

# 1. Inventory of Existing Conditions

The Chehalis Centralia Airport (CLS) in Lewis County, Washington is a regional site for aviation service and aeronautical history between the larger urban areas of Seattle, Washington and Portland, Oregon. Having opened in 1927 as Donahoe Field, the Airport has provided Lewis County with access to aviation for nearly a century. In accordance with Federal Aviation Administration (FAA) guidelines, a Master Plan Update is intended to guide the future development process in line with the FAA’s Airport Master Plan Advisory Circular (AC 1500/500-6B). In general, airports such as CLS complete the master planning process every 10 years on average. The previous CLS Master Plan was published in 2001. In 2019 an Airport Layout Plan (ALP) Update was completed to bridge the gap between Master Plan Updates.



A master plan is defined by the FAA as “a comprehensive study of an airport that usually describes the short-, medium-, and long-term development plans to meet the future aviation demand.” The documentation produced by a Master Plan Update is used to guide the development of infrastructure built by airport stakeholders such as the FAA, airport tenants, and the airport itself. Other topics such as operations, management, or maintenance may be recognized but are not always addressed due to the purpose of a Master Plan Update being to guide airport development over a 20-year period.

## 1.1. EXISTING AIRSPACE AND WIND DATA

Located just west of downtown Chehalis, Washington along Interstate I-5, the Chehalis-Centralia Airport (CLS) is nearly equidistant between the metropolitan areas of Seattle, Washington and Portland, Oregon. The Airport is operated by the City of Chehalis, which functions as the day-to-day management authority of the Airport. The Airport is designated by the FAA National Plan of Integrated Airport Systems (NPIAS) and in the Washington Aviation System Plan (WASP) prepared by the Washington State Department of Transportation (WSDOT) Aviation Division as a regional general aviation (GA) facility.

Figure 1-1: Washington and Chehalis Map



Source: The Aviation Planning Group, 2023.

As a regional GA facility, CLS serves Lewis County with important aviation services and activities including corporate aviation, leisure aviation, flight training, aeromedical flights, aerial firefighting, and other important aviation activities that support both the Airport and the community at-large.

CLS does not have an Air Traffic Control (ATC) tower. As a non-towered Airport with instrument approaches, CLS lies within Class E airspace as defined by the FAA. Airspace is classified between Class A, B, C, D, E, and G as depicted in **Figure 1-2**.

Figure 1-2: FAA Airspace Classification



Source: Federal Aviation Administration, 2023.

Aircraft intending to arrive at CLS fly under Visual Flight Rules (VFR) or Instrument Flight Rules (IFR). Aircraft operating at CLS broadcast aircraft maneuvers and intentions on the Airport's assigned Common Traffic Advisory Frequency (CTAF) of 122.800 MHz. Class D airspace at Olympia Regional Airport (OLM) and Joint Base Lewis-McChord (TCM) can be found to the north of CLS. Nearby airspace to CLS is detailed in the sectional chart diagram of **Figure 1-3** and nearby airports are described in **Table 1-3**.

**Figure 1-3: CLS Airspace and Surrounding**



Source: Federal Aviation Administration, 2023.

**Table 1-3: Nearby Airports**

Name	Identifier	City	Distance from CLS in Nautical Miles
Ed Carlson Memorial Field - South Lewis County	KTDO	Toledo	14.0 SE
Olympia Regional	KOLM	Olympia	17.9 N
Gray AAF	KGRF	Joint Base Lewis-McChord	29.3 N/NE
Southwest Washington Regional	KKLS	Kelso	33.7 S/SE
Sanderson Field	KSHN	Shelton	34.1 N/NW

Source: The Aviation Planning Group, 2023.

### 1.1.1. Existing Airport Traffic Pattern

The traffic pattern at CLS uses a standard left-hand pattern for Runway 34 while utilizing a nonstandard right-hand traffic pattern on Runway 16. This traffic pattern keeps aircraft over the west side of the Airport when operating within either direction of Runway 16/34. Having a pattern in this configuration additionally acts as a noise abatement procedure for the City of Chehalis which is located just to the east of the Airport. CLS does not have any other voluntary noise abatement procedures currently.

### 1.1.2. Wind Data

Wind data is collected by the AWOS-3 located just north of the current hangar developments, to the west of the runway and taxiway system. Users of the Airport can access meteorological conditions on the aviation frequency 118.025 MHz or by calling (360) 710-5164. Wind data collected at CLS is stored and maintained in the FAA’s Airport Data and Information Portal (ADIP). ADIP data and analysis tools provide detailed depictions of historical wind conditions observed at CLS over the previous 10-year period (2013-2022). The data is offered in the form of percentage usability for a given runway for varying crosswind limitations. The FAA desires 95% wind coverage for a primary runway. The wind analysis table (**Table 1-4**) and the wind rose (**Figure 1-4**) indicated Runway 16/34 at CLS complies with the desired 95% wind coverage due to limited excessive changes of wind direction in the region.

**Table 1-4: CLS Wind Data Table**

Runway	10.5 Knots	13 Knots	16 Knots
16/34 VFR	99.48%	99.88%	99.99%
16/34 IFR	99.92%	99.98%	100%
16/34 All Weather	99.55%	99.89%	99.99%

Source: FAA Airport Data and Information Portal, 2023.

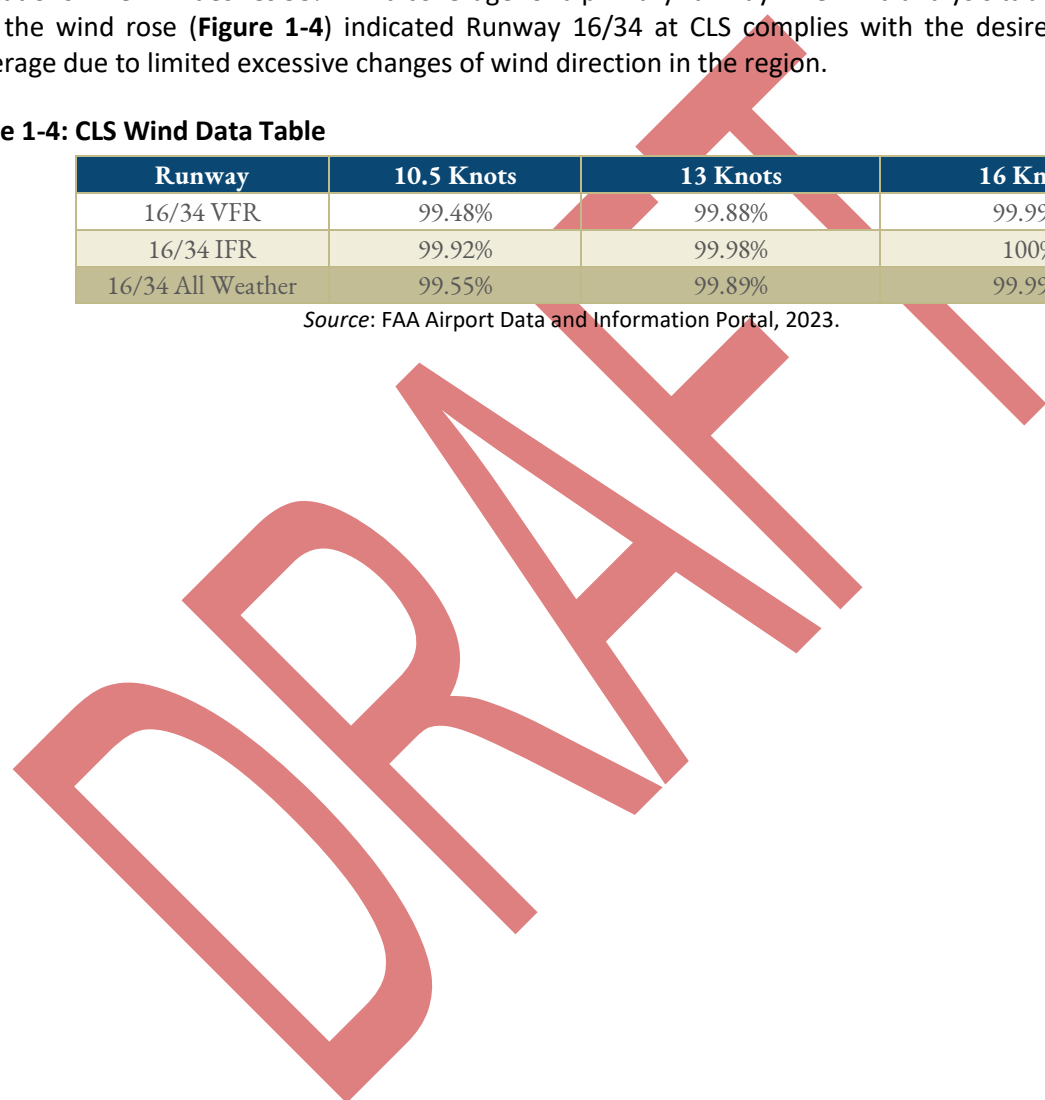
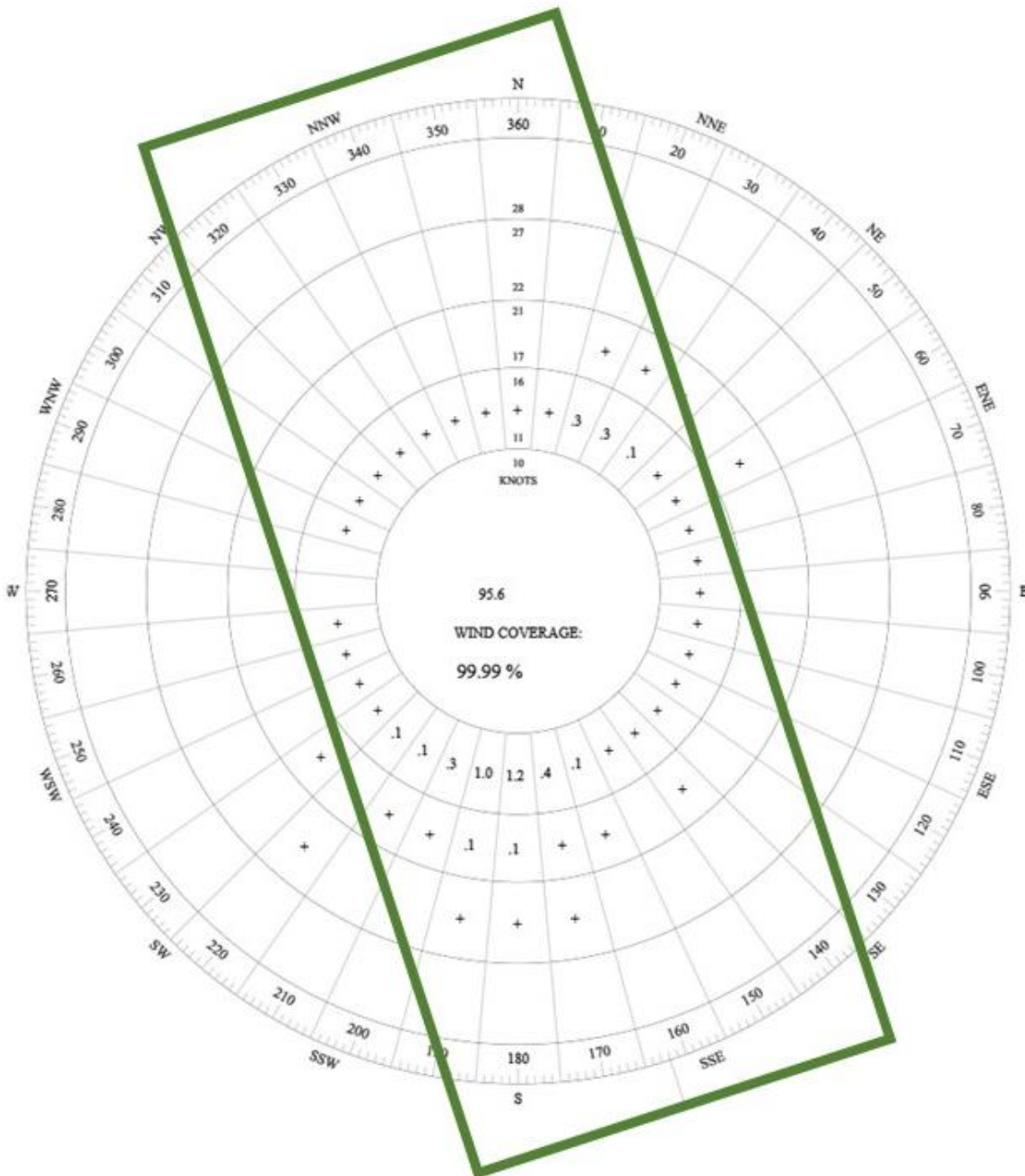


Figure 1-4: CLS All-Weather Wind Rose



Source: FAA Airport Data and Information Portal, 2023.

