

1. Inventory of Existing Conditions

1.1. Introduction to Existing Conditions

The Olympia Regional Airport (OLM) in Thurston County, Washington is a hub for aviation services for the southern portion of the Seattle-Tacoma Metropolitan Area. 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 150/5070-6B). Airports such as OLM, generally endeavor through the master planning process on average every 10 years. Previous Master Plan Updates occurred in 2013 and in 1996. An Airport Layout Plan (ALP) Update was completed in 2003, which bridged the gap between the previous two Master Plan Updates over the last two and a half decades.

The FAA defines a master plan as “a comprehensive study of an airport that usually describes the short-, medium-, and long-term development plans to meet future aviation demand.” This process and the resulting documentation of a Master Plan Update guides development of infrastructure built by an airport, the FAA, and airport tenants and users. Factors and issues revolving around management, maintenance and operational issues may be recognized but not always addressed in a Master Plan Update, as the overall purpose is to guide the development of an airport over the next 20 years.



The Master Plan Update process involves investigation of the existing conditions of an airport, forecasting the future use of an airport, development of the facility requirements based on the forecasted need, and setting priorities and schedules for development. The result of the Master Plan Update culminates in a recommended phased 20-year Airport Capital Improvement Program (ACIP). The ACIP is based on the needs and requirements defined in the facility requirements and preferred alternative that will be shown on the ALP, which follows FAA planning and design standards to ensure airport development occurs in a safe manner. Airport improvements must be included on the ALP to be eligible for FAA funding.

A systematic and sequential process is utilized when creating the Master Plan Update which corresponds to the chapters of this report. This includes:

1. Inventory of existing conditions, facilities, and issues;
2. Forecast of future activity;
3. Identification of facility requirements/needs;
4. Airport development alternatives and recommended plan;

5. The Airport Layout Plan; and
6. Implementation.

The Issues, needs, alternatives, and recommendations identified within this Master Plan Update are heavily influenced by the input of a wide array of airport users and stakeholders. Formal and informal methods of providing user/stakeholder input utilized during the Master Plan Update process included:

- User interviews
- Surveys
- Presentations at stakeholder meetings – Port of Olympia
- Technical Advisory Committee (TAC) (four meetings)
- Public meetings (three meetings)

The Goals and Objectives of this OLM Master Plan Update are designed to identify the needs of the Airport and plan for continued development and sustainable growth. To achieve the desired outcome the objectives will include the following:

- Operations forecasts and fleet mix
- Analysis of existing airfield to meet current design standards and capacity
- Examine how OLM can prepare for emerging aviation technologies such as electric aircraft and alternative fuels
- ACIP
- ALP set
- Collect and submit safety critical Airport Geographic Information System (AGIS) data
- Coordinate with the HCP and analyze impacts of the HCP to future projects in the ACIP
- Evaluate the feasibility of OLM for elements associated with the Commercial Aviation Coordinating Commission (CACC)

Port of Olympia representatives for the OLM Master Plan Update Project Team include:

- Warren Hendrickson – Airport Sr. Manager / Project Owner
- Lorie Watson – Port Project Coordinator
- Taber Lee – Port Communications & Outreach

A committee, known as the TAC, was responsible for providing input and insight on technical considerations as they pertain to the Airport and related elements addressed in this Master Plan Update. The TAC was formed in consultation with OLM Airport Management and composed of key representatives of the following entities:

- Port of Olympia;
- City of Tumwater;
- Thurston County;
- FAA;

- Washington State Department of Transportation (WSDOT) – Aviation Division;
- Major Tenants/Operators/Business Owners at OLM; and
- Key community leaders.

The OLM Master Plan Update TAC Members and their organizations are detailed on **Table 1-1**.

Table 1-1: OLM Master Plan Update TAC Members

Name	Representing
Michelle Tirhi	Washington Department of Fish and Wildlife
Max Platt	WSDOT Aviation Division
Dave Ritchie	Washington Department of Natural Resources Aviation
Lt. Krista Greydanus	Washington State Patrol Aviation
James Boone	OLM Air Traffic Control Tower
Katrina Van Every	Thurston Regional Planning Council
Brad Medrud	City of Tumwater
Jeff Powell	Airport Hangar Tenant
Mike Theilen	Airport Fixed Base Operator Owner
Mike Reid	City of Olympia
Cameron Wilson	Port of Olympia Citizens Advisory Committee

Source: The Aviation Planning Group 2021.

In reviewing the Master Plan Update work product, the TAC evaluated its technical merit, while weighing the recommendations against community goals, values and needs.

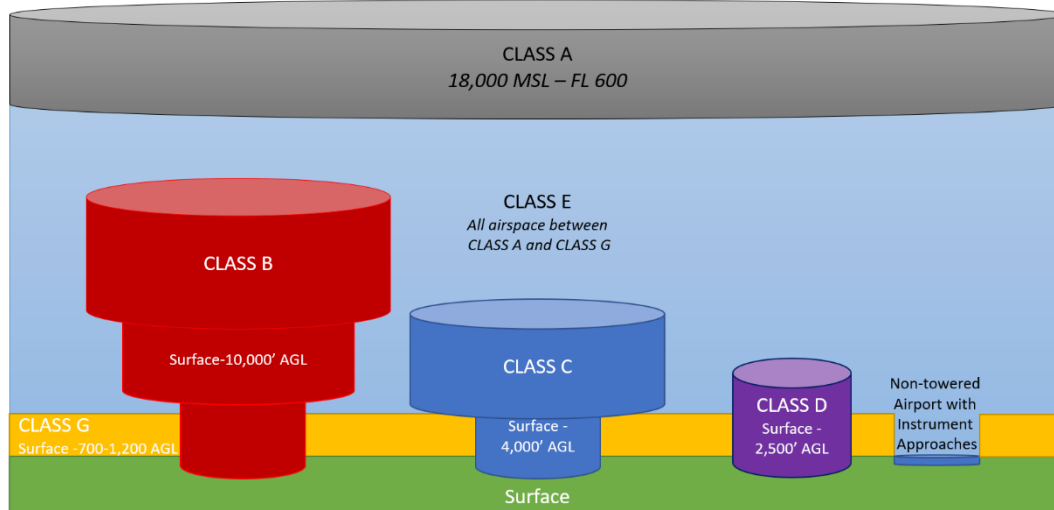
1.2. Existing Airspace and Wind Data

Located four miles south of Olympia, Washington in the City of Tumwater Urban Growth Area, OLM is south of the Seattle-Tacoma Metropolitan Area near the center of Thurston County. It is owned and operated by the Port of Olympia, which provides for the day-to-day management of the Airport. The Airport is designated as a Regional General Aviation (GA) airport in the National Plan of Integrated Airport Systems (NPIAS) by the FAA and designated as a Regional Service Airport by the WSDOT Aviation Division.

As a Regional GA airport, OLM serves the southern Seattle-Tacoma Metropolitan Area with important aviation related services such as corporate aviation, charter and sightseeing flights, aeromedical flights, recreational aviation activity, flight training, avionics maintenance, State aviation activity, aerial firefighting activity and other important aviation activity that support the Airport and the community.

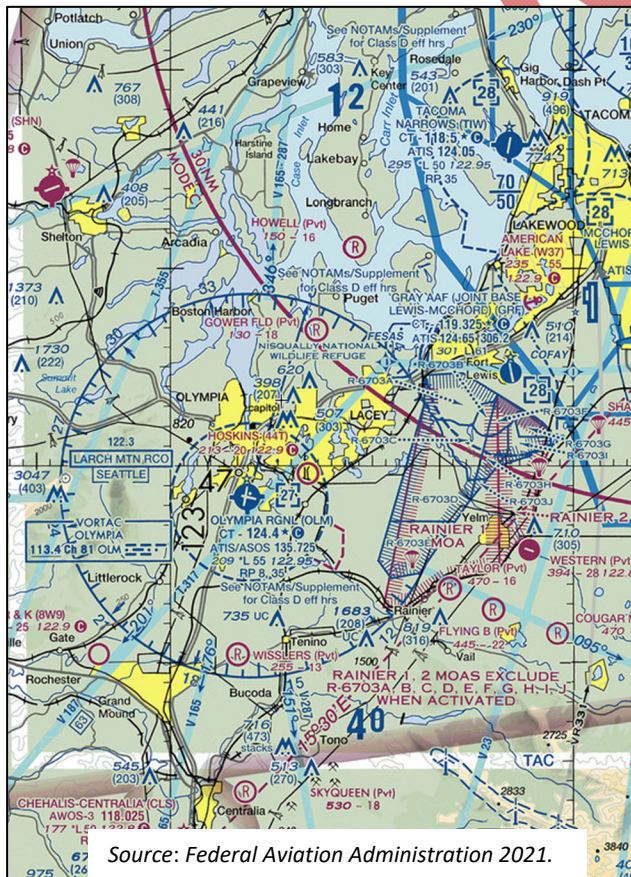
The Airport is a controlled airfield with an Air Traffic Control (ATC) tower. The purpose of a control tower at an airfield is to ensure separation of aircraft is maintained in the air and on the ground. The tower is operated from 8 AM to 8 PM daily as a contract tower through an agreement with the FAA. Airspace is depicted as either Class A, B, C, D, E, or G. The FAA’s Airspace Classification diagram, shown in **Figure 1-1** defines the types of airspace that fall within each category.

Figure 1-1: FAA Airspace Designations



Source: Federal Aviation Administration 2021.

Figure 1-2: OLM Airspace



Source: Federal Aviation Administration 2021.

OLM is a Class D airport, during the air traffic control tower hours of operation, while the Seattle-Tacoma International Airport (SEA) is a Class B. OLM's airspace (Figure 1-2) is 8 nautical miles in diameter, proceeding 4 nautical miles in every direction from the center point of the airfield, and extends from the surface up to 2,700 feet above mean seal level (MSL) or approximately 2,500 feet above ground level (AGL). Aircraft that desire to takeoff from OLM or enter into the airspace, when the tower is operational, must first contact the tower for permission and instructions.

Aircraft intending to land at OLM will either be flying VFR (Visual Flight Rules) or IFR (Instrument Flight Rules). If the aircraft is flying VFR and is not currently talking to the Air Route Traffic Control Center (ARTCC): Seattle Center, then the pilot will contact Olympia Tower on radio frequency 124.4 prior to entering the Olympia Airspace. If a pilot is flying an IFR flight plan then they will be handed off to the Olympia Tower controllers by the ARTCC for approach into OLM.

1.2.1. Existing Airport Traffic Pattern & Voluntary Noise Abatement Procedures

OLM utilizes a standard left hand traffic pattern from Runway 17 and Runway 26 while Runway 35 and Runway 8 utilize a non-standard right hand traffic pattern. This acts in part as a noise abatement procedure for neighborhoods in the area as well as provide visual line of sight from the tower to the aircraft in the pattern.

In addition to non-standard traffic patterns, the Airport has published Voluntary Noise Abatement Procedures. The current procedures were last revised in April 2013 and are as follows:

OLYMPIA AIRPORT VOLUNTARY NOISE ABATEMENT PROCEDURES

Revised April 2013

The management of Olympia Airport is committed to aircraft operating procedures which minimize noise impact on airport neighbors. Listed below are voluntary recommended procedures. The Port asks you cooperation so that further restrictions will be unnecessary.

It is understood that ATC instructions and safety considerations may at times require deviation from the suggested procedures.

Runway 8-26 has been designated as the preferred runway for noise abatement purposes and should be used when conditions permit, otherwise the following will have the least negative impact on our neighbors.

General

A. Approaches

1. Preferred landing runways are 8-26 and 35

B. Departures

1. Preferred departure runways are 8-26 and 17
2. Intersection departures are discouraged

C. High Power Engine Run-ups

Power plant maintenance testing will only be conducted on a runway, at a runway hold short, Taxiway Charlie, Taxiway Alpha or at the compass rose

Jet/turbo prop and heavy propeller aircraft

A. Standard NBAA noise abatement approach procedures should be used by jet aircraft

B. Approaches

1. Runway 17 VFR approaches fly final at or above ILS glide slope unless otherwise directed at ATC. Maintain at or above 2,000 MSL until intercepting ILS glide slope unless otherwise directed by ATC
2. Practice IFR approaches in VFR conditions
 - a. Avoid circle-to-land maneuvers west of airport

b. Missed approaches should maintain runway heading to pattern altitude unless otherwise directed by ATC

C. Departures IFR and VFR

- 1. Intersection departures are discouraged*
- 2. Climb as rapidly as practicable to 1,500' AGL unless otherwise directed by ATC*

D. Miscellaneous

- 1. Judicious use of maximum reverse propeller pitch or reverse thrust is encouraged*
- 2. No training flights between 10 p.m. and 7 a.m. local time*

Light propeller aircraft (single and twin)

A. Approaches – straight-in

- 1. Runway 17 – If possible, remain above 1200' MSL until over the golf course and above 800' MSL until over the approach lights unless otherwise directed by ATC*
- 2. Runway 35 – If possible, remain above 1200' MSL until intercepting the VASI unless otherwise directed by ATC*
- 3. Runway 8-26 – Avoid low dragged-in approaches*

B. Patterns

- 1. Hold base and crosswind legs on 17 end close-in to avoid populated area to north; left traffic 17, right traffic 35, unless otherwise directed by ATC*
- 2. Do not make close in left approaches on 35 or on west departures from 17; extend out so crosswind and base leg will not be over Scheller Park, unless otherwise directed by ATC*

Helicopters

A. Helicopter Association International (HAI) recommended noise abatement procedures for all phases of flight should be followed for individual model helicopters.

- 1. Fly no lower than 1,000 feet AGL, if possible.*
- 2. Fly on the downwind side of noise sensitive areas, if possible.*
- 3. Maintain steady flight avoiding large pedal movements.*
- 4. Fly with the noise sensitive areas on the side opposite the tail rotor.*
- 5. Fly over less sensitive areas such as highways, greenbelts or non-residential areas.*

These voluntary noise abatement procedures coupled with pilot situational awareness in the traffic pattern will aid in the overall community understanding and acceptance of the Airport and efforts made to reduce noise in and around the Airport. It is understood that there is a certain level of noise associated with every airport, and these efforts show a commitment to working and operating within the community in a cohesive nature.

