

Chapter 6

Implementation Plan



Photo: Century West Engineering

Introduction

The purpose of this chapter is to present the implementation program for the Airport Master Plan. This chapter includes:

- The twenty-year Airport Capital Improvement Program (ACIP) that was developed based on the analyses conducted in the Facility Requirements and Development Alternatives evaluations (Chapters Four and Five);
- A twenty-year projection of airport operating revenues and expenses; and
- Summary of implementation strategies and challenges.

The ACIP projects are summarized in **Table 6-1** and **Table 6-2**, 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 ODA and FAA to support the development program based on existing funding sources. Minor pavement maintenance items such as vegetation removal and crack filling are not included in the ACIP, but will need to be undertaken by ODA on an annual or semi-annual basis.

A brief environmental review was prepared and is included in the airport master plan (see Appendix - A). 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 Seven.

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 6-1**, the projected twenty-year total for FAA eligible projects in the ACIP significantly exceeds current FAA funding levels through the Non-Primary Entitlement (NPE) 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. ODA must maximize the use of available FAA and other outside funding sources as it manages its ACIP. In some cases, the limited availability of funds may require deferring some projects, or increasing funding with additional local, state, or private funding.

Part 1 – Master Plan Development Program

Airport Development Schedule and Cost Estimates

Cost estimates for each individual project were developed in 2021 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 2021-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)¹

USCPI-U
264.877
(1982-1984 = 100)
March 2021

Multiplying the change ratio (Y) times any 2021-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.

¹ U.S. Consumer Price Index for All Urban Consumers (USCPI-U)

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 ODA and the FAA, provides the ability to adjust ODA'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, ODA will continue to require regular facility maintenance such as pavement maintenance, vegetation control, sweeping, lighting repair, and fuel system maintenance

SHORT-TERM PROJECTS

The ACIP projects in Table 6-1 are summarized below for short-term, mid-term, and long-term periods. The summaries provide a general time frame for implementation of individual projects. However, the actual timing for project implementation is subject to change, based on a variety of factors including availability of funding. Projects that are not completed during the current twenty-year planning period will be reevaluated based on need, with determinations on future timing made by ODA.

Short-Term Projects (Years 1-5)

The first priority in the short-term development period is to complete the design and commissioning of a non-precision instrument approach for the Airport in coordination with the FAA. The initial development and approval of the instrument procedures is scheduled for September 2022, and will be based on the FAA's assessment of currently-charted airspace obstacles. The first project in the ACIP is the design and environmental for obstruction removal, as recommended by the FAA instrument procedures development team. Once obstruction removal is completed to the extent feasible, the instrument procedures (approach minimums, etc.) will be reviewed by FAA for potential modifications to reflect mitigation.

Other priorities in the short-term period include:

- Pavement rehabilitation for Runway 15/33, Taxiway A, and Taxiways A1-A5 (crackfill, sealcoating, repaint markings);
- Improvements to the south apron and adjacent development area to accommodate additional hangar sites;
- Upgraded fencing and controlled access gates;
- Vehicle parking and access improvements;
- Replacement pilot building; and
- Snow removal equipment (SRE) building and equipment.

Mid-Term Projects (Years 6-10)

The mid-term development program includes several airside and landside improvement projects focused on the aircraft parking expansion on the south apron; parallel taxiway reconstruction (overlay) and object free area (OFA) obstruction clearance; airfield lighting replacement; fuel apron improvements; and property acquisition for future development of west hangar area.

Long-Term Projects (Years 11-20)

The long-term development program includes an expanded SRE/pilot building; implementation of the west hangar area site improvements (taxilane access, hangar site preparation, fencing, vehicle access); sealcoats for the runway, parallel taxiway, and south apron; and pavement reconstruction/overlay for Runway 15/33 and the south apron and access taxiway.

