

CHAPTER 2

Existing Conditions Analysis



The existing conditions analysis documents existing airfield facilities and conditions that affect the operation and development of the airport within the context of the regional setting, landside, airside, and administrative functions of the airport. The existing conditions analysis utilizes previous planning and design documents related to the Lake County Airport (LKV), in addition to meetings with tenants, stakeholders, and County staff. The findings documented in the Existing Conditions Analysis chapter are used to support subsequent recommendations throughout the development of the master plan.

Regional Setting

The Regional Setting section is comprised primarily of the features that provide higher level context of the Airport to ensure a better understanding of the social, economic, and environmental impacts airports can have in a region, county, and local communities. This section of the existing conditions analysis includes a discussion of the location & vicinity of the LKV as well as the socio-economic conditions, airport history, airport role, area airports context, historical airport operations, relevant studies, environmental data, and the land use on and around the Airport.

LOCATION & VICINITY

LKV is situated in southern Lake County in south central Oregon. The County is bordered by Klamath County to the west, Deschutes County to the north, Harney County to the east, and California and Nevada to the south. The Airport is located approximately three miles southwest of the City of Lakeview, Oregon, and 11 miles north of the California border. The Airport location relative to the surrounding region is depicted in **Figure 2-1**.

Lake County is primarily rural with agriculture, timber, and government as the largest economic contributors. Known as Oregon's Outback, the County offers a host of outdoor recreational resources such as large lakes and high desert vistas, which has increased tourism.



Lake County is located in Oregon's High Plateau Region, a region bordered by the Cascades on the west and several minor mountain ranges on the south and east. The City of Lakeview, the county seat, boasts itself as Oregon's tallest town, sitting at 4,800 feet above mean sea level (MSL). The County's elevation ranges from 4,100 feet MSL to a high of 8,446 feet MSL.

SOCIO-ECONOMIC DATA

This section focuses on socio-economic data related to the Airport's regional area compiled for use in various elements of this Master Plan. *Federal Aviation Administration (FAA) Advisory Circular 150/5070-6B, Airport Master Plans*, states that the economic characteristics of a community may affect the demand for air traffic. An analysis to determine whether current trends in social and economic indicators correlate with aviation activity will be included in Chapter 3 – Aviation Activity Forecasts.

The information presented in **Table 2-1** through **2-3** is intended to provide a contextual summary of the local and regional economic conditions that may affect activity at LKV.

Population

Data from Portland State University (PSU) indicates that the area around LKV has experienced moderate growth over the past ten years. The population growth in Lake County and neighboring counties (Klamath and Harney Counties) trailed the state average growth rate at 0.77%, 0.81%, and 0.50%, respectively, compared to the state average growth rate of 0.90%. However, Lake County experienced above-average growth in the last five years. Between 2019 and 2023, Lake County's population grew at an average annual growth rate (AAGR) of 1.46%, nearly four times the state's average annual growth rate of 0.35% during the same period.

While the specific trigger for the sudden population jump remains unclear, some research suggests that population shifts during and after the COVID-19 pandemic may have contributed. A study¹ conducted by researchers at Michigan Technological University and the U.S. Department of Agriculture Forest Service found that, in the two years following the pandemic, rural counties with recreational draws (such as Lake County) experienced a temporary decline in outbound migration and an increase in inbound migration, relative to urban counties and rural counties without recreational draws. However, this effect had largely disappeared by 2023. It should be noted that this is a single study, and it may or may not fully explain the unusual population increase observed during that period.

A breakdown of recent PSU-certified annual population estimates, the annual change, and the corresponding AAGR's for the 10-year period are presented in **Table 2-1**.

Table 2-1: Historical Population

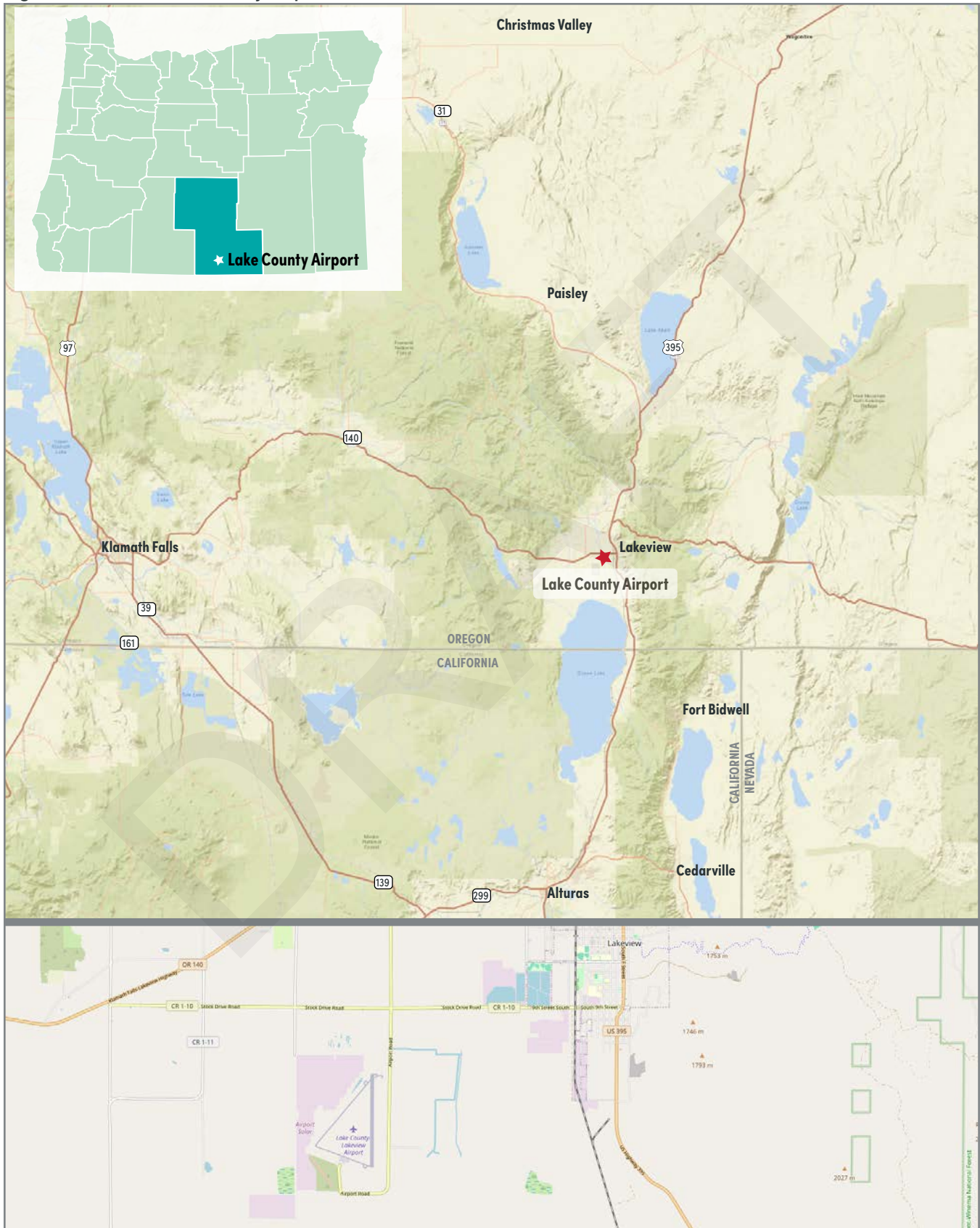
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	AAGR
State of Oregon	3,962,710	4,013,845	4,076,350	4,141,100	4,195,300	4,236,400	4,245,290	4,222,611	4,271,406	4,296,626	
AAGR		1.29%	1.56%	1.59%	1.31%	0.98%	0.21%	-0.53%	1.16%	0.59%	0.90%
Lake County	7,990	8,010	8,015	8,120	8,115	8,080	8,168	8,215	8,402	8,562	
AAGR		0.25%	0.06%	1.31%	-0.06%	-0.43%	1.09%	0.58%	2.28%	1.90%	0.77%
Klamath County	66,910	67,110	67,410	67,690	67,960	68,190	69,539	70,146	71,495	71,919	
AAGR		0.30%	0.45%	0.42%	0.40%	0.34%	1.98%	0.87%	1.92%	0.59%	0.81%
Harney County	7,265	7,295	7,320	7,360	7,380	7,360	7,498	7,511	7,623	7,600	
AAGR		0.41%	0.34%	0.55%	0.27%	-0.27%	1.88%	0.17%	1.49%	-0.30%	0.50%

Source: Federal Reserve Bank of St. Louis; Portland State University 2023 Annual Oregon Population Report Tables (2023)

¹ Petersen, J. K., Winkler, R. L., & Mockrin, M. H. (2024). Changes to rural migration in the COVID-19 pandemic. *Rural Sociology*, 89(1), 130–155. <https://doi.org/10.1111/ruso.12530>



Figure 2-1: Location and Vicinity Map



Source: FAA Airport Data & Information Portal; OpenStreetMap



Economic Indicators

Economic activity in the region has also grown significantly over the last decade. According to data provided by the Bureau of Economic Analysis, the gross domestic product (GDP) of Lake County and the State of Oregon both experienced significant growth during this period. A summary of 2017-2023 Lake County, State, and neighboring counties GDPs are presented in **Table 2-2**.

