INTRODUCTION

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

2022 AIRPORT LAYOUT PLAN UPDATE

The Ed Carlson Memorial Field – South Lewis County Airport (Airport) is updating their Airport Layout Plan (ALP) and narrative report to include an Airport Geographic Information System (AGIS) survey, identify conformance issues related to changes in FAA standards, and complete an updated Airport Layout Plan set. As part of the 2022 ALP update, the 2017 Airport Master Plan report will be updated as needed to reflect current information, a forecast update through the 20-year planning period, and an updated capital improvement plan (CIP).

2017 AIRPORT MASTER PLAN UPDATE

Lewis County completed an Airport Master Plan Update study for the Ed Carlson Memorial Field – South Lewis County Airport (Airport) in 2017 with a grant from the Federal Aviation Administration (FAA) to fund 90% of the study with Washington State Department of Transportation Aviation funding 5%, and Lewis County funding the remaining 5%.

The Airport's previous planning study was the 2003 Airport Layout Plan Update, which included a narrative report. In 2002, the Airport prepared a report titled *Airport Needs Assessment, Planning and Recommendations*. Prior to the 2002 study, the Airport conducted a 1995 airport master plan study. The FAA recommends that airports periodically update their master plans as conditions affecting airport operations and development occur—often in unpredictable ways. Consequently, the timeframe to update a master plan varies for different airports.

This Master Plan Update served as Lewis County's 20-year development strategy for the Airport to accommodate aviation demand, meet FAA design standards, address airport user needs, and serve its role in the air transportation system.

The 2017 Airport Master Plan Update study involved several tasks which spanned over an estimated 15-month study timeframe. The FAA's *Advisory Circular 150/5070-6B, Airport Master Plans*, provides guidance for the planning process. Documentation of the study findings for the Airport were presented in the following six chapters:

1. Inventory
2. Aviation Forecasts
3. Facility Requirements
4. Alternatives Development and Evaluation
5. Airport Plans
6. Implementation

The chapters were published in draft for review and comment throughout the planning process. Review comments were incorporated into all draft chapters, and a comprehensive report was published. Further, the Airport Layout Plan (ALP), which was previously reviewed and approved by the FAA in 2003, will be updated. The ALP update corrected obsolete features, show any facilities constructed more recently and not reflected on the current ALP, and incorporate the County's long-term development plans so the future improvements will be eligible for Federal funding.

COMMUNITY OUTREACH

As part of both the 2022 ALP Update and the 2017 Airport Master Plan, the County established a Planning Advisory Committee (PAC), representing a cross-section of the community. These PAC members serve as community liaisons and participate in working sessions throughout the planning process. They discuss airport issues, study progress, and key findings, and provide input, evaluate development concepts, and provide review comments and questions on all draft materials produced throughout the study process. PAC members are invited to share their knowledge of the study findings with the public at any time, but all PAC work sessions are open to the public.

PAC meetings will provide input into the facility requirements, which are necessary to satisfy future demands on the Airport. The facility requirements will serve as the building blocks for the development of preliminary alternative concepts capable of satisfying future demand. The development alternatives will be presented for public review and comment following the second PAC meeting.

AIRPORT ISSUES

Lewis County has established a project website to keep the public informed of the Airport Layout Plan Update study progress. The County will post meeting information, public comment sheets, newsletters, draft airport master plan materials, and other pertinent information on the County website.

The Ed Carlson Memorial Field – South Lewis County Airport is a public use general aviation (GA) airport serving its airport users, community, surrounding region, and the air transportation system. Consequently, the Airport is an important asset. Identifying issues and taking action to address those issues is necessary to preserve and enhance this important asset. The following is a list of airport issues—coordinated with Lewis County and the PAC members—that the 2017 master plan addressed.

Some of the issues/needs from the 2017 survey included:

- FBO facilities and services (lounge area, computer and internet access, courtesy cars)
- Taxiway improvements (widening, paving)
- Upgraded fuel facilities/pumps
- Hangar space (clear derelict airplanes, build more hangars)
- Improved landside access (paved, aesthetically appealing)
- Weather reporting station
- General airport maintenance and grass mowing
- Access to water for washing aircraft

The 2022 ALP update will address:

- Existing and potential airport users and their needs
- Runway length adequate to support existing and future needs
- Preserving existing infrastructure and costs for future improvements
- Jackson Highway and Buckley Road located in Runway Protection Zone (RPZ) on west end
- Runway development opportunities on south side of runway
- Existing land constraints and possible need for acquisition
- Existing environmental conditions
- Security – fencing, wildlife intrusions
- Stormwater management

PLAN GOALS

The Airport Master Plan goals should align with the County's long-term vision for the Airport and guide the near- to long-term plans for improved airport facilities and services. The following plan goals were identified in 2017 Airport Master Plan:

- Enhance safety and security
- Support economic growth
- Accommodate demand
- Preserve/protect investment

These goals provided the framework for defining evaluation criteria used later in the study to evaluate the various development alternatives for the Airport.

CHAPTER 1: INVENTORY

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

As part of the 2022-23 ALP update, the 2017 Airport Master Plan report will be updated as needed to reflect current information, a forecast update through the 20-year planning period, and an updated capital improvement plan (CIP).

This first element of the Ed Carlson Memorial Field - South Lewis County Airport (Airport or South Lewis County Airport) Master Plan update documents the existing conditions to include Airport facilities and aviation activity. The information presented represents baseline data and the foundation for the subsequent chapters. Identifying what is available today allows the study to address what facilities are insufficient to meet the projected aviation demand.

This task was accomplished through a number of sources and actions that included the following:

- Conducting a site visit to identify the Airport facilities, their general location and condition
- Meeting with the Airport Systems Manager, Airport users and other stakeholders to discuss issues associated with the Airport facilities
- Obtaining Federal Aviation Administration (FAA) and Washington State Department of Transportation (WSDOT) Aviation data
- Reviewing available County studies, drawings, and other documents

AIRPORT LOCATION AND ACCESS

The South Lewis County Airport is just over 100 miles south of Seattle and 75 miles north of Portland, OR, where both provide access to major air carrier service. Located five miles east of Interstate 5 (**Exhibit 1A**), the Airport is easily accessible from major roadways. The Cities of Toledo and Winlock are the closest communities to the Airport.