TABLE 6-1: ESTIMATED COST OF CAPITAL IMPROVEMENT PROJECTS

Year	Short-Term Projects (2021-2025) Description	Total Project Costs
2021-2022	Instrument Approach Development (FAA)	\$0
2023	Instrument Approach Procedure (IAP) Obstruction Removal (Environmental/Design)	\$526,500
2024	Obstruction Removal/Mitigation (IAP)	\$42,900
2024	Runway 15/33 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$687,900
2024	TWY A and Connectors A1-A5 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$461,100
2025	South Apron Expansion, Hangar Site Prep, Vehicle Parking, Gates	\$607,500
2025	South Apron Expansion, Hangar Site Prep, Vehicle Parking, Gates/Fencing (Construction)	\$1,364,790
2025	Snow Removal Equipment (SRE) Building (Phase 1) and Temporary Pilot Building (Design & Construction)	\$487,500
2025	Airport Snow Plow/Blower	\$350,000
SHORT-TERM TOTAL (1-5 Years)		\$4,528,190
Year	Mid-Term Projects (2026-2030) Description	Total Project Costs
2026	Mid-Term Airside/Landside Projects (Environmental/Design)	\$682,500
2027	South Apron – Transient AC Parking Expansion	\$257,833
2028	TWY A and Connectors A2-A3 Rehabilitation (Overlay); Repaint Markings, Replace Edge Reflectors	\$1,057,263
2028	TWY A – TOFA Grading, Fence Reinforcement	\$331,250
2028	Fuel Apron Reconfiguration/Expansion	\$153,586
2028	South Apron and Access TWY Maintenance Project (Slurry Seal, Crackfill, Markings)	\$235,700
2029	Airfield Lighting Replacement/Upgrade: Runway 15/33 MIRL; Rwy 15 PAPI, REIL; Airfield Signs; Airport Beacon; Wind Cone	\$1,542,000
2030	Property Acquisition – West Hangar Parcel (Owner – City of Joseph)	\$61,750
MID-TERM TOTAL (6-10 Years)		\$4,321,882
Year	Long-Term Projects (2031-2040) Description	Total Project Costs
2031-2040	Pilot Building (Expand SRE – Phase 2)	\$297,500
	West Hangar Site Development & Taxilanes (Environmental/Design)	\$525,000
	West Hangar Site Development (Access & Stub Taxilanes Connection to TWY A, Site Preparation, Fencing, Vehicle Parking, New Access Road (Construction)	\$2,257,760
	TWY A and Connectors A1-A5 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$461,100
	Runway 15/33 Maintenance Project (Slurry Seal, Crackfill, Markings)	\$687,900
	South Apron and Access TWY Maintenance Project (Slurry Seal, Crackfill, Markings)	\$235,700
	Airport Master Plan Update	\$650,000
	RWY 15/33 TWY A Connectors A2-A3 Rehabilitation (Overlay)	\$2,820,565
South Apron and Access TWY Rehabilitation (Overlay)	\$860,882	
LONG-TERM TOTAL (11-20 Years)		\$8,796,407

TABLE 6-1: ESTIMATED COST OF CAPITAL IMPROVEMENT PROJECTS (CONT)

Phases	Total Phase Costs
Short-Term (0-5 Years)	\$4,528,190
Mid-Term (6-10 Years)	\$4,321,882
Long-Term (11-20 Years)	\$8,796,407
LONG-TERM TOTAL (11-20 Years)	\$17,646,479

Source: Century West Engineering, 2021 Estimates

Capital Funding Sources & Programs

FAA grants provided through the federal Airport Improvement Program (AIP) are the primary source of funding for public use airports in the federal airport system. **Table 6-2** identifies the typical federal and local share of project costs based on current funding formulas. It is important to note that overall project eligibility for FAA funding does not guarantee availability of funding within the defined twenty-year time frame of the master plan.

FEDERAL GRANTS

The current AIP, reauthorized in 2018, 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 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 based on fixed amount of \$150,000 per year. The NPE funds can be 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:
 - » Need;
 - » The FAA’s project priority ranking system; and
 - » 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 D.

STATE FUNDING

As a state-owned airport, the local share (non-FAA) of the ACIP funding for Joseph State Airport is provided by ODA. In addition, ODA offers a variety of programs for funding airport projects that are outlined in this section.

PAVEMENT MAINTENANCE PROGRAM

The Pavement Management Program (PMP) programs airfield pavement maintenance funds on established multi-year cycles. The PMP is funded by a portion of the fuel tax revenues. Forty-five percent of the original fuel taxes collected (\$0.01/gallon on Jet-A and \$0.09/gallon on AVGAS) are used to fund the PMP. (It should be noted that the remainder of the revenues collected from the original \$0.01/gallon Jet-A and \$0.09/gallon AVGAS fuel taxes equaling 55 percent are used to fund the operation of Oregon’s 28 state owned airports and ODA administrative costs.) This program is intended to preserve and maintain existing airfield pavements in order to maximize their useful lives and the economic value of the pavement. As noted earlier, several short-term pavement maintenance projects are identified for Joseph State Airport in the most recent PMP. The program funds pavement maintenance and associated improvements (crack filling, repair, sealcoats, etc.), including some items which have not traditionally been eligible for FAA funding.