During the most recent six-year historical period, it is important to note that the COVID-19 pandemic had a significant impact on local economies. Lake County's GDP declined in 2020 but steadily recovered through 2023 resulting in growth nearly double the State average.

Table 2-2: Historical Gross Regional Product

	2017	2018	2019	2020	2021	2022	2023	AAGR
Oregon	\$225,534,544	\$234,308,332	\$239,794,808	\$237,424,218	\$250,325,781	\$256,062,724	\$261,951,538	
AAGR		3.89%	2.34%	-0.99%	5.43%	2.29%	2.30%	2.53%
Lake County	\$256,293	\$294,826	\$313,840	\$307,051	\$311,915	\$316,371	\$365,647	
AAGR		15.03%	6.45%	-2.16%	1.58%	1.43%	15.58%	6.10%
Klamath County	\$2,285,268	\$2,343,100	\$2,394,334	\$2,367,513	\$2,482,458	\$2,493,611	\$2,609,750	
AAGR		2.53%	2.19%	-1.12%	4.86%	0.45%	4.66%	2.24%
Harney County	\$245,012	\$259,971	\$270,219	\$276,842	\$305,785	\$320,290	\$351,439	
AAGR		6.11%	3.94%	2.45%	10.45%	4.74%	9.73%	6.20%

Source: Bureau of Economic Analysis

Over the past 10-year historical period, Lake County's per capita income, although trailing the State, has grown steadily. During the most recent 10-year historical period, it is important to note that the COVID-19 pandemic is likely responsible for the significant increase in per capita income between 2020 and 2021 across the state as regional economies adjusted to new economic conditions. The historical per capita income for Lake County, the State, and neighboring counties are summarized in **Table 2-3**.

Table 2-3: Historical Per Capita Income

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	AAGR
Oregon	\$41,653	\$44,166	\$45,467	\$47,565	\$50,209	\$52,189	\$56,577	\$62,347	\$64,107	\$67,838	
AAGR		6.03%	2.95%	4.61%	5.56%	3.94%	8.41%	10.20%	2.82%	5.82%	5.57%
Lake County	\$35,895	\$36,957	\$38,425	\$36,932	\$39,449	\$40,811	\$43,592	\$48,142	\$47,956	\$50,163	
AAGR		2.96%	3.97%	-3.89%	6.82%	3.45%	6.81%	10.44%	-0.39%	4.60%	3.79%
Klamath County	\$33,443	\$35,129	\$36,439	\$37,789	\$39,257	\$39,914	\$43,338	\$47,688	\$48,655	\$51,246	
AAGR		5.04%	3.73%	3.70%	3.88%	1.67%	8.58%	10.04%	2.03%	5.33%	4.86%
Harney County	\$34,856	\$36,768	\$37,075	\$35,870	\$38,344	\$40,619	\$44,609	\$50,171	\$52,128	\$53,228	
AAGR		5.49%	0.83%	-3.25%	6.90%	5.93%	9.82%	12.47%	3.90%	2.11%	4.82%

Source: U.S. Bureau of Economic Analysis, "CAINC1 County and MSA personal income summary: personal income, population, per capita personal income" (accessed Friday, January 3, 2025).

More detailed socio-economic data and analysis is presented in Chapter 3: Aviation Activity Forecasts to supplement the updated projections of future aviation activity.



AIRPORT HISTORY

LKV has been in existence since 1943 and consists of 1,000 acres. It was initially constructed by the U.S. Navy and used as a training base through the end of World War II. The U.S. Navy transferred the Airport's ownership to the Town of Lakeview in 1945. The following decade was dominated by an economic surge caused by resource extraction and processing. During this time the airport expenses were shared by the Town of Lakeview and Lake County. Today the Airport is solely owned and operated by Lake County.

Air service was first introduced at the Airport in 1954 by West Coast Airlines operating DC-3 aircraft; the service was maintained until the mid-1960s. In 1975 Air Oregon began service that lasted until 1979. No scheduled air service has operated at the Airport since then.

At least four fixed base operators (FBO) have been based at the Airport since it was built, providing a range of services such as fuel sales, aircraft maintenance, aircraft charter, flight instruction, and so on. Past operators include Buswell Flying Service, Rent-A-Plane, Goose Lake Aviation, and Oregon Sunstone Aviation. Lake County presently provides fuel sales and some FBO services.

The U.S. Forest Service (USFS) entered a ground lease in 1961 to locate a permanent facility for fire control operations. While heavy air tankers no longer operate from the Airport, Single Engine Air Tankers (SEATs) and helicopters regularly use the Airport as an operations base during the fire season. The Interagency Air Tanker Base is operated in cooperation with the Oregon Department of Forestry, U.S. Fish and Wildlife Service, Fremont-Winema/Modoc National Forests, and Bureau of Land Management (BLM).

AIRPORT ROLE

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

National Role

The FAA maintains an inventory of U.S. aviation facilities through the National Plan of Integrated Airport Systems (NPIAS). The NPIAS lists existing and proposed airports significant to the air transportation system of the United States and thus are eligible for federal funding through the Airport Improvement Program (AIP) which covers over 90% of eligible costs of planning and development projects. According to the 2023 National Plan of Integrated Airport Systems Report to Congress, LKV is classified as a Nonprimary Local Airport. A Nonprimary Local Airport provides the community the opportunity to connect with other local and regional markets. The local airport serves propeller-driven aircraft, but no jets.

State Role

Oregon categorizes state airports into five categories: Category I: Commercial Service Airports; Category II: Urban General Aviation Airports; Category III: Regional General Aviation Airports. Category IV: Local General Aviation Airports; Category V: Remote Access/Emergency Service Airports. LKV is categorized as Category III: Regional General Aviation Airport. The airport supports twin and single engine aircraft, and possible business jets. The airport also serves a populated area and supports regional transportation.

Local Role

The Lake County Airport serves the City of Lakeview, which is the County Seat, and the greater unincorporated areas of Lake County. The City of Lakeview is a scenic remote location bordering California. Fremont-Winema National Forest, Goose Lake, and Sheldon National Antelope Refuge are some local geographical features surrounding Lakeview. Lakeview and the geographical features surrounding area allows for the Airport to contribute to tourism, economic development, and emergency services. LKV serves as an operation base during fire season allowing Single Engine Air Tankers and helicopters to operate. This operation is in cooperation with the Oregon Department of Forestry, U.S. Fish and Wildlife Service, Fremont-Winema/Modoc National Forests, and BLM.



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 Lake County Airport are summarized in **Table 2-4** and depicted in **Figure 2-2**. A summary of the documented based aircraft numbers for the area airports is presented in **Table 2-5**. It is noted that available TAF data for individual airports vary significantly in accuracy. Operations totals (takeoffs and landings) at non-towered GA airports as reported in the TAF are especially unreliable as they are only periodically updated, typically during a major planning study. As such, operations estimates are not presented for the neighboring airports due to low confidence in the accuracy of the available data. An updated operations estimate for Lake County Airport will be provided in Chapter 3.

For Lake County, the updated based aircraft count completed by airport management in November 2023 and validated by the FAA through the National Based Aircraft Inventory program is used as the based aircraft activity baseline for the Airport Master Plan.

