

## CHAPTER 2 EXISTING CONDITIONS

The Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B; *Airport Master Plans*, outlines the necessary steps in the development of an airport master plan. The initial step in documenting the master planning process is the identification of an airport's existing conditions. This involves the collection of planning data pertinent to an airport and the area it serves. The objective of the existing conditions chapter for the Southwest Oregon Regional Airport *Master Plan Update* is to provide background information for subsequent phases of analysis.

The existing conditions information is obtained through:

- on-site investigations of the Airport
- interviews with airport management, airport users/stakeholders, and other tenants or interested parties
- the collection and analysis of previous reports and studies, as well as guidelines for airport development

In addition, a glossary of terms used throughout this master plan is provided in **Appendix A; Glossary**. This chapter is organized into sections as follows:

- A background section describes the history, location, and weather conditions of the Airport.
- An airside (or airfield) facilities section describes the property of the Airport used for aircraft movement. These facilities include runways, taxiways, aprons, and the navigational aids to support aircraft operation.
- A terminal facilities section describes the commercial passenger terminal building. These facilities include aircraft gates, passenger holdrooms, check-in counters, concessions, and other uses within the terminal.
- A airport facilities section describes the uses of the land surrounding the airfield and passenger terminal. Uses of this land include roadways and parking lots, as well as facilities for industries, fixed base operators, air cargo, and airport users.
- An environs section briefly describes the land use and activities surrounding the Airport.
- An environmental conditions section provides an overview of existing environmental issues within the airport vicinity.

## 2.1 **BACKGROUND**

Southwest Oregon Regional Airport (also known by its FAA identifier, OTH) is located on the southern coast of Oregon, approximately 112 miles southwest of the City of Eugene, approximately 170 miles northwest of Medford, Oregon, and less than one mile from the Pacific Ocean. Southwest Oregon Regional Airport (the Airport) was originally constructed as a Naval air base in 1943 with three intersecting runways. Following World War II, the Airport was converted to general aviation use, and was known as North Bend Municipal Airport until 2006 when the name changed to Southwest Oregon Regional Airport. In the last five years, a new commercial passenger terminal building was built (2008), followed by the construction of an Airport Traffic Control Tower (2009).

Currently, the Airport is owned and operated by the Coos County Airport District (CCAD), which has overall responsibility of the Airport on a daily basis. Airport administration, which is led by a five-member board of commissioners, includes the executive director, business manager, and maintenance manager, along with additional airport operations and maintenance staff.

### 2.1.1 **Airport Location, Setting, and Meteorological Conditions**

An airport is defined by its location relative to other landmarks, transportation corridors, and geography, as well as the context and environment in which it operates. These factors are described in this section.

#### 2.1.1.1 Location and Setting

An airport is defined by its location relative to other landmarks, transportation corridors, and geography, as well as the context and environment in which it operates. Southwest Oregon Regional Airport is situated on an estuary in the northern sections of the City of North Bend and the City of Coos Bay, extending out into the main shipping entry channel of Coos Bay. The Airport is located approximately one mile from downtown North Bend, in Coos County, at an elevation of approximately 17 feet above sea level. Current airport property totals approximately 619 acres. Oregon State Highway 101, located east of the Airport, provides major access to the airport vicinity as shown on Figure 2-1.

The Airport provides aviation access to national destinations via commercial and private aircraft services. The Airport also serves as a base for the U.S. Coast Guard Group North Bend Air Station.

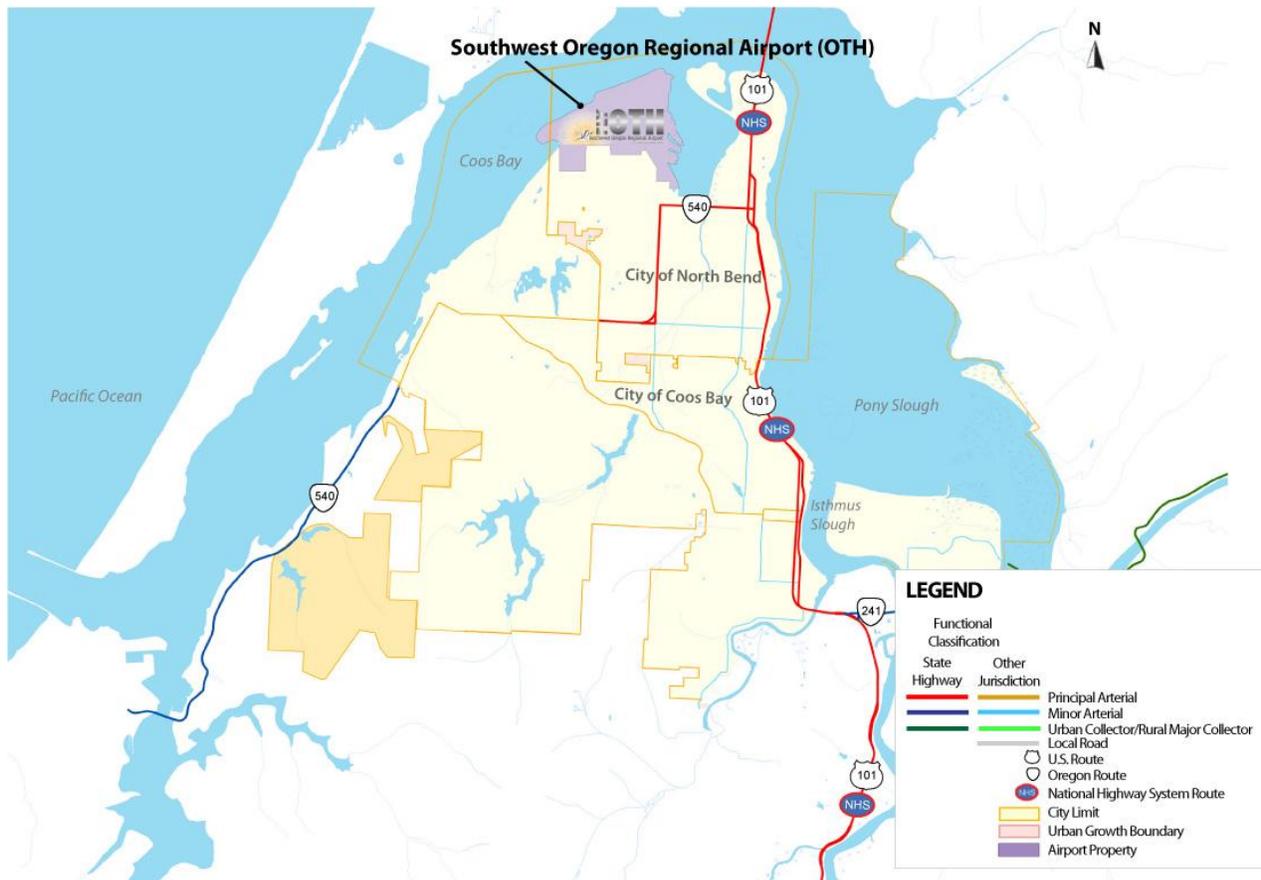
#### 2.1.1.2 Meteorological Conditions

A review of the prevailing meteorological conditions is necessary to assist in the evaluation of aircraft performance characteristics at the Airport. Temperature, precipitation, winds, visibility, and cloud ceiling heights are elements used to analyze an area's climate for airport planning purposes. With a mild, marine climate, the average annual maximum temperature for Southwest Oregon Regional Airport is approximately 66 degrees Fahrenheit (F), with the hottest summer months occurring July through September. Although the annual precipitation of approximately 61.9 inches, winter is the wettest season with approximately 10 inches of average rainfall during December and

January. Average annual snowfall is less than one inch, and winter lows reach around 39 degrees F during January.

According to the National Oceanic and Atmospheric Administration (NOAA) and the Oregon Department of Geology and Mineral Industries, Southwest Oregon Regional Airport is located within the Tsunami Inundation Boundary, which is an area expected to be covered by flood water from a tsunami caused by a magnitude 8.8 undersea earthquake.

Figure 2-1  
AIRPORT LOCATION MAP



Sources: Oregon Department of Transportation, RS&H 2012.

**2.1.2 Airport Role, Classification, and Certification**

Southwest Oregon Regional Airport is open for public-use providing facilities for commercial, general aviation, cargo, and military air traffic. In 2010, the FAA ranked the Airport the 324th busiest in the nation in terms of passenger enplanements. Southwest Oregon Regional Airport is designated by the Oregon Department of Aviation System Plan as a Category I - Commercial Service Airport.

### 2.1.2.1 National Plan of Integrated Airport Systems (NPIAS)

An airport must be included in the NPIAS to be eligible for Federal funding under the Airport Improvement Program. Southwest Oregon Regional Airport is classified as a Primary/Non-Hub commercial service airport by the NPIAS. Primary/Non-Hub airports are those FAA regulated airports that enplane less than 0.05 percent of all commercial passenger enplanements, but more than 10,000 annual enplanements. **Appendix B; National Plan of Integrated Airport Systems**, presents a detailed description of the NPIAS. Southwest Oregon Regional Airport is currently the only commercial service airport on the Oregon coast. Figure 2-2 graphically depicts Oregon airports within the NPIAS.

### 2.1.2.2 Airport Certification

Southwest Oregon Regional Airport is designated as a Part 139, Class I Certificated Airport, which means it serves all types of scheduled flights of air carrier passenger aircraft designated for at least 31 seats and any other type of commercial operation.

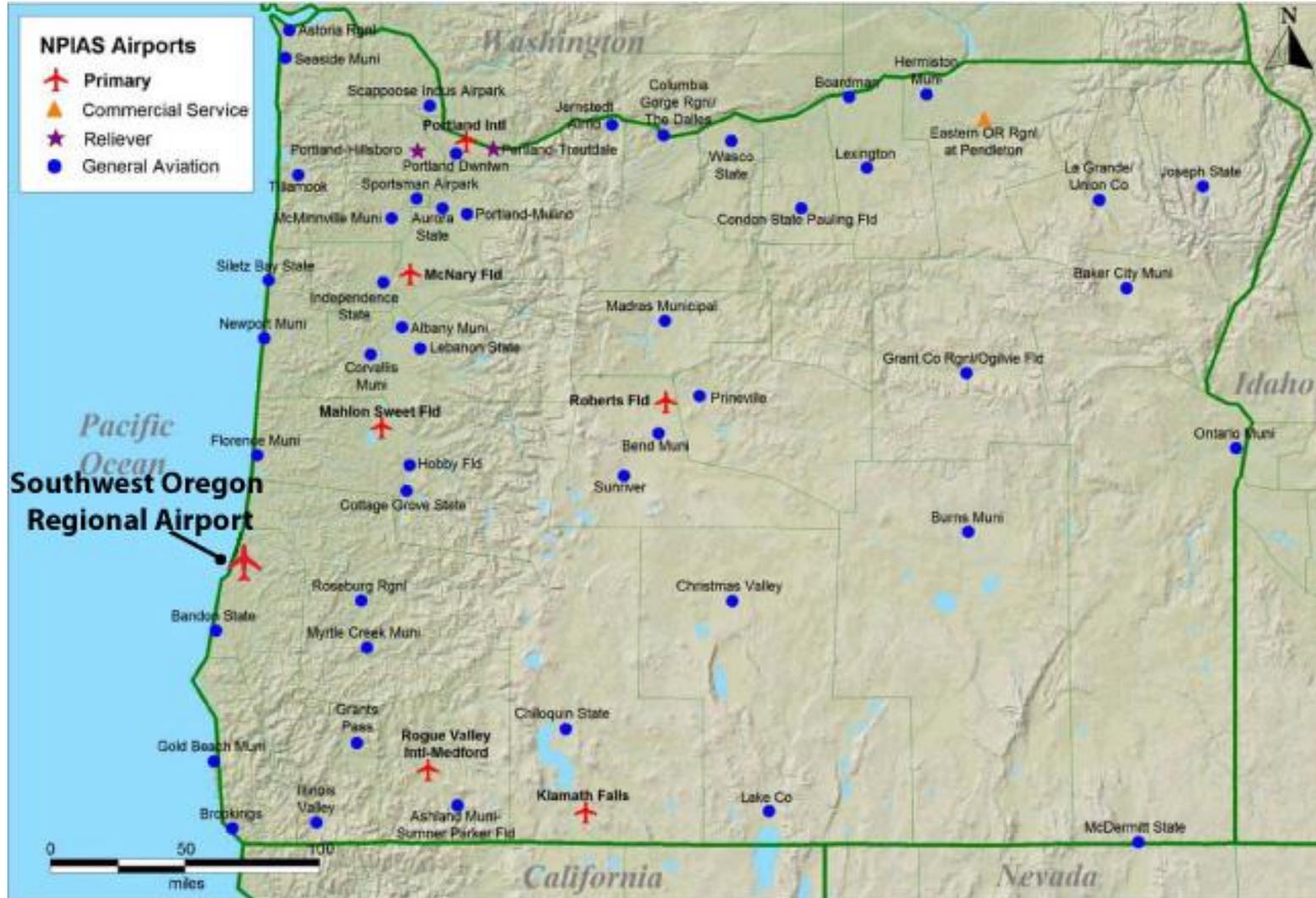
Current scheduled airline service at Southwest Oregon Regional Airport is provided by United Airlines/United Express operated by SkyWest Airlines, on a 30-seat Embraer (EMB) 120 Brasilia turboprop aircraft, with daily service to Portland International Airport (PDX) and San Francisco International Airport (SFO). In 2011, United Airlines offered a temporary seasonal (June through September) once daily flight to SFO on a 50-seat Canadair CRJ-200 regional jet, which introduced the Airport's first commercial jet service. Starting in January 2012, SeaPort Airlines began scheduled service in between Southwest Oregon Regional Airport and Portland International Airport, on a nine-seat Cessna Caravan single-engine turboprop aircraft.

