

## CRESWELL HOBBY FIELD AIRPORT AIRPORT MASTER PLAN

### CHAPTER 2

# Existing Conditions



The purpose of this chapter is to document existing facilities and conditions that affect the operation and development of the Hobby Field (FAA/ICAO Identifier Code: 77S/K77S), also referred to as “the Airport” or “77S.” The Airport is owned and operated as the local municipal airport by the City of Creswell, Oregon.

The assembled information is presented within the context of the Airport’s regional setting, airside, landside, and administrative functions. Data sources for this evaluation include City of Creswell records, the 2007 Airport Master Plan Update<sup>1</sup>, airfield pavement inspections, recent airfield design and environmental documents, and City of Creswell and Lane County land use planning documents, codes, and regulations. The data collection is supplemented with meetings/contact with airport management, tenants, stakeholders, city staff, and county staff. This chapter provides an updated baseline facility assessment that will support subsequent elements of the master plan.

## Regional Setting

The Regional Setting section is intended to provide a broader understanding of the geographic, social, economic, and environmental impacts airports can have in a region, county, and community. The primary focus in this section is to describe conditions that are specifically related to Hobby Field and its surroundings.

<sup>1</sup> Hobby Field -Airport Master Plan Update narrative report (City of Creswell, Century West Engineering November 2007)

## LOCATION & VICINITY

Creswell is located in Lane County at the southern end of the Willamette Valley. Creswell is located about a two hours south of Portland on U.S. Interstate 5 (I-5). Eugene, the county seat, is located about 15 minutes to the north and Cottage Grove is located about 15 minutes to the south on I-5.

Hobby Field is located approximately two miles northeast of the Creswell city center, directly adjacent to I-5. The original airport site was acquired by the City of Creswell in 1963 and airfield facilities were subsequently developed. The Airport is located entirely within the Creswell city limits.

Lane County was established in 1851 and the City of Creswell was incorporated in 1909.<sup>2</sup> Lane County has a land area of approximately 4,620 square miles and is made up of predominantly forest and agricultural lands. The largest population centers are located along I-5 in the Willamette Valley, with numerous communities and sparsely populated areas located along its network of roads and highways extending west to Pacific coastline and east to the Cascade Range. The western and eastern sections of the county consist of large, forested areas, including the Willamette National Forest.

Surface access to Hobby Field is provided via Melton Road and East Cloverdale Road, which connect to I-5 at the Exit 182 interchange and extend into the city center. Dale Kuni Road also provides access to the Airport from the north (I-5 overpass) that extends east and south, connecting to Emerald Parkway and Melton Road. An unimproved frontage road extends south from Dale Kuni Road on the west side of the runway, parallel to I-5. The gated road provides access to an area used by seasonal wildfire helicopters and it ends at the aircraft hold area/parallel taxiway at the north end of the runway.

A location, vicinity and site map is provided in **Figure 2-1**.

## COMMUNITY SOCIO-ECONOMIC DATA

### Population

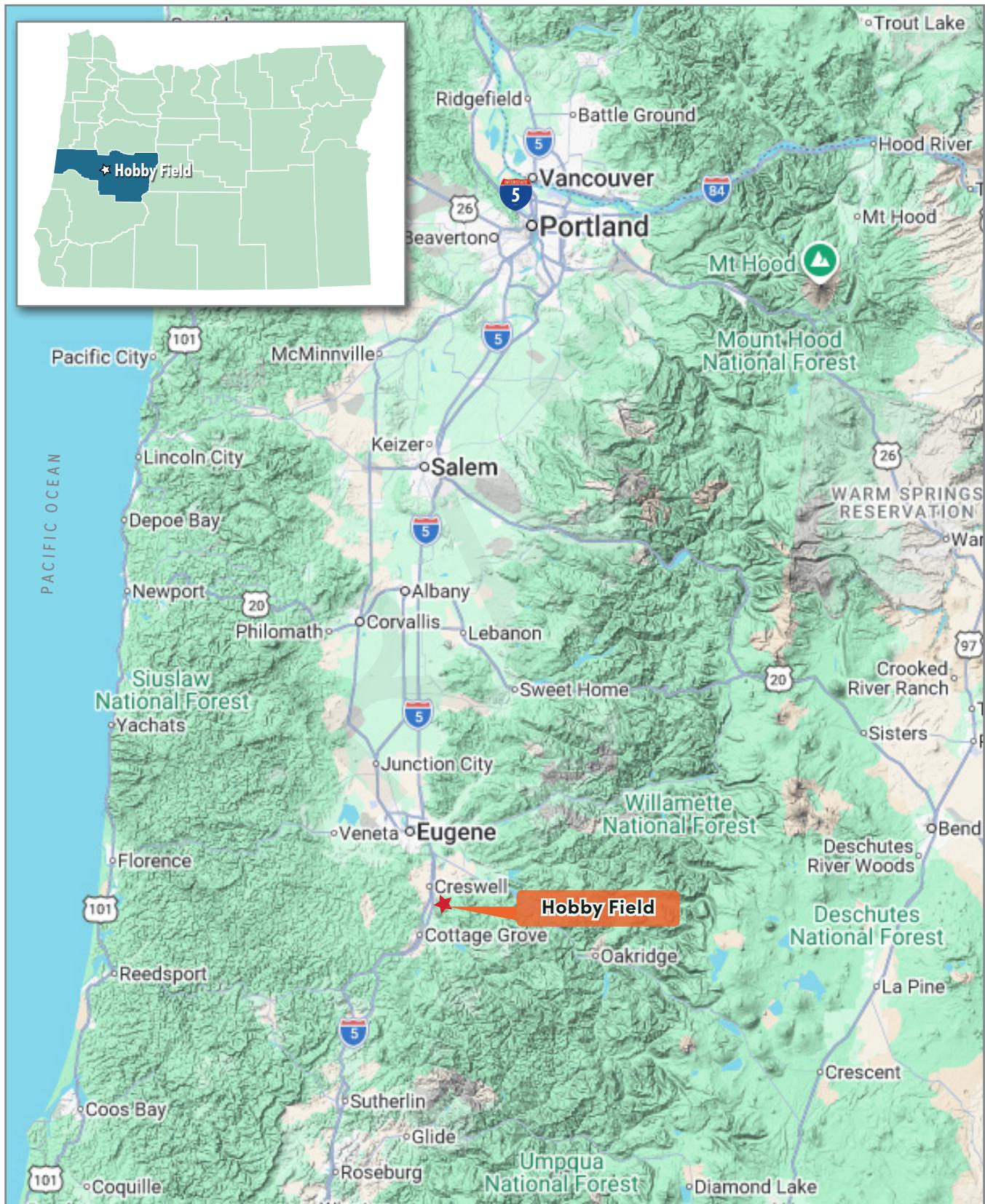
Population in the vicinity of an airport helps define the broad socio-economic characteristics that may influence airport activity. Data from the Portland State University Population Research Center (PRC) were reviewed to gauge recent historical population trends relevant to Creswell and Lane County, and therefore Hobby Field. The PRC Certified Population Estimates for 2025 (July 1, 2025) were reviewed along with the 2024 Annual Population Report (data compiled April 15, 2025) for use in this master plan.

The data indicate that between 2014 and 2024 (10 years) the annual rate of population growth in the City of Creswell outpaced county-wide growth at nearly twice the average rate (1.3% vs 0.7%). Local population growth during this period also exceeded the State of Oregon, which averaged growth of just over 0.7% annually. Historical population data are summarized in **Table 2-1**. Available data indicate that both Creswell and Lane County population growth slowed in 2025 to levels below their most-recent 10-year averages. This is not considered significant, as short term fluctuations are not unusual.

Creswell is located within 10 miles of Lane County's largest population center (Eugene and Springfield), which combined, accounted for approximately 63% of county population in 2024. Creswell's population has increased approximately 14% since 2014, and its share of county population has increased slightly to approximately 1.5%. A comparison of the 2014 and 2024 population distributions in Lane County is provided in **Table 2-2**.

<sup>2</sup> Oregon Blue Book (<https://sos.oregon.gov/blue-book/Pages/local/counties/lane.aspx>)

Figure 2-1: Location and Vicinity Map



Source: Google Maps

**Table 2-1: Historical Population**

	2014	2020	2021	2022	2023	2024	CAGR 2014-2024
Oregon	3,962,710	4,241,467	4,234,736	4,255,112	4,269,152	4,286,443	0.79%
Lane County	358,805	382,746	381,042	382,917	383,574	384,649	0.70%
Creswell	5,075	5,652	5,675	5,713	5,720	5,789	1.33%

CAGR: Compounded Annual Growth Rate (average annual growth rate for period)

TSOURCE: Portland State University (PSU) Certified Population Estimates – Lane County/Creswell (Incorporated) and Oregon State 2014-2024. Note: 2024 totals based on “2025 Vintage” adjustment contained in 2025 PSU-PRC certified estimate tables.

**Table 2-2: Historical Population – Local Area Distribution**

	2014	2024
Lane County	358,805 (100%)	384,649 (100%)
Creswell	5,075 (1.4%)	5,789 (1.5%)
Eugene	160,775 (44.8%)	178,454 (46.4%)
Springfield	60,065 (16.7%)	63,263 (16.5%)
Cottage Grove	9,840 (2.7%)	10,903 (2.8%)
Florence	8,565 (2.4%)	9,611 (2.5%)
Other Cities	17,205 (4.8%)	20,300 (5.3%)
Unincorporated	97,280 (27.1%)	96,329 (25.0%)

Source: Portland State University (PSU) Certified Population Estimates – Lane County/City 2014-2024. Note: 2024 totals based on “2025 Vintage” adjustment contained in 2025 PSU-PRC certified estimate tables.

## Income & Employment

U.S. Census data reports the 2023 median household income in the City of Creswell census district was \$95,865, higher than both Lane County (\$69,311) and Oregon statewide (\$80,426). The September 2025 seasonally adjusted unemployment rate in Lane County was 5.0%, slightly lower than Oregon’s statewide rate of 5.2%. These factors suggest that the local economy is performing in line or better than the regional or statewide economy in general terms.

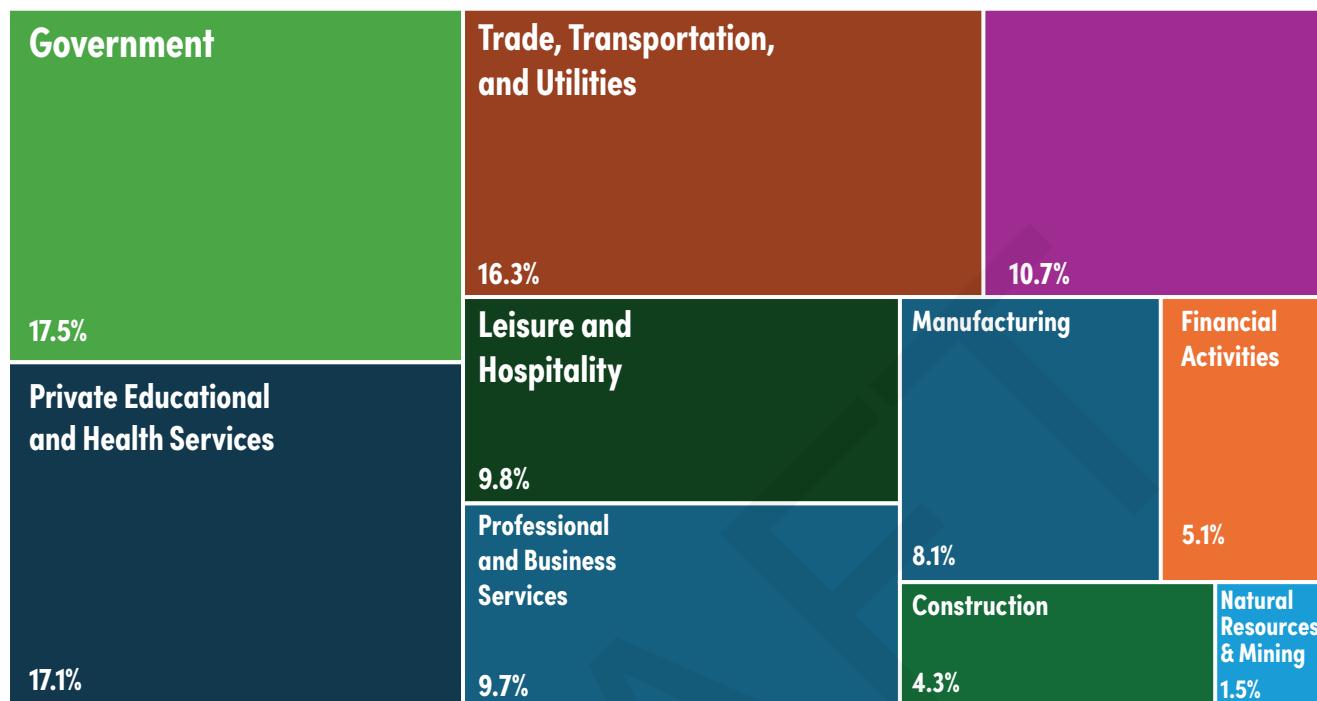
Historically centered around the timber and wood-products sectors, the Lane County’s economy has diversified substantially to include health care and technology industries centered around the Eugene-Springfield Metropolitan Service Area (MSA), which includes the City of Creswell.

Hobby Field supports a variety of local businesses with direct and indirect employment in both general aviation and commercial activities, and a broad range of secondary economic activity. The Airport supports local and regional economic activity by providing efficient access to air transportation for Creswell and the southern section of Lane County. The Airport’s accessibility makes it an important asset for emergency response, business travel, and general aviation activities.

**Figure 2-2** highlights the largest employment sectors in Lane County for 2024.<sup>3</sup> Three employment sectors (government; private education and health services; trade, transportation, and utilities) account for about half of total employment in Lane County. However, the remaining half of employment reflects a diverse mix across numerous sectors ranging from leisure and hospitality to manufacturing. The Oregon Employment Department (OED) December 2025 ten-year projection of industry employment in Lane County projects a 6% net increase between 2024 and 2034. **Table 2-3** highlights demographic data for Lane County from the 2023 Census.

<sup>3</sup> Oregon Employment Department, Workforce and Economic Research Division (December 2025)

Figure 2-2: Employment Industries



Source: Oregon Employment, Workforce and Economic Research Division Published: December 2025

Table 2-3: Lane County Demographics

Demographic	Data
Population	382,396 (2024)
Ethnicity (Primary Groups)	White, Hispanic, or Latino, Black, Asian, American Indian and Alaska Native, Pacific Islanders
Median Household Income (2019-2023)	\$69,311 (in 2023 dollars)
Per Capita Income (2019-2023)	\$38,563 (in 2023 dollars)
Persons in Poverty (%)	14.7%
Persons Under 18 (%)	17.0%
Persons 65 and over (%)	21.8%
Total Employment (2023)	129,060
Unemployment Rate (September 2025) Seasonally-Adjusted <sup>1</sup>	5.0%

Source: U.S. Census Bureau QuickFacts. 1. Oregon Employment Department.

## AIRPORT ROLE (NATIONAL, STATE, AND LOCAL)

The role of an airport may vary slightly within the context of the national, state, or local perspective. Understanding the existing roles of Hobby Field is key to establishing the long-term vision and future development of the facility.

### National Role

The FAA maintains a current inventory of 3,287 existing U.S. aviation facilities in the [National Plan of Integrated Airport Systems \(NPIAS\)](#). The NPIAS lists airports significant to the air transportation of the United States and thus are eligible for federal funding through the Airports Improvement Program (AIP), which typically covers 90% of eligible costs of planning and development projects. According to the *2024 National Plan of Integrated Airport Systems (2025-2029)* Report to Congress, Hobby Field is classified as a **Local General Aviation Airport** and as such, supports regional economies by connecting communities to statewide and interstate markets.

### State Role

The Oregon Department of Aviation (ODAV) has developed and regularly updates the Oregon Aviation Plan (OAP) to provide guidance on preserving the state's system of airports. The OAP presents a framework for improving the system for continued support of communities and economic development. The most recent update to the OAP (v.6.0) classifies Hobby Field as **Category IV – Local General Aviation Airport**. Category IV airports support local air transportation needs and special-use activities to include primarily single-engine general aviation aircraft, helicopters, gliders, and small twin engine aircraft.