Funding for the PMP is generated through collection of aviation fuel taxes. ODA manages the PMP through an annual consultant services contract and work is programmed on a 3-year regional rotation. The program includes a regular schedule of inspection and subsequent fieldwork.

Benefits from the PMP include:

- Economy of scale in bidding contracts;
- Federal/State/Local partnerships that maximize airport improvement funds; and
- PMP is not a grant program and local match is on a sliding scale (50% - 5% required).

The PMP includes the following features:

- Review prior year’s Pavement Condition Index (PCI) reports;
- Only consider PCI’s above 70;
- Apply budget;
- Limit work to patching, crack sealing, fog sealing, and slurry sealing;
- Add allowance for striping; and
- Program to include approximately 20 airports per year, depending on funding levels.

FINANCIAL AID TO MUNICIPALITIES (FAM) GRANTS

ODA’s Financial Aid to Municipalities (FAM) grant program has been suspended in recent years due to a lack of funding. House Bill 2075 (discussed later in this chapter) established a new source of funding revenue for aviation programs within the state. This bill resulted in the creation of three new programs that have essentially replaced FAM Grants. In order to facilitate these new programs, the rules used to administer funds under FAM have been amended to incorporate the language of House Bill 2075 and serve as the funding mechanism for these new programs.

CONNECT OREGON PROGRAM

In 2005, the Legislature created Connect Oregon, which used proceeds from lottery-backed bonds to provide grants and loans to fund non-highway transportation projects. In 2014, after the fifth installment of funding, the Legislature had provided \$382 million to the program. Connect Oregon grants fund up to 80-percent of project costs with a 20-percent sponsor match and loans up to 100-percent of project costs. The 2021 Connect Oregon Program has been authorized at \$46 million for aviation, marine, and rail projects. The minimum local match is 30 percent.

HOUSE BILL 2075

House Bill 2075 (HR 2075) increased the tax on aircraft fuels, providing new revenues for the State Aviation Account. HR 2075 increased the fuel tax on both Jet-A and AVGAS by \$0.02/gallon resulting in a new tax on Jet-A of \$0.03 per gallon and AVGAS of \$0.11 per gallon. The additional \$0.02/gallon in revenues on Jet-A and AVGAS generated by HR 2075 will be distributed to fund a variety of aviation needs through ODA's new Aviation System Action Program (ASAP) fund.

ASAP allocates and distributes the additional \$0.02/gallon revenues generated by HR 2075 among three new programs: COAR - Critical Oregon Airport Relief Program; ROAR – Rural Oregon Aviation Relief Program; and SOAR – State Owned Airports Reserve Program. The specific programs are outlined below.

COAR - Fifty percent of the revenues from the \$0.02/gallon fuel tax increase will be distributed as follows:

- (A) To assist airports in Oregon with match requirements for Federal Aviation Administration (FAA) Airport Improvement Program grants;
- (B) To make grants for emergency preparedness and infrastructure projects, in accordance with the Oregon Resilience Plan, including seismic studies, emergency generators, etc.;
- (C) To make grants for:
 1. Services critical or essential to aviation including, but not limited to, fuel, sewer, water and weather equipment.
 2. Aviation-related business development including, but not limited to, hangars, parking for business aircraft and related facilities.
 3. Airport development for local economic benefit including, but not limited to, signs and marketing.

ROAR – Twenty-five percent of the revenues from the \$0.02/gallon fuel tax increase will be distributed to assist commercial air service to rural Oregon.

SOAR – Twenty-five percent of the revenues from the \$0.02/gallon fuel tax increase will be distributed to state owned airports for:

- (A) Safety improvements recommended by the Oregon State Aviation Board and local community airports;
- (B) Infrastructure projects at public use airports.

STATE CAPITAL IMPROVEMENT PROGRAM (SCIP)

The FAA's Seattle Airport District Office (ADO) in conjunction with state aviation agencies in Oregon, Washington, and Idaho have developed a coordinated "state" capital improvement program, known as the SCIP. The SCIP is the primary tool used by FAA, state aviation agencies, and local airport sponsors to prioritize funding. Airport sponsors are required to provide annual updates to the short-term project lists annually in order to maintain a current system of defined project needs. The short-term priorities identified in the master plan CIP will be incorporated into the SCIP during the next coordination meeting.

