

CHAPTER 6: CAPITAL IMPROVEMENT & FINANCIAL PLAN

Ed Carlson Memorial Field – South Lewis County Airport 2022-23 ALP Update for 2017 Airport Master Plan

November 2023 Update: As defined in the FAA-approved scope of work for this project, a minor update of the 2017 Airport Master Plan is being performed. This work includes updating the airport’s 20-year capital improvement program (CIP) for the 2022-2042 planning period, which is the focus of this chapter.

The 2017 Capital Improvement and Financial Plan chapter has been refreshed with updated project descriptions and 2023 cost estimates. Projects completed since the Airport Master Plan was adopted by Lewis County in 2017 have been removed from the current CIP. Where appropriate, the original chapter content from the 2017 master plan update is maintained without modification.

OVERVIEW

The purpose of this chapter is to outline airport improvement projects necessary over the 20-year planning period, and in order of priority. The priority of projects is driven by the aviation demand forecasts, compliance with Federal Aviation Administration (FAA) design standards, and other needs identified during the study process. Safety improvements, environmental evaluations, and property acquisitions are often high priority projects and are prerequisites to other development. The less critical projects are identified later in the planning period timeline. Cost estimates for each project as well as potential funding sources are presented to assist Lewis County with assessing the financial feasibility of implementing the proposed development within the timeframe each project should be accomplished. An attempt is made to balance the cost over the years so that budgets required to design and construct the projects are reasonable and feasible.

Improvements that are required to satisfy the forecast aviation demand at South Lewis County Airport are placed into three development timeframes—referred to as phases: near-term (0-5 years), intermediate-term (6-10 years), and long-term (11-20 years). The proposed list of improvements by phase, their associated costs, and narrative descriptions are provided in subsequent sections.

CAPITAL IMPROVEMENT PROGRAM

The following sections outline the Airport’s Capital Improvement Program (CIP), which includes the proposed development projects over the 20-year planning window. Following discussion of the 20-year CIP, potential improvements beyond 20 years are also discussed. Consideration of longer-term needs is prudent planning,

although projects that are anticipated beyond the 20-year planning period are identified as development reserves and are not included in the CIP. These definitions provide “placeholders” that may be revisited in future years and subsequent CIP updates.

Cost estimates for individual projects, based on 2023 dollars, have been prepared for improvements that are anticipated during the 20-year planning period. More importantly, estimated costs are presented by eligibility so the County may review what portion of these improvements could be funded by outside sources. These include federal and state grants (typical funding levels: FAA 90%; WSDOT Aviation 5% matching grants). “Local” funding includes the County (grant matching funds or full funding for projects not eligible for outside funding), other local partners identified by the County, and tenant-funded improvements such as hangars. Identifying potential funding sources allows the County to budget for upcoming improvements, coordinate funding streams in advance, and make annual adjustments when funding constraints require shifting timeframes.

In late 2023, the FAA indicated that projects requiring discretionary AIP funding that are not currently programmed may be delayed until at least 2032. Recent increases in FAA funding through a variety of programs including the Bipartisan Infrastructure Law (BIL) have altered funding streams (e.g., discretionary funds) commonly used by many general aviation (GA) airports for larger projects.

The general distribution of future projects (Phases I-III) presented in the 2017 master plan is maintained in this update, although it is recognized that many projects may be deferred until later in the planning period, or beyond. The future availability of local, state, and federal funding resources is expected to have a significant impact on the actual timing of individual projects. Additional discussion of costs and funding sources is provided in later sections.

NEAR-TERM (PHASE I) DEVELOPMENT

Table 6A lists the near-term airport improvement needs through the year 2028. Descriptions of the airport improvement projects are listed below.

