

Chapter Nine: CAPITAL IMPROVEMENT & FINANCIAL PLAN



La Grande / Union County Airport

Airport Master Plan Update

FINAL – March 2018

Introduction

The Preferred Alternative was selected by Union County (County) as the favored method for implementing the needs identified in the Master Plan's Facility Requirements. Subsequent development of the Airport Layout Plan (ALP) depicted improvements needed at the La Grande / Union County Airport (Airport) over the next 20-year period. This Capital Improvement Plan (CIP) provides the basis for planning the funding of those improvements.

The CIP balances project prioritization sequencing, environmental requirements, funding constraints, and County operating policies. These elements are discussed in the following sections. The planned phases of development presented in the CIP are in the 5-, 10-, and 20-year timeframes. Implementation of the CIP may change from year to year in response to changing conditions and user needs. Some components of the Facility Requirements, such as hangar development and apron expansion, were based on the Forecasts developed in Chapter 3. If actual aviation activity occurs at an accelerated rate, those demand-driven projects would be given higher priority than shown in the CIP. Accordingly, the CIP should be updated annually by the County, in order for it to remain an effective tool.

Additionally, this chapter presents a financial implementation analysis for the Airport and examines various facets of the financial operating condition of the Airport. Funding sources and projections of Airport revenues and expenses will be presented, along with methods to enhance revenues, in order to determine Union County's ability to fund projects within the CIP.

Capital Improvement Projects

The CIP develops the timeline for airport improvements and estimated costs for those improvements. The plan is divided into three phases: Phase I (2016-2020), Phase II (2020-2025), and Phase III (2026-2035).

Below is the anticipated plan for the Airport to meet projected demand. Funding for these projects has not yet been committed and the actual costs may vary depending upon final construction costs. The date of implementation may also vary due to funding availability. A discussion of project purpose is included with the descriptions. Potential funding sources follows the CIP project descriptions within the Financial Plan.

CIP Environmental Considerations

Any project that results in changes to the approved ALP, or includes funding from the Federal Aviation Administration (FAA), requires review under the National Environmental Policy Act (NEPA). There are three levels of FAA NEPA review: Categorical Exclusion (CatEx), Environmental Assessment (EA), and Environmental Impact Statement (EIS). Briefly, a CatEx refers to a category of actions that do not individually or cumulatively have a significant effect on the human environment, and for which neither an EA nor an EIS is required. An EA is used to determine whether a proposed action has the potential to significantly affect the human environment and it should provide sufficient evidence and analysis for determining whether an EIS is required or if there is a Finding of No Significant Impacts (FONSI). An EIS

must be prepared for actions that significantly affect the quality of the human environment. An EIS is a detailed written statement required under Section 102(2)(C) of NEPA when one or more environmental impacts would be significant and mitigation measures cannot reduce the impact(s) below significant levels.

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, is the FAA's guiding document for NEPA compliance, and it was consulted during preparation of this CIP to determine the likely level of environmental review necessary for individual project completion. Unless where otherwise noted, the anticipated level of NEPA review for the following projects is a CatEx, which will likely require resource-specific reports for additional documentation. Expected resource-specific documentation would be cultural resources, wetland delineations, biological evaluations, and possibly others.

Final determination of NEPA documentation will occur during project design. An FAA Environmental Specialist should be included in the design discussions to advise on the appropriate NEPA preparation.

CIP Phase I (2016 -2020)

Phase I is the first five years of the planning period, through 2020, representing the highest priority projects identified in the CIP. Project priority was determined by several factors, including Airport safety, efficiency, and funding availability. A draft CIP was presented to, and approved by, the County and Planning Advisory Committee (PAC) members. Projects in this phase include:

Airport Beacon and Beacon Tower (Design / Construct) – 2016

The existing beacon has been decommissioned and is an obstruction to the Runway 16-34 departure surface. A new beacon tower and beacon will be constructed near the existing electrical building.

Runway 30 Blast Pad (Design / Construct) – 2016

Jet blast from frequent jet departures on Runway 30 have eroded the runway safety area. This project consists of a 150-foot by 200-foot blast pad extending from the current end of pavement, and will correct this design standard deficiency.

Runway 16-34 Improvements and Taxiway D Rehabilitation – Design 2019 and Construct 2020

This project would include rehabilitation, widening, lighting, and precision approach path indicator (PAPI) installation for Runway 16-34. A connector taxiway from Taxiway A to the Runway 16 threshold would be included, as well as removal of pavement behind the threshold, as to increase pilot situational awareness. Taxiway D would also be rehabilitated at this time.

As a result of magnetic declination the runway will likely be renumbered to Runway 17-35 during this project.