LOCAL FUNDING

The locally funded (ODA/tenant) portion of the project costs during the twenty-year planning period is estimated to be just over \$1.74 million as currently defined. Hangar construction costs and building maintenance have not been included in the CIP, since no FAA funding is assumed.

Portions of local matching funds are generated through airport revenues, including land leases and hangar rentals. Airport sponsors occasionally fund infrastructure and revenue-generating development such as hangars, either through interfund loans or the issuance of long-term debt (bonds).

TABLE 6-2: 20-YEAR CAPITAL IMPROVEMENT PROGRAM - PROBABLE FUNDING SOURCES

Short-Term Projects		FAA (90%)	ODA (10%)	Total Project Costs
Year	Description			
2021-2022	Instrument Approach Development (FAA)	TBD*	\$0	TBD
2023	Instrument Approach Procedure (IAP) Obstruction Removal (Environmental/Design)	\$473,850	\$52,650	\$526,500
2024	Obstruction Removal/Mitigation (IAP)	\$38,610	\$4,290	\$42,900
2024	Runway 15/33 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$619,110	\$68,790	\$687,900
2024	TWY A and Connectors A1-A5 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$414,990	\$46,110	\$461,100
2025	South Apron Expansion, Hangar Site Prep, Vehicle Parking, Gates	\$546,750	\$60,750	\$607,500
2025	South Apron Expansion, Hangar Site Prep, Vehicle Parking, Gates/Fencing (Construction)	\$1,228,311	\$136,479	\$1,364,790
2025	Snow Removal Equipment (SRE) Building (Phase 1) and Temporary Pilot Building (Design & Construction)	\$390,000**	\$97,500	\$487,500
2025	Airport Snow Plow/Blower	\$315,000	\$35,000	\$350,000
SHORT-TERM TOTAL (1-5 Years)		\$4,026,621	\$501,569	\$4,528,190

*Instrument Approach Development cost funded by FAA through separate program.

**FAA funding assumed to be 80% for building.

Mid-Term Projects		FAA (90%)	ODA (10%)	Total Project Costs
Year	Description			
2026	Mid-Term Airside/Landside Projects (Environmental/Design)	\$614,250	\$68,250	\$682,500
2027	South Apron – Transient AC Parking Expansion	\$232,050	\$25,783	\$257,833
2028	TWY A and Connectors A2-A3 Rehabilitation (Overlay); Repaint Markings, Replace Edge Reflectors	\$951,537	\$105,726	\$1,057,263
2028	TWY A – TOFA Grading, Fence Reinforcement	\$298,125	\$33,125	\$331,250
2028	Fuel Apron Reconfiguration/Expansion	\$138,227	\$15,359	\$153,586
2028	South Apron and Access TWY Maintenance Project (Slurry Seal, Crackfill, Markings)	\$213,930	\$23,770	\$237,700
2029	Airfield Lighting Replacement/Upgrade: Runway 15/33 MIRL; Rwy 15 PAPI, REIL; Airfield Signs; Airport Beacon; Wind Cone	\$1,387,800	\$154,200	\$1,542,000
2030	Property Acquisition – West Hangar Parcel (Owner – City of Joseph)	\$55,575	\$6,175	\$61,750
MID-TERM TOTAL (6-10 Years)		\$3,891,494	\$432,388	\$4,323,882

TABLE 6-2: 20-YEAR CAPITAL IMPROVEMENT PROGRAM - PROBABLE FUNDING SOURCES (CONT.)

Year	Long-Term Projects			Total Project Costs
	Description	FAA (90%)	ODA (10%)	
2031-2040	Pilot Building (Expand SRE – Phase 2)	\$267,750	\$29,750	\$297,500
	West Hangar Site Development & Taxilanes (Environmental/Design)	\$472,500	\$52,500	\$525,000
	West Hangar Site Development (Access & Stub Taxilanes Connection to TWY A, Site Preparation, Fencing, Vehicle Parking, New Access Road (Construction))	\$2,031,984	\$225,776	\$2,257,760
	TWY A and Connectors A1-A5 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)	\$414,990	\$46,110	\$461,100
	Runway 15/33 Maintenance Project (Slurry Seal, Crackfill, Markings)	\$619,110	\$68,790	\$687,900
	South Apron and Access TWY Maintenance Project (Slurry Seal, Crackfill, Markings)	\$212,130	\$23,570	\$235,700
	Airport Master Plan Update	\$585,000	\$65,000	\$650,000
	RWY 15/33 TWY A Connectors A2-A3 Rehabilitation (Overlay)	\$2,538,509	\$282,057	\$2,820,565
	South Apron and Access TWY Rehabilitation (Overlay)	\$774,794	\$86,088	\$860,882
LONG-TERM TOTAL		\$7,649,016	\$849,891	\$8,498,907