1.2.2. Wind Data

The wind data is collected and reported by the Automated Surface Observing System (ASOS) located to the west of Runway 17 and North of Runway 8. Users of the Airport can access the ASOS information on the aviation frequency 135.725 or also by calling (360) 754-0781. The information reported by the ASOS

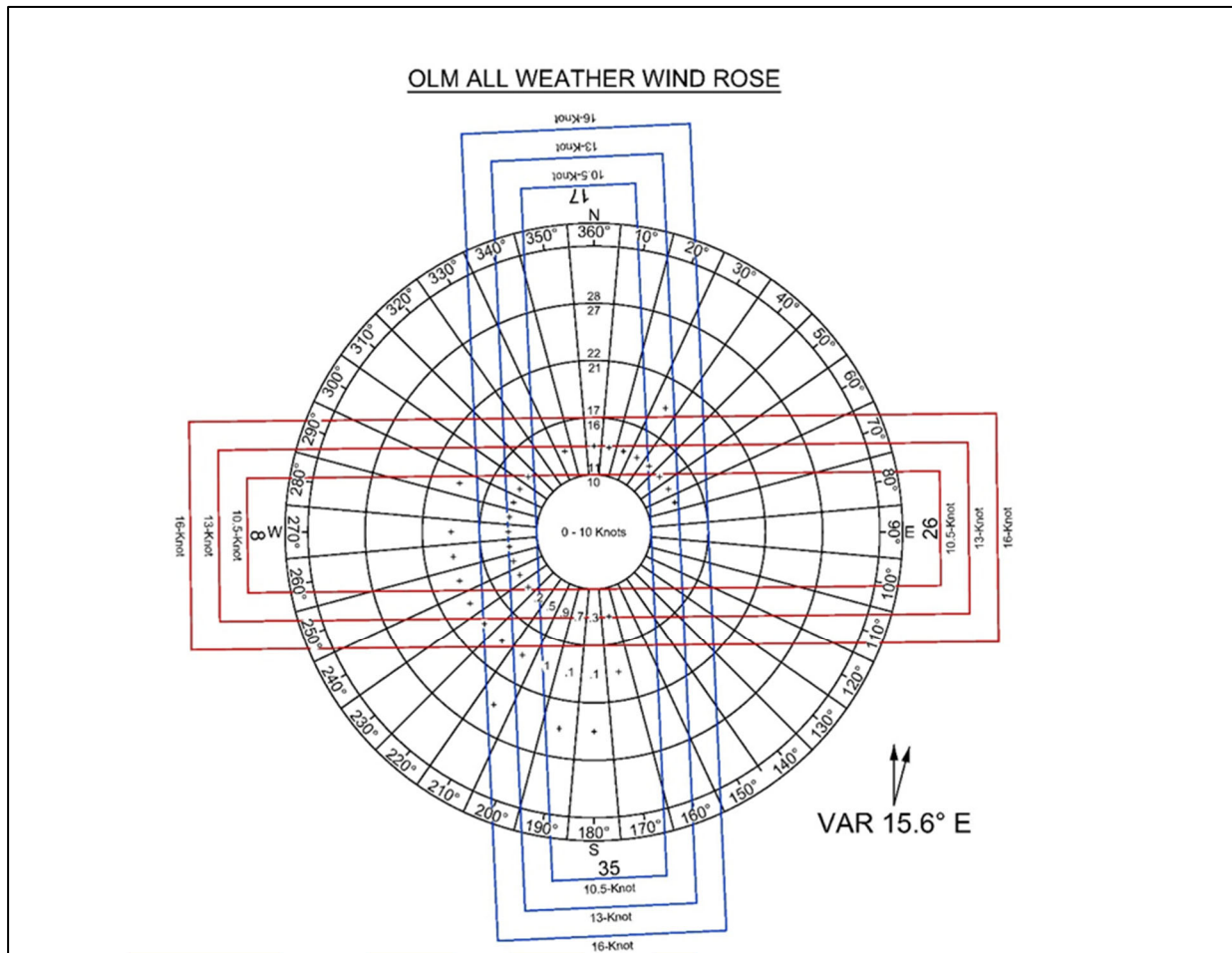
such as wind speed and direction are collected and maintained within the FAA’s Airport Data and Information Portal (ADIP). The ADIP data and analysis tools provides a detailed visual depiction of the historical wind conditions that have been observed at OLM over the previous 10 years (2011-2020). This information is provided in the form of percentages of usability of a certain runway or combination of runways with consideration given for selected crosswind limitations. The FAA desires a 95% wind coverage for a primary runway. As the wind analysis table (**Table 1-2**) and wind rose (**Figure 1-3**) indicate, OLM exceeds a 95% wind coverage with the primary runway due to the limited number of excessive wind occurrences for the region. The crosswind runway is a valuable asset for the Airport as it is a large training airfield with multiple flight schools, as well as providing increased ATC controller options to aid in shorter ground times and operational availability.

Table 1-2: OLM Wind Data

Runway	10.5 Knots	13 Knots	16 Knots
17/35	97.75%	98.98%	99.88%
8/26	94.58%	97.13%	99.27%
Combined	99.76%	99.99%	99.99%
Coverage	10.5 Knots	13 Knots	16 Knots
17	85.89%	86.11%	86.18%
35	72.20%	72.24%	72.26%
Combined	99.63%	99.88%	99.98%

Source: FAA Airport Data and Information Portal 2021.

Figure 1-3: OLM Wind Rose



Source: FAA Airport Data and Information Portal 2021.

1.3. Airside Facilities

OLM is a flourishing and active airfield with a primary and crosswind runway, extensive taxiway infrastructure, with a growing landside that includes businesses for flight training, maintenance, avionics, and fixed base operations. The airport reference point is located at 46-58-09.8560N LAT and 122-54-09.1610W LONG at an elevation of 207.8 feet above sea level (ASL) on approximately 845 acres.

1.3.1. Runways

The runways at OLM are constructed of asphalt and are designated as either a primary runway or a crosswind runway. The primary runway for the Airport is the longest runway and also is aligned with the most favorable wind conditions for the Airport. This runway is designated as Runway 17/35 with a length of 5,500 feet and a width of 150 feet. The primary runway has a grooved surface to aid in water displacement during rain events and has four instrument approaches, to include an Instrument Landing System (ILS) approach for Runway 17 with a localizer located off of the end of Runway 35.

Traffic patterns for Runway 17/35 are designed to keep traffic over the east side of the Airport, with Runway 35 having a non-standard right hand traffic pattern designation and Runway 17 maintaining a standard left hand traffic pattern.

Runway edge lighting for the primary runway is composed of High Intensity Runway Lights (HIRLs) that are controlled by the ATC tower staff during ATC operational hours, and pilot controlled during non-ATC hours of operations through the Common Traffic Advisory Frequency (CTAF). In addition to runway edge lighting, visual aids include Precision Approach Path Indicators (PAPIs) located on the left-hand side of each runway that are set up in a four-box configuration. Visual aids for the ILS approach for Runway 17 also include a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR).

The markings for the runway are in conformance with the approaches afforded to the primary runway. The markings for Runway 17 are that of Precision instrument runway markings, while the markings for Runway 35 are that of non-precision instrument markings.

The crosswind runway is designated as Runway 8/26 and is the shorter of the two runways at 4,157 feet in length and a width of 150 feet. This runway is a direct crosswind runway for Runway 17/35 and is ideal for use when a crosswind is present on the primary runway. This runway is intended for use by aircraft with a single wheel axle aircraft that has a weight less than 30,000 pounds. Runway 8/26 has basic runway markings and no edge lights; therefore, it is for visual approach operations only. Similar to Runway 17/35, the crosswind runway has a right-hand traffic pattern for Runway 8 and a standard left hand traffic pattern for Runway 26, which keeps aircraft activity to the south side of the Airport.

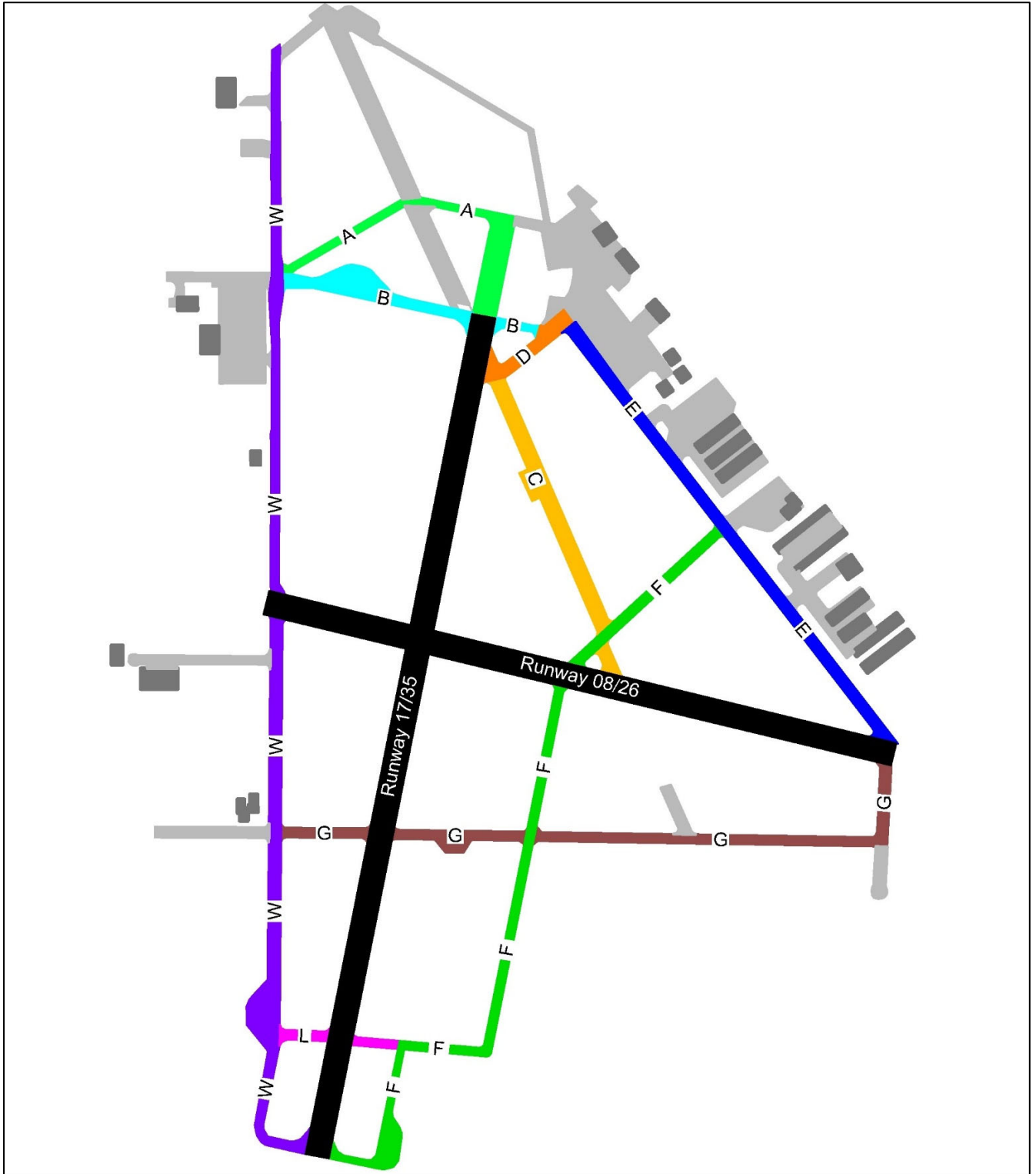
No major construction projects on the runway have occurred since the last Master Plan Update, though the runway will need to be re-numbered to show the proper magnetic heading, as this is occurring over time due to magnetic shift.

1.3.2. Taxiways

Accessing the runways from the hangar areas and aprons at OLM is done via taxiways. The taxiway system at OLM is extensive, providing access to all areas of the Airport through the network of taxiways.

Figure 1-4 illustrates the locations of OLM's taxiways.

Figure 1-4: OLM Taxiway System



Source: The Aviation Planning Group 2021.

The following provides additional details on the taxiways currently utilized at the Airport:

- **Taxiway A** – Taxiway “Alpha” is on the north end of the airfield connecting Taxiway W to Runway 17. At 50 feet in width, this taxiway is lit to provide ease of access to the west side of the airfield from Runway 17/35.
- **Taxiway B** – Taxiway “Bravo” connects the west side of the Airport with the east side of the Airport on the north end of the airfield. This taxiway is a 50-foot-wide lighted taxiway that crosses Runway 17/35 on the north end.
- **Taxiway C** – Taxiway “Charlie” is a 35-foot-wide connector taxiway that connects Runway 17/35 on the north end to Runway 8/26 on the East end. This taxiway provides access to the compass rose and is also used for helicopter operations and training. This taxiway utilizes reflectors for taxiway edge marking.
- **Taxiway D** – Taxiway “Delta” is a 40-foot wide, un-lit taxiway marked with edge reflectors. This connector taxiway connects the north end of the east side of the Airport with Taxiway C as well as provides access to Runway 17/35 on the north end.
- **Taxiway E** – Taxiway “Echo” is 50 feet in width on the northwest end and 35 feet in width on the southeast end, using Taxiway F as the dividing point. It parallels the east side aprons, and provides access to the north end of Runway 17/35 and the east end of Runway 8/26. The width difference on the south end of Taxiway E is associated with the aircraft requirements that utilize the crosswind runway, and the weight bearing capacity is limited to that of the crosswind runway on that end of the Taxiway as well. This taxiway does not have lighting, but is marked with reflector edge markers. Taxiways B/D/F/G connect with Taxiway E to provide access across the airfield.
- **Taxiway F** – Taxiway “Foxtrot” is 35 feet in width, and is a non-standard partial parallel for Runway 17/35 from the runway intersection point to the previous runway end of Runway 17/35. In 2005 the Runway Shift and Safety Improvement project was undertaken shifting the runway south by 758 feet. As a result of a threshold relocation, taxiway F was extended as a true partial parallel to the Runway 35 end. Taxiway F is unlighted and crosses Runway 8/26 at the near midpoint and connects to Taxiway E for east side access.
- **Taxiway G** – Taxiway “Golf” is a 50-foot wide, non-lighted taxiway, that utilizes reflectors for edge marking. Taxiway G is a non-standard parallel taxiway for Runway 8/26, which connects Taxiway W with Runway 26 and crosses Runway 17/35 and Taxiway F.
- **Taxiway L** – Taxiway “Lima” is a connector taxiway, which connects Runway 17/35 to taxiway W and Taxiway F. This taxiway is 50 feet wide and is lighted on the west side that connects with Taxiway W. The east side connector is marked with reflector edge markings to connect with Taxiway F.
- **Taxiway W** – Taxiway “Whiskey” is a lighted taxiway that is 50 feet in width and provides access to the west side of the Airport as a non-standard parallel taxiway for Runway 17/35. Runway 8 is directly accessible from this taxiway.

1.3.3. Pavement Condition and Strength

1.3.3.1. Pavement Strength

The airfield pavement has been constructed to various weightbearing capacity to accommodate aircraft weights in the configurations of single wheel axles, double wheel axles, and double tandem wheel axles. **Table 1-3** depicts the weightbearing capacity for runways, taxiways, and apron pavement at the airport. The data source is a pavement strength survey provided by OLM. If data was not available for a specific pavement or pavement strength it is not included in the table.

Table 1-3: OLM Pavement Strength

Pavement	Pavement Strength (lbs)		
	Single Wheel Axle	Double Wheel Axle	Double Tandem Wheel Axle
Runways			
Runway 17/35	75,000	94,000	142,000
Runway 08/26	30,000		
Taxiways			
Taxiway W	30,000		
Taxiway G (East of Twy W)	30,000		
Taxiway G (West of Twy W)		60,000	
Taxiway E (North of Twy F to Sector A4)			
Taxiway E (South of Twy F)			
Taxiway E (North of Sector A4)	30,000		
Taxiway A	107,000	142,000	240,000
Taxiway D	107,000	142,000	240,000
Taxiway F (Between Twy C & Twy E)		94,000	
Taxiway F (Between Twy C & Twy L)	30,000	60,000	
Taxiway B	75,000	94,000	142,000
Taxiway C	30,000		
Closed Taxiway (Between displaced threshold and apron)	43,000	50,000	85,000
Displaced Threshold (Runway 17)	75,000	94,000	142,000
Taxiway Stub (Sector T7)	12,500		
Apron			
North Apron	30,000		
WSDOT Apron	107,000	142,000	240,000
WSDOT Apron Entrance		94,000	
Run-up Area (Twy W South)	107,000	142,000	240,000
T-Hangars A, B, C Area Apron	12,500		
Safety in Motion (FBO) Apron		60,000	

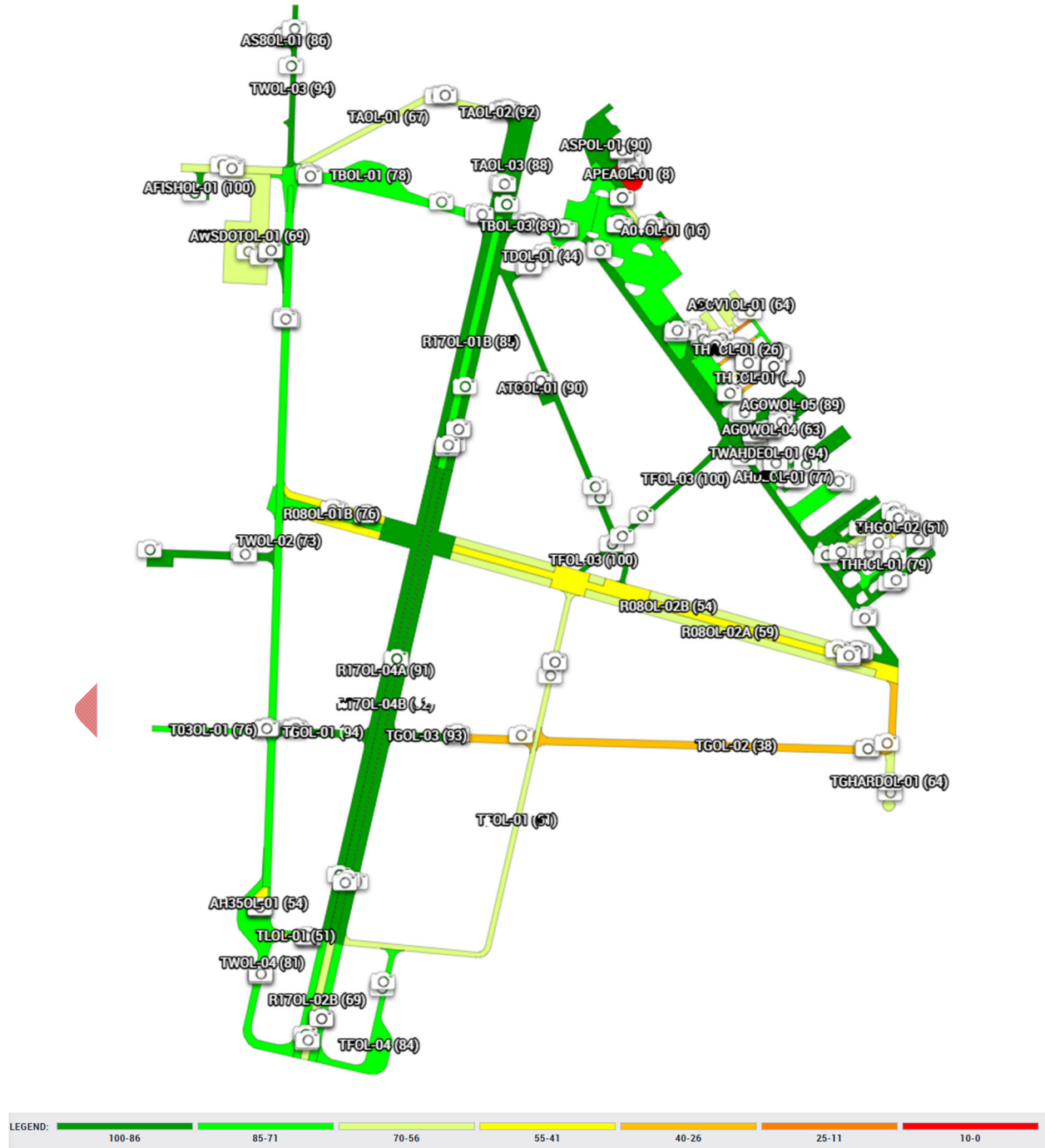
Source: Olympia Regional Airport, Pavement Strength Survey 2021.