Table 6A. Capital Improvement Program Near-Term (through 2028)

#	FY	Description	Federal \$	State \$	Local \$	Total Cost
I-1	2023	Aircraft Fuel Tank and Fueling Apron	-	\$514,400*	-	\$514,400
I-2	2024	AWOS Environmental & Land Acquisition -Phase I	\$307,076	\$17,060	\$17,060	\$341,196
I-3	2026	AWOS Design & Construction – Phase 2	\$1,260,000	\$70,000	\$70,000	\$1,400,000
I-4	2028	Access Road Align & Perimeter Fencing – Phase I Design	\$300,000	\$16,666	\$16,667	\$333,333
I-5	2028	Main Apron Seal Coat	\$305,780	\$16,988	\$16,988	\$339,756
Near-term Total			\$2,172,856	\$635,114	\$120,715	\$2,928,685

Note: Project costs are planning level estimates in 2023 dollars. Funding source assumptions: Federal/State/Local projects are 90%, 5%, and 5%, respectively. Local can be Lewis County, private, or other. * WSDOT CARB Loan.

PROJECT DESCRIPTIONS FOR PHASE I (PRESENT TO 2028)

- I-1 Aviation Fuel Storage Tank and Fueling Apron** – Design and construction for the installation of an above ground fuel tank, dispensing facilities, and fueling apron. The planned location for the tank and fueling apron is at the western end of the main apron. The existing underground fuel storage tanks, located beneath the main apron, will be decommissioned and all above-ground items (fueling apparatus and structure) will be removed. The existing apron will be patched for re-use. The new fueling area is planned for one above ground tank, which would allow the Airport to serve 100LL AVGAS. If demand warrants, a future fuel tank could be added to support Jet-A.
- I-2 AWOS Environmental & Land Acquisition** – Phase I: NEPA-compliant environmental study (to support use of FAA funds) for property acquisition and installation of proposed Automated Weather Observing System (AWOS-3) station. Fee simple purchase of property or long-term lease for future AWOS equipment installation and an access route between the nearest adjacent airport access point and the AWOS site. A land area of approximately .8 acres is needed to site the AWOS system and construct the access road. An additional 12.4 acres is defined within the 500 feet critical area for the AWOS. This area should be free of obstacles that could affect the accuracy of weather observations but could be otherwise used; an easement is recommended.
- I-3 AWOS Design & Construction** – Phase 2: Design and construction for the installation of the AWOS-3 system at the Airport. Extensions of existing on-airport electrical and communication service to the site is anticipated. The addition of on-site weather observation capabilities will improve operational safety for visual and instrument flight activity at the Airport, and for enroute aircraft transiting the local airspace.
- I-4 Access Road Realignment & Perimeter Fencing** – Phase I Design: Design of the realignment of the existing airport entrance road as shown on the preferred alternative and the ALP.
- I-5 Main Apron Seal Coat** – Seal coat main apron and re-stripe taxilanes and tiedown markings based on relocated aircraft fueling area.

INTERMEDIATE TERM (PHASE II) DEVELOPMENT

Projects included in Phase II of the planning period are proposed for 2029-2033. As shown in **Table 6B**, total project costs for Phase II are estimated at \$13.2 million with nearly \$10.9 million eligible for FAA funding; the remaining balance is divided between state and local funding. It is noted that nearly half of the projected state/local share is connected to one hangar project (no FAA funding assumed), which may also be funded with tenant or private developer financing.

Table 6B. Capital Improvement Program Intermediate Term (2029-2033)

#	Description	Federal \$	State \$	Local \$	Total Cost
II-1	Taxiway A, A1-A4 Slurry Seal; Markings	\$499,980	\$27,776	\$27,777	\$555,533
II-2	Runway Slurry Seal; NPI Markings	\$1,160,782	\$64,488	\$64,488	\$1,289,758
II-3	Lighted Wind Cone Replacement (Rwy 6 end)	\$196,812	\$10,934	\$10,934	\$218,680
II-4	New Supplemental Lighted Wind Cone (Rwy 24 end)	\$430,047	\$23,891	\$23,892	\$477,830
II-5	Main Apron Overlay; Reconfigure Tiedowns and Taxilanes	\$623,714	\$34,651	\$34,651	\$693,016
II-6	Hangar Stub Taxilanes (4) Reconstructions	\$1,013,270	\$56,293	\$56,293	\$1,125,856
II-7	North Hangar Taxilane Construction/Paving; TLOFA Clearing/Grading, New Perimeter Fencing	\$807,669	\$44,870	\$44,871	\$897,410
II-8	Hangar Development	\$0	\$554,591	\$554,592	\$1,109,183
II-9	Airport Beacon Replacement (LED)	\$385,317	21,406	21,407	\$428,130
II-10	Avigation Easement – Runway 6 RPZ	\$72,000	\$4,000	\$4,000	\$80,000
II-11	Replace Runway Lighting System (MIRL – LED)	\$1,346,592	\$74,810	\$74,811	\$1,496,213
II-12	Phase II Access Road Realignment, Fencing & Terminal Parking – Environmental/ Design/ Construction	\$1,109,060	\$61,615	\$61,615	\$1,232,290
II-13	Land Acquisition – East Terminal Area Apron	\$980,064	\$54,448	\$54,448	\$1,088,960
II-14	East Terminal Area Apron Design/ Construction	\$2,268,064	\$126,003	\$126,004	\$2,520,071
Intermediate-Term Total		\$10,893,371	\$1,159,776	\$1,159,783	\$13,212,930