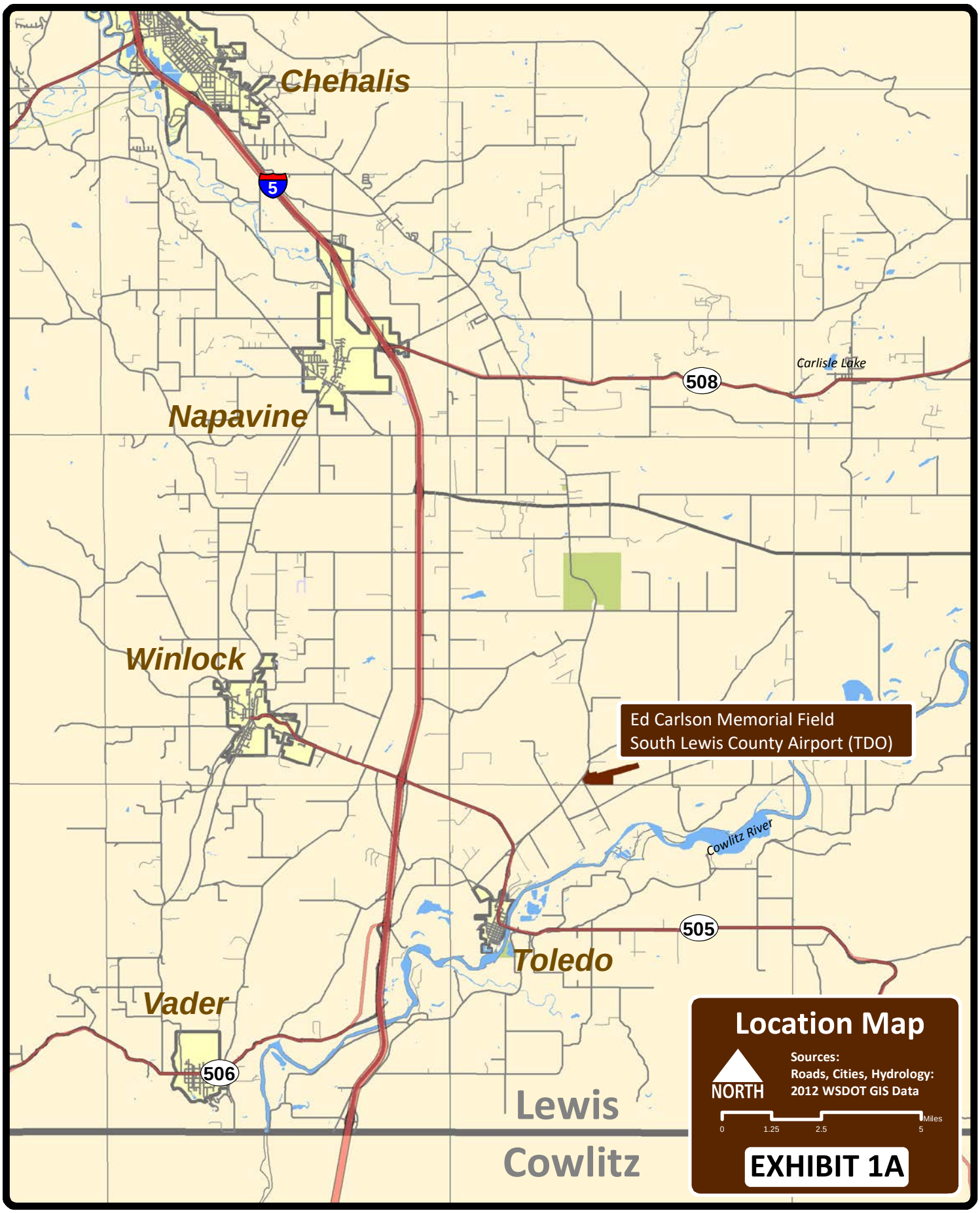
Access to the Airport from Toledo—three miles southwest of the Airport—is via Jackson Highway just past Buckley Road. Access from Winlock is via Washington State Highway 505 to Jackson Highway. **Exhibit 1B** depicts the Airport and the local roadways surrounding the facility.

AREA LANDSCAPE AREA LANDSCAPE

The Toledo area has access to a broad range of scenery and recreational opportunities. Mountains, foothills, forests, rivers, lakes, and prairies are all in close proximity.

Toledo is located on the banks of the Cowlitz River and is known as the Gateway to Mt. St. Helens.

The Airport is at an elevation of 374 feet mean sea level (MSL).


Chehalis
5
Napavine
508
Carlisle Lake
Winlock
Ed Carlson Memorial Field
South Lewis County Airport (TDO)
Cowlitz River
505
Toledo
Vader
506
Lewis
Cowlitz
Location Map
NORTH
Sources:
Roads, Cities, Hydrology:
2012 WSDOT GIS Data
0
1.25
2.5
5
Miles
EXHIBIT 1A


Tucker Rd
Skyhawk Dr
Schoolhouse Ln
Howe Rd
Ed Carlson Memorial Field
South Lewis County Airport (TDO)
Jackson Hwy
Buckley Rd
Spencer Rd
Helen Ln
Homer Ln
Poetsch Rd
Cowlitz River
Vicinity Map
Source: Google Earth
NORTH
EXHIBIT 1B
Updated by Century West November 2022

CLIMATE

Toledo has an average of 136 sunny days and an average annual 45.7 inches of precipitation. According to the Western Regional Climate Center's data for Toledo from 1950 through 2007, the mean maximum temperature of the hottest month (August) is 78.8 degrees Fahrenheit, which is an important temperature in determining runway length requirements in a subsequent chapter. The City's average low temperature for the coldest month (December) is 44.9 degrees Fahrenheit.

AIRPORT HISTORY

The Ed Carlson Memorial Field-South Lewis County Airport was originally known as the Toledo- Winlock-County Airport when the two municipalities and the County had joint ownership. Prior to their ownership, the Airport was a privately-owned airstrip that served as an emergency airfield. World War II prompted Lewis County to pass a resolution to acquire the airfield and invest $7,000 in improvements along with matching funds from the two municipalities. Subsequently, the U.S. government invested $150,000 for additional improvements during war time. While the Airport was officially under the control of the U.S. government, a three-member Airport commission was established with one representative from each of the three owners. When the war ended, the three-member Airport commission took over. In 1975, the commission was reorganized and increased from three to six members: two representatives from each municipality and the County Commission. In December 2001, the municipalities released their interests in the Airport and the County took full ownership. By 2002, the County had established a five-member Airport Board consisting of area residents to oversee the Airport, but the Board of County Commissioners (BOCC) retained ultimate decision-making authority. Further, the Airport was renamed Ed Carlson Memorial Field-South Lewis County Airport. In October 2002, the County published a planning study titled Airport Needs Assessment, Planning, and Recommendations, which analyzed Airport maintenance and capital improvement needs, conducted an economic analysis of Airport operations, provided recommendations for maintenance and capital improvements, and addressed funding sources. An Airport Layout Plan (ALP) and Narrative Report was prepared in 2003, the FAA approved the ALP in November 2003, which updated the previous 1995 Airport Layout Plan and Narrative Report. In 2005, the BOCC established a part-time Airport systems manager position to manage the daily operations of the Airport and enhance Lewis County's ability to achieve their established goals and objectives for the Airport.

Since its acquisition, the Airport has continually improved with both airside and landside development. According to FAA records, Lewis County has received funding grants for the following projects since they obtained full ownership:

- 2003 – Rehabilitate runway; improve runway safety area (including relocation of Runway 5 VASI); rehabilitate runway lighting; install runway vertical/visual guidance system (REILs Runway 5-23 and PAPI Runway 23); update Airport Master Plan (note: ALP Update Report completed).
- 2007 – Conduct miscellaneous study (survey for Runway 5-23) localizer approach with vertical guidance); construct general aviation apron, including environmental and design (phase 1).
- 2008 – Construct apron; rehabilitate apron.

- 2010 – Rehabilitate Runway 5-23, including remarking (Note: instrument approach procedures also published in 2010).
- 2011 – Obstruction removal (trees); rehabilitate Runway 6-24 (fog and crack seal).
- 2019 – Taxiway A complete reconstruction.
- 2019 – Aircraft apron fog and crack seal.
- 2020 – North side tree removal.
- 2022 – Building removal on north side of the apron.

AVIATION ACTIVITY

For General Aviation (GA) airports, the primary measurements of aviation activity include the number of based aircraft and the number of annual aircraft operations. An operation is a takeoff or a landing, so a touch-and-go performed during flight training counts as two operations.

According to Lewis County, the based aircraft fleet includes the following:

- 39 single engine airplanes
- 2 helicopters

The FAA Airport Master Record (FAA Form 5010) provides data on airport operations and based aircraft. For South Lewis County Airport, airport operations fall into two of the FAA operations categories to include GA and military. GA aircraft operations are estimated to represent 98% of total annual operations at the Airport, while military operations represent 2%.