### 2.1.3 Airport Service Area and Adjacent Airports

According to the NPIAS, Southwest Oregon Regional Airport is one of seven commercial service airports in Oregon with scheduled passenger service, as shown in Table 2-1 and graphically depicted on Figure 2-2. As location can be a key factor for a passenger's choice of airports, the proximity based on driving distance can often have an influence on the airport service area in terms of available passenger air service and choice of air carriers. Eugene, Medford, and Portland are all reasonably close in driving distance to the Airport and may attract certain regional passengers.

An important part of examining the issues and existing conditions at an airport is the review of neighboring airports and their services provided. This includes public use airports that may have an impact on both regional airspace and aviation demand. Table 2-2 depicts the public general aviation service airports within 50 nautical miles of Southwest Oregon Regional Airport.

Figure 2-2  
NPIAS OREGON AIRPORTS



Sources: 2011-2015 FAA National Plan of Integrated Airport Systems (NPIAS) Report, Appendix B: State and Territory Maps of NPIAS Airports, RS&H 2012.

Table 2-1  
OREGON COMMERCIAL SERVICE AIRPORTS

Airport (FAA Identifier)	Associated City	Runways	Pavement	Instrument Approaches	Services		Based Aircraft	Annual Operations	Driving Distance from OTH (miles)
					Fuel	Maint.			
Eastern Oregon Regional Airport (PDT)	Pendleton	07/25 - 6,301' x 150'	Asphalt	ILS	100LL, JET-A	Yes	46	19,885	430
		11/29 - 5,581' x 100'	Asphalt						
		03/21 - 4,341' x 60'	Asphalt						
Klamath Falls Airport/ Kingley Field (LMT)	Klamath Falls	14/32 - 10,301' x 150'	Asphalt / Concrete	ILS	100LL, JET-A	Yes	169	32,829	247
		16L/34R - 5,258' x 100'	Asphalt						
Mahlon Sweet Field Airport (EUG)	Eugene	16R/34L - 8,009' x 150'	Asphalt	ILS	100LL, JET-A	Yes	151	69,161	106
		16L/34R - 6,000' x 150'	Asphalt	ILS					
Portland International Airport (PDX)	Portland	10R/28L - 11,000' x 150'	Concrete	ILS	100LL, JET-A	Yes	109	230,253	232
		10L/28R - 9,825' x 150'	Asphalt	ILS					
		03/21 - 6,000' x 150'	Asphalt	LOC/DME					
Redmond Municipal Airport/ Roberts Field (RDM)	Redmond	04/22 - 7,038' x 150'	Asphalt	ILS	100LL, JET-A	Yes	75	48,693	238
		10/28 - 7,006' x 100'	Asphalt						
Rogue Valley International- Medford Airport (MFR)	Medford	14/32 - 8,800' x 150'	Asphalt	ILS	100LL, JET-A	Yes	219	50,046	168
		02/20 - 3,136' x 100'	Asphalt						
Southwest Oregon Regional Airport (OTH)	North Bend	04/22 - 5,980' x 150'	Asphalt	ILS	100LL, JET-A	Yes	56	21,036	N/A
		13/31 - 4,470' x 150'	Asphalt						

Sources: FAA National Plan of Integrated Airport Systems (2011-2015), FAA Terminal Area Forecasts, FAA Form 5010-1, *Airport Master Record*, [www.airnav.com](http://www.airnav.com) (obtained November 2011).

Table 2-2  
**SURROUNDING GENERAL AVIATION AIRPORTS**

Airport (FAA Identifier)	Associated City	Runways	Pavement	Instrument Approaches	Services		Based Aircraft	Annual Operations	Distance to OTH
					Fuel	Maint.			
Bandon Airport (S05)	Bandon	16/34 - 3,601' x 60'	Asphalt	None	100LL	Yes	49	7,100	21 NM
Cape Blanco Airport (5S6)	Sixes	14/32 - 5,100' x 150'	Asphalt	None	None	No	7	900	36 NM
Florence Municipal Airport (6S2)	Florence	15/33 - 3,000' x 60'	Asphalt	None	100LL, JET-A	No	15	7,000	35 NM
Mytle Creek Municipal (16S)	Myrtle Creek	03/21 - 2,600' x 60'	Asphalt	None	100LL	No	N/A	2,280	48 NM
Powers Airport (6S6)	Powers	13/31 - 2,500' x 60'	Turf	None	None	No	N/A	400	34 NM
Roseburg Regional Airport (RBG)	Roseburg	16/34 - 4,602' x 100'	Asphalt	VOR-A / RNAV	100LL, JET-A	Yes	116	31,750	40 NM

Sources: FAA Form 5010-1, *Airport Master Record*, [www.airnav.com](http://www.airnav.com) (obtained November 2011).

## 2.2 AIRSIDE FACILITIES

This section provides an inventory of major physical airside facilities and the Airport's operating aeronautical environment. Information was obtained during on-site investigations of the Airport, as well as interviews with airport staff, fixed base operators, and other users and stakeholders. Further, historical and current airport records were collected and analyzed. The general configuration of the Airport, along with the location of major facility and infrastructure features is illustrated on Figure 2-3. Airside facilities include the airfield's system of runways, taxiways, aprons, lighting, marking, signage, visual aids, navigational aids, Airport Traffic Control Tower, and instrument approach procedures used to accommodate the landing and takeoff of aircraft within the aeronautical environment.

### 2.2.1 Runway System

An airport's airfield geometry is unique as it depends upon factors such as meteorological conditions, airspace, the surrounding environment, topography, volume and mix of aircraft operations, airport traffic control tower visibility, and the critical aircraft operating characteristics. However, in consideration of these factors, an airport's runway system is primarily regulatory-driven, as runway design (and associated runway elements) is based upon established FAA design standards and volume of traffic.

The number and orientation of runways provided at an airport depends largely on the orientation of the prevailing wind patterns. The size and shape of the area available for development, as well as land-use or airspace restrictions near the Airport, is dependent on the runway length and orientation. In general, runways and connecting taxiways are arranged to provide adequate separation between aircraft in the traffic pattern; cause the least interference in taxiing, landing, and takeoff operations; and provide the shortest taxi distance from the terminal area to the runway ends.

#### 2.2.1.1 Runways 04/22 and 13/31

Located on the north side of the Airport, the primary runway (Runway 04/22) is oriented northeast-southwest, is 5,980 feet long by 150 feet wide, and designed to accommodate Airport Reference Code (ARC) B-III group aircraft. The Runway 22 threshold is displaced 659 feet, and a 250-foot stopway is located beyond the displaced Runway 22 threshold. The Runway 04/22 declared distances are shown below in Table 2-1. Runway 04/22 is constructed of asphalt concrete, and was last resurfaced in 2006. The runway is served by a full-length parallel taxiway (Taxiway C) located south of the runway, along with several connecting taxiways.

Located south of the primary runway, the crosswind runway (Runway 13/31) is oriented northwest-southeast, is 4,470 feet long by 150 feet wide, and is also designed to accommodate ARC B-III group aircraft. An approximate 580-foot stopway is located beyond the Runway 13 threshold. Runway 13/31 is constructed of asphalt concrete, and was last resurfaced in 2003. Runway 13/31 is also served by a full-length parallel taxiway (Taxiway A) located west of the runway, and several connecting taxiways providing access to the general aviation and U.S. Coast Guard ramps. The general characteristic of the runways are summarized in Table 2-3. Located on the east side of the Airport, the former Runway 16/34 (2,320 feet long x 150 feet wide) was decommissioned in 2006, and is marked as a closed runway. The U.S. Coast Guard often uses this runway for maintenance, training, and miscellaneous operations.

Table 2-3  
EXISTING RUNWAY DATA

Item	Runway			
	04	22	13	31
Runway Length	5980'	5980'	4470'	4470'
Runway Width	150'	150'	150'	150'
Runway Displaced Threshold	-	660'	-	-
TORA	5321'	6000'	4470'	4470'
TODA	5321'	6000'	4470'	4470'
ASDA	5321'	6000'	4470'	4470'
LDA	5321'	5321'	4470'	4470'
Runway Gradient	0.0%	0.0%	0.1%	0.1%
Pavement Type	Asphalt Concrete	Asphalt Concrete	Asphalt Concrete	Asphalt Concrete
Surface Treatment	Grooved	Grooved	Grooved	Grooved
Pavement Condition	Good	Good	Good	Good
Pavement Strength (lbs)				
Single Wheel Gear	106,000 lbs	106,000 lbs	90,000 lbs	90,000 lbs
Dual Wheel Gear	113,000 lbs	113,000 lbs	100,000 lbs	100,000 lbs
Dual Wheel Tandem Gear	190,000 lbs	190,000 lbs	100,000 lbs	100,000 lbs
Runway Markings	Precision	Precision	Basic	Basic
Runway Edge Lighting	HIRL REIL	HIRL -	MIRL REIL	MIRL REIL
Visual & Precision Approach Indicator Lighting	4-box VASI	-	-	4-light PAPI
Approach Lighting System	1400' MALSR	-	-	-
Instrument Approach	ILS	MLS	-	-
Approach Slope Ratio	50:1	34:1	20:1	20:1
Unobstructed Approach Slope*	25:1	8:1	11:1	-
Airport Reference Code	B-III	B-III	B-III	B-III
Runway Protection Zone	1000' x 2500' x 1750'	500' x 1000' x 700'	500' x 1000' x 700'	500' x 1000' x 700'

Sources: Airport records; 2011 FAA Form 5010-1, *Airport Master Record*; FAA Digital Airport/Facility Directory (October 20, 2011 to December 15, 2011); and [www.airnav.com](http://www.airnav.com).

\*Unobstructed approach slope to clear shipping channel.

Figure 2-3  
EXISTING AIRPORT LAYOUT



Source: Southwest Oregon Regional Airport, 2012.

### 2.2.2 Taxiway Systems

As indicated in FAA Advisory Circular (AC) 150/5300-13, *Airport Design*, the FAA airfield design process first focuses on safety, followed by efficiency and capacity. The primary function of a taxiway system is to provide access between runways and the apron areas, which is a vital element to enhancing airfield safety. Further, taxiways expedite aircraft departures from runway, which also increases airfield operational efficiency. FAA design standards require taxiways to be located where aircraft exiting the runway will have minimal interference with aircraft entering the runway or with aircraft remaining in the traffic pattern.