Note: Project costs are planning level estimates in 2023 dollars. Funding source assumptions: Federal/State/Local projects are 90%, 5%, and 5%, respectively. Local can be Lewis County, private, or other. Project II-8 (hangar) assumed to be 50% Local/50% State (Carb Loan, etc.)

PROJECT DESCRIPTIONS FOR PHASE II (2029-2033)

- II-1 Taxiway A, A1-A4 Slurry Seal; Markings** – Slurry seal parallel taxiway and re-paint markings.
- II-2 Runway Slurry Seal; NPI Markings** – Slurry seal runway 06/24 and re-paint markings.
- II-3 Lighted (LED) Wind Cone Replacement (Runway 6 end)** – Replace lighted wind cone on the Runway 6 end at the end of its useful life.
- II-4 New Supplemental Lighted (LED) Wind Cone (Runway 24 end)** – Add a supplemental wind cone on the Runway 24 end.

- II-5 **Main apron overlay and tiedown reconfiguration** to meet taxilane object free area standards.
- II-6 **Hangar Stub Taxilanes (4) Reconstruction** – Reconstruct/reconfigure hangar stub taxilanes in T-hangar rows (east of main apron).
- II-7 **North Hangar Taxilane Construction/ Paving; Taxilane Object Free Area (TLOFA) Clearing/Grading, New Perimeter Fencing** – Design and construction of paved taxilane to serve the existing and future sites in north terminal area.
- II-8 **Hangar Development** – Design and construction of hangars in the north terminal area. The actual timing of this project will depend on demand and may require private (tenant) funding.
- II-9 **Airport Beacon Replacement (LED)** – Replace the airport rotating beacon as part of overall airfield lighting upgrades to LED.
- II-10 **Avigation Easement (Runway 6 Runway Protection Zone (RPZ))** – Acquisition of avigation easement (air rights) for the portion of the Runway 6 RPZ that extends off airport property (west of Buckley Road).
- II-11 **Replace Runway Lighting System** – Design and construction for replacing the existing medium intensity runway lighting (MIRL) system with LED, at the end of its useful life.
- II-12 **Phase II Access Road Realignment, Fencing & Terminal Parking (Environmental/Design/Construction)** – Design and construction of a vehicular parking lot to the south of the future access road. This project includes filing the ditch and construction of a vehicular parking lot as well as fencing that will be installed along the realigned road with a vehicular gate and three pedestrian gates to protect the Airport Operations Area (AOA).
- II-13 **Environmental and Land Acquisition (East Terminal Area Apron)** – NEPA-compliant environmental study (to support use of FAA funds) for property acquisition and construction of proposed aeronautical improvements. Approximately 4.5 acres of property acquisition located at the east end of the terminal area on the north side of the airfield identified on the 2017 ALP is maintained. This land will be used to construct a new aircraft parking apron and access road. Future improvements may include hangar sites.
- II-14 **East Terminal Area Apron Development** – Design and construction for site development and construction of the new aircraft apron and extended access road.

LONG TERM (PHASE III) DEVELOPMENT

Table 6C includes the proposed Phase III airport improvements (2032-2042) during the last half of the 20-year planning period. The projects are related to pavement maintenance and rehabilitation. Total project costs for Phase III are estimated at \$5.06 million with nearly \$4.6 million eligible for FAA funding; the remaining balance is divided between state and local funding.