US Forest Service Rappel Base and Apron Improvements

If Union County (County) is successful in securing a *ConnectOregon* VI grant, this project would involve construction of a new US Forest Service Rappel base south of the existing base, with one Type I helipad and three Type II helipads. The existing base will likely be demolished to provide parking for the new facility. This project is the first of three phases for development of the helicopter operations area.

Pavement Maintenance Program (PMP) – 2018

The state-sponsored program, through the Oregon Department of Aviation (ODA), provides maintenance for airport pavements and is scheduled at the Airport every three years. The 2018 project would include Taxiway B crack repair, crack sealing, and seal coat.

CIP Phase II (2021-2025)

Projects within Phase II represent the second five years of the planning period, 2021-2025. Projects recommended during this phase are listed below. Specific years for implementation are not projected, as several of the projects are demand-driven.

Runway 12-30 Shoulder and Safety Area – Design / Environmental / Construction 2022 and 2023

The Runway 12-30 shoulder and safety area improvements would be the final phase to the recent runway shift project. Pre-design and environmental permitting for the project would occur in 2022, with full design and construction in 2023.

PMP – 2021 and 2024

The PMP operates on a three-year cycle. Specific pavement maintenance items will not be identified until 2020 and 2023, respectively. The project cost estimates, presented below, are based on an average of actual past PMP projects at the Airport.

US Forest Service Fixed Wing Ramp Expansion

This project includes expansion of the existing apron (located north of the cache building) and Taxiway D to accommodate a variety of fire-related aircraft

Taxiway A Relocation and Extension

Taxiway A will be relocated to B-II runway-taxiway centerline separation standards at such a time the existing pavement needs to be rehabilitated. The taxiway would also be extended to the Runway 34 threshold, with edge lighting along the full length.

Development of Crew Camping

Crews associated with firefighting activity occasionally camp at the Airport. In an effort to remove this incompatible use off Airport, the County would work with the City of La Grande to develop crew camping across Pierce Road in the City's Light Industrial Zone.

County Maintenance / Storage Facility

A steel structure, located south of the fuel farm, would have multiple uses: fuel truck storage, transient aircraft hangar, and County storage. Currently, fuel trucks are parked outside year-round and maintenance equipment is stored in multiple sheds. This project would centralize the County's equipment and allow for revenue-generation through hangar rent.

Fencing and Gates along Pierce Road

The project consists of security fencing from Oregon National Guard to Bond Lane, with keypad-access gates. This area was identified as a priority to increase Airport safety, since no fencing currently exists and vehicles can easily access the hangar areas and taxiway/runway system. A second project, listed in Phase III, would complete full perimeter fencing.

Helicopter Operations Area – Phase 2 of 3

This project would be a continuation of the *ConnectOregon* VI Rappel Base. It would include four helipads and relocation / demolition of the existing hangar.

Runway Protection Zone Avigation Easements

The County does not own portions of land within the Runway 30 and 34 Runway Protection Zones (RPZs). In order to have land use control of those lands, avigation easements would be secured. Acreage of the areas would be: Runway 30 - 10.09 acres and Runway 34 - 3.65 acres.

Upgrade Weather Station and Wind Indicators

The weather station would be upgraded to an Automated Weather Observing System (AWOS)-III, to provide precipitation sensitivity, and supplemental wind indicators installed near all runway ends.

Hangar Development and Demolition

This item includes redevelopment of the hangar area, as indicated on the ALP. Existing hangars are aging, and many have exceeded their useful life. The County would redevelop the area, which would provide higher aircraft storage capacity.

Rehabilitate and Expand General Aviation (GA) Tiedown Apron

The existing GA tiedown apron would be rehabilitated and expanded to the north, which would require removal of the silver T-hangar building.

Expand Cargo Apron

Cargo operations would be centralized at the existing FedEx ramp, with an expansion to accommodate all cargo carriers. Centralizing the cargo operations will increase Airport safety by removing frequent ground support vehicle operations from the GA apron area.

Update Master Plan

It is recommended that Airport Master Plans be updated around every 10 years to reflect current trends and needs.

Vehicle Parking

A new parking area for Airport users and visitors would be constructed between Pierce Road and the existing row of conventional hangars (north of the existing vehicle parking area).

Extend Utilities to Northeastern Property

As indicated on Sheet 17 of the ALP drawings, utilities are not accessible from the northeastern Airport property labeled for future aviation-compatible development. The City of La Grande has been consulted on how best to extend utilities to this area. Conversations have developed a general understanding of potential need; however, no definite plans have been identified and no cost associated with utility extension is included in the CIP.