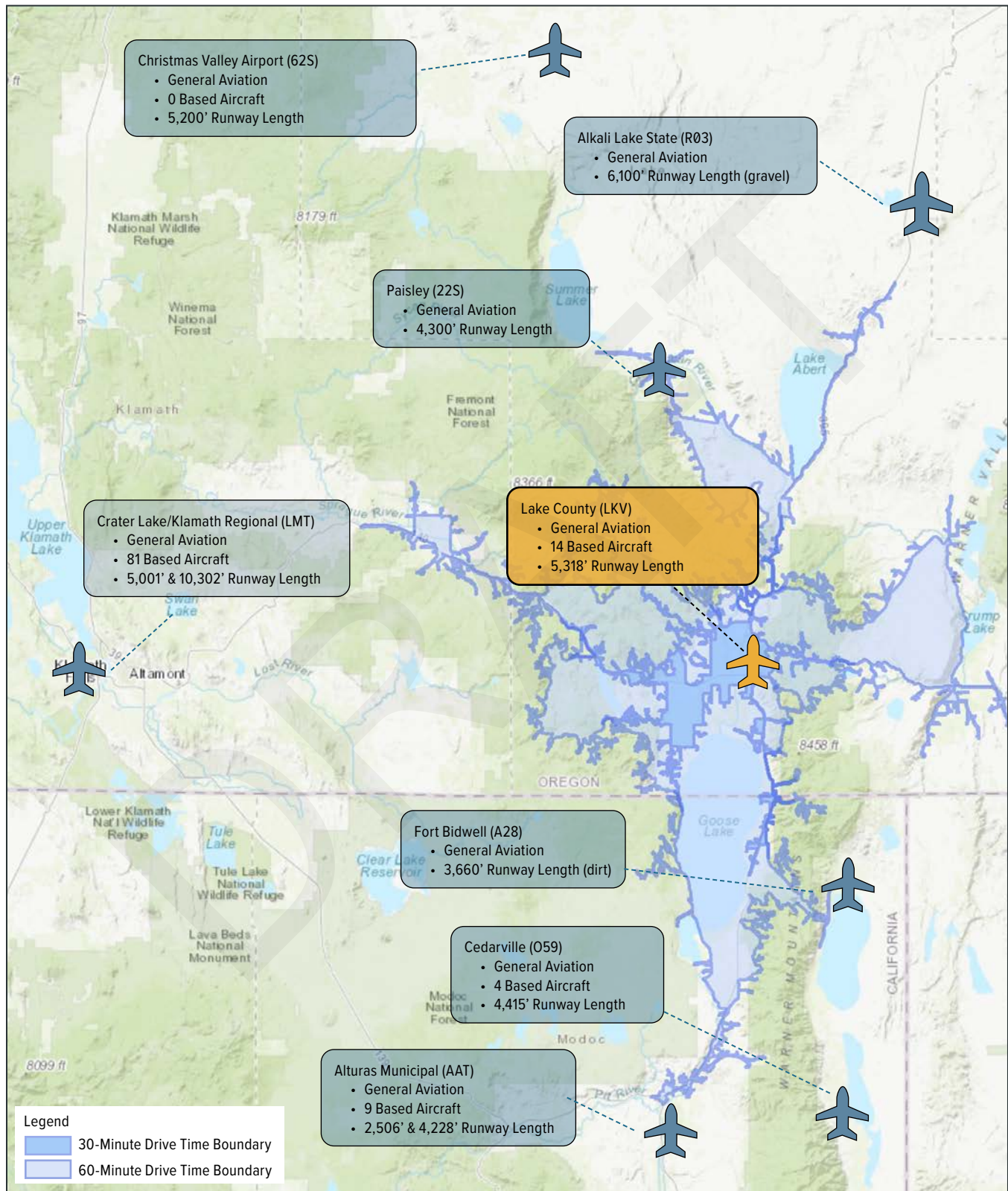
Table 2-4: Area Airports Comparison

Airport	Location (Rel. to LKV)	Runway ID	Runway Dimension (feet)	Surface	Lighted Runway	Published Procedures (see note)	Fuel Available
Lake County (LKV)		17/35	5,318 x 100'	Asphalt	Yes	NPI, Circling	100LL, Jet A
Alkali Lake State (R03)	59 nm NE	18/36	6,100 x 150'	Gravel	No	None	None
Crater Lake/ Klamath Regional (LMT)	59 nm W	14/32	10,302 x 150'	Asphalt/Concrete	Yes	PI, NPI, Circling	100LL, Jet A
		8/26	5,001 x 75'	Asphalt	Yes		
Christmas Valley (62S)	66 nm N	7/25	5,200 x 60'	Asphalt	Yes	Circling	None
Alturas Municipal (AAT)	41 nm S	13/31	4,228 x 50'	Asphalt	Yes	NPI, Circling	100LL, Jet A
		3/21	2,506 x 60'	Asphalt	Yes		
Paisley (22S)	34 nm N	13/31	4,300 x 60'	Asphalt	Yes	None	None
Cedarville (O59)	35 nm SE	2/20	4,415 x 50'	Asphalt	Yes	None	None
Fort Bidwell (A28)	20 nm SE	16/34	3,660 x 50'	Gravel/Dirt	No	None	None

Source: Airport Master Record – Access via FAA Airport Data Information Portal (ADIP); AirNav

Notes: NPI - Nonprecision Instrument Approach; PI - Precision Instrument Approach; Circling - Circling Approach

Figure 2-2: Area Airports



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



Table 2-5: 2023 Based Aircraft Counts

	Lake County ¹	Crater Lake/ Klamath Regional ²	Cedarville ²	Alturas Municipal ²	Christmas Valley ²	Alkali Lake State	Paisley	Fort Bidwell
TOTAL BASED AIRCRAFT	14	81	4	9	0	N/A ³	N/A ³	N/A ³
Single Engine	12	61	4	8	0			
Multi Engine	2	9	0	1	0			
Jet	0	10	0	0	0			
Helicopters	0	1	0	0	0			
Glider	0	0	0	0	0			
Ultra-Light	0	0	0	0	0			

Notes:

1. National Based Aircraft Inventory Program, September 2024 Validated Based Aircraft Count

2. FAA Terminal Area Forecast (2023)

3. Non-NPIAS airport. Based aircraft counts are not available

SUMMARY OF AIRCRAFT ACTIVITY

Lake County accommodates a variety of general aviation activity generated by locally-based and transient aircraft, including a high volume of seasonal wildfire fighting activity generated by USFS-contract SEAT aircraft and helicopters. General aviation activity includes single-engine and multi-engine piston fixed wing, turboprops, helicopters, and occasional business jets. The most recent (September 2024) based aircraft summary is provided in **Table 2-6**, with earlier estimates from the 2023 FAA TAF and the 2022 projection from the 2013 Airport Master Plan Update provided for comparison. Small single-engine piston aircraft represent the majority of locally based aircraft at LKV.

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 National Based Aircraft Inventory program. All aircraft included in the validated count must be stored at the airport for more than half the year, and must have a valid and current registration or airworthiness certificate. If an aircraft is claimed as based by more than one airport, it is removed from the validated count of all claimant airports until the conflict is resolved. Airport management completed the most recent review of Lake County based aircraft in September 2024, with a total of 14 validated aircraft recorded.

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. These aircraft types were included in the 2013 master plan based aircraft totals, which was consistent with FAA policy at the time.

Table 2-6: Based Aircraft

	2013 AMP (2022 Projection)	2023 FAA TAF	FAA Validated Count (Sep 2024)
Single Engine	26	14	12
Multi Engine	1	2	2
Jet	0	0	0
Helicopter	1	1	0
Glider	0	0	0
Ultra-Light	0	0	0
TOTAL BASED AIRCRAFT	28	17	14

Sources: 2013 Lake County Airport Master Plan; FAA Terminal Area Forecast (2023); National Based Aircraft Inventory Program Website (www.basedaircraft.com, accessed September 2024)



Aircraft Operations

Aircraft operations (takeoffs and landings) at non-towered airports are not routinely recorded. The 2013 master plan estimated 6,074 annual aircraft operations in the forecast base year (2011), with 6,948 operations projected for 2022. The FAA Terminal Area Forecasts (TAF) include operations data. The 2023 TAF reported 6,069 operations for that year. However, TAF operations data for non-towered airports are unverified and commonly inaccurate. Using operations numbers from the TAF is not recommended for non-towered airports. An updated estimate of current airport flight activity will be prepared and presented in Chapter 3.

RELEVANT STUDIES

There are numerous local, regional, and statewide studies available for reference that contain a significant amount of information as it relates to the Airport or the greater community. The relevant studies summarized below have been incorporated into the planning process to provide greater context when developing understanding, exploring solutions, or implementing the plan.