Table 6C. Capital Improvement Program Long-Term (2032-2042)

#	Description	Federal \$	State \$	Local \$	Total Cost
III-1	Runway Overlay; NPI Markings	\$3,748,731	\$208,263	\$208,263	\$4,165,257
III-2	Main Apron Seal Coat Extension Protection	\$305,780	\$16,988	\$16,988	\$339,756
III-3	Taxiway A, A-1-A4 Slurry Seal; Markings	\$499,979	\$27,776	\$27,777	\$555,532
Long-term Total		\$4,554,490	\$253,027	\$253,028	\$5,060,545

Note: Project costs are planning level estimates in 2023 dollars. Funding source assumptions: Federal/State/Local projects are 90%, 5%, and 5%, respectively. Local can be Lewis County, private, or other.

PROJECT DESCRIPTIONS FOR PHASE III (2032-2042)

III-1 Runway Overlay; NPI Markings – Overlay Runway 06/24 and re-paint markings.

III-2 Main Apron Seal Coat – Seal coat main apron and re-stripe taxilanes and tie down markings.

III-3 Taxiway A, A1-A4 Slurry Seal; Markings – Slurry seal parallel taxiway re-paint markings.

BEYOND 20 YEARS (DEVELOPMENT RESERVES)

Several long-term projects are anticipated beyond the current 20-year planning period. It is important to identify potential long-term needs to protect the County’s vision for the Airport. This will also allow local jurisdictions to protect long-term airport improvements through effective land use, zoning, and overlay zoning.

Future Fixed Base Operator (FBO): Construction of a future FBO to the north side of the main apron in the area identified on the ALP. The conceptual areas may accommodate mixed-use buildings that include aircraft storage, operational space, pilot facilities, restaurant space, etc.

Runway Extension Justification Report: Once the demand levels necessary to justify the extension of the runway are reached, a report documenting activity levels and the need for a runway extension must be prepared and submitted to the FAA.

Runway Extension Environmental Assessment: An FAA-Environmental Assessment (EA) related to the property acquisition and extension of the runway/parallel taxiway to the east.

Property Acquisition: Land area required to accommodate the runway and parallel taxiway extension beyond the existing east end of Runway 6/24.

Runway & Parallel Taxiway Extension: The development reserve maintains the ultimate length of 6,200 feet identified on the 2017 ALP. It is anticipated that the aircraft use required to justify that future runway length would trigger a change from ADG I to ADG II standards. As such, ADG II and related dimensional standards are applied to all reserve items including RSA, OFA, OFZ, RPZ, and runway/taxiway widths.

SOURCES OF CAPITAL FUNDING

This section describes the various funding sources that are potentially available to Lewis County for their proposed airport development plans. Since South Lewis County Airport revenues represent a relatively small source of funding relative to the large CIP investment needs, the vast majority of CIP funding will be derived from other sources. The majority of grant funding for eligible capital projects typically comes from the FAA. However, if such projects are deemed a relatively low priority by the FAA, they may be delayed or deferred indefinitely. The following is a summary of the County's financing options:

- Federal (FAA)
- Washington State Department of Transportation (WSDOT) Aviation Division grants and loan programs
- Lewis County transfers in funding
- County bonds
- Airport operating revenues
- Private financing/third party development of specific airport projects

FEDERAL FUNDING

Federal funding available to South Lewis County Airport is derived from the Airport Improvement Program through entitlement grants and discretionary grants. The Airport Improvement Program (AIP) was established by the *Airport and Airway Improvement Act of 1982*, with several subsequent amendments to include the most recent *FAA Reauthorization Act of 2018*. A 2023 FAA reauthorization bill, if approved, would extend FAA funding through fiscal year 2028. The most recent funding proposal was “\$20 billion for FAA airport improvement grants to support more than 3,300 airports nationwide and promote a sustainable and resilient infrastructure to meet increasing demand and integration of emerging technologies.”¹ A short-term continuing appropriation resolution, passed by Congress in July 2023, funds the FAA through December 31, 2023.