## 1.2. AIRSIDE FACILITIES

CLS is an active airfield with a single runway, supporting taxiway network, and growing aeronautical-use facilities to support aviation maintenance, flight training, and fixed base operations. The Airport Reference Point is located at 46° 40' 36" N and 122° 58' 41" W at a field elevation of 177.1 feet above sea level (ASL) on a property that encompasses approximately 420 acres of land.

### 1.2.1. Runway 16/34

The runway (Runway 16/34) is a single active runway and is constructed of Portland Cement Concrete (PCC). The runway has a length of 5,000 feet and a width of 140 feet. Runway 16 has one singular instrument approach.

Runway edge lighting for Runway 16/34 consists of Medium Intensity Runway Lights (MIRLs) which are controlled by the pilot through the aircraft radio on the CTAF. In addition to runway lighting, CLS also has visual navigational aids in the form of a 4-light Precision Approach Path Indicator (PAPI) on the left side of Runway 16 and a 2-light Visual Approach Slope Indicator (VASI) on the left side of Runway 34. CLS does not have an approach lighting system. Additionally, the runway markings for both directions of Runway 16/34 are marked and painted to the standard of non-precision markings.

### 1.2.2. Taxiways

Accessing the runways from the hangars, terminal, and apron at CLS is via a network of taxiways. The taxiway system at CLS is relatively simple, providing quick access to all necessary areas of the Airport. **Figure 1-5** illustrates the present network of taxiways at CLS.

**Figure 1-5: CLS Taxiway System**



Source: The Aviation Planning Group, 2023.

The following narrative provides additional details on the taxiways as they are presently constructed and utilized at CLS. Although previous master plans and diagrams have used various nomenclature prior to the current built status of the Airport, naming of taxiways will follow **Figure 1-5** above for clarity.

- **Taxiway A**

Taxiway A is the primary taxiway facilitating movement about the Airport at CLS. The north-south running taxiway chicanes briefly around the Airport apron and segmented circle before continuing to run parallel to Runway 16/34. The northern segment of Taxiway A just south of A1 to A3 is paved with Portland Cement Concrete, with the remaining pavements being Asphalt Concrete. Taxiway A measures 50-feet-wide through the northern segments. Taxiway A south of Taxiway A3 measures 35-feet-wide.

- **Taxiway T-04**

Taxiway T-04 is a parallel taxiway to Runway 16/34. The taxiway is 35-foot-wide and has taxiway reflectors at intersections with other taxiways in lieu of taxiway edge lighting. T-04 runs parallel from the threshold of Runway 34 to approximately the first third of the runway's total distance, where it intersects Taxiway A3. The previous ALP calls for this taxiway to be extended the full length of Runway 16/34 to become a full parallel taxiway. The taxiway is paved with Asphalt Concrete.

- **Taxiway A1**

Taxiway A1 connects the northern end of the primary Taxiway A to the threshold of Runway 16 for southbound departures. The taxiway is also connected to an aircraft run-up area. A1 is a 35-foot-wide taxiway although taxiway fillets do make it larger due to the proximity of Taxiway A and Runway 16/34. The taxiway was previously paved with Portland Cement Concrete, but in the time since the last state inspection in 2018 (Figure 1-5) it has been realigned to properly intersect the runway and is paved with Asphalt Concrete.

- **Taxiway A2**

Taxiway A2 is a 30-foot-wide taxiway that connects Taxiway A to Runway 16/34 at approximately halfway down the runway. Crossing Taxiway A at A2 also provides access to the hangar and ramp areas of the Airport. The taxiway is paved with Asphalt Concrete.

- **Taxiway A3**

Taxiway A3 is a 35-foot-wide taxiway connecting Taxiway A to Runway 16/34 just south of the extent of the middle third of the runway length. Taxiway A3 is bisected by an unnamed taxiway. The taxiway is paved with Asphalt Concrete.

- **Taxiway A4**

Taxiway A4 is the southwestern end of the now-abandoned crosswind runway. The surface diagonally cuts across from Runway 16/34 and ends onto an unnamed apron. The taxiway is 140-foot-wide. As the eastern end of the runway has been demolished and abandoned, the remaining pavement on Taxiway A4 east of Runway 16/34 is not used for aircraft taxiing given there are no facilities on the east of the Airport, but is frequently used for transient aircraft parking for access to local restaurants and businesses. The taxiway is paved with Portland Cement Concrete.



- **Taxiway A5**

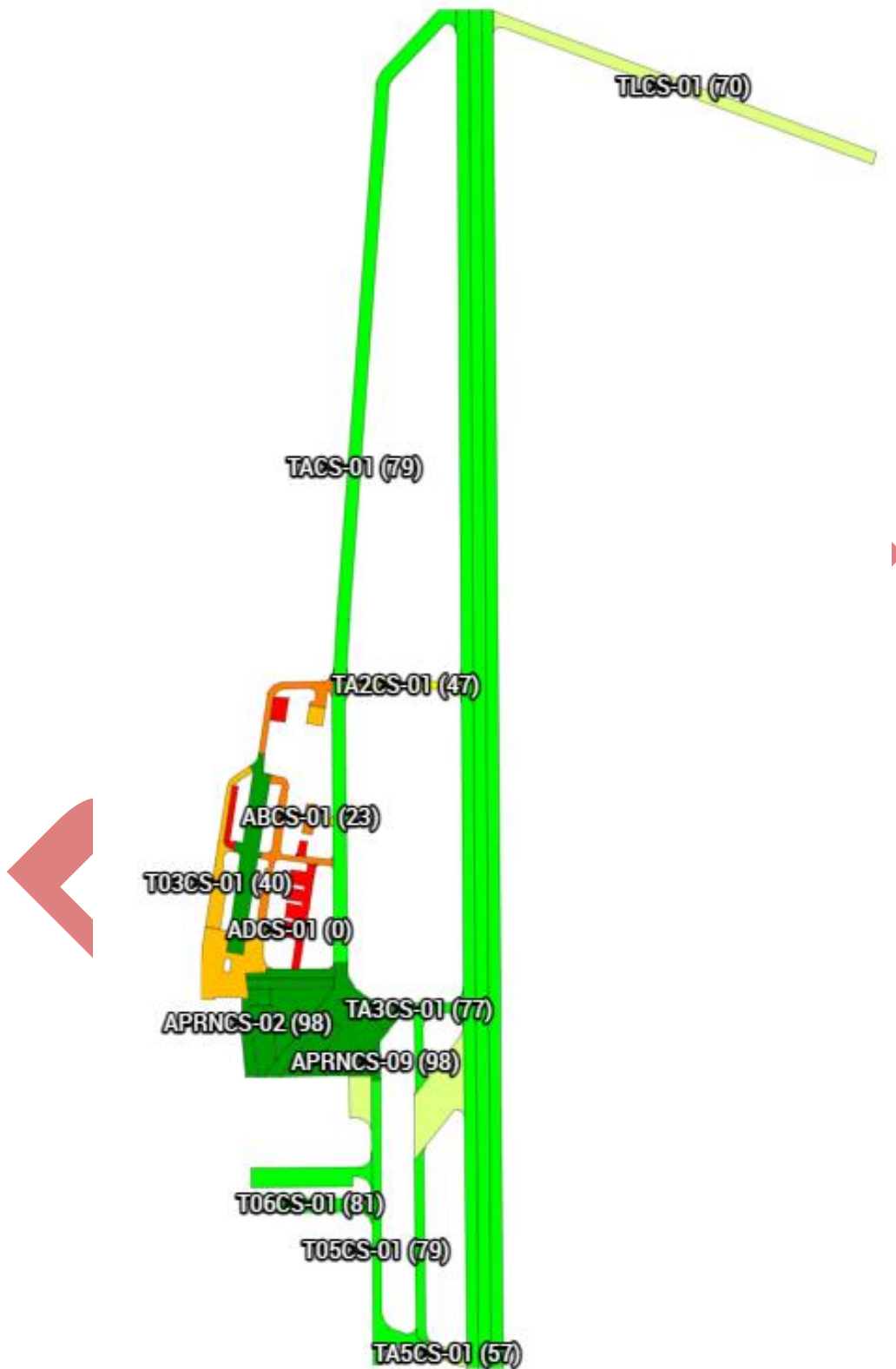
Taxiway A5 connects the southern end of the primary Taxiway A to the threshold of Runway 34 for northbound departures. Taxiway A3 is bisected by Taxiway T-04 and is also connected to an aircraft run-up area. Just like Taxiway A1, Taxiway A5 is a 35-foot-wide taxiway which is larger in sections due to fillets at intersections with Taxiway A, Taxiway T-04, and Runway 16/34. The taxiway was previously paved with Portland Cement Concrete, but in the time since the last state inspection in 2018 has been realigned to properly intersect the runway and is now paved with Asphalt Concrete.

### **1.2.3. Pavement Condition and Strength**

Airfield pavement is constructed to accommodate varying aircraft weights and configurations. The taxiways and runway at CLS are capable of withstanding 30,000 lbs. in a single wheel landing gear configuration, 30,000 lbs. in a double wheel configuration, and 85,000 lbs. in a double tandem configuration.

The current pavement inspection, conducted in 2018 by WSDOT Aviation, has established the existing and forecasted pavement conditions for the Airport. The condition of each branch and section of pavement is reported through a pavement condition index (PCI) to identify on a 0-100 scale where the pavement condition has failed at zero and is excellent at 100. Generally, pavements over 70 are considered good, and below that will need rehabilitation and maintenance to extend the useful life. PCI at CLS is depicted on **Figure 1-6** and **Table 1-5**.

Figure 1-6: CLS Pavement Condition Index Map - State Inspection, 2018



Source: Washington Airport Pavement Management, 2023.