There are nine separate taxiways at Southwest Oregon Regional Airport: **Alpha**, **Bravo**, **Charlie**, **Delta**, **Foxtrot**, **Gulf**, **Hotel**, **Juliet**, and **Kilo**. Taxiway A and Taxiway C are two full-length parallel taxiways serving both runways. Taxiway A, which serves Runway 13/31, is located on the west side of the runway and has several connecting taxiways (A1, A2, A3, and A4) providing aircraft access to the general aviation and U.S. Coast Guard ramps. Taxiway C, which serves Runway 04/22, is located south of the runway and has several connecting taxiways C1, C2, C3, C4, and C5 that provide access to the commercial and general aviation. Taxiway C intersects with Taxiway A on the west side of Runway 13, which provides aircraft access to the main apron area. In 2009, Taxiway C was relocated 400 feet south of Runway 04/22, necessary to meet FAA Airport Reference Code (ARC) C-III design standards (not all criteria are met and thus Runway 4/22 is classified as B-III).

Taxiway D, located on the south side of Taxiway C and west of the Airport Traffic Control Tower, provides direct aircraft access to the air carrier ramp. A summary of the existing taxiway characteristics at OTH is shown below in Table 2-4.

Table 2-4  
**EXISTING TAXIWAY DATA**

Item	Taxiways (By Major Designation Grouping)				
	A	B	C	D	F
Runway Served	13/31	13/31	04/22	04/22	13/31
Length	4,650'	100'	5,980' *	220'	100'
Width	50'	42'	50'	80'	80'
Surface Type	Asphalt Concrete	PC Concrete	Asphalt Concrete	Asphalt Concrete	PC Concrete
Edge Lighting	MITL	MITL	MITL	MITL	MITL
Pavement Markings	Centerline	Centerline	Centerline	Centerline	Centerline
Movement/Non-Movement Area	Movement	Movement	Movement	Movement	Movement

Item	Taxiways (By Major Designation Grouping)			
	G	H	J	K
Runway Served	13/31	13/31	13/31	13/31
Length	100'	285'	50'	140'
Width	80'	50'	35'	37'
Surface Type	PCC	Asphalt Concrete	Asphalt Concrete	Asphalt Concrete
Edge Lighting	MITL	MITL	MITL	Reflectors
Pavement Markings	Centerline	Centerline	Centerline	Centerline
Movement/Non-Movement Area	Movement	Movement	Movement	Movement

Source: Airport Records.

\* Does not include the run-up area off the northeast end of Taxiway C.

Notes: Portland Cement Concrete (PCC).

**2.2.3 Aircraft Parking Aprons**

At any airport, the function of the aircraft apron is to provide areas for aircraft maneuvering to and from the taxiway system; support air carrier operations for both aircraft and support vehicles; offer transient aircraft parking; allow based aircraft tie-down and storage; and supply ramp area for conducting flight line services including aircraft fueling. There are four total apron areas utilized for air carrier and general aviation aircraft operations, and three apron areas exclusive for U.S. Coast Guard/military use. The existing aprons vary by function and size, which are described below and shown on Table 2-5.

- The air carrier apron, constructed in 2008, is located immediately north of the commercial passenger terminal building, and is approximately 24,440 square yards in size. Aircraft access to the passenger terminal apron is provided by Taxiway D, which connects to Taxiway C to the north.
- The main GA apron is located west of Taxiway A, adjacent to the northern one-third of Runway 13/31. This apron is approximately 36,110 square yards and serves both based and transient general aviation aircraft. Aircraft access to the main apron is provided by five connecting taxiways on the east side of the apron, Taxiways A1, A2, B, F, and G via parallel Taxiway A. The main apron pavement was resurfaced in 2001.

- Two smaller general aviation aprons are located to the southern end of the Airport, adjacent to Runway 31, and are used primarily for based general aviation aircraft. From Taxiway A, Taxiway K provides aircraft access to the southernmost apron, and Taxiway J provides access to the adjacent apron area. Combined, both aprons are approximately 8,770 total square yards in size.
- The U.S. Coast Guard apron is located in the southeastern area of the Airport along the west side of Taxiway A between Taxiways A3 and A4. The apron area is accessed via Taxiway H and provides two helicopter parking areas on the north side of the apron (approximately 2,490 square yards) and three aircraft (or helicopter) parking positions on the southern portion of the apron (approximately 4,200 square yards). An additional small apron is located north of the main Coast Guard apron area and northwest of Taxiway A3, which is approximately 1,111 square yards. The Coast Guard’s total combined apron size is approximately 7,801 square yards. All Coast Guard property is located outside of airport property, but with airside access.

Table 2-5  
EXISTING AIRCRAFT PARKING AREA DATA

Apron	Approximate Total Size (SY)	Pavement Type	Aircraft Parking Positions	Connecting Taxiway(s)
Air Carrier	24,440	Asphalt	2	D
Main GA	36,110	PCC	71 SE, 6 ME, 2 TP/BJ <sup>(B)</sup>	A1, A2, B, F, G
South GA (northern)	4,330	Asphalt Concrete	2	J
South GA (southern)	4,440	Asphalt Concrete	3	K
U.S. Coast Guard <sup>(A)</sup>	7,801	Asphalt, Asphalt Concrete, & PCC	5	H
<b>Total</b>	<b>77,121</b>			

Sources: Airport Records and the 2007 Oregon Aviation System Plan.

Notes: Portland Cement Concrete (PCC), Single Engine (SE), Multi-Engine (ME), Turboprop (TP), Business Jet (BJ).

<sup>(A)</sup> Portions of the apron are constructed of concrete or asphalt. Aircraft parking includes helicopters.

<sup>(B)</sup> This aircraft parking configuration could not be achieved simultaneously as some tie-down areas overlap.

2.2.4 **Visual Aids**

Visual aids are necessary components to facilitate an airport’s flight operations and enhance safety during periods of inclement weather and/or darkness by providing guidance to pilots in the air and on the ground. Additional information regarding visual aids can also be found in **Appendix C, Visual and Navigation Aids**. Visual aids at Southwest Oregon Regional Airport include the following:

- Runway and taxiway lighting systems
- Runway marking
- Airfield signage
- Rotating beacon
- Automated Weather Observation System (AWOS)

- Main lighted windsock
- Runway 04 supplemental windsock
- Runway 31 supplemental windsock
- Segmented circle
- Airfield obstruction lighting

#### 2.2.4.1 Runway Lighting and Marking

Runway lighting is specifically placed on the airfield as a visual aid to guide pilots in taking-off or landing aircraft during the night or other times of low visibility. Detailed information regarding visual aids, including runway lighting, can be found in **Appendix C, Visual and Navigation Aids**. The runways at Southwest Oregon Regional Airport are equipped with the following types of lighting:

- Runway 04/22 lighting includes a High Intensity Runway Light (HIRL) edge lighting system, Runway End Identifier Lights (REIL) on Runway 04, a four-box Visual Approach Slope Indicator (VASI) lighting system on Runway 04, and a 1,400-foot medium-intensity approach lighting system with runway alignment indicator lights (MALSR) installed prior to the approach end of Runway 04.
- Runway 13/31 is equipped with a Medium Intensity Runway Light (MIRL) edge lighting system, REILs on both ends of Runway 13/31, and a four-light Precision Approach Path Indicator (PAPI) system installed on the left side of Runway 13.

Runway markings may vary depending on whether the runway is used exclusively for visual flight rule or instrument flight rule operations. Runway 13/31 currently has visual/basic runway markings, which include runway designator numbers and a dashed white centerline. Runway 04/22 has precision markings, which include visual/basic markings, threshold, aiming point, and touchdown zone markings (see Table 2-3).

#### 2.2.4.2 Airfield Signage

Airfield signage is provided at most airports for visual ground navigation and guidance. All airfield signs are placed in accordance with an FAA-approved Airport Sign and Marking Plan and meet the standards of FAA Advisory Circular (AC) 150/5340-18, *Standards for Airport Sign Systems*. The Southwest Oregon Regional Airport airfield signage meets FAA signage criteria, which includes the following six types of signs: mandatory instruction signs, location signs, direction signs, destination signs, information signs, and runway distance remaining signs.

#### 2.2.4.3 Rotating Beacon

Rotating beacons are used to guide pilots to lighted airports, and normally operated from dusk to dawn. The beacon consists of an alternating white and green light identifying the facility as a civilian land airport. The rotating beacon at Southwest Oregon Regional Airport is located on top of the Airport Traffic Control Tower facility, which is directly north of the main apron, south of Taxiway C.

#### 2.2.4.4 Automated Weather Observation System

The Automated Weather Observation System (AWOS) (Category III) unit is operated and controlled by the FAA. The AWOS is approximately 250 feet south of Taxiway C, southeast of the Runway 13 threshold, and west of the closed Runway 16/34. This system reports current weather conditions at hourly intervals, but also reports special observations, if weather conditions change rapidly. Pilots can request information from the system to obtain current airport weather.

#### 2.2.4.5 Airfield Wind Indicators and Segmented Circle

Wind indicators are conical shaped cloth tubes designed to indicate wind direction and wind speed. Wind indicators are commonly referred to as windsocks. The main lighted windsock is located on the airfield, and to the east of Runway 13. The Runway 04 supplemental windsock located near the Runway 04 threshold on the southwest side. The Runway 31 supplemental windsock is located northwest of Runway 31, in between Taxiways A3 and A4.

A Segmented Circle is a dashed circle located on an airport that is noticeable by a pilot from a distance and provides critical information necessary for the pilot to land safely, such as landing direction and appropriate traffic pattern. The segmented circle is located near the middle of the airfield, southeast of Runway 13, adjacent to the AWOS tower.

#### 2.2.4.6 Airfield Obstruction Lighting

Obstruction lighting is used to mark hazards and is meant to be visible to pilots and not a disturbance to people on ground. The following facilities located on the airfield are lighted obstructions:

- Glide slope antenna – Located on the north side of Runway 4, approximately 1,000 feet from the runway threshold.
- Localizer antenna – Located in-line with Runway 4, approximately 1,000 feet before the threshold of Runway 22.
- Automated Weather Observation System (AWOS) tower – Located on the east side of Runway 13, approximately 500 feet from the runway threshold.
- Air-Traffic Control Tower – Located on the west side of Runway 13, approximately 200 feet south of the centerline of Taxiway C.
- Main lighted windsock – Located to the east of Runway 13, approximately 300 feet south of the AWOS tower.
- Runway 04 supplemental windsock – located near the Runway 04 threshold on the southwest side.
- Runway 31 supplemental windsock – located northwest of Runway 31, in between Taxiways A3 and A4.

Several airspace obstructions are located within the area, including some lighted obstructions, which will be analyzed in subsequent chapters.

### 2.2.5 Navigational Aids

Navigational aids, commonly referred to as NAVAIDs, are ground-based instruments to provide pilots with en route navigation and guidance into and out of airports, in appropriately equipped aircraft. Additional information of NAVAIDs can be found in **Appendix C, Visual and Navigational Aids**.

Current navigational aids used at the Airport include the Instrument Landing System (ILS) or Localizer, a very high frequency omni-directional range distance measuring equipment (VOR/DME), a Global Position System (GPS), a non-directional beacon (NDB), and a VHF omni-directional range/tactical air navigation (VORTAC). The North Bend VORTAC is located approximately 3.4 miles east of the Airport.

Facilities used to support the instrument approach procedures include the glide slope, which is located on the north side of Runway 4, approximately 1,000 feet from the runway threshold; the localizer, which is located in line with Runway 4, approximately 1,000 feet before the threshold of Runway 22, and the MALSR lighting system, which is located prior to the approach end of Runway 04.