Funds for the AIP are derived from the Airport and Airway Trust fund, which is supported by user fees, fuel taxes, and other similar revenue sources. Currently, AIP grants cover 90% of eligible project costs for general aviation airports like South Lewis County Airport.

AIP funding for eligible projects is described in FAA Order 5100.38D (Change 1), *Airport Improvement Program Handbook*.

The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century—often referred to as AIR-21, established the Non-Primary Airports Entitlement (NPE) program, of which South Lewis County and similar GA airports in the National Plan of Integrated Airport Systems (NPIAS) benefit. AIR-21, enacted in 2000, sets

¹ U.S. Senate Committee on Commerce, Science, & Transportation (June 12, 2023)

aside grant funding for these airports. Currently, each airport can receive up to \$150,000 per year based on the FAA's assessment of eligible needs over a five-year period. If a project is anticipated to cost in excess of \$150,000, airports can rollover the NPE funds for up to four years (\$600,000 maximum) and apply the accumulated rolled-over funds to larger projects. Any unused funds at the end of the entitlement program revert to the FAA. CIP funding for the South Lewis County Airport CIP assumes the \$150,000 entitlement grant funding will continue through the planning period.

In addition to NPE grants, the FAA provides discretionary grants to general aviation airports to support larger projects. Within a finite amount of funding, these grants are highly competitive and favor projects that enhance airport safety, security, and capacity, and would be difficult to fund otherwise. 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. While dollar amounts for these grants can vary substantially, they are generally significantly larger than an airport's accumulated NPE funding and focus on major projects.

As part of the economic recovery response to the COVID-19 pandemic, several supplemental funding programs were introduced that benefited airports. These included the American Rescue Plan (APRA) and the Bipartisan Infrastructure Law (BIL). These grant programs created temporary funding streams for airports beyond traditional AIP funding.

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 grant 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 a high priority given to helping support the local match required for FAA-funded projects at NPIAS airports. Limited funding is also provided to non-NPIAS 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 \$750,000. Due to volume of grant applications received in any given cycle, large grant awards under this program remain relatively uncommon.

The WSDOT Aviation webpage provides the following information:

“On projects seeking state funds only, the airport sponsor must contribute a minimum 5 percent match of the entire project cost. If the sponsor is able, and would like to contribute a larger match amount, they certainly can and will receive additional points towards their total project application

score during WSDOT Aviation's prioritization review of all grant applications.

For projects receiving federal funds, it has been a long-standing practice of the Airport Aid Program to support airports in matching their Airport Improvement Program (AIP) grants. Currently, AIP grants require 10 percent of the project total to come from the airport sponsor. WSDOT supports grants to airports for up to half of their match requirement.”

For long-term planning purposes, the local share (10%) of FAA-eligible projects is assumed to be evenly split (5%/5%) between local and state levels in the updated CIP. However, since available funding levels in the state grant program may vary year to year, it is recommended that whenever possible, Lewis County manage its capital program where WSDOT grants are supportive, but not essential to fully fund the local match required for FAA grants.

When WSDOT Aviation Division grant requests are successful, the required Lewis County expenditure (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 are distributed with the guidance of the Community Aviation Revitalization Board (CARB).

As currently authorized, 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 providing 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.

State Capital Improvement Program (SCIP)

The FAA's Seattle Airports 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. For Washington airports, the FAA and WSDOT Aviation schedule annual "joint planning conferences" (JPC) with airport sponsors to update the regularly SCIP.

LOCAL FUNDING

AIRPORT CASH FLOW

This section presents an overview of the historical and projected revenues and expenses for the South Lewis County Airport. A review of the Airport's cash flow helps the County determine the financial feasibility of the CIP, namely when local dollars needed to fund airport improvement projects are substantially higher than the County typically budgets for the Airport. This often occurs when projects are either ineligible for state or federal funding participation, or do not compete well for eligible funding, resulting in the airport sponsor being responsible for a larger share or 100% of the project.

CURRENT REVENUE SOURCES

The following recaps the Airport's limited operating revenue sources outlined in the Inventory Chapter. As discussed in subsequent sections—and typical of similar general aviation airports, these revenues typically fall short of covering the Airport's operating expenses.

