# **Chapter 15: Aviation Systems**

### Introduction

This chapter addresses activities, issues and needs at the region's airports within and near the Bend Metropolitan planning area over the 20-year planning horizon.

Airport planning is generally conducted at three levels. Individual airports do Master Plans and Airport Layout Plans under Federal Aviation Administration (FAA) guidance that addresses their 20-year future. States do airport system planning by establishing a hierarchy of public use airports within the state, setting priorities for investment and management based on different goals and policies. The FAA also does its own airport-related planning through a number of documents, including the National Plan of Integrated Airport Systems.

## Policies

Individual airports and local jurisdictions have their own policies, goals and objectives but are also guided by nine statewide aviation goals including:

- 1. Preserve investment in Oregon's system of airports and its level of service.
- 2. Protect airports from incompatible land uses.
- 3. Maintain Oregon's public-use airports so that they are safe, and ensure that the airport system can fulfill its role in the state's emergency response system.
- 4. Support economic development by providing access to regional, state, national, and international markets.
- 5. Provide access to the air transportation system and its connections with other modes for people and freight throughout the state.
- 6. Comply with state and federal environmental protection requirements.
- 7. Support efforts to ensure sufficient system capacity and airport modernization.
- 8. Seek adequate and stable statewide funding to preserve system airports.
- 9. Provide advocacy and technical assistance (from the State Aviation Department) for airports and their users.

The region has specific goals and policies outlined within the local transportation plans that are specifically related to aviation and were developed to help guide the future of the airports in the region. The relevant policies include:

- Work with member agencies and jurisdictions to protect the function and economic viability of the existing public-use airports while ensuring public safety and compatibility between airport uses and surrounding land uses for public use airports and for private airports with three of more based aircraft.
- 2. Continue to recognize the Redmond (Roberts Field) Airport as the major commercial/passenger aviation facility in central Oregon and an airport of regional

significance. Its operation, free from conflicting land uses, is in the best interests of the citizens of central Oregon.

- 3. Work with, and encourage airport sponsors to work with the FAA to enforce FAA registered flight patterns and FAA flight behavior regulations to protect the interests of County residents living near airports.
- 4. Encourage appropriate federal, state and local funding for airport improvements at public-owned airports.
- 5. Work with local jurisdictions to discourage future development of private landing fields when they are in proximity to one another, near other public airports and potential airspace conflicts have been determined to exist by the Federal Aviation administration FAA or ODOT Aeronautics.
- 6. Participate in and encourage adoption and update of airport master plans for the Bend Municipal Airport and Redmond Municipal Airport.
- 7. Work with airport sponsors, local jurisdictions and transportation providers to evaluate and enhance opportunities for improving surface transportation options to the Bend Municipal Airport and Redmond Municipal Airport.

## Facilities

#### **Bend Municipal Airport**

The Bend Municipal Airport is located approximately five miles northeast of the Bend Metropolitan planning area. It is a non-towered airport and classified as a Category 2 – Business or High Activity General Aviation Airport with no scheduled passenger service to/from the airport. The single asphalt runway is 75 feet wide and 5,005 feet in length serving approximately 42,000 annual aircraft operations (departures and arrivals) with an approximate average of 110 operations per day thus making it the 14<sup>th</sup> busiest airport in the state<sup>1</sup>. The existing asphalt runway is in fair condition. Approximately 180 aircrafts in combination with 18 aviation type businesses are currently based at the airport. The airport was established in 1942 in response to World War II training efforts.

#### Redmond Municipal Airport ~ Roberts Field

Passenger air service is provided to the Central Oregon area at the Redmond Municipal Airport, located approximately sixteen miles north of Bend. The Redmond airport is classified as a Primary Service/Transport airport and is publicly owned. It provides scheduled passenger service and accommodates larger and higher performance aircraft than the Bend facility. The Redmond airport is currently served by three commercial carriers, Delta, Horizon Air, and United Airlines (including United Express). Currently, there are daily direct flights to several cities in the western U.S. This airport is not included in the Bend Metropolitan planning area.

The Bend Municipal Airport and Redmond Municipal Airport are outside of the Bend Metropolitan planning area. The Deschutes County regulations and County TSP policies govern land use issues that are associated with the use and operation of the airport. Key goals outlined in the Deschutes County TSP are related to the protection of

<sup>&</sup>lt;sup>1</sup> Airport update #7, Bend Municipal Airport, April 18, 2006 (http://www.ci.bend.or.us)

public-use airports through the development of land use regulations based upon the adopted airport master plans. The purpose of these regulations is to prevent the installation of airspace obstruction, additional airport hazards and to ensure the safety of the public and guide compatible land use.

### **Forecasts and Future Needs**

The Oregon State Aviation System Plan discusses five trends that will cause aviation activity growth in the state and within the Bend Metropolitan region including:

- Migration to Oregon;
- Growth in high-tech and export-oriented industries;
- Growth in tourism;
- Increase in air travel by general population; and
- Increase in number of retirees with high discretionary incomes.

#### **Bend Municipal Airport**

According to the most recent City of Bend Municipal Airport Plan, annual operations are forecast to increase from 25,000 in 1993 to 50,000 in 2013. Even with a doubling of activity over the 20-year planning period, the airfields system (runway and taxiway) will accommodate the forecast demand. Additionally, aircraft based at the Bend Airport are forecast to increase from 110 in 1993, to 165, in 2013. Bend has adequate paved tie-down areas to meet demand but will need to add hanger space to accommodate demand for covered aircraft storage.

The Oregon Aviation Plan<sup>2</sup> found runway length/width and weather reporting to be the key needs for the Bend airport in order to preserve the airport system over the next twenty years. Since this finding, an automated weather observation system capable of announcing wind speed, wind direction, current temperature and dew point, precipitation, cloud layers and ceiling up to 12,000 feet AGL, density altitude, barometric pressure (altimeter setting), visibility (1/4 mi to 10+ mi), and lightning strikes/activity within and beyond 10 miles<sup>3</sup> has been installed. An additional runway is anticipated to be completed in October 2007.

#### **Redmond Municipal Airport**

According to the most recent Redmond Airport Master Plan<sup>4</sup>, the number of passenger emplanements is forecast to double from 147,106 in 2003 to 300,000 in the year 2023. Following a similar growth pattern the general aviation trends are expected to increase from 36,128 in 2003 to 67,400 in the year 2023. The plan evaluated airport needs over

<sup>&</sup>lt;sup>2</sup> Oregon Aviation Plan, Oregon Department of Transportation, February, 2000.

<sup>&</sup>lt;sup>3</sup> Airport update #7, Bend Municipal Airport, April 18, 2006 (http://www.ci.bend.or.us)

<sup>&</sup>lt;sup>4</sup> *Redmond Municipal Airport Master Plan*, April 2005. Accessed online: <u>http://www.ci.redmond.or.us/internet/content/view/104/212/</u>

a 20-year planning horizon and recommended a series of runway improvements to accommodate the forecast growth. The following list outlines key needs for the future:

- Longer runway length to accommodate aircraft flown by United States Forest Service. Runway 4-22 should be extended to a length of 8700 feet
- Construction of a new parallel runway (7000-8000 feet long, 150 feet wide)
- Segregated area for air cargo facilities
- Expansion of the existing terminal
- Up to 80 new storage spaces for small and large aircraft
- Taxiway modifications

The Oregon Aviation Plan cited runway length/width, taxiway access and REILS (runway end lighting system) as the primary deficiency areas for the Redmond Airport in the 20-year planning horizon. These deficiencies were also cited in the Redmond Airport Master Plan.