**Table 1-5: CLS PCI Data, 2023**

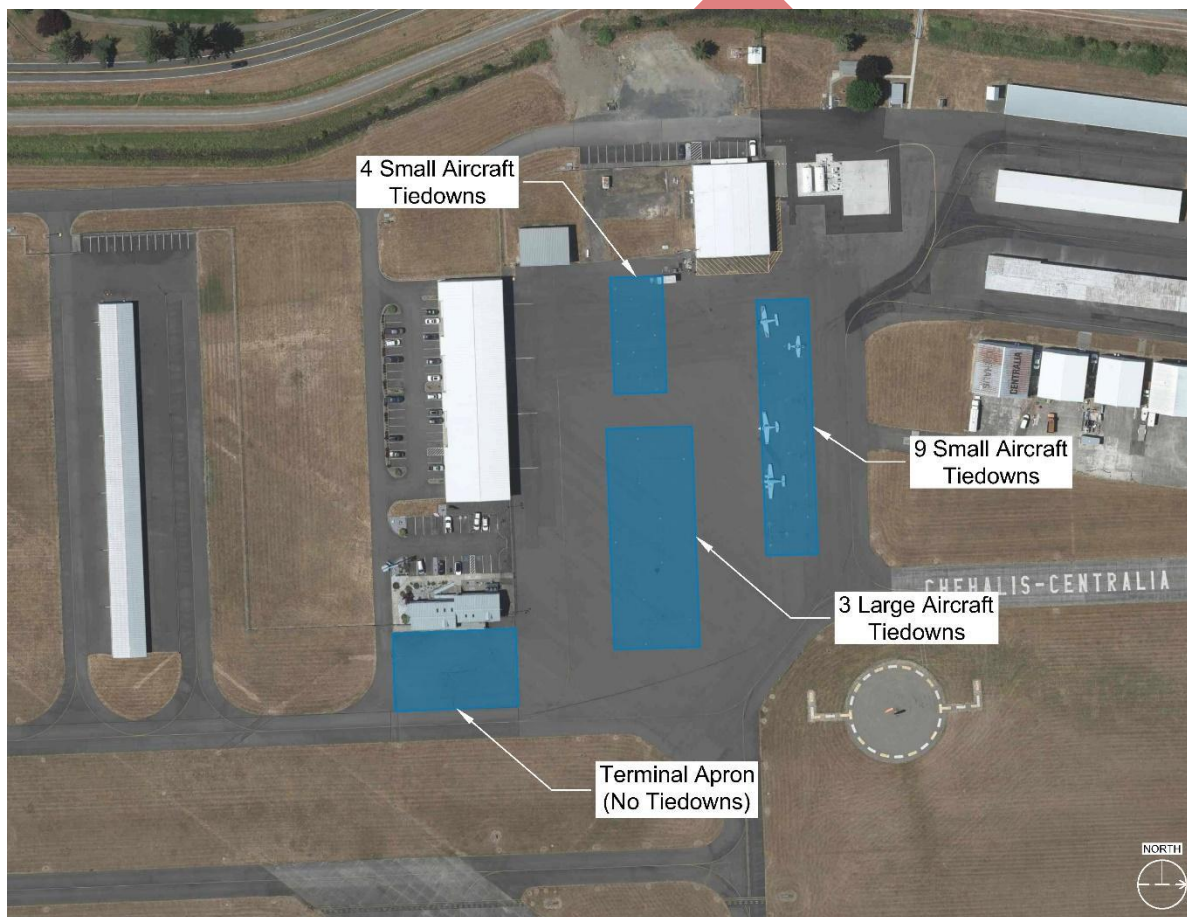
Branch ID	Section ID	2018	2019	2020	2021	2022	2023	2024	2025
A02CS	1	0	0	0	0	0	0	0	0
AACS	1	39	37	35	33	30	28	26	24
AACS	2	12	10	8	6	3	1	0	0
ABCS	1	34	32	30	28	25	23	21	19
ABCS	2	56	55	54	53	52	51	50	49
ACCS	1	8	6	4	2	0	0	0	0
ADCS	1	4	2	0	0	0	0	0	0
ADCS	2	10	9	8	7	6	5	4	2
AFBOCS	1	32	31	30	29	28	27	26	24
APRNCS	1	100	100	99	99	98	98	97	96
APRNCS	2	100	100	99	99	98	98	97	96
APRNCS	3	73	72	71	70	69	68	67	66
APRNCS	4	100	100	99	99	98	98	97	96
APRNCS	5	100	100	99	99	98	98	97	96
APRNCS	6	100	100	99	99	98	98	97	96
APRNCS	7	100	99	97	95	93	91	90	88
APRNCS	9	100	100	99	99	98	98	97	96
APRNCS	10	100	100	99	99	98	98	97	96
R16CS	01A	73	73	72	72	71	71	70	70
R16CS	01B	78	78	77	77	76	76	75	75
T01CS	1	26	25	24	23	22	22	21	20
T01CS	2	91	90	89	88	88	87	86	85
T02CS	1	24	23	22	21	20	20	19	18
T03CS	1	44	43	42	41	40	40	39	38
T04CS	1	100	99	99	98	97	96	95	94
T05CS	1	83	82	81	80	79	79	78	77
T06CS	1	85	84	83	82	81	81	80	79
TA2CS	1	51	50	49	48	47	47	46	45
TA3CS	1	81	80	79	78	77	77	76	75
TA4CS	1	66	66	65	65	64	64	63	63
TA5CS	1	59	59	58	58	57	57	56	56
TACS	1	81	81	80	80	79	79	78	78
TLCS	1	72	72	71	71	70	70	69	69

Source: Washington Airport Pavement Management, 2023.

### 1.2.4. Aircraft Parking Areas

Aircraft parking is a critical piece of infrastructure used by transient aircraft. Dedicated marked parking has been significantly reconfigured since the development of the Airport Terminal Building in the mid-2000s. Since then, the ramp surface offering transient parking has been reoriented to the directional axis of the terminal building and hangars, and most importantly to parallel the runway. This configuration allows aircraft to be oriented into the wind when parked. Current aircraft parking can accommodate both small single-engine general aviation aircraft and larger business jets. Aircraft parking areas can be seen in **Figure 1-7** below. Tie down aircraft parking can be found in the pink box, while temporary parking without tiedowns is observable in the green box and is commonly used by visiting aircraft on short stops.

**Figure 1-7: CLS Aircraft Parking Areas**



Source: The Aviation Planning Group, 2023.

Although not specifically dedicated or maintained for the purpose of aircraft parking, the remaining pavement east of Runway 16/34 from the former secondary runway is occasionally used for aircraft parking. There are no aeronautical use facilities on the east side of the Airport, however there is a perimeter fence access gate which pilots use just off the end of this pavement to access retail locations still on the airport property.

## 1.2.5. Navigational Aids

Navigational Aids (NAVAIDs) offer pilots tools to augment their spatial orientation and navigation to and from locations across the country. There are NAVAIIDs located on the airfield at CLS as well as in the immediate region utilized by pilots accessing CLS.

### 1.2.5.1. Radio NAVAIIDs

There are no radio navigational aids located at CLS, however there are multiple within the region which pilots may choose to utilize while navigating in IFR). The five nearest regional radio NAVAIIDs to CLS are listed in **Table 1-6**. All the listed NAVAIIDs in this table offer azimuth and distance referencing to pilots, with the TACAN (Tactical Air Navigation) and VORTAC (VHF Omni-directional Range/Tactical Air Navigation) stations offering military-specific navigational assistance. The VORTAC and VORDME (VHF Omni-directional Range with Distance Measuring Equipment) stations are accessible to civilian aircraft.

**Table 1-6: Regional Radio NAVAIIDs**

Station Name	Station ID	Station Type	Frequency	Distance from CLS in Nautical Miles
Olympia	OLM	VORTAC	113.40	18.0 @N
McChord (Tacoma)	TCM	TACAN	109.60	35.2 N/NE
Astoria	AST	VORDME	114.00	48.5 SW
Hoquiam	HQM	VORTAC	117.70	50.8 W
Seattle	SEA	VORTAC	116.80	53.3 N

Source: The Aviation Planning Group, 2023.

### 1.2.5.2. Visual NAVAIIDs

Visual navigational aids offer standardized reference to pilots operating at and around an airfield. CLS features multiple visual NAVAIIDs that are common at similarly sized GA airports. There are multiple visual NAVAIIDs at CLS located across the field. A rotating beacon, shining green and white light 180 degrees separated, is located on the west side of the Airport at the end of the access roadway. A rotating beacon is used to confirm the location and operational status of an airfield by pilots at night and during IFR conditions. CLS also features three wind cones to offer visual orientation of the prevailing winds on the airfield. A primary wind cone is located inside the segmented circle to the west of Runway 16/34. There are also secondary wind cones located to pilot's left when approaching the runway from either end. Additional to wind information visually identifiable with the wind cones, the Airport also has an AWOS-3 which transmits the audible real time meteorological conditions. An observation station is located midfield approximately 740 feet west of the runway and north of the existing hangar development area. Additional visual NAVAIIDs present at the Airport include a 4-light PAPI (Precision Approach Path Indicators) setting a 3-degree glide path approach to Runway 16 and a 2-box VASI (Visual Approach Slope Indicator) setting a 3.5-degree glide path approach to Runway 34. There is a painted compass rose located on the former secondary runway pavement on the east side of the field which can be used to orient the aircraft compass as necessary. The location of visual NAVAIIDs at CLS are shown in **Figure 1-8**.

Figure 1-8: CLS Visual NAVAIDs

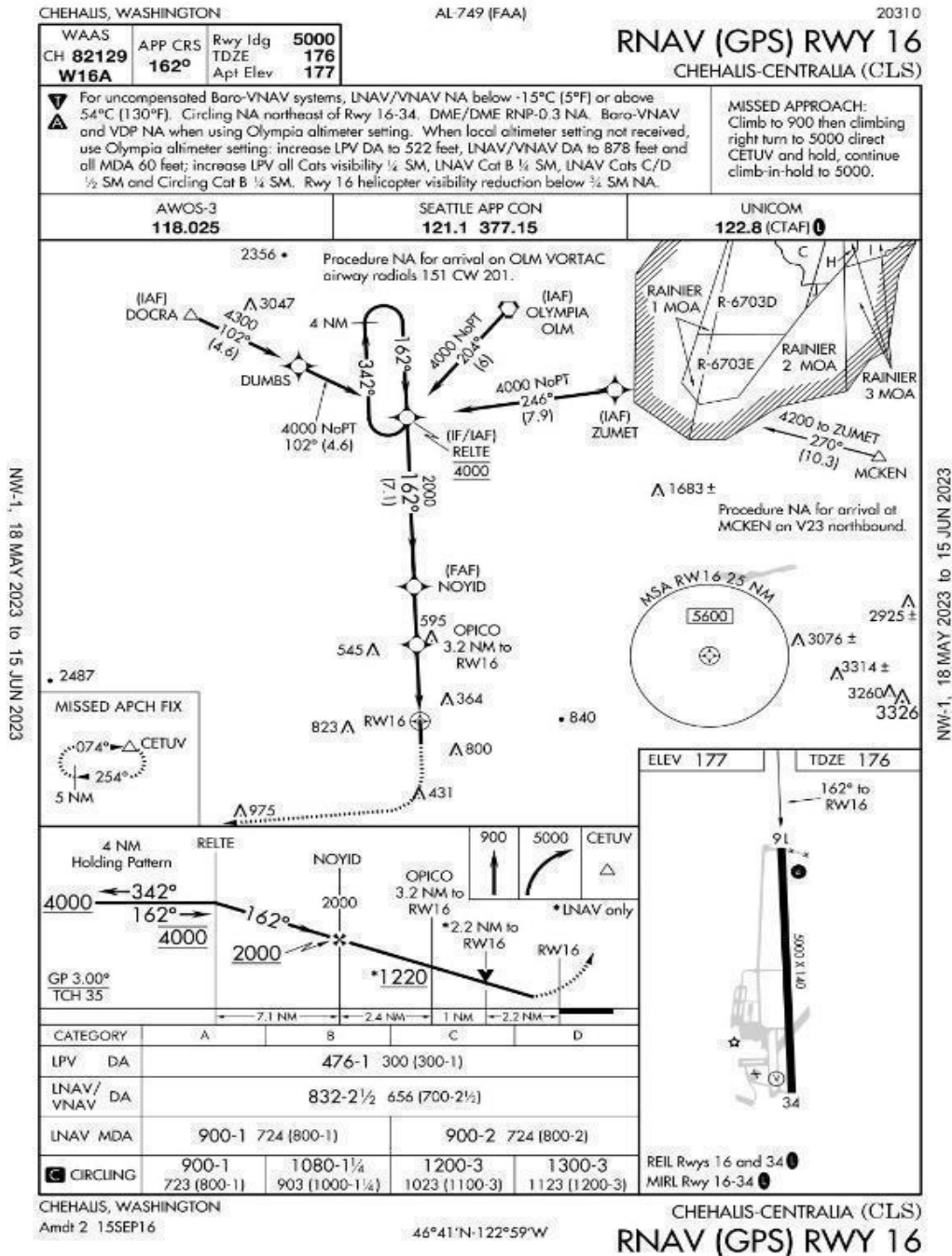


Source: The Aviation Planning Group, 2023.