1.3.3.2. Pavement Condition

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 OLM is depicted on **Figure 1-5** and **Table 1-4**.

Figure 1-5: OLM PCI Map



Source: Washington Airport Pavement Management 2021.

Table 1-4: OLM PCI Data, 2018

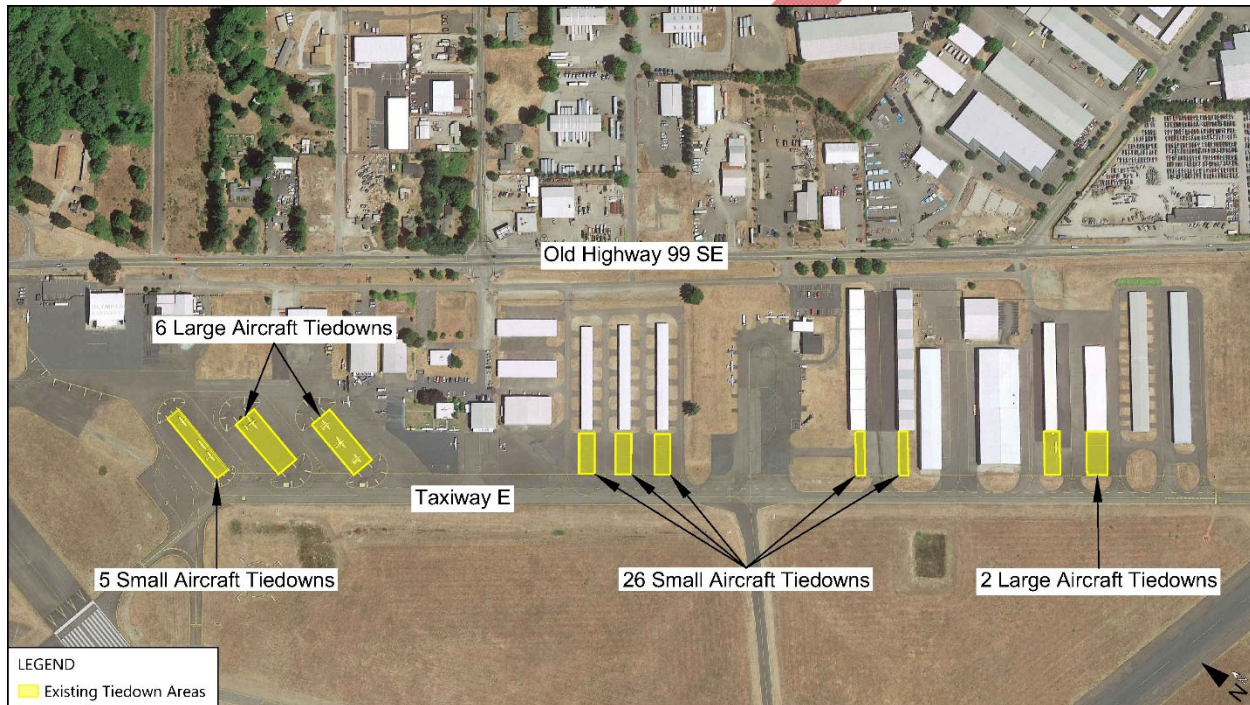
Branch ID	Branch Name	2018	2019	2020	2021	2022	2023	2024	2025
A01OL	APRON 01	46	45	44	43	42	41	39	38
ACOV1OL	APRON COV PARK 1	72	71	70	69	68	67	66	65
AFISHOL	APRON FISHERIES	100	100	99	99	98	98	97	96
AGOWOL	APRON GOWAN	82	81	80	79	78	77	76	75
AH35OL	RUNWAY 35 HOLD APRON	54	53	52	51	50	49	48	47
AHABCOL	APRON HANGAR ABC	71	70	69	68	67	66	65	64
AHDEOL	APRON HANGAR DE	91	91	90	90	89	88	87	86
AHFGHOL	APRON HANGAR FGH	88	87	86	85	84	83	82	81
APEAOL	APRON PEARSON	8	7	6	5	4	3	2	0
AS8OL	APRON SUPER 8	86	85	84	83	82	81	80	79
ASPOL	APRON ST. PATROL	90	89	88	87	86	85	84	83
ATCOL	APRON HOLD PAD TWY C	90	89	88	87	86	85	84	83
ATRANSOL	TRANSIENT APRON	78	77	76	75	74	73	72	71
AWSDOTOL	WSDOT APRON	72	71	70	69	68	67	66	64
R08OL	RUNWAY 8-26	58	57	56	55	54	53	52	51
R17OL	RUNWAY 17-35	88	87	86	85	84	83	82	81
T03OL	TAXIWAY 03	76	75	74	74	73	72	71	70
TAOL	TAXIWAY A	82	81	80	80	79	78	77	76
TBOL	TAXIWAY B	81	80	79	78	77	76	75	74
TCOL	TAXIWAY C	94	93	92	91	90	90	89	88
TCOVOL	TAXIWAY COV PARK	19	18	17	16	15	15	14	13
TDOL	TAXIWAY D	44	43	42	41	40	40	39	38
TEOL	TAXIWAY E	92	91	90	89	89	88	87	86
TFOL	TAXIWAY F	76	75	74	73	72	71	70	69
TGHARDOL	TAXIWAY G HARDSTANDS	64	63	62	61	60	60	59	58
TGOL	TAXIWAY G	53	52	51	50	49	48	47	46
TH1OL	TAXIWAY HANGAR 01	83	82	81	80	78	77	76	75
THABCOL	TAXIWAY HANGAR ABC	81	80	79	78	76	75	74	73
THAOL	TAXIWAY HANGAR A	26	25	25	24	23	23	22	21
THBOL	TAXIWAY HANGAR B	45	44	44	43	42	42	41	40
THCOL	TAXIWAY HANGAR C	33	32	32	31	30	30	29	28
THFOL	TAXIWAY HANGAR F	100	99	97	96	95	93	92	91
THGOL	TAXIWAY HANGAR G	73	72	71	70	69	68	67	66
THHOL	TAXIWAY HANGAR H	79	78	77	76	75	73	72	71
THIOL	T-HANGAR I	90	89	88	86	85	84	83	81
TLOL	TAXIWAY L	51	50	49	48	47	47	46	45
TSOLOYOL	SOLOY RAMP	91	90	89	88	87	87	86	85
TWAHDEOL	TAXIWAY An HDE	94	93	92	91	90	90	89	88
TWOL	TAXIWAY W	78	77	76	75	74	73	72	71
TWSDOTOL	TAXIWAY TO WSDOT BLDG	67	66	65	65	64	63	62	61

Source: Washington Airport Pavement Management 2021.

1.3.4. Aircraft Parking

Many aircraft that are traveling through the Airport will utilize either of the two Fixed Base Operator (FBO) parking aprons. Long term parking for aircraft is available at the north end of the aprons on the east side of the airfield along Taxiway E. There are currently five small aircraft and six large aircraft tiedowns available on the north end, with an additional 26 small aircraft tiedowns and two large aircraft tiedown parking spaces along the hangar rows on the south end of Taxiway E that are available for tenants and users of the Airport (**Figure 1-6**).

Figure 1-6: OLM Tie-Down Locations



Source: The Aviation Planning Group 2021.

1.3.5. Navigational Aids

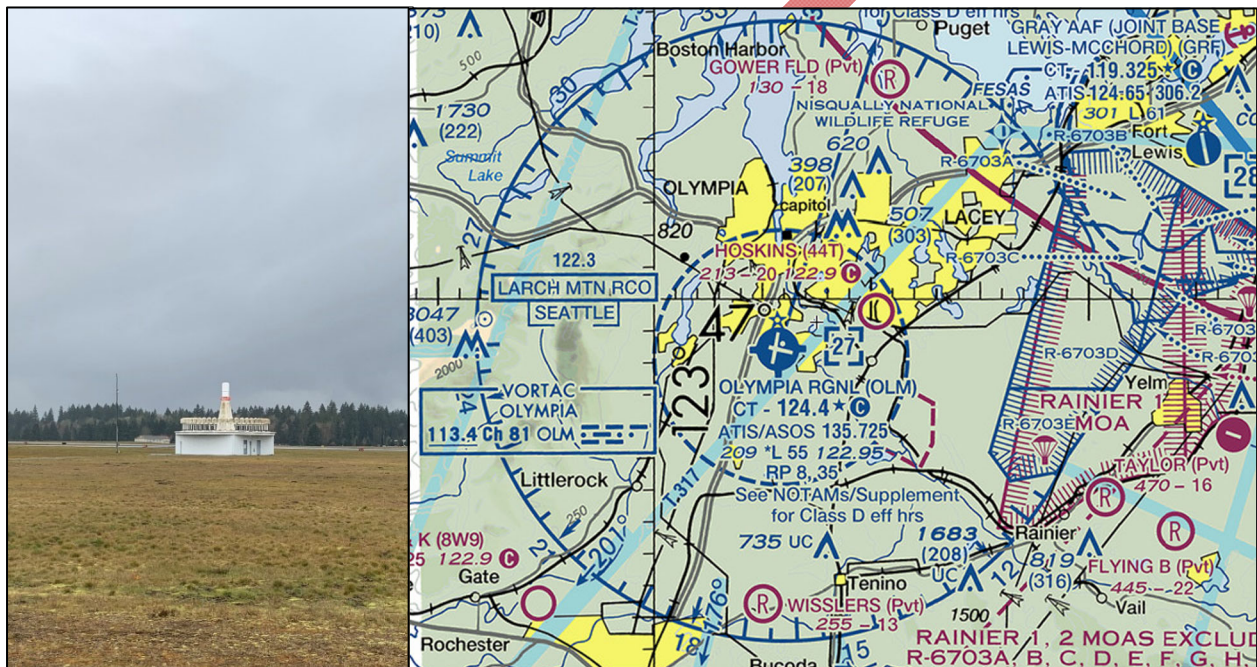
Navigational Aids (NAVAIDS) are tools utilized by pilots for the purpose of aerial navigation to or from a location all across the nation. NAVAIDS on the airfield, and within the region, are utilized by pilots traveling to, from and nearby OLM.

1.3.5.1. VORTAC

A critical navigational asset located on the airfield is the VORTAC (Very High Frequency Omnidirectional Range/Tactical Air Navigation). The primal element of a VORTAC is the VOR (Very High Frequency Omnidirectional Range) which are dispersed across the nation for aerial navigation and can be followed, creating roadways in the air from one VOR to the next. A VOR sends out a signal from a centralized point of the VOR outward in a 360-degree array utilizing the standard compass headings. A VOR is very helpful to pilots when flying on instruments and during visual navigation to locate one's exact position when needed through triangulation with multiple VORs. The VORTAC at OLM (**Figure 1-7**) has enhanced

capabilities beyond a basic VOR. Similar to a VOR/DME (Very High Frequency Omnidirectional Range with Distance Measuring Equipment), a VORTAC has the ability to measure the distance an aircraft is from the VOR and reporting it to the pilot in nautical miles when capable of receiving that information to both military and civilian aircraft. This tool is very helpful as it allows the pilot to know exactly how far and what direction they are from the VORTAC location, which happens to be located on the airfield. Military aircraft in the area that are operating to and from Joint Base Lewis McChord can utilize this NAVAID for their operations as well, which provides an important service to the area.

Figure 1-7: OLM VORTAC



Source: Federal Aviation Administration 2021.

1.3.5.2. NDBs

A Non-Directional Beacon (NDB) is a navigational aid for pilots that provides a signal that is transmitted in all directions. When an aircraft is equipped with ADF (Automatic Direction Finding) equipment, the pilot can tune the signal of the particular NDB within range and fly directly to it. NDBs in the area that are available for aerial navigation can be found in **Table 1-5**.

Table 1-5: Regional NDBs

NDB Name	ID	Frequency (KHz)	Distance from OLM in Nautical Miles
Lacomas	LAC	328	14.4 E/NE
Graye	GR	216	16.3 NE
Mason County	MNC	348	18.3 NW
Carney	CAN	274	26.6 N
Kitsap	PWT	206	31.9 N/NE
Dondo	ODD	224	33.9 NE

Source: Olympia Regional Airport Master Plan Update 2013.

1.3.5.3. Visual NAVAIDs

Visual navigational aids provide pilots with standardized reference points when landing or maneuvering around an airfield. OLM has several visual NAVAIDs that are expected at similar sized airports. A rotating beacon that shines a green light and a white light 180 degrees apart from one another is located on the air traffic control tower at the Airport. The beacon assists pilots in locating the airfield from the air and is operational at night and during IFR conditions. A primary wind cone is located within the segmented circle west of the north end of Taxiway E. Secondary lighted wind cones are located at the south end of Runway 17/35 near Taxiway W and the runup area and on the west end of runway 8/26 near the south end of Taxiway E. In addition to visual cues from the wind cones for wind direction, an ASOS is located west of Runway 17/35 and north of runway 8/26 to provide audible real time weather conditions and wind speed/direction on radio frequency 135.725 or by calling (360) 754-0781. Additional aids for pilots include PAPIs located on Runway 17/35 to provide lighted reference cues for the approach path, and a MALSR (Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights) for the approach end of Runway 17, which is a set of lights in the runway approach zone that precedes the runway centerline before the runway threshold (**Figure 1-8**). A compass rose is located on Taxiway C and is available to operationally check and align the aircraft compass when needed. The locations of OLM’s visual NAVAIDs are shown on **Figure 1-9**.

Figure 1-8: Runway 17 MALSR



Source: The Aviation Planning Group 2021.

Figure 1-9: OLM Visual NAVAIDS



Source: The Aviation Planning Group 2021.