- Land leases
- Hangar leases
- Tiedown fees
- Tenant annual use fees
- Through the fence annual fees
- Profit of fuel flowage fees

The Airport's current rates and charges structure is as follows:

- Ground leases rates for privately owned Airport buildings--\$0.16 per square foot/year for private use and \$0.19 per square foot/year for commercial use
- Airport-owned T-hangar bay lease rates--\$660/year (or \$55/month plus tax)
- Airport tiedown fees--\$180/year (\$15/month)
- Airport tenant user fees--\$100/ year
- Airport Avgas price--\$6.95/gallon

HISTORICAL REVENUES AND EXPENSES

The relationship between operating revenues and operating expenses is one representation of the overall financial condition of the Airport. From a net cash flow perspective, comparison of operating revenues and expenses shows whether revenues are sufficient to cover operating expenses.

Table 6D summarizes a comparison of 2015 and 2022 historical operating revenues and expenses for South Lewis County Airport. Non-operating or one-time revenues such as state or federal grants, or general fund transfers are not included; expenses not generated through the operation of the Airport are also not included.

Revenues include fuel sales, space and facility leases, and miscellaneous revenues. Since the County is responsible for fueling, a line item identified as “fuel purchases for resale” is listed in expenses. For 2022, the fuel expense and net income from fuel sales were both listed at \$120,000, which does not appear to reflect any profit to cover system maintenance, repair and management. Space and facility lease revenues—primarily derived from ground and hangar leases—show a total of \$14,553 reported in 2022. Consequently, Lewis County provides a subsidy to cover the Airport’s operating expenses. This subsidy is often referred to as “Transfers In” from Lewis County.

The operating expenses are clustered to distinguish various labor costs, airport operating costs and imputed outside-government and County interfund costs charged to the Airport. Labor costs accounted for approximately 33% of 2022 airport expenditures.

As an offset to negative cash flows, Lewis County Transfers-In funds are intended to cover three airport cost areas:

1. Labor and benefits (operating costs)
2. Inter-fund and inter-government imputed expenses (operating costs)
3. Outside grant matching requirements (capital costs)

Table 6D. Historical Operating Revenues and Expenses

	Actuals	
	2015	2022
Operating Revenues		
Fuel Sales	\$50,000	\$120,000
Space & Facility Leases	\$23,000	\$14,553
Misc. Revenue--Other	\$100	\$0
Total Operating Revenues	\$73,100	\$134,553
Operating Expenses		
Salaries & Wages	\$51,831	\$56,927
Industrial Insurance	\$142	\$173
Social Security	\$3,965	\$-
Retirement	\$4,997	\$6,432
Med/Dental/Vision/H&A	\$1,519	\$7,394
Life Insurance	\$26	\$31
Sic/Vac Payout	\$6,500	\$-
Interfund Self Insur.	\$189	\$531
Interfund County Ins	\$275	\$-
Interfund Unemployment	\$-	\$260
Labor Subtotal	\$69,444	\$71,748
Office & Oper Supplies	\$1,500	\$1,800
Fuel For Resale	\$48,000	\$120,000
Small Tools & Minor Equip	\$100-	\$-
Professional Services/Advertising	\$50	\$-
Telephone	\$1,000	\$2,000
Travel	\$500	\$-
Taxes/Op Assessment	\$-	\$-
Oper Rental & Lease	\$-	\$-
Insurance	\$5,000	\$-
Repairs & Maintenance	\$2,000	\$5,000
Miscellaneous	\$1,000	\$1,500
Training & Registration	\$250	\$-
Dues & Subscriptions	\$250	\$-
Administration Subtotal	\$59,650	\$130,300
Intergovt--Prof Svcs	\$250	\$-
Intergovt--External Tax	\$-	\$-
Interfund--Prof Services	\$625	\$-
Interfund--Info Services	\$2,280	\$4,539
Interfund--Postage	\$1,113	\$75
Interfund--Supplies	\$-	\$-
Interfund--Op Rentals	\$-	\$-
Interfund--ER&R Info SV	\$300	\$-
Interfund--Facilities M	\$7,609	\$12,000
Interfund--Debt	\$-	\$-
Intergovernmental Expense Subtotal	\$12,177	\$16,614
Total Airport Expenditures	\$141,271	\$218,662
Net Cash Flow (Loss)	\$(68,171)	\$(84,109)

Source: Lewis County

PROJECTED REVENUES AND EXPENSES

This section projects future operating revenues and expenses to provide Lewis County with an approximation of the Airport's future operating cash flows. **Table 6E** summarizes the projections through the 20-year planning period. These projections consider normal growth factors for operating revenues and expenses, including the impact of inflation, adapted to the unique characteristics of South Lewis County Airport, particularly with revenues associated with space and facility leases, which have shown growth and are projected to increase with forecast demand and the County's development plans.