### 1.2.5.3. Instrument Approaches

The Airport has just one instrument approach available to aircraft arriving in IFR conditions as well as for training purposes and currency requirements. The sole instrument approach is a RNAV (GPS) approach to Runway 16 and can be observed in **Figure 1-9**.

**Figure 1-9: Approach Plate – RNAV (GPS) RWY 16**



Source: FAA Terminal Area Procedures, 2023.

### 1.3. LANDSIDE FACILITIES

Airport development is largely concentrated on the southwest corner of the airfield along Airport Road. Much of the aviation facilities such as the Terminal Building, hangars, and fuel storage are accessible by road entrance on the south side of the field along Airport Road.

#### 1.3.1. Landside Access

The Airport is located within the City of Chehalis just to the west of the Interstate 5 (I-5) highway and the parallel surface road Louisiana Avenue. The I-5 highway connects much of the west coast along a north-south axis from Washington to California while it transits from the United States-Mexico border through major western cities and most importantly between Portland, Oregon and Seattle, Washington of which Chehalis is relatively equidistant. Vehicular traffic traveling south on I-5 from the Seattle-Tacoma Metropolitan Area would take Exit 79 northwest onto Chamber of Commerce Way before turning left onto Louisiana Avenue, right onto Airport Road, and then right once more to the airport access road leading to the Airport facilities. Traffic moving north on I-5 from Portland Metropolitan Area will take Exit 77 to head west on Main Street, followed by a turn north on Louisiana Avenue, and finally a left onto Airport Road. Airport Road also circles the property before returning to Louisiana Avenue just north of the Airport property. Because of proximity to I-5, as well as the cities of Chehalis and Centralia also being located on the highway in immediate proximity, the Airport welcomes easy access for general aviation facilities to the public, local businesses, and the region. Landside access to CLS is available at three secured gates as labeled in **Figure 1-10**.



Figure 1-10: Vehicle Access to CLS

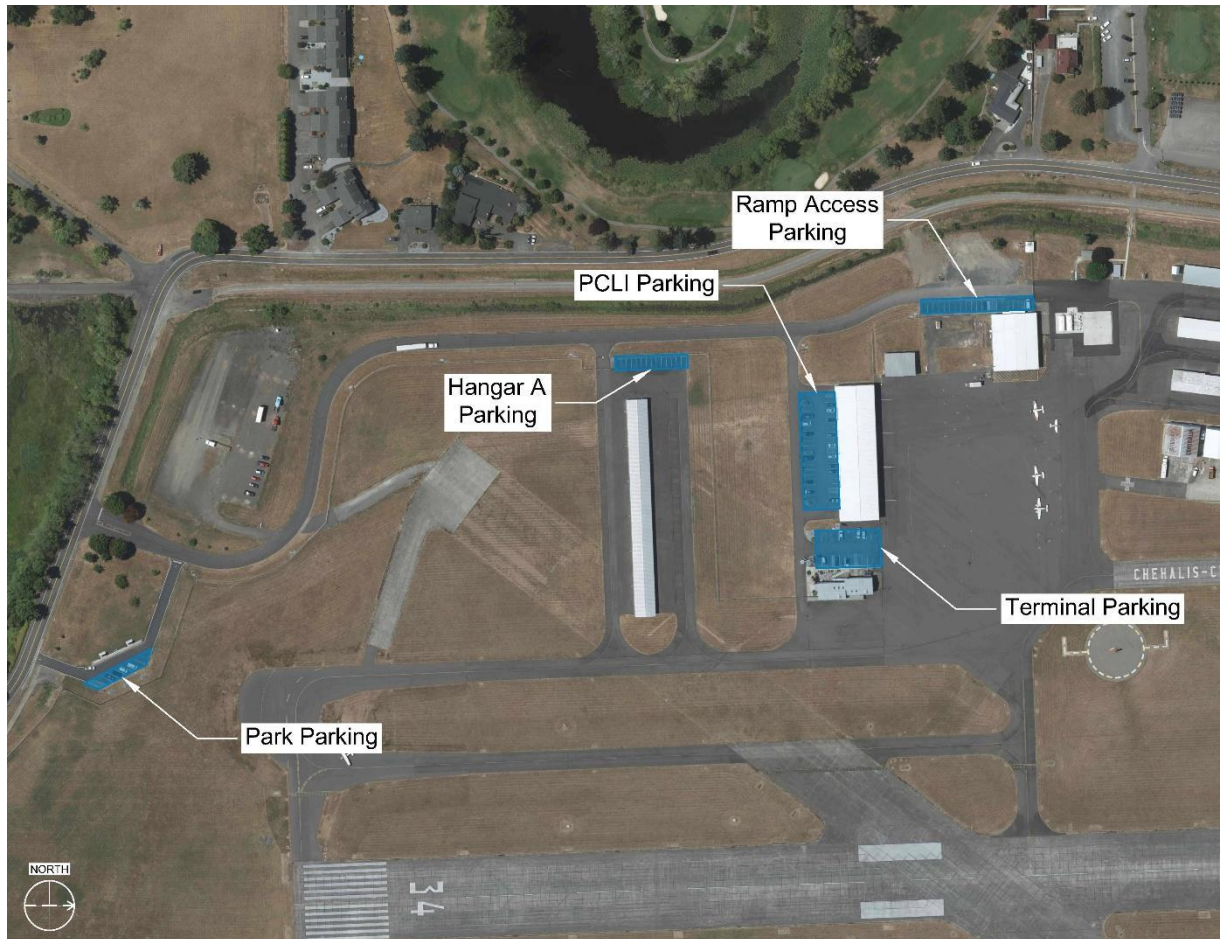


Source: The Aviation Planning Group, 2023.

### 1.3.2. Vehicle Parking Facilities

As a GA facility, vehicle parking is associated with being essential to personal access to the Airport. Public parking is available at the terminal building with 18 general and two handicap accessible parking spots. Seven additional publicly accessible parking spots are available on the south side of the Airport connecting to Airport Road however these spots are generally for the purpose of accessing the Airport Viewing Area and picnic tables, not facilities for aviation operations. Businesses with property on the Airport also have parking available at their buildings. There are 18 parking spots on the west side of the airfield adjacent to the access gate nearby the Central Aircraft Repair hangar as well as the rows of aircraft hangars. Surface parking at CLS is depicted in **Figure 1-11**.

Figure 1-11: Vehicle Parking Facilities on the Southwest Side of CLS



Source: The Aviation Planning Group, 2023.

### 1.3.3. On-Airport Roadways

There is just one on-airport roadway at CLS. This roadway originates from Airport Road on the south of the property next to the Airport Viewing Area and continues north to offer Airport access at three points. The first access point along the Airport access road is at Hangar “A” and is a gated entrance which allows vehicles to pass through. The next exit of the access road offers an entrance to vehicle parking for the Pacific Cataract and Laser Institute Hangar and the Airport Terminal Building. There are two access points to the airfield in this area, one on the south end of the Airport Terminal Building which is a gated vehicle entrance and another on the north end of the parking lot between the PCLI Hangar and Airport Terminal Building which is a man-gate entrance not used for any vehicles or equipment. The final access point is a full-size vehicle access gate and is located at the northernmost extent of the Airport access roadway where it then dead ends into the Airport perimeter fence between the Airport rotating beacon, electrical vault, and the hangar utilized by Central Aircraft Repair for aircraft maintenance.

### 1.3.4. Airport Viewing Area

Located along Airport Road on the south side of the Airport, the Airport Viewing Area offers the community access to seeing aviation up close in a safe environment. The area is built like a park with a handful of parking spots, trees shading a lawn, and a small shaded display (pictured) outlining the history of the Airport and local aviation. Situated adjacent to the end of Runway 34, the Airport Viewing Area

enjoys an up-close look of approaching aircraft from the park or from inside one’s car. It has been observed that many members of the community will come to watch aircraft from their car while eating lunch from nearby dining locations.



### 1.4. TERMINAL FACILITY

The terminal facility at CLS serves as a hub for aviation operations on site with a multitude of resources available to Airport tenants and pilots alike. The Airport terminal facility is on a raised platform to mitigate the risk of flood damage in the event of widespread Airport flooding. Entering the facility from the landside parking leads guests into a lounge area with multiple amenities including seating, restrooms, a kitchenette, reading materials, and refreshments. The entire facility boasts panoramic views of the airfield and offers an up-close view of aeronautical activities at CLS.

The terminal building additionally hosts the administrative offices and meeting room. On the north end of the terminal building, a small room features a flight simulator, the AWOS broadcast station, and other aeronautical-related information. Aircraft parking on the apron can be accessed from the terminal building, however access into the terminal is secure by a coded lock to allow for 24-hour access for pilots.



### 1.5. SUPPORT FACILITIES

Beyond just terminal building and landside development at CLS, there are a handful of other facilities which are essential to airfield operation. Airfield equipment, fuel service areas, and hangar space are all aspects of the airfield which can keep the Airport in operation, attract pilots to the airfield, and generate revenue for the Airport. The availability of utilities at the Airport is key to future development capabilities at CLS. The Airport is connected to the municipal water system. The west side of the Airport is on a septic system while the eastern side of the Airport is connected to the city’s sanitary sewer system.

### 1.5.1. Equipment Storage Building

The operation of an airport with the size and activity level of CLS requires a considerable amount of airfield equipment that can be used for the management and maintenance of the Airport. Most airfield equipment is stored in Hangar “S”, however additional stores of smaller airfield tools and utilities are stored in various structures around the Airport. Equipment currently maintained on-site at CLS is listed in **Table 1-7**.