Oregon Aviation Plan (OAP)²

The Oregon Department of Aviation (ODAV) published the Oregon Aviation Plan that presents a framework for improving the system for continued support of communities and economic development. The OAP also addresses topics containing LKV such as, Airport Functional Roles, System and Airport Evaluation, Special Considerations, Compliance Report, and Recommended Plan. The OAP gives specific information on the airport such as the FAA ID, City, Airport name, if the airport meets the fencing objective, and the improvements needed to meet that objective. The document also shares specific information on airport's current NPIAS standing, runway and pavement specifics, instrument approach, beacons, hangars, terminal parking spaces and many other.

Oregon Aviation Plan Airport Summary Lake County Airport³

The Airport Summary is an in-depth document based upon the OAP. This summary covers an overview of LKV, the objectives for a Category III airport, projections, economic impact, land use, recommendations, and facility improvement costs for LKV. Data is included throughout the summary topics.

Lake County Airport DBE Program Plan⁴

The 2020 Disadvantaged Business Enterprise (DBE) Program Plan is put into place to align with the U.S. Department of Transportation (DOT) regulations, the program is also required in Lake County to receive grants for airport planning and development. Lake County has received financial assistance from the Department of Transportation. The LKV DBE Program Plan defines DOT assisted contracts that encompass policies such as nondiscrimination, a level playing field, a tailored DBE program, consistent eligibility standards, removal of barriers, promotion of all types of DBEs, assistance with successful competition, and flexibility.

2013 Lake County Airport Master Plan

In 2013 the Lake County Airport Master Plan was developed by WHPacific. The previous Master Plan gives a detailed summary on the history of the airport, forecasts, facility requirements, alternatives, compliance reviews, the airport layout and a capital improvement plan. This Master Plan was in effect for the last 10 years.

2 <https://www.oregon.gov/aviation/airports/planning-and-programs/Documents/OAP/2019/00AP-2018-Entire-Report.pdf>

3 <https://digitalcollections.library.oregon.gov/nodes/download/43348>

4 <https://cms3.revize.com/revize/lakecounty/government/airport/index.php>



ENVIRONMENTAL DATA

Typical annual temperatures at Lake County Airport are summarized in **Figure 2-3**. Lake County has cold winters and warm, dry summers. Winter temperatures are generally around 45°F, and summer temperatures average 74°F. The coldest month in the year is December with a low of 18°F, and a high of 35°F. The hottest month of the year in Lakeview is July, with a high of 84°F, and a low of 47°F. Due to generally high elevations, the High Plateau Region has cool temperatures and receives a significant amount of snow. Its distance from the coast, along with its location downwind of the Cascade Mountain Range, causes its low annual precipitation. The rainy period lasts around 8 months, October through June. Throughout this period, the average rainfall is 0.5 in. The other months have an average rainfall of 0.2 in. per month.

Cloud Cover

The cloud cover at LKV (**Figure 2-4**) varies throughout the seasonal change. The cloudier months of the year begin in mid-October through early-June. The cloudiest month is January with an overcast, or mostly cloudy sky 61% of the time. The clearer part of the year lasts around four months, with the clearest month being August. August is clear, mostly clear, and partly cloudy 84% of the time.

Wind

Wind data for the Airport are summarized in **Figure 2-5**. Lakeview experiences moderate wind, changing slightly throughout the seasons. The windier parts of the year take place during a six-month period lasting from late-October through late-May. The windiest month of the year is March with an average wind speed of 8.9 mph. The calmest months of the year last around five months, with August being the least windy month. The average wind speed in August is 6.2 mph.

Figure 2-3: Average High and Low Temperature in Lakeview, OR

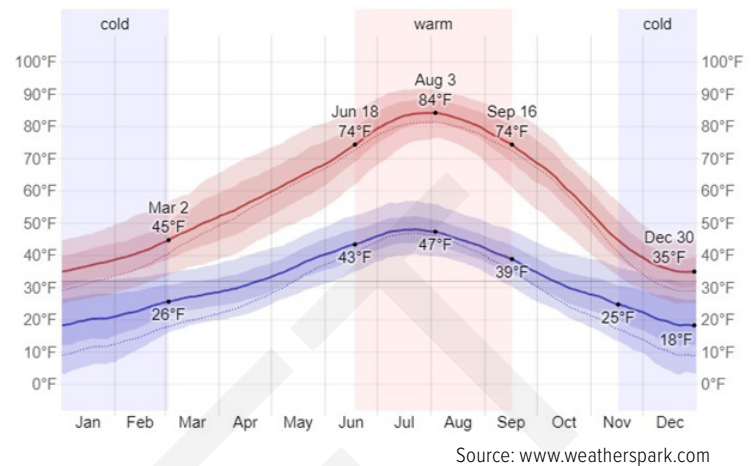


Figure 2-3: Cloud Cover Categories in Lakeview, OR

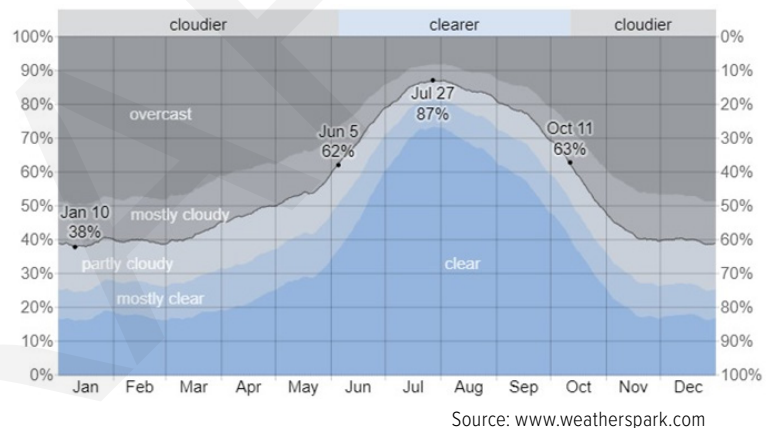
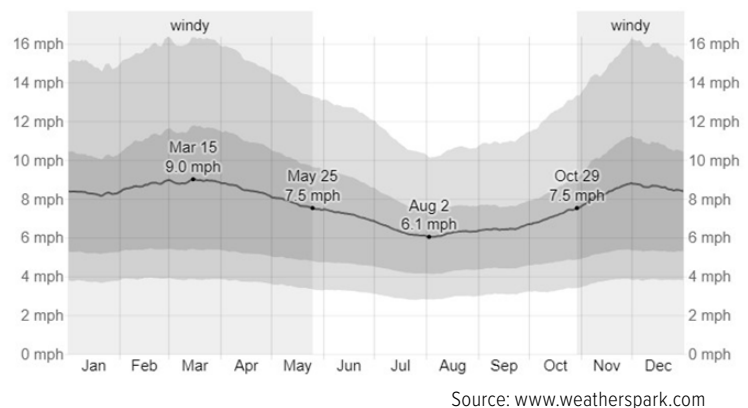


Figure 2-5: Annual Wind Data





ENVIRONMENTAL SCREENING/NEPA CATEGORIES

An environmental screening of National Environmental Policy Act (NEPA) environmental impact categories was conducted as part of the airport master plan. The NEPA categories investigated are listed and the findings are briefly summarized below. Please see **Appendix B: Preliminary Environmental and Cultural Resources Screening** for the full analysis and findings.

Air Quality - The Airport is located approximately two miles west of the Lakeview Air Quality Maintenance Area, which meets National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb). The area was previously designated nonattainment for PM₁₀ due to dust from Goose Lake and agricultural activity but was reclassified to attainment/maintenance in 2006 following local and state mitigation efforts. The Airport is not currently classified and does not generate significant air emissions.

Biological Resources - Biological resources include sensitive plant and animal species and their habitats. There are no recorded occurrences of federally or state-listed threatened or endangered species on Airport property. However, species listed for Lake County with the potential to occur in the region include gray wolf, North American wolverine, yellow-billed cuckoo, and monarch butterfly. No suitable habitat for these species is present at the Airport, and monarch host plants (milkweed) are likely absent due to ongoing vegetation control.

Several migratory bird species protected under the Migratory Bird Treaty Act (MBTA) may occur in the Airport vicinity, including ground-nesting birds such as killdeer and savannah sparrows, as well as swallows that may nest on Airport structures. While bald and golden eagles may traverse the area, no nesting or roosting habitat is present on or near the Airport.

There is no designated critical habitat for federally listed species on the Airport. No ESA-listed fish species are present, and the Airport is located more than 150 miles from the nearest Essential Fish Habitat (EFH). However, heavy rainfall or snow melt runoff from the Airport may enter the Sacramento River watershed, which supports federally protected fish species and EFH. If future projects increase impervious surfaces, consultation with the National Marine Fisheries Service (NMFS) may be required.