1.3.5.4. Instrument Approaches

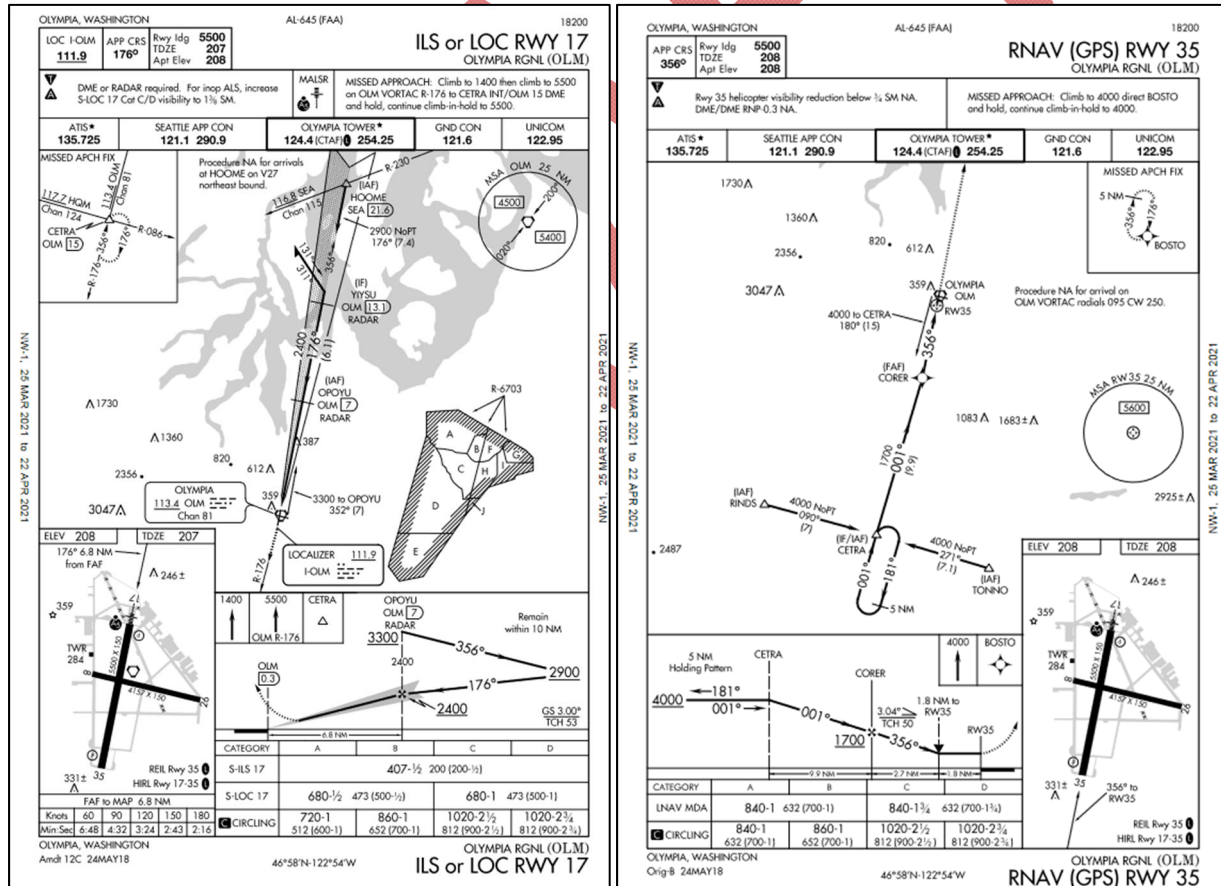
The Airport has three types of approaches (ILS, RNAV (GPS) – Area Navigation; and VOR – Very High Frequency Omni-directional Range) available for aircraft that allow aircraft to land at the Airport during IFR conditions as well as for training purposes and currency requirements. The five existing instrument approach procedures into OLM and their associated minimum operating capabilities are shown in **Table 1-6** and **Figure 1-10**.

Table 1-6: Instrument Approaches into OLM

Approach Name	Approach Type	Runway	Minimum	
			Ceiling (AGL)	Visibility
ILS OR LOC RWY 17	ILS	17	200 feet	1/2 mile
RNAV (GPS) RWY 17	GPS (LPV)	17	200 feet	1/2 mile
RNAV (GPS) RWY 35	GPS	35	700 feet	1 mile (Category A/B), 1-3/4 Mile (Category C/D)
VOR-A	VOR/DME Circling	17	700 feet (Category A/B), 900 feet (Category C/D)	1 mile (Category A/B), 2-1/2 Mile (Category C), 2-3/4 Mile (Category D)
VOR RWY 35	VOR/DME	35	700 feet	1 mile (Category A/B), 1-3/4 Mile (Category C/D)

Source: FAA Terminal Area Procedures 2021.

Figure 1-10: Approach Plates- ILS or LOC RWY 17 and RNAV(GPS) RWY 35



Source: FAA Terminal Area Procedures 2021.

1.4. Landside Facilities

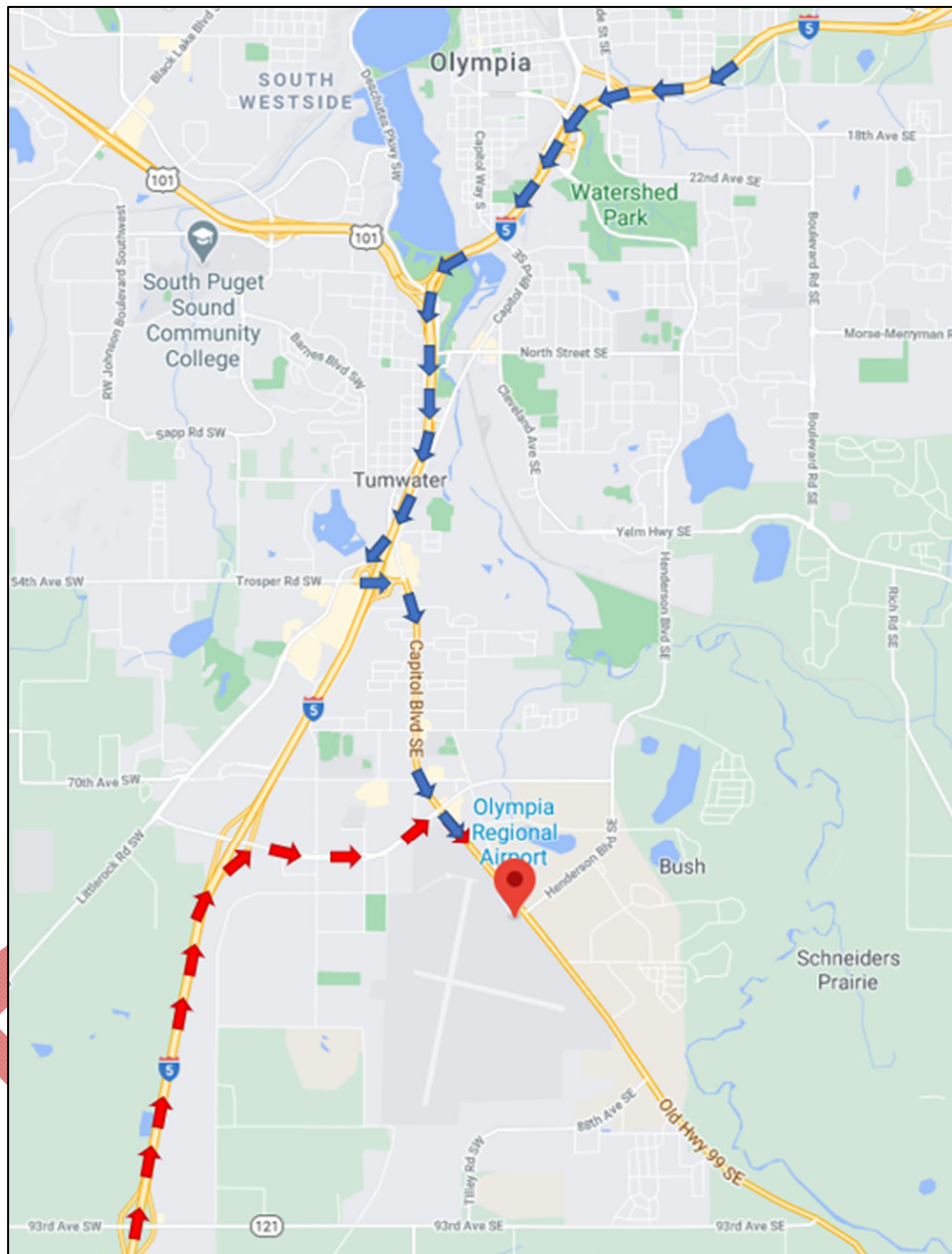
Development on the Airport is primarily concentrated to the northeast side of the airfield along Old Highway 99 SE. Much of the businesses, fuel storage, fixed base operators, administration buildings, transient aprons, and hangars are located within the eastside of the Airport's development area. The state utilizes aviation facilities on both the east and west side, with the Washington State Patrol (WSP) Air Operation facilities located on the east side of the Airport, and the WSDOT Aviation Division offices located on the west side of the airfield. The air traffic control tower is also located on the west side of the airfield along with other industrial type businesses and developments.

1.4.1. Landside Access

The Airport is located within the City of Tumwater which is south of the City of Olympia (**Figure 1-11**). Access to the Airport is predominantly achieved via Interstate 5 (I-5) which runs north and south along the west coast of the United States approximately 50-75 miles inland. I-5 connects the area with the Seattle-Tacoma Metropolitan Area as well as coastal travel through Oregon and California. Vehicular traffic accessing the Airport from the north (Seattle-Tacoma Metropolitan Area) will use I-5 and take exit 102 to Trospen Rd SW to continue south on Capitol Boulevard SE/Old Highway 99 SE. From the south on I-5, exit 101 will provide expedited travel on Tumwater Boulevard to Old Highway 99 SE to gain access to the Airport. Situated just over a mile from I-5, vehicle access is unhindered and advantageous to the users of OLM either heading to the Airport or arriving at the Airport for business in the region.

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Figure 1-11: Vehicle Access to OLM



Source: Google Maps 2021.

1.4.1.1. Vehicle Parking Facilities

Vehicle parking at OLM is generally associated with the purpose of one’s visit to the Airport. Public parking is available near the Airport Administration Building that can be utilized at no charge for individuals visiting OLM on a short-term basis. There are 13 public use parking spaces located between the Airport Administration Building and Old Highway 99 SE immediately north of the Airport entrance off Old Highway 99 SE. Additionally, each business tenant has private parking available for their uses and for their patrons. Surface parking at OLM is depicted on **Figure 1-12**.

Figure 1-12: Vehicle Parking Facilities on the East Side of OLM



Source: The Aviation Planning Group 2021.

1.4.1.2. On-Airport Roadways

Roadways on the Airport are generally limited to the landside hangar access roadways. The primary east side landside roadway is the hangar access road that parallels the west side of Old Highway 99 SE. This access road enters onto the Airport property at four points along Old Highway 99 SE. From north to south the access points are at 1. the WSP hangar and aircraft maintenance hangar, 2.) the Airport Administration Building, 3.) FBO Safety in Motion, and 4.) at the far south end of the hangar access road. On the west side of the Airport, access is achieved directly off of Terminal St. SW. Once on the airfield, roadways are limited to taxiway travel for service vehicles and vehicle access to respective points (ex: ASOS, VORTAC, airfield lighting) with unpaved access paths.

1.4.2. Fixed Base Operator Facilities

Businesses on the east side of OLM are accessible along Taxiway E, and are intermixed throughout the apron network off of the taxiway. Two FBOs operate at OLM primarily providing flight training, pilot services, fuel and transient parking. Fuel is stored on the north end of the Airport with each respective FBO operating fuel tanks that they own on infrastructure leased to each business by the Airport. FBOs utilize fuel trucks, that they fill at the fuel farm on the north end of the airfield, to dispense fuel into aircraft. The two FBOs that operate at OLM are:

- Glacier Aviation utilizes four 12,000-gallon fuel tanks in the fuel farm, two for Jet-A and two for 100LL fuel. To fuel aircraft the FBO then uses two Jet-A fuel trucks (3,000 gallon and 2,000 gallon) and two 100LL trucks (750 gallon each). Glacier Aviation has a strong focus on helicopter

training, and they currently operate a fleet of Robinson R22's and R44's. On average there are around 70-80 students actively training through the FBO at any given time. In addition to the FBO's main building they also have additional hangars that are utilized for aircraft storage and aeromedical purposes.

- Safety in Motion is a flight center that provides flight training, fuel, and transient parking. Their flight training consists of fixed wing aircraft that include Cessna 172s, a Cessna 150, Cessna 340 and a King Air. On average there are 50 students actively training through the flight center. The FBO uses two fuel tanks at the fuel farm on the north end of the airfield (one 10,000-gallon Jet-A and one 10,000-gallon 100LL). Fuel is transported from the fuel farm and ready to be dispensed into aircraft through a Jet-A fuel truck (5,000 gallon) and two 100LL trucks (1,000 gallon and 1,200 gallon). The main FBO has hangar space available in it and they also utilize two other hangar structures for housing their flight school aircraft and transient aircraft needing overnight hangars.

Aircraft parking at each facility is identified in the **Figure 1-13**.

Figure 1-13: FBO Aircraft Parking



Source: The Aviation Planning Group 2021.

1.4.3. Support Facilities

1.4.3.1. Equipment Storage Buildings

Airport maintenance equipment is stored under the western side of the western planeport. This section of the planeport was no longer usable for aircraft due to the hangar that was constructed immediately west of the planeports. Without having proper taxiway safety clearances for aircraft, the area has become an asset for equipment storage. Though it is not fully enclosed, the covering protects the equipment from the sun, rain, and most weather events observed at OLM. The primary equipment owned and operated by the Airport are mowers and tractors. Equipment currently maintained on the Airport are detailed in **Table 1-7**.

Table 1-7: OLM Equipment

Type	Description	Year
Vehicles	Federal Lamplighter Bucket Truck	1985
	Ford F350XL Pickup	2005
	Dodge Ram Pickup S35/CB (Airport Maintenance)	2012
	Ford F650 w/Snow Plow	2006
	Chevrolet Silverado 4WD	2003
	Dodge Ram 3500	2016
Equipment	RY10 PRO Crack Seal Machine	2020
	Powerliner 4955 2-gun Paint Striper	2020
	FOD Boss Sweeper	2001
	Utility Trailer 4700	1994
	Utility Trailer	1998
	De-icing sprayer w/Honda GX160 engine	2020
	John Deere Gator XUV590E	2021
Mowers	Tiger Flail Mower T3F282C	2003
	Kubota Mower G2160-60	2002
	Kubota Tractor M9000DTC w/boom mower assembly	2002
	Toro Z Master 580D, 25 hp Kubota Diesel Mower	2014
	John Deere 7594 Cab Tractor	2012
	John Deere Z994R Zero Turn Mower w/72" deck	2020
	John Deere 5090M Cab Tractor & Alamo Interstater Mower	2019
	Interstater 21 ES-DW Mower Attachment	2012

Source: Olympia Regional Airport 2024.

1.4.3.2. Air Traffic Control Tower

The most prominent and recognizable structure on the west side of the Airport is the control tower (Figure 1-14). The ATC tower is located in the northwest portion of the airfield just north of Runway 8 on Taxiway W. The tower is part of the Federal Contract Tower Program and is staffed 12 hours (8AM-8PM) seven days per week as a VFR facility, meaning that the tower can handle both VFR and IFR traffic but

they have to relay IFR clearances to instrument pilots rather than issuing clearances. During operational hours traffic contact the tower on the following radio frequencies: 124.4 (Olympia Tower) and 121.6 (Olympia Ground). During hours when the tower is non-operational aircraft continue to utilize radio frequency 121.4 as the CTAF.

Figure 1-14: OLM Air Traffic Control Tower



Source: The Aviation Planning Group 2021.

1.4.3.3. Passenger Terminal Building

The existing passenger terminal building is located along Taxiway W near the intersection of Taxiway W and Taxiway B on the northwest side of the Airport. The building is not being utilized as a passenger terminal building at this time. Commercial service is not currently operating at OLM, and the structure has been refurbished for use as office buildings for the WSDOT – Aviation Division. The facility was constructed in 1993 prior to the TSA screening requirements that were put in place after the terrorist attacks in 2001 in New York City. The facility does not have the room or capacity in the existing building to properly manage passenger flows with TSA.

1.4.3.4. Fuel Storage Area

In 1996 the underground fuel storage facilities at the Airport were removed and an above ground fuel storage area capable of containing 96,000-gallons of fuel was established. The fuel storage area for the Airport is located west of the approach for Runway 17 near the intersection of Tumwater Boulevard and Old Highway 99 SE (**Figure 1-15**). The storage area is shared by both FBOs on the airfield. Each FBO provides their own tanks to be placed on infrastructure owned by the Airport for containment. The facility has a capacity of eight individual fuel tanks, of which six are in use. Glacier Aviation currently utilizes four spaces with four 12,000-gallon tanks (two for Jet-A and two for 100LL), and Safety in Motion occupies two spaces (one 10,000-gallon Jet-A and one 10,000-gallon 100LL). The remaining two spaces are vacant and able to be used by any existing or future FBO when desired. The FBOs use the area in agreement with the Airport and pay a fuel flow fee of \$0.07 per gallon delivered to the Airport. Annual fuel sales at OLM are detailed in **Table 1-8**.

Figure 1-15: OLM Fuel Storage Area



Source: The Aviation Planning Group 2021.