Airport operations are also divided between GA local and itinerant activity. Local operations refer to aircraft remaining near the Airport and include training activity such as touch-and-go operations, aircraft maneuvers in a practice area near the Airport, and skydiving operations. Itinerant activity refers to all other operations that depart to or arrive from another airport. GA itinerant operations make up the majority of the GA operations at 62% of the total GA, while local operations represent 38% of total GA.

Considering the recent substantial drop in aviation activity at the Airport, the County estimated that total annual operations in 2020 were approximately 8,300. At airports without an air traffic control tower, operations are always estimated. These data are unverified and are presented for reference only. An updated baseline estimate of annual aircraft operations will be developed for use as the baseline for the new aviation activity forecasts for the ALP Report.

These operations are conducted by a variety of transient and based aircraft for a broad range of business and recreational purposes. Operations primarily consist of small, single-engine piston fixed wing aircraft, but other aircraft types operate there such as multi-engine piston, helicopters, turboprops, and some limited activity by corporate jets.

Examples of aviation activity conducted at the South Lewis County Airport include the following:

- Corporate/Business
- Flight Training
- Emergency Medical
- Medical/Patient Transfer
- Search/Rescue
- Military
- Police/Law Enforcement
- Recreational Flying/Skydiving
- Environmental Patrol
- Aerial Photography
- Real Estate Tours
- Special Events (i.e. Fly-ins)

EXISTING FACILITIES

Consisting of an estimated 96.6 acres, the Airport includes facilities described as airside, landside and support. Existing facilities are depicted on **Exhibit 1C**.

AIRSIDE FACILITIES

Airside facilities include active aircraft movement areas such as the runways, taxiways, and aircraft apron areas. The South Lewis County Airport has a single runway, full-length parallel taxiway system, and aircraft apron areas with tiedowns on the east side adjacent to the building areas.

RUNWAYS

Runway 6-24—with a northeast-southwest alignment—is 4,479 feet in length by 150 feet wide. The runway is asphalt-paved. A relocated threshold for Runway 6 reduced the length to its current 4,479 feet to comply with FAA design standards for obstacle clearance slope and runway safety area.

The wind rose on the last Airport Layout Plan indicates that prevailing winds are from the southwest. According to the County, runway utilization is an estimated 75% of operations on Runway 24 and 25% on Runway 6. However, during calm winds, most aircraft operators will choose Runway 6. The local skydiving club will also use Runway 6 for departures unless the tailwinds are excessive. Most arriving aircraft prefer Runway 24 for the short taxi time and easy turnoff to the apron and building area.

Upon current review, the wind data for Toledo are no longer available. An updated wind rose will be developed using data from Chehalis Airport (14NM NW).

HANGAR INFORMATION

KEY	LEASE	TYPE / DESC.	TENANT
A	#18	Conventional	Myron Barr/Dan Merritt
B	#16	Conventional	Rob Taylor
C	#12	Conventional	Lance Christiansen
D	Rental	T-Hangar / 7 Bay	Lewis County
E	#1	T-Hangar / 7 Bay	Toledo Flying Club
F	#4	Conventional	Matt Myers
G	#3	Conventional	Jerry Pruitt
H	#2	Conventional	Mike Messmore
I	#7	Conventional	Nancy Anderson
J	#6	Conventional	Richard Cole
K	#5	Conventional	Jerry Wilkins
L	#8	T-Hangar / 7 Bay	Heather Whittaker
M	#18	Conv. / 3-Hangar Bldg.	Darrell Peterson / Express Aircraft
N	#10	Conventional	John Beck
O	#14	Conventional	Matt Ross
P	#15	Conventional	Mark Smith

LEGEND

	AIRPORT PROPERTY LINE
VASI	VISUAL APPROACH SLOPE INDICATOR
REILS	RUNWAY END IDENTIFIER LIGTHS
PAPI	PRECISION APPROACH PATH INDICATORS

ED CARLSON MEMORIAL FIELD - SOUTH LEWIS COUNTY AIRPORT

AIRPORT MASTER PLAN UPDATE

Existing Conditions Map

EXHIBIT 1C

TAXIWAYS

Runway 6-24 is served by a full-length north parallel taxiway designated as Taxiway A, which has a 272-foot runway-to-taxiway centerline separation. Taxiway A is 25 feet wide with four 90-degree connecting taxiways to the runway designated as A1, A2, A3, and A4 from west to east. Connecting taxiways A1 and A4 are located at Runway 6 and 24 ends, respectively; A2 is at the east end of the building area and A3 is just east of midfield. The parallel taxiway provides access to the main apron, fueling area, on-airport aircraft hangar areas, and one through-the-fence (TTF) access taxiway.

Significant upgrades to Taxiway A and the Runway 6 threshold were completed since the 2017 master plan and ALP. The taxiway system was completely reconstructed with medium intensity edge lighting (MITL) replacing the edge reflectors.

The previous Runway 6 taxiway connector (A1) to an aligned taxiway leading to the relocated threshold was removed and replaced with a new 90-degree taxiway connector (A1). The previous aligned taxiway providing access to Runway 6 threshold was converted to a paved overrun and painted with yellow chevrons.

Taxiway A4 was also replaced with a 90-degree connector.

APRONS AND AIRCRAFT PARKING

The Airport has one aircraft apron located at the west end of the airfield. The asphalt apron (420 x 140 feet) serves locally based and transient aircraft parking. There is no officially designated helipad or heliport on the airfield, so helicopters hover-taxi between the runway-taxiway system and the apron for parking refueling. The apron has seven small airplane tiedowns configured in two rows.

AIRFIELD PAVEMENTS

The runway, taxiways, and apron are designed to accommodate small general aviation aircraft. The major airfield pavements were observed to be in good condition during site visits conducted in late 2022. See the most recent (2018) WSDOT pavement evaluation summary below for condition assessments.

Runway 6-24 has a pavement strength rating of 25,000 pounds for aircraft equipped with single wheel landing gear (SWL).[1] The last runway pavement maintenance project was completed in 2012, which included crack sealing, fog sealing, and restriping of the runway markings.

The parallel taxiway was reconstructed in 2019. Some hangar taxilanes are in poor condition, with rutting, alligator cracking, and depression noted in the inspection.

The apron was reconstructed in 2008 and was observed to be in good condition during recent site visits. In 2018, Washington State Department of Transportation (WSDOT) conducted a statewide Airport Pavement Management System Study to evaluate the current condition and preservation needs of Washington's

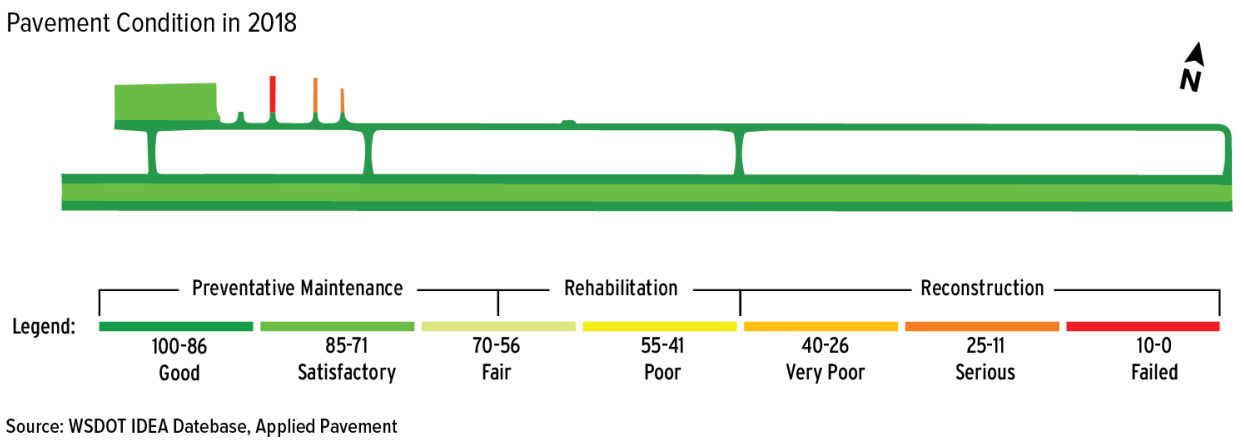
[1] FAA Chart Supplement, FAA Form 5010-1

airport pavements. Part of the study involves using the Pavement Condition Index (PCI) procedure to indicate the condition of the operational surface of the pavement and to some extent, the structural integrity of the pavement. WSDOT recorded the distress type, severity, and quantity of each section of the airfield pavement, and this information was used to calculate the PCI value of the section. The final calculated PCI value is a number from 0 to 100, with 100 representing a pavement in good condition.