Phase III (2026-2035)

Phase III is the last ten years of the planning period, 2026 – 2035. Specific years for these projects were not identified, except for PMP, as any projection would be speculative. Projects falling within this timeframe include:

Taxiway E Construction

A full parallel taxiway, Taxiway E, would service Runway 12-30 and provide access to the Northeastern development area. The taxiway would be constructed with edge lighting. An EA for NEPA documentation would be prepared for this project, with the expectation of a FONSI.

Perimeter Fencing

The project would complete perimeter fencing, with gates, for the entire Airport environs – as indicated on the ALP.

US Forest Service Tanker Apron

To relieve congestion around the US Forest Service Tanker Base, an apron would be constructed across Taxiway D with the same capacity as the existing apron.

Helicopter Operations Area – Phase 3 of 3

This project would be the full build-out of the helicopter operations area indicated on the ALP.

PMP – 2027, 2030, and 2033

The PMP operates on a three-year cycle. Specific pavement maintenance items will not be identified until 2026, 2029, and 2032, respectively. The project cost estimates, presented below, are based on an average of actual past PMP projects at the Airport.

Project Costs

Projects listed above are presented with estimated costs in **Table 9A**. Estimates were prepared by Precision Approach Engineering, Inc., using recent unit cost pricing from around the region. All costs are estimated in 2016 dollars. Total project costs include construction, temporary flagging and signing, construction staking, testing, engineering, administration, and contingency, as applicable. Power utilities are included in all new hangar projects; however, water service costs were not. Project estimates are included in **Appendix H** for more detailed cost information. Demand-driven projects, such as hangar development have been highlighted to indicate the timing and scope are dependent upon actual demand.

Funding sources are indicated as either FAA, State, Local, or Other. FAA support would likely be a combination of Non-Primary Entitlement Program, State Apportionment, or Discretionary funds. State of Oregon funding sources are proposed as either future *ConnectOregon* grant or the newly designated HB 2075 funds, which are derived from aviation fuel taxes. Local funds are County-pursued, whether by general fund or bonds. Private funding, as shown for hangar development, constitutes the Other funding column.

Table 9A. La Grande / Union County Airport Proposed Capital Improvement Plan with Costs

Phase I (2016 - 2020)		FAA	State	Local	Other	Total
2016	Airport Beacon & Tower	155,000	-	17,222	-	172,222
2016	Rwy 30 Blast Pad	425,000	-	47,222	-	472,222
2017	USFS Rappel Base & Apron	-	1,000,000	2,430,055	-	3,430,055
2018	Rwy 16-34 Shift & Twy D Rehab (Phase I Predesign)	200,700	-	22,300	-	223,000
2018	PMP	20,000	-	-	-	20,000
2019	Rwy 16-34 Shift & Twy D Rehab (Phase II Design)	567,000	-	63,000	-	630,000
2020	Rwy 16-34 Shift & Twy D Rehab (Phase III Construction)	5,850,000	-	650,000	-	6,500,000
	Phase I Subtotals	\$ 7,217,700	\$ 1,000,000	\$ 3,229,799	\$ -	\$ 11,447,499
Phase II (2021-2025)		FAA	State	Local	Other	Total
2021	PMP	60,000	-	-	-	60,000
2022	Rwy 12-30 Shoulder/Safety Area (Phase I Design)	400,500	-	44,500	-	445,000
2023	Rwy 12-30 Shoulder/Safety Area (Phase II Construction)	4,410,000	-	490,000	-	4,900,000
-	USFS Ramp Expansion	1,854,000	150,000	56,000	-	2,060,000
2024	PMP	60,000	-	-	-	60,000
-	Twy A Relocation & Extension	3,240,000	150,000	210,000	-	3,600,000
-	Crew Camping	-	-	50,000	-	50,000
-	County Building	-	-	210,000	-	210,000
-	Fencing & Gates, Pierce Rd	171,900	-	19,100	-	191,000
-	Helicopter Operations Area	1,629,000	150,000	31,000	-	1,810,000
-	RPZ Avigation Easements	43,200	-	4,800	-	48,000
-	Upgrade Weather Station	98,550	-	10,950	-	109,500
-	Hangar Development & Demo	-	750,000	840,000	1,600,000	3,190,000
-	Rehab & Expand GA Apron	1,764,000	150,000	46,000	-	1,960,000
-	Expand Cargo Apron	162,000	-	18,000	-	180,000
-	Update Master Plan	261,000	-	29,000	-	290,000
-	Vehicle Parking	153,000	-	17,000	-	170,000
-	Extend Utilities to NE	-	-	-	-	TBD
	Phase II Subtotals	\$ 14,307,150	\$ 1,350,000	\$ 2,076,350	\$ 1,600,000	\$ 19,333,500
	<i>Phase II Subtotals (Minus Demand-Driven)</i>	<i>\$ 12,678,150</i>	<i>\$ 450,000</i>	<i>\$ 1,155,350</i>	<i>\$ -</i>	<i>\$ 14,283,500</i>
Phase III (2026-2035)		FAA	State	Local	Other	Total
	EA for Taxiway E	90,000	-	10,000	-	100,000
-	Taxiway E Construction	6,489,000	150,000	571,000	-	7,210,000
-	Perimeter Fencing	612,000	-	68,000	-	680,000
-	US Forest Service Tanker Apron	1,845,000	150,000	55,000	-	2,050,000
-	Helicopter Operations Area	1,620,000	150,000	30,000	-	1,800,000
-	PMP (2027, 2030, 2033)	180,000	-	-	-	180,000
	Phase III Subtotals	\$ 10,836,000	\$ 450,000	\$ 734,000	\$ -	\$ 12,020,000
	<i>Phase III Subtotals (Minus Demand-Driven)</i>	<i>\$ 792,000</i>	<i>\$ -</i>	<i>\$ 68,000</i>	<i>\$ -</i>	<i>\$ 860,000</i>
	CIP Totals	\$ 32,360,850	\$ 2,800,000	\$ 6,040,149	\$ 1,600,000	\$ 42,800,999
	<i>CIP Totals (Minus Demand-Driven)</i>	<i>\$ 20,687,850</i>	<i>\$ 1,450,000</i>	<i>\$ 4,453,149</i>	<i>\$ -</i>	<i>\$ 26,590,999</i>