## AIRPORT HISTORY

Hobby Field is owned and operated by the City of Creswell. In 1963 the City of Creswell purchased land "to be used exclusively for airport purposes" for the development of a new airport. The land was leased to Creswell Airport Inc., to begin airfield development in 1964. In 1975, Creswell Airport Inc., was purchased by Rens Manufacturing Company, Inc. The lease arrangement continued until 2000, when ownership of the Airport was transferred to the City of Creswell following a renegotiation of the original and amended agreements for ownership and operation of Hobby Field.<sup>4</sup> Key developments are summarized below:

**1964 to 1974:** The original airfield components were constructed using private funds. The facilities included a 2,100-foot paved runway, gravel taxiways, an asphalt terminal apron, a terminal building, T-Hangars (23 units), and an aircraft fueling facility.

**1976 to 1982:** Additional privately-funded improvements were completed including the aircraft fueling facility, T-Hangars (22 units), an expanded aircraft apron, taxilanes, hangar access, aircraft run-up pads, fencing and landscaping projects.

**1982 to 2000:** The City of Creswell began applying for FAA grants in 1982 for airport expansion and improvement projects that included property acquisition, runway and parallel taxiway construction, apron expansion, access road construction, and vehicle parking, PAPI and runway lighting. Additional privately-funded hangar development continued during this period with 7 individual hangars and 4 multi-unit T-hangars.

**2000 to present:** Following the transfer of ownership to the City of Creswell, several airport improvement projects have been completed including obstruction removal, runway reconstruction, installation of weather reporting equipment, utility improvements, navigational aid (NAVAID) and lighting improvements, and private hangar construction. An instrument approach and non-precision instrument (NPI) runway markings were added in 2012. The runway designation was updated to "16/34" in 2018 based on changes in magnetic declination. An Airport Master Plan was completed in 2007, and a new Airport Master Plan update began in 2025.

Recent FAA funded (with local match) airfield projects were listed in **Table 1-1**, in Chapter 1. **Figure 2-3** depicts new, rehabilitated and reconstructed airfield pavement, and new buildings constructed since the last ALP was completed in 2007.

<sup>4</sup> Hobby Field Airport Master Plan Update 2007, Century West Engineering)

Figure 2-3: Airport Development Since 2007



Source: Century West Engineering

## AREA AIRPORTS CONTEXTUAL ANALYSIS

The contextual analysis of an airport's service area examines its impact on its immediate geographic area. The airports within a defined service area that offer similar facilities or services effectively compete with each other. This includes locally based and transient aircraft where operators choose airports based in part on proximity to their place of home, business, or travel destination. The type and availability of facilities and services, and competition among airports, are key factors in the distribution of aviation activity within any particular service area.

For general aviation airports, most aeronautical activity can be linked to a service area boundary, which is commonly defined by 30 or 60-minute driving times surrounding the airport. Areas with larger concentrations of population often have a greater number of available airports with shorter travel times between facilities. In contrast, less densely populated areas may have fewer airports and longer travel times between facilities. Longer travel times are also common for commercial service airports, where there are fewer options available and surface traffic congestion increases in heavily populated metro areas.

The public use airports located within the service area defined for Hobby Field are briefly summarized below and depicted in **Figure 2-4**. These airports include publicly owned and privately-owned facilities that are open to the public without prior permission. A summary of the January 2026 Airport Master Record data for the area airports is presented in **Table 2-4**. It is noted that available Airport Master Record data for individual airports vary significantly in accuracy and are presented for reference only. An updated evaluation of airport activity will be provided in Chapter 3.

For Hobby Field, an updated based aircraft count completed by airport management in 2025 and submitted to the FAA through the National Based Aircraft Inventory program will be used as the based aircraft activity baseline for the Airport Master Plan forecast period (2025-2045). The updated baseline activity (based aircraft and annual aircraft operations) and forward looking projections will be presented in Chapter 3 – Airport Activity.

### Mahlon Sweet Field (EUG)

Mahlon Sweet Field is a publicly owned airport located on the north side of Eugene on Oregon Highway 99, about 15 nautical miles (NM) northwest of Hobby Field. EUG is a Part 139 certificated commercial airport (CFR Part 139) with an air traffic control tower, two paved and lighted runways (8,009' and 6,000' long) with precision instrument approach capabilities, and on-airport rescue and firefighting (ARFF) services. For general aviation users, EUG provides FBO services, fuel, aircraft maintenance, flight instruction, aircraft rental, aircraft storage hangars and tiedown parking, and car rental services.

### Cottage Grove State Airport (61S)

Cottage Grove State Airport is a publicly owned airport located in Cottage Grove Oregon, just east of I-5, about 8 NM south of Hobby Field. 61S has a single lighted paved runway (3,201' x 60') with visual approaches. 61S provides fuel, paved locally based and transient aircraft tiedowns, and hangars for locally-based aircraft.

### Corvallis Municipal Airport (CVO)

Corvallis Municipal Airport is a publicly owned airport located on the south side of Corvallis near Oregon Highway 99W, about 36 NM north of Hobby Field. CVO has two paved and lighted runways: Runway 17/35 (5,900' x 150') has precision instrument approach capabilities; Runway 10/28 (3,100' x 75') has visual approach capabilities. CVO provides FBO services, fuel, paved aircraft tiedowns for local and transient aircraft, flight training, aircraft rental, and hangars for locally-based aircraft.

### Albany Municipal Airport (S12)

Albany Municipal Airport is a publicly owned airport located in Albany, directly adjacent to I-5, about 43 NM north of Hobby Field. S12 has a single lighted paved runway (3,004' x 75') with non-precision instrument approach capabilities. S12 provides paved aircraft tiedowns for local and transient aircraft, flight training, aircraft maintenance, fuel, and hangars for locally-based aircraft.

## Lebanon State Airport (S30)

Lebanon State Airport is a publicly owned airport located in Lebanon, about 18 miles east of I-5 on Oregon Highway 34 (about 36 NM north of Hobby Field). S30 has a single lighted paved runway (2,747' x 60') with visual approach capabilities. S30 provides paved aircraft tiedowns for local and transient aircraft, aircraft maintenance, fuel, and hangars for locally-based aircraft.

## Oakridge State Airport (5S0)

Oakridge State Airport is a publicly owned airport located near Willamette City, about 24 NM southeast of Hobby Field. 5S0 has a single unlighted paved runway (3,610' x 47') with visual approaches. 5S0 has a single paved aircraft apron providing small aircraft parking (tiedowns) and access to storage hangars for locally-based aircraft.

A summary of the October 2025 Airport Master Record data for the area airport is presented in **Table 2-4**. As noted earlier, the Airport Master Record data is provided for general reference only as a broad indication of activity.

**Table 2-4: FAA Airport Master Record Airport Master Record Data (Public Use Airports in Vicinity)**

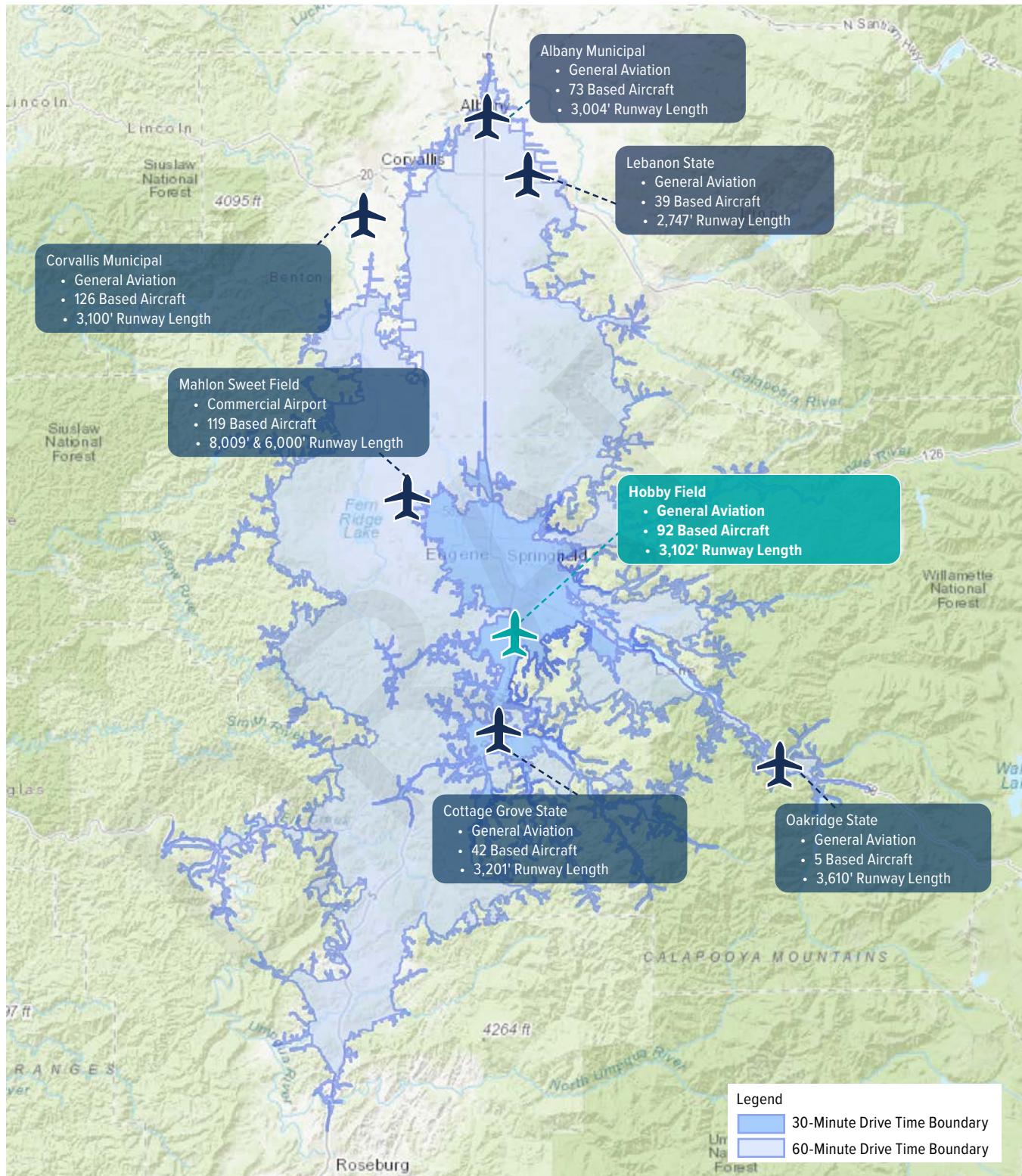
	Hobby Field Airport	Mahlon Sweet Field	Cottage Grove State Airport	Corvallis Municipal Airport	Albany Municipal Airport	Lebanon State Airport	Oakridge State Airport
<b>Total Based Aircraft<sup>1</sup></b>	<b>92</b>	<b>119</b>	<b>42</b>	<b>126</b>	<b>73</b>	<b>39</b>	<b>5</b>
Single Engine	89	88	41	114	64	39	5
Multi Engine	0	14	0	9	2	0	0
Jet	0	9	0	2	0	0	0
Helicopter	3	8	1	0	0	0	0
Glider	1	0	0	1	0	0	0
Military	0	0	0	0	0	0	0
Ultra-Light	0	0	0	3	0	0	0

Source: ADIP Airport Master Records and Reports (accessed 1/14/2026)

Notes:

1. \* FAA does not include listed gliders, ultra-light, or military aircraft in its Airport Master Record based aircraft totals.

Figure 2-4: Area Airports



Source: Source: Airport Data and Information Portal (ADIP), Esri, USGS, NOAA

## SUMMARY OF AIRCRAFT ACTIVITY

Hobby Field accommodates a variety of general aviation activity generated by locally-based and transient aircraft, including a high volume of skydiving activity generated by a locally based operator. General aviation activity includes single-engine and multi-engine piston fixed wing, turboprops, business jets, and helicopters. The most recent (December 2025) based aircraft summary is provided in **Table 2-5**, with earlier estimates from a recent FAA Airport Master Record form and the 2007 AMP Report provided for comparison. Small single-engine piston aircraft represent the majority of locally based aircraft at Hobby Field.

### Based Aircraft

As part of the FAA's National Based Aircraft Inventory Program, airport sponsors are required to periodically review and update their based aircraft data. The validated based aircraft refers to an aircraft count conducted by airport management that has been verified and confirmed as being based at an airport through the FAA's program. For comparison, the Airport Master Record data presented earlier is also reported by airports, but not verified through the FAA's inventory database. As noted earlier, Airport Master Record data provides only rough approximations of airport activity for general reference.

Airport management completed the most recent review of Hobby Field based aircraft in January 2026, with a total of 84 validated aircraft recorded. The FAA inventory identified 16 aircraft that were excluded from the validated count, including 12 aircraft with invalid FAA registrations or airworthiness certificates and 4 aircraft that were reported by other airports. Airport management is reviewing the status of these aircraft to identify any that are expected to return to active status in the near future and to verify that the duplicated are accurately assigned to the correct airport. Aircraft that divide their time at more than one airport are typically credited to the airport where they spend at least 6 months + 1 day in any given calendar year. If any of the 16 excluded aircraft at Hobby Field can be verified, they will be added to the first 5-year based aircraft projection (2030) in the master plan.

When comparing current and historical based aircraft data, it is important to note that the current FAA based aircraft counting methodology excludes gliders and ultra lights from an airport's validated count total (currently noted on the FAA Airport Master Record form, but not included in its total based aircraft count). These aircraft types were included in the 2007 master plan based aircraft totals, which was consistent with FAA policy at the time.

**Table 2-5: Based Aircraft**

	2007 Airport Master plan	FAA Airport Master Record	FAA Validated Based Aircraft Count (January 2026) <sup>1</sup>
Single Engine	98	89	83
Multi Engine	3	0	0
Jet	0	0	0
Helicopter	1	3	1
Glider*	0	1	0
Ultra-Light*	2	0	0
<b>TOTAL BASED AIRCRAFT</b>	<b>104</b>	<b>92</b>	<b>84</b>

Updated count provided by airport management (12/2025). 2007 AMP Report (2005 base year).

1. FAA validated count (January 2026); 16 additional aircraft listed in inventory were excluded.

\*Glider and ultralight aircraft are not included in the FAA National Based Aircraft Inventory "Validated Inventory" or the FAA Airport Master Record "Based Aircraft" totals.

### Aircraft Operations

Aircraft operations (takeoffs and landings) at non-towered airports are not routinely recorded. Data from various available sources will be evaluated and combined to create an estimate of activity for Hobby Field. The 2007 AMP Report estimated 34,600 annual aircraft operations in the forecast base year (2005), with 50,595 operations projected for 2025. An updated estimate of current airport flight activity will be prepared and presented in Chapter 3 – Airport Activity Evaluation for facility planning purposes.

## ENVIRONMENTAL DATA

### Physical Geography

The following summary was provided in the 2007 Airport Master Plan (Century West Engineering) and updated as needed: Creswell is located adjacent to the Camas Swale, a natural plain that extends into the valley from the South Eugene Hills. The terrain immediately surrounding Hobby Field is relatively level, consisting mostly of cultivated agricultural lands and sparsely forested areas. The published airport elevation is 541 feet above mean sea level (MSL). Creswell Butte is located about 1.75 miles southwest of the runway, rising to an elevation of approximately 984 feet MSL, which is 443 feet above the Airport. Creswell Butte is located just south and west of the standard (left) airport traffic pattern for Runway 34, within the existing conical surface, which is the outer band of protected airspace for the runway. Short Mountain is located approximately 3 miles north of the airport with an elevation of just less than 1,100 feet MSL (a tower height of 1,114 feet MSL is depicted on current USGS topographical mapping). Terrain rises to nearly 3,800 feet (southeast) within ten miles of the Airport.

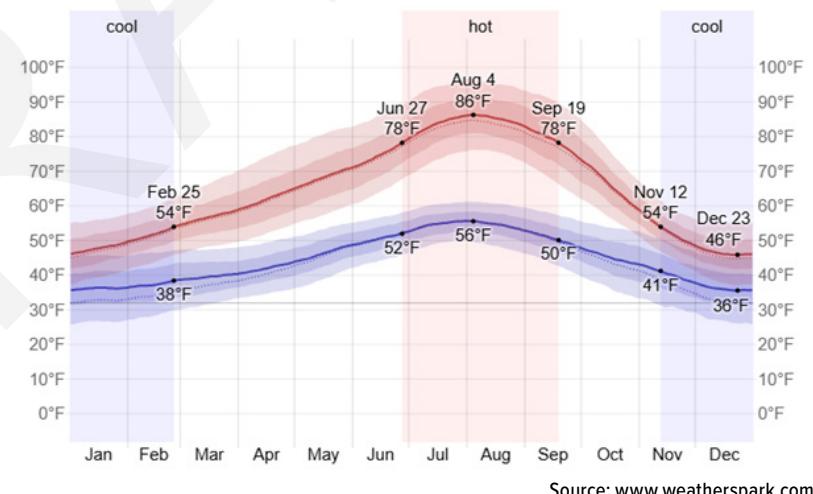
Updated Soil Survey information provided by the US Department of Agriculture (USDA) indicates that the soils in the vicinity of the Airport predominantly consist of silty loams and clay loams typical of the Willamette Valley floor.<sup>5</sup> These soils formed in alluvium derived from mixed sources and are generally nearly level to gently sloping, with moderate to poor drainage characteristics in areas near floodplains.