Table 1-8: 10-Year Fuel Delivery History at OLM

Year	Jet A Gallons	100LL Gallons	Total Gallons
2010	231,184	99,079	330,263
2011	197,930	87,538	285,468
2012	205,453	87,867	293,320
2013	199,120	66,665	265,785
2014	189,684	76,202	265,886
2015	196,714	56,533	253,247
2016	218,684	78,502	297,186
2017	215,502	77,437	292,939
2018	221,901	99,419	321,320
2019	186,439	118,923	305,362
2020	182,154	106,053	288,207

Source: Olympia Regional Airport 2021.

1.4.3.5. Aviation Maintenance

The FBOs perform maintenance on their own aircraft and minor maintenance assistance for aircraft at OLM. There is currently discussion for the addition of a maintenance facility to become based at OLM in the near future.

1.4.3.6. Airport Administration Building

Port of Olympia employees that manage and take care of OLM are headquartered in the Airport Administration Building located on the east side of the Airport. The building is a single-story structure located off of the public parking area near the intersection of Old Highway 99 SE and Henderson Boulevard SE. The building houses administration and Airport Management offices, conference room, restrooms, and records storage.

1.4.3.7. Hangars

Aircraft storage is an essential part of an airport's function to ensure that tenants and itinerant users are able to keep their aircraft out of the elements when not in use. The Airport is currently at 100% occupancy for existing hangars. There is a robust hangar waiting list due to a hold on additional hangar development until NEPA requirements have been met and the Habitat Conservation Plan has been approved.

Hangars at OLM are either owned and operated by the Port of Olympia, owned by the Port and leased to a business or person, or owned by the tenant on leased land by the Port. There are currently 28 hangar structures on the airfield, of which 10 are T-hangar/multi-unit structures and two planeports. The Airport owns and operates seven T-hangars and the two planeport structures. As of spring 2021, eight hangars are operated by the Port, three hangars are leased from the Port and there are 15 hangar land leases at the Airport, where individuals and businesses have built hangars on the leased land. Hangars and other OLM buildings is detailed on **Table 1-9** and are shown visually on **Figure 1-16** (hangars) and **Figure 1-17** (buildings).

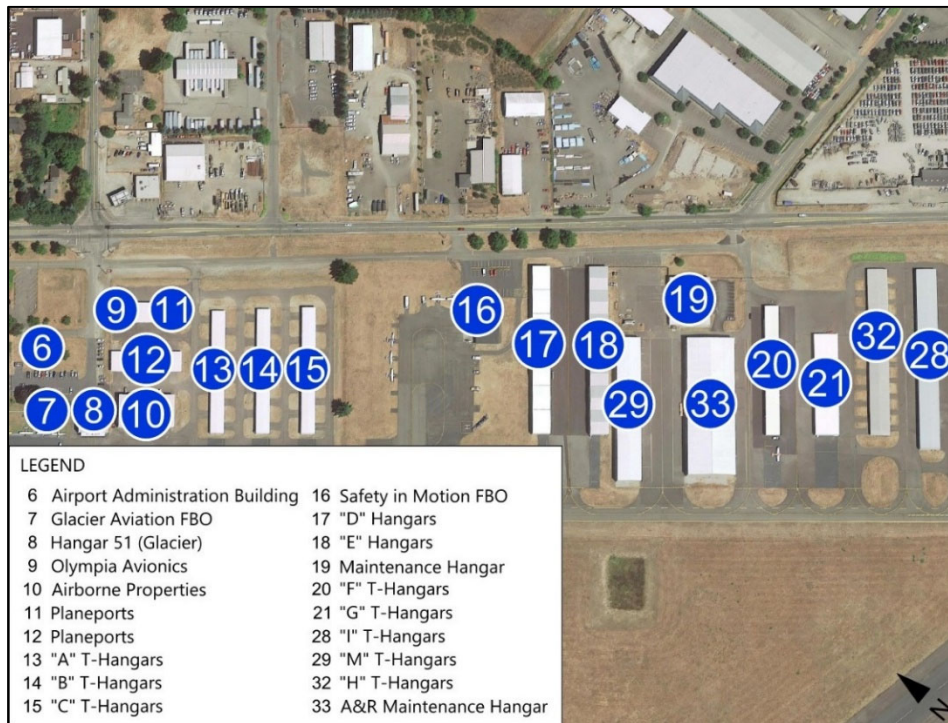
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Table 1-9: OLM Building and Hangar Table

Building #	Tenant/User	Location (West or East side)	Hangar	Size	Port Owned	Land Lease
1	Washington State Patrol Aviation Hangar and Office	East	Hangar/office	85' x 110'	X	
2	Spanaflight Hangar/Office	East	Hangar/office	60' x 145'		X
3	Washington State Department of Natural Resources	East	Hangar/office	60' x 125'		X
4	Olympic Flight Museum	East	Hangar/office	90' x 145'		X
5	Airlift Northwest Medivac (Glacier)	East	Hangar/office	70' x 100'		X
6	Airport Administration Building	East	Office	40' x 62'	X	
7	Glacier Aviation FBO	East	Office	50' x 50'	X	
8	Hangar 51 (Glacier)	East	Hangar	75' x 80'		X
9	Hangar/Office	East	Hangar/office	50' x 50'	X	
10	Airborne Properties	East	Hangar	50' x 175'		X
11	Planeports	East	Planeport	50' x 175'	X	
12	Planeports	East	Planeport	50' x 125'	X	
13	"A" T-Hangars	East	T-Hangar	35' x 310'	X	
14	"B" T-Hangars	East	T-Hangar	35' x 310'	X	
15	"C" T-Hangars	East	T-Hangar	35' x 310'	X	
16	Safety in Motion FBO	East	Hangar/Office	85' x 89'		X
17	"D" T-Hangars	East	Hangar	45' x 425'	X	
18	"E" Hangars	East	Hangar	45' x 425'	X	
19	Maintenance Hangar	East	Hangar	100' x 120'		X
20	"F" T-Hangars	East	T-Hangar	35' x 320'	X	
21	"G" T-Hangars	East	T-Hangar	60' x 255'	X	
22	Peninsula Group, Inc.	West	Hangar	70' x 140'		X
23	Peninsula Group, Inc.	West	Office	90' x 90'		X
24	Hangar/Office	West	Hangar/office	50' x 120'	X	
25	WSDOT	West	Old Airport Terminal Building	50' x 120'	X	
26	ATC Tower	West	ATC Tower	20' x 20'		X
27	Cardinal Glass	West	Hangar/office	120' x 225'		X
28	"I" T-Hangars	East	T-Hangar	50' x 475'		X
29	"M" Hangars (Prime Development)	East	T-Hangar	75' x 355'		X
30	OAPM	West	Office	50' x 105'		X
31	OAPM	West	Hangar	50' x 460'		X
32	"H" T-Hangars	East	T-Hangar	50' x 425'		X
33	A&R Maintenance Hangar	East	Hangar	120' x 180'		X
34	Craig Properties	West	Hangar	75' x 75'		X

Source: Olympia Regional Airport 2024.

Figure 1-16: OLM Building Location Map 1



Source: Olympia Regional Airport 2024.

Figure 1-17: OLM Building Location Map 2



Source: The Aviation Planning Group 2024.

Businesses on the airfield that provide services to the community and the surrounding region that operate from the Airport are detailed in the following sections.

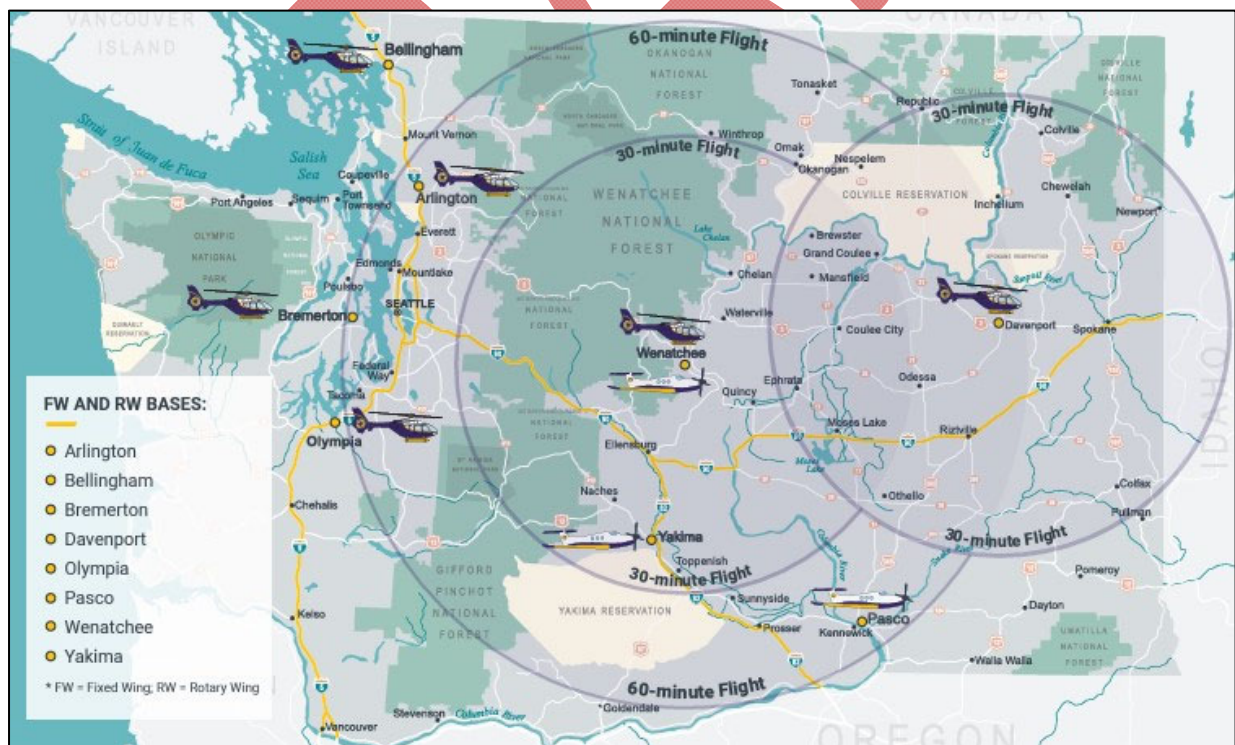
Olympic Flight Museum

The Olympic Flight Museum is located north of the Airport Administration Building, along Old Highway 99 SE on the east side of OLM in a 13,000 sq/ft hangar. The museum is a non-profit organization that maintains a fleet of nearly a dozen vintage aircraft and helicopters. The mission of the museum is to “deliver the sights, sounds, smells and excitement of flight to every museum visitor.” Outreach to the community is done through aircraft demonstrations, hosting an annual airshow, regular museum visitations, and facility rentals for events.

Airlift Northwest Medevac

Air ambulance services are a critical component of general aviation as they provide expeditious lifesaving transportation. With seven locations across Washington, Airlift Northwest is able to quickly pick up and transport patients to area hospitals to receive the lifesaving care that is needed. The Airlift Northwest crew and helicopter are located in a hangar that is operated by Glacier Aviation immediately south of the Olympic Flight Museum and north of the Airport Administration Building. The facility is operated around the clock and staffed with pilots and nurses to respond on a moment’s notice. The helicopter based at OLM is a Eurocopter EC-135. Airlift Northwest’s service area is depicted on **Figure 1-18**.

Figure 1-18: Airlift Northwest Medevac Service Area Map



Source: UW Medicine Airlift Northwest 2024.
Available at <https://www.uwmedicine.org/airliftnw>

Washington State Patrol

The WA State Patrol has a significant presence on the airfield with a prominent hangar on the northeast side. Collectively, the WSP Air Operation, operates one King Air B200, two Cessna 206s, and three Cessna 182s. This aircraft fleet mix meets their current and future needs, and there are no additional aircraft or type changes expected in the near future. The organization flies an estimated 3,500 flight hours per year to support their missions for law enforcement and emergency services response.

Department of Natural Resources

The Washington Department of Natural Resources operates from OLM with a large hangar on the east side of the Airport and offices and hangar on the west side. Helicopter operations are significant with this organization. There are 11 aircraft based at OLM from November to April and that is reduced to two or three aircraft as the aircraft head out to other areas of the state during their observation duties from April to November each year. Due to the increase in aircraft for the organization and need for hangars when all the aircraft are located back at OLM, the organization would be very interested in additional hangars when available.

1.5. Airport Environs

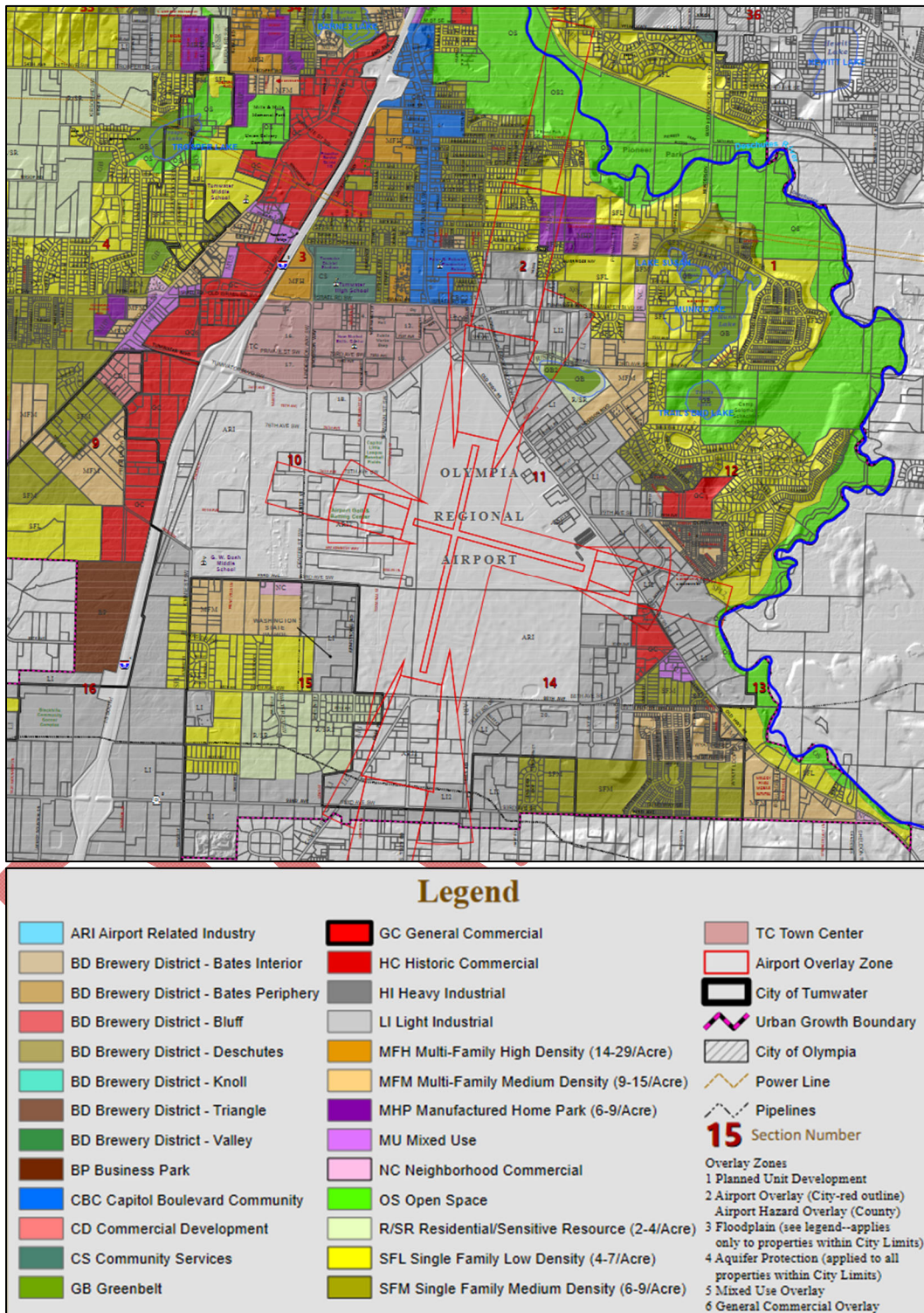
1.5.1. Existing Off Airport Land Use

The Port of Olympia operates a large area outside of what is traditionally considered the Airport. Much of the land to the west of the Airport is owned by the Port and is referred to as the New Market Industrial Campus. Similar to the general airport zoning designation being that of Industrial, the New Market Industrial Campus is also zoned as Industrial with a breakdown of the specific zoning requirements listed in the City of Tumwater Zoning Code under: ARI Airport Related Industry Zone District.