Part 2 – Airport Financial Overview

Airport Rates and Fees

A State Airport Rates schedule is adopted annually by ODA for all airports under ODA management, as prescribed in **OAR Rule 738-010**. The rates presented in **Table 6-3** for Joseph State Airport were adopted in 2021. These rates are periodically adjusted based on valuation appraisals, as required by **OAR 738-010**.

TABLE 6-3: AIRPORT RATES & FEES - JSY

Land Lease (improved sites)	\$0.1433 per square foot (annual)	Hangars, apron, aviation related uses with apron or taxiway/taxilane access
Land Lease (unimproved sites)	\$0.05 per square foot (annual)	Hangars, apron, aviation related uses
Tiedown Fees (non-commercial)	\$17.50 (monthly)	Locally-based or long-term transient small aircraft parking
Tiedown Fees (non-commercial)	\$3.00 (daily)	Transient small aircraft parking
Fuel Flowage Fees	\$0.08 (per gallon) 100 LL AVGAS	Flowage fee for self-service 100LL available at the Airport; Jet fuel not available.
Aircraft Landing Fees	None	No landing fee established for Airport
Hangar Rental Rates (ODA-owned hangars)	N/A	No ODA-owned hangars at Airport
Airport Access Fees	\$15-120 (monthly)	Through-the fence (TTF) access fee for off-airport aeronautical users. Rates are based on aircraft classifications. No TTF use currently exists at Joseph State Airport.
Aircraft Registration Fees	\$65-700 (annual)	Annual aircraft registration fee for all aircraft based in Oregon. Rates are based on aircraft classifications.

A review of the [2021 State Airport Rates](#) schedule for ODA’s 28 airports indicates that their fee structure is comparable with other similarly sized airports in Oregon. Several of ODA’s fees are graduated by airport size (OASP airport category II-V for State Owned Airports). Some fees are differentiated by aircraft size.

ODA’s land lease rates for improved sites (e.g., hangar sites, etc.) are location-specific. The wide range (0.1042-0.3256 per square foot annually) of lease rates at state airports reflects some unique conditions. For example, the highest lease rate is in effect at Aurora State Airport, one of Oregon’s busiest general aviation airports located in the highly competitive Portland Metro market. At the other end of the range, more than half of the state airports (16 of 28) charge the lowest lease rate. These airports are among ODA’s lowest activity airports, often located in remote, sparsely populated areas.

For Joseph State Airport, the current rate for improved site land leases is \$0.1433 per square foot, annually, which is slightly above the mean rate (\$0.1391) for all ODA airports.

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. Rates at individual general aviation airports vary based primarily on market conditions. The rate structure for state airports established by ODA reflects the unique regional market conditions in both urban and rural areas of Oregon.

Cash Flow Analysis

A projection of Joseph State Airport operating revenues and expenses for the twenty-year planning period is presented in **Table 6-4**. The projections are based on baseline data provided by ODA and the noted assumptions on future events.

ODA operates a group of 28 state-owned airports as part of its overall agency responsibilities. ODA uses a partial cost recovery system, which applies a portion of overall administrative expenses to individual airport budgets, in addition to airport-specific expenses such as maintenance or utilities. Airport-generated revenues are tracked individually.

As with all State of Oregon agencies, ODA operates on a biennial budget cycle. In its 2017-2019 budget cycle, ODA reported an annual operating deficit for Joseph State Airport of approximately \$20,000, based on annual revenues approximately \$68,000. These totals represent approximately one-half of the reported operating revenue and assigned expense totals for the two-year period. As noted above, additional ODA administrative expenses or program revenues are not included in these totals. A review of partial data from the 2019-2021 biennial budget cycle indicates similar financial performance. The general operating position of the Airport is projected to remain relatively steady based on the modest projected growth in future revenues and similar growth in operating expenses.

As noted in the previous section, Joseph State Airport has two primary revenue categories: airport ground leases and aviation fuel sales. 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 ACIP. 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 federal grants and the full or partial cost of projects not eligible for FAA funding.