Financial Plan

This section presents the financial implementation analysis for the Airport and will examine various facets of the financial operating condition of the Airport. In addition, it will examine the Airport's historic operating revenues and expenses, and provide projections for future financial results. The projections of Airport revenues and expenses focus on the CIP phases. These planning periods are used to identify the ability of the Airport to contribute to the local share of anticipated project costs, as required. It should be noted that the CIP is used as a guideline, and that capital projects should be undertaken when demand warrants and funding becomes available.

Financial Implementation Analysis Approach

The overall approach for the development of the financial implementation analysis included the following elements:

- Gathered and reviewed key airport documents related to historical financial results, capital improvement plans, operating budgets, regulatory requirements, and airport policies.
- Evaluated Airport rates and charges.
- Analyzed existing operating and financial environment, as well as the overall financial management philosophy.
- Reviewed the CIP, cost estimates, and development schedule anticipated for the planning periods in order to project the overall financial requirements for the program.
- Analyzed historical operating revenues, developed operating revenue assumptions, and projected future operating revenues for the planning period.
- Analyzed historical operating expenses, developed operations and maintenance expense assumptions, and projected future operating costs for the planning period.
- Completed results of the analysis and evaluation in a Financial Plan Summary that provides conclusions regarding the financial practicality of the CIP.

Airport Rates Comparison

Airport revenues are typically generated through user fees charged for the facilities and services that are provided. These fees are normally based on area market conditions and vary airport-to-airport. An airport's pricing strategy should be to charge "market" rents for land and improvements (as is mandated by the FAA). Limited data on existing rates is available for the Airport, as individual lease rates are a set fee, rather than price per square foot, which makes it difficult to compare with other airports. Rates set by the County should be determined through close coordination with Airport management and based on the unique condition, amenities, location and demand for facilities.

Ground (Land) Lease

Nationally, most airport tenants lease land from an airport on which they have constructed hangars and other aviation-related facilities. Generally, the lease rate should be adjusted every three years to keep pace with changes in the general price levels as reflected in the U.S. Department of Labor's Bureau of Labor Statistics Consumer Price Index (CPI).

For comparison, ODA's 2016 ground lease rate survey that lists the state-owned airport lease rates was reviewed. The average land lease rate for state-owned airports in Oregon is \$0.1275 per square foot annually. Overall, land lease rates ranged from \$0.095 to \$0.298 per square foot annually.

To determine the most appropriate land lease rate, the County should contract to have a rate survey conducted at the Airport that takes into account the land's fair market value, and other attributes pertinent to the local market. The County did hire a firm to prepare this work years ago, but it is too old to be considered valid. Once a survey is conducted, the County should update leases to reflect a price per square foot fee, rather than a flat rate.

Landing Fees

The methodology used for determining landing fees varies widely, and are either based on aircraft type or aircraft weight. Landing fees are typically employed when there are frequent operations in large aircraft that can cause damage to airfield pavements. The County updated their landing fee in 2005, via Court Order 2005-25, which states the assessed landing fee is \$1.50 per 1,000 pounds for aircraft over 12,000 pounds. Nearly all of the County's collected landing fees are paid by the large firefighting air tanker operators.

No changes to the landing fee schedule are recommended at this time; however, the County should periodically review the policy and update it, as prudent.