1.5.2. Existing Zoning

Zoning and land use protections for OLM have been incorporated into the City of Tumwater's Municipal Code under Chapter 18.32. To protect the current and future assets of the Airport, the zoning code ensures that the land around OLM is used in a manner that will be compatible now and into the future. Compatible land use focuses on densities, height awareness and reduction of hazards to the purposes of the Airport and the community. Zoning regulations and guidance is available on the City of Tumwater's website along with associated maps and documentation available for review at the City of Tumwater's Community Development Department. Tumwater zoning is depicted on **Figure 1-19**.

Figure 1-19: City of Tumwater Zoning



Source: City of Tumwater Community Development Department 2020.

1.5.3. Airport Overlay Zone

The municipal zoning chapter for the Airport Overlay for the City of Tumwater was adopted pursuant to RCW 36.70.547 and 3670A.510, which requires the counties, cities and towns to put forth regulations that ensure compatible land uses are adjacent to airports. The focus of the Airport Overlay Zone is on Compatible land use while height restrictions that correlate with the Federal Aviation Regulations (FAR) Part 77 “Objects Affecting Navigable Airspace” are addressed in the development standards within each zoning district that one must comply with for development in the City of Tumwater.

The City of Tumwater’s Airport Overlay Zone District (See Figure 1-20) was established in 2004 and describes prohibited non-compatible land uses in Chapter 18.32 as follows:

A. Zone 1 – Runway Protection Zone – Prohibited Uses.

1. Residential dwellings;
2. Stormwater wet ponds;
3. Active recreational facilities;
4. Schools, preschool/child care facilities, child day care centers, churches, hospitals, senior housing facilities, rest homes and group foster homes;
5. Uses that:
 - a. Create lighting that diminishes the ability of pilots to distinguish between airport lights and nonairport lights;
 - b. Create electrical interference with navigational signals or radio communication between the airport and aircraft;
 - c. Create dust, smoke or other emissions that result in impairment of visibility for pilots.

B. Zone 2 – Inner Approach/Departure Zone – Prohibited Uses.

1. Multifamily dwellings;
2. Active recreational facilities;
3. Schools, preschool/child care facilities, child day care centers, churches, hospitals, senior housing facilities, rest homes and group foster homes;
4. Uses that:
 - a. Create lighting that diminishes the ability of pilots to distinguish between airport lights and nonairport lights;
 - b. Create electrical interference with navigational signals or radio communication between the airport and aircraft;
 - c. Create dust, smoke or other emissions that result in impairment of visibility for pilots.

C. Zone 3 – Inner Turning Zone – Prohibited Uses.

1. Multifamily dwellings;
2. Active recreational facilities;
3. Schools, preschool/child care facilities; child day care centers; churches, hospitals, senior housing facilities, rest homes and group foster homes;
4. Uses that:

- a. Create lighting that diminishes the ability of pilots to distinguish between airport lights and nonairport lights;*
- b. Create electrical interference with navigational signals or radio communication between the airport and aircraft;*
- c. Create dust, smoke or other emissions that result in impairment of visibility for pilots.*

D. Zone 4 – Outer Approach/Departure Zone – Prohibited Uses.

- 1. Multifamily dwellings;
- 2. Schools, preschool/child care facilities; child day care centers; churches, hospitals, senior housing facilities, rest homes and group foster homes;
- 3. Uses that:
 - a. Create lighting that diminishes the ability of pilots to distinguish between airport lights and nonairport lights;*
 - b. Create electrical interference with navigational signals or radio communication between the airport and aircraft;*
 - c. Create dust, smoke or other emissions that result in impairment of visibility for pilots.*

E. Zone 5 – Sideline Zone – Prohibited Uses.

- 1. Multifamily dwellings;
- 2. Schools, preschool/child care facilities; child day care centers; churches, hospitals, senior housing facilities, rest homes and group foster homes;
- 3. Uses that:
 - a. Create lighting that diminishes the ability of pilots to distinguish between airport lights and nonairport lights;*
 - b. Create electrical interference with navigational signals or radio communication between the airport and aircraft;*
 - c. Create dust, smoke or other emissions that result in impairment of visibility for pilots.*

(City of Tumwater Ord. O2006-015, Amended, 08/01/2006; Ord. O2004-009, Added, 12/07/2004)

1.6. Environmental Review Inventory

1.6.1. Air Quality

Air Quality analysis for federally funded projects must be prepared in accordance with applicable air quality statutes and regulations that include the Clean Air Act of 1970, the 1977 Clean Air Act Amendments, the 1990 Clean Air Act Amendments, and the National Ambient Air Quality Standards (NAAQS). In particular, the air pollutants of concern in the assessment of impacts from airport-related sources include six “criteria pollutants:” carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂).

The EPA sets NAAQS for the aforementioned criteria pollutants. States are required to meet the national standards but can also set more stringent ambient air quality standards within the state. The State of Washington has adopted the current federal NAAQS in state regulations. The federal Clean Air Act requires EPA to review the NAAQS every five years to ensure continued protection of human health and the environment. State regulations are updated when EPA revises or establishes a new standard. The EPA designates areas as “in attainment” or “non-attainment” based on whether the NAAQS are met.

The Airport is located in Thurston County, and according to the EPA, is designated in an attainment area for all NAAQS. A portion of Thurston County, specifically the Olympia, Tumwater, and Lacey area is designated an attainment/maintenance for PM₁₀.

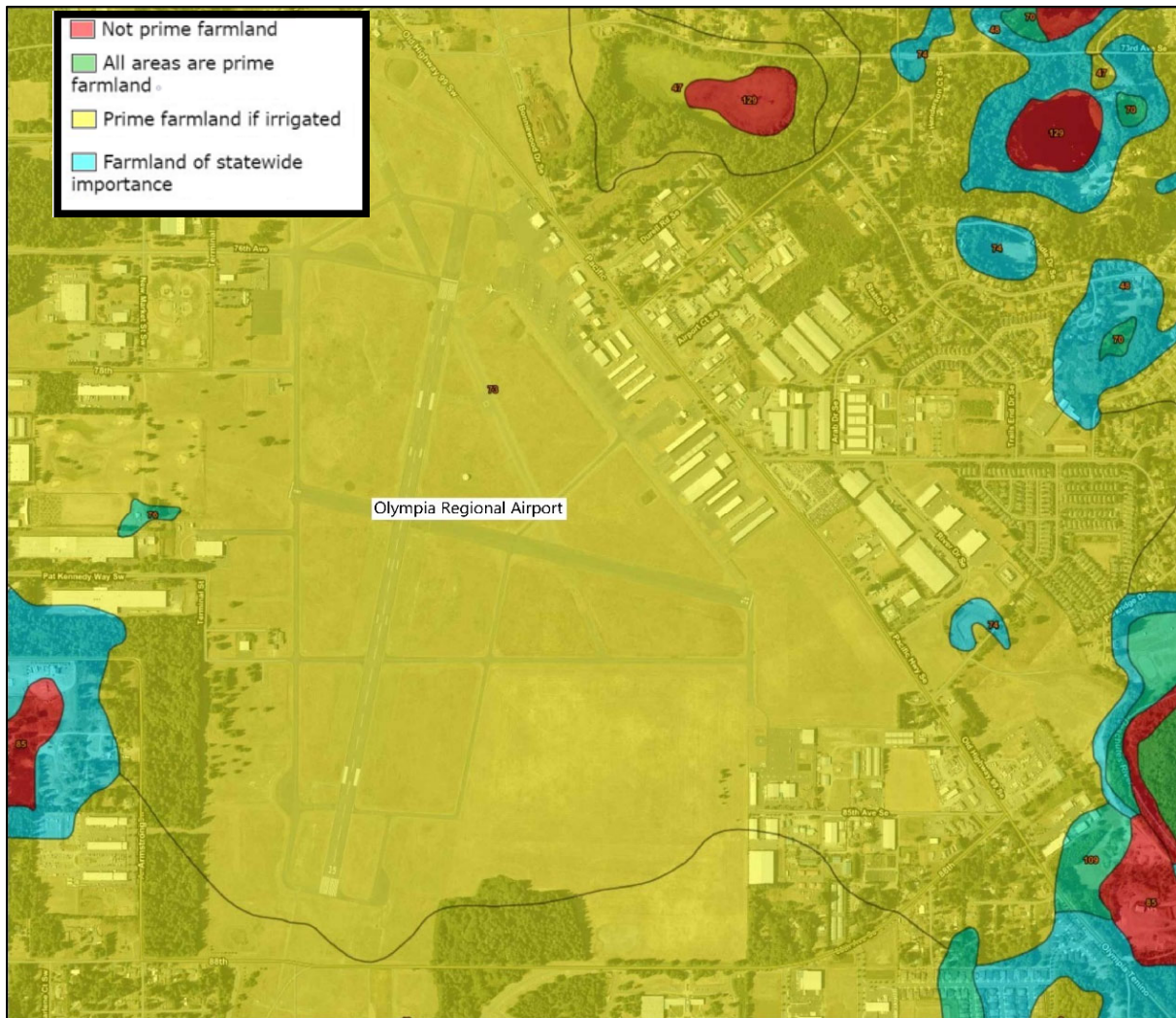
The EPA EnviroMapper indicates there are three facilities near the Airport listed in the Aerometric Information Retrieval System (AIRS) that have operating permits to release air pollutants. One is currently operating in compliance with all regulatory programs; one is temporarily closed and the other facility is permanently closed and is either in compliance or meeting compliance schedules with the regulatory program.

1.6.2. Farmland

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 OLM. The FPPA excludes land that was dedicated to urban use, including aviation, prior to 1982. According to the Soil Map for Thurston County, Washington prepared by the NRCS, a significant portion of the Airport property, as can be seen in **Figure 1-21**, is comprised of soils considered prime farmland (green), prime farmland if irrigated (yellow), or farmland of statewide importance (blue). Consultation with the NRCS will be necessary prior to any development to conclude if there will be a conversion from prime farmland to classification.

Figure 1-21: Thurston County Soil Map



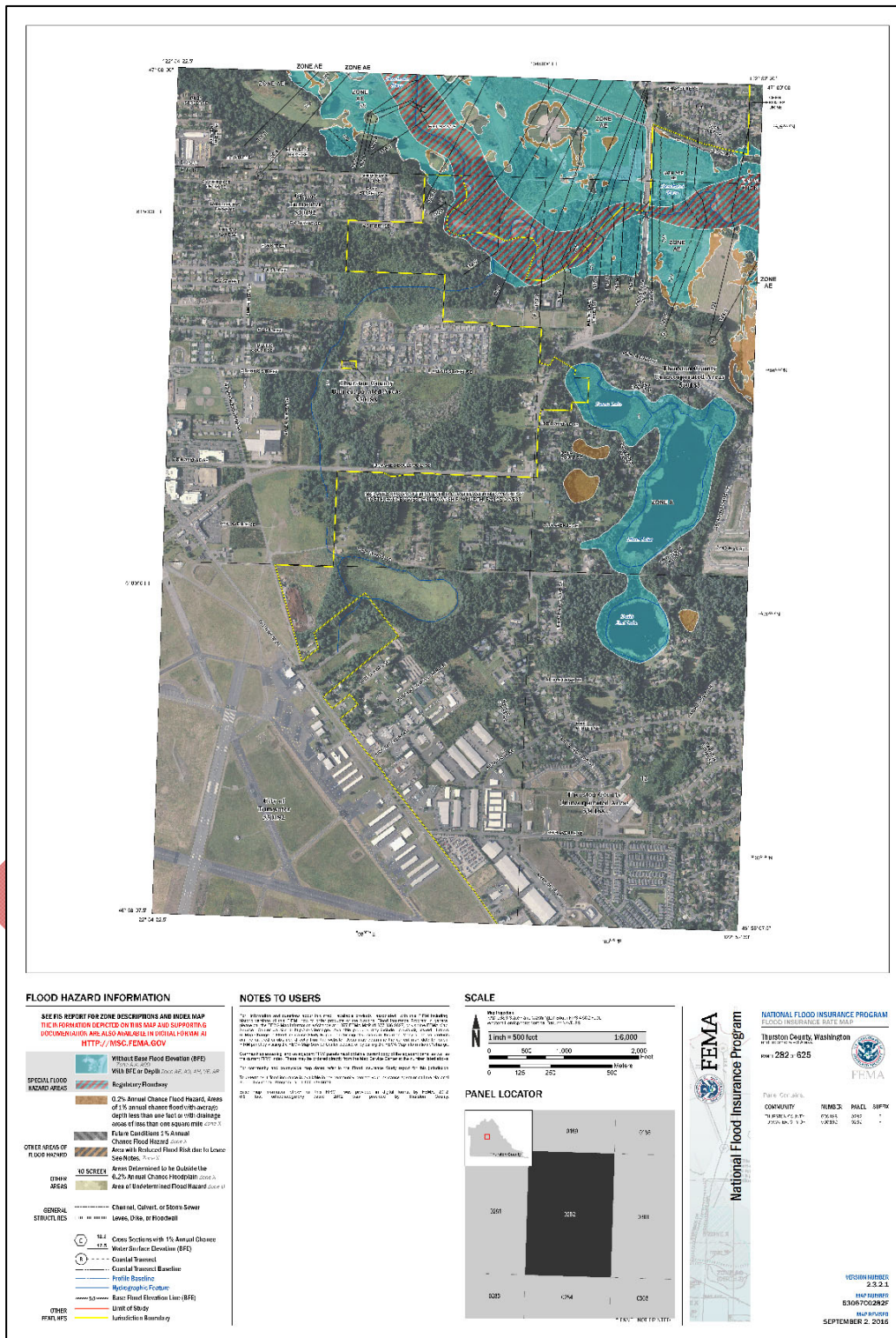
Source: National Resources Conservation Service (NRCS) 2021.

1.6.3. Floodplains

Executive Order 11988, Floodplain Management directs federal agencies to “avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.” The Federal Emergency Management Administration (FEMA) publishes floodplain maps to illustrate extent and type designations on Flood Insurance Rate Maps (FIRM).

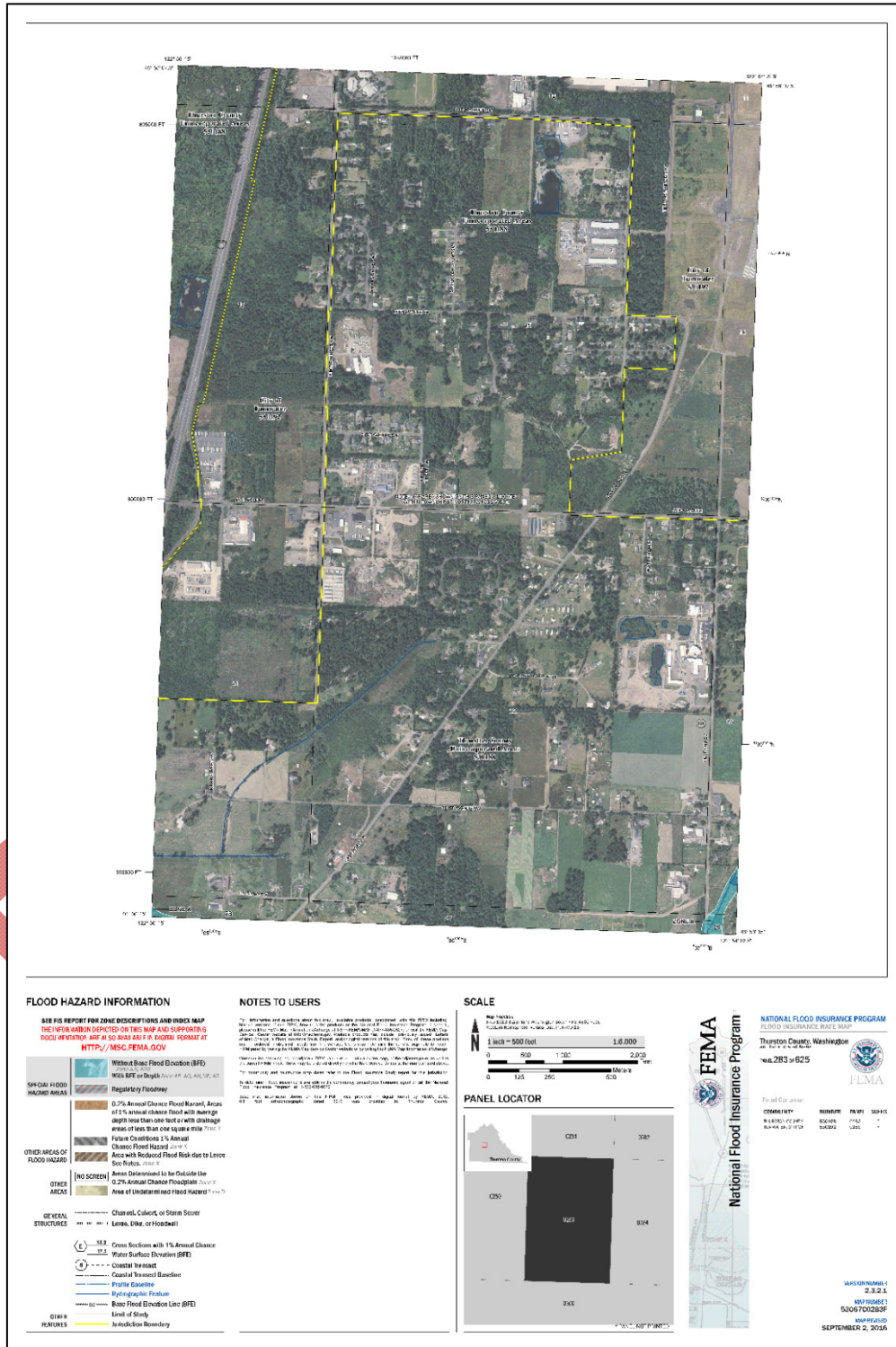
The Airport is not located within the 100-year floodplain. **Figure 1-22, 1-23, 1-24, and 1-25** indicate the Airport is within a Minimal Flood Hazard, Zone X. This is an area defined as being outside the Special Flood Hazard Area (SFHA), known as the 100-year floodplain. Zone X areas are higher than the elevation of the 0.2% annual chance flood.