**Table 1-7: CLS Equipment**

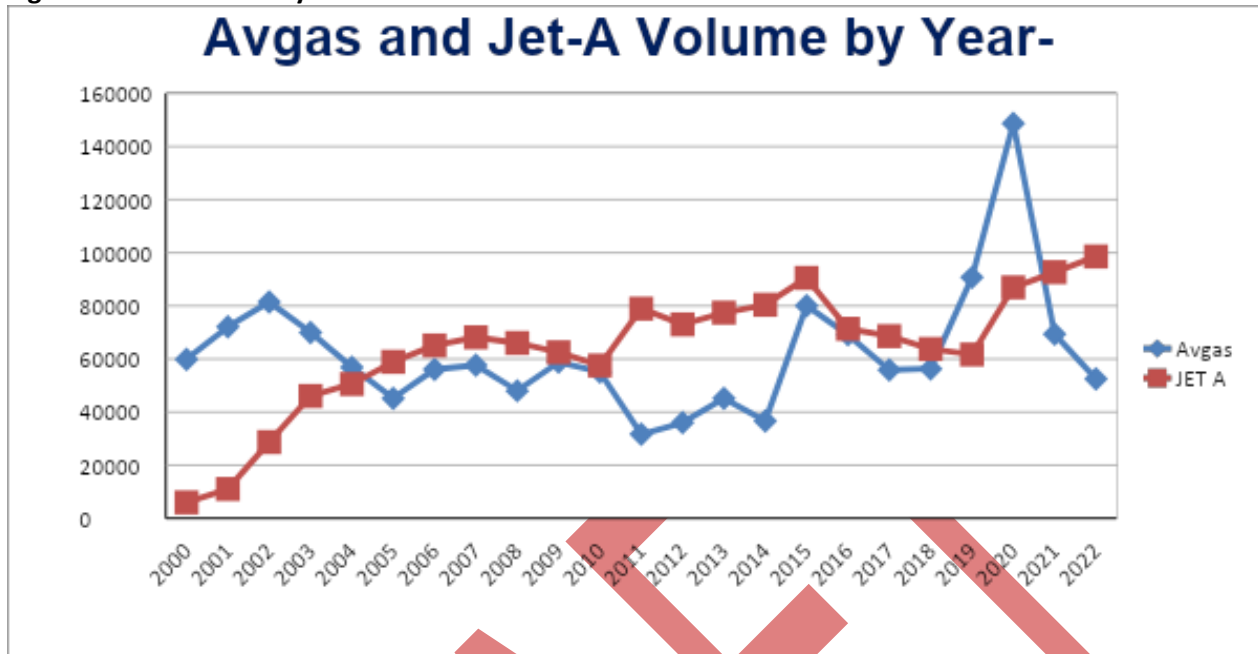
Year	Make	Model
2007	International	MA025 Fuel Truck
2010	Ford	Escape
2000	Ford	Taurus
2008	International	MA065 Snow Plow
2014	Toyota	Sienna
2005	Nissan	Altima
2015	Kubota	L3560HST
2017	Ford	F150 Supercab 4X
2019	Kubota	M5-091HDC12-1

Source: Chehalis-Centralia Airport, 2023.

### 1.5.2. Fuel Storage Area

The Airport currently features two fuel storage tanks. Historically, the Airport had two below ground storage tanks offering 6,000 gallons each of Jet-A and Avgas fuel that were closed in place in 1991. CLS has since used above ground fuel tanks, and is now operating two above ground 12,000-gallon fuel storage tanks that were replaced in 2022 and offer a self-service fueling pad for transient and based aircraft on-site. Fuel activity is depicted in **Figure 1-12**, showing a positive trend in Jet-A fuel sales, with Avgas remaining relatively stable year over year with the exception of 2020 which can be attributed to the increased GA utilization during the COVID-19 Pandemic.

Figure 1-12: Fuel Activity at CLS 2000-2022



Source: Chehalis-Centralia Airport, 2023.

### 1.5.3. Aviation Maintenance

At CLS, there is presently one business providing maintenance services to aircraft. Central Aircraft Repair occupies Hangar “E” just off the Airport access road. The hangar serves for aircraft services on the airfield and formerly provided pilot services prior to the opening of the Airport terminal building.

### 1.5.4. Hangars

The Airport provides leasable space for development of hangars through ground leases as well as owns a collection of hangar units which are available for lease varying in size, type, and age. Airport buildings are named alphabetically, of which the hangars are named accordingly with a letter of the alphabet. The largest hangar occupant at the Airport is Pacific Cataract and Laser Institute (PCLI), a prominent business at the Airport that operates several aircraft stored in multiple hangars. Hangars on the airfield are pictured in **Figure 1-13**, and building types are identified as:

- A – 10 unit T-Hangar
- B – 4 unit – Box Row Hangar
- C – Terminal/FBO
- D – Fire Fighting storage building
- E – Aircraft Maintenance Hangar
- F – 5 unit Open T Hangar
- G – 7 unit T-Hangar
- H – 8 unit T-Hangar
- I – 8 unit T-Hangar
- J – 8 unit Open T-Hangar
- K – Box Hangar
- L – Box hangar
- M – Box Hangar
- N – Box Hangar
- O – Box Hangar
- P – 2 unit Box Hangar
- Q – Box Hangar
- R – Box Hangar
- S – Airport Maintenance Building

Figure 1-13: Hangar Locations at CLS



Source: The Aviation Planning Group, 2023.

## 1.6. AIRPORT ENVIRONS

The Environmental Inventory addresses existing conditions at an airport and its environs. This inventory identifies relevant environmental resources that should be considered during preparation of the Airport Master Plan Update for CLS. The inventory is organized using the resource categories contained in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures (2015). Available information regarding the environmental conditions at the Airport and within the surrounding area has been derived from internet resources, agency maps, and existing literature.

### 1.6.1. Existing Off-Airport Land Use and Future Trends

Unlike many small general aviation airports, CLS has an extensive portfolio of non-aeronautical land uses on the airport property. In collaboration with the City of Chehalis, CLS has been in the process of developing the non-aeronautical retail area of the airport property as the Twin City Town Center. The site is just across I-5 from the majority of Chehalis, Washington and as such benefits from traffic passing along the interstate. Competitive sales tax in Chehalis additionally attracts retail businesses to the development. The area presently boasts a variety of retail options addressing many community needs

including groceries, dining, gas, banking, medicine, hardware, automobile dealers, and more. The properties provide a significant source of revenue for the airport that is unseen for most airports like CLS. The non-aeronautical land use area still has more room for development and is guided by a Commercial Development Master Plan that was completed in 2018. **Figure 1-14** details areas currently assigned for commercial development as of the 2019 Airport Layout Plan. A list of businesses currently operating stores in the commercial area can be found in **Table 1-8**.

**Figure 1-14: Commercial Development Areas on Airport Property at CLS**



Source: The Aviation Planning Group 2023.

**Table 1-8: Businesses Operating in CLS Commercial Development Area - Twin City Town Center**

Twin City Town Center Businesses		
Applebee's Grill + Bar	Interstate Honda of Chehalis	Smoke Depot
Armed Forces Career Center	Jiffy Lube	Sonic Drive-In
Big 5 Sporting Goods	KB Nails	Starbucks
Burger King	Kobo Teriyaki	Subway
Chevron	Little Caesars	Taco Del Mar
Desert Sun Tanning Salon	Mattress Firm	The Home Depot
Dollar Tree	Maurices	T-Mobile
Dutch Bros Coffee	McDonald's	Town Center Dental
Edward Jones	Michaels	Town Center Liquor & Wine
GameStop	Miracle-Ear	UScellular
Glint Car Wash	O'Reilly Auto Parts	Verizon
GNC	Petsense by Tractor Supply	Walgreens
Grocery Outlet	Sally Beauty	Walmart
Happy Kids Dentistry and Orthodontics	Security State Bank	Wendy's
Harbor Freight Tools	Sherwin-Williams Paint Store	WSECU

Source: The Aviation Planning Group, 2023.

### 1.6.2. Zoning Regulations

CLS is located within an Airport Service District (ASD). The ASD is a special 'overlay' district that provides for the appropriate development of the Airport and surrounding properties. The clear intent of this designation is to ensure that development at and around the Airport occurs in a manner that is compatible with the continued and expanding operation of the Airport facility. The ASD contains approximately 295 acres, and encompasses the entire general area of the Airport.

### 1.6.3. Socioeconomic and Demographic Data

Socioeconomic and demographic data information relative to CLS, the City of Chehalis, and Lewis County provide insight into the region in which the Airport operates. Regional demographics and socioeconomics often influence aviation demand. Increasing population, higher income, and growing employment can positively impact aviation demand. Declining economic indicators can have a similar negative impact.

Demographic information for the City and County shows a positive increase in population, which will provide for continued growth for the region and economic stability. Demographic data comparisons are respectively shown in **Table 1-9**.



**Table 1-9: Demographic Data for Chehalis and Lewis County**

Socioeconomic and Demographic Subject	Chehalis	Lewis County
<b>Population</b>		
Population 2022	7,645	85,370
Population 2010	7,259	75,455
<b>Age and sex</b>		
Less than 5 years old	5.80%	5.50%
Less than 18 years old	21.90%	21.40%
Greater than 65 years old	16.90%	21.50%
Female	46.30%	19.40%
<b>Race</b>		
White alone	81.80%	91.30%
Black or African American alone	1.60%	1.10%
American Indian and Alaska Native alone	0.50%	2.10%
Asian alone	0.80%	1.20%
Native Hawaiian and other Pacific Islander alone	0.00%	0.30%
Hispanic or Latino alone	14.10%	11.70%
Two or more races	11.50%	4.00%
<b>Population Characteristics</b>		
Veterans	501	6,798
Foreign Born	5.00%	5.00%

Source: United States Census Bureau, 2023.

Socioeconomic data indicates a strong workforce, which enhances the overall economy, providing opportunity for continued growth in the region. Regional stability and growth can provide demand and need for the Airport, especially with its location to transportation corridors, and being situated between Seattle, WA and Portland, OR. Socioeconomic data comparisons are respectively shown in **Table 1-10**.

**Table 1-10: Socioeconomic Data for Chehalis and Lewis County**

Socioeconomic and Demographic Subject	Chehalis	Lewis County
<b>Housing</b>		
Owner Occupied Housing	49.10%	71.90%
Median Value of owner occupied housing	\$228,500	\$260,900
Median Gross Rent	\$921	\$933
<b>Families and Living Arrangements</b>		
Households	2,987	31,223
Persons per household	2.27	2.57
Language other than English Spoken at home	9.40%	8.30%
<b>Computer and Internet Use</b>		
Households with a computer	84.60%	92.30%
Households with a broadband Internet subscription	75.80%	83.70%
<b>Education</b>		
Highschool graduate or higher	90.30%	89.30%
Bachelors degree or higher	20.70%	19.00%
<b>Health</b>		
With a disability, under age 65 years	10.00%	13.50%
Persons without health insurance under age 65	10.50%	9.20%
<b>Economy</b>		
In civilian labor force, over age 16	59.90%	54.60%
In civilian labor force, female, over age 16	59.80%	49.70%
<b>Income and Poverty</b>		
Median household income	\$52,717	\$60,581
Persons in Poverty	13.40%	13.50%
<b>Geography</b>		
Population per square mile (2020)	1,281.0	34.2
Population per square mile (2010)	1,311.6	31.4
Land area in square miles	5.81	2,402.78

Source: United States Census Bureau, 2023.

Socioeconomic and demographic data help communities plan for the needs of the future while providing a look into the current community characteristics. These data elements that are tracked through the census process over time will be considered further in the forecasting process for aviation demand in the following chapter, especially with consideration given to population and regional growth.

## 1.7. ENVIRONMENTAL DATA

Future development at CLS cannot be complete without first understanding the existing environmental situation in the surrounding area. The preservation of natural resources and mitigating the impact of airport operational externalities on the surrounding environment has become an important element to airport development nationwide. The following inventory of environmental data outlines relevant environmental categories of note to the FAA and other various federal agencies during the Airport development process.