Table 1A below summarizes the PCI values for the airfield pavements at the Airport.

Table 1A. Pavement Conditions – South Lewis County Airport (2018 Inspection)

Airfield Pavement	PCI	Condition
Apron	82	Satisfactory
Runway	74	Satisfactory
Runway Shoulders	89	Good
Taxiway A1 & A2 (incl. 50' wide Taxiway A section)	100	Good
Taxiway A (21' wide section), A3 & A4	100	Good
Taxilanes between Hangars	6-15	Failed



Source: WSDOT IDEA Datebase, Applied Pavement

AIRFIELD LIGHTING

Runway 6-24 is equipped with a medium intensity runway lighting (MIRL) system and a Runway End Identifier Lighting (REIL) system at both runway ends. The MIRL and REIL systems are pilot-activated. The MIRL system, installed in 2003, is in good operating condition today. As part of the same lighting improvement project in 2003, REIL systems for both runway ends were replaced.

The parallel taxiway has medium intensity edge lighting (MITL), newly installed as part of the 2019 taxiway reconstruction. The MITL is LED.

All runway/taxiway lighting systems are pilot activated using the CTAF. The airport rotating beacon operates from dusk to dawn, or in periods of darkness, with a photocell switch.

AIRFIELD MARKINGS AND SIGNAGE

Runway 6-24 has non-precision markings. The parallel taxiway and connector taxiways are marked with yellow centerlines. The four connecting taxiways are marked with hold bars located 200 feet from the runway centerline, which coincides with the edge of the runway obstacle free zone (OFZ).

Minor taxiways/taxilanes are not marked with centerlines. Unlighted distance-to-go-markers along the south side of the runway are in good to fair condition. Lighted (LED) airfield signage was installed new in 2019 as part of the parallel taxiway project and is in excellent condition.

AIRPORT NAVIGATIONAL AIDS

Airport navigational aids include both visual and instrument approach aids.

The Airport's visual aids include a rotating beacon, Visual Approach Slope Indicator (VASI) on Runway 6, Precision Approach Path Indicator (PAPI) on Runway 24, and three wind indicators (wind cones).

The rotating beacon is atop a 60-foot tower at the far west end of the building area next to the Airport property line along Jackson Highway. The beacon, in good operating condition, is on the opposite side of the access road from the Airport and sewage treatment plant.

The three wind indicators (wind cones) are in good to fair condition with one each located near a runway end and one at the Toledo Flying Club hangar. Two of the three wind cones are lighted—the one near Runway 6 end and the one at the Toledo Flying Club hangar. The VASI system on Runway 6 and the PAPI system on Runway 24 are both owned by the County. The PAPI is in good operating condition and was installed in 2003. The VASI system is in fair to poor condition and was relocated as part of the runway threshold relocation in 2003.

The Airport currently has two satellite navigation (SATNAV)-based non-precision instrument procedures:

- RNAV (GPS)[2] Runway 6
- RNAV (GPS) Runway 24

WEATHER REPORTING

The Airport does not currently have a weather reporting system on site. The nearest airport weather reporting, an Automated Weather Observing System (AWOS), is located 14 nautical miles northwest at Chehalis-Centralia Airport. This system provides weather conditions with updates on an hourly basis or when weather conditions change significantly.

The 2017 ALP depicts the installation of a future AWOS off airport property, north of the runway-taxiway system. Construction is currently planned for 2025. The recommended siting of the AWOS will be reviewed in the alternatives review for the ALP update and will address siting issues, property acquisition needs, and utility requirements.

[2] RNAV (GPS) = Required Navigation using Global Positioning System satellites. Visibility minimums are as low as one mile for Category A and B aircraft.

LANDSIDE FACILITIES

Landside facilities at the Airport are located on the north side of the airfield near the Runway 6 end. These include facilities such as the airport office, aircraft apron, aircraft storage hangars, underground fuel storage tanks, fuel dispensing facilities, vehicle access, and parking. Aviation services provided at the Airport are also addressed in this section.

AIRPORT OFFICE BUILDING

The airport office building is located at the far west end of the building area at the main entrance to the Airport. This new building sits over the footprint of the former Flight Service Station (FSS), but is much larger than the FSS, which was an old WWII wooden building. The new structure (3,456 square feet) houses both the airport office/lounge space and a sewage treatment facility. The airport office/lounge space totals 728 square feet with 75% consisting of an L-shaped lounge area and a separate office for the Airport Manager. The remaining 25% of the space contains two restrooms, an electrical room, and a storage room.

The sewage treatment facility—discussed later in the utilities section—shares a common wall with the airport office/lounge space.

HANGARS

Aircraft hangars located on airport property provide storage for most of the aircraft based at the Airport. Approximately 5 aircraft are stored in hangars located in the adjacent residential airpark.

All hangars are privately-owned on ground leases, with the exception of two county-owned hangar buildings—one conventional and one T-hangar. A summary of the on-airport hangars follows.

- Conventional/community hangars – There are 13 hangars, each providing storage capacity for several aircraft. Most of these hangars have one large open bay; one hangar is configured with three bays. Most hangars are in good to fair condition. The Airport Manager reports that the County-owned T-hangar was upgraded recently to address structural integrity.
- T-hangars – There are three seven-unit T-hangars. The two privately owned T-hangars are fully enclosed with doors; the County-owned T-hangar has an open face (without doors).

The majority of these hangars were constructed in the last 25 years, but four individual hangars and the county T-hangar were built prior to 1989, based on review of 1989 aerial photography.

The closest hangar to the runway is approximately 338 feet from the Runway 6-24 centerline. The precise location and elevation of existing hangars will be documented in the AGIS survey being completed as part of this plan update, Access to all hangars is provided by taxilane connections with Taxiway A.

Off-Airport (TTF) Hangars

The adjacent residential airpark currently has five conventional hangars in active use, The hangars are accessed via a single taxilane that extends from Taxiway A, about midway between Taxiways A2 and A3.

AVIATION SERVICES

There is no Fixed Base Operator (FBO) at the Airport, but Lewis County provides 100LL fuel at a self-serve 24/7 fueling station at the west end of the aircraft parking apron. There are currently three businesses that operate at Ed Carlson Memorial Field West Air Repair, Toledo Flying Club, and Skydive Toledo.

Other services offered at the Airport include airport management, aircraft parking on the apron, a meeting area in the airport office building (L-shaped lounge area), and restrooms. While no courtesy transportation is available, the airport manager often takes pilots/passengers to the local Enterprise rental car office or to the Chehalis-Centralia Airport where they have a courtesy vehicle or can rent other vehicles for transportation. There are also two local area taxi companies providing service to airport visitors.

FUEL STORAGE

There are two underground fuel storage tanks at the Airport, but one has been decommissioned. The second tank (10,000 gallons), which stores 100LL fuel, has been properly lined to comply with environmental regulations. Jet A fuel is not provided at the Airport.