State-protected species such as the Goose Lake sucker, pit roach, and Goose Lake tui chub are documented within two miles of the Airport, primarily in Thomas Creek. These species are not federally or state-listed but are monitored for conservation purposes.

Department of Transportation Act, Section 4(f) - Under section 4(F) of the U.S. Department of Transportation Act publicly owned and accessible parks, recreation areas, and wildlife and waterfowl refuges and historic sites are protected. There are no Section 4(f)-protected properties in or near the Airport. This includes publicly owned parks, recreation areas, wildlife or waterfowl refuges, and historic sites of national, state, or local significance. While Highway 395 is a designated National Scenic Byway and several historic sites exist in Lakeview and Lake County, none are near the Airport. A nearby privately owned golf course and surrounding public lands managed by the BLM and USFS are also not subject to Section 4(f). In addition to section 4(f), no lands purchased with Section 6(f) Land and Water Conservation funds are located in the airport vicinity.

Cultural Resources - A review of available records was completed using the Oregon Archaeological Records Remote Access (OARRA) database administered by State Historic Preservation Office (SHPO) to determine if archaeological resources have been recorded or if archaeological surveys have been completed for the airport property. The review found that the Airport became operational in 1942 and was originally built as a national defense project during World War II. There are 11 buildings and three structures (Runway 16/34, an apron, and two taxiways) within the study area that were built more than 50 years ago. Five cultural resource studies have been conducted within, or partially overlap with, the study area, and 44 archaeological resources have been identified within the study area. SHPO lists 40 of the 44 archaeological resources within the study area as not eligible for listing in the NRHP.



Land Use and Zoning - the Airport zoning and land use are regulated by Lake County Zoning ordinance and comprehensive plan. The Airport is situated in a primarily agricultural use area dominated by open rangeland and cropland. The closest residential development resides within the City of Lakeview approximately 3 miles northeast.

Currently, Airport zoning is listed as Exclusive Farm Use (A-1) under Lake County Zoning ordinance Article 2. The current base zoning was found to relate to mainly agricultural uses and does not permit industrial and commercial uses that generally occur in aeronautical and non-aeronautical development areas of an airport similar to LKV's size and activity.

The Airport overlay zoning is defined in Article 13 of the Lake County Zoning ordinance. The overlay protects airport approaches from airspace obstructions. Section 13.02 defines imaginary surfaces that may not be exceeded, as structures above the surface heights may pose a hazard to aircraft. The surfaces defined in the ordinance mirror the 14 Code of Federal Regulations (14 CFR) Part 77 Airspace surfaces.

In addition to airspace protections, Article 13 contains provisions to prohibit noise-sensitive land uses such as schools, hospitals, and nursing homes within the 55 DNL (day/night noise level) contour. Housing may be allowed in these areas provided that appropriate noise screening is constructed and landowners grant a "Hold Harmless Agreement and Avigation and Hazard easement" to the Airport Owner. Airport-related uses (terminal, hangar, etc) are allowed within these areas without restrictions.

Natural Resources - The Airport uses fuel to power aircraft, natural gas for heating, and electricity to power buildings and runway and taxiway lighting. Electricity is provided to the Airport by Surprise Valley Electric Corporation. Airport water is provided by well water and sewer service is provided by septic systems.

Water Resources - The Airport is located in a dry lakebed in the Lower Thomas Creek sub-watershed, which drains to Goose Lake via surrounding man-made drainage canals. The area is designated as Zone AE on FEMA flood maps, indicating a special flood hazard area with determined base flood elevations. While historical surface water once flowed through the airport site, these flows are now diverted by drainage canals. Stormwater from impervious surfaces at the Airport is collected in a series of vegetated ditches for treatment and infiltration.

On-airport wetlands were largely eliminated with the development of drainage canals, though some drainage areas are developing wetland-like characteristics. The National Wetland Inventory maps several small wetlands on the property, particularly in the infield and adjacent canals. All airport land is mapped as hydric soil, and a site visit by a qualified wetland scientist is recommended to confirm wetland presence.

There are no designated Wild and Scenic Rivers near the Airport.

NOISE AND COMPATIBLE LAND USE

The Airport has about 6,000 annual operations by mostly single-engine aircraft. The Airport is in a relatively isolated area, with agricultural lands immediately surrounding the facility. Due to the relatively low activity levels and the surrounding agricultural land, noise issues are minimal.

LOCAL SURFACE TRANSPORTATION

Access to the Airport is provided by US Route 395 and Oregon Route 140 (OR 140). US Route 395 offers access north to Burns and south to Alturas, California. OR 140 provides travel west towards Klamath Falls. Local access from the Airport to the highways is provided by Airport Road (co-listed as County Highway 1-10A).

Airside Elements

The Airside Elements section is comprised of the facilities that facilitate the movement and operation of aircraft on the ground and in the air around LKV. This section of the existing conditions analysis includes a discussion of the area airspace, instrument flight procedures, runways, taxiways/taxilanes, aprons/tiedowns/aircraft parking, airfield pavement condition, and airside support facilities.

AREA AIRSPACE

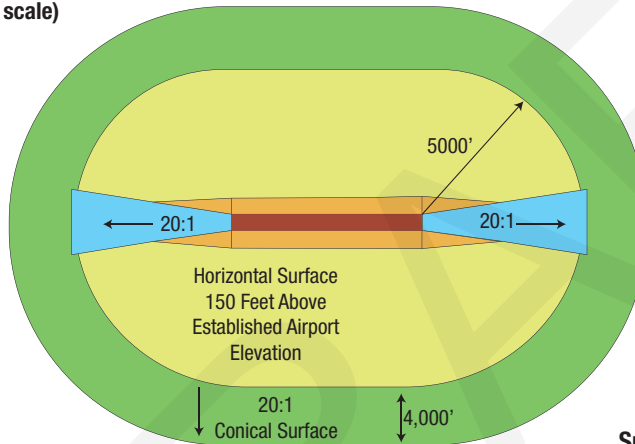
In addition to the airspace classifications and operating environment pilots are more familiar with, there are a variety of rules, regulations, design standards, and policies associated with the protection of airspace, evaluation of proposed objects on and near airports, and their effects on navigable 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.

Part 77—Objects Affecting Navigable Airspace

Part 77 airspace, depicted in **Figure 2-6**, is the central 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.

Figure 2-6: PART 77 Airspace

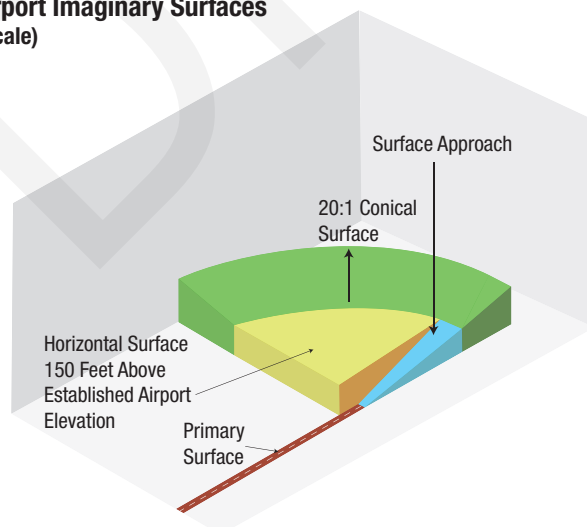
**Plan View of Part 77
Civil Airport Imaginary Surfaces
(not to scale)**



Surface Slope Key

- Primary Surface
- Transitional Surface
- Horizontal Surface
- Conical Surface
- Approach Surface

**Isometric View of Part 77
Civil Airport Imaginary Surfaces
(not to scale)**



For Lake County Airport, the approach surfaces for the runway extend 5,000 feet beyond each runway (beginning 200 feet beyond the runway end).



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.

FAA AC 150/5300-13B—Airport Design

This AC is the principal document utilized by the FAA, airport sponsors, and planning consultants when planning and designing new airports or modifications to airports. Airspace clearances for key runway end features are defined in the AC's discussion of Runway End Siting Surfaces.

Airspace Classifications

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 2-7** 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 very large commercial airports in high traffic areas. Uncontrolled airspace is typically found in remote areas similar to Lake County and is limited to a 700 or 1,200-foot Above Ground Level (AGL) layer above the surface and below controlled airspace.

Local Area Airspace Structure

The Oregon Sectional Aeronautical Chart depicts nearby airports, notable obstructions, special airspace designations and instrument airways in the vicinity of LKV as shown in **Figure 2-8**.