ODA will need to evaluate the financial feasibility and timing of replacing the ODA-owned pilot building with available resources. Pilot buildings are not typically eligible for FAA funding, and this type of facility investment is needed at several ODA airports. The option of public-private partnerships, or other cost sharing arrangements may also be explored for projects not eligible for FAA funding. These decisions should be made based on market conditions, expected return on investment, and any intangible benefits provided to the community or specific user groups that would result from the project.

Summary of Revenue Assumptions:

- A. Land lease revenue increases at 3.5% per year (inflation factor), as land is leased for future hangar development, incremental increases would be added based on the current/future ground lease rates;
- B. No plans of any future ODA-owned hangars to be constructed in the next 20 years;
- C. Fuel revenues increase at 3.5% per year (inflation factor); and
- D. State Airport Rates will be periodically adjusted per OAR 738-010.

Summary of Expense Assumptions:

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

TABLE 6-4: JOSEPH STATE AIRPORT OPERATING EXPENSE AND REVENUE 20-YEAR PROJECTIONS

OPERATING EXPENSES*	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Materials and Services																					
Personnel Services	\$19,545	\$20,130	\$20,730	\$21,350	\$21,990	\$22,650	\$23,330	\$24,030	\$24,750	\$25,490	\$26,250	\$27,040	\$27,850	\$28,690	\$29,550	\$30,440	\$31,350	\$32,290	\$33,260	\$34,260	\$35,290
Maintenance and Safety Supplies, Tools and Equipment, Fuel	\$17,622	\$18,150	\$18,690	\$19,250	\$19,830	\$20,420	\$21,030	\$21,660	\$22,310	\$22,980	\$23,670	\$24,380	\$25,110	\$25,860	\$26,640	\$27,440	\$28,260	\$29,110	\$29,980	\$30,880	\$31,810
Fuel Purchases	\$44,642	\$45,980	\$47,360	\$48,780	\$50,240	\$51,750	\$53,300	\$54,900	\$56,550	\$58,250	\$60,000	\$61,800	\$63,650	\$65,560	\$67,530	\$69,560	\$71,650	\$73,800	\$76,010	\$78,290	\$80,640
Utilities	\$6,317	\$6,510	\$6,710	\$6,910	\$7,120	\$7,330	\$7,550	\$7,780	\$8,010	\$8,250	\$8,500	\$8,760	\$9,020	\$9,290	\$9,570	\$9,860	\$10,160	\$10,460	\$10,770	\$11,090	\$11,420
Miscellaneous/Other Expenses	\$636	\$660	\$680	\$700	\$720	\$740	\$760	\$780	\$800	\$820	\$840	\$870	\$900	\$930	\$960	\$990	\$1,020	\$1,050	\$1,080	\$1,110	\$1,140
TOTAL FUND EXPENDITURES	\$88,764	\$91,430	\$94,170	\$96,990	\$99,900	\$102,890	\$105,970	\$109,150	\$112,420	\$115,790	\$119,260	\$122,850	\$126,530	\$130,330	\$134,250	\$138,290	\$142,440	\$146,710	\$151,100	\$155,630	\$160,300
OPERATING REVENUES*																					
Services																					
Leases/Invoiced Payments	\$12,425	\$12,860	\$13,310	\$13,780	\$14,260	\$14,760	\$15,280	\$15,810	\$16,360	\$16,930	\$17,520	\$18,130	\$18,760	\$19,420	\$20,100	\$20,800	\$21,530	\$22,280	\$23,060	\$23,870	\$24,710
Fuel Sales	\$55,652	\$57,600	\$59,620	\$61,710	\$63,870	\$66,110	\$68,420	\$70,810	\$73,290	\$75,860	\$78,520	\$81,270	\$84,110	\$87,050	\$90,100	\$93,250	\$96,510	\$99,890	\$103,390	\$107,010	\$110,760
TOTAL FUND REVENUES	\$68,077	\$70,460	\$72,930	\$75,490	\$78,130	\$80,870	\$83,700	\$86,620	\$89,650	\$92,790	\$96,040	\$99,400	\$102,870	\$106,470	\$110,200	\$114,050	\$118,040	\$122,170	\$126,450	\$130,880	\$135,470
NET OPERATING REVENUE	\$(20,687)	\$(20,970)	\$(21,240)	\$(21,500)	\$(21,770)	\$(22,020)	\$(22,270)	\$(22,530)	\$(22,770)	\$(23,000)	\$(23,220)	\$(23,450)	\$(23,660)	\$(23,860)	\$(24,050)	\$(24,240)	\$(24,400)	\$(24,540)	\$(24,650)	\$(24,750)	\$(24,830)

Source: ODA Records Biennium 2017-2019

*Operating expenses were calculated at a 3% average annual growth rate over the next 20 years.