The County is currently planning to install an above-ground 100LL fuel storage tank and remove/permanently decommission both underground storage tanks.

VEHICLE ACCESS, PARKING AND SECURITY

Vehicle access to the Airport is on a two-lane road that connects to Jackson Highway. Limited unmarked vehicle parking is available adjacent to the airport office. The airport manager indicated that tenants drive onto the aircraft apron and taxiway to access the hangar area from the main access road that extends along the north side of the hangar area. “No Parking” signs are installed in some areas to manage congestion in the circulation areas. Hangar tenants typically park in their hangars or adjacent to their hangars.

AIRPORT SUPPORT

Airport support briefly addresses emergency services, airport maintenance, fencing, utilities, and ground transportation.

EMERGENCY SERVICES

The Lewis County Sheriff’s Department provides law enforcement support to the Airport including occasional patrol.

Firefighting support is provided by both a volunteer fire department and the Lewis County Fire District #2 in Toledo. The volunteer fire department has a two-bay fire station located on Tucker Road, an estimated two miles from the Airport. While firefighters are volunteers, the station is staffed with one full-time resident.

The Lewis County Fire District #2 station in Toledo is located 3.5 miles from the Airport and is staffed with County firefighters and volunteer firefighters. In an airfield emergency, Aircraft Rescue and Fire Fighting (ARFF) trained firefighters can respond within 15 minutes.

AIRPORT MAINTENANCE

Lewis County staff typically provides routine airport maintenance with County equipment and vehicles, but the County also contracts for such services, as needed. The County has a dedicated lawn mower assigned to the Airport.

FENCING

Perimeter fencing around the Airport is limited and primarily includes four-foot range fencing. The loop roadway adjacent to the airport office has a manual swing gate that is not normally locked. There are currently no gates limiting access to the airport operational areas from the main access road.

DRAINAGE

The entire airport site is relatively flat, with limited fall from the east to the west. The runway's storm drainage system is comprised of a series of catch basins located on either edge of the runway pavement approximately 200 feet apart. These catch basins collect the stormwater runoff from the runway and convey the stormwater through a 24-inch storm pipe that runs underneath the runway pavement and drains from south to north. This system discharges the stormwater to an existing drainage ditch just north of the Airport's access road and conveys the runoff from airport property under Jackson Highway. Areas north of the runway also eventually drain to the same existing drainage swale.

Runoff on the south side of Runway 6-24 generally flows in a southwesterly direction towards an existing shallow swale approximately 270 feet from the runway centerline. Stormwater then flows in a westerly direction parallel to the existing runway. Drainage in the swale is conveyed to a 24-inch culvert under Buckley Road west of the site and discharges into Bill Creek, which flows into the Cowlitz River in Toledo.

UTILITIES

The Airport has water, sanitary sewer, electrical, and telephone/internet service. A local sewage treatment facility is located at the Airport. The system consists of a Membrane Filter Reactor (MBR), located by the Airport office. The system extends through the terminal area to provide service to hangars.

An electrical building is located near the rotating beacon and airport office building with controls for airfield lighting systems. The structure has been renovated to include metal siding and roof, and air conditioning. In addition to the airfield lighting equipment, it contains a water pressure tank from the new well that supplies

the new office building and MBR system, and a Sheriff's Office radio relay station. This building structure is in good condition. Additional provider information regarding electrical service and the on-site sewer treatment plant has been requested and will be added to this section at a later date. The location and sizes of existing water and sewer lines, and water wells located on the Airport will also be documented based on utility mapping provided by Lewis County, if available.

GROUND TRANSPORTATION

As previously noted in the Aviation Services section, airport users can request taxi service from two local area taxi service providers in addition to the courtesy transportation service that the County's airport manager provides, as needed, to and from the local area or to the Chehalis Airport.

Ground transportation in the area includes rail and bus services. A historic train depot (1912, restored) is located in Centralia. Amtrak provides rail service. Greyhound bus service is also available in Centralia.

ENVIRONMENTAL INVENTORY

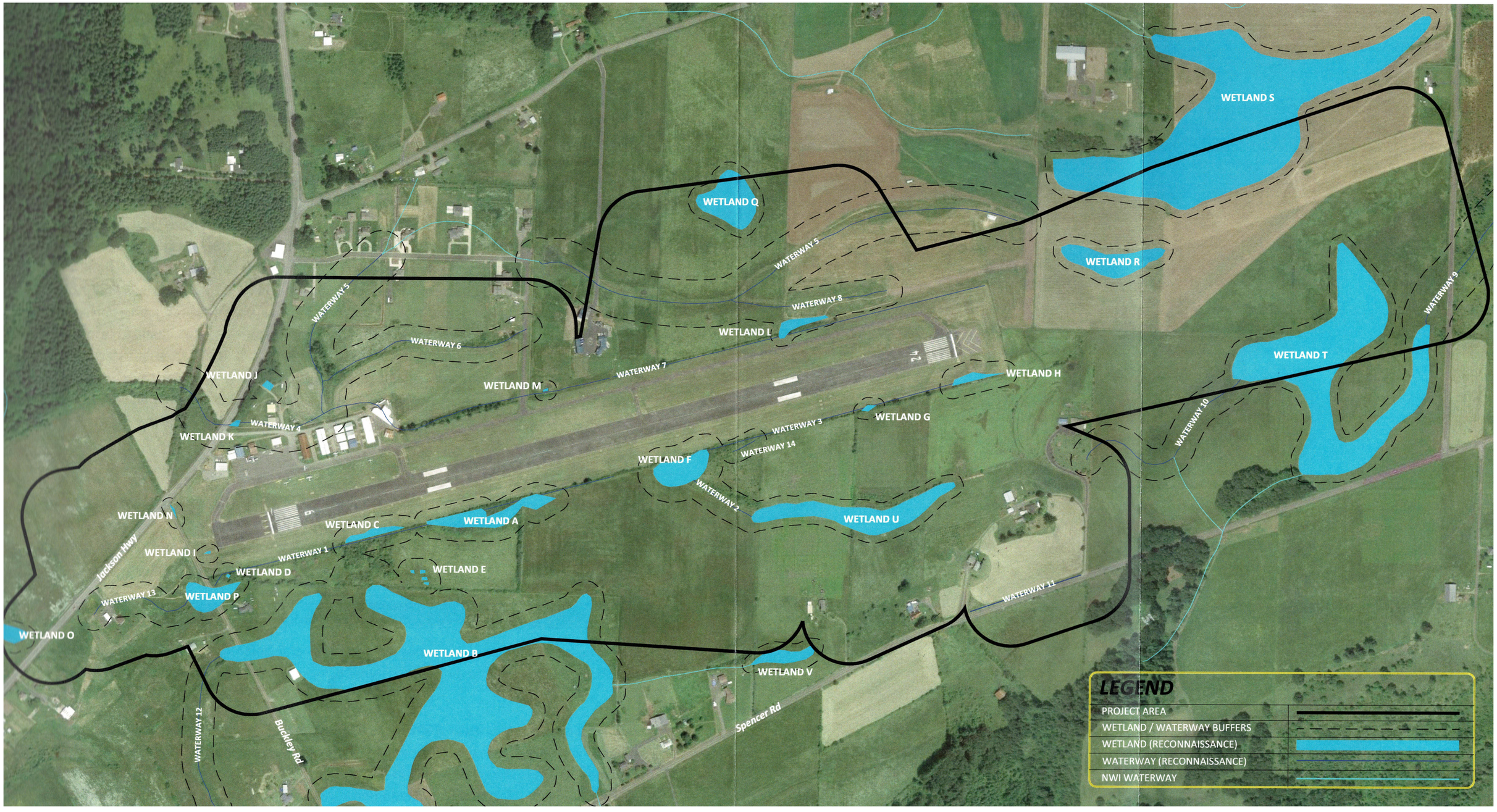
The purpose of this section is to summarize the environmental setting of the Airport and identify any potential environmental constraints. Limited scope environmental and cultural resource reviews were performed as part of the 2022-2042 ALP Update. Information from these reviews is summarized below and the full reports are provided in the report appendices.