LKV is located in an area of Class G airspace up to 700 feet AGL, where it becomes Class E airspace. Radio communication is not required for visual flight rules (VFR) operations in Class G or E airspace, although pilots are encouraged to use the common traffic advisory frequency (CTAF) when operating at the airport. However, aircraft are required to obtain an air traffic control (ATC) clearance prior to operating in Class E airspace when operating under instrument flight rules (IFR).

Special Use Airspace

Special use airspace near LKV includes several Military Operation Areas (MOA).

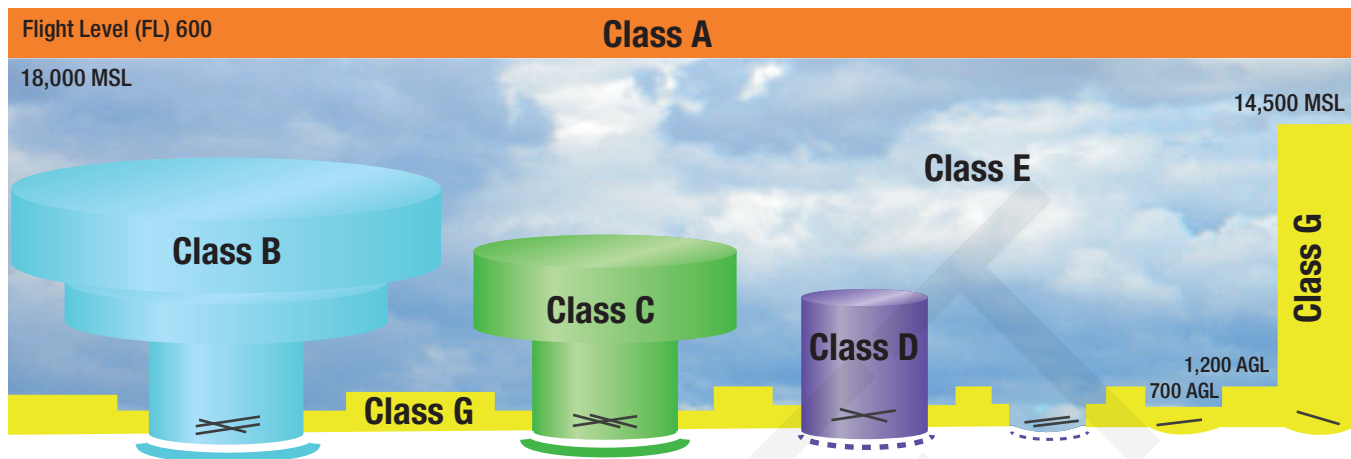
Controlled & Uncontrolled Airspace

LKV is an uncontrolled field, and pilots use the airport Unicom/common traffic advisory frequency (CTAF) for communications on the ground and in the vicinity of the Airport.

Instrument Flight Procedures

Instrument approach and departure procedures are developed by the FAA using electronic navigational aids to guide aircraft through a series of prescribed maneuvers in and out of an airport's terminal airspace. According to the published procedures, LKV operates RNAV/GPS procedures with LPV, LNAV/VNAV, LNAV, and GPS circling minimums. The lowest visibility minimum for LKV is 1 statute mile. There are Special Alternate Minimums, and Special Take-Off Minimums/Departure Procedures published for Lake County Airport.

Figure 2-7: 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: FAA & Century West Engineering



Figure 2-8: Area Airspace – Klamath Falls Sectional Chart



Source: SkyVector.com



RUNWAY

LKV has one paved runway (17/35). Runway 17/35 is asphalt with dimensions of 5,318 feet by 100 feet. The pavement conditions analysis of the runway is satisfactory. The pavement strength identified in FAA Airport Master Record data indicate a rating of 74,000 pounds for Single Wheel Gear aircraft and 86,000 pounds for a Dual Wheel Gear aircraft.

FAA Design Standards and Existing Non-Standard Conditions

The FAA defines several recommended standards for airport design in AC 150/5300-13B, Airport Design. Some of the most critical standards are those related to the design of runways, which are listed below.

- **Runway Safety Area (RSA)** – The RSA is a defined surface surrounding the runway that is prepared or suitable for reducing the risk of damage to airplanes in the event of an airplane undershoot, overshoot, or an excursion from the runway.
- **Object Free Area (OFA)** – The OFA is an area on the ground centered on the runway, taxiway, or taxilane centerline that is provided to enhance the safety of aircraft operations. No above ground objects are allowed except for those that need to be in the OFA for air navigation or aircraft ground maneuvering purposes.
- **Object Free Zone (OFZ)** – The OFZ is a volume of airspace that is required to be clear of obstacles, except for frangible items required for the navigation of aircraft. It is centered along the runway and extended runway centerline.
- **Runway Protection Zone (RPZ)** – The RPZ is a trapezoidal area off each runway end intended to enhance the protection of people and property on the ground. The dimensions of an RPZ are a function of the runway ARC and approach visibility minimums. The FAA recommends that RPZs be clear of all residences and places of public assembly (churches, schools, hospitals, etc.) and that airports own the land within the RPZs.

TAXIWAY/TAXILANES

LKV has two asphalt paved taxiways. Both taxiways were previously constructed to 40-foot widths. Taxiway A was reconstructed to 35 feet in 2021 and the center 35 feet of Taxiway B was rehabilitated in 2024. The Taxiway B rehabilitation project retained 2.5 feet of unimproved pavement on each side of the taxiway as paved shoulder. Both taxiways are marked with a standard yellow centerline and hold markings prior to the runway. Neither taxiway has edge markings.

Taxiway A provides access from the aircraft parking and hangar area to the southern runway end (35). A previous runway now operates as Lake County's Taxiway B. Taxiway B provides access from the west end of Taxiway A to the northern runway end (17). The geometry of the airport comprises the runway and two taxiways resembling a triangle. Taxiways are categorized by two different groups, Taxiway Design Groups (TDG), and Airplane Design Groups (ADG) for LKV the design group is TDG-2A. TDG-2A has a Taxiway width of 35 feet, Edge Safety Margin of 7.5 feet, and Shoulder width of 15 feet. The difference between TDG-2A/B is the Taxiway Centerline to Centerline Distance.