**Operating revenues were calculated at a 3.5% average annual growth rate over the next 20 years.

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

Part 3 – Master Plan Implementation Strategies and Challenges

Summary of Short Term Project Implementation

The implementation of the ACIP typically requires a variety of strategies/actions to address related land use, transportation, and environmental issues. **Table 6-5** includes summaries of issues and anticipated actions for the major development projects identified in the first 5 years of the ACIP.

TABLE 6-5: IMPLEMENTATION PLAN – SHORT TERM CAPITAL IMPROVEMENT PROGRAM PROJECTS

Project: Instrument Approach Procedure (IAP) Obstruction Removal (Environmental/Design/Obstruction Mitigation) Project Year: 2023	
<p>The project consists of required environmental, design, and implementation elements for mitigation of FAA—identified airspace penetrations (obstacles) to airspace surfaces required for instrument procedure development¹ at Joseph State Airport. Project implementation includes coordination with affected property owners, acquisition of air (Avigation) easements or other agreements, and actual obstacle mitigation. The AGIS survey completed in the Airport Master Plan Update will be the primary source for identification of penetrating obstacles. The project is FAA eligible.</p>	
Required Implementation Strategies/Actions	
Land Use	<p>No impacts to existing or future land use. No changes in Wallowa County land use or zoning are required for mitigation of identified obstacles (built items, trees, etc.).</p> <p>All affected property owners will be identified and contacted by ODA following the initial identification of obstacles to provide notification of project, address any concerns, and identify any unique site constraints. Airspace (“Avigation”) easements will be negotiated with individual property owners for each parcel and/or obstacle to be mitigated. A proposed mitigation action will be defined for each identified obstacle.</p> <p>Any required Wallowa County permits (e.g., modification of existing utilities, tree removal, etc.) will be addressed during design.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Preliminary design will identify if any specific utility components penetrate FAA-defined TERPS surfaces critical to instrument approach/departure development. 2) ODA will initiate property owner contact for each identified mitigation item. 3) ODA will secure airspace rights through easements or other agreement with individual property owners. 4) Local permit coordination, as applicable. 5) None.
Transportation	<p>No impacts to existing or future transportation systems, with the possible exception of overhead utility components (overhead electrical or communication lines or poles). Potential mitigation options (e.g., marking or lighting, lowering, or undergrounding) to be determined during design. Proposed obstacle mitigation must be accepted by FAA Flight Procedures group prior to design and commissioning of instrument procedures.</p> <p>No other transportation actions anticipated for this project.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Preliminary design will identify if any specific utility components penetrate FAA-defined TERPS surfaces critical to instrument approach/departure development. 2) ODA will coordinate with local utility providers to evaluate feasibility and cost of obstacle mitigation options (marking, lighting, lowering, undergrounding). 3) ODA will secure airspace rights through easements or other agreement with individual property owners.
Environmental	<p>ODA will be required to perform an environmental evaluation (NEPA) for proposed obstruction removal/mitigation through federal action.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Complete Environmental Assessment, Categorical Exclusion Document, or other environmental document as required by FAA.

¹ United States Standard for Terminal Instrument Procedures (TERPS), FAA Order 8260.3D

TABLE 6-5: IMPLEMENTATION PLAN – SHORT TERM CAPITAL IMPROVEMENT PROGRAM PROJECTS (CONT)

Project: Runway 15/33 Maintenance Project (Crackfill, Slurry Seal, Repaint Markings)
Project Year: 2024

The projects are maintenance rehabilitations of existing asphalt runway and taxiway pavements, including vegetation removal, filling/repairing minor cracking, sealcoating, and repainting existing markings per FAA specifications. The projects will also include environmental, design, and implementation elements required by FAA. The project is FAA eligible.