#### 2.2.5.1 Instrument Approach Procedures

Instrument procedures associated with an airport can include Standard Terminal Arrivals (STAR), Standard Instrument Departures (SID), or Instrument Approach Procedures. The Instrument Landing System (ILS) is a precision approach navigational aid that provides highly accurate course, glide slope, and distance guidance information to a given runway. Southwest Oregon Regional Airport is served by a variety of published instrument approaches, which are ILS or Localizer, Area Navigation (RNAV) Global Positioning System (GPS), RNAV Required Navigation Performance (RNP), Very High Frequency (VHF) Omni-directional Range/Distance Measuring Equipment (VOR/DME), and a Non-Directional Radio Homing Beacon (NDB). These instrument approach procedures are identified in Table 2-6.

*Table 2-6*  
**PUBLISHED INSTRUMENT PROCEDURES**

Name	Procedure Type	Above Ground Level Ceiling (feet)	Visibility Minimum (nautical miles)
ILS or LOC RWY 04	Precision Approach	200'	½ NM
RNAV (GPS) Y RWY 04	LPV Precision Approach	300'	½ NM
RNAV (RNP) Z RWY 04	Non-Precision Approach	263'	¾ NM
VOR/DME RWY 04	Non-Precision Approach	528'	1 NM
NDB RWY 04	Non-Precision Approach	664'	¾ NM
VOR/DME-B	Non-Precision Approach	723'	1 NM
VOR-A	Non-Precision Approach	1,183'	1¼ NM
COPTER ILS or LOC RWY 04	Precision Approach	200'	½ NM

Source: FAA Digital Terminal Procedures Publication, NW-1, 20 Oct 2011 to 17 Nov 2011.

## 2.2.6 Aeronautical Environment

Like all airports, Southwest Oregon Regional Airport operates within the aeronautical environment associated with the local, regional, and national system of airports and airspace. The aeronautical environment includes the surrounding airspace and the type of aeronautical activities that take place within the airspace, including aircraft arrival and departure procedures, for instance.

### 2.2.6.1 Airspace Analysis

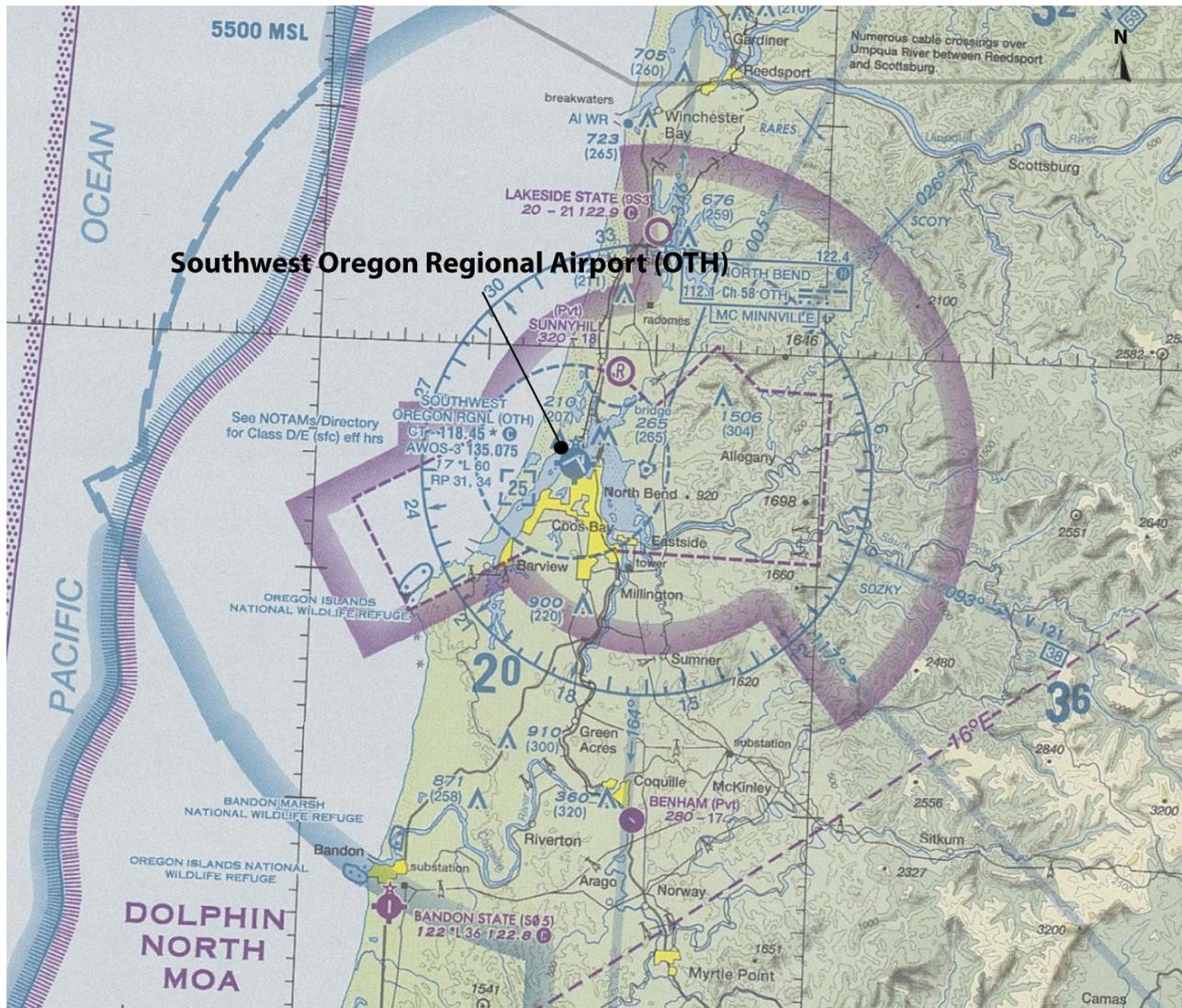
The National Airspace System consists of various classifications of airspace that are regulated by the FAA. Airspace classification is necessary to ensure the safety of all aircraft utilizing the facilities during periods of inclement weather, with the primary function of airspace classification being the separation of Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) traffic. A detailed description of the National Airspace System is provided in **Appendix D, National Airspace System**.

Airspace associated with Southwest Oregon Regional Airport is depicted in the Klamath Falls (North) Sectional Aeronautical Chart, shown in Figure 2-4. Local airspace surrounding the Airport is designated as Class D Airspace. The airspace consists of the immediate airspace within a horizontal radius of five miles from the surface up to an altitude of 2,500 feet.

### 2.2.6.2 Air Traffic Service Areas

The 22 Air Route Traffic Control Centers (ARTCC) located throughout the United States are primarily established to provide air traffic service to aircraft operating under IFR flight plans within controlled airspace, including airways and jet routes, and principally during the en route phase of flight. In addition, ARTCC can provide approach control services to non-towered airports and to non-terminal radar approach control airports. Southwest Oregon Regional Airport is contained within the Seattle ARTCC service area, which includes airspace in portions Oregon, Washington, Idaho, Montana, and the Pacific Ocean.

Figure 2-4  
AERONAUTICAL SECTIONAL CHART



Sources: FAA Klamath Falls (North) Sectional Aeronautical Chart, September 22, 2011, Edition 85; RS&H, 2012.

2.2.6.3 Airport Traffic Control Tower

Air traffic in the vicinity of the Airport is controlled by the North Bend Airport Traffic Control Tower (ATCT), which is contracted through the FAA Federal Contract Tower Program. The ATCT facility was constructed in 2009, and is located northeast of the passenger terminal building, adjacent to the north end of the main apron, just southwest of the intersection of Runways 04/22 and 13/31. The ATCT is operational from 8:00 am to 5:00 pm daily, and a rotating beacon is located on top of the facility to provide visual guidance to pilots within the area from dusk till dawn. ATCT controllers maintain all air to ground communications and visual signaling within five nautical miles and up to 2,500 feet above elevation of the Airport. Additionally, these controllers are responsible for

directing ground movement of all aircraft and vehicles on the runway and taxiway system. Instrument approaches and departures beyond five nautical miles of the Airport are controlled by the Seattle ARTCC.

#### 2.2.6.4 Local Airspace

The Airport has a standard traffic pattern (a standard traffic pattern is considered to be left-hand traffic). Within the local airspace, ATCT imposes instrument departure procedures to clear several obstructions within the area, which include antennas, a bridge, a transmission tower, trees, buildings, roadways, poles, a spire, and ships coming through the Coos Bay channel. Airspace obstructions will be evaluated later in Chapter 6, Airport Layout Plan. The “North Bend Five Departure” procedures for the Airport are as follows:

- Take-off Runways 04 and 31: Climbing left turn, heading 220° and OTH R-250, continue climbing via OTH R-250 to 1300 then right turn direct OTH VORTAC via assigned transition (DEROY, GAMMA, LEDGE, RARES, or SCOTY transition).
- Take-off Runways 13 and 22: Climbing right turn, heading 280° and OTH R-250, continue climbing via OTH R-250 to 1300 then right turn direct OTH VORTAC via assigned transition (DEROY, GAMMA, LEDGE, RARES, or SCOTY transition).

### 2.3 COMMERCIAL SERVICE PASSENGER TERMINAL FACILITIES

The Southwest Oregon Regional Airport commercial service passenger terminal building, which opened in 2008, is located south of Taxiway C, and west of the main apron. This new terminal building replaced a previous terminal building that was constructed in 1962, and is located on the southern end of the main apron, just west of Taxiway A2. Currently, the majority of the former terminal building is leased out to Emergency Airlift for personnel and crew headquarters.

The commercial service passenger terminal building is a three-story building with a contemporary design centrally located on a terraced hillside overlooking the airfield, south of Taxiway C and west of the T-Hangar storage area and the fuel farm. Taxiway D, located south of Taxiway C and west of the Taxiway C and Taxiway A intersection, provides direct airside access for commercial aircraft to the air carrier apron and passenger terminal building. Landside access to the terminal building is provided by Airport Lane to the south, with the building entrance on the southwest side of the terminal. The size of the existing terminal areas by function for each floor are shown in Table 2-7.

Table 2-7  
**EXISTING TERMINAL AREAS**

<b>Terminal Areas</b>	<b>Square Feet</b>
Airline Offices	1,290
Airline Check-in Counters	626
Baggage Claim	868
Departure Holding Room Area	2,330
Checked Baggage Security Screening	1,610
Passenger Security Screening	1,852
TSA Offices	918
Air Freight	566
Concessions	557
Retail	700
Rental Car Counters	192
Airport Administration	3,438
Restrooms - Public	1,302
Circulation, Waiting, Airline, and Airport	13,585
<b>Total Terminal Area</b>	<b>29,834</b>

Source: Airport records.

#### 2.3.1 First Level

The first floor of the terminal is the secured level dedicated for departing and arriving passengers, as well as supporting functional areas for airport, airline, and TSA operations, which is described in the following sections and illustrated in Figure 2-5.

### 2.3.1.1 Passenger Departure Areas

There is one passenger departure hold room area within the terminal located on the first floor on the west end of the building. The departure hold room is accessed from the second level escalator located next to the passenger security screening area. The departure hold room area is approximately 2,330 square feet, with an open plan configuration to allow passengers maximum visibility of the gate counter area and space to move around at their leisure. There are also restrooms and a vending area available to passengers within the departure hold room area.

### 2.3.1.2 Aircraft Gates

The passenger departure hold room currently accommodates one gate, which utilized by United Airlines. Directly outside of the gate doors, passenger access to/from aircraft is provided by a covered exterior escalator and elevator that transports passengers to the air carrier ramp. Currently, the air carrier ramp can accommodate two Airplane Design Group II aircraft simultaneously, such as the Canadair CRJ-200 or Embraer EMB-120.

