, business parks on airport property, paid parking facilities, passenger amenities, and other revenue-generating or cost-cutting developments that help make the airport more self-sustaining and less dependent on public funding.

KLS has applied for loan funding for the 2020 airport fuel tank replacement project listed in the master plan CIP.

### State Capital Improvement Program (SCIP)

The FAA's Seattle Airport District Office (ADO) coordinates its capital improvement programming with state aviation agencies in Washington and Oregon. The coordinated program is known as the "state" capital improvement program, or "SCIP." The SCIP is the primary tool used by FAA, state aviation agencies, and local airport sponsors to prioritize current and near-term future funding decisions through evaluation formulas and ongoing coordination.

Airport sponsors provide annual updates to the short-term project lists in order to maintain a current system of defined project needs. The FAA and WSDOT Aviation schedule annual "joint planning conferences" (JPC) with airport sponsors to update the regularly SCIP. The short-term priorities identified in the master plan CIP were incorporated into the SCIP during the November 25, 2019 JPC.





### **LOCAL FUNDING**

The locally funded portion of the CIP for the twenty-year planning period is estimated to be approximately \$4.2 million as currently defined. Hangar or other building construction and maintenance costs have not been included in the CIP, since no FAA funding is assumed.

A portion of local matching funds are generated through airport revenues, including fuel sales, land leases, and hangar rentals. Airport sponsors occasionally fund infrastructure and revenue-generating development, including hangars and buildings, either through an inter fund loan or the issuance of long-term debt (revenue or general obligation bonds).

## **Airport Rates and Fees**

The primary aviation use rates and fees at KLS are summarized in **Table 8-2**. A review of existing rates and fees indicates that the airport's fee structure is generally comparable with other similarly sized airports in the region. Rates at individual general aviation airports vary based primarily on market conditions. For example, hangar rental rates in the Portland metro area or in the greater Seattle area are typically higher than at airports in other parts of the states. An airport's ability to effectively raise rates must consider local and regional market conditions and the potential for nearby competitive airports to attract tenants through more economical rates.

The rates and fees structure should be subject to regular review and adjustment to reflect inflation, market conditions and specific facility improvements. Common methods of actively managing airport land lease rates include periodic appraisals of land values (aeronautical and non-aeronautical) and CPI-indexing written into leases.

**TABLE 8-2: AIRPORT LEASE RATES** 

Tiedown Fee (Daily)	\$3.50
Ground Lease Rate - Hangar site with apron/taxilane access (per square foot):	\$0.45
Fuel Flowage Fee (Jet-A) per gallon:	No Charge
Fuel Flowage Fee (100LL) per gallon:	No Charge
Landing Fee (Large GA) per 1,000lbs MGLW:	No Charge
1,480 Sq/Ft T-Hangar Lease Rate (monthly rent, airport owned):	\$297.00
940 Sq/Ft T-Hangar Lease Rate (monthly rent, airport owned):	\$233.76

# **Cash Flow Analysis**

A projection of airport operating revenues and expenses for the twenty-year planning period is presented in Table 8-3, based on data provided by the city and the noted assumptions on future events. According to the airport's proposed 2019 budget, the Airport is currently operating in a deficit (based on operating





revenues and expenses only). The general operating position of the Airport is expected to improve as specific facility improvements occur and overall airport activity increases. Basic business decisions will need to be made regarding the financial feasibility of renovating individual city-owned buildings. These decisions should be made based on market conditions, expected return on investment, and any intangible benefits provided to the community that would result from the project.

The Airport has two primary revenue categories: airport leases including ground leases and hangar leases, as well as fuel sales. The current rates and fees structure appear to be generally in line with market rates at other general aviation airports in the region. For the purposes of projecting future revenues, it is assumed that revenues will increase at an average rate of 3.5 percent annually, through the twenty-year planning period. This rate assumes both an increase in revenue-producing activities on the airport (new leases, fuel sales, etc.) and periodic increases in current rates and fees to account for inflation and market conditions.

The current level of maintenance and operating expenses is considered to be reasonable based on the size of the facility and reflects the efficient use of staff and outside resources. For the purposes of projecting future revenues, it is assumed that expenses will increase at an average rate of 3 percent annually, through the twenty-year planning period. Additional maintenance expenses are also anticipated as the airfield continues to expand physically. Although the precise staging of facility expansion will depend on market demand and availability of funding the new facilities identified in the twenty-year CIP. The costs of maintaining the airfield can be reasonably expected to increase incrementally as the facility expands.

Ongoing capital improvement expenditures will include local match for state and federal grants and the full or partial cost of projects not eligible for FAA or state funding.