Figure 1-23: Northeast Flood Map



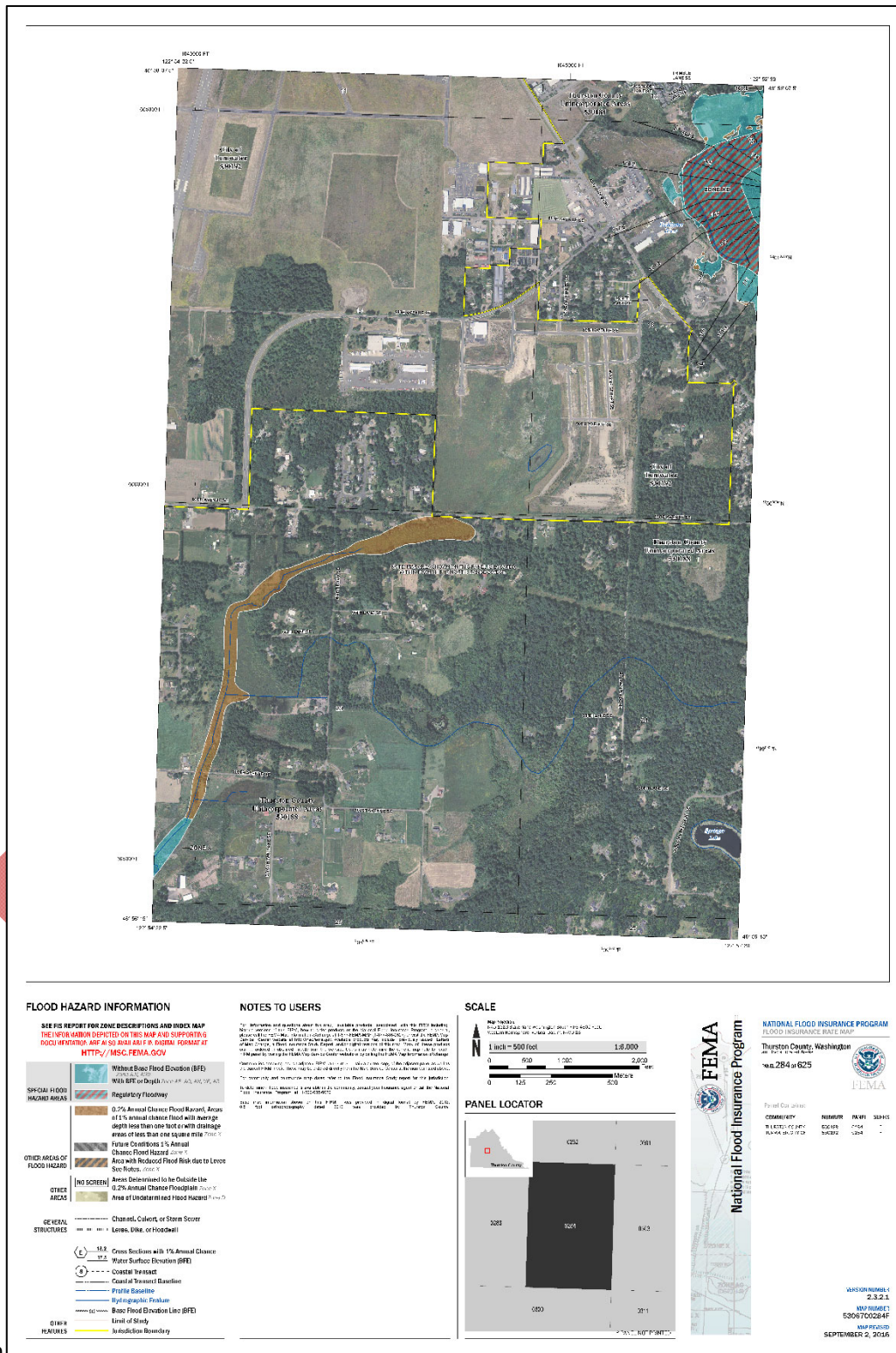
Source: FEMA 2016.

Figure 1-24: Southwest Flood Map



Source: FEMA 2016.

Figure 1-25: Southeast Flood Map



Source: FEMA 2016.

1.6.4. Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act (NHPA) 26 and the Archaeological and Historical Preservation Act 27 regulate the preservation of historical, architectural, archaeological, and cultural resources. Section 106 of the NHPA requires federal actions and undertakings to evaluate the impact on these resources.

According to the NRHP, there are 60 historic properties listed in Thurston County. Of these, four are located within the Tumwater City Limits, which include the Capital Boulevard Crossing, the Tumwater Historic District, the Tumwater Methodist Church, and the Union/Pioneer Calvary Cemeteries. The Union/Pioneer Calvary Cemeteries are located closest to the Airport at approximately 1.2 miles to the northwest. The City of Tumwater Register of Historic Places indicates there are 16 additional sites located within the city having historical significance to either the city or the State. Two of the sites are located on, or in close proximity to the Airport. A historic hangar, currently occupied by the Aviation Division of the WSP, located on the east side of the Airport (identified as building 4 on Figure 1-17). The other site is an approximately 400-year-old tree, known as the Jack Davis Oak, which is located on the east side of the historic hangar described previously.

1.6.5. Noise and Compatible Land Use

The FAA has determined that for an aviation noise analysis the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of yearly day/night average sound levels (DNL) as FAA's primary metric. If significant noise impacts are expected, the FAA official must prepare a detailed noise analysis as part of the environmental document. Projects which may have a significant impact on noise include citing a new airport, runway relocation, runway strengthening, or a major runway expansion require a noise analysis including noise contour maps. FAA Order 1050.1F indicates that any action that would increase noise by DNL 1.5dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase is considered to be significant. Future development at the Airport is unlikely to present a significant noise impact to surrounding land use based on the current 65 DNL noise contour, providing that compatible land use in the future is maintained by the City of Tumwater.

1.6.6. Department of Transportation Act 4(f)

The Department of Transportation (DOT) Act, Section 4(f)¹³ 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)¹⁴ 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 1-10 and **Figure 1-26** identify the park and recreation facilities near the Airport. Should any proposed Airport development resulting from the Master Plan Update involve more than a minimal physical use or a “constructive use” substantially impairing these facilities, and no prudent and feasible alternatives exist that would avoid impacting the facilities, then section 4(f) may be applicable. If section 4(f) is applicable, then appropriate measures will be determined and implemented through consultation with the officials responsible for those facilities.

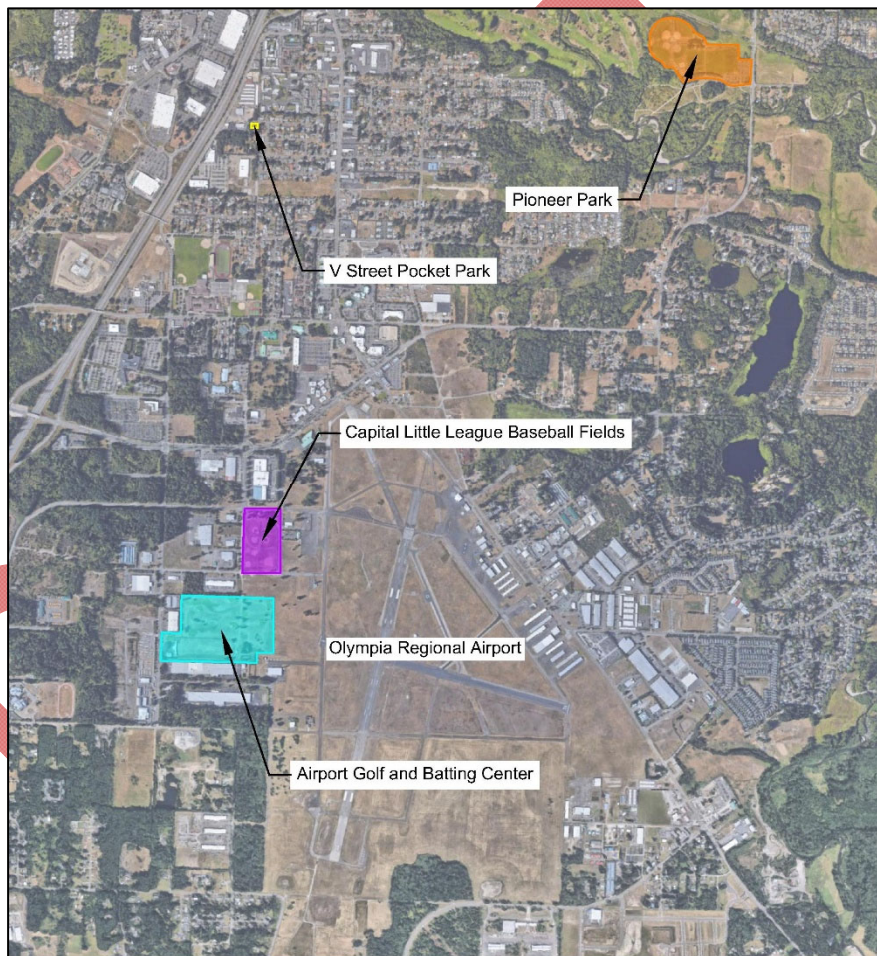
Table 1-10: Park and Recreation Facilities Near OLM

Facility Name	Distance and Direction from OLM	Facilities
Capital Little League Baseball Fields	0	Baseball Fields
Airport Golf & Batting Center	0	Golf range & batting cages
V Street Pocket Park	1.0-mile NW	Playground & basketball court
Pioneer Park	1.0-mile NNE	Baseball, softball and soccer fields, volleyball courts, playground, restrooms, and trails
Palermo Pocket Park	1.3 miles N	Playground and basketball hoop
Tumwater Valley Running Path	1.7 miles N	Trail
Millersylvania State Park	2.0 miles NNE	Camping, fishing, swimming, canoeing, picnic areas, and trails
Barclift Park	2.1 miles NNE	Shelter, picnic areas, playground, basketball court, tennis court, and trails
Tumwater Falls Park	2.1 miles N	Restroom and trails
Jim Brown Park	2.3 miles N	Playground, basketball court, tennis court, and picnic/play areas
Overlook Park	2.4 miles NNW	Scenic overlook and picnic areas
Tumwater Hill Park	2.5 miles NNW	Baseball field, picnic areas and trails

Facility Name	Distance and Direction from OLM	Facilities
Tumwater Historical Park	2.7 miles N	Shelter, picnic areas, restrooms, playground, and trails
Kenneydell Park	2.9 miles W	Lodge, shelters, picnic areas, swimming, athletic fields, playgrounds, and trails
Black River Mima Prairie Glacial Heritage Preserve	3.0 miles W	Closed to public use

Source: The Aviation Planning Group 2021.

Figure 1-26: Park and Recreation Facilities Near OLM



Source: The Aviation Planning Group 2021.

1.6.7. Fish, Wildlife, Plants

Requirements have been set forth by the Endangered Species Act, Sikes Act, Fish and Wildlife Coordination Act, Fish and Wildlife Conservation Act, and the Migratory Bird Treaty Act, for the protection of fish, wildlife, and plants of local and national significance.

The Endangered Species Act, as amended, requires each federal agency to ensure that any action authorized, funded, or carried out by the federal agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the habitat of such species. **Table 1-11** identifies the species known to occur within Thurston County. Typically, before any projects could be undertaken, the Airport would need to determine if these threatened or endangered species are located within the proposed project area. If the species is found to be present, and depending upon the potential impact, an Environmental Assessment or Environmental Impact Statement may have to be prepared prior to project implementation.

Table 1-11: Thurston County Threatened and Endangered Species

Group	Common Name	Specific Name	Status
Amphibians	Oregon spotted Frog	Rana pretiosa	Federal Threatened
Birds	Norther spotted owl	Strix occidentalis caurina	Federal Threatened
Birds	Marbled murrelet	Brachyramphus	Federal Threatened
Birds	Streaked Horned lark	Eremophila alpestris strigata	Federal Threatened
Birds	Oregon vesper sparrow	Pooecetes gramineus affinis	State Endangered
Butterflies	Mardon skipper	Polites mardon	State Endangered
Butterflies	Taylor’s checkerspot	Euphydryas editha taylori	Federal Endangered
Butterflies	Puget blue	Plebejus icarioides blackmorei	State Candidate
Butterflies	Valley silverspot	Speydria zerene bremnerii	State Candidate
Fishes	Bull Trout	Salvelinus confluentus	Federal Threatened
Overlook Park	Golden Paintbrush	Castilleja levisecta	Federal Threatened
Flowering Plants	Water howellia	Howellia aquatilis	Federal Threatened
Mammals	Fisher	Martes pennanti	Federal Candidate
Mammals	Olympia pocket gopher	Thomomys mazama pugetensis	Federal Threatened
Mammals	Tenino pocket gopher	Thomomys mazama tumuli	Federal Threatened
Mammals	Yelm pocket gopher	Thomomys mazama yelmensis	Federal Threatened

Source: U.S. Fish & Wildlife Service Washington Fish and Wildlife Office 2021.

Since the last Airport Master Plan Update, the City of Tumwater and Port of Olympia have worked jointly on the Brush Prairie Habitat Conservation Plan (Brush Prairie HCP) which will be developed to balance growth and the preservation of primarily three covered species: Olympia pocket gopher, streaked horned lark and the Oregon spotted frog. The HCP is a detailed plan for achieving this goal and is required under Section 10 of the Endangered Species Act, under which permits can be issued to “take” an endangered species by causing harm to the species or its habitat. In this case, “take” is expected to result from new development, from maintenance of City and Port facilities, and from maintenance performed at the conservation reserve sites.

The plan will include a detailed description of the activities to be performed, both for development and species protection, and their effects upon the species.

1.6.8. Critical Areas

In addition to the previously described environmental review categories, the State's Growth Management Act (GMA) requires cities and counties to write comprehensive plans and development regulations to manage growth and prevent urban sprawl through the protection of five types of critical areas. These include important fish and wildlife habitat areas, wetlands, critical aquifer recharge areas, frequently flooded areas, and geologically hazardous areas (i.e., bluffs). The City of Tumwater has adopted a Conservation Plan, as a part of their Comprehensive Plan, which identifies, protects, and conserves critical environmental areas and valuable natural resources. The Conservation Plan specifically addresses these topics in the following categories: Natural Resource Land Conservation (consisting of wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat areas).