### 2.3.1.3 Checked Baggage Security Screening

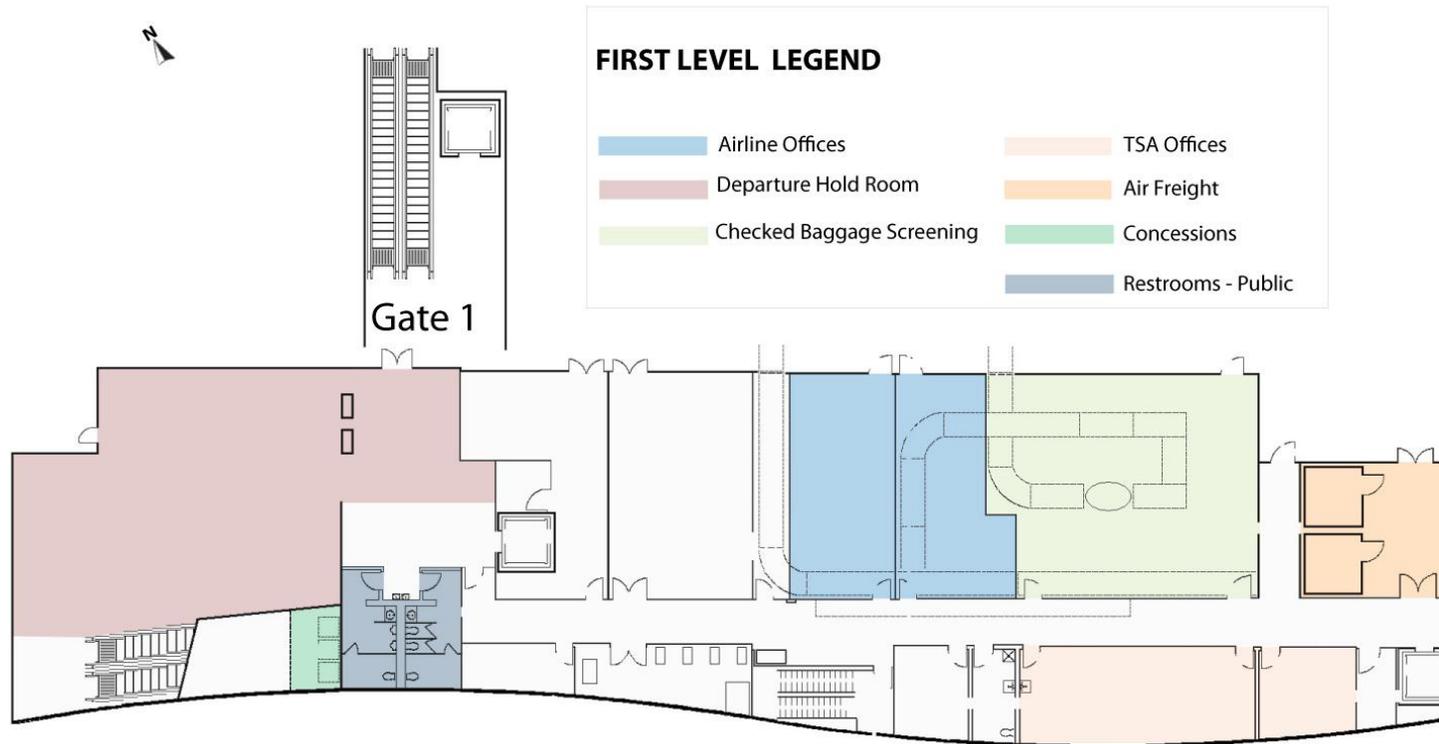
From the airline check-in area on the second level, checked baggage is transported by hand downstairs to the Transportation Security Administration (TSA) checked baggage security screening area on the first floor. The checked baggage security screening area is located in the eastern part of the first level, in between the airline offices and the air freight storage room, and is approximately 1,610 square feet in size. Although the baggage system screening area is designed to handle an in-line Explosive Trace Detection (ETD) system, all baggage is currently manually screened using Trace Detection System (TDS) tables in the screening room. Once the baggage has been screened, TSA personnel then place the baggage outside, onto the airline's outbound baggage carts. A tug tow tractor transports baggage on paved ramp located on the east/northeast side of the terminal building that connects downhill to the air carrier apron for aircraft loading.

Checked baggage from arriving aircraft are transported on the baggage tow up the ramp to the checked baggage area on the first level. Currently, there are two airline bag systems, which the external portion of the baggage system is only partially covered by the second floor overhang, yet is frequently exposed to salt due to the coastal climate. Baggage is then placed on a conveyor that transports it to the baggage claim carousel on the second level.

### 2.3.1.4 Airline Offices, Air Freight Storage, and TSA Office Areas

Other secured areas on the first floor include airline offices, air freight storage, and TSA office areas, which are located east of the passenger departure holding room and aircraft gate area. Currently, there are two airline offices located on the west side of the checked baggage security screening area on the first floor. The total size of the airline office area is approximately 1,290 square feet. An air freight storage area is located on the opposite (east) side of the checked baggage screening area, which is on the eastern side of the first level of the terminal building. The air freight area currently has two large freezer storage units, and the total size of the room is approximately 566 square feet. TSA offices are located across the hall from the checked baggage screening room, on the southeast side of the building. The total size of the TSA office area is approximately 918 total square feet.

Figure 2-5  
PASSENGER TERMINAL FLOOR PLAN – FIRST LEVEL



Sources: Airport records, RS&H 2012.

### 2.3.2 Second Level

Of the building's three floor levels, the ground-level public entrance to the commercial service passenger terminal is on the second floor of the terminal, located on the southwest side of the building. The following sections describe the functional areas on the ground level of the terminal, which are also graphically depicted on Figure 2-6.

#### 2.3.2.1 Terminal Curb Front and Entrance

The terminal has a one-level vehicle curb front where both arriving and departing passengers are served. The roadway that passes in front of the terminal has one lane, which is located immediately in front of the terminal entrance doors. This lane is used by passengers and other terminal visitors to load and unload passengers and baggage. No parking is permitted at the curb front unless the driver remains with the vehicle. There is a designated length of curb near the central entrance to the terminal reserved for the parking of hotel shuttle buses. The terminal curb measures approximately 240 feet in length. Additionally, there are two self-pay vehicle parking stations located next to the terminal entrance doors where passengers can pay for terminal parking as they enter/exit the building.

#### 2.3.2.2 Airline Check-in Positions and Self-Service Kiosks

There are currently two counter positions within the check-in area on the ground/second level, located to immediately north of the terminal entrance doors. One counter position is currently assigned to United Airlines and the other is vacant. In addition to the counter positions, there is one self-service check-in kiosk next to the United Airlines check-in counter. The total size of the check-in counter area is approximately 626 square feet.

#### 2.3.2.3 Baggage Claim

The baggage claim area is located on the second floor, directly across from the airline check-in counters by the terminal entrance. The baggage claim area currently has one baggage claim belt, which has a perimeter edge for passenger access that is approximately 83 linear feet. The total size for the baggage claim area measures approximately 1,568 square feet.

#### 2.3.2.4 Rental Car Counters

Two on-airport car rental agencies (Enterprise and Hertz) occupy counter space within the terminal building. There are two counters, located on the second floor in the eastern corner of the building, adjacent to the baggage claim carousel. The rental car counters utilize approximately 192 square feet.

#### 2.3.2.5 Retail

The Airport currently has one retail area containing a gift store, which is located on the northeast side of the second level, across from the airline self check-in kiosk station. The total size of the retail area is approximately 700 square feet.

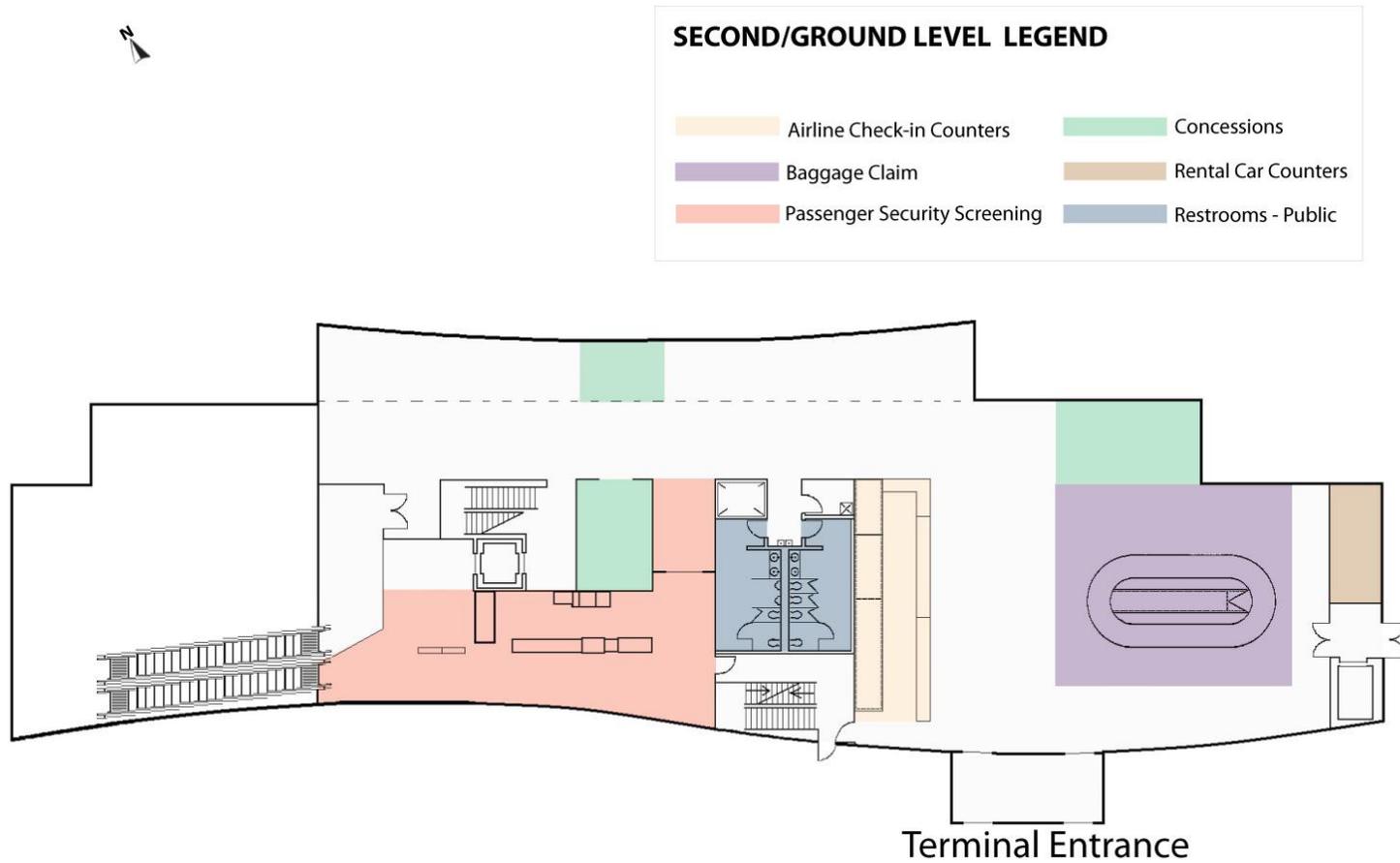
### 2.3.2.6 Concessions

A small concessions area is located on the second floor of the passenger terminal building, which includes a café and dining/lounge area. The dining/lounge area is located within the waiting area that borders the northern wall of the terminal building, providing a full observational viewpoint of the airfield. The café is located directly across the circulation corridor from the dining/lounge concessions area, next to the entrance to the passenger security screening checkpoint. The total concessions space (including the small vending area on the first level) is approximately 557 square feet.

### 2.3.2.7 Passenger Security Screening

The passenger security screening area is located on the second floor, behind the concessions area, along the southwest side of the terminal building. The passenger screening area is approximately 1,852 square feet in size, and currently has one passenger security screening checkpoint, with one security screening lane. An escalator is located beyond the security screening area, which connects directly to the passenger departure area on the first floor.