### 1.7.1. Air Quality

The United States (U.S.) Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) based on health risks for six pollutants:

- Carbon monoxide (CO)
- Nitrogen dioxide (NO<sub>2</sub>)
- Sulfur dioxide (SO<sub>2</sub>)
- Lead (Pb)
- Ozone (O<sub>3</sub>)
- Two classifications of particulate matter (PM): PM measuring 10 micrometers in diameter or less (PM<sub>10</sub>), and PM measuring 2.5 micrometers or less in diameter (PM<sub>2.5</sub>)

An area with ambient air concentrations exceeding the NAAQS for a criteria pollutant is said to be a nonattainment area for the pollutant's NAAQS, while an area where ambient concentrations are below the NAAQS is considered an attainment area. The U.S. EPA requires that areas designated as nonattainment demonstrate how they will attain the NAAQS by an established deadline. To accomplish this, states are required to prepare State Implementation Plans (SIPs). SIPs are typically a comprehensive set of reduction strategies and emissions budgets designed to bring the area into attainment.

The Airport is in Lewis County, Washington. According to the U.S. EPA's Green Book – National Area and County-Level Multi-Pollutant Information, Lewis County is in attainment for all federal criteria pollutants.

### 1.7.2. Biological Resources

U.S. Fish and Wildlife Service (USFWS) is charged with overseeing the requirements of the Endangered Species Act (ESA), specifically Section 7, which sets forth requirements for consultation to determine if a proposed action "may affect" a federally endangered or threatened species. If an agency determines that an action "may affect" a federally protected species, then Section 7(a)(2) requires the agency to consult with USFWS to ensure that any action the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species, or result in the destruction or adverse modification of critical habitat. If a species has been listed as a candidate species, Section 7(a)(4) states that each agency must confer with USFWS.

The 2016 Chehalis-Centralia Airport Levee Rehabilitation Finding of No Significant Impact (FONSI) found the following information concerning biological resources, and the protection of the resources, which is directly related to the Airport and the regional setting:

The Chehalis River system is an important migration corridor for anadromous salmonids and provides foraging and spawning habitat for a variety of both anadromous and resident fish. Salmonids include

spring and fall Chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*), chum (*O. keta*), winter and summer steelhead (*O. mykiss*), and coastal cutthroat trout (*O. clarki clarki*), all anadromous; and resident rainbow (*O. mykiss*), cutthroat, and brook (*Salvelinus fontinalis*) trout. Fall Chinook salmon spawn throughout the Chehalis basin upstream from the Satsop River. Major spawning areas include the mainstem Chehalis (RM 28 to 67 and RM 88 to 108), Black, Newaukum, and Skookumchuck rivers as well as Cloquallum and Porter creeks. Spawning also takes place in Cedar Creek, Stillman Creek, and the South Fork Chehalis River (WDFW 2016a). Bull trout (*Salvelinus confluentus*) have been reported downstream, but are not shown as present in the Chehalis reach of the Chehalis River (WDFW 2016b). Non-salmonids receive much less attention, but are known to include largemouth bass (*Micropterus salmoides*) and others including Centrachids (sunfish), yellow perch (*Perca flavescens*), minnows, sculpins, catfish, suckers, whitefish, lampreys, and sturgeon (Envirovision2000). The Olympic mudminnow (*Novumbra hubbsi*), a state-designated "Sensitive Species" endemic to Washington, has not been reported from the Chehalis River, but is found in Lewis County (USFWS 2012). Riparian and wetland corridors along the river provide habitat for many species of wildlife. Typical species expected to frequent the project area or the riparian corridor along the Chehalis River west and north of the project include coyote (*Canis latrans*), raccoon (*Procyon lotor*), skunks (family Mephitidae), black-tailed deer (*Odocoileus hemionus columbianus*), beaver (*Castor canadensis*), Townsend's chipmunk (*Neotamias townsendii*), and Douglas squirrel (*Tamiasciurus douglasii*); amphibians including Pacific chorus frog (*Pseudacris regilla*) and ensatina salamander (*Ensatina eschscholtzii*); and reptiles including common garter snake (*Thamnophis sirtalis*) and northern alligator lizard (*Elgaria coerulea*). Many species of birds including osprey, northern flicker, black-capped chickadee, spotted towhee, song sparrow, Bewick's wren, great blue heron, Canada goose, American crow, magpie, sharp-shinned hawk, and red-winged blackbirds have been observed in the wetland along the levee on the Airport side (USACE 2010). Red-tailed hawks and bald eagles use the taller trees in the region for perching and foraging. The closest identified bald eagle nest is on the north side of the Chehalis River approximately 800 feet from the project area (WDFW 2016c). The Washington Department of Fish and Wildlife Priority Habitats and Species website shows cavity-nesting duck breeding habitat north and south of the repair site (WDFW 2016c).

### 1.7.3. Climate

Although greenhouse gasses (GHGs) are not directly discussed within FAA Order 1050.1F, they are discussed in the 1050.1F Desk Reference. GHGs are discussed here because research has shown a direct correlation between fuel consumption and GHG emissions. The FAA is participating in several initiatives to better understand the role played by commercial aviation in the production of GHG emissions. The FAA has also developed the Aviation Climate Change Research Institute to attempt to advance understanding of regional and global climate impacts of aircraft emissions. The amount of GHGs emissions created at the Airport are unknown; however, due to the modest operations at this Airport, emissions are likely minimal.

### 1.7.4. Coastal Resources

All coastal counties within the state of Washington are subject to the Coastal Zone Management Program. Enforceable policies of the State's Coastal Zone Management Program include the SEPA, the Clean Water Act, the Clean Air Act, the State Shoreline Management Act, and local shoreline master programs. Local shoreline master programs are approved and adopted by the state, which ensures consistency with the Coastal Zone Management Act.

The Washington State Department of Ecology determines the consistency of a proposed development with the Coastal Zone Management Act and the Washington Coastal Zone Management Program. Before issuing a Clean Water Act Section 10/404 permit, the U.S. Army Corps of Engineers must receive notice

that the Department of Ecology, following review of a proposed project, concurs with the project sponsor's certification statement of compliance with the Washington Coastal Zone Management Program.

While Chehalis is located inland, approximately 50 miles to the east of the Pacific Ocean, the Chehalis River Basin is included under the Shoreline Management Act as the Chehalis River is considered a shoreline of statewide significance. The Chehalis Basin has long-term strategies in place to reduce flood-related damage within the basin as well as improve, protect, and restore habitats for native aquatic species. Groups such as Chehalis River Basin Flood Control Zone District, the Office of Chehalis Basin, and Chehalis Basin Board are working together to implement projects to protect communities. Projects within the Airport vicinity include raising the Airport Levee and raising portions of Airport Road along the southern side of the Airport. The impacts of raising the levee will be taken into consideration for future Airport development.

### 1.7.5. Department of Transportation Act, Section 4(f) Resources

The Department of Transportation (DOT) Act, Section 4(f)<sup>13</sup> provides that the "Secretary of Transportation will not approve any program or project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land from a historic site of national, state, or local significance unless there is no feasible or prudent alternative and the use of such land includes all possible planning to minimize harm resulting from the use." The FAA has adopted the regulations the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued in March 2008 (23 CFR Part 774)<sup>14</sup> to address project-related effects on Section 4(f) resources. For Section 4(f) purposes, a proposed action would eliminate a resource's use in one of two ways.

- **Physical use.** Here, the action physically occupies and directly uses the Section 4(f) resource. Here an action's occupancy or direct control (via purchase) causes a change in the use of the Section 4(f) resources. For example, building a runway safety area across a fairway of a publicly-owned golf course is a physical taking because the transportation facility physically used the course by eliminating the fairway.
- **Constructive use.** Here, the action indirectly uses a Section 4(f) resource by substantially impairing the resource's intended use, features, or attributes. For example, a constructive use of an overnight camping area would occur when project-related aircraft noise eliminates the camping area's solitude. Although not physically occupying the area, the project indirectly uses the area by substantially impairing the features and attributes (i.e., solitude) that are necessary for the area to be used as an overnight camping area.

**Table 1-11** describes the location and direction from the Airport of nearby parks and trails.

**Table 1-11: Parks and Recreational Areas Near CLS**

Park Name	Description	Location	Distance from Airport (miles)
Westside Park	1 acre, originally a playground for elementary school that was razed due to damage from 1949 Olympia earthquake.	SE	0.25
The Riverside Golf Course	Nestled between the Chehalis–Centralia Airport and the Chehalis River. Spanning 110 acres. Originally a nine-hole course when first constructed in 1927, it expanded to 18 holes in 1971.	W	0.1
Airport Levee Trail	The trail is mixed paved-gravel built atop a levee and loops for 3.5 miles (5.6 km) around the Chehalis-Centralia Airport and Twin City Town Center.	N/E/S/W	0.1
Airport Road Trail	The mixed-use paved trail is 1.4 miles (2.3 km) and runs parallel to Interstate 5 to the east, with farmland and close views of the Chehalis River to the west. Completed in 2014, the south trailhead links with the Airport Levee Trail and continues north, passing over Salzer Creek and into Centralia, officially terminating at the Twin Transit Mellen Street Station.	N	0.5

Source: The Aviation Planning Group, 2023.

### 1.7.6. Farmlands

The Farmland Protection Policy Act (FPPA) regulates federal actions that may affect or convert farmland to a non-agricultural use. FPPA defines farmland as “prime or unique land as determined by the participating state or unit of local government and considered to be of statewide or local importance.”

The Natural Resources Conservation Service (NRCS) Web Soil Survey was used to review soils on and around CLS.

Projects affecting classified farmlands require notification of the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS). As noted in **Figure 1-15**, there are prime farmlands designated on CLS. Consultation with the NRCS should be conducted as part of the NEPA process to determine if the FPPA applies to land that would be converted for implementation of proposed Airport actions.

**Figure 1-15: CLS Soil Map**

Source: National Resources Conservation Service (NRCS), 2023.



**1.7.7. Hazardous Materials, Solid Waste, and Pollution Prevention**

The Resource Conservation and Recovery Act (RCRA)<sup>22</sup>, Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA)<sup>23</sup>, Superfund Amendments and Reauthorization Act (Superfund)<sup>24</sup>, and the Community Environmental Response Facilitation Act (CERFA)<sup>25</sup> are the four predominant laws regulating actions related to the use, storage, transportation, or disposal of hazardous materials, chemicals, substances, and wastes. Federal actions that pertain to the funding or approval of airport projects require the analysis of the potential for environmental impacts per the regulating laws. Furthermore, property listed or considered for the National Priority List (NPL) should be evaluated in relation to CLS's location. According to the NPL, no sites are located near CLS. The Lewis County, WA Environmental Hazards Report – Superfund Sites does show four sites in the county, but that they are not near the Airport.

An Industrial Stormwater Pollution Prevention Plan (SWPPP) was written by RB Engineering in January 2023 for the CLS Levee and summarized all hazardous material present on site at the onsite fueling facility, the fueling truck, aircraft storage hangars, and aircraft maintenance hangars. Petroleum from fueling and maintenance pose the greatest environmental risk. Other hazardous materials present on site include paint, wash water from the aircraft wash rack, waste oil, solvents, recycling/solid waste, and herbicide. Additionally, the Chehalis Airport is listed in Ecology's Toxic Cleanup for petroleum in the soil, with the status of cleanup started.

Pollution prevention is provided by the vegetation and mulch in the conveyance ditches on the east side of the site as well as from sediment settling in Airport Lake. An oil-water separator is present by the fueling station to ensure jet fuel does not enter the storm system from that location, however it is possible that leaks or spills may occur elsewhere during maintenance or mobile fueling. Best Management Practices (BMPs) recommended in the SWPPP are also implemented as a form of source control to prevent pollution through practices such as drip pans for maintenance and pavement sweeping on an as-needed basis to remove FOD and sediment.