Runway 17/35



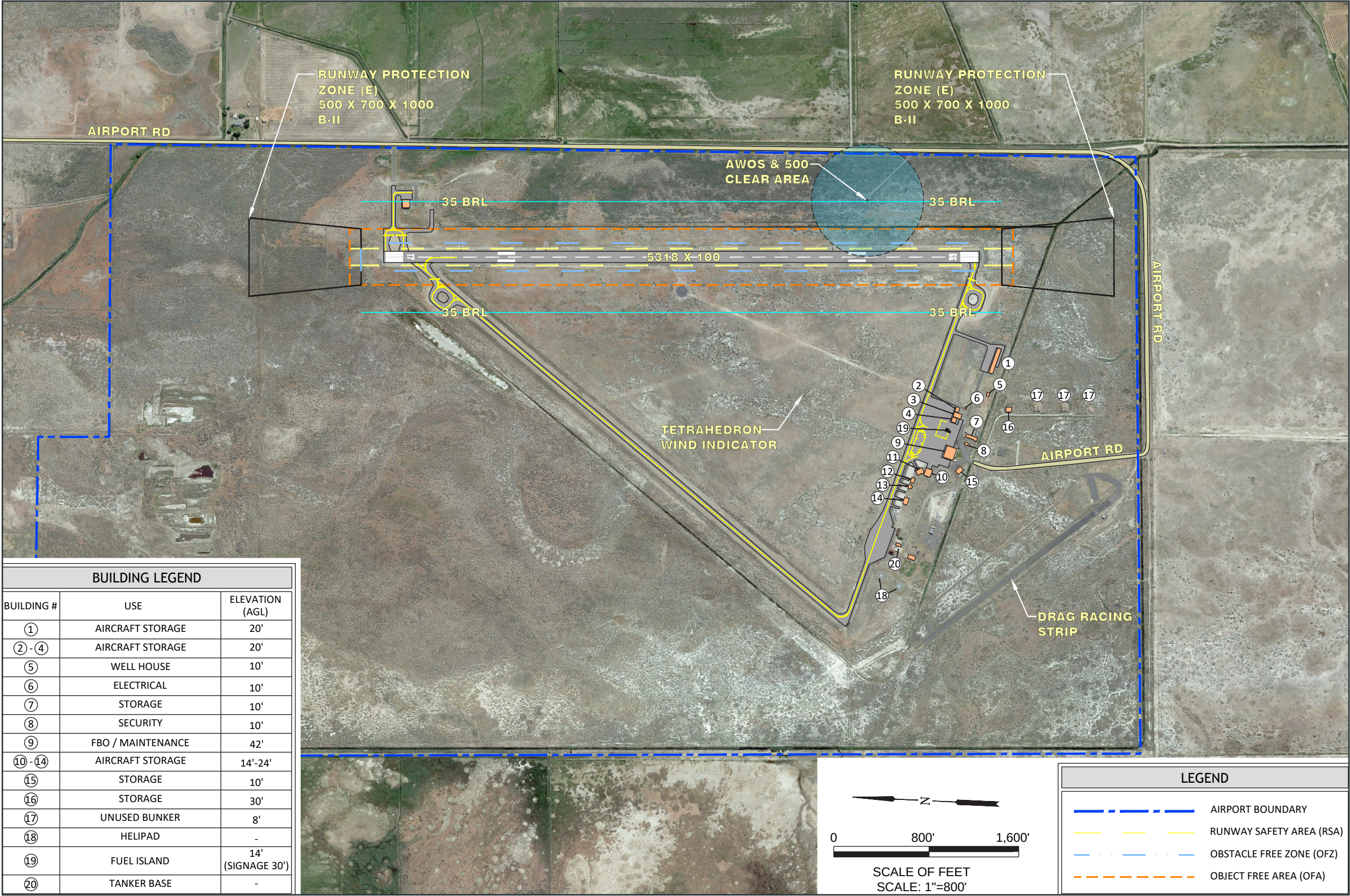
Taxiway A



Taxiway B



Figure 2-9: Existing Conditions



Source: Century West Engineering

APRONS/TIEDOWNS

According to the previous airport master plan completed in 2013, the Airport has two main aprons that provide access to hangar areas, vehicle parking, and taxiway/ runway facilities. LKV has 11 tiedowns for aircraft parking. However, space may exist for additional parking.



Apron/Tiedowns

AIRFIELD PAVEMENT CONDITIONS

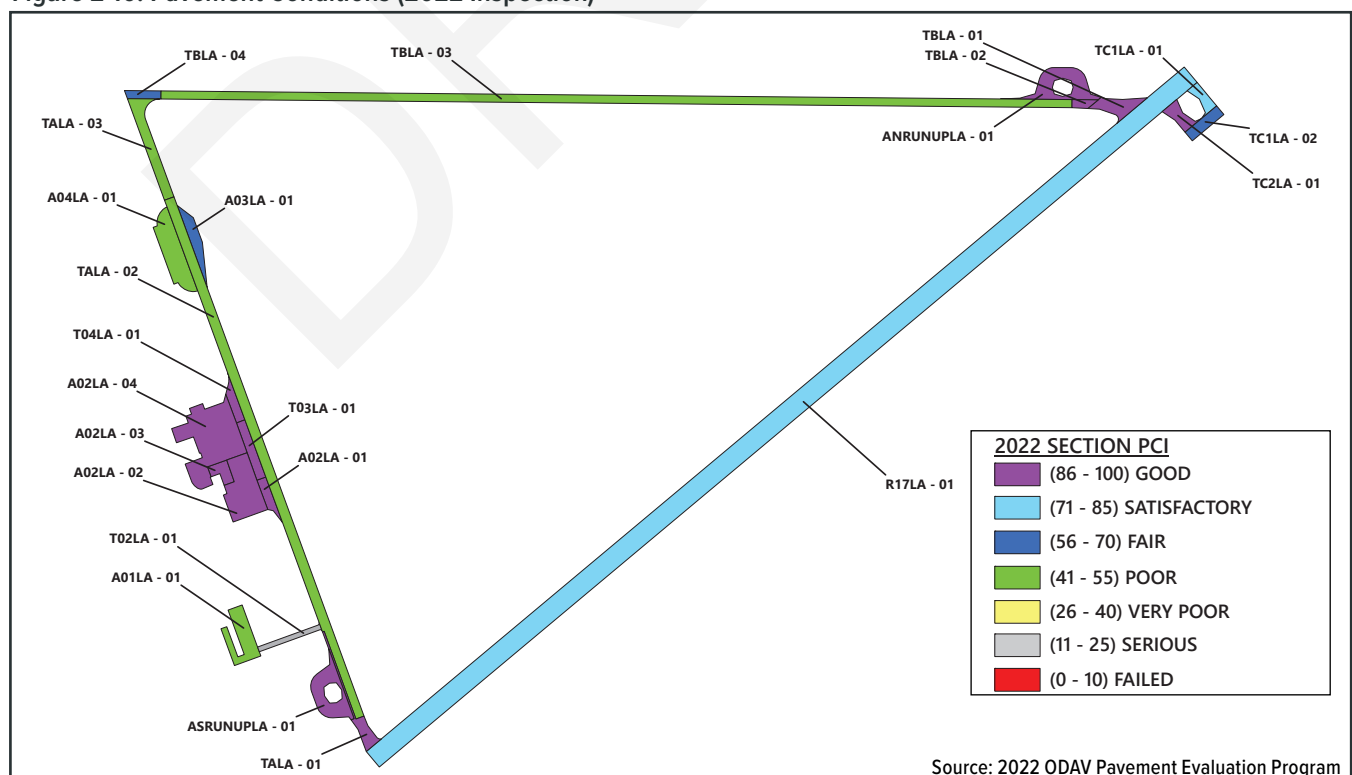
According to the Oregon Pavement Evaluation/ Maintenance Management Program 2019, LKV's history of recent pavement projects includes the apron, taxiway, and runway. The most recent pavement projects on each pavement section took place in 2019. The apron had multiple crack sealing projects and patching. The taxiway had crack sealing and patching as well. The runway as well had crack sealing.

The 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 LKV was performed in March 2022. The survey was performed using the PCI methodology which was developed by the U.S. Army Corps of Engineers. The conditions for the major runway, taxiway, and apron pavements surveyed in 2022 were "Poor" and "Satisfactory" while other conditions were named, "Good", "Fair", and "Serious." The PCI found that the primary distresses were weathering, raveling, longitudinal and transverse cracking, fatigue cracking, and block cracking.

The predicted PCI provided by ODAV indicates that pavement areas on the apron will require pavement maintenance before the runway or taxiway/taxilane pavements. The PCIs for LKV ranged from a low of 18 to a high of 100.

Figure 2-10: Pavement Conditions (2022 Inspection)





AIRFIELD SUPPORT FACILITIES

Support facilities will generally include airside support facilities, including airfield lighting, signage, weather reporting equipment, and visual aids. LKV accommodates day and night operations in visual meteorological conditions (VMC) and instrument meteorological conditions (IMC) and the corresponding visual and instrument flight rules (VFR and IFR) for aircraft.

Airfield Lighting

The runway is equipped with a Medium Intensity Runway Lighting (MIRL) system. LKV has runway end identifier lights on both ends of the runway. The edge lighting is located on the runway and runway end identifier lights (REILs) are located at the end of the runway. There are edge reflectors lining the airport's taxiways, taxilanes, and apron.

Airfield Signage

The airport has standard airfield signage that is in good condition.

Weather Reporting

The Automated Weather Observing System (AWOS) provides weather reporting for LKV. The Airport has type AWOS-3PT which reports precipitation, thunderstorms, and lightning, including the usual AWOS reporting.

Navigational Aids

There is a rotating beacon that is located at the top of the FBO. The beacon has functioning white-green light that operates from sunset to sunrise.

Aircraft Fuel

LKV has full-service and self-service Jet A and 100LL fuel. The tanks are 12,000-gallon above ground tanks in good condition.



Airfield Lighting



Airfield Signage



Navigational Aid - REIL



Fuel Service

Source: Airport Management



Landside Elements

The landside elements section includes the facilities designed to support airport operations but not those dedicated to aircraft operations. This section of the existing conditions analysis includes a discussion of the terminal building/facilities, hangars, airport fencing, airport surface roads, vehicle parking, and utilities.

TERMINAL BUILDING/FACILITIES

According to AirNav, the County provides FBO services and amenities including airport management, aviation fuel, aircraft parking, hangars, passenger terminal and lounge, courtesy transportation, pilot lounge / snooze room, public telephone, computerized weather, and internet access.

HANGARS

LKV has a total of nine hangars. All of the hangars have a total square footage of 27,000 square feet. There is also an additional hangar on the northeast side of the airport that adds an additional 4,900 square feet.