Figure 2-6  
PASSENGER TERMINAL FLOOR PLAN – SECOND LEVEL

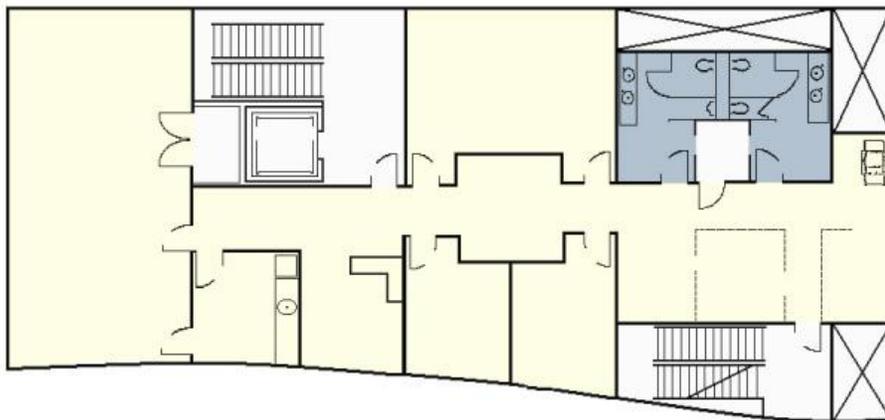
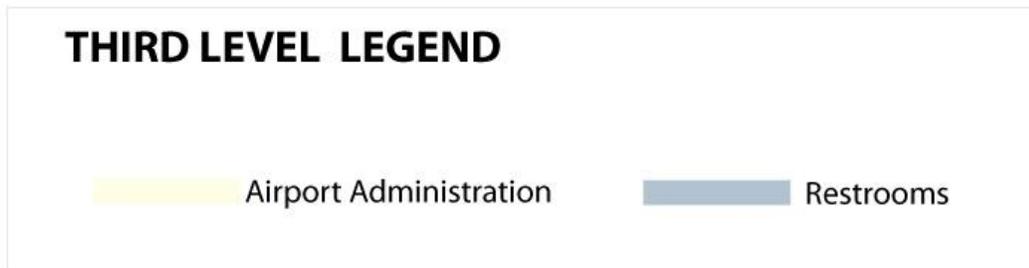


Sources: Airport records, RS&H 2012.

**2.3.3 Third Level – Airport Administration**

The entire third level of the terminal building is utilized for airport administration, which is accessed via the stairwell/elevator landing area next to the café on the second level. The third level includes a boardroom, three offices, one work area, a kitchen area, two storage rooms, a reception area and restrooms as illustrated in Figure 2-7. The total space for the airport administration area is approximately 3,438 square feet.

Figure 2-7  
**PASSENGER TERMINAL FLOOR PLAN – THIRD LEVEL**



Sources: Airport records, RS&H 2012.

## 2.4 LANDSIDE FACILITIES

The airport landside consists of roadway access to the Airport, passenger and employee parking lots, rental car ready/return spaces, general aviation vehicular parking, and publicly accessible airport buildings. Landside also refers to the various tenant facilities and other supporting facilities and uses of airport land, as addressed in this section.

### 2.4.1 Airport Surface Access

Convenient, simple, and efficient airport surface access is an integral part of an airport system. Airport surface access can consist of connecting roadways, railways, bikeways, and walk paths that enable users to enter and exit the landside facilities and parking facilities. Airport surface access is comprised of three elements: off-airport access system, on-airport roads and circulation, and dedicated public vehicle parking.

#### 2.4.1.1 Off-Airport Access System

The primary means of travel to Southwest Oregon Regional Airport consists of personal automobiles, taxicabs/shuttle buses, or rental cars. Currently, there is limited public transportation access to the Airport. The major regional vehicle roadway that serves the Airport is U.S. Highway 101 (commonly known as the Oregon Coast Highway locally), which is located one mile east of the Airport. Highway 101 connects the Airport to the City of North Bend and to the City of Coos Bay to the south, as well to the north by crossing the McCullough Bridge.

As shown on Figure 2-8, primary access from Highway 101 to the Airport by vehicle is Virginia Avenue from the southeast. Virginia Avenue is a major east-west roadway within the City of North Bend, connecting most of the City together including the Airport. Vehicular access to the Airport's many facilities, such as the passenger terminal building, general aviation facilities, and the Business Park, is provided by traveling west from Virginia Avenue onto Maple Street, then northwest on Maple Leaf Lane, onto Colorado Avenue, which is an east-west roadway adjacent to the Airport.

#### 2.4.1.2 On-Airport Roads and Circulation

On-airport circulation consists of both public access roads and non-public service roads. The public roads provide access not only to the passenger terminal, but also to the general aviation and non-aviation facilities. On-airport roadways are illustrated in Figure 2-8.

Airport Lane is a two-lane interior street that provides principal access to the passenger terminal building, passenger parking lots, and the Airport Business Park off Colorado Avenue. East and West, and Airport Way are two-lane interior streets that provide access to the majority of all general aviation facilities.

There are six vehicle access points along these roadways providing secured vehicle access into the Airport Operations Area (AOA) for tenants and authorized users. These access points are used by airport maintenance and FBO personnel to gain access to machinery and service equipment. The Airport's "East Perimeter Road" is a partial perimeter road (formerly called Pony Point Boat Ramp Road), which starts at Virginia Avenue, running northerly along the eastern edge of airport property, and terminating at the old boat ramp.

Figure 2-8  
AIRPORT ACCESS



Source: Southwest Oregon Regional Airport, 2012.

## 2.4.2 Vehicle Parking

Public vehicle parking areas at Southwest Oregon Regional Airport include passenger terminal building and general aviation parking. The following sections describe the functions and locations of the Airport's public vehicle parking areas.

### 2.4.2.1 Passenger Terminal Parking Lots

Public vehicle parking at the passenger terminal building consists of three joined lots totaling 173 spaces. As shown in Figure 2-9, the gate entrance to the lower lot is located south of the passenger terminal building and to the west of Airport Lane. The gate entrance to access both upper lots is located at the second pay parking entrance, on Airport Lane, southwest of the lower lot. These three parking lots share a common exit lane, which is located on the southern most parking lots and west of Airport Lane. The first two hours of parking are free; however, each additional hour is \$2 with a maximum daily charge of \$6. In addition, five employee parking spots and six parking ADA parking spots are located prior to the lower lot entry gate.

### 2.4.2.2 Rental Car Ready/Return Area

The Airport's rental car ready/return lot is shared by both Enterprise and Hertz rental car companies, and is located at the entrance within Pay Parking Upper Lot 1 as illustrated in Figure 2-9. A total of 30 rental car spaces are reserved in Pay Parking Upper Lot 1. As mentioned previously, the rental car counters for both companies is located inside on the ground/second level of the terminal building, adjacent to the baggage claim area.

### 2.4.2.3 General Aviation Parking

General aviation parking is located in between East Airport Way and the Colorado Avenue loop, to the south of the former passenger terminal building. This public vehicle parking lot has approximately 119 parking spaces. Immediately east of the main general aviation parking lot, overflow parking is available along the airfield fence line, in between the former passenger terminal building and the privately owned conventional hangars. Additional vehicle parking for general aviation users is provided at both FBO locations, adjacent to their own building/facilities as illustrated in Figure 2-9 summarizes the public-use and major tenant auto parking capacities available, which totals 318 parking spaces broken-down into the follow user lots.

Table 2-8

**PUBLIC VEHICLE PARKING SPACE CAPACITIES**

<b>Lot Description</b>	<b>Parking Spaces (Approximate)</b>
<b>Terminal Parking</b>	
Pay Parking (Lower Lot)	65
Pay Parking (Upper Lot) 1	47
Pay Parking (Upper Lot) 2	61
<b>Total Pay Parking</b>	<b>173</b>
<b>Rental Car (Ready-Return Lot)</b>	
Enterprise	15
Hertz	15
<b>Total Rental Car</b>	<b>30</b>
<b>Total Terminal Parking</b>	<b>203</b>
<b>Main General Aviation Lot</b>	<b>119</b>
<b>Total Public Parking</b>	<b>322</b>

Source: Airport records

Figure 2-9  
PUBLIC VEHICLE PARKING LOCATIONS



Sources: Airport records, RS&H 2012.

## 2.5 AIRPORT FACILITIES

Airport facilities encompass facilities located on the Airport for either aviation-use or non-aviation use. Supporting facilities for aviation-use include a broad set of functions designed to optimize the smooth and efficient operations of the Airport. The support facilities at the Airport include fixed base operators (FBOs), air cargo operators (FedEx), aircraft storage and maintenance buildings, aircraft rescue and firefighting (ARFF), airport fuel storage, deicing and snow removal, and utilities. The locations of all airport facilities within airport property are identified in Figure 2-10.

Page Left Blank Intentionally

Figure 2-10  
AIRPORT FACILITIES



Source: Southwest Oregon Regional Airport, 2012.

### 2.5.1 Fixed Base Operators

A Fixed Base Operator (FBO) is usually a private enterprise located on an airport that provides services to based and itinerant aircraft. The extent of the services provided varies from airport to airport; However, such services frequently include aircraft fueling, major and minor aircraft maintenance and repair, aircraft rental, aircraft charter services, flight instructions, pilot lounge, flight planning facilities, aircraft tie-down, and hangar storage. The Airport has two FBOs, Coos Aviation and Ocean Air Aviation. Aircraft can access both FBO facilities from Runway 04/22 via Taxiway C to A, and A1 onto the main General Aviation apron. Vehicle access is available from Colorado Avenue to Airport Way.

Coos Aviation is located midway of the primary general aviation ramp just north of the main aircraft hangar. Coos Aviation is a full service Fixed Base Operator and provides the following basic amenities to pilots and their crews: aviation fuel, aircraft ramp and tie-down parking, hangar storage, flight training, aircraft rental, aerial tours, aircraft maintenance, and aircraft parts/accessories.

Ocean Air Aviation is located on the northwest corner of the primary general aviation ramp just south of the Airport Traffic Control Tower. Ocean Air Aviation is also a full service Fixed Base Operator providing basic amenities to pilots and their crews, including aviation fuel, aircraft ramp and tie-down parking, hangar storage, flight training, aircraft rental, aerial tours, aircraft maintenance, and aircraft parts/accessories.

### 2.5.2 Other Tenants

The Airport has numerous other tenants that contribute to the dynamic airfield environment. Some of these tenants provide services to the public and pilots, while others utilize the airport as a means for their business. Some of the key tenants at Southwest Oregon Regional Airport include:

- The U.S. Coast Guard is based at Southwest Oregon Regional Airport, with facilities located just off airport property in the southwestern area of the Airport. Coast Guard operations include maritime search and rescue missions, enforcement of laws and treaties, providing aids to navigation, and marine environmental protection. In addition the Coast Guard, assists federal, state and county agencies by responding to inland search and medical evacuations. There are five Eurocopter HH-65 Dolphins based at the Coast Guard Station, with four stored in one large conventional hangar and one stored on the ramp. Occasionally, the Coast Guard base services the Lockheed C-130 Hercules. Based on airport records, there are approximately 10,950 Coast Guard operations annually.
- Emergency Airlift, which is owned by Ocean Air Aviation, provides medical air transportation for time sensitive patients and can provide highly technical life-saving functions during transport. Emergency Airlift's aircraft based at OTH includes a Socata TBM 700, two Commander 690Bs, two Jetstream 31s, a Learjet 25 and 35, and three Bolkow BO105 helicopters. These aircraft are stored the main hangar, and the northernmost corporate hangar located southeast of the former passenger terminal building, which west of the approximate middle of Taxiway A. In addition, a significant portion of the former passenger terminal building is leased to Emergency Airlift for personnel and crew headquarters.

- The Bureau of Land Management (BLM) is an agency within the U.S. Department of the Interior, which administers America's public lands. The BLM Coos Bay District is located southwest of the terminal parking area off Airport Lane. The Coos Bay District is responsible for public land management of approximately 325,000 acres on the Coast Range within the southwestern region of Oregon. Although the BLM Coos Bay District is a key airport tenant, there is currently no airside access to the BLM area.

### 2.5.3 Air Cargo Facilities

Air cargo is an encompassing term used to describe the combined activities of airmail and air freight/air express. The air cargo industry includes a diverse range of businesses providing a variety of different services supporting the movement of freight by air. This includes all-cargo airlines, passenger airlines, freight forwarders, customs brokers, and air freight trucking. Although there is no apron area exclusively dedicated to air cargo operations, FedEx is currently the only air cargo operator leasing building space, which is located behind the former passenger terminal building adjacent to the ARFF building. FedEx operates daily air cargo service out of Southwest Oregon Regional Airport utilizing Cessna 208 Caravans. According to the U.S. Bureau of Transportation Statistics, in 2010, approximately 410,939 pounds of freight was enplaned at Southwest Oregon Regional Airport.