Tiedown Fees

Many airports charge a monthly tiedown fee for aircraft. Based on ODA's state-owned airport survey, the average tiedown fee is \$17.50 per month, with price varying for type of aircraft. A daily rate of \$3.00 per aircraft is also assessed. It is not uncommon for tiedown fees to be waived if fuel is purchased.

The County does not assess a daily or monthly tiedown fee. It is recommended the County evaluate the benefit of charging a tiedown fee and determine if it fits within their management goals.

T-Hangar and Conventional Hangar Rates

T-hangars provide individual hangars within a larger contiguous building. T-hangars are the most basic and affordable form of aircraft hangar infrastructure available to aircraft owners. Generally, they are built to hangar a single engine to a small multi-engine aircraft. Aircraft larger than these will require conventional hangar space. T-Hangar facilities provide an area of approximately 1,300 square feet per individual storage unit.

There are numerous factors that influence the price airports set for hangar fees, some of these being airport location, hangar amenities, demand, etc. In reviewing the County's lease agreements, there is a large variance in rates. Many airports throughout the country are choosing to lease land to a developer to construct T-hangars or conventional hangars and lease the individual units to aircraft owners. This trend is growing in popularity because it frees the airport from the burden of leasing and maintaining the space, as well as collecting rent from multiple tenants.

Once the County conducts a rate survey, leases should be updated to reflect an appropriate market value for their hangar rates.

Fuel Flowage Fee

In addition to charging land and/or facilities rent, some airports charge a fuel flowage fee. In the situation at the La Grande / Union County Airport, an example of a fuel flowage fee would be assessing a charge to firefighting helicopter operators that provide their own fuel. Since these operators typically have a fuel truck dedicated to a helicopter, they do not typically buy fuel from the County. Currently, the County does not assess a fuel flowage fee, as they see a larger benefit to the community in the form of the firefighting presence – such as employment and spin-off spending.

Capital Funding Sources

The development of the Airport's CIP is anticipated to be funded from several sources. These sources include federal grants, state grants, net operating revenues/cash reserves, and other unidentified funding sources, including private funding. Each of these sources of funds is described in the following sections.

Federal Aviation Administration (FAA) Funding

To promote the development of airports to meet the nation's needs, the Federal Government embarked on a Grants-In-Aid Program to units of state and local government after the end of World War II. Following multiple earlier versions of federal funding programs, the Airport Improvement Program (AIP) was established through the Airport and Airway Improvement Act of 1982. The initial AIP provided funding legislation through fiscal year 1992, but since then, it has been authorized and appropriated on a yearly or even quarterly basis. Funding for the AIP is generated through taxes on airline tickets, freight way bills, international departure fees, general aviation fuel, and jet fuel.

AIP grants include entitlement grants, which are allocated among airports by a formula that is driven by passenger enplanements, and by discretionary grants that are awarded in accordance with specific guidelines. Generally, primary airports receive entitlements based on the number of enplaning passengers and landed cargo weights, while non-primary airports, which include general aviation airports, likewise receive some entitlements and may also be eligible for federal state apportionment funding. The total amount of state apportionment funding is based on an area/population formula for the state, while the amount of non-primary entitlements is computed from the needs list for the particular airport in the published National Plan of Integrated Airport Systems (NPIAS). Federal Airport Improvement Funds must be spent on FAA-eligible projects as defined in FAA Order 5100.38D, *Airport Improvement Program (AIP) Handbook*. The handbook and the latest authorization state that:

- An airport must be included in the current version of the NPIAS;
- Non-primary entitlement funds of \$150,000 per year can be accumulated for up to four years;
- The federal portion of AIP grants is 90% for all general aviation airports; and
- If an airport has no airside improvement needs, entitlement funds can be used for certain landside projects.

General aviation and commercial service airports also compete for federal discretionary funds. These funds are awarded based on priority ratings given to each potential project by the FAA. The prioritization process makes certain that the most important and beneficial projects (as viewed by the FAA) are the first to be completed, given the availability of adequate discretionary funds. Federal funding is limited to development that is justified to meet aviation demand according to FAA guidelines. Each NPIAS airport

development project is subject to eligibility and justification requirements as part of the normal AIP funding process.

The County is currently receives entitlements of \$150,000 per year for eligible projects at the Airport. Additional funding could be realized through state apportionment funding and AIP discretionary funding, based on the aforementioned project eligibility ranking methodology. For the Airport CIP, this financial plan assumes total AIP grant awards (entitlement/discretionary) funding of approximately \$7.2 million for Phase I, \$12.6 million during Phase II, and \$10.8 million for Phase III.

Oregon Department of Aviation (ODA)

ODA administers several programs for funding airport planning, construction, and maintenance projects. The following is a description of each funding program.