Table 6E. Projected Revenues and Expenses

Revenues	2023 Baseline	2027	2032	2042
Fuel Sales	\$175,000	\$204,725	\$249,080	\$368,699
Space and Facility Leases	\$17,725	\$20,736	\$25,228	\$37,344
Total Revenue	\$192,725	\$225,461	\$274,308	\$406,043
Expenses	2023 Baseline	2027	2032	2042
Salaries and Benefits	\$56,927	\$64,072	\$74,277	\$99,822
Fuel for resale	\$175,000	196,964	\$228,335	\$306,864
Minor Equipment, Supplies, Equipment Rental and Services	\$1,600	\$1,801	\$2,088	\$2,806
Communication, Travel, Advertising	\$2,000	\$2,251	\$2,610	\$3,507
Insurance, Taxes	\$1,613	\$1,815	\$2,105	\$2,828
Repairs & Maintenance	\$20,000	\$22,510	\$26,095	\$35,070
Miscellaneous- other	\$10,250	\$11,536	\$13,374	\$17,973
Intergovernmental	\$0	\$0	\$0	\$0
Total Expenses	\$267,390	\$300,950	\$348,883	\$468,870
Cash Flow	\$(74,665)	\$(75,489)	\$(74,576)	\$(62,827)

Similar to any forecasting effort, results are predictions of future activities and should serve only as a guide for planning purposes. These predictions are based on the best available information and knowledge about existing conditions and anticipated future events and trends. Consequently, as the forecast extends further out from the present time, the predicted results become increasingly uncertain—all the more reason to update projections as they become outdated. Sudden changes within the Lewis County community or in the aviation industry can cause significant deviations from the projected activity.

CASH FLOW VERSUS CAPITAL COSTS

Table 6F provides a brief review of the South Lewis County Airport's cash flow versus the anticipated local funding requirements for the proposed airport improvements identified in the CIP by phase. Since current airport revenues cannot fully cover capital improvement needs, there are funding shortfalls in each development phase. This provides the County with an overview of the total funding needs by phase, which

will require one or a combination of the following actions throughout the CIP implementation process:

- County provides funding to cover capital costs not covered by FAA and State grants
- County postpones select airport projects, on an as-needed basis, until funding is budgeted or otherwise secured
- County pursues other funding options such as private development/financing (discussed further in the next section)

Another option is to increase rates and fees at the Airport to generate an increase in airport operating revenues. However, rates and fees should still be market-based to maintain overall competitiveness with nearby airports. Based on current activity levels and number of tenants presently at the Airport, incremental increases will provide limited assistance with large capital funding needs. Nevertheless, the County should periodically review their rate- and-fee structure to keep pace with local economic conditions.

Table 6F. Cash Flow versus Capital Costs

Development Phase	Revenues	Expenses	Net Income	CIP Local/ Other Share	Net Difference
Near-term, Phase I (2023-2027)	\$1,043,861	\$ 1,419,610	\$ (375,749)	\$ 120,715	\$ (496,464)
Intermediate-term, Phase II (2028- 2032)	\$1,270,016	\$ 1,645,717	\$ (375,701)	\$ 1,159,783	\$ (1,535,484)
Long-term, Phase III (2033-2042)	\$3,425,103	\$ 4,119,543	\$ (694,440)	\$ 253,027	\$ (947,467)
Total	\$5,738,980	\$ 7,184,869	\$ (1,445,889)	\$ 1,177,794	\$ (2,979,415)

OTHER POSSIBLE FUNDING SOURCES

This section was developed for the 2017 Airport Master Plan and is maintained largely without revision.