### 2.5.4 Aircraft Storage Hangars

There are nine hangars on airport property, which include seven conventional hangars (varying in size from small to large), one 14-unit T-hangar, and one large wood clear-span hangar (also known as the main hangar). All nine hangars are located either along the main general aviation ramp or south of the ramp towards the southern end of the airport property.

The Coos County Airport District owns the 14-unit T-hangar, the main wood hangar, and Taxiway J hangar. The 14-unit T-hangar is located north/northwest of the fuel farm, and is accessed via Taxiway B. Built in 1941, the main hangar is approximately 68,828 square feet, originally built to store World War II aircraft. This hangar is centrally located on the main ramp.

There are two private medium size corporate hangars located west of Taxiway A, southeast of the former passenger terminal building, aircraft access is provided by two private taxilanes connecting to Taxiway A. Five privately-owned conventional box hangars are located adjacent to Runway 31, west of the southern end of Taxiway A on the two south general aviation aprons. One small conventional/box hangar is located on the northernmost of the two aprons, which is accessed from Taxiway J, west of Taxiway A. Four hangars are located on the southernmost of the two south general aviation aprons. One medium and one small conventional/box hangars are located on the western portion of the apron, and one medium and one small hangar are located on the northern part of the apron. Aircraft access to these hangars is provided by Taxiway K, which has a direct connection to Taxiway A4 to the northeast. Additionally, the U.S. Coast Guard stores four of their five based helicopters in one large conventional hangar, located along the southern portion of the Coast Guard ramp, which is accessed from Taxiway H, on the west side of Taxiway A.

### **2.5.5 Aircraft Rescue and Fire Fighting**

The purpose of an Aircraft Rescue and Fire Fighting (ARFF) facility is to save lives by maximizing the emergency response and intervention during an airport crisis by reducing response time to an aircraft emergency. The ARFF crew at Southwest Oregon Regional Airport conducts fire fighting rescue operations and fire prevention services. More specifically, the ARFF provides emergency assistance; inspection of fuel farms, fuel trucks, and commercial sites; guidance relative to compliance with FAA standards on safety, environment, and training; and is the medical first responder for an aircraft incident.

The Airport is currently classified as a Class I, Part 139 facility, meets FAA Index A, and on request by contacting the Airport Manager, the Airport can meet Index B requirements. The existing ARFF building is centrally located immediately south of the main hangar, on the southwest side of the main apron. ARFF personnel are present during all scheduled air carrier operations, and have immediate access to all taxiways, runways, ramps, and buildings from the ARFF facility. The existing 3,786 square foot ARFF building was built in 1960, and is considered to be in poor condition. The ARFF currently houses two fire rescue vehicles, and other equipment and amenities. The primary ARFF vehicle is a 2002 all wheel drive KME truck, with a capacity of 1,500 gallons of water and 250 gallons of foam. This vehicle meets FAA Index B requirements, which include the capability of holding 1,500 gallons of water and 200 gallons of foam. In addition, the secondary ARFF vehicle is a 1984 Ameritek ARFF truck, and is only used as a reserve to assist the primary ARFF vehicle.

### **2.5.6 Maintenance Building**

The Airport owns and operates a variety of maintenance equipment that is needed for ground maintenance, pavement and facilities maintenance, general repairs, and snow removal. Although storage is limited, equipment is stored in the airport maintenance building located west of the main general aviation apron and ARFF building.

### **2.5.7 Fuel Storage**

The Airport owns one aircraft fuel farm, which was expanded in 2008, and accommodates 100 Low Lead (100LL) AvGAS and Jet-A fuel. All aviation fuel is stored aboveground in four separate tanks, and is available for purchase from Coos Aviation or Ocean Air Aviation, which provide fuel services. Most general aviation users require 100LL for piston driven aircraft, though some require Jet-A fuel. Almost all of the commercial service aircraft require Jet-A fuel. There is no self-serve fueling provided on the Airport by the FBOs.

Fuel tank capacity includes one 12,000-gallon Jet-A tank, one 5,000-gallon 100LL AvGas tank owned by Coos Aviation, and one 10,000-gallon Jet-A fuel tank and one 4,500-gallon 100LL AvGas fuel tank owned by Ocean Air Aviation.

All aircraft fueling occurs via refueling trucks, of which Coos Aviation has one 5,000-gallon and one 2,200-gallon Jet-A fuel trucks, and one 750-gallon AvGas fuel truck. Ocean Air also has three fuel trucks, including one 5,000-gallon and one 3,000 gallon Jet-A fuel trucks, and one 500-gallon AvGas fuel truck.

Airport records indicate current fuel flowage between July 1 to December 29, 2011 was approximately 17,238 gallons of AvGas and 423,344 gallons of Jet-A, for a total of 440,582 gallons of fuel sold. Table 2-9 shows the Airport’s revenues from fuel fees between fiscal years 2007 to 2011.

Additionally, the Coast Guard fuel farm, which contains one 30,000-gallon fuel tank, is located in between the main Coast Guard hangar and Taxiway H, and is owned and operated exclusively by the Coast Guard.

*Table 2-9*  
**FUEL FEE REVENUES**

<b>Year</b>	<b>Total Revenue from Fuel Fees</b>
2007	\$58,724
2008	\$47,302
2009	\$51,612
2010	\$42,620
2011*	\$17,237

Source: Airport records.

Note: CCAD fiscal year ends June 30.

\*September 2011 year to date.

**2.5.8 Deicing and Snow Removal**

Aircraft deicing facilities are recommended at airports where icing conditions are expected. With the area’s relatively mild winters, deicing activity at Southwest Oregon Regional Airport is rare, although the Airport has deicing capabilities. When deicing is necessary, commercial aircraft are deiced by United/SkyWest Airlines. As indicated in the Airport’s *Snow and Ice Control Plan*, accumulation of slush, wet/dry snow, and ice/freezing rain will initiate snow removal operations. The Airport’s snow removal equipment includes a 2009 TYM 903 4-wheel drive tractor with a half-yard bucket, and a 1993 Ford 660 2x4 tractor with seven-foot roll broom attachment. Stormwater discharge drains are located to the north of Runway 04/22, which drains into Coos Bay. Discharge drains located east of the closed Runway 16/34, and near the southern end of Runway 13/31 both drain into Pony Slough.

**2.5.9 Fencing**

The entire airport perimeter is fenced with a standard six-foot high, chain link security fence except for areas adjacent to the water, and west of Taxiway C5. Nine vehicle access gates are located on the Airport, with one key-card access gate located at the southern GA apron and three along main apron. Two pad-locked gates are located on the east side of the Airport, at the entrance to East Perimeter Road/Pony Point Boat Ramp Road.

### 2.5.10 Utilities

The availability of water, sanitary sewer, natural gas, electric, telephone, internet, and storm water drainage to an airport must be considered while evaluating the existing utility conditions. In general, the public water distribution and sanitary sewage system are significant governmental responsibilities with major capital investments required for new or expanding area. Natural gas, electricity, telephone, and internet services are normally provided by the private sector. Currently, utilities at the Airport consist of electricity, sewer, telephone, water, and Internet. However, airport records indicate that there currently is no utility infrastructure on the east side of the Airport.

The City of North Bend has a wastewater treatment plant located on airport property, south of Runway 04/22 near Taxiway C4. The North Bend Wastewater Treatment Plant is capable of treating two million gallons per day during dry weather flows and 10 million gallons per day during wet weather. The treatment facility's collection system includes 50 miles of sewer lines and nine pumping stations. Treated wastewater is discharged into the Coos Bay channel.

#### 2.5.10.1 Storm Water Drainage

The Airport operates under the requirements of an NPDES 1200-Z permit Schedule A, Storm Water Pollution Control Plan. The Airport's storm water treatment includes infiltration that drains into the Coos Bay Estuary and the Pony Slough via a series of discharge outfalls. In addition, the soils surrounding the Airport are highly permeable and are predominantly sand fill.

## 2.6 AIRPORT ENVIRONS

The following section provides an overview of the various community issues and socioeconomic conditions. This includes a discussion of airport operations affect surrounding communities, particularly in regards to land use patterns and zoning districts.

### 2.6.1 Existing Land Use and Zoning

Land use controls and zoning near an airport help control the location, type, and intensity of new urban land use and prevents incompatible land uses from locating too close to an airport. This ensures the value of the public's investment in the facility is maintained, as well as the ability of an airport to expand as required in the future.

#### 2.6.1.1 Zoning

Southwest Oregon Regional Airport is located within the jurisdictional areas of both the City of North Bend and the City of Coos Bay, (in Coos County), and is subject to zoning of both cities. The following provides a summary of the zoning regulations specific to the Airport within these jurisdictional areas.

The 2003 City of North Bend *Official Zoning Map* shows all airport property located within the City of North Bend designated as Airport Zone (A-Z), which is also established in Chapter 18.52 of the current City of North Bend Municipal Code (Ord. 1952 § 1(4), 2006). The Airport Zone includes all airport property contained within the North Bend city limits, and serves to regulate land use (Ord. 1952 § 1(4), 2006). The North Bend Zoning Map also indicates the majority of land located south and southeast of the Airport is zoned residential, and areas to the east of the Airport beyond the Pony Slough and to the North across the Coos Bay are zoned industrial.

According to the 2010 City of Coos Bay *Zoning Map*, a portion of airport property on the west is located within the City of Coos Bay city limits, though this segment falls under the jurisdiction of the Coos Bay Estuary Plan. The Coos Bay Estuary Plan is an element of the Coos County Comprehensive Land Use Plan, which provides a management tool for the existing and future use of water and intertidal areas of Coos Bay. The zoning designations for the portions of airport property located within the jurisdiction of the Coos Bay Estuary Plan are Shoreland or Upland Unit, and Aquatic Unit.

The North Bend Municipal Code also establishes an Airport Overlay Zoning in Chapter 18.56, which encourages and supports the Airport's continued operation and vitality by establishing standards for compatible development and safety to promote air navigational safety and reduce potential safety hazards for people working, living, and recreating within the vicinity of the Airport (Ord. 1952 § 1(4), 2006).

The Coos Bay Municipal Code establishes an Air Surface Protection Area, which is intended to protect areas underneath the approach, transitional, horizontal, and conical air protection surfaces of the Airport [Ord. 93 § 3.20.1, 1987]. The Coos County Zoning and Land Development Ordinance of 1985 also establishes Airport Surfaces (AS) as Overlay Zones in Section 4.6.3.

### 2.6.1.2 Existing Land Use

Land uses surrounding the Airport are predominately water, including the Pony Slough on the east side of the Airport, and Coos Bay to the north, northwest, and west. On-airport land uses include a business park located on the southwest side of the Airport (owned by the Coos County Airport District) and the City of North Bend wastewater treatment plant along the west side of the Airport.

The business park area on airport property provides space for small business and manufacturing enterprises. UPS currently has a secondary sorting facility within the southwestern area of the Airport Business Park, located on Cessna Circle. According to airport records, approximately 60 acres of land is available for development in the southern area in the business park, located southwest of the BLM area.

### 2.6.1.3 Existing On-Airport Land Use Plan

Figure 2-11 graphically depicts a conceptual layout of existing and planned uses of land on the Airport. Shown within the airport boundary (red dashed line) are a number of uses, both directly aviation-related as well as those not directly aviation-related. Each is important for meeting the needs of OTH and the community by providing for the safe and efficient movement of aircraft, as well as identifying the location of businesses that support this mission. Non-aviation uses provide for the diversification of airport revenue sources so that the fiscal health of the facility is not tied to just one segment of the local economy, one that has been historically volatile.

Referring to Figure 2-11, the areas dedicated to operation of aircraft and movement to/from the runways are depicted in yellow and listed in the legend as Airfield. The small areas that border both the Airfield and water are not labeled and is not considered suitable for development. Areas in blue that are adjacent to the Airfield are shown for General Aviation uses. This area also includes land opposite from the main GA development area once occupied by the now closed Runway 16/34 (shown in pink).