WETLANDS AND WATERWAYS

Previous wetland/waters delineations and determinations associated with site development at the Airport have identified streams and wetlands in proximity to and within Airport controlled property (**Exhibit 1D**). Previously identified emergent wetlands are located at the western end of the Airport and south of the runway. The US Fish and Wildlife Service's National Wetland Inventory also indicates wetlands in this vicinity. They are part of a Palustrine wetland system that includes "non-tidal wetlands dominated by trees, shrubs, emergent, mosses or lichens." Most wetland areas near the Airport are classified as Freshwater Emergent Wetland, though few are Freshwater Forested / Shrub Wetlands. Most are either subject to temporary flooding (surface water present for brief periods during growing season) or seasonal flooding (surface water present for extended periods during growing season).

Waterways that have been previously identified include an unnamed tributary to Lacamas Creek to the north of the Airport access road.

Soil mapping for Lewis County indicates that the wetland along the northern boundary on Airport land meets hydric soil criteria. This factor combined with high relative annual rainfall and aerial photography suggests that potentially jurisdictional drainage ditches and additional wetlands may occur elsewhere on the Airport. Future development will warrant wetland and waters determinations if conducted outside of previously studied areas.



ED CARLSON MEMORIAL FIELD - SOUTH LEWIS COUNTY AIRPORT

AIRPORT MASTER PLAN UPDATE

Exhibit 1D - Wetland and Waterway Map

N

0 400 800

Feet

Source: Landau Associates

WHPacific 12100 NE 195TH ST. STE 300 . BOTHELL WA 98011 425.951.48

CULTURAL RESOURCES

The Airport Layout Plan meets the requirements of Section 106 of the National Historic Preservation Act (NHPA) and considers impacts of future airfield improvements to any potential historic properties. The Section 106 review was conducted through online research. This research included the review of known archaeological resources within a 1.0-mile radius of the Airport property using publicly available archeological resource databases maintained by the State of Washington. This database includes recorded archaeological resources, historic property inventories (HPIs), National Register of Historic Properties (NRHP) and Washington Heritage Register (WHR) properties, identified cemeteries, and previously conducted cultural resource surveys found throughout the state. An updated cultural assessment was completed as part of this study and found two Archeological sites that fall within the modern-day Airport property. The study concluded with the recommendation that future archeological surveys with subsurface testing be conducted in areas that have not been previously surveyed where ground disturbance is proposed. The full study can be found in **Appendix B**.

ENDANGERED SPECIES

Previous analyses, reports, and readily available resource information indicate that listed species and species of concern are unlikely to be found within Airport controlled property or in association with Airport related projects. Listed salmonids and Critical Habitat for these species occur several miles downstream of the Airport. Future increases of impervious area at the Airport and stormwater management activities are the primary nexus for effects to these species. However, the distance to these resources and the likely treatment of stormwater that occurs at the Airport present little connection or effect. The disturbed and managed nature of the Airport lands, absence of mature forest stands and absence of aquatic habitat on the Airport limit the potential for listed species or species of concern to occur at the Airport. A previous no effect determination was prepared for Airport project activities for listed species and critical habitat. Future Airport projects will require additional analysis of effects for endangered species with the assumption that determinations of no effect will be likely. Due diligence including analysis of project stormwater impacts/effects and botanical surveys of project impact areas should be completed prior to ground disturbances and in addition to other environmental analysis and reporting.

BIOTIC COMMUNITIES

Additional biotic consideration at the Airport includes vegetation clearing and compliance with the Migratory Bird Treaty Act (MBTA). Future development projects that include vegetation removal should conduct this removal activity outside of the nesting period (September 1 – March 1) for migratory birds in western Washington to avoid violation of the MBTA.

AIRSPACE

For the safety of aircraft operations, it is important to protect the airspace around an airport. In this section, airspace around the Airport is briefly reviewed, identifying any obstructions or other issues, which are discussed further in subsequent chapters.

The Airspace Drawing illustrates the airspace around the Airport that needs to be protected for air navigation. An Airspace Drawing is prepared in accordance with 14 CFR Part 77, which defines a set of "imaginary surfaces" that should be protected from obstructions to air navigation, when possible. The Part 77 imaginary surfaces help to define the Airport's area of influence and generally encompass the traffic patterns for the runways. Part 77 imaginary surfaces are primary, approach, horizontal, transitional, and conical. A brief description of each surface is listed below. These imaginary surfaces are pertinent to the land use discussion in the next section. Current Lewis County Airport Overlay zoning is based on protecting the Part 77 surfaces defined for Runway 6-24.

PRIMARY SURFACE

The primary surface is at the same elevation as the runway and is longitudinally centered on the runway. Since the runway is paved, the primary surface extends 200 feet beyond each runway end. The width of the primary surface is dependent on the runway approach. The primary surface width is 500 feet for basic visual runways serving large aircraft (greater than 12,500 pounds) or nonprecision instrument approach runways with greater than ¾-mile visibility minimums, which applies to the Airport today.

APPROACH SURFACE

The approach surface extends outward and upward from the end of the primary surface at each runway end. Visual approaches and nonprecision approaches on a runway exclusively for small aircraft requires a 20:1 approach slope while nonprecision instrument approaches on other runways require a 34:1 slope. The 2017 ALP depicts 34:1 approaches for both ends of Runway 6-24.

HORIZONTAL SURFACE

The horizontal surface is a horizontal plane at 150 feet above the Airport elevation. Based on airfield elevation of 374 feet MSL the horizontal surface at the Airport is 524 feet MSL. The size of the horizontal surface is defined by a set of 10,000-foot arcs from the outer ends of the approach surfaces of Runway 6-24.

TRANSITIONAL SURFACE

The transitional surface helps define where the building restriction line should be located and to what height buildings should be permitted relative to the airfield operations. The transitional surface extends from the sides of the primary surface and approach surface upward and outward at a 7:1 slope. The transitional surface ends where it intercepts the horizontal surface or any other surface where a more restrictive elevation is intercepted.

For example, based on a 500-foot wide primary surface, at a 7:1 slope, a 35-foot building height would need to be located approximately 495 feet from runway centerline to avoid penetrating the transitional surface.

CONICAL SURFACE

The conical surface is an imaginary surface that surrounds the horizontal surface with an inclined plane extending upward and outward at a slope of 20:1 for a horizontal distance of 4,000 feet (+200 feet). Based on airfield elevation of 374 feet MSL, the outer edge of the conical surface is 724 feet MSL at South Lewis County Airport.

OTHER AIRSPACE CONSIDERATIONS

The airspace surrounding South Lewis County Airport is generally clear of terrain penetrations. However, the FAA Airport Master Record (Form 5010) notes approach obstructions to both Runway 6 and 24 with an approach slope clearance limited to 10:1. Lewis County previously removed these obstructions (wind cone and trees) and will be updating the FAA Airport Master Record in coordination with the FAA and State. The AGIS survey being completed as part of the 2022-2042 ALP update will document all existing obstructions.

According to the 2017 Airspace Plan for the Airport, there are two areas that penetrate the Part 77 imaginary surfaces—one in the horizontal surface well over a mile south of the airfield, and one to the conical surface, approximately two miles southwest of the runway.