Pavement Maintenance Program (PMP). The pavement maintenance program provides a resource for airfield pavement maintenance projects. The program funds pavement maintenance and associated improvements (crack filling, repair, sealcoats, etc.), 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 field work. Benefits from the PMP include:

- Economy of scale in bidding contracts
- Federal/State/Local partnerships that maximize airport improvement funds
- 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 PCIs above 70
- Apply budget
- Limit work to patching, crack sealing, fog sealing, slurry sealing
- Add allowance for striping
- Program to include approximately 20 airports per year, depending on funding levels

Aviation System Action Program Fund (HB 2075 Funds). During the 2015 session, House Bill 2075 was passed to increase aviation fuel taxes, mandating ODA to distribute the revenues for various means. Draft administrative rules for the new program are currently available for comment. As presented, the Aviation System Action Program Fund allows for the distribution of fuel tax revenues for the purpose of financing grants to fund aviation and airport projects that involve: 1) providing assistance for federal grant match support, airport safety and emergency preparedness enhancements, services critical and essential to aviation, aviation-related business development, and airport development for local economic benefit; 2) rural commercial air service development; and 3) safety improvements and infrastructure projects at State owned airports.

It is unknown what projects are eligible for funding with this program since it is still being developed; however, several projects – amounting in grant amounts of \$150,000 each – were identified as likely candidates for funding in the CIP.

ConnectOregon. Currently in its sixth round, *ConnectOregon* is a lottery-backed bond initiative to invest in air, rail, marine, transit, and bicycle/pedestrian infrastructure to ensure Oregon’s transportation system is strong, diverse, and efficient. The program is administered by the Oregon Department of Transportation. Historically, the County has been successful in receiving funds from this program.

Other Capital Funding

The traditional funding sources described in previous paragraphs are often insufficient to finance the full range of projects programmed for development during a CIP. Due to the lack of traditional funding, other non-traditional funding sources will be needed to implement non-eligible AIP projects. Alternative sources of funds will require about \$3 million in Phase I, \$1.8 million in Phase II, and \$734,000 in Phase III. The sources of these other funding needs have been identified in broad terms and will likely be needed to supplement the total capital shortfall of almost \$9 million through the 20-year planning period. If these funding sources cannot be ultimately obtained in the timeframes needed, the associated projects will have to be delayed, phased, or reduced in scope to fit within the available funding.

Note that non-traditional funding sources for airport development may include the following sources:

- General Fund Revenues
- Bond Issues
- Private Funding
- Other Federal Agency Funds

Of these, general fund revenues and general obligation bonds are have historically been the most common funding sources. Revenue bonds supported by airport generated revenues are seldom used at general aviation airports because most do not generate enough money to pay operating expenses and the debt service of capital funding requirements.

General Fund Revenues

Transfers to the Airport Fund from the County’s General Fund have been used to support projects and operations. Ideally, once bond debts have been serviced for facilities leased by the US Forest Service the lease rents for those facilities will cover the existing revenue gap at the Airport. During years of heavy firefighting operations, the County-owned fixed base operator’s (FBO’s) fuel sales have decreased the need for transfers in.

Bond Funds

The County has been successful in securing bonds for construction of facilities leased to the US Forest Service. Bond debts have then been serviced with the lease revenues collected. If the *ConnectOregon VI* grant is awarded, the County’s portion of the match will likely be backed by bonds. Given the County’s success with using bond, future revenue-generating projects would be likely candidates for bond funding.

Private Funds

Items such as storage and maintenance hangars are not typically eligible for federal or other grant funding assistance at public airports because those projects generate income for the airport. Airport sponsors sometimes work with local businesses or developers to fund these types of improvements. The County owns some hangars, while the majority are constructed and maintained by private tenants that pay a ground lease.

Within the CIP, hangar development is identified for private funding as no other funding sources would likely be offered.

Other Federal Agency Funds

While not often available, the County has secured funding for projects from the US Forest Service. A recent example of this was the reconstruction of the Tanker Base apron. Since that apron is used exclusively for US Forest Service and their contractors, the agency paid for the project. Any future projects that are similarly used may be eligible for this type of funding.

Estimated Project Costs and Development Schedule

A listing of capital improvement projects has been assembled based on the Preferred Alternative for the Airport established in earlier sections of this Master Plan. This project list has been coordinated with the Airport Layout Plan (ALP) drawing set and the CIP, both of which should be continuously updated by the County, as required federal grant obligations. Generally, the CIP itself has three primary purposes:

1. Identify improvement projects that will be required at an airport over a specific period of time;
2. Estimate the order of implementation of the projects included in the plan; and
3. Estimate the total costs and funding sources of the projects.