### Revenue assumptions:

- A. Land leases increase at 3.5% per year (inflation factor), as land is leased for future hangar development, incremental increases would be added based on the current ground lease rates;
- B. Building leases increase at 3.5% per year (inflation factor);
- C. No plans of any future City owned hangar buildings to be constructed in the next 20 years; and
- D. Fuel revenues increase at 3.5% per year (inflation factor).

## **Expense assumptions:**

- A. Operating expenses increase at 3% per year (inflation factor); and
- B. No increase in airport staffing.







**TABLE 8-3: AIRPORT OPERATING BUDGET** 

SOUTHWEST V	WASHINGTON REGIONAL	<b>AIRPORT 20-YEAR</b>	OPERATING BUDGET

<b>OPERATING EXPENSES*</b>	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
MATERIALS AND SERVICES	-																				
City Professional Services	\$136,400	\$140,490	\$144,700	\$149,040	\$153,510	\$158,120	\$162,860	\$167,750	\$172,780	\$177,960	\$183,300	\$188,800	\$194,460	\$200,290	\$206,300	\$212,490	\$218,860	\$225,430	\$232,190	\$239,160	\$246,330
Airport Staff (Salaries and Benefits)	\$124,000	\$127,720	\$131,550	\$135,500	\$139,570	\$143,760	\$148,070	\$152,510	\$157,090	\$161,800	\$166,650	\$171,650	\$176,800	\$182,100	\$187,560	\$193,190	\$198,990	\$204,960	\$211,110	\$217,440	\$223,960
Other Professional Services	\$8,000	\$8,240	\$8,490	\$8,740	\$9,000	\$9,270	\$9,550	\$9,840	\$10,140	\$10,440	\$10,750	\$11,070	\$11,400	\$11,740	\$12,090	\$12,450	\$12,820	\$13,200	\$13,600	\$14,010	\$14,43
Maintenance and Repairs	\$86,700	\$89,300	\$91,980	\$94,740	\$97,580	\$100,510	\$103,530	\$106,640	\$109,840	\$113,140	\$116,530	\$120,030	\$123,630	\$127,340	\$131,160	\$135,090	\$139,140	\$143,310	\$147,610	\$152,040	\$156,600
Diking Assessment	\$26,500	\$27,300	\$28,120	\$28,960	\$29,830	\$30,720	\$31,640	\$32,590	\$33,570	\$34,580	\$35,620	\$36,690	\$37,790	\$38,920	\$40,090	\$41,290	\$42,530	\$43,810	\$45,120	\$46,470	\$47,86
Staff Travel and Memberships	\$4,250	\$4,380	\$4,510	\$4,650	\$4,790	\$4,930	\$5,080	\$5,230	\$5,390	\$5,550	\$5,720	\$5,890	\$6,070	\$6,250	\$6,440	\$6,630	\$6,830	\$7,030	\$7,240	\$7,460	\$7,680
Office Supplies, Telephone, Postage	\$5,500	\$5,670	\$5,840	\$6,020	\$6,200	\$6,390	\$6,580	\$6,780	\$6,980	\$7,190	\$7,410	\$7,630	\$7,860	\$8,100	\$8,340	\$8,590	\$8,850	\$9,120	\$9,390	\$9,670	\$9,960
Maintenance and Safety Supplies,																					
Tools and Equipment, Fuel	\$8,000	\$8,240	\$8,490	\$8,740	\$9,000	\$9,270	\$9,550	\$9,840	\$10,140	\$10,440	\$10,750	\$11,070	\$11,400	\$11,740	\$12,090	\$12,450	\$12,820	\$13,200	\$13,600	\$14,010	\$14,430
Advertising and Promotions	\$10,000	\$10,300	\$10,610	\$10,930	\$11,260	\$11,600	\$11,950	\$12,310	\$12,680	\$13,060	\$13,450	\$13,850	\$14,270	\$14,700	\$15,140	\$15,590	\$16,060	\$16,540	\$17,040	\$17,550	\$18,080
Insurance	\$25,000	\$25,750	\$26,520	\$27,320	\$28,140	\$28,980	\$29,850	\$30,750	\$31,670	\$32,620	\$33,600	\$34,610	\$35,650	\$36,720	\$37,820	\$38,950	\$40,120	\$41,320	\$42,560	\$43,840	\$45,160