The most common soil types mapped within the Airport area include Salkum silt loam, Noti loam, Linslaw loam, and Holcomb silty clay loam. Additional mapped soils include Camas gravelly sandy loam, Chehalis silty clay loam, Coburg silty clay loam, Salem gravelly silt loam, and Wapato silty clay loam, along with small areas of Newberg, McBee, and Cloquato soils.

### Local Climate

The climate in the Creswell area is characterized by warm, dry summers and mild, mild wet winters. The climate is heavily influenced by the topography formed by the Willamette Valley and the Coast and Cascade Ranges that border the valley to the west and east. The mountainous terrain bordering the Willamette Valley effectively tempers wind movement and reduces wind speeds on the valley floor. The region experiences seasonal wind patterns that are generated from the Pacific Ocean. During winter and spring, southerly winds associated with active storm fronts are common. The patterns shift in the summer and fall with winds from the northwest.

Figure 2-5: Annual Temperatures



Detailed climatic data from the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration's Modern-Era Retrospective analysis for Research Applications, Version 2 (MERRA-2) dataset, and other global and meteorological databases were reviewed and are summarized. The graphs used in this section were accessed through [www.weatherspark.com](http://www.weatherspark.com). The seasonal variation in average temperature for Creswell is depicted in **Figure 2-5**.

<sup>5</sup> U.S. Department of Agriculture, Natural Resources Conservation Service. (2020). Soil Survey: Lane County Area, Oregon (Survey Area Data, Version 17, June 11, 2020) [Data set]. Web Soil Survey. Retrieved from <https://websoilsurvey.sc.egov.usda.gov/>

The data indicate that July and August are typically the warmest months with an average maximum temperature reaching 86° Fahrenheit (F). December and January are the coldest months, with an average minimum temperature around 36° F. The highest temperatures recorded rarely exceed 97° F and the lowest temperatures rarely exceed 26° F. Seasonal variations in average precipitation and cloud cover are presented in **Figure 2-6** and **Figure 2-7**. The area averages significant annual rainfall, particularly from October through March, accounting for the majority of the yearly total average. Snowy periods in Creswell range from December to January with an average snowfall of less than 1 inch.

## Wind Analysis

Wind speed and direction play a significant role in runway use. While large aircraft can operate with higher levels of crosswinds during takeoff and landing, smaller aircraft have more operational limits during strong crosswind conditions.

The ability of an aircraft to effectively manage crosswinds depends on aircraft type, crosswind speed, and angle (relative to direction of flight), and pilot skill. The FAA standard for wind coverage is that a primary runway should be capable of accommodating at least 95% of wind conditions, within the prescribed crosswind comment. This metric is used primarily to justify development of crosswind runways and to determine FAA funding eligibility.

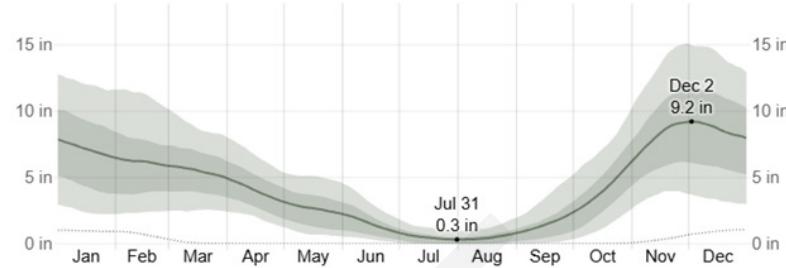
The 2007 ALP noted that onsite wind data for Hobby Field was not available at the time and the Eugene Airport wind rose was used for general comparison. The 2007 AMP cited a 1983 environmental assessment study for a Hobby Field runway reconstruction project that estimated all-weather wind coverage to be 95% at 12 mph for both the original and reoriented (approximately 10 degrees NW/SE) runway configurations. It was determined that the runway wind coverage was generally considered to be adequate, although occasional periods of moderate-to-strong crosswinds are not uncommon.

An FAA-funded AWOS was installed at Hobby Field in 2012. An analysis of the last 10 years of onsite wind data will be performed for Runway 16/34 and included in Chapter 4 – Facility Requirements. An updated wind rose will be created and added to the ALP.

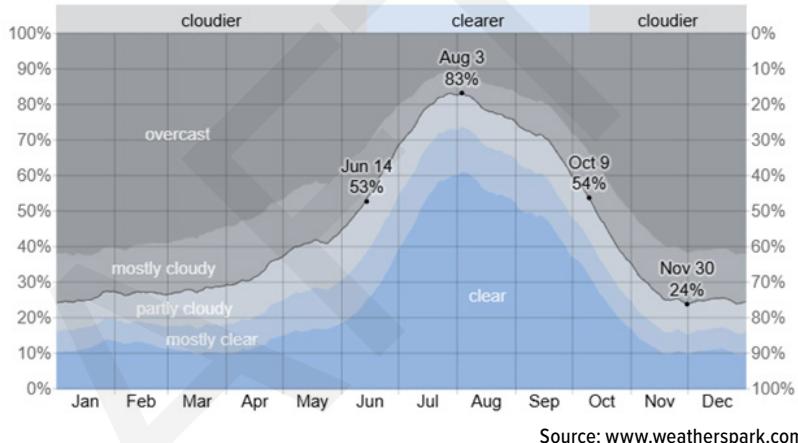
## ENVIRONMENTAL OVERVIEW (NEPA)

An Environmental Overview was completed as part of the airport master plan. The technical memorandum is provided in **Appendix A**.

**Figure 2-6: Annual Rainfall**



**Figure 2-7: Annual Cloud Cover**



Source: [www.weatherspark.com](http://www.weatherspark.com)

## LAND USE & ZONING ANALYSIS

### Compatible Land Use Planning

The Oregon Department of Aviation's Airport Land Use Compatibility Guidebook identifies land uses that are considered generally compatible or incompatible within Part 77 airspace surfaces and other projected areas for airports. **Figure 2-8** depicts ODAV's land use compatibility matrix defined for the five defined Part 77 airspace surfaces, and for Runway Protection Zones (RPZ), which are defined by the FAA (design standard) and assigned to each runway end. The compatibility criteria is developed by FAA and other federal agencies, including Housing and Urban Development (HUD) and the Environmental Protection (EPA).

### Part 77 Airspace

As noted above, airport land use protections are typically assigned to the specific airspace surfaces defined in Part 77 in the form of airport overlay zones.

Part 77 airspace is federally defined under *Title 14, the Code of Federal Regulations (CFR), Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace*. **Figure 2-13** (later in the chapter) depicts the Part 77 airspace for Hobby Field from the 2007 Part 77 airspace plan, which will be updated in the current master plan update.

It is important to note that Part 77 surfaces have both flat and sloped surfaces that begin at runway elevation. In general, airspace surfaces located further from a runway are elevated above their associated airports, consistent with common aircraft movements occurring during the landing and takeoff modes around airports. Obstacle clearing standards apply to both natural terrain and built items.

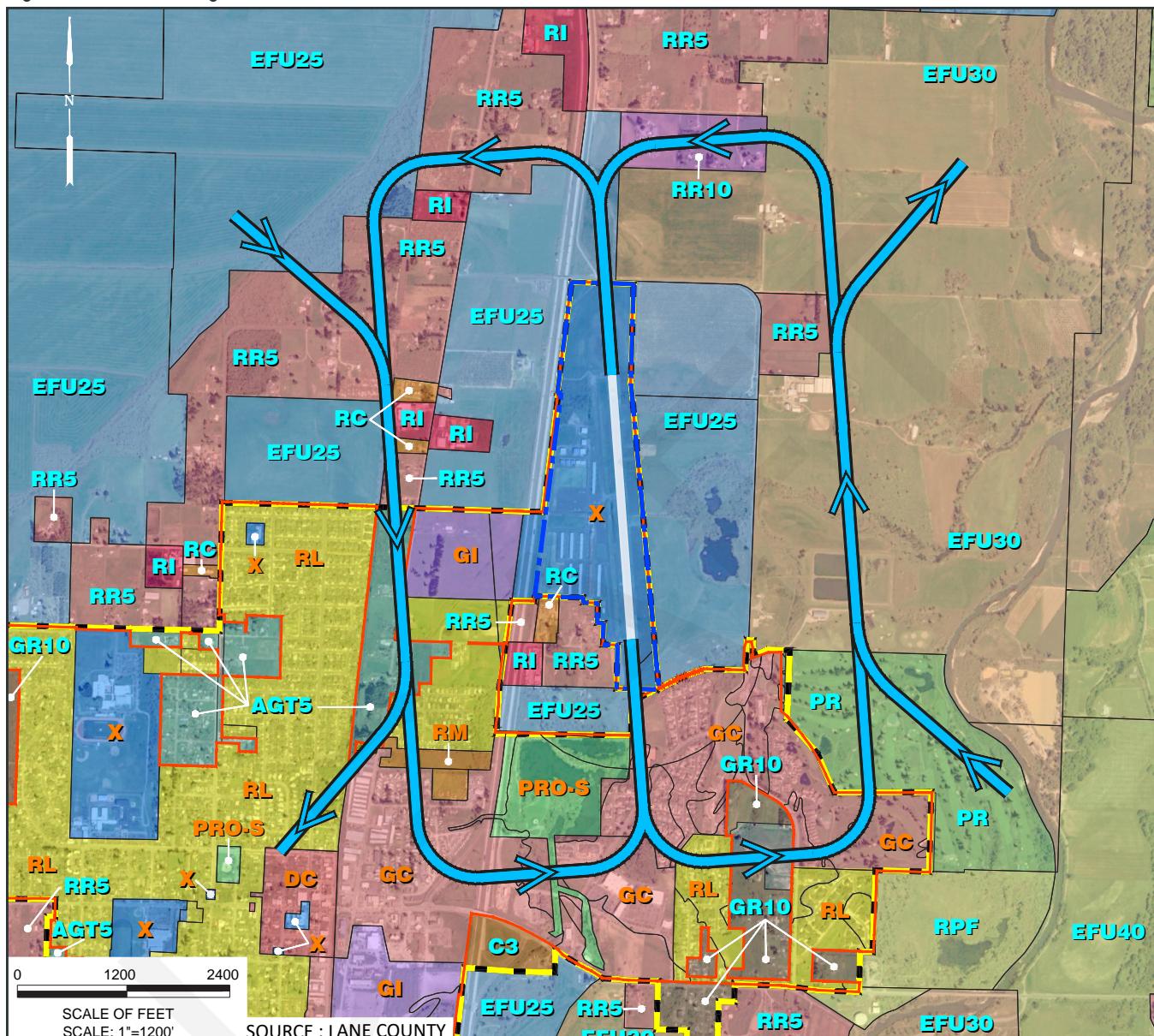
### Local Land Use Regulations

Land use actions related to the Airport and its immediate surroundings are subject to both the City of Creswell Development Code (City of Creswell, Article 2) and the Lane County Code (Lane Code, Chapter 10). The current zoning for the Airport and its immediate surroundings is depicted in **Figure 2-9**. These zones are briefly summarized below, and the full zoning ordinances are provided in **Appendix B**.

Figure 2-8: ODAV Land Use Matrix

Compatible Land Uses per FAR Part 77 Surfaces and FAA Safety Areas							
Land Uses	Criteria for Compatibility:						
	Primary Surface	Transitional Surface	Horizontal Surface	Conical Surface	Approach Surface	Runway Surface	Runway Protection Zone
<b>Residential</b>							
Residential, other than those listed below	NC	NC	•	C	•	NC	
Mobile home parks	NC	NC	•	C	•	NC	
Transient lodgings	NC	NC	•	C	•	NC	
<b>Public Use</b>							
Places of public assembly (schools, hospitals, churches, auditoriums)	NC	NC	•	C	NC	NC	
Government services	NC	•	C	C	•	NC	
Transportation (parking, highways, terminals)	NC	•	C	C	•	•	
<b>Commercial Use</b>							
Offices, business and professional	NC	•	C	C	•	NC	
Wholesale & retail - building materials, hardware and farm equipment	•	•	C	C	•	NC	
Retail trade - general	NC	•	C	C	•	NC	
Utilities	NC	•	•	•	•	•	•
Communication	NC	•	•	•	•	•	NC
<b>Manufacturing &amp; Production</b>							
Manufacturing - general	NC	•	•	•	•	•	NC
Agricultural (except livestock) and forestry	•	•	C	C	•	•	•
Livestock farming and breeding	NC	•	•	C	•	•	NC
Mining and fishing, resource production and extraction	NC	NC	•	•	•	•	NC
<b>Recreational</b>							
Outdoor sports arenas and spectator sports	NC	NC	•	C	NC	NC	
Nature exhibits and zoos	NC	NC	•	C	NC	NC	
Amusement park, resorts and camps	NC	NC	C	C	NC	NC	
Golf courses	NC	NC	C	C	NC	NC	
Parks	NC	•	•	•	•	•	•

Figure 2-9: Local Zoning



LEGEND	
	AIRPORT BOUNDARY
	ZONING BOUNDARY
	URBAN GROWTH BOUNDARY
	URBAN GROWTH BOUNDARY
	AIRPORT TRAFFIC PATTERN

CITY OF CRESWELL ZONING	
	PUBLIC FACILITY / GOVERNMENT - <b>X</b>
	PARK, RECREATION, OPEN SPACE - <b>PRO-S</b>
	GENERAL INDUSTRIAL - <b>GI</b>
	DOWNTOWN COMMERCIAL - <b>DC</b>
	GENERAL COMMERCIAL - <b>GC</b>
	MEDIUM DENSITY RESIDENTIAL - <b>RM</b>
	LOW DENSITY RESIDENTIAL - <b>RL</b>

LANE COUNTY ZONING	
	RURAL RESIDENTIAL (5 AC.) - <b>RR5</b>
	RURAL RESIDENTIAL (10 AC.) - <b>RR10</b>
	PARK AND RECREATION - <b>PR</b>
	EXCLUSIVE FARM USE (25 AC.) - <b>EFU25</b>
	EXCLUSIVE FARM USE (30 AC.) - <b>EFU30</b>
	EXCLUSIVE FARM USE (40 AC.) - <b>EFU40</b>
	RURAL PUBLIC FACILITY - <b>RPF</b>
	RURAL PUBLIC FACILITY - <b>RI</b>
	RURAL COMMERCIAL - <b>RC</b>
	GENERAL RURAL DISTRICT - <b>GR10</b>
	AGRICULTURE, GRAZING, TIMBER - <b>AGT5</b>
	COMMERCIAL - <b>C3</b>

## AIRPORT ZONING

Hobby Field is located inside the Creswell city limits and is subject to City of Creswell land use and zoning regulations.

### City of Creswell

The [City of Creswell Development Code \(Chapter 1\)](#) defines the comprehensive plan and development code standards that apply to all lands within the City's incorporated limits (city limits). Land use districts and applicable overlay zones are defined for all land divisions (parcel, lot, tract) to identify permitted land uses.

**Public Facilities District (X).** The City of Creswell development code includes a **Public Facilities District (Chapter 2.6)**, which is applied to Hobby Field. The City's Comprehensive Plan Zoning diagram depicts Hobby Field with a Public land use designation. The Public Facilities District intent is to *"provide for the public and quasi-public structures and services necessary for the operation, minimum health and safety, and desired present and future quality of life for the City of Creswell."* Permitted uses include colleges, schools, government buildings, fire stations or substations, **airports**, and transportation facilities.

The zoning designation corresponds to the functional needs of the Airport as a public facility. The maximum building height is 36 feet, however more restrictive height restrictions from overlay zoning may restrict building heights to avoid conflicts with Part 77 surfaces associated with Runway 16/34. The current land use and zoning criteria is compatible (with appropriate site requirements) with the development and operational needs of the Airport.

## AIRPORT VICINITY ZONING

As noted previously, the Airport is located in the City of Creswell with areas of the Part 77 surfaces for Runway 16/34 extending over unincorporated Lane County. The surrounding areas include a mix of residential, agricultural, industrial, commercial, and public lands under the zoning jurisdiction of both Lane County and the City of Creswell. The land uses and zoning in the vicinity of Hobby Field (see below) are consistent with development patterns found in smaller communities and no significant incompatibilities are identified.