Both runway ends at the Airport use standard left traffic patterns. Non-standard right traffic patterns are often implemented when obstructions are present, community noise impacts require noise abatement procedures, special aviation activities such as skydiving need to be kept a safe distance from air traffic, environmentally-sensitive areas must be avoided, or other issues need to be mitigated with traffic pattern adjustments. Skydiving activity at the Airport is frequent during the summer with flights and jumps throughout the day, but Airport users operate with standard left traffic patterns. Operational issues with skydiving activity and flight operations are being addressed by Lewis County.

The Airport's location is such that it lies west of two Victor Airways (V187 and V23), which are "highways in the sky." A Victor Airway is a corridor of protected airspace defined by radio navigational aids.

Special use airspace that may affect airport operations is also reviewed as part of an airport planning effort. There is no special use airspace such as a military operations area (MOA) immediately above or around the Airport.

OFF-AIRPORT LAND USE AND DEVELOPMENT

This section identifies the existing land use designations within the vicinity of South Lewis County Airport and discusses land use compatibility issues that may impact or limit future airport development projects. During the master planning process, it is important to consider off-Airport land use to ensure long-term compatibility with Airport operations. Airport noise levels, height restrictions for facilities, and other safety issues should be considered when planning for area land use changes. According to the Washington State Airport System Plan, "Incompatible land use encroachment issues have led to a number of airport closures in the state over the past thirty years."

AREA LAND USE

Exhibit 1E illustrates the land use around South Lewis County Airport. Certain adjacent residences are aircraft owners and have through-the-fence (TTF) access to the Airport to use the airfield and fuel facilities.

Airport Zoning
The zoning designation of the Airport is **Rural Area Industrial (RAI)** described in Chapter 17.75 of the Lewis County Code (LCC) (Title 17). Rural Industrial Zones are rural areas of more intense development that have been identified for planned future activity. The purpose is to provide guidance for development without creating to urban development in rural areas. The current zoning is compatible for the current and future operation of the Airport.

Surrounding Area
Agricultural Resource Land (ARL) surrounds the majority of the airport to the west east and south. ARL zoning according to LCC Chapter 17.30 protects and provides for agricultural activities and is commonly compatible with Airport operations. Zoning prevents incompatible land uses being anything not associated with agricultural activity. Accessory dwelling units are allowed but such a conversion is limited to no more than one agricultural acre to non-agricultural use.

Rural Development Districts (RDD) according to LCC Chapter 17.100 permits rural residential units while protecting the density levels of a rural area. RDD zones surrounding the Airport include RDD-5, RDD- 10 and RDD-20. Each designation represents one unit per the designated acres. For example, in RDD-10 one unit is allowed per each 10 acres. The highest density RDD-5 borders the airport in an off-airport Airpark directly north. RDD zoning is compatible with airport zoning provided height restrictions are maintained to protect airport operations.

RURAL AIRPORT OVERLAY REQUIREMENTS

The Washington State Department of Transportation (WSDOT) developed the Airport Land Use Compatible Program to address the "the encroachment of incompatible land use development near and around airports."[3] The program is reflective of provisions in the 1996 Growth Management Act (GMA), encouraging cities and counties to develop comprehensive plans and regulations that restrict certain types of developments near airports.

Lewis County has established **Rural Airport Overlay Requirements (17.100.110)** within their land use controls. Future developments in the vicinity of South Lewis County Airport are subject to these provisions. Exhibit 1F depicts elements of the overlay zoning for the Airport. The purpose of the overlay zoning is to provide adequate setbacks and avoid incompatible developments near the Airport. Major requirements include:

- Adequate Lateral Setbacks: No multifamily or clustered residential developments or places of public assembly within 500 feet of the centerline or end of the paved runway.

[3] WSDOT Aviation Land Use Compatibility Program, WSDOT website

- Approach Surface Setbacks: No structures permitted within 500 feet of the end of the runway. Agricultural and accessory buildings (e.g. garages) may be permitted from 500 – 1,000 feet from the end of the runway.
- Clustering: Land within the lateral and approach setbacks must be considered for property density determinations.
- Notice and Consent to Air Operations: Any new division or use of land within 1,000 feet of the Airport property boundaries will require a provision listed on the Title that the owner consents to the use of the Airport in accordance with the Airport Master Plan and applicable laws.


Tucker Rd
Skyhawk Dr
Schoolhouse Ln
Howe Rd
Sareault Rd
Ed Carlson Memorial Field
South Lewis County Airport
Buckley Rd
Jackson Hwy
Spencer Rd
Helen Ln
Homer Ln
Poetsch Rd
Cowlitz River
Legend
Agriculture
Commercial Retail
Mining/Forestry
Residential
Public/Quasi-Public
Trans/Utility
Undeveloped/Vacant
Existing Land Use
Sources: Lewis County GIS https://maps.lewiscountywa.gov/ and google earth
NORTH
EXHIBIT 1E
Updated by Century West November 2022

FINANCIAL INVENTORY

The purpose of this section is to inventory and characterize on-site sources of revenue at the Airport. Sources of revenues generated on-site at the Airport are limited. They include:

- Land leases
- Hangar leases
- Tie-down fees
- Tenant annual use fees
- Through-the-fence (TTF) annual fees
- Profit of fuel flowage fees

A description of these on-site funding sources follows.

LAND LEASES

In 2022, there were eighteen (18) conventional hangar land leases at the Airport. **Table 1B** shows that in 2022, revenue generated from these leases totaled $13,261.75. However, $1,019.04 of this total was paid to the Washington State Department of Revenue as Leasehold Excise Taxes at a rate of 12.84%[4] Additionally, $400 of this total was comprised of annual user fees (at a rate of $100 per annum), which certain tenants paid at the same time as their lease fees.

Table 1B. 2012 Land Leases for South Lewis County Airport

Lessee Location	Account #	Lease Amount	Excise Tax	User Fee	Total
Toledo 98591	LL1	$ 1,797.00	$ 230.80	$ 100.00	$ 2,127.80
Toledo 98591	LL2	$ 575.00	$ 73.83		$ 648.83
Toledo 98591	LL3	$ 575.00	$ 73.83		$ 648.83
Onalaska 98570	LL4	$ 575.00	$ 73.83	$ 100.00	$ 748.83
Toledo 98591	LL5	$ 500.00	$ 64.20		$ 564.20
Ethel 98542	LL6	$ 468.23	$ 39.55		$ 507.78
Chehalis 98532	LL7	$ 450.00	$ 57.78		$ 507.78
Toledo 98591	LL8	$ 1,650.00	$ 211.86	$ 100.00	$ 1,961.86
Winlock 98596	LL10	$ 495.69	$ 73.02		$ 568.71
Center Isl. 98221	LL12	$ 493.20	$ 63.33		$ 556.53
Spokane 99212	LL14	$ 713.00	$ 91.55		$ 804.55
Mossyrock 98564	LL15	$ 540.00	$ 69.34		$ 609.34
Chehalis 98532	LL16	$ 644.80	$ 82.79		$ 727.59
Graham 98338	L17	$ 624.31	$ 52.73		$ 677.04
Castle Rock 98611	LL18	$ 1,431.16	$ 170.92	$ 100.00	$ 1,702.08
Totals		$ 11,532.39	$ 1,429.36	$ 400.00	$ 13,361.75

Source: Lewis County, Real Estate Economics. Note: Figures are annual.

[4] Approximately 53% of this Leasehold Excise Tax goes to the State General Fund and 47 percent of the tax is returned to the county or city in which the leased property is located.