To comply with the FAA Modernization and Reform Act of 2012 (FMRA) Section 132 (b) this master plan update specifically identifies specific aspects to further decrease solid waste by increasing resources that can be recycled in a more efficient manner. The Airport generates typical solid waste such as paper, cardboard, and some hazardous waste such as oil and paint cans. **Figure 1-16** shows the used oil recycling station on the Airport. **Figure 1-17** illustrate the cardboard recycling as well as other misc. recycling items on Airport owned property.



Figure 1-16: CLS Oil Recycling



Source: The Aviation Planning Group, 2023.

Figure 1-17: Cardboard Recycling at CLS



Source: The Aviation Planning Group, 2023.

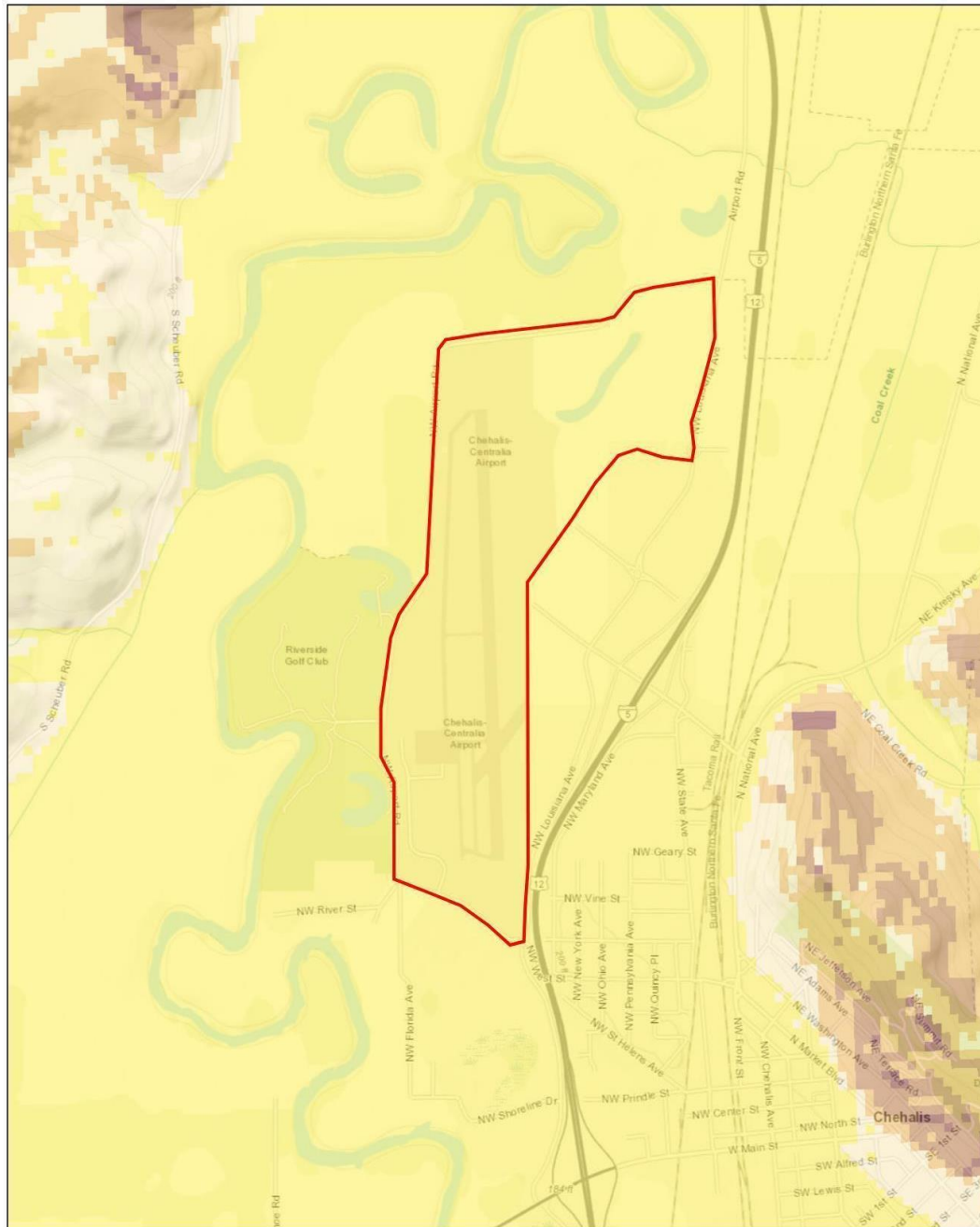
CLS can continue working with their tenants to inform them of the City's solid waste and recycling program.

### 1.7.8. Historical, Architectural, Archeological, and Cultural Resources

The Washington Department of Archaeology and Historic Preservation's Washington Information System for Architectural and Archeological Records Data (WISAARD) web application identifies the entire Airport and surrounding area as "High to Very High Risk". See **Figure 1-18** for the Cultural Resources and Archeological.

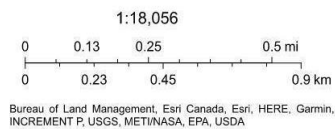
An archaeological survey, including subsurface testing is recommended prior to any ground disturbance in the area. Consultation with the tribes and the Washington State Department of Archaeology and Historic Preservation (DAHP) will be required.

**Figure 1-18: Cultural Resources and Archaeological Survey Risk Map**



**Environmental Factors with Archaeological Resources Results**

- 1 - Survey Contingent Upon Project Parameters: Low Risk (Color: Brick Red)
- 2 - Survey Contingent Upon Project Parameters: Moderately Low Risk (Color: Burnt Orange)
- 3 - Survey Recommended: Moderate Risk (Color: Orange)
- 4 - Survey Highly Advised: High Risk (Color: Pale Yellow)
- 5 - Survey Highly Advised: Very High Risk (Color: Brightest Yellow/Canary Yellow)
- Approximate Airport Property



Source: Washington Department of Archaeology and Historic Preservation’s Washington Information System for Architectural and Archeological Records Data (WISAARD), 2023.

### **1.7.9. Natural Resources and Energy Supply**

All sources of light contribute to the safety of operations at the Airport and produce an insignificant amount of light on the surrounding area.

### **1.7.10. Noise and Noise Compatibility Land Use**

Aircraft noise and noise surrounding airports are two of the most notorious issues related to the environment at airports. The FAA examines actions and development that may change runway configurations, airport/aircraft operation and/or movements, aircraft types, and flight patterns, all of which could ultimately alter the noise impacts on communities near an airport. CLS is located within an airport overlay district with the clear intent of this designation is to ensure that development at and around the Airport occurs in a manner that is compatible with the continued and expanding operation of the Airport facility.

The FAA has determined that the cumulative exposure of individuals to noise resulting from aviation activities must be established in terms of yearly day/night average sound level (DNL). Noise exposure is considered significant if the 65 DNL or greater encroaches on any noise sensitive area. A noise analysis is required by the FAA for airport proposals which involve “utility” or transport category airports whose forecast annual operations within the period covered by the environmental assessment exceed 90,000 annual propeller operations or 700 jet operations because these levels result in noise levels greater than the DNL threshold.

According to the operations counts for CLS, jet activity does not currently exceed these levels. Therefore, a noise analysis will not be required as part of the NEPA process for proposed Airport improvement projects. Should noise levels or operations counts exceed these thresholds in the future, a noise analysis may be necessary.

### **1.7.11. Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks**

Socioeconomic effects could involve relocating people from their homes, moving businesses, or causing substantial changes in local traffic patterns. They also involve dividing or disrupting established communities or planned development, and creating notable changes in employment. Executive Order 12898 requires Federal agencies to analyze project effects relative to low-income and minority populations. Environmental justice analysis considers the potential of a proposed action’s alternatives to cause disproportionate and adverse effects on low-income or minority populations. The analysis of environmental justice impacts and associated mitigation ensures that no low-income or minority population bears a disproportionately high and adverse effects resulting from the implementation of the proposed action. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks requires Federal agencies to make child protection a high priority because children may be more susceptible to environmental effects than adults. No impacted populations as described above are within the boundaries of the study area – CLS.

### 1.7.12. Visual Effects

Federal regulations do not specifically regulate airport light emissions; however, the FAA does consider airport light emissions on communities and properties near an airport. Significant portions of light emissions at airports are a result of safety and security equipment and facilities.

CLS has four primary sources of light:

- Runway Lighting: lights outlining the runway, classified by the intensity or brightness the lights are capable of producing
- Apron/Parking Lights: pole lighting on aprons and parking areas
- The Airport Beacon: lighted rotating green and white beacon at night and during IFR conditions
- 4 box (3 degree) PAPI on Runway 16 and a 2 box (3.5 degree) VASI on Runway 34

### 1.7.13. Water Resources

Along with the proximity of the Airport to the Chehalis River, the site features several critical areas, multiple wetlands including Airport Lake, and a stormwater conveyance system graded to direct runoff north to Airport Lake and eventually to the Chehalis River.

#### 1.7.13.1. Environmental Critical Areas

The entire CLS property is within and nearly level with the 100-year floodplain of the Chehalis River, with a levee separating the Airport from the effects of flooding, as seen by historical data. The soil in the area is class B/C/D which is characterized by slow infiltration rates and poor drainage, contributing to the flooding issues present in the Chehalis River Basin. Additionally, the west shore of the Chehalis River is designated as a rural/urban conservancy, along with the stretch north of the Airport.

The Chehalis River to the west of the Airport has several water quality concerns, as listed on the Washington Department of Ecology's 303(d) list. Categories on the list include a Category 2 listing as a water of concern for Bacteria - Fecal Coliform and Category 4 listings as an impaired body of water that does not require a total maximum daily load (TMDL) for Temperature and Dissolved Oxygen. See **Appendix XX** for the 303(d) listing map.

#### 1.7.13.2. Wetlands

According to the National Wetland Inventory, the southeast portion of Runway 16-34 is classified as a freshwater emergent wetland, along with the northeast corner of the Airport is Airport Lake, which is classified as a freshwater emergent wetland that serves as a detention pond for Airport runoff. A 100-foot buffer around Airport Lake will be required by the City of Chehalis. Portions of the area east of Airport Lake are classified as a freshwater forested/shrub wetland. See **Appendix XX** for a wetland map. Airport Lake is also designated by the Washington Department of Fish and Wildlife (WDFW) as Type F for fish bearing water bodies. WDFW also identified two streams within the vicinity, one as type N for non-fish bearing going north from the east end of Airport Lake to the Chehalis River and one as type U for unknown to the east of Airport Lake, flowing north.