### City of Creswell

**Residential-Low (RL) District.** A large area of low density residential (RL) zoning exists southwest of the Airport and a smaller area is located to the southeast. RL land provides for *"households living at lower densities, with parks, schools, places of worship, and other supportive services that are at an appropriate neighborhood scale."* Permitted uses include single-family, duplex and multi or cottage cluster dwellings with minimum lot sizes ranging from 4,000 to 7,000 square feet. The maximum development density is 16.4 dwelling units per acre. The standard maximum structure height in the RL district near the Airport is 35 feet.

**Residential-Medium (RM) District.** A pocket of RM land exists southwest of the Airport, adjacent to I-5. RM land is intended to *"accommodate a wider variety of housing types, including more attached and small lot housing, than is allowed in the RL district."* Permitted uses include duplex and multi or cottage cluster dwellings with minimum lot sizes ranging from 2,650 to 8,000 square feet. Single family (not attached) dwellings are allowed as conditional uses (permit required with specific conditions). The permitted development density range is 8 to 18 dwelling units per acre. The standard maximum structure height in the RM district near the Airport is 35 feet.

**Residential-High (RH) District.** A small area of RH zoning exists southwest of the Airport. RH land accommodates *"a variety of housing types at higher densities, often focusing on attached or multifamily dwelling units with common amenities."* Outright permitted uses include duplex and cottage cluster dwellings. Manufactured home, zero-lot line housing, and multifamily housing are permitted with standards. Minimum lot sizes ranging from 2,650 to 8,000 square feet. The permitted development density range is 12 to 24 dwelling units per acre. The standard maximum structure height in the RH district near the Airport is 35 feet.

**Downtown Commercial (DC) District.** A small area of DC zoned land exists in the downtown City of Creswell, southwest of the Airport. The DC district focuses on the core commercial and civic of the community. Permitted uses include bed and breakfast inns, educational services, day care, offices, retail sales and service, basic utilities, pedestrian amenities, parks and recreation facilities, other open space, and transportation facilities. The maximum structure height in the DC district is 36 feet.

**General Commercial (GC) District.** Large areas of GC zoned land exist near Airport property to the south. The GC district is focused on commercial areas outside or adjacent to the central business area. Permitted uses include bed and breakfast inns, educational services, offices, retail sales and service, fully enclosed industrial services, fully enclosed manufacturing and production, fully enclosed warehouse and freight movement, fully enclosed wholesale sales, basic utilities, pedestrian amenities, other open space, and transportation facilities. The maximum structure height in the GC district is 36 feet.

**General Industrial (GI) District.** GI zoned land borders the Airport to the west and is located further south of the Airport. The GI district is intended to provide for land use compatibility while providing a high-quality environment for businesses and employees as well as to provide suitable locations for heavy industrial uses. Permitted uses include drive-up/drive-through facilities, offices, quick vehicle servicing or vehicle repair, self-service storage, fully enclosed industrial services, manufacturing and production services, warehouse and freight movement, basic utilities, pedestrian amenities, other open space, radio frequency transmission facilities (within height limit of district), and transportation facilities. The maximum structure height in the GI district is 35 feet.

**Park, Recreation, or Open Space (PRO-S) District.** Areas of PRO-S zoned land exist immediately to the south of the Airport and are dispersed throughout the city to the west of I-5. The PRO-S district is intended to *“preserve and protect park, recreation and open space lands that contribute to the general welfare and safety, the full enjoyment or the economic well-being of persons who reside, work or travel in, near or around them.”* Permitted uses include public parks and playgrounds, golf courses and country clubs, historical areas, natural features, community and recreation centers, accessory structures, agricultural uses, recreational facilities, nature preserves, wetland or wildlife mitigation areas, interpretive signs, benches, trails and pathways, lights, and transportation facilities.

**Public Facilities (X) District.** The Airport is zoned as X, and additional X zoned land exists to the west of I-5, southwest of the Airport with the same land uses permitted as the Airport. The maximum structure height in the X district is 36 feet.

## Lane County

**Lane Code (LC) , Chapter 10 – Zoning, Section 10.100** defines the zoning for the unincorporated areas of the county. The land uses and zoning for unincorporated Lane County in the vicinity of Hobby Field (see below) are consistent with rural development patterns and no significant incompatibilities are identified.

**Exclusive Farm Use (E25, E30, E40, E60).** Large areas of EFU zoning exist under the Part 77 surfaces for Runway 16/34. The purpose of EFU land is to provide areas for the continued practice of agriculture. Permitted uses include farm uses, accessory buildings, single family dwellings, public or semi-public buildings, forest harvesting of a forest product, churches, public or private schools, mining operations of geothermal resources commercial activities (in conjunction with a farm use), private parks, flood control or irrigation projects and facilities, electrical generation facilities, personal use airports, feed lots, solid waste disposal site, minor and major rural homes, and rock, sand gravel or loam extraction, and transportation facilities. These uses are generally compatible with public use airport operations and land use. Additional restrictions and hazard mitigation (dust, glare, etc.) are included in airport overlay zoning (see below).

A 33.69-acre parcel of E25 zoned property located directly adjacent to the east side of Hobby Field. The parcel was purchased in 2008 by the City of Creswell Wastewater Department. The parcel sits between the Airport and a section of Dale Kuni Road that roughly parallels the runway to the east. The Airport sited its automated weather observation system (AWOS) on this parcel through an interdepartmental use agreement. The local skydive operator based at Hobby Field pays an annual fee to the City's Wastewater Department to site a parachute drop zone adjacent to the runway. The limited aeronautical use (grass surfaced parachute landing area and AWOS system) appear to be consistent with transportation facilities and uses defined in **LC Section 10.100-500 Transportation Facilities and Uses**.

**Public Reserve (PR).** PR zoned land exists to the southeast of Airport property. The purpose of PR zoning is not described in the Land County Zoning code. However, permitted uses include hunting and fishing lodges, ranches, resort hotels, public and semi-public buildings, and transportation facilities.

**Rural Public Facility (RPF).** Areas of RPF zoning exist west and south of the Airport, underneath the horizontal and conical surfaces. Among the listed purposes for this zone include *"To provide land for public and semipublic uses and development that serve rural residents and people traveling through the area and that are by nature intensive or unusual uses not normally associated with other zones."* It is noted that *"this zone applies only to developed and committed exception lands."* (LC 16.294)

**Rural Industrial (RI).** Areas of RI zoning are dispersed northwest and south of the Airport. Among the listed purposes for this zone include *"to allow industrial uses and development that are consistent with Goal 14 (of the LC Rural Comprehensive Plan - RCP) that include areas for small scale industrial uses and for industries that rely on a rural location in order to process rural resources; to allow for the continued operation of existing industries; and to provide protective measures for riparian vegetation along Class I streams designated as significant in the RCP."* (LC 16.292)

**Rural Commercial (CA).** Areas of CA zoning exist northwest and south of the Airport. The purpose of CA zoning is to *"provide convenience goods and services needed by rural area residents on a daily basis."* Permitted uses include a single-family dwelling per lot, grocery store or general store, fruit and vegetable store or stand, diary produce store, meat market, public and semi-public building, retail or wholesale nurseries, service station, feed and seed store, other similar uses, and transportation facilities.

**Rural Residential (RR1, RR2, RR5, RR10).** Areas of RR zoning exist underneath a majority of the Part 77 surfaces that extend over unincorporated Lane County. The purpose of RR zoning is to *"provide opportunities for persons who desire to live in a rural neighborhood setting."* Permitted uses include one single-family dwelling, guest house, general farming, raising, and tending or breeding of animals (cattle, horse, sheep, goats, or bees, poultry fur-bearing animals and swine for the purpose of personal domestic use), public or semi-public or semipublic buildings, accessory buildings, and transportation facilities.

## AIRPORT OVERLAY ZONING

The City of Creswell and Lane County have each adopted airport overlay zoning that is applicable to Hobby Field, in accordance with Oregon state law (OAR 660-013-0070). The responsibility for adopting airport overlay zoning specific to Hobby Field rests with each local government entity located within the footprint of federally defined airspace for Hobby Field, under Title 14 of the Code of Federal Regulations (CFR), Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace.

The airspace associated with Hobby Field extends over both the City of Creswell and areas of unincorporated Lane County. The city and county airport overlay zoning districts require structures on land that fall under the defined Part 77 surfaces to support compatibility with airport operations and ensure safety.

## City of Creswell

The City of Creswell utilizes an overlay district to “encourage and support the continued operation of Creswell Municipal Airport (Hobby Field) by establishing compatibility and safety standards to promote air navigational safety and to mitigate the impact of the airport on surrounding land uses.” **City of Creswell Code, Chapter 2.8 Airport (A) Overlay** is intended to protect the airspace associated with the Airport from obstructions, hazards, and incompatible land uses. The imaginary surfaces adopted by the City of Creswell through its Airport Layout Plan (ALP) drawing set establishes protections for federally defined airspace per the Code of Federal Regulations (14 CFR, Part 77) and applies those to all lands beneath those surfaces under city land use jurisdiction.

The Airport (A) Overlay district also defines the requirement to establish a noise impact boundary for the Airport to ensure that all land uses within the boundary “are consistent with the levels identified in OAR 660, Division 13, Exhibit 5.” Other elements in Chapter 2.8 establish standards to address glare, industrial emissions, outdoor lighting, electrical/communication interference, landfills, bird strike hazards, that could create a hazard for aircraft and airports. The overlay district also explicitly prohibits specific land uses (new residential development, public assembly) in the Runway Protection Zones (RPZ) located at each end of the runway.

## Lane County

Similar to the ordinance adopted by the City of Creswell, Lane County has adopted airport overlay zoning that creates protections for federally defined airspace from incompatible land uses and encourages compatible land use intended to support air transportation. **Lane Code Chapter 10.201 Airport Vicinity District – AV** “is intended to provide areas for activities directly supporting or dependent upon aircraft or air transportation which are not of necessity required to locate within the on-site operational area of the airport. It is also intended to provide areas for open land uses which minimize potential dangers from, and conflicts with, the use of aircraft.

*Underlying these purposes are the concerns that air transportation has special functional, support and safety needs; that it would be desirable to provide locational opportunities for those commercial, industrial or other land uses which require close proximity to the airport and its services, that land values should be safeguarded by preventing the encroachment of incompatible uses which could better serve the community by being located elsewhere; and that there is the need to protect the public health, safety and general welfare from hazards, noise, and other conditions incidental to airport activity.”*

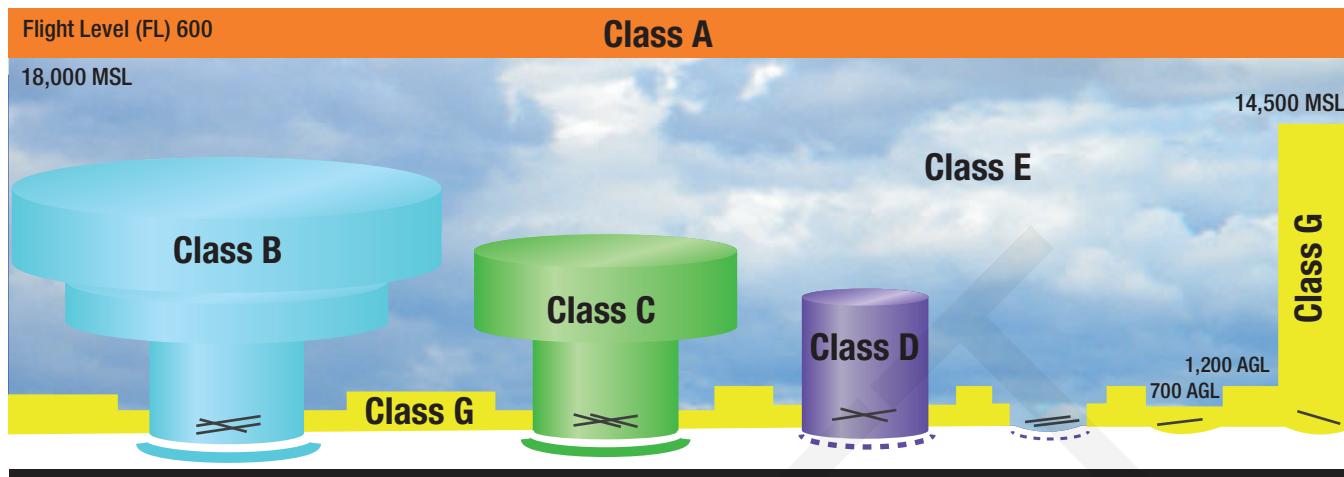
*The AV District identifies a variety of permitted and conditional uses that are compatible with airports. The district also requires that “All structures and uses within the Airport Vicinity District shall conform to the requirements of Federal Aviation Agency regulation FAR-77 or successor, and to other Federal and State laws as supplemented by Lane County Ordinances, particularly Lane County Ordinance #105 or successor, regulating structure height, lights, glare producing surfaces, radio interference, smoke, steam or dust and other hazards to flight, air navigation or public health, safety and welfare.”*

## U.S. AIRSPACE CLASSES

Airspace within the United States is classified by the FAA as “controlled” or “uncontrolled” with altitudes extending from the surface upward to 60,000 feet above MSL. Controlled airspace classifications include Class A, B, C, D, and E. Class G airspace is uncontrolled. **Figure 2-10** depicts these airspace classes.

Aircraft operating within controlled airspace are subject to varying levels of positive air traffic control that are unique to each airspace classification. Requirements to operate within controlled airspace vary, with the most stringent requirements associated with large commercial airports in high traffic areas. Uncontrolled airspace is typically found in remote areas or is limited to a 700 or 1,200-foot above ground level (AGL) layer above the surface and below controlled airspace.

Figure 2-10: FAA Airspace Classifications



COMMUNICATION REQUIREMENTS AND WEATHER MINIMUMS						
	Class A	Class B	Class C	Class D	Class E	Class G
Airspace Class Definition	Generally airspace above 18,000 feet MSL up to and including FL 600.	Generally multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports	Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control	Generally airspace from the surface to 2,500 feet AGL surrounding towered airports	Generally controlled airspace that is not Class A, Class B, Class C, or Class D	Generally uncontrolled airspace that is not Class A, Class B, Class C, Class D, or Class E
Minimum Pilot Qualifications	Instrument Rating	Student*	Student*	Student*	Student*	Student*
Entry Requirements	IFR: ATC Clearance VFR: Operations Prohibited	ATC Clearance	IFR: ATC Clearance VFR: Two-Way Communication w/ ATC	IFR: ATC Clearance VFR: Two-Way Communication w/ ATC	IFR: ATC Clearance VFR: None	None
VFR Visibility Below 10,000 MSL**	N/A	3 Statute Miles	3 Statute Miles	3 Statute Miles	3 Statute Miles	Day: 1 Statute Mile Night: 3 Statute Miles
VFR Cloud Clearance Below 10,000 MSL***	N/A	Clear of Clouds	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal***
VFR Visibility 10,000 MSL and Above**	N/A	3 Statute Miles	3 Statute Miles	3 Statute Miles	5 Statute Miles	5 Statute Miles
VFR Cloud Clearance 10,000 MSL and Above	N/A	Clear of Clouds	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	1,000 Below 1,000 Above 1 Statute Mile Horizontal	1,000 Below 1,000 Above 1 Statute Mile Horizontal

\* Prior to operating within Class B, C, or D airspace (or Class E airspace with an operating control tower), student, sport, and recreational pilots must meet the applicable FAR Part 61 training and endorsement requirements. Solo student, sport, and recreational pilot operations are prohibited at those airports listed in FAR Part 91, appendix D, section 4.

\*\* Student pilot operations require at least 3 statute miles visibility during the day and 5 statute miles visibility at night.

\*\*\* Class G VFR cloud clearance at 1,200 agl and below (day); clear of clouds.

Source: Federal Aviation Administration (FAA) & Century West Engineering

## LOCAL AREA AIRSPACE STRUCTURE

The [FAA Klamath Falls Sectional](#) aeronautical chart depicts nearby airports, notable obstructions, special airspace designations, and instrument airways in the vicinity of Hobby Field. **Figure 2-11** depicts the local airspace structure.

Hobby Field is in an area of Class E airspace with a floor 700 feet AGL; the airspace from the surface to 700 feet AGL is class G (uncontrolled). Radio communication is not required for visual flight rules (VFR) operations in Class E airspace, although pilots are encouraged to use the Common Traffic Advisory Frequency (CTAF) when operating at or in the vicinity of the Airport. An area of Class E airspace extending upward from the surface is located approximately 1 NM northwest of Hobby Field. This section of Class E airspace is associated with the Eugene Airport. Aircraft are required to obtain air traffic control (ATC) clearance prior to operating in Class E airspace during instrument flight rules (IFR), since the airspace is intended to protect inbound and outbound aircraft in non-visual conditions.