Lewis County does not charge landing fees for outside users of the Airport. Key reasons underpin this policy. The Airport systems manager, a part-time employee, has no administrative means of monitoring or collecting user fees. Moreover, none of the other Lewis County airports (Chehalis/Centralia, Morton, Packwood) charge user fees. However, all business tenants at South Lewis County Airport are charged a $100 business fee because this can be readily administered. **Table 1C** shows the other 2022 Airport user fees (including grandfathered "through-the-fence" user fees).[5] Combining tenant land lease fees and user fees resulted in a 2012 gross income total of $11,220.23 for 2012 at South Lewis County Airport. Of this total, the net revenue actually flowing to the Airport was slightly under $9,600.

Table 1C. Other Airport User Fees (2022)

Fee Type	User Fee	Number	Annual Totals
Business Fee	$100.00	X4	$400.00
Through the Fence (TTF)	$300.00	X4	$1200.00
Ramp Parking	$50.00 Mo. (X3)	X1 A/C	$150.00

Source: Lewis County, Real Estate Economics

Selected characteristics of land leases at South Lewis County Airport are now described. Corresponding hangar buildings were privately developed. They are typically on 30-year ground leases. Although privately owned, these buildings will ultimately revert back to the Airport at the end of their long-term leases.

All commercial tenants are charged $0.19 cents per square foot per year. All private aircraft tenants are charged $0.16 cents per square foot per year. These rates are considered each five years by the BOCC for adjustment as per RCW.These rates only apply to the land "footprint" of each hangar building. No land rent is charged for immediate taxiways in front of (or around) each building.

Because of cost, the Airport does not contract for full land valuation appraisals every five years.5 There is one exception. The only land lease that is annually adjusted as per the Seattle Consumer Price Index is land lease #18, Darrell Peterson, owner of Express Aircraft.

HANGAR LEASES

Table 1D shows 2022 lease revenues for the one County-owned T-hangar as well as the County-owned Rocky Hangar and one tiedown. In 2022, these County buildings (plus the one tiedown) generated $2,133 in gross income with $1,540 of net revenue accruing to the Airport.

The other two Airport T-hangar buildings (also with seven units each) are privately owned. All of the Airport T-hangars are leased and no vacancies exist.

[5] The only through-the-fence agreement at South Lewis County Airport was signed December 1, 2003 between Lewis County and Peterson Estates Homeowners' Association. The term of the agreement is 20 years and it is due to expire December 1, 2023. This agreement entails the adjacent air-park subdivision containing 20 lots, five of which have hangars.

Table 1D. Hangar Leases (2022)

Lessee Location	Account #	Lease Amount	Tax	Total
Toledo 98591	9A	$ 220.00	$ 84.76	$ 304.76
Kelso 98626	9B	$ 220.00	$ 84.76	$ 304.76
Center Isl. 98221	9C	$ 220.00	$ 84.76	$ 304.76
Winlock 98569	9D	$ 220.00	$ 84.76	$ 304.76
Battle Ground 98604	9E	$ 220.00	$ 84.76	$ 304.76
Onalaska 98570	9F	$ 220.00	$ 84.76	$ 304.76
Onalaska 98570	9G	$ 220.00	$ 84.76	$ 304.76
Totals		$ 1,540.00	$ 593.32	$ 2,133.32

*Source: Lewis County, Real Estate Economics. *All located in WA unless otherwise noted.*

TIEDOWN FEES

The Airport charges longer-term users of tiedowns a fee of $50/month. Occasional users are charged at the rate of $5.00/Overnight or $25.00/week. However, if short-term users purchase fuel, no daily or weekly tiedown charge is levied.

FUEL FLOWAGE REVENUES

South Lewis County Airport (KTDO) generates revenues through the sale of aviation fuel. From 2019 to 2021, the Airport sold an average of 19,757 gallons of 100LL per year.

The Airport Manager continually monitors Avgas rate charges at other airports in the region. However, particular attention is paid to competing rates at Chehalis/Centralia Airport (KCLS) and Southwest Washington Regional Airport (KKLS—Kelso). Table 1E shows 2022 prices for 100LL Avgas at competing airports within 50 miles of South Lewis County Airport. The December 2022 price for 100LL at South Lewis County Airport was $6.95 per gallon.

Table 1E. 100LL Fuel Prices (within 50 miles)

Airport	ID	Location	Price /Gallon
South Lewis County Airport	KTDO	Toledo, WA	$ 6.95
Chehalis-Centralia Airport	KCLS	Chehalis, WA	$ 6.89
Southwest Washington Regional Airport	KKLS	Kelso, WA	$ 6.75
Olympia Regional Airport	KOLM	Olympia, WA	$ 7.79
Scappoose Industrial Airpark	KSPB	Scappoose, OR	$ 6.50
Pierce County Airport--Thun Field	KPLU	Puyallup, WA	$ 6.74
Sanderson Field Airport	KSHN	Shelton, WA	$ 7.75
Tacoma Narrows Airport	KTIW	Tacoma, WA	$ 6.57
Astoria Regional Airport	KAST	Astoria, OR	$ 7.09
AVERAGE $ CHARGED			**$ 7.01**

Source: South Lewis County Airport Manager, Airnav.com; November 2022 fuel prices

SUMMARY—CURRENT RATES AND CHARGES

A summary of the 2012 rates and charges at South Lewis County Airport is presented below:

- Ground leases rates for privately owned Airport buildings--$0.16 per square foot/year
- Airport-owned T-hangar bay lease rates--$660/year (or $55.00/month)
- Airport tiedown fees--$180/year
- Airport tenant user fees--$100/ year
- 2022 Airport Avgas price--$6.95/gallon

Note: Updated 2022 data will replace the existing 2012 data once received.

AIRPORT REVENUE SOURCES OF FUNDS

The dominant actual source of funds for South Lewis County Airport comes from the internal transfer of funds from Lewis County. In contrast, the major budgeted source of Airport revenues is shown to come from the FAA. However, dollars from the FAA are actually grants for specific projects—FAA typically funds up to 90% of airport improvements with WSDOT and Lewis County funding the remaining 10%. This means that the County's budgeted amount for FAA revenues may substantially differ from actual revenues if planned improvements are postponed. For example, the County had budgeted for a project at the Airport in 2010 to clear a 14-acre parcel on the south side of the runway. This project required the completion of an Environmental Assessment and obtaining a USACE Individual wetland fill permit. A lack of available mitigation land and stalled USACE permitting efforts delayed this project for the last three years. Consequently, the FAA decided to postpone any funding in the project until the completion of the master plan update.

Table 1F shows Airport budgeted and actual revenue trends by source for the current and following year. As indicated, Lewis County directly transfers in 19% of actual total revenues to the Airport. Fuel sales and leases comprise an additional 19 and 2.3%, respectively. In 2023 the Airport expects to see an increase in fuel sales by 16% and facility leases by 16%. It is important to note that FAA or WSDOT Airport improvement grants are meant for the completion of approved projects and are not a yearly source of revenue.

Table 1F. Airport Financials

Airport Revenues		
	2022 Revised Budget	2023 Proposed Budget
FAA Airport Improvement	$350,000	$233,100
WSDOT Airport Improvement	$17,500	-
Fuel Sales – AvGas (100LL)	$120,000	$175,000
SPC & Facility Leases	$14,553	$17,275
Miscellaneous Revenues	$5,000	$574,402
Current Expense – Transfers In	$120,000	$169,344
Totals	**$627,053**	**$1,169,121**

Airport Expenses		
	2022 Revised Budget	2023 Proposed Budget
Salaries & Wages	$74,923	$114,272
Supplies and Utilities	$7,691	$10,536
Fuel for Resale	$120,000	$175,000
Professional Services	-	$241,000
Taxes and Insurance	$1,088	$11,325
Facility Maintenance	$18,836	$42,586
Construction in Progress	$385,000	$574,402
Totals	**$607,538**	**$1,169,121**