The existing passenger terminal and associated auto parking area is depicted in purple. The U.S. Coast Guard area, shown in orange, provides the Coast Guard full access to the airfield but is situated on land not owned by the Airport. Finally, the large area shown in green is owned by the Airport but is not suitable for connection to the airfield. As such, this land is available for lease to non-aeronautical commercial and light industrial uses. Several businesses now occupy sites within the business park and abundant land remains available for development. See also Figure 2-10 for more specific users within airport property.

Figure 2-11  
EXISTING AIRPORT LAND USE



Source: Southwest Oregon Regional Airport, 2012.

### 2.6.2 Community Demographic and Employment Overview

According to the U.S. Census Bureau, the 2010 population for Coos County was approximately 63,000, with the majority of the population between the ages of 50 and 60 years. The 2010 population for North Bend, Oregon was approximately 9,600, and Coos Bay (city) population was approximately 16,000. In 2008, the South Coast Development Council (local economic development organization) estimated the largest four employers in Coos County were the Bay Area Hospital in Coos Bay (over 1,000 employees), The Mill Casino (over 550 employees), the Affiliated Computer Services (over 500 employees), and Bandon Dunes Golf Resort (over 500 employees).

North Bend, Coos Bay, and Charleston (all located within Coos County), are known as “Oregon’s Bay Area”, which serves as a hub for economic activity in the southwest region of Oregon. Historically, the region’s natural resource-related base economy has largely included forestry and fishing. Coos Bay is a short 15-mile channel, managed by the Oregon International Port of Coos Bay. The Coos Bay channel is the largest coastal deep-draft harbor between Puget Sound and San Francisco, and is Oregon’s second busiest maritime commerce center<sup>1</sup>.

One major industrial facility located within the airport vicinity is a forestry chip terminal located less than one mile northwest of the Airport, across the Coos Bay channel. Additionally, the Jordan Cove Energy Project, L.P. is located next to Jordan Cove (north of Pony Slough, across from the Coos Bay channel) on an industrial zoned site within the Oregon International Port of Coos Bay. Currently undergoing a regulatory review process, the Jordan Cove Energy Project plans to build a new liquefied natural gas (LNG) import terminal and processing facility on the site, which will receive LNG supplies from marine vessels, store LNG, and redeliver to natural gas consumers in the Pacific Northwest via the Pacific Connector Gas Pipeline. The project site is less than one mile north of the Airport.

In December 2011<sup>2</sup>, a removal-fill permit was approved by the Oregon Department of State Lands for developing a multi-purpose vessel slip and access channel located on the North Spit of Coos Bay. The multi-purpose cargo slip development would accommodate two berthing areas; one for the proposed Jordan Cove Energy Project LNG terminal, and the second for inbound and outbound bulk and breakbulk commodities. The proposed 18-month construction of the slip and access channel would increase employment within the regional economy, with an estimated 75 direct construction jobs and nearly 200 indirect support jobs within the region.

Located approximately 25 miles south of the Airport in Bandon, Oregon, Bandon Dunes Golf Resort has been a significant economic impact to the Airport and the region within recent years. According to a confidential research provided by Bandon Dunes Golf Resort, it is estimated that resort spending nearly doubled between 2004 to 2008, which has resulted in several million dollars directly added into the local economy.

The Oregon Department of Aviation *Oregon System Plan* estimated that the Airport’s total aviation and non-aviation related contribution to the regional and state economies in 2008 was approximately \$266.3 million for local business sales and \$313.2 million for state business sales.

---

<sup>1</sup> <http://www.portofcoosbay.com/index.html>

<sup>2</sup> Oregon International Port of Coos Bay, New Releases, *State awards Port of Coos Bay permit for multi-purpose vessel slip, access channel*, December 21, 2011.

## 2.7 ENVIRONMENTAL CONDITIONS

FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects, requires the evaluation of airport development projects as they relate to specific environmental impact categories by outlining types of impacts and the thresholds for which they are considered significant. For some NEPA impact categories, this determination can be made through calculations, measurements, or observations. Other impact categories require that the determination is established through correspondence with the appropriate federal, state, and/or local agencies. A complete evaluation of the impact categories identified in FAA Order 5050.4B is required in NEPA documents resulting from a federal action.

For the purpose of this Master Plan, Southwest Oregon Regional Airport's environmental categories of focus include: Coastal Zone Management; Compatible Land Use; Department of Transportation: Section 4(f) Resources; Endangered and Threatened Species; Floodplains; Historic, Architectural, Archeological, and Cultural Resources; Noise; Water Quality; and, Wetlands. This review is to provide an overview of existing environmental conditions, and is not intended to replace nor substitute required NEPA reviews for potential federal actions.

### 2.7.1 Coastal Zone Management

The Coastal Zone Management Act (CZMA) requires that "each federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved state management programs." The Oregon Coastal Zone Management Program (CZMP) extends from the Washington state border south to the California state border. The CZMP extends seaward to the Oregon jurisdictional boundary as recognized by federal law, and inland to the crest of the coastal mountain range.

Southwest Oregon Regional Airport is located within the Oregon CZMP. Any future development surrounding the Airport should involve agency coordination with the Oregon Department of Land Conservation and Development to ensure that Oregon's coastal and ocean resources are managed, conserved, and consistent with statewide planning goals.

### 2.7.2 Compatible Land Use

FAA Order 1050.1E *Environmental Impacts: Policies and Procedures* states that the compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts. Therefore, there must be assurances that zoning laws, current infrastructure, and the adoption of new zoning regulations are compatible with the Airport's location and forecast noise contours.

### 2.7.3 Department of Transportation: Section 4(f) Resources

Section 4(f) of the Department of Transportation Act (recodified at 49 USC, Subtitle I, Section 303) provides that no publicly owned park, recreation area, wildlife or waterfowl refuge, or land of a historic site of local, state, or national significance will be used, acquired, or affected by programs or projects requiring federal assistance for implementation.

The closest two Section 4(f) resources to the Airport are managed either by the BLM or the Oregon Department of Transportation (ODOT). The BLM lands, managed by the BLM Coos Bay District, are located two miles west of the Runway 04 end. The BLM lands cover approximately 4,000 acres of Pacific Ocean coast and Coos Bay coast, north of the Coos Bay estuary. A boat ramp, hiking trails, and horse trails are also located in this area, along with camping and designated off-highway vehicle areas. Because of these public recreation features, these BLM lands are considered a Section 4(f) resource.

The National Register of Historic Places (NRHP) lists the Conde B. McCullough Memorial Bridge, (formerly known as the Coos Bay Bridge), and is therefore a Section 4(f) resource. This resource, maintained by ODOT, is located approximately one mile east of the Runway 22 threshold.

**2.7.4 Endangered and Threatened Species**

Provisions have been set forth in the environmental process for the protection of fish, wildlife and plants of local and national significance, which are provided under the Endangered Species Act, the Sikes Act, the Fish and Wildlife Coordination Act, and the Fish and Wildlife Conservation Act. Table 2-10 identifies the federally listed endangered and threatened species in Coos County.

*Table 2-10*  
**ENDANGERED AND THREATENED SPECIES IN COOS COUNTY**

Scientific Name	Common Name	Group	State Status	Federal Status
Phoebastria (Diomedea) albatrus	Short-tailed albatross	Birds	Endangered	Endangered
Charadrius alexandrinus nivosus	Western snowy plover	Birds	Threatened	Endangered
Strix occidentalis carurina	Northern spotted owl	Birds	Threatened	Threatened
Brachyramphus marmoratus	Marbled murrelet	Birds	Threatened	Threatened
Lilium occidentale	Western Lily	Flowering Plants	Not Applicable	Not Applicable
Demochelys coriacea	Leatherback sea	Reptiles	Endangered	Endangered
Chelonia mydas	Green sea turtle	Reptiles	Endangered	Threatened
Caretta caretta	Loggerhead sea turtle	Reptiles	Threatened	Threatened

Source: U.S. Fish and Wildlife Service (website access on October 7, 2011)

**2.7.5 Essential Fish Habitat**

Essential Fish Habitats (EFH) are those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity as defined under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Under the federal Fishery Management Plan (FMP), groundfish, coastal pelagic species, and Pacific salmon are protected in Oregon. Future airport development should consider potential impacts to these species and their respective habitats.

**2.7.6 Migratory Bird Act**

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds.

A list of birds in Coos County obtained from the Oregon Department of Fish and Wildlife “Species by County Report” was cross-referenced with the “List of Migratory Birds” protected by the MBTA from the U.S. Fish and Wildlife Service Migratory Bird Program Website. These lists indicate that Coos County currently does not have any identified MBTA protected birds.

### **2.7.7 Floodplains**

As defined by 28 CFR 63 – Floodplain Management and Wetland Protection Procedures, floodplains are “lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in a given year (100-year floodplain).” Executive Order 11988, *Floodplain Management* directs federal agencies to take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and, restore and preserve the natural and beneficial values served by floodplains. The Federal Emergency Management Agency (FEMA) 2009 Flood Insurance Rate Map (FIRM) indicates that portions of the area surrounding the Airport are located within a 100-year floodplain.

### **2.7.8 Historic, Architectural, Archeological, and Cultural Resources**

The National Historic Preservation Act (NHPA) of 1966 established the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS). Section 106 of the NHPA requires federal agencies to consider the effects of their undertaking on properties on or eligible for inclusion in the NRHP. Compliance with Section 106 requires consultation with the ACHP, the State Historic Preservation Officer (SHPO), and/or the Tribal Historic Preservation Officer (THPO) if there is a potential adverse effect to historic properties on or eligible for listing on the NRHP.

As discussed previously, the Conde B. McCullough Memorial Bridge is the closest NRHP property to the Airport, located approximately one mile east of Runway 22. Prior coordination with the SHPO, the Confederated Tribes of Coos, Lower Umpqua & Siuslaw, the Confederated Tribes of Siletz Indians, and the Coquille Indian Tribe has already occurred with the Environmental Assessment for the initiation of turbojet service. However, the SHPO should be included in any type of agency coordination for future airport development.

### **2.7.9 Noise**

According to the FAA, significant noise action would occur if noise sensitive areas were to experience an increase in the day/night noise level (DNL) of 1.5 decibels or more at or above 65 decibels when compared to existing conditions for the same timeframe. No subsequent environmental documentation regarding noise exposure will be conducted as part of this Master Plan Update.

### **2.7.10 Water Quality**

The Federal Water Pollution Control Act (FWPCA) provides the authority to establish water quality standards, control discharges, develop waste management treatment plans and practices, prevent or minimize the loss of wetlands, define the location of a Proposed Action with regard to an aquifer

or sensitive ecological area, and regulate other issues concerning water quality. Any potential airport development should minimize potential impacts to ground water, surface water bodies, public water supply systems, and complicate with federal, state, or local water standards. In particular, guidance for water quality standards should also be consistent with provisions in the Coos Bay Estuary Plan (an element of the Coos County Comprehensive Plan).

### 2.7.11 Wetlands

Executive Order 11990, *Protection of Wetlands*, defines wetlands as “those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.” Federal agencies are required to avoid, minimize, and/or mitigate the destruction, loss, or degradation of wetlands.

According to the U.S. Fish and Wildlife Service National Wetlands Inventory, there are nine wetlands located on airport property, which include:

- One freshwater emergent wetland located in between Taxiways A and H (approximately 0.27 acres)
- One estuarine and marine wetland (approximately 1.38 acres) located south of the Runway 31 threshold
- One freshwater forested/shrub wetland (approximately 0.66 acres, though a portion of this wetland extends off airport property)
- Six freshwater pond wetlands (approximately two total acres), located in the City of North Bend wastewater treatment plant area on the western portion of airport property

Several wetlands surround the Airport, which include estuarine and marine, estuarine and marine deepwater wetlands in the Coos Bay channel to the west, northwest, and north, and the Pony Slough to the east.