Required Implementation Strategies/Actions

Land Use	<p>No impacts to existing or future land use. The project is related to an existing land use (airfield), which is consistent with Wallowa County land use and zoning currently in place at the Airport.</p> <p>No impacts to adjacent property owners are anticipated. All construction activity will be limited to the airport site.</p> <p>Any required Wallowa County permits will be addressed during design.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) No land use actions required. 2) Local permit coordination, as applicable.
Transportation	<p>The reconfiguration/expansion of vehicle parking may include additional connections to existing county roads to provide vehicle access.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) FAA coordination for project environmental, design and construction. 2) ODA will coordinate with Wallowa County Public Works Department regarding any planned improvements affecting public roads. 3) ODA will coordinate with airport tenants and regular users regarding periods of construction and apron/taxilane closures through direct contact and issuance of appropriate ‘Notices to Airmen’ (NOTAMs).
Environmental	<p>ODA will be required to perform an environmental evaluation (NEPA) for project through federal action.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Complete Environmental Assessment, Categorical Exclusion Document, or other environmental document as required by FAA.

TABLE 6-5: IMPLEMENTATION PLAN – SHORT TERM CAPITAL IMPROVEMENT PROGRAM PROJECTS (CONT)

Project: South Apron Expansion, Hangar Site Prep, Vehicle Parking, Gates/Fencing (Environmental/Design/Construction) Project Year: 2024	
The project includes expansion/reconfiguration of the existing south aircraft apron, removal of the airport’s pilot building and septic system, grading and other required preparation for new hangar sites, updated/reconfigured airport fencing/gates, and vehicle parking. All aeronautical elements will be completed per FAA specifications. The projects will also include environmental, design, and implementation elements required by FAA. The project is FAA eligible.	
Required Implementation Strategies/Actions	
Land Use	No impacts to existing or future land use. The project is related to an existing land use (airfield), which is consistent with Wallowa County land use and zoning currently in place at the Airport. No impacts to adjacent property owners are anticipated. All construction activity will be limited to the airport site. Any required Wallowa County permits will be addressed during design. <u>Actions:</u> 1) No land use actions required. 2) Local permit coordination, as applicable.
Transportation	The reconfiguration/expansion of vehicle parking may include additional connections to existing county roads to provide vehicle access. <u>Actions:</u> 1) FAA coordination for project environmental, design and construction. 2) ODA will coordinate with Wallowa County Public Works Department regarding any planned improvements affecting public roads. 3) ODA will coordinate with airport tenants and regular users regarding periods of construction and apron/taxilane closures through direct contact and issuance of appropriate ‘Notices to Airmen’ (NOTAMs).
Environmental	ODA will be required to perform an environmental evaluation (NEPA) for project through federal action. <u>Actions:</u> 1) Complete Environmental Assessment, Categorical Exclusion Document, or other environmental document as required by FAA.

TABLE 6-5: IMPLEMENTATION PLAN – SHORT TERM CAPITAL IMPROVEMENT PROGRAM PROJECTS (CONT)

Project: Snow Removal Equipment (SRE) Building (Phase 1) and Temporary Pilot Building (Design & Construction) Project Year: 2025	
Required Implementation Strategies/Actions	
Land Use	<p>No impacts to existing or future land use. The project adds improvements to an existing land use (airfield), which is consistent with Wallowa County land use and zoning currently in place at the Airport.</p> <p>No impacts to adjacent property owners are anticipated. All construction activity will be limited to the airport site. Any required Wallowa County permits will be addressed during design.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) No land use actions required. 2) Local permit coordination, as applicable.
Transportation	<p>No impacts to existing or future off-airport transportation systems. All construction activity will be limited to the airport site.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) FAA coordination for project environmental, design and construction.
Environmental	<p>ODA will be required to perform an environmental evaluation (NEPA) for FAA-funded project through federal action.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Complete Environmental Assessment, Categorical Exclusion Document, or other environmental document as required by FAA, for the federally-funded elements of the project.

TABLE 6-5: IMPLEMENTATION PLAN – SHORT TERM CAPITAL IMPROVEMENT PROGRAM PROJECTS (CONT)

Project: Snow Removal Equipment (SRE) Building (Phase 1) and Temporary Pilot Building (Design & Construction) Project Year: 2025	
Required Implementation Strategies/Actions	
Land Use	<p>No impacts to existing or future land use.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) No land use actions required.
Transportation	<p>No impacts to existing or future off-airport transportation systems.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) None.
Environmental	<p>ODA will be required to perform an environmental evaluation (NEPA) for FAA-funded project through federal action.</p> <p><u>Actions:</u></p> <ol style="list-style-type: none"> 1) Complete environmental review, as required by FAA for federally-funded equipment purchases.