An area of Class D airspace associated with Eugene Airport is located approximately 10 NM northwest of Hobby Field at its nearest point. The Class D airspace (4.5 NM radius, extending from the surface to 2,500 feet) is in effect during the hours of operation for the airport's air traffic control tower (ATCT), but reverts to Class E when the ATCT is closed. Aircraft are required to obtain air traffic control (ATC) clearance prior to operating in Class D airspace.

Several low altitude instrument (Victor) airways in the local area extend outward from the Eugene VORTAC, located 14.8 NM northwest of Hobby Field. The nearest airway is **V452**, with minimum enroute altitudes of 5,200 feet and 7,000 feet MSL north and south of the JUXBI reporting point that is located about 5 NM southwest of Hobby Field. There are no operational conflicts between the instrument airway and the VFR traffic pattern at Hobby Field (1,406 feet MSL/865 feet AGL).

A designated parachute drop zone is located on a 33-acre land parcel adjacent to Airport on its east side. A “Parachute Jumping Area” symbol is depicted east of the Airport on the [FAA Klamath Falls Sectional](#) aeronautical chart and the parachute jumping activity is noted in the remarks section in the FAA Chart Supplement listing for Hobby Field. Additional information (remarks) is provided through the Airport's AWOS broadcast: “...Creswell Hobby Field Airport 77S, skydiving activity adjacent, northeast area of Airport...”

## SPECIAL USE AIRSPACE

No special use or other restricted airspace is located within 25 NM of Hobby Field. The eastern boundary of the Dolphin North Military Operations Area (MOA) is located 27 NM west of the Airport. The MOA has a listed floor of 11,000 feet msl, extending upward to 18,000 feet; the time of use is listed as 0800-1600.

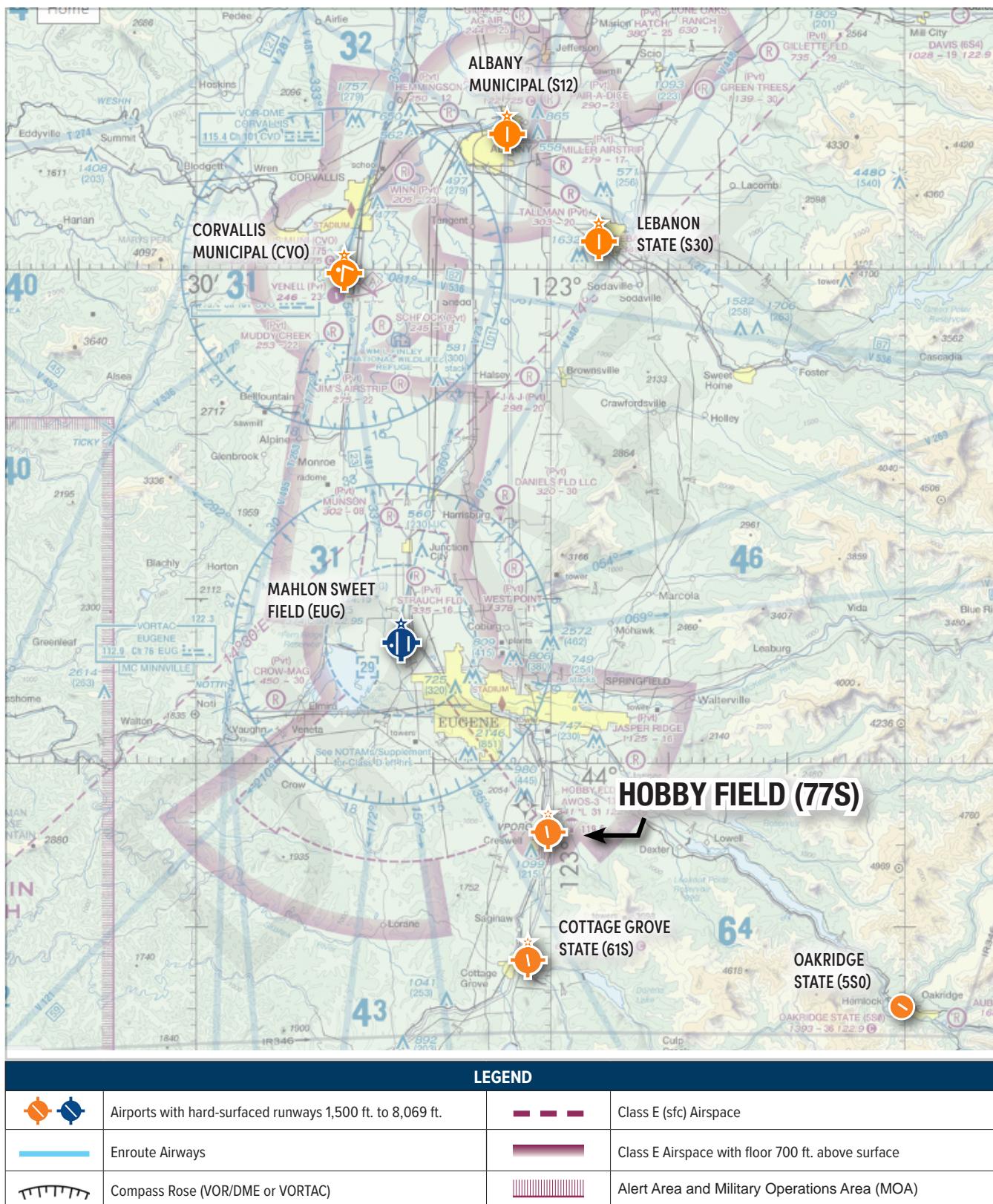
## CONTROLLED & UNCONTROLLED AIRSPACE

Hobby Field is an uncontrolled field (no air traffic control tower), and pilots are responsible for traffic monitoring, communications, and operations, as defined by the FAA. Hobby Field has an airport Unicom/Common Traffic Advisory Frequency (CTAF) - 122.7 MHz - for communications on the ground and in the vicinity of the Airport. Current weather conditions are continuously provided on the AWOS-3 broadcast - 119.275 MHz.

## AIRSPACE REGULATIONS, FAA DESIGN CRITERIA

In addition to the airspace classifications and operating environment pilots are more familiar with (described in the previous section above) there are a variety of rules, regulations, design standards, and policies associated with the protection of airspace, evaluation of proposed objects on and near airports, and their effects on navigable airspace. Airport Cooperative Research Program (ACRP) Report 38 - Understanding Airspace, Objects, and Their Effects on Airports provides a comprehensive description of the regulations, standards, evaluation criteria, and processes designed to protect the airspace surrounding airports. The most commonly used technical guidance sources are summarized below.

Figure 2-11: Local Area Airspace – Klamath Sectional Chart

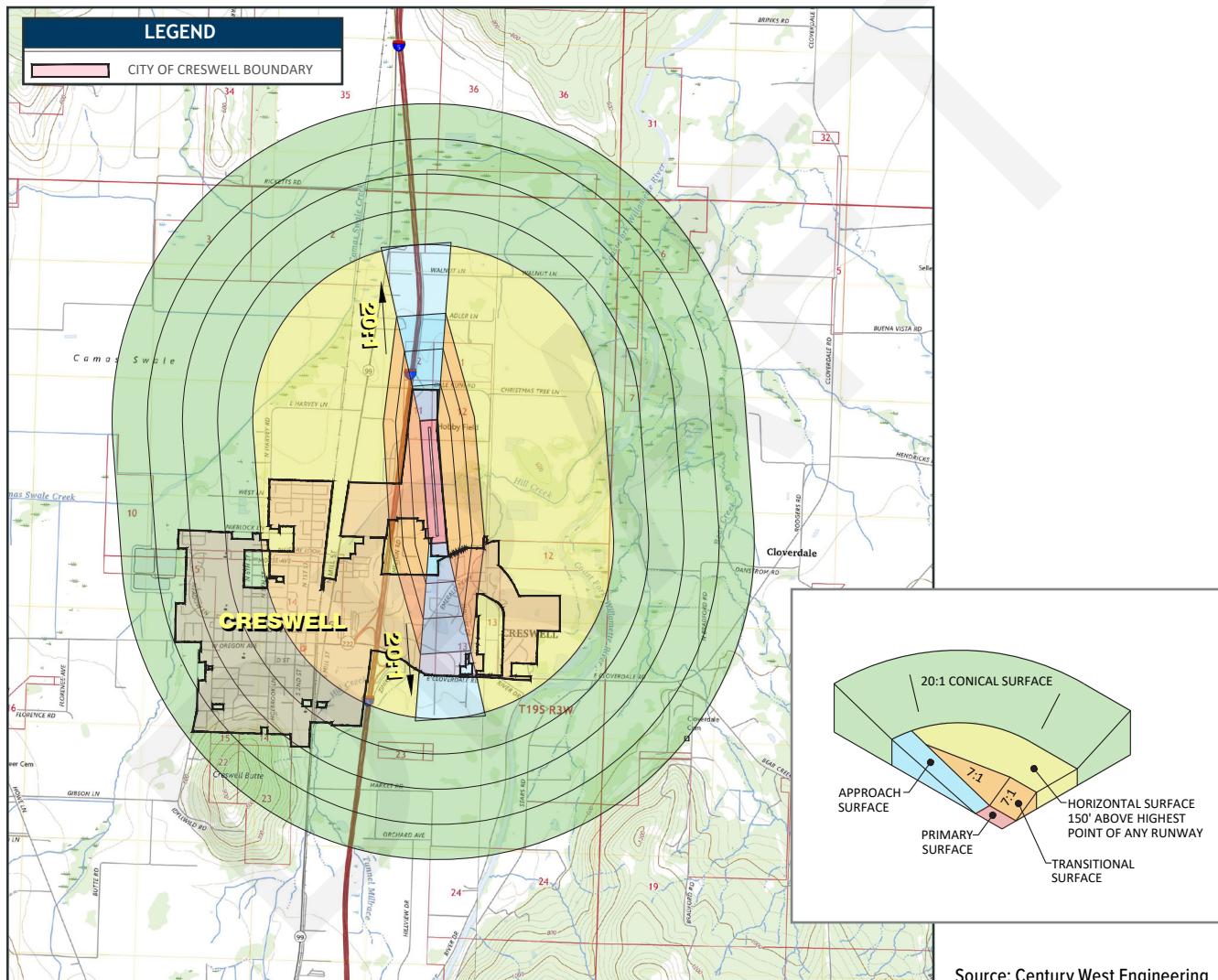


Source: SkyVector.com

## Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace

14 CFR, Part 77 (described earlier) is the central federal regulation governing airspace protection, with cross-references to many other criteria documents. It sets forth the requirements for notifying the FAA of proposed construction; defines obstruction criteria; and describes aeronautical studies required to assess hazard status. Part 77 airspace surfaces, also known as “imaginary surfaces,” are defined for designated runways or helicopter landing pads, in accordance with FAA requirements. These surfaces are commonly used in local land use planning to define airport overlay zoning. The Part 77 airspace surfaces for Runway 16/34 based on current approach capabilities and design aircraft, are depicted in **Figure 2-12**.

**Figure 2-12: Part 77 Airspace**



## FAA Order 8260.3G- United States Standard for Terminal Instrument Procedures (TERPS)

This Order, along with several derivative orders in the 8260 series and other related orders, define criteria that FAA airspace designers utilize when designing instrument flight procedures at airports. Airspace protection requirements (obstacle clearance) for inbound and outbound instrument flight procedures are one of the items analyzed for hazard status in aeronautical studies. Other TERPS surfaces are associated with aircraft approaches and maneuvering in the vicinity of a runway or airfield. While Part 77 airspace surfaces are broadly defined by runway category, aircraft type, and the type of approach, the dimensions, and features of TERPS surfaces correspond to a particular procedure design and the transition between enroute and terminal airspace.

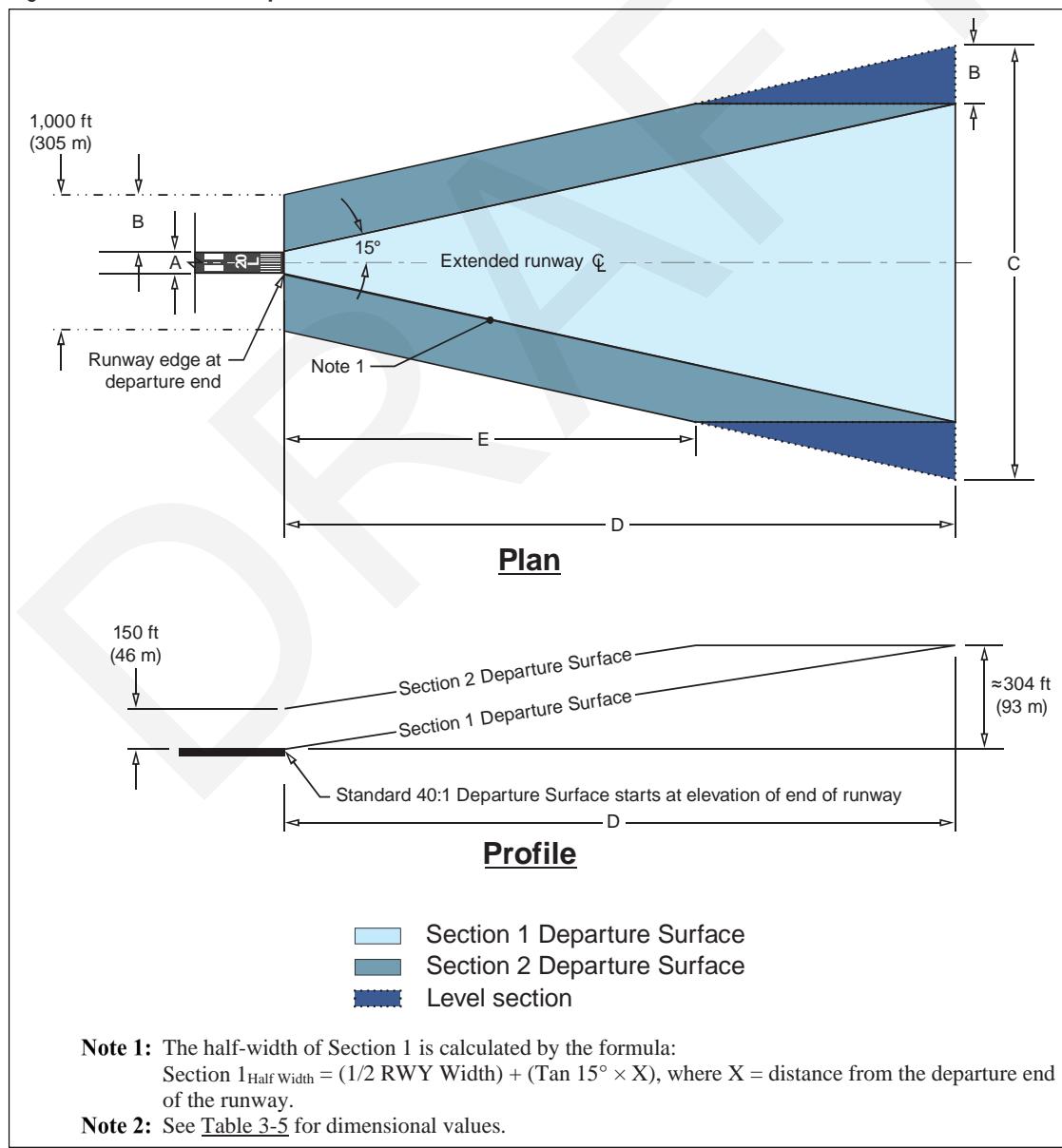
The 40:1 TERPS departure surface is now incorporated in the FAA's primary airport design advisory circular (AC 150/5300-13B, change 1), and identified as the "Instrument Departure Surface." **Figure 2-13** depicts this surface, which is required for any runway end that supports departures in instrument conditions. At Hobby Field, the surface is required to extend beyond the north end of Runway 16/34 based on the standard instrument departure procedure (**HOBBY Two Departure**) authorized for Runway 34. The **Hobby Two Departure** establishes minimum ceiling, visibility, climb and altitude requirements and routes aircraft northwest to the Eugene VORTAC. Instrument departures are not authorized ("N/A") for Runway 16 due to "obstacles."

Copies of the current instrument approach and departure procedures for Hobby Field are provided in **Appendix C**.