AIRPORT FENCING

The fencing surrounds the perimeter of the airport and is a combination of both chain-link security fencing and livestock fencing. The chain-link fencing contains the Interagency Fire Center. All of the access points to the airport are gated, however they remain open during hours of operation.

AIRPORT SURFACE ROADS/VEHICLE PARKING

LKV airport surface roads include a drag racing strip on the south side of the airport, an entrance road (Airport RD) that leads to the majority of hangars, the FBO, and other services. There are vehicle parking spaces available south of the FBO building as well as the Interagency Air Tanker Base. Individual tenants are also able to park adjacent to their hangars when flying.

UTILITIES

Utilities available on the property include water, sanitary sewer, electric, and telephone. Water is provided by a County-owned well system. Sanitary sewer is available at the terminal building and some hangars via dedicated septic systems for each facility. Surprise Valley Electric provides power to the site, and telephone service is available through CenturyLink.

SINGLE ENGINE AIR TANKER (SEAT) BASE

The Bureau of Land Management (BLM) and the United States Forest Service (USFS) jointly operate an aerial firefighting base at LKV. The property is held under a ground lease from the County and is located on the south side of the airport, west of the Terminal Apron. The facility's primary mission is to support a seasonally based fleet of federally contracted Air Tractor 802 (AT-802) single-engine air tankers (SEATs), which provide aerial firefighting support to the region. Key infrastructure at the base includes fire retardant storage and loading systems, aircraft fueling, aircraft wash facilities, and crew quarters. The base also offers three parking stands for fixed-wing aircraft and two additional stands for helicopters.



Terminal Building



Hangars

Source: Airport Management

Non-Aeronautical Development

There are two areas of non-aeronautical development currently on airport property: a solar farm and an automotive drag racing area.

Airport Solar is a 320-acre, 47-megawatt solar farm developed by Obsidian Renewables. It is situated on leased land on the west side of the airport under a 25-year ground lease and is capable of producing 132-million kilowatt-hours of electricity annually for the local electrical grid. The facility was constructed and began operating in 2019.

Construction of solar farms in the vicinity of an airport is a relatively recent concept that has become more common over the past several years. To clarify land-use suitability questions near airports, the FAA published a “Final Policy” under 14 CFR Part 77 on “Review of Solar Energy System Projects on Federally-Obligated Airports⁵.” The guidance does not define solar land uses to be incompatible but rather states that a 7460-1 must be submitted to the FAA to prove that there is no hazardous glare to pilots reflecting off of the solar panels.

A drag racing strip, operated and maintained by a local automotive club, is located south of the airport, along Airport Road. The drag strip was approved through a written 20-year lease for 60 acres. Under the terms of the lease, the automotive club pays no rent but is responsible for property taxes. The lease is currently due for renewal. The facility includes a 2,000-foot asphalt drag strip and five small structures used for storage and events. No improvements to the drag strip are permitted without written permission from the County. The facility has been largely inactive in recent years, though the County has recently discussed potential reactivation with the automotive club.

⁵ <https://www.govinfo.gov/content/pkg/FR-2021-05-11/pdf/2021-09862.pdf>



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

LKV is owned and operated by Lake County. The County is responsible for the day-to-day management of the Airport, in addition to any contractors who perform airfield maintenance as needed. Airport tenants are responsible for managing their facilities and leased areas to meet the requirements defined in their leases.

AIRPORT FINANCE

LKV operates as an enterprise fund with all revenue generated by the Airport remaining in the Airport's budget. This is required by the FAA to prevent revenue diversion from Airport operations to general county services. The primary revenue generating sources for the Airport include hangar and ground lease rents and fuel sales. A summary of current leases granted by the Airport is presented in **Table 2-7**.

Table 2-7: Current Lease Summary

Lessee	Lease Type	Use	Leased Area
Solv Energy	Ground Lease	Solar Farm	320 acres
BLM	Ground Lease	Aerial Fire Fighting Base	14.8 acres
Private User	Ground Lease	Hangar	1,290 sq ft
Private User	Ground Lease	Hangar	10,000 sq ft
Private User	Ground Lease	Hangar	2,940 sq ft
Private User	Ground Lease	Hangar	2,800 sq ft
Private User	Ground Lease	Hangar	520 sq ft
Private User	Ground Lease	Hangar	3,960 sq ft
Private User	Ground Lease	Hangar	3,700 sq ft
Private User	Ground Lease	Hangar	1,024 sq ft
Private User	Ground Lease	Hangar	1,290 sq ft
Private User	Ground Lease	Hangar	2,419 sq ft
Private User	Ground Lease	Hangar	1,920 sq ft

Source: Airport Management

The primary expenditures for the Airport include airport administration, maintenance, and facility improvements. Many airport administration responsibilities such as human resources, finance, and legal services are provided by County internal service departments. The Airport's capital improvement projects are typically funded through FAA grants with a local (Airport Enterprise Fund) match that may be supplemented by ODAV grants.

RULES AND REGULATIONS

Lake County operates the Airport for the use and benefit of the public in order to make it available to all types, kinds, and classes of aeronautical activity on fair and reasonable terms and without unjust discrimination.

FAA Grant Assurances and Compliance

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 regarding airport sponsor conduct, it establishes the policies and procedures for FAA personnel to follow in carrying out the FAA's responsibilities for ensuring compliance by the sponsor.



The Airport Compliance Manual 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 enforce them." According to the FAA, cooperation between the FAA, state, and local agencies should result in an airport system with the following attributes:

- 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; and
- 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 describe the selected assurances in more detail.

Project Planning, Design, and Contracting

Sponsor Fund Availability (Assurance #3)

Once a grant is given to the airport sponsor, the sponsor commits to providing the funding to cover their portion of the total project cost. Currently this amount is 10% 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)

All projects must be consistent with city and county comprehensive plans, transportation plans, zoning ordinances, development codes, and hazard mitigation plans. The airport sponsor should familiarize 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 cost, how monies were actually 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 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)

LKV 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 is 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 Transportation prepares and updates pavement condition reports for LKV. These reports identify the maintenance of all pavements funded with federal financial assistance and provide a pavement condition index (PCI) rating (0 to 100) for various sections of aprons, runways, and taxiways; including, a score for overall airport pavements.

Operation 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. The airport is located within Lake County. The airport sponsor should work with land use authority (Lake County) to ensure there are zoning laws that protect the airport from incompatible land uses. Incompatible land uses around airports represent one of the greatest threats to the future viability of airports.

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 for 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 airports include fuel flowage fees, tie-down fees, landing 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 County 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: Grant Assurances (Obligations) | Federal Aviation Administration ([faa.gov](https://www.faa.gov))

Existing Conditions Analysis Summary

The existing conditions analysis of the regional setting, airside, landside, and airport administrative elements of LKV identified several conditions that affect the operation and development of the Airport and reaffirmed several known issues and opportunities. The findings documented in the Existing Conditions Analysis chapter and summarized below will be used to support subsequent studies and recommendations throughout the development of the master plan.

Regional Setting

- Lake County has experienced a moderate increase in population in recent years
- The historical gross regional product has increased in the recent years as well
- Aircraft operations and based aircraft have remained relatively constant
- No existing land use ordinance in County to protect airspace or adjacent incompatibilities

Airside Elements

- Approach Procedures – There are published instrument approach procedures at the Airport
- Runway – Runway pavement conditions are satisfactory
- Taxiway/taxilanes – There are two taxiways that connect both ends of the runway. The pavement conditions of the taxiways are in poor condition
- Apron/Tiedowns – There are six tie-downs for aircraft parking
- Pavement Conditions – As of the 2022 pavement condition analysis, the majority of the pavement was in poor or satisfactory condition
- Support Facilities – Generally in good condition



Landside Elements

- Terminal Building – The FBO on site is equipped with all possible needs for airport guests
- Hangars – Nine hangar buildings serve the Airport for aircraft parking and storage
- Fencing – The perimeter of the airport is surrounded by chain-link security fencing and livestock fencing
- Vehicle Parking – No major issues
- Utilities – Utility service to the Airport property includes telephone service, electrical power, water and sanitary services

Airport Administration

- Airport is owned and operated by Lake County
- The County should periodically assess their fees for services and airport staffing and compare them to other regional airports like Lake County
- County should consider conducting an Airport Business Plan to further pursue new revenue potential and other development opportunities
- Airport is understood to be in compliance with all local, state, and federal laws and requirements