It is important to note that as the CIP progresses from project planning in the current year to projects planned in future years, the plan becomes less detailed and more flexible. Additionally, the CIP is typically modified on an annual basis as new projects are identified, projects change, and financial environments evolve.

Each proposed capital improvement project over the 20-year planning horizon has been assigned to one of three specific planning periods: Phase I, short term (2016-2020); Phase II, intermediate term (2021-2025); and Phase III, long term (2026-2035) as shown in the above Table 9A. This table also includes estimates of the funding source eligibility for each project. Note that the estimates contained in this table were derived from analyzing similar projects, but should be reevaluated at the time of initiation.

Phase I contains \$11.4 million in capital projects including airport beacon, Runway 30 blast pad, Runway 16-34 improvements, Taxiway D rehabilitation, and rappel base and apron improvements,. It is estimated that the sponsor (County) share of Phase I capital costs will be approximately \$3.2 million, the federal share will be about \$7.2 million, with \$1 million from *ConnectOregon*.

Phase II contains approximately \$19.3 million in total capital projects. Projects in this phase range from Runway 12-30 shoulder and safety area design and construction to security fencing. The County's share of the proposed development plan in Phase II is approximately \$2 million, while the majority of the

funding is sourced from the FAA. When demand-driven projects are removed from Phase II, the County's share is reduced to just over \$1 million, and the FAA portion remains near \$12.6 million.

Phase III contains \$12.0 million in total capital projects, including construction of Taxiway E and completion of the helicopter operations area. Like all other phases, this phase includes on-going PMP projects to maintain the Airport's runway and taxiway system. About \$734,000 are expected to be funded by the County in this phase. The Federal share is approximately \$10.8 million. Again, once demand-driven projects are removed from consideration, the County's share is \$68,000, with the FAA funding roughly \$800,000.

Airport Revenues and Expenses

Operating revenues at the Airport are realized from the following primary sources:

- Aviation Fuel Sales
- Forest Service and Hangar Rents
- Miscellaneous Revenues

Landside facility development and levels of aviation activity are typically the primary factors affecting airport operating revenues. Note that as additional airport development occurs, the number of based aircraft and aircraft operations will normally increase and new/updated leases will be enacted, typically resulting in airport operating revenues increasing in a corresponding fashion.

Airport operating revenues are offset by airport operating expenses, typically referred to as Operation and Maintenance (O&M) costs. Airport operating expenses are comprised of the day-to-day costs incurred by operating the airport. Primary components of O&M costs at the Airport include:

- Personnel Services – Includes full-time salaries, overtime pay, accrued personal leave, payroll taxes, health insurance, pension and retirement benefits, unemployment insurance and workers' compensation expense.
- Materials and Services – Purchase of aviation fuels, administrative supplies, insurance (building, vehicle, liability), and similar items.
- Capital Outlay – Includes local funds for capital improvement projects.
- Debt Serving – Loan repayment.

Table 2E, *Revenues and Expenses per Fiscal Year*, provides a detailed outlay of the Airport's revenues and expenses from 2008 to 2015.

Projected Airport Operating Revenues and Expenses

The continued growth of the Airport, in terms of activity, tenants, new leases and facility development, will impact the overall operating revenues and expenses throughout the planning period. Actual future financial outcomes will be determined by a variety of factors, many of which are impossible to identify at the current time. However, the projections for airport operating revenues and expenses are based on recent financial results, year-to-date revenues and expenses for fiscal year 2013-2014, as it reflects an average firefighting season (which has a large impact on fuel revenues), along with activity and tenant growth trends identified in Chapter Three, *Forecasts*.

Projections of future airport operating revenues and expenses at the Airport for the periods 2016 through 2035 are presented in **Table 9B**. The following information for operating revenues was established through consideration of historical trends, as well as proposed airport development initiatives and how they might impact those future revenues. In most cases, revenue projections resulted from normal growth factors refined to more closely reflect the circumstances of the Airport.

Table 9B. Projected La Grande / Union County Airport Operating Revenues and Expenses