Utilities	\$24,000	\$24,720	\$25,460	\$26,220	\$27,010	\$27,820	\$28,650	\$29,510	\$30,400	\$31,310	\$32,250	\$33,220	\$34,220	\$35,250	\$36,310	\$37,400	\$38,520	\$39,680	\$40,870	\$42,100	\$43,360
Miscellaneous/Other Expenses	\$10,172	\$10,480	\$10,790	\$11,110	\$11,440	\$11,780	\$12,130	\$12,490	\$12,860	\$13,250	\$13,650	\$14,060	\$14,480	\$14,910	\$15,360	\$15,820	\$16,290	\$16,780	\$17,280	\$17,800	\$18,330
TOTAL FUND EXPENDITURES	\$468,522	\$482,590	\$497,060	\$511,970	\$527,330	\$543,150	\$559,440	\$576,240	\$593,540	\$611,340	\$629,680	\$648,570	\$668,030	\$688,060	\$708,700	\$729,940	\$751,830	\$774,380	\$797,610	\$821,550	\$846,180
OPERATING REVENUES**	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
SERVICES																					
Intergovernment Funding	\$304,000	\$314,640	\$325,650	\$337,050	\$348,850	\$361,060	\$373,700	\$386,780	\$400,320	\$414,330	\$428,830	\$443,840	\$459,370	\$475,450	\$492,090	\$509,310	\$527,140	\$545,590	\$564,690	\$584,450	\$604,910
Hangar Leases	\$119,000	\$123,170	\$127,480	\$131,940	\$136,560	\$141,340	\$146,290	\$151,410	\$156,710	\$162,190	\$167,870	\$173,750	\$179,830	\$186,120	\$192,630	\$199,370	\$206,350	\$213,570	\$221,040	\$228,780	\$236,790
Land Leases	\$25,800	\$26,700	\$27,630	\$28,600	\$29,600	\$30,640	\$31,710	\$32,820	\$33,970	\$35,160	\$36,390	\$37,660	\$38,980	\$40,340	\$41,750	\$43,210	\$44,720	\$46,290	\$47,910	\$49,590	\$51,330
Apartment Rentals	\$8,300	\$8,590	\$8,890	\$9,200	\$9,520	\$9,850	\$10,190	\$10,550	\$10,920	\$11,300	\$11,700	\$12,110	\$12,530	\$12,970	\$13,420	\$13,890	\$14,380	\$14,880	\$15,400	\$15,940	\$16,500
FBO Agreement	\$3,722	\$3,850	\$3,980	\$4,120	\$4,260	\$4,410	\$4,560	\$4,720	\$4,890	\$5,060	\$5,240	\$5,420	\$5,610	\$5,810	\$6,010	\$6,220	\$6,440	\$6,670	\$6,900	\$7,140	\$7,39
Tiedown Fees	\$2,100	\$2,170	\$2,250	\$2,330	\$2,410	\$2,490	\$2,580	\$2,670	\$2,760	\$2,860	\$2,960	\$3,060	\$3,170	\$3,280	\$3,390	\$3,510	\$3,630	\$3,760	\$3,890	\$4,030	\$4,170
Leasehold Excise Tax	\$4,500	\$4,660	\$4,820	\$4,990	\$5,160	\$5,340	\$5,530	\$5,720	\$5,920	\$6,130	\$6,340	\$6,560	\$6,790	\$7,030	\$7,280	\$7,530	\$7,790	\$8,060	\$8,340	\$8,630	\$8,930
Other Income (Interest, Late Fees)	\$1,100	\$1,140	\$1,180	\$1,220	\$1,260	\$1,300	\$1,350	\$1,400	\$1,450	\$1,500	\$1,550	\$1,600	\$1,660	\$1,720	\$1,780	\$1,840	\$1,900	\$1,970	\$2,040	\$2,110	\$2,180
TOTAL FUND REVENUES	\$468,522	\$483,780	\$500,700	\$518,230	\$536,360	\$555,130	\$574,560	\$594,670	\$615,490	\$637,030	\$659,330	\$682,400	\$706,280	\$731,000	\$756,570	\$783,040	\$810,450	\$838,820	\$868,170	\$898,560	\$930,020
<b>NET OPERATING REVENUE</b> \$	-	\$ 1,190	\$ 3,640	\$ 6,260	\$ 9,030	\$ 11,980	\$ 15,120	\$ 18,430	\$ 21,950	\$ 25,690	\$ 29,650	\$ 33,830	\$ 38,250	\$ 42,940	\$ 47,870	\$ 53,100	\$ 58,620	64,440	\$ 70,560	77,010	\$ 83,840

Source: City of Kelso Adopted Budget Fiscal Year 2019

 $The \ budget \ does \ not \ include \ incremental \ land \ and \ hangar \ leases \ that \ will \ occur \ over \ the \ next \ 20 \ years.$ 

<sup>\*</sup>Operating expenses were calculated at a 3% average annual growth rate over the next 20 years.

<sup>\*\*</sup>Operating revenues were calculated at a 3.5% average annual growth rate over the next 20 years.