The section discusses other sources for funding capital improvements at the Airport. One possibility is general obligation bonds backed by the creditworthiness and taxing power of Lewis County. They usually bear low interest rates because of their high degree of scarcity. However, state laws limit the County’s overall debt, and competition from other County financing requirements may preclude their use for Airport capital improvement projects. Their potential use at the Airport is uncertain.

Third party financing may be appropriate for the Airport in a case where the Airport sponsor uses a third-party developer or a tenant to finance an on-site construction project. The obvious advantage to the County of such an arrangement is relief of all responsibility for raising the capital funds for improvements. Key advantages to the developer are that there are no up-front property acquisition costs and that public entitlement uncertainties are typically mitigated. Projects of this kind typically include hangars, FBO facilities, fuel storage, exclusive aircraft parking aprons, industrial aviation-use facilities, and other various projects. This type of funding is particularly suitable because these types of projects are not typically eligible for FAA or WSDOT funding. However, only projects with a strong positive cash flow can support this type of financing. From a developer’s perspective, the biggest concern is that development would occur on leased

Airport land with building improvement reversionary clauses at the end of the ground lease. Prospective building developers and owners strongly prefer developing on fee land.

Further, financing a new project or building on leased public land is challenging for a developer, from a collateral standpoint, for example. The Airport is precluded from allowing claims such as developer liens to be placed against airport land. Thus, the developer is unable to offer the potential real estate to be developed as security. In contrast, on private property, developers typically can encumber the title of the property for purposes of lender security. The lender, in turn, has the ability to place a lien on the real estate in order to secure its position.

Another potential problem for a developer is the probable existence of low market rents at the Airport. Given the private developer's cost to construct a new airport building, rents must be adequate to achieve amortization of that investment plus an adequate investment return for the effort and risk.

From the lender's point of view, private development financing on airport ground lease land may be problematic. The financial institution lending on an airport development project must look at the downside of the project and the implications of curing a potential default by the developer. Fundamental to the financing of a real estate project is mortgage underwriting—the analysis of a loan from the lender's perspective to determine the risk of making the loan using the real estate as collateral. However, from the lender's perspective, the real estate collateral is not viewed as a good defense against lender loss.

Specifically, the foundation of the market value of income producing real estate is the future stream of income. The key to the lender forecasting the present value of this future stream of income is accuracy in the size, timing, duration and stability of future income flows. The process of converting these future income flows to a present value is a simple matter of capitalization at an appropriate rate. From a lender's perspective, determining the appropriate rate is problematic and must consider multiple marketplace variables including:

- The building is mostly absorbed with signed leases (not Letters of Intent)
- Signed tenants are mostly good credits
- In the case of construction loans, permanent (take-out) financing is already secured
- A minimum of 10 years is remaining on the lease in order to achieve any refinancing approvals
- Typically, a 20- to 30-year lease term is acceptable

Nevertheless, many of the metrics of the Airport, the developer, and the lender reflect similar perspectives. All three parties must be comfortable with the real estate development and business arrangement.

The following are possibilities to consider for generating additional revenue at South Lewis County Airport in the future.

1. The County could seek a third-party developer to construct the following:
 - New hangars or FBO facilities (north side of runway)
 - South side aircraft hangars (on 14 acres owned by the Airport)

2. Lewis County could generate some additional recurring annual revenue at the Airport by developing the following as recommended in the Preferred Alternative:
 - Creating buildable, fully serviced sites (taxilane access, utilities, surface access, etc.) for private hangar construction
 - Additional aircraft apron/tiedowns on the south side
 - Additional aircraft apron/tiedowns on the north side

SUMMARY

Lewis County, airport tenants and visitors, and area communities recognize the importance of the South Lewis County Airport. Protecting the investment in this asset is essential to the Airport fulfilling its role in the air transportation system and in contributing to the future economic growth of the region. This Master Plan should be used as a tool to guide the County's development efforts to this end. Planning is a continuous process and changes in the aviation industry, economic environment, and numerous other factors may require adjustments in timing of planned improvements. The fundamental elements addressed in the Master Plan will assist the County in responding to such adjustments in the coming years.