### FAA AC 150/5300-13B, Change 1 – Airport Design

This advisory circular (AC) is the principal document utilized by the FAA, airport sponsors, and planning consultants when planning and designing new airports, or modifications to existing airports. Airspace clearances for key runway end features are defined in the AC's discussion of runway end siting surfaces.

**Figure 2-13: Instrument Departure Surface**



Source: FAA AC 150-5300/13B - Airport Design

## INSTRUMENT FLIGHT PROCEDURES

Instrument approach and departure procedures are developed by the FAA, using electronic guidance from ground based navigational aids and satellite navigation systems, to guide aircraft through a series of prescribed maneuvers in and out of an airport's terminal airspace. The capabilities of instrument approaches are determined by the technical requirements for the type of procedure. These include mandatory vertical and lateral obstacle clearances for both the approach and missed approach procedure segments.

The procedures are designed to enable continued airport operation during instrument meteorological conditions (IMC), but are also used during visual conditions, particularly in conjunction with flight training or the completion of an instrument flight plan (in visual conditions).

Hobby Field currently has one published non-precision instrument (NPI) approach: **RNAV (GPS) RWY 16**. NPI procedures provide course guidance only and pilots are responsible for altitude control based on published "step down" guidance defined by the procedure.

The **RNAV (GPS) RWY 16** approach is supported by satellite navigation and uses a series of GPS waypoints to guide aircraft on a common inbound path aligned with the runway heading from the northwest to the missed approach point (MAP) near the end of Runway 16. The approach offers four procedure options, some of which depend on specific equipment requirements for the aircraft. Three of the procedures are classified as "straight-in" to Runway 16 and one is a "circling" procedure that allows aircraft to land on any runway end once the pilot has established visual contact with the airport environment. Pilots are required to maintain visual contact with the runway environment when descending beyond the MAP or below the MDA for the procedure. If visual contact is lost, the pilot must immediately execute a missed approach procedure.

The LPV and LNAV/VNAV (Localizer Performance with Vertical Guidance and Lateral Navigation/Vertical Navigation) options for the **RNAV (GPS) RWY 16** approach provide vertical guidance, but are still classified by FAA for Part 77 airspace planning purposes as NPI approaches. All of the existing approach procedures are authorized for Approach Category A to D aircraft, with varying approach descent and visibility minimums. Additional information about aircraft approach categories is provided in Chapter 4 – Facility Requirements.

It is important to note that when the FAA authorizes an instrument approach procedure for approach category A through D aircraft, it indicates that the higher performance aircraft are able to meet the design parameters required to execute all prescribed movements associated with the procedure, based on clearances to nearby terrain and other charted obstacles. This does not necessarily indicate that the existing runway capabilities (length, pavement strength, etc.) are capable of safely accommodating larger or more demanding aircraft.

The procedure approach minimums are summarized in **Table 2-6**. The values listed in the table include the "ceiling" which represents the lowest cloud height (above ground level - AGL) and corresponding descent permitted for the approach and "visibility," which indicates the minimum required visibility measured on the airfield (in statute miles) for the procedure.

**Table 2-6: Instrument Approach Procedure Minimums (77S)**

Approach	Category A		Category B		Category C		Category D	
	Ceiling*	Visibility	Ceiling*	Visibility	Ceiling*	Visibility	Ceiling*	Visibility
<b>RNAV (GPS) RWY 16</b>								
LPV DA	500	1.375	500	1.375	500	1.375	500	1.375
LNA/VNAV DA	872	2.5	872	2.5	872	2.5	872	2.5
LNAV MDA	1,279	1.25	1,279	1.5	1,279	3	1,279	3
Circling	1,279	1.25	1,279	1.5	1,719	3	2,199	3

Source: FAA U.S. Terminal Procedures. \*Published values for aircraft minimum descent altitude (MDA), translated into above ground level (AGL) equivalent. Visibility represented in statute miles.

## AIRFIELD FACILITIES

Existing Hobby Field airfield facilities described in the following sections and depicted in **Figure 2-14**. Additional detail for existing landside facilities is depicted in **Figure 2-17**, provided later in the chapter.

## AIRSIDE ELEMENTS

Airside Elements are facilities focused on the movement and operation of aircraft on the ground and in the air. This section includes a discussion of the existing facilities including runways, taxiways, airfield lighting, pavement condition, visual and electronic navigation aids. The evaluation of FAA design standards, including required protected surfaces/setbacks and their dimensions, will be included in the facility requirements section of the airport master plan (Chapter 4).

### Runways

Hobby Field has one paved (asphalt) runway (16/34) oriented in a northwest-southeast direction (160/340 degrees magnetic). The runway is served by a full length west parallel taxiway, providing access to both runway ends and adjacent landside facilities. Aircraft hold/run-up areas are located at both ends of the runway. A brief summary of Runway 16/34 is provided in **Table 2-7** and additional detail is provided in the following sections.

**Table 2-7: Runway Details (77S)**

Runway 16/34	
Dimensions	3,102' x 60'
Bearing (true)	N 04° 07' 18.82" W (see note)
Effective Gradient	0.0074%
Surface Condition	Asphalt/Good
Weight Bearing Capacity	12,500 pounds - Single Wheel Gear
Markings	RWY 16 & 34: NPI - good condition
Lighting (all LED and Pilot Activated)	Medium Intensity Runway Edge Lights (MIRL) 2 Light Precision Approach Path Indicators (PAPI) <ul style="list-style-type: none"> <li>• 2 Light PAPI (3.6-degree glide path) (RWY 16)</li> <li>• 2 Light PAPI (4.0-degree glide path) (RWY 34)</li> </ul> Runway End Identifier Lights (REIL) (RWY 16 and 34)
Signage	Lighted Mandatory, Location, Directional, and Destination

Source: FAA Chart Supplement; FAA Airport Record Form Information; 2007 Hobby Field Airport Master Plan.

Note: The runway bearing is based on the existing runway end coordinates listed on the 2007 ALP. The end coordinates, runway bearing, and airport reference point (ARP) will be verified and documented on the ALP, when 2026 AGIS survey data are available.

Runway 16/34 is categorized as a non-precision instrument (NPI) runway, based on its current approach capabilities. The runway dimensions are consistent with Airplane Design Group I (ADG I), which includes small single-engine and multi-engine aircraft. The runway markings, lighting, and signage are in good condition and are consistent with FAA standards for configuration and color.

The 12,500-pound single-wheel (SW) pavement strength for Runway 16/34 is consistent with the historical activity at the Airport and is consistent with general aviation airports of similar size in Oregon. The 2024 ODAV pavement inspection rated the runway condition as “good” (93/100) with a cold mill and overlay rehabilitation project completed in 2022.

Runway 16/34 has a full-length parallel taxiway (Taxiway A) on its west side. The taxiway is configured with three 90-degree exit taxiways (A1-A3) – one at each runway end and near mid-runway. Aircraft hold/run-up areas are located at both ends of the taxiway (@ exits A1 and A3). The runway-to-parallel taxiway centerline separation is 200 feet.

## Runway Lighting and Markings

Runway 16/34 is equipped with a Medium Intensity Runway Lighting (MIRL) system that was installed in 2023 as part of the runway rehabilitation project. The MIRL system consists of white edge lights (with amber lights located near the runway ends to indicate runway remaining) and threshold lights indicating the beginning and end of the runway. The threshold lights consist of four green/red split lens fixtures at each corner of the runway end.

Runways 16 and 34 are equipped with Precision Approach Path Indicators (PAPI), the current FAA standard for Visual Glide Slope Indicators (VGSI) for GA runways. The PAPI glide path slopes are 3.6-degrees for Runway 16 and 4.0-degrees for Runway 34. The steeper glide angle raises the landing aircraft above terrain or other known obstacles south of the runway. The FAA Chart Supplement indicates that the “*Rwy 34 VGSI unusbl byd 5 deg right and left of cntrln & byd 1.5 nm fm thr.*” The PAPIs are two-box units that project beams of red and white light allowing pilots to determine if their aircraft is on, above, or below the obstacle-free glide path established for landing.

Runways 16 and 34 are equipped with **Runway End Identifier Lights (REIL)**, which consist of two high-intensity sequenced strobe fixtures located near the corners of the runway end. For runways without an approach lighting system, REILS assists pilots in establishing visual contact with the runway environment during periods of darkness or reduced visibility.

The current runway markings include NPI threshold markings and runway end numbers at both ends, and a centerline stripe. Taxiway lead-in striping (yellow) is provided on the runway, on both sides of Taxiway A2 (mid-runway exit). The runway markings are in good condition (restriped in 2022).



Runways 16 and 34

Figure 2-14: Existing Conditions Overview



Source: Century West Engineering

## Airport Traffic Patterns

The existing aircraft traffic patterns for Runway 16/34 are depicted in **Figure 2-15**. The traffic patterns for both runway ends are standard (left traffic). The left traffic designations indicate the direction of turns made by aircraft when operating in the pattern. The published traffic pattern altitude (TPA) is 1,406 feet MSL (865 feet above ground level - AGL). Runway 34 is identified as the calm wind runway.

The parachute drop zone located east of Runway 16/34 is under the traffic pattern for Runway 16. Federal Air Regulations (FAR) Part 105, subpart B, describes the operating rules for parachute operations. As outlined in Part 105, aircraft transporting parachuters must be equipped with 2-way radio communication systems and must establish and maintain radio communication between air traffic in the vicinity before releasing jumpers to ensure safe operating conditions.

**Figure 2-15: Airport Traffic Patterns (77S)**



## Taxiway and Taxilanes

Hobby Field's taxiway system provides access to the runway, terminal area and fueling facilities, hangars, and aircraft parking areas on the Airport. Taxilanes provide access to aircraft tiedowns on the main apron and within the north and south hangar areas. Overall, the existing taxiway/taxilane system provides effective aircraft movement on the airfield.

Airport pavement records indicate that the parallel taxiway and exit taxiways were constructed in 1987. Most of the original hangar taxilanes and main apron were constructed in 1988. Several of the south T-hangar taxilanes were reconstructed in 2020.

## Taxiway A, A1-A3

Taxiway A is the full-length parallel taxiway with three 90-degree exit taxiway connectors (A1-A3) located on the west side of Runway 16/34. The taxiway is 35 feet wide with a runway-to-taxiway centerline separation of 200 feet.

Aircraft hold line markings are painted at all connections to the runway (Taxiways A1, A2, A3), 125 feet from the runway centerline. The aircraft hold lines and associated hold position signage are located based on the runway obstacle free zone (OFZ) setback. As noted earlier, aircraft taxiway lead-in lines (yellow paint) extend from the centerline of Taxiway A2 toward the runway, then turn north and south, running parallel and just west of the runway centerline for about 200 feet.

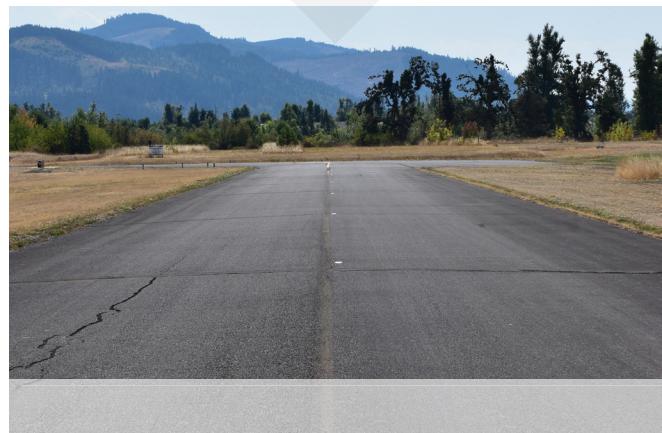
The 2025 ODAV pavement inspection rated the main section of Taxiway A “poor” and the sections of A1-A3 immediately adjacent to the runway “good.” The taxiways were observed to be in fair to good condition during a fall 2025 site visit.

## Taxiway Lighting and Markings

The taxiways at Hobby Field are equipped with centerline reflector markers, with the exception of blue lens fixtures marking exit taxiway locations on the runway. The major taxiways on the airfield have yellow centerline stripes and markings. The taxiway markings vary in condition from poor (worn) to good (recently painted).



Taxiway A



Taxiway Lighting & Markings

## Pavement Condition

The [2024 ODAV Pavement Evaluation Program Creswell Hobby Field Airport](#) (issued, revised February 2025) provides visual assessments of current conditions and projected conditions through 2034. The pavement evaluation included a visual PCI survey in August 2024.

The Oregon Department of Aviation (ODAV) Pavement Evaluation Program (PEP) systematically identifies maintenance, repair, and rehabilitation projects required to sustain functional pavements at Oregon airports. The PEP provides a periodic evaluation of current conditions and future projections of condition in terms of pavement condition indices (PCI) for all eligible (public use) airfield pavements across the state. For NPIAS airports that receive federal funding, the PEP assists in meeting FAA grant assurances.

The most recent PEP survey for Hobby Field as performed in August 2024. The survey was performed using the Pavement Condition Index (PCI) methodology developed by the U.S. Army Corps of Engineers and outlined in the current edition of ASTM D-5340, Standard Test Method for Airport Condition Index Surveys.

The total area of airfield pavement included in the Hobby Field site inventory is approximately 623,342 square feet (14 acres). The 2024 PEP inspection rated approximately 73% of the Hobby Field airfield pavements as “satisfactory or good.”

The 2024 PEP inspection rated the main section of Taxiway A and two hangar taxilanes “poor.” The eastern 430 feet of the main access taxilane for the south hangar area was rated “very poor.” The Runway 16 aircraft hold/runup area and a section of Taxiway A3 was rated “fair.” The FBO/fueling apron, the main tiedown apron, and three hangar taxilanes were rated “fair.”

**Table 2-8** summarizes the weighted average 2024 PCI ratings for the airfield’s main pavement areas.

**Figure 2-16** depicts the individual airfield pavement sections on Hobby Field with seven condition ranges (“Good” to “Failed”) that correspond to their numerical PCI ratings. These data sets are both based on the August 2024 on-site pavement inspection.

Pavement records indicate that recent rehabilitation or reconstruction projects include Runway 16/34 (2022),

portions of Taxiways A1 and A3, and several south

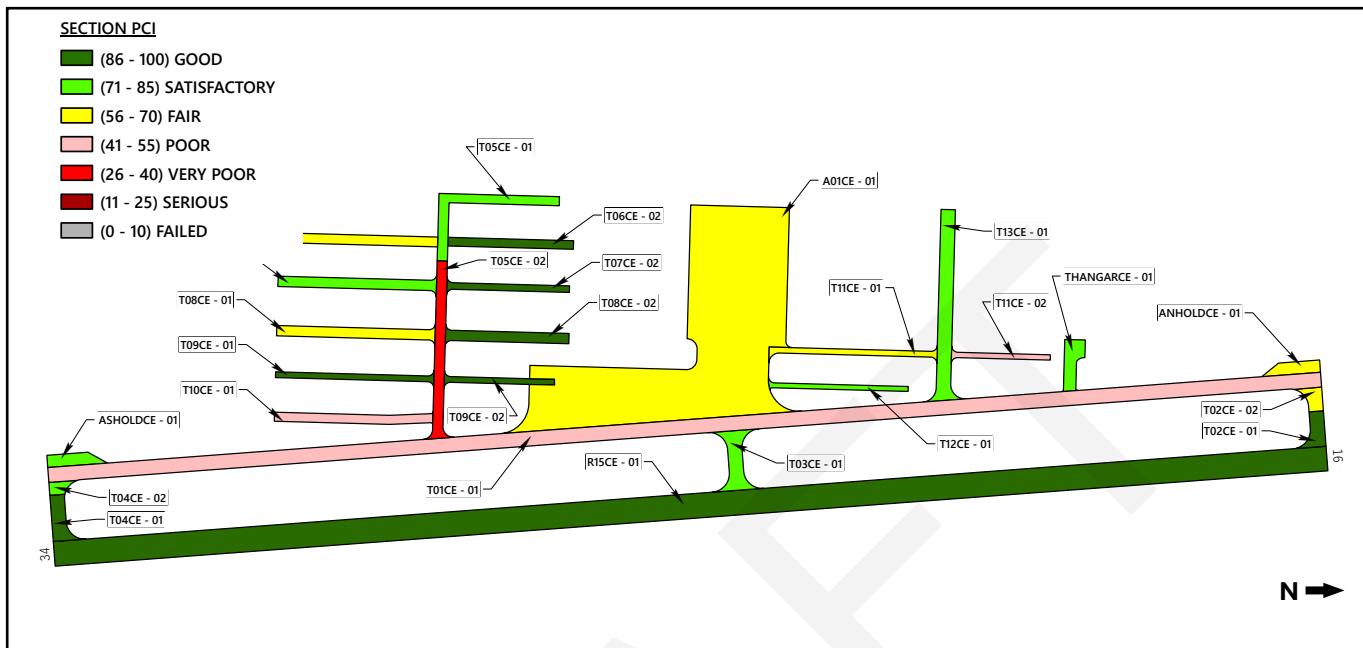
hangar taxilanes (2020, 2007). Minor pavement maintenance projects including crackfill and sealcoats have been performed periodically on major airfield pavements. No major rehabilitation projects have been completed on Taxiway A since its construction (1987), although the inner sections (adjacent to runway) of Taxiway A1 and A3 were reconstructed in 2022 as part of the runway reconstruction project. The 2024 PEP work plan recommended a 2026 overlay for Taxiway A.