Fiscal Year	2013-2014	2019-2020	2024-2025	2029-2030	2034-2035
Revenues					
Fuel Flowage Fee	-	-	-	-	-
Jump Start Fee	6,640	7,636	8,632	9,628	10,624
Landing Fees	5,668	6,518	7,368	8,218	9,068
Yearly Maint. Fees	3,900	4,485	5,070	5,655	6,240
Tiedown Fees	-	-	-	-	-
AirLife Callouts	11,160	12,834	14,508	16,182	17,856
Aviation Fuel Sales	595,892	685,275	774,659	864,043	953,427
Fuel Tax Refund ¹	-	-	-	-	-
Aviation Oil	5,743	6,605	7,466	8,328	9,189
Forest Service Rent	60,669	69,769	91,003	106,171	121,338
Hangar Rent	12,830	14,755	17,962	22,453	25,660
Misc. Refund	2,441	2,807	3,173	3,539	3,905
Total Revenues	\$ 704,942	\$ 810,683	\$ 929,841	\$ 1,044,216	\$ 1,157,307
Expenses					
Personnel Services	101,020	116,173	131,326	146,479	161,631
Mat. & Services	632,800	727,719	822,639	917,559	1,012,479
Capital Outlay	-	-	-	-	-
Transfer to Public Works ²	30,000	34,500	39,000	43,500	48,000
Loans	-	-	-	-	-
Total Expenditures	\$ 763,819	\$ 878,392	\$ 992,965	\$ 1,107,538	\$ 1,222,110
Operating Income	\$ (58,877)	\$ (67,708)	\$ (63,123)	\$ (63,322)	\$ (64,803)

Source: Union County historical data and WHPacific, Inc.

Revenues were projected to increase at standard rates (starting at 3% annually) that will increase beyond fiscal year 2025 to account for increased tenants and the resulting volume of activity. In operating expenses, increases in salaries, as well as overall operational activities, are based on accepted inflationary growth rates (primarily a 3% annual growth). Slightly higher growth factors for fuel costs were factored in order to account for some volatility in the supply market, as well as for the overall personnel costs. Unknown factors include the new Rappel Base, including the loan terms and US Forest Service lease agreement.

¹ Historically this refund has been unpredictable and greatly varied. As such, no income projections were made.

² The Airport is managed by the Public Works Department, this transfer helps to partially pay the Director's salary.

No Capital Outlays were identified in the table, as specific projects – particularly in the mid- and long-term range – will likely shift based on need and demands. The projections within Table 9B do show, however, a continuance of a net loss of income at the Airport, regardless of capital outlays. This will likely change once lease revenue from the Rappel Base is calculated. The terms of that agreement, along with the loan the County will use to construct the facility, is still being negotiated. Once those debts have been serviced, the lease revenues will likely change the overall operating deficit.

Based on anticipated CIP project costs and the projected operating income shown above, annual income from the Airport's operation will not be sufficient to cover the County's share of CIP project-related costs in throughout the planning period. Historically, the Airport has not been self-sustaining without General Fund subsidy. It is possible that income from the US Forest Service leases will reduce the Airport's reliance on future transfers. However, since details of the Rappel Base debts and lease schedule are not known, it is difficult to forecast their overall impact in the long-term.

Factors that could improve the County's ability to match CIP funding costs would be to increase hangar and land lease rates to a market-based fee, with periodic updates based on CPI. Other methods of increasing revenue would be implementing tiedown and fuel flowage fees. These fees are common practice at most general aviation airports, and would increase County revenues at no additional expense.

Financial Plan Summary

The primary goal is for the Airport to evolve into a facility that will best serve the air transportation needs of the region, while simultaneously developing into a self-sustaining economic generator. This Master Plan Update can best be described as being the road map to helping the Airport achieve these goals. But it should be recognized that planning is a continuous process that does not end with the completion of the Master Plan in that the fundamental basic issues that have driven this Master Plan will remain valid for many years. Therefore, the ability to continuously monitor the existing and forecast status of airport activity will be a key ingredient in maintaining the applicability and relevance of this study. The County is currently in a negative operating mode at the Airport, but is making investments at the Airport that will improve the region's economics. As these investments gain traction, additional investments from external partnerships will likely increase – adding jobs and revenues for the community and Airport. At this point, however, there are too many unknowns on upcoming lease terms and loan rates to demonstrate this with raw numbers.

In order to realize those goals through the successful implementation of airport development projects, sound and measured decisions by the County must be made. Two of the most important factors in influencing the decision to move forward with a specific improvement are airport activity and funding timing. Both factors must be considered in the implementation of this Master Plan in that while airport activity levels provide the "what" and the "why" in the establishment of airport improvements, the timing of funding provides the "how." Through the course of this Master Plan effort, the "what" and the "why" have been discussed in detail in previous sections. This chapter has addressed the "how" by providing an overview of the sources of potential funding and the practical financial realities required to implement this overall airport development program. However, although every effort has been made in this chapter to conservatively estimate when facility development may be required, aviation demand and the

availability of financial resources for capital projects will ultimately dictate when facility improvements need to be implemented, accelerated or delayed.

Key assumptions supporting the financial plan relate to the availability and timeliness of the funding sources that have been indicated. Continuation of the AIP entitlement program at authorized funding levels is essential. Receiving state apportionment and AIP grants throughout the three CIP phases, as indicated are critical to the financial feasibility of implementing these projects.