# OREGON AVIATION PLAN AIRPORT SUMMARY
PAISLEY AIRPORT

In 2018, the Oregon Department of Aviation (ODA) updated the Oregon Aviation Plan (OAP v6.0) for the state airport system which includes 95 airports, one heliport and one seaplane base. The study area was statewide and considered both commercial service and general aviation airports. Airports outside of Oregon in proximity to the state were considered as well. The study includes Paisley Airport (22S or the Airport). This section focuses on the system plan's individual findings and recommendations for this facility as well as documenting the various benefits the Airport provides in Oregon.

Aviation system plans are top down studies that must be implemented from the bottom up by individual airports. The ultimate success of the plan depends on each airport implementing recommendations from the study and following through on any identified improvement actions. Individual airport improvements will result in the enhancement of overall system performance.

Within the statewide system, the Paisley Airport has been designated as a Category V – Remote Access/Emergency Services (RAES) Airport in the 2007 OAP. Within the OAP, a Category V airport supports primarily single-engine general aviation aircraft, special-use aviation activities, access to remote areas, or provide emergency service access.

From a facilities standpoint, the Paisley Airport meets most of the objectives for an OAP Category V Airport. It is worth noting, however, that the Airport's own capital improvement plan and/or master plan may recommend additional projects that it will be needed over the coming 10 years. The OAP also does not identify all maintenance, rehabilitation, and replacement costs that could be incurred by the Airport during this period.

EXISTING OREGON AIRPORT SYSTEM 2018