**Table 2-8: 2024 PCI Inspection (77S)**

Pavement Section	2024 PCI (Area Weighted Average)
Apron	68
Runway	93
Taxiway	63

Source: 2024 ODAV Pavement Evaluation Program (Hobby Field), February 18, 2025 (Revised)

Figure 2-16: 2024 PCI Ratings (77S)



Source: 2024 ODAV Pavement Evaluation Program Creswell Hobby Field Airport

## AIRSIDE SUPPORT FACILITIES

Airside support facilities generally include airport lighting, airfield signage, weather reporting equipment, and visual aids. Hobby Field accommodates day and night operations in both visual and instrument meteorological conditions (IMC). The runway is equipped with lighting systems that are consistent with current instrument approach requirements and runway use. The signage for the runway-taxiway system conveys directional, location, and runway information pilot to pilots.

### Airport Lighting

Hobby Field has a rotating beacon (LED) mounted on top of the main FBO building adjacent to the fueling area. The beacon operates on a dusk-dawn photocell switch and reportedly functions normally. Rotating beacons are used to indicate the location of an airport to pilots at night or during reduced visibility. The beacon provides sequenced white and green flashing lights (representing a lighted land airport) that rotate 360 degrees to allow pilots to identify the Airport from all directions for several miles.

The Airport has a lighted wind cone (LED) and segmented wind circle located near mid-runway on the east side of Runway 16/34. The lighting for the wind cone operates on a dusk-dawn photocell switch and reportedly functions normally. The wind cone provides a visual indication of surface wind conditions (direction and speed) for aircraft operating at the Airport. Overhead flood lighting is available in the terminal area, fueling area and adjacent to multiple aircraft hangars.



Rotating Beacon (FBO Building)



Lighted Wind Cone

## Airfield Signage

The airfield has mandatory instruction signs (red background with white letters/numbers) marking the aircraft holding positions at each of the taxiway connections with a runway. The two-panel signs also include taxiway designations [A1, A2, etc.]. The runway-facing side of each sign depicts the exit taxiway designation. The signs are located to coincide with the painted aircraft hold lines on each taxiway that connects to the runway. Signage located at the connections with 16/34 are internally illuminated and were installed new in 2022 in conjunction with the runway rehabilitation.



## Weather Observation

Hobby Field has an Automated Weather Observation System (AWOS-3) that provides on-site wind, temperature, dew point, altimeter setting, visibility, cloud height, sky condition, and precipitation accumulation reporting. The AWOS-3 is located outside the runway OFZ and OFA on the east side of the runway, south of the Runway 16 PAPI. The AWOS-3 operates continuously and is accessed by radio (119.275 MHz) and telephone (541) 895-2349. The FAA grant history indicates that the AWOS components were installed in 2012 and 2015.

## Landside Elements

Landside facilities support airport operations, including aircraft parking aprons, hangar, and apron taxilanes, aircraft fuel storage and fueling aprons, and hangars. Other items including utilities, fencing, surface access roads, vehicle parking, and fixed base operator (FBO)/terminal facilities are also included as support facilities. Existing landside facilities are depicted in **Figure 2-17**. The existing aprons are summarized in **Table 2-9**, and described below.

### AIRCRAFT APRONS

Hobby Field has a central apron area that is located directly adjacent to Taxiway A, near mid-runway and Taxiway A2. The apron includes an FBO/fueling area section and a large tiedown section. Both sections of the apron were built in 1988 with a 2" asphalt surface over 16" of crushed aggregate base/subbase. The apron has a total pavement area of approximately 170,706 square feet. As noted earlier, asphalt apron was rated "fair" in the 2024 PEP inspection. Areas of longitudinal, transverse, and diagonal (LTD) cracks, common to older asphalt pavements, were observed.

#### FBO Apron

The fixed base operator (FBO) apron provides access to the FBO facilities and the aircraft fueling area. The FBO office and maintenance hangar and fuel station structure are located along the back (west) edge of the apron.

The FBO apron is configured with limited aircraft parking in its north and south sections, and the fueling area located adjacent and south of the FBO building. The fueling facilities consists of two 10,000-gallon underground fuel storage tanks, a dispensing system, and overhead protective structure. The usable depth of the apron is limited by Taxiway A clearances, particularly the taxiway object free area (TOFA).



## Main Tiedown Apron

The main tiedown apron is located north of the FBO building. The apron is configured with three parallel (east-west) aircraft tiedown rows served by two taxilanes. The main part of the tiedown apron has 28 small airplane tiedowns. The apron has center dual-sided row (14 tiedowns) with tail-in tiedown rows on the north and south ends (14 tiedowns). Six additional tiedowns (noted earlier) are located adjacent (north) to the FBO building. The apron's tiedowns and taxilane centerline striping has faded.



Main Apron Tiedown

**Table 2-9: Apron Details (\$77)**

<b>Fueling/FBO Apron</b>	
Surface/Condition	Asphalt Concrete (fair condition)
Markings	Taxilane centerline to fuel pumps (good condition); tiedown striping (fair/poor condition)
Aircraft Parking	6 small airplane tiedowns (adjacent - north of FBO building); 2 large airplane tiedowns south of fueling area
Aircraft Fueling Area	Fueling area adjacent (south) to the FBO building; 2 underground fuel storage tanks located adjacent to apron.
<b>Main Tiedown Apron</b>	
Surface/Condition	Asphalt Concrete (fair condition)
Markings	Tiedown and taxilane striping (poor condition)
Aircraft Parking	28 small airplane tiedowns

## Hangars and Airport Buildings

Hobby Field currently has a total of 23 buildings located on the Airport, consisting of 20 aircraft storage hangars, an FBO hangar and office, small office building, an Experimental Aircraft Association (EAA) building, and an electrical building. No new hangars have been constructed since the last master plan was completed in 2007. The existing buildings at Hobby Field are listed in **Table 2-10** and depicted in **Figure 2-17**.

The Airport currently has 9 T-hangars with a total of 97 aircraft storage units. The majority of the T-hangars are located south of the FBO apron accessed by a taxilane extending from Taxiway A. Three T-hangars have open fronts (no doors) and the remaining six have doors.

There are currently 12 conventional hangars located on the Airport housing primarily small aircraft with hangar width and length dimensions ranging between 50 and 60 feet.

The Airport's FBO maintenance hangar located at the western edge of the FBO and fueling apron, houses office space, classrooms, a pilot waiting area, and restrooms. The EAA building, which hosts Chapter 31 of the EAA, is located south of the T-hangars near the Runway 34 end. A small electrical building is located north of the FBO maintenance hangar adjacent to the tiedown apron.

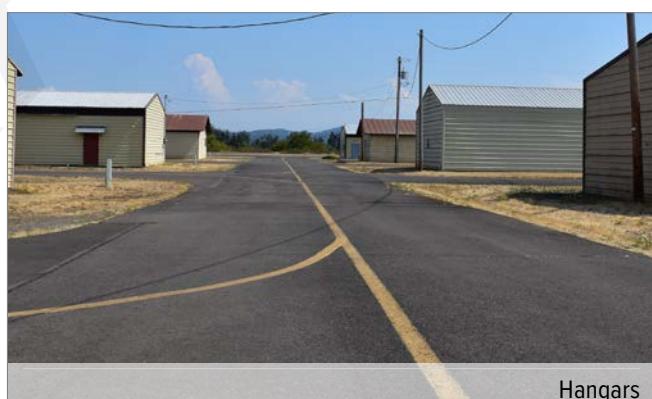
A residence/hangar is located off airport property near the southwest corner of the Airport, with taxiway access to the aircraft holding area for Runway 34. Airport management reports that the hangar is not currently in use and no agreement to access the Airport is currently in place.



Hangars



Hangars

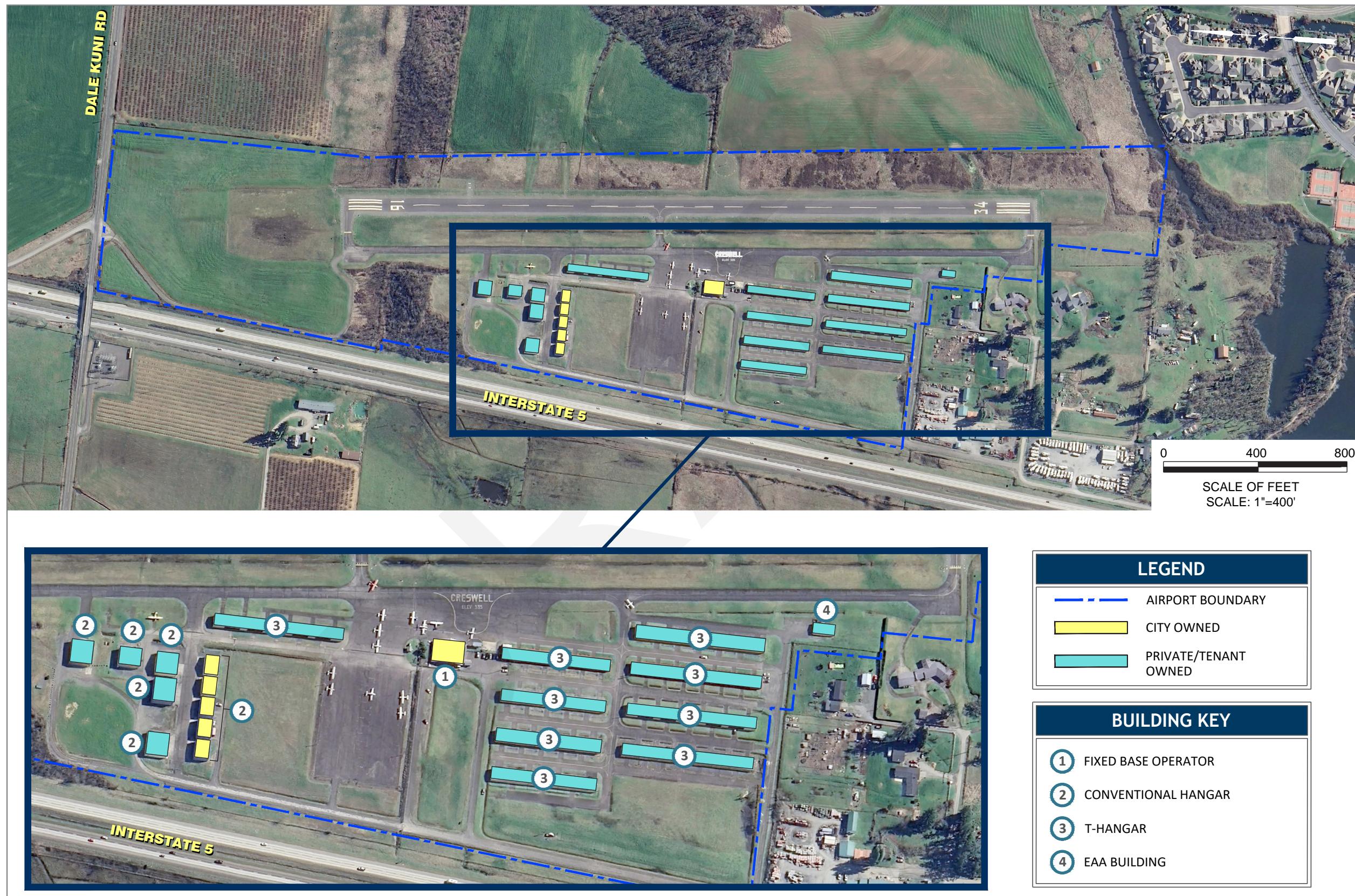


Hangars



Hangar

Figure 2-17 Landside Facilities Existing Conditions



Source: Century West Engineering

**Table 2-10: Existing Buildings (77S)**

Building	Existing Use
FBO Hangar and Office	FBO, Restrooms, Office, Pilot/Passenger Areas; Maintenance Hangar
T-Hangar A - (11 units) (north hangar area)	Aircraft Storage
T-Hangar B - (10 units) (south hangar area)	Aircraft Storage
T-Hangar C - (13 units) (south hangar area)	Aircraft Storage
T-Hangar D - (10 units) (south hangar area)	Aircraft Storage
T-Hangar E - (11 units) (south hangar area)	Aircraft Storage
T-Hangar F - (10 units) (south hangar area)	Aircraft Storage
T-Hangar G - (14 units) (south hangar area)	Aircraft Storage
T-Hangar L - (11 units) (south hangar area)	Aircraft Storage
T-Hangar I - (7 units) (south hangar area)	Aircraft Storage
"EAA" Building	EAA Operations
Sm/Med. Conventional Hangar (G1) (north hangar area)	Aircraft Storage
Sm/Med. Conventional Hangar (G2) (north hangar area)	Aircraft Storage
Sm/Med. Conventional Hangar (G3) (north hangar area)	Aircraft Storage
Sm/Med. Conventional Hangar (G4) (north hangar area)	Aircraft Storage
Sm/Med. Conventional Hangar (G5) (north hangar area)	Aircraft Storage
Med/Lg. Conventional Hangar (F1) (north hangar area)	Commercial Hangar (Wolf Aircraft); Aircraft Storage & Operations
Med/Lg. Conventional Hangar (F2) (north hangar area)	Commercial Hangar (PCC Aviation) Aircraft Storage & Operations
Med/Lg. Conventional Hangar (F4) (north hangar area)	Commercial Hangar (About Time Aviation); Aircraft Storage & Operations
Med/Lg. Conventional Hangar (E1) (north hangar area)	Commercial Hangar (Eugene Skydivers); Aircraft Storage & Operations
Med/Lg. Conventional Hangar (D1) (north hangar area)	Commercial Hangar (Wright Brothers Skydiving); Aircraft Storage & Operations
Small Office (modular bldg.)	Commercial tenant office
Electrical Building	Facilities

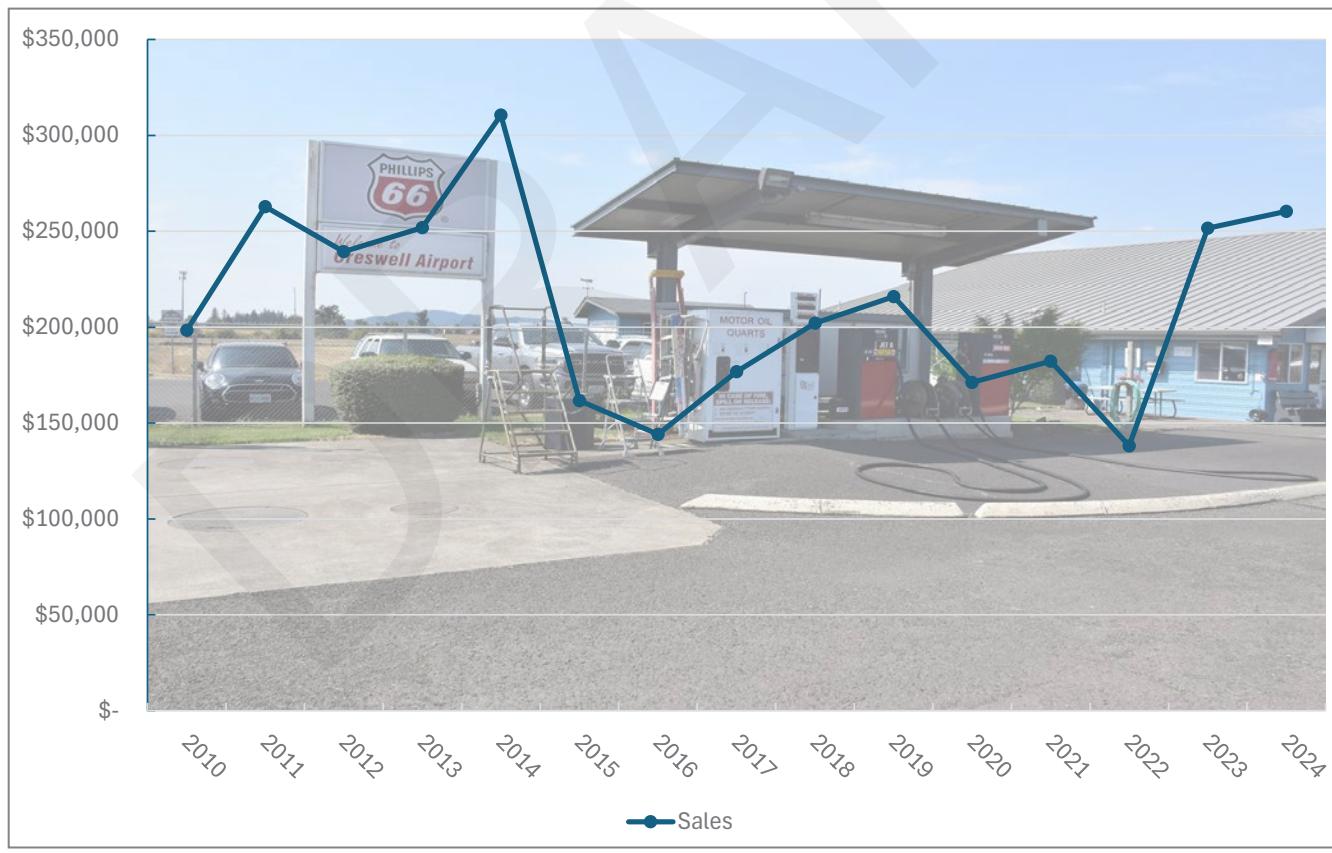
Source: Airport Management

## Aircraft Fuel

Hobby Field offers both 100-octane low lead (100LL) aviation gasoline (AVGAS) and jet fuel (Jet-A) available for sale. The existing fuel system includes two underground 10,000-gallon tanks equipped with a credit card self-serve dispensing system that was installed in 2000. The tanks are owned by the City of Creswell. The fuel tanks are located at the western edge of the FBO Apron accessed by a taxilane route designated for fueling aircraft which connects to Taxiway A. A summary of the Airport's recent fuel sales depicted in **Figure 2-18**.