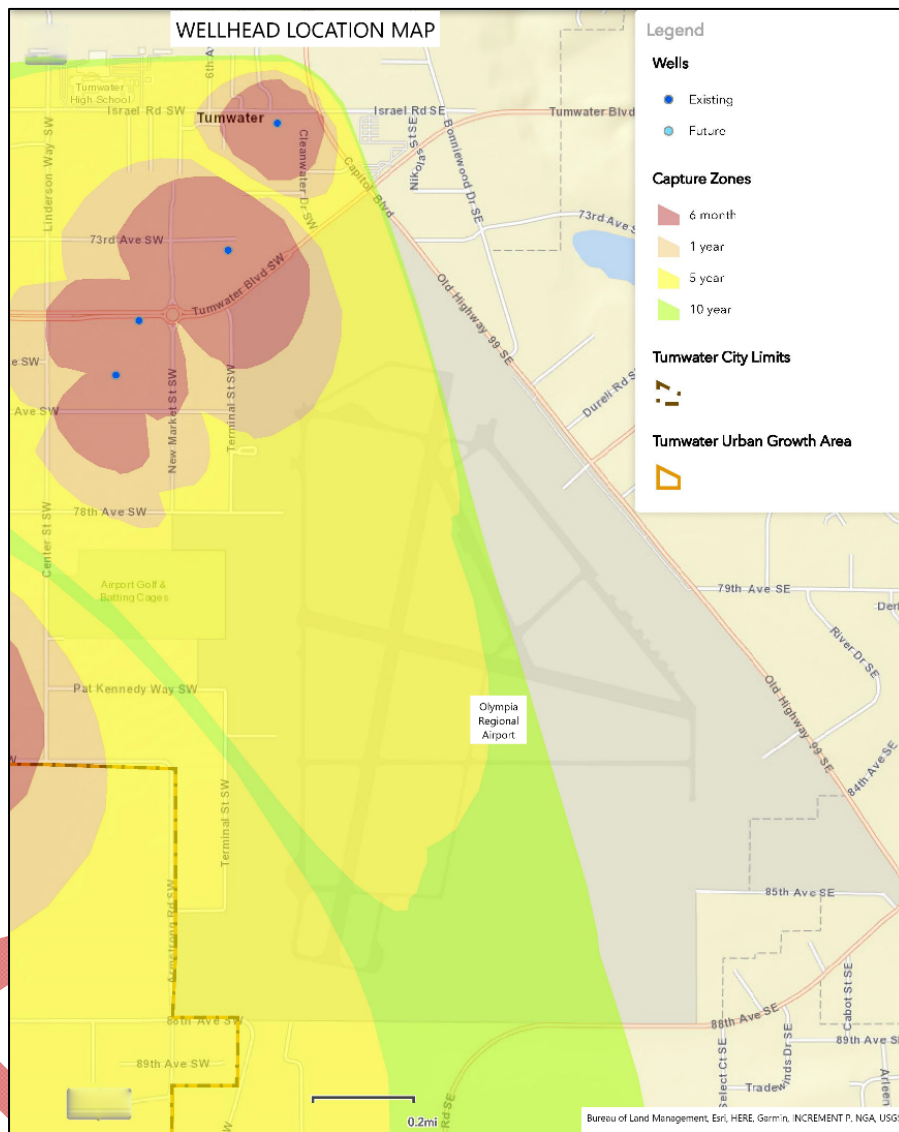
1.6.9. Water Quality

The majority of OLM is contained within the Deschutes River watershed. The area to the south is within the Black River watershed. The Deschutes River empties into Capitol Lake about 2.5 miles north of the Airport, which connects to Budd Inlet of Puget Sound. A small creek flows northward from the extreme northeast corner of Airport property to the Deschutes River. The Black River is a tributary of the Chehalis River, which empties into Grays Harbor on the Pacific Ocean.

In 2016 the City of Tumwater prepared a Wellhead Protection Plan (currently in DRAFT form). The City's overall groundwater management strategies were reviewed as part of the Wellhead Protection Plan and it showed there are contaminated sources within the City's wellhead protection area (WHPA) that warrant continued management and monitoring. Several sites have been flagged for additional review, either based on lack of information or perceived higher risk.

According to the Wellhead Protection Plan, there are six identified wells supplying drinking water to the city with corresponding Wellhead Protection Areas on or near OLM (**Figure 1-22**). The WHPA is a management area defined by modeled capture zones, specific surface and subsurface areas surrounding a municipal water well or well field through which contaminants are likely to move toward and reach such water well or well field within specified time periods. Within the WHPA, the city applies specific prohibitions and limitations to new, expanding, and existing developments and oversees the management and use of hazardous materials that could contaminate ground-water.

Figure 1-227: Wellhead Protection Areas



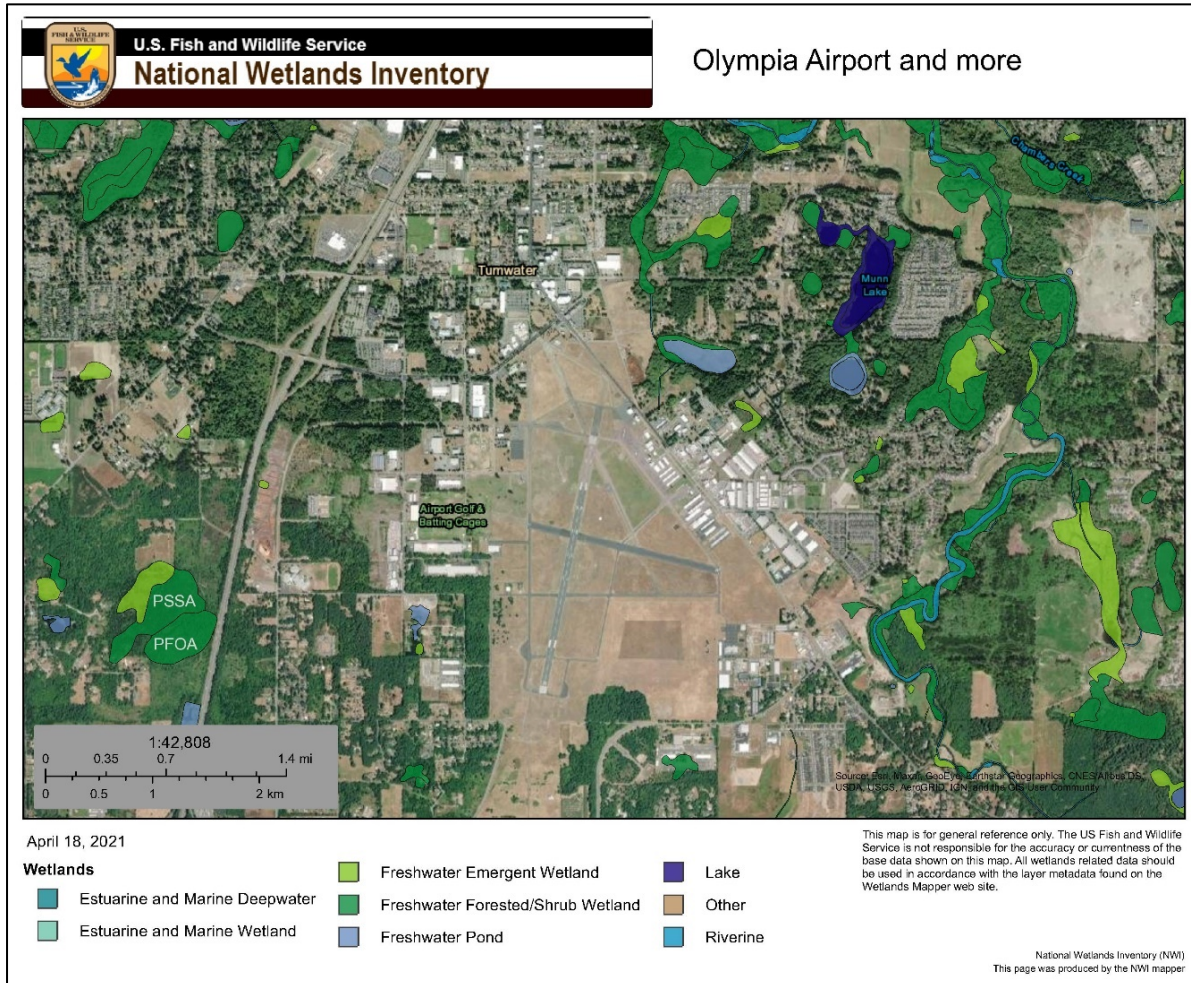
1.6.10. Wetlands

Wetlands are regulated under Sections 401 and 404 of the Clean Water Act. The Washington Department of Ecology is responsible for compliance with Section 401 and the Army Corps of Engineers (Corps) is responsible for administering compliance with Section 404. Thereby, both are required to minimize the destruction, loss, or degradation of wetlands.

Executive Order 11990, Protection of Wetlands, defines wetlands as “those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated

soil conditions for growth and reproduction.” **Figure 1-28** provides information on the wetlands located in the vicinity.

Figure 1-23: National Wetlands Inventory (NWI)



Source: U.S. Fish and Wildlife Services 2021.

If any proposed projects impact these wetlands, the Airport will coordinate with the U.S. Army Corps of Engineers to determine the extent of the impacts and any mitigation measures, if required.

1.6.11. Secondary (Induced) Impacts

Per Order 1050.1E, secondary impacts result from shifts in population movement or growth; public service demands; and changes in business and economic activity to the extent influenced by airport development. As this chapter serves as a baseline for environmental conditions existing at OLM, no further discussion is presented.

1.6.12. Socioeconomical Impacts, 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 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 – OLM.

1.6.13. Light Emissions and Visual Impacts

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. OLM has two primary sources of light:

- **Runway Lighting:** lights outlining the runway, classified by the intensity or brightness the lights capable of producing
- **VASIs:** system of lights on the side of an airport runway threshold that provides visual descent guidance information during approach

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

1.6.14. Hazardous Material, Pollution Prevention, and Solid Waste

The Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (Superfund), and the Community Environmental Response Facilitation Act (CERFA) 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 OLM's location. According to the NPL, no sites are located near OLM.

Hazardous materials present at the Airport include the following: aviation fuels, motor fuels, pesticides, substances used to operate or maintain aircraft, ground vehicles, equipment, and buildings, and various hazardous materials transported to and from the Airport via ground vehicles and aircraft.



There are four 12,000-gallon tanks (two for Jet-A and two for 100LL) and two 10,000-gallon tanks (one for Jet-A and one for 100LL) for aviation fuel storage currently in place. The storage, use, and transport of hazardous materials at the Airport are controlled by a framework of federal, state, and local regulations. The WDOE's Hazardous Waste and Toxics Reduction Program (HWTR) maintains environmental databases on sites with known contamination and sites that are regulated according to the requirements of state or federal laws.

Existing and future activities at the Airport are not anticipated to generate a quantity of hazardous waste materials which would reach impact category thresholds. However, construction activities have the potential to generate hazardous materials. Hazardous materials used and/or generated during construction would be disposed of at a designated facility.

The identification and evaluation of OLM's solid waste sources can be complicated. There are many different groups, operational styles, and collection/disposal processes that play into the overall generation of waste. OLM management identified the primary sources of waste at the Airport; the Hangars/Tenants, Flight School, Airport Manager/Admin, Airfield and Airfield Maintenance/Operations and Flight Museum.

OLM, as discussed previously, strives to actively participate in a recycling program and join in local initiatives when applicable. The Airport currently provides recycling bins in the administrative office and solid waste dumpsters throughout the airport property. Both solid waste and recyclables are collected through contracts with independent companies. Recyclables being collected at the Airport include cardboard, paper, used oil, and scrap metal.

An Airport Recycling, Reuse, and Waste Reduction Plan is provided in the Implementation portion of the Master Plan. The Plan provides a review of OLM's recycling, reuse, and waste program and provides guidance on ways to reduce waste and improve recycling and reuse at the Airport.

1.7. Financial Inventory

The Port of Olympia owns and operates the Airport as an entity of the Port. The Airport falls under the stewardship of the Airport Senior Manager, who reports to the Port Executive Director. The operating revenue and expenses for the previous 5 years, as seen below, show a historic trend of operational self-sustainability. Few airports within the system of airports across the nation have achieved self-sustainability, and the Port's efforts have ensured that OLM is positioned well for the future. Capital

projects are mostly funded through FAA and State Aeronautics grants in which the Airport participates through funding a local match to the grant. The local match to these grants can be funded through the Airport's budget and also with the aid of additional Port funding when needed. Operating revenues and expenses for OLM are detailed in **Table 1-12**, while the Airport's grant history is detailed in **Table 1-13**.

Table 1-92: OLM Operating Revenue and Expenses 2016-2020

	2020	2019	2018	2017	2016
Landing Fees	\$ 8,152	\$ 8,788	\$ 9,971	\$ 9,968	\$ 6,873
Cargo/Hangar Rentals	\$ 291,381	\$ 279,994	\$ 256,561	\$ 258,897	\$ 260,156
Fuel Flowage Fees	\$ 15,799	\$ 22,781	\$ 27,243	\$ 21,898	\$ 19,641
Total Aeronautical Revenue	\$ 315,332	\$ 311,563	\$ 293,775	\$ 290,763	\$ 286,670
Land and Non-Aeronautical Leases	\$ 826,521	\$ 771,843	\$ 763,123	\$ 751,441	\$ 716,393
Other	\$ 14,883	\$ 23,352	\$ 21,142	\$ 8,929	\$ 11,932
Total Operating Revenue	\$ 1,156,736	\$ 1,106,758	\$ 1,078,040	\$ 1,051,133	\$ 1,014,995
Total Operating Expenses Before Depreciation	\$ 599,028	\$ 618,881	\$ 557,611	\$ 638,425	\$ 608,660
Operating Income	\$ 557,708	\$ 487,877	\$ 520,429	\$ 412,708	\$ 406,335

Source: Olympia Regional Airport 2021.

Table 1-103: OLM FAA Grant History 2009-2017

Fiscal Year	Grant Sequence No.	Work Description	AIP Federal Funds
2009	18	Update Airport Master Plan Study	\$120,687
2010	20	Update Airport Master Plan Study	\$189,059
2010	19	Install Miscellaneous NAVAIDS, Rehabilitate Taxiway	\$1,975,951
2011	21	Rehabilitate Taxiway	\$150,000
2011	22	Install Airfield Guidance Signs	\$225,000
2012	23	Rehabilitate Taxiway	\$150,000
2013	24	Construct Taxiway, Install Miscellaneous NAVAIDS, Rehabilitate Taxiway	\$2,249,939
2014	25	Rehabilitate Taxiway	\$150,000
2015	26	Rehabilitate Taxiway	\$1,059,917
2017	27	Conduct Environmental Study	\$150,000
Totals			\$6,420,553

Source: Olympia Regional Airport 2021.

1.8. Emergency Services Inventory

Due to the City of Olympia's designation as the state capitol and the WSDOT Aviation Division, Washington Department of Natural Resources (DNR), and WSP having a presence on the airfield, OLM

plays a major support and response role for medical emergencies, evacuations, and disaster preparedness for the region that it serves.

1.8.1. Fire and Rescue

The Washington DNR operates two large hangars on the east and west sides of the Airport with 11 aircraft based from November to April and two or three aircraft for the rest of the year. The Washington State DNR Wildfire Aviation is a firefighting team tasked with responding to wildland fires. For all other types of fires, the Helitack Program provides support. Recently, the DNR established an Air Retardant Tanker Base at the airport to provide support for fighting wildfires. The base, located at the WSDOT Aviation Division's ramp, provides fire retardant for different types of aircraft such as the Bombardier Q400-AT and Convair CV580.

1.8.2. Law Enforcement

The WSP operates out of a hangar on the northeast side, providing law enforcement and emergency services response for the surrounding area. This consists of aerial enforcement, rapid response, airborne assessments of incidents, and transportation services. The Aviation Operation team utilizes one King Air B200, two Cessna 206s, and three Cessna 182s. The aircraft are equipped with infrared cameras, aerial mapping, and live video downlink.

1.8.3. Emergency Medical Services

The Airport is equipped to provide air ambulance services through Airlift Northwest, located in a hangar immediately south of the Olympic Flight Museum and north of the Airport Administration Building. The air ambulance service operates around the clock and is able to pick up and transport patients to area hospitals using a Eurocopter EC-135. **Figure 1-18** depicts the service area and time of response for Airlift Northwest.

1.9. Summary

The Port of Olympia has a thriving Airport that has a history of growth and has served as an asset to the city, county and state over the years. Throughout the inventory process Airport users, neighbors and other stakeholders were invited to identify needs and issues through a variety of methods including interviews, surveys, public open house meetings, comment sheets, and TAC Meetings. While the focus of the issues identification was on Airport Master Plan Update needs and issues, in some cases the issues identified were more related to management, maintenance, or operations issues. All issues identified were shared with Airport staff so that they could be addressed outside the Master Plan Update, if appropriate.

The initial Spring 2021 User Survey (**Appendix 1-1**), completed by 30 respondents, captures the primary issues that were brought up over the course of the study. The highest ranked Master Plan Update issues from the survey are summarized below.

1. Additional Hangars to Rent/Own

2. Pavement Conditions
3. Lighting, Windssocks, or other Navigational Aids
4. Improved Instrument Approaches
5. Self-Service Fuel: 100LL

The data collected through the inventory process is the baseline for the subsequent chapters in this Master Plan Update.

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