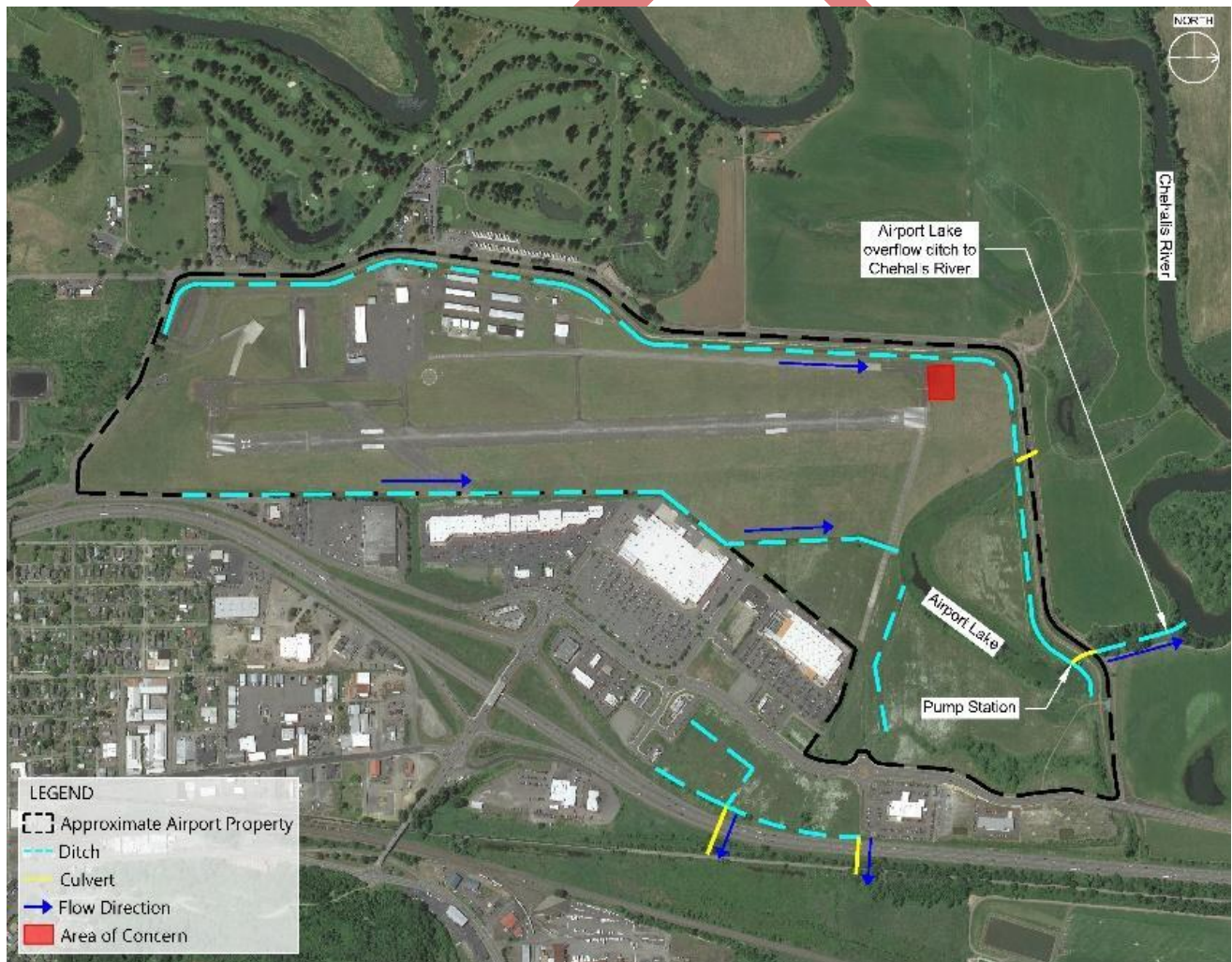
#### 1.7.13.3. Stormwater

Stormwater on site is collected and managed by a series of roof drains that collect runoff from the hangar roofs and convey it to French drains between hangars or to catch basins. A system of pipes and ditches on the east and west side of the runway convey the runoff generally to the northeast to outfall into Airport

Lake where sediment can settle out. Airport Lake overflows to the pump station installed in 2018 that discharges water to a drainage ditch on the north end of the site which outfalls to the Chehalis River, ensuring that in flood conditions the Airport shall remain operational. The conveyance ditch on the east end that collects runoff from the development to the east of the Airport was maintained with brushing and re-mulching in 2022 and does not seem to have capacity issues. **Figure 1-19** features a map of the existing flow patterns on site.

Overall, the Airport has good drainage and none of the facilities are regularly impacted by capacity issues or poor drainage. A minimal location on site has existing flooding due to poor grading or drainage is present on site and located on the northwest end of the Airport just north from the taxiway connector to the northern end of the runway, which is a low point causing standing water that doesn't encroach up on the runway.

**Figure 1-19: Airport Flow Patterns**



Source: Osborne Consulting, 2023.

## 1.8. FINANCIAL INVENTORY

The Airport is operated by the City of Chehalis and is stewarded by the Airport Director. The previous five years of operating revenues and expenses are reported below in **Table 1-12**, indicating a strong level of self-sustainability which is rarely seen at general aviation facilities nationwide. Capital projects are often funded by FAA and State Aeronautics grants with a local match to the grant. A grant’s local match can be funded by CLS with the aid of additional governmental funding when needed. Grant history for the Airport is additionally detailed in **Table 1-13**.

**Table 1-12: CLS Operating Revenues and Expenses 2017-2022**

Revenue and Expenses	2018	2019	2020	2021	2022
<b>Revenues</b>					
Fuel Sales	\$ 524,221	\$ 637,451	\$ 726,501	\$ 610,549	\$ 709,188
Rents & Leases	\$ 1,152,429	\$ 1,182,336	\$ 1,165,573	\$ 1,177,954	\$ 1,336,303
Intergovernmental Grants	\$ 443,540	\$ 2,452,599	\$ 267,877	\$ 531,071	\$ 804,441
Other Misc. Revenues	\$ 1,217	\$ 2,598	\$ 8,615	\$ 2,146	\$ 34,284
<b>Total Revenues</b>	<b>\$ 2,121,407</b>	<b>\$ 4,274,984</b>	<b>\$ 2,168,566</b>	<b>\$ 2,321,720</b>	<b>\$ 2,884,216</b>
<b>Expenditures</b>					
Payroll Wages and Benefits	\$ 410,421	\$ 479,623	\$ 452,445	\$ 491,647	\$ 434,994
Office and operating supplies	\$ 444,797	\$ 550,378	\$ 628,815	\$ 542,945	\$ 692,093
Services	\$ 204,337	\$ 187,852	\$ 218,840	\$ 232,336	\$ 227,664
Intergovernmental services and taxes	\$ 8,400	\$ 3,091	\$ -	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ 1,067,955</b>	<b>\$ 1,220,944</b>	<b>\$ 1,300,100</b>	<b>\$ 1,266,928</b>	<b>\$ 1,354,751</b>
<b>Excess (Deficiency) Revenues over Expenditures</b>	<b>\$ 1,053,452</b>	<b>\$ 3,054,040</b>	<b>\$ 868,466</b>	<b>\$ 1,054,792</b>	<b>\$ 1,529,465</b>
<b>Other Increase/Decrease in Fund Resources</b>					
Other Increase in Fund Resources	\$ 582,641	\$ 235,506	\$ 15,256	\$ 730,927	\$ 147,163
Other Decreases in Fund Resources	\$ 956,300	\$ 3,171,334	\$ 661,626	\$ 1,633,694	\$ 906,053
<b>Total Increase (Decrease) in Cash and Investments</b>	<b>\$ 679,793</b>	<b>\$ 118,212</b>	<b>\$ 222,096</b>	<b>\$ 152,025</b>	<b>\$ 770,575</b>

Source: Chehalis-Centralia Airport, 2022.

**Table 1-13: CLS FAA Grant History, 2005-2022**

Fiscal Year	Project Description	Federal Funds
2005	Construct Access Road	\$142,470
2005	Construct Taxiway	\$457,121
2005	Rehabilitate Runway	\$5,000
2006	Construct Taxiway	\$164,451
2006	Install Weather Reporting Equipment	\$132,563
2006	Rehabilitate Taxiway	\$575,957
2008	Acquire Land for Approaches	\$244,586
2009	Acquire Land for Approaches	\$94,695
2010	Rehabilitate Runway	\$35,000
2011	Acquire Snow Removal Equipment	\$75,000
2011	Install Perimeter Fencing	\$84,632
2013	Construct Snow Removal Equipment Building	\$85,200
2013	Rehabilitate Runway	\$6,000
2015	Construct Taxiway	\$89,900
2015	Rehabilitate Apron	\$128,485
2016	Rehabilitate Apron	\$940,346
2018	Reconstruct Taxiway	\$2,598,521
2020	CARES Act Funds	\$69,000
2021	CRRSA Act Funds	\$23,000
2021	Seal Runway Pavement Surface/Pavement Joints	\$238,790
2021	Seal Taxiway Pavement Surface/Pavement Joints	\$527,810
2021	Seal Taxiway Pavement Surface/Pavement Joints	\$177,777
2022	General ARPA	\$59,000
<b>Total:</b>		<b>\$6,955,304</b>

Source: Chehalis-Centralia Airport, 2023.

## 1.9. EMERGENCY SERVICES INVENTORY

As a small and non-towered general aviation airfield, much of the emergency services provided to CLS are not hosted on sight. Local agencies can provide emergency response services to CLS. The Airport can also support certain aviation emergency service functions by virtue of its regional location and aeronautical facilities.

### 1.9.1. Fire and Rescue

There is no active aircraft rescue and firefighting (ARFF) station at CLS due to the small-scale nature of the Airport and its operations. As such, the nearest fire and rescue response services are available through the Chehalis Fire Department which has a station on the same I-5 highway exit as the Airport. Because of the proximity to the Airport, response time can be reduced in the event of an emergency. At times there

are fire trucks stored in Building D (Fire Fighting Storage Building) at the Airport, but there are no active firefighters stationed at the Airport.

### 1.9.2. Law Enforcement

While no aerial law enforcement is based at CLS, again the Airport is capable of supporting helicopter and fixed-wing law enforcement operations. The Washington State Patrol (WSP) has an office located just off the Airport property on Louisiana Avenue. The Chehalis Police Department and Lewis County Sheriff Department are located in nearby downtown Chehalis, east of highway I-5. Both offices are no more than 5 minutes from the Airport terminal building by automobile.

### 1.9.3. Emergency Medical Services

While no air ambulance or helicopter emergency medical services are based on site at CLS, the facilities at the Airport are capable of supporting regional air ambulance services such as the Life Flight Network or Airlift Northwest which offer coverage across the region.

The nearest medical facility to the Airport is Providence Centralia Hospital, located approximately 4.5 miles north of the airfield. Because of helicopter emergency medical services in the region, service can be provided to larger regional hospitals to treat various emergency response scenarios.

## 1.10. SUMMARY

CLS a vibrant general aviation airport, with both public and pilot appreciation, located adjacent to the towns of Chehalis and Centralia in Lewis County, WA. The Airport serves as an asset to local businesses and the regional aviation landscape. Throughout the inventory chapter development process, Airport stakeholders, users, and local businesses were queried to identify pertinent Airport needs, issues, and desires. The input was gathered through a variety of public engagement methods such as interviews, surveys, and Master Plan Update committee (TAC and PAC) meetings. Issues identified outside of the scope of the CLS Master Plan Update, such as those regarding Airport Management or maintenance, were referred to Airport staff outside of the Master Plan Update, if appropriate.

The initial Summer/Fall 2023 Airport User Survey ([Appendix XX](#)) was returned by nine respondents. The survey identifies primary issues impacting users of the Airport. When asked to rank Master Plan Update issues that should be addressed, the respondents provided the five highest ranked priorities below.

1. Additional Box Hangars to Rent/Own
2. Improved Instrument Procedures
3. Lighting, Windssocks, and other Visual NAVAIDS
4. Self-Serve 100LL (Avgas) Fuel
5. Airport Security and/or Fencing

Data and feedback collected during the inventory chapter development process serves as the basis for analysis in the following chapters of the CLS Master Plan Update.