**Figure 2-18: Historical Aviation Fuel Sales (77S)**



## AIRPORT PERIMETER FENCING

The majority of the operational areas of Hobby Field have perimeter fencing. Sections of 7-foot chain link with a 1-foot barbed wire top exist along the tiedown apron and along northern sections of the Airport property. Other portions of the Airport perimeter are fenced with three or four strand wire range fencing; small areas of the airport perimeter are not currently fenced. Vehicle and pedestrian gated access points are located at the FBO building and apron, the north hangar area, the south T-hangar area, and a gated access point off of Dale Kuni Road at the north end of the Airport.

## SURFACE ACCESS AND VEHICLE PARKING

Vehicle access to the Airport is provided via Melton Road, which connects to Emerald Parkway and then Cloverdale Road (Springfield Creswell Highway No. 222). Cloverdale Road is Creswell's primary east-west crossing over U.S. Interstate 5 (I-5) and connects to the freeway interchange (Exit 182) serving Creswell. Cloverdale Road becomes Oregon Avenue on the west side of the freeway as it enters downtown Creswell. Melton Road and the terminal area loop roadway are paved. An unpaved section of Melton Road continues beyond the terminal area entrance roadway to provide access to the north hangar area. A separate section of Melton Road connects at Dale Kuni Road, and extends along the northwest corner of the Airport on the east side of I-5. Dale Kuni Road borders the airport's north end and extends southward beyond the airport's eastern boundary to Cloverdale Road. All landside facilities are currently located on the west side of the Airport; no vehicle access is available to the east side of the Airport.

Designated vehicle parking areas are located adjacent to the FBO building, along the terminal area loop roadway and adjacent to individual hangars. Vehicle parking requirements are generally modest, although some congestion reportedly occurs in the north hangar area during busy skydiving days.

## AVIATION BUSINESSES

Hobby Field supports aviation businesses including a full-service fixed base operator (FBO), skydiving operator, skydiving equipment sales, flight instruction, and private hangar rental. The existing aviation businesses operating at Hobby Field are summarized in the following below.

### Eugene Skydivers

Eugene Skydivers is a skydiving operator which began operations at Hobby Field in 1992. They conduct parachuting operations through most of the year, closing only in the winter months. The business is located in a conventional hangar in the north hangar area. Their fleet currently consists of two Cessna 182s (CE-182) single-engine aircraft. Eugene Skydivers also offers gear rentals, rigging services, skydive instruction, and jumps from various altitudes.

### TakeWING Aviation

TakeWING Aviation is a FAR Part 61 flight training school based at Hobby Field that provides a range of fixed wing aircraft training options, computerized testing, ground school courses, and pilot supplies.

# Airport Administration

The Airport Administration section provides a summary of Airport Ownership & Management, Airport Finance, Rates and Charges, Rules and Regulations, and an overview of FAA Grant Assurances and Compliance.

## AIRPORT OWNERSHIP & MANAGEMENT

Hobby Field is owned and operated by the City of Creswell. Current staffing for managing and maintaining the Airport's facilities are provided by the City of Creswell. The City of Creswell provides finance, legal, human resources, information technology, and administrative services for the Airport. The Airport lessees are responsible for managing their facilities and leased areas to meet the requirements defined in their leases and the Airport Minimum Standards document.

## AIRPORT FINANCE

The City manages the Airport's finances to include the collection of revenues such as airport fees, fueling fees, hangar, and ground leases, tiedown fees, and the handling of any other miscellaneous revenue source. The Airport's capital improvement projects are typically funded through FAA grants with a local match that may be supplemented by ODAV grants and airport funds. Hangar construction has historically been privately funded.

## CITY OF CRESWELL RULES AND REGULATIONS

The airport minimum standards document defines the minimum standards and criteria that apply to general aviation and commercial activities that take place at Hobby Field. Any potential or existing activities and businesses that take place on airport grounds should be conducted in conformity with the Hobby Field airport minimum standards. According to FAA AC 150/5190-8, the purpose of a minimum standards document is *“to promote safety in all airport activities, protect airport users from unlicensed and unauthorized products and services, maintain and enhance the availability of adequate services for all airport users, promote the orderly development of airport land, and ensure efficiency of operations. Therefore, airport sponsors should strive to develop minimum standards that are fair and reasonable to all on-airport aeronautical service providers and relevant to the aeronautical activity to which it is applied.”* The current airport minimum standards document is provided for reference in **Appendix D**.

## FAA COMPLIANCE OVERVIEW

A management program based on the FAA's "Planning for Compliance" guidance and the adoption of additional airport management "Best Practices" is recommended to address FAA compliance requirements and avoid noncompliance, which could have significant consequences.

Airport management "Best Practices" are developed to provide timely information and guidance related to good management practices and safe airport operations for airport managers and sponsors. The practices outlined herein are designed for use by the City of Creswell for evaluating and improving their current and future operation and management program.

Airport sponsors must comply with various federal obligations through agreements and/or property conveyances, outlined in FAA Order 5190.6B, Airport Compliance Manual. The contractual federal obligations a sponsor accepts when receiving federal grant funds or transfer of federal property can be found in a variety of documents including:

Grant agreements issued under the Federal Airport Act of 1946, the Airport and Airway Development Act of 1970, and Airport Improvement Act of 1982. The current FAA grant program, the Airport Improvement Program (AIP), is pursuant to the Airport and Airway Development Act of 1982, as amended. Included in these agreements are the requirement for airport sponsors to comply with:

- Grant Assurances;
- Advisory Circulars;
- Application commitments;

- FAR procedures and submittals;
- Special conditions;
- Surplus airport property instruments of transfer;
- Deeds of conveyance; Commitments in environmental documents prepared in accordance with FAA requirements; and
- Separate written requirements between a sponsor and the FAA.

## Airport Compliance with Grant Assurances

As a recipient of both federal and state airport improvement grant funds, the City of Creswell is contractually bound to various sponsor obligations referred to as “Grant Assurances,” developed by the FAA and the Oregon Department of Aviation. These obligations, presented in detail in federal and state grants and state statute and administrative codes, document the commitments made by the airport sponsor to fulfill the intent of the grantor (FAA and State of Oregon) required when accepting federal and/or state funding for airport improvements. Failure to comply with the grant assurances may result in a finding of noncompliance and/or forfeiture of future funding. Grant assurances and their associated requirements are intended to protect the significant investment made by the FAA, State, and City to preserve and maintain the nation’s airports as a valuable national transportation asset, as mandated by Congress.

### FAA Grant Assurances

The FAA’s Airport Compliance Program defines the interpretation, administration, and oversight of federal sponsor obligations contained in grant assurances. The Airport Compliance Manual defines policies and procedures for the Airport Compliance Program. Although it is not regulatory or controlling with regard to airport sponsor conduct, it establishes the policies and procedures for FAA personnel to follow in fulfilling the FAA’s responsibilities for ensuring compliance by the sponsor.

The Airport Compliance Manual (Section 1.5) states the FAA Airport Compliance Program is: “...designed to monitor and enforce obligations agreed to by airport sponsors in exchange for valuable benefits and rights granted by the United States in return for substantial direct grants of funds and for conveyances of federal property for airport purposes. The Airport Compliance Program is designed to protect the public interest in civil aviation. Grants and property conveyances are made in exchange for binding commitments (federal obligations)

designed to ensure that the public interest in civil aviation will be served. The FAA bears the important responsibility of seeing that these commitments are met. This order addresses the types of commitments, how they apply to airports, and what FAA personnel are required to do to ensure compliance with Federal obligations.” Section 1.7 notes “The airport system should have the following attributes to meet the demand for air transportation:

- Airports should be safe and efficient, located at optimum sites, and be developed and maintained to appropriate standards.
- Airports should be operated efficiently both for aeronautical users and the government, relying primarily on user fees and placing minimal burden on the general revenues of the local, state, and federal governments.
- Airports should be flexible and expandable, able to meet increased demand and accommodate new aircraft types.
- Airports should be permanent, with assurance that they will remain open for aeronautical use over the long term.
- Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation and the requirements of residents in neighboring areas.
- Airports should be developed in concert with improvements to the air traffic control system.
- The airport system should support national objectives for defense, emergency readiness, and postal delivery.
- The airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically not more than 20 miles of travel to the nearest NPIAS airport.
- The airport system should help air transportation contribute to a productive national economy and international competitiveness.”

The airport sponsor should have a clear understanding of and comply with all assurances. The following sections briefly summarize the practical performance requirements for selected assurances.

#### **Project Planning, Design, And Contracting Sponsor Fund Availability (Assurance #3)**

Once a grant is awarded to the City of Creswell (airport sponsor), the City commits to providing the funding to cover their portion of the total project cost. Currently this amount is ten percent of the total eligible project cost, although it may be higher depending on the particular project components or makeup. Once the project has been completed, the receiving airport also commits to having adequate funds to maintain and operate the airport in the appropriate manner to protect the investment in accordance with the terms of the assurances attached to and made a part of the grant agreement.

#### **Consistency with Local Plans (Assurance #6)**

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport. The City of Creswell (airport sponsor) routinely familiarizes themselves with local planning documents before a project is considered to ensure that all projects follow local plans and ordinances.

#### **Accounting System Audit and Record Keeping (Assurance #13)**

All project accounts and records must be made available at any time. Records should include documentation of costs, how monies were spent, funds paid by other sources, and any other financial records associated with the project at hand. Any books, records, documents, or papers that pertain to the project should be available at all times for an audit or examination.

#### **General Airport Assurances Good title (Assurance #4)**

The City of Creswell (airport sponsor) must have a Good Title to affected property when considering projects associated with land, building, or equipment. Good Title means the sponsor can show complete ownership of the property without any legal questions or show it will soon be acquired.

#### **Preserving Rights and Powers (Assurance #5)**

No actions are allowed, which might take away any rights or powers from the sponsor, which are necessary for the sponsor to perform or fulfill any condition set forth by the assurance included as part of the grant agreement.

#### **Airport Layout Plan (ALP) (Assurance #29)**

The City of Creswell should maintain an up-to-date ALP, which should include current and future property boundaries, existing facilities/structures, locations of non-aviation areas, and existing and proposed improvements. FAA requires proposed improvements to be depicted on the ALP in order to be eligible for FAA funding. If changes are made to the Airport without authorization from the FAA, the FAA may require the Airport to change the alteration back to the original condition or jeopardize future grant funding.

#### **Disposal of Land (Assurance #31)**

Land purchased with the financial participation of an FAA grant cannot be sold or disposed of by the airport sponsor at their sole discretion. Disposal of such lands are subject to FAA approval and a definitive process established by the FAA. If airport land is no longer considered necessary for airport purposes, and the sale is authorized by the FAA, the land must be sold at fair market value. Proceeds from the sale of the land must either be repaid to the FAA or reinvested in another eligible airport improvement project.

### **Airport Operations and Land Use**

#### **Pavement Preventative Maintenance (Assurance #11)**

Since January 1995, the FAA has mandated that it will only give a grant for airport pavement replacement or reconstruction projects if an effective airport pavement maintenance-management program is in place. The Oregon Department of Aviation prepares and updates pavement reports for Hobby Field. These reports identify the maintenance of all pavements funded with federal financial assistance and provides a pavement condition index (PCI) rating (0 to 100) for various sections of aprons, runways, and taxiways, including, a score for overall airport pavements.

#### **Operations and Maintenance (Assurance #19)**

All federally funded airport facilities must operate at all times in a safe and serviceable manner and in accordance with the minimum standards as may be required or prescribed by applicable Federal, State, and Local agencies for maintenance and operations.

#### **Compatible Land Use (Assurance #21)**

Land uses around an airport should be planned and implemented in a manner that ensures surrounding development and activities are compatible with the Airport. Hobby Field is located in the Creswell city limits. Portions of the Part 77 airspace defined for the Airport extends over the City of Creswell and unincorporated Lane County. The City of Creswell, as airport sponsor, should continue to work with Lane County/Lane Council of Governments to ensure that adequate zoning ordinances are in place that protect the Airport from incompatible land uses.

### **Day-To-Day Airport Management**

#### **Economic Non-Discrimination (Assurance #22)**

Any reasonable aeronautical activity offering service to the public should be permitted to operate at the Airport as long as the activity complies with airport established standards for that activity. Any contractor agreement made with the Airport will have provisions making certain the person, firm, or corporation will not be discriminatory when it comes to services rendered including rates or prices charged to customers.

#### **Exclusive Rights (Assurance #23)**

No exclusive right to the use of the Airport by any person providing, or intending to provide, aeronautical services to the public. However, an exception may be made if the airport sponsor can prove that permitting a similar business would be unreasonably costly, impractical, or result in a safety concern, the sponsor may consider granting an exclusive right.

### **Leases and Finances**

#### **Fee and Rental Structure (Assurance #24)**

An airport's fee and rental structure should be implemented with the goal of generating enough revenue from airport related fees and rents to become self-sufficient in funding the day-to-day operational needs. Airports should update their fees and rents on a regular basis to meet fair market value, often done through an appraisal or fee survey of nearby similar airports. Common fees charged by GA airports include fuel flowage fees, tie-down fees, and hangar or ground lease rents.

#### **Airport Revenue (Assurance #25)**

Revenue generated by airport activities must be used to support the continued operation and maintenance of the Airport. Use of airport revenue to support or subsidize non-aviation activities or to fund other departments who are not using the funds for airport specific purposes is not allowed and is considered revenue diversion. Revenue diversion is a significant compliance issue for FAA.

For additional information on FAA Grant Assurances, please go to: [https://www.faa.gov/airports/aip/grant\\_assurances](https://www.faa.gov/airports/aip/grant_assurances).

## State of Oregon Airport Regulations

A summary of Oregon aviation administrative rules and laws is provided in **Figure 2-19**.

**Figure 2-19: Oregon Aviation Laws**

### OREGON AVIATION ADMINISTRATIVE RULES AND LAWS

The State of Oregon, with the technical assistance of its Department of Aviation (ODAV), has created Oregon Administrative Rules (OAR) that are intended to provide clear administrative guidelines that govern airports within the state, to comply with laws adopted by the State Legislature through its Oregon Revised Statutes (ORS).

#### Oregon Administrative Rules (OAR)

- OAR Chapter 660, Division 13 – Airport Planning
- OAR Chapter 660, Division 13 – Exhibits
- OAR Chapter 738 – Oregon Department of Aviation

#### Oregon Revised Statutes (ORS)

- ORS 197 – Land Use Planning I
- ORS 197A – Land Use Planning II
- ORS 319 – Aviation Fuel Tax
- ORS 835 – Aviation Administration
- ORS 836 – Airports and Landing Fields
- ORS 837 – Aircraft Operations
- ORS 838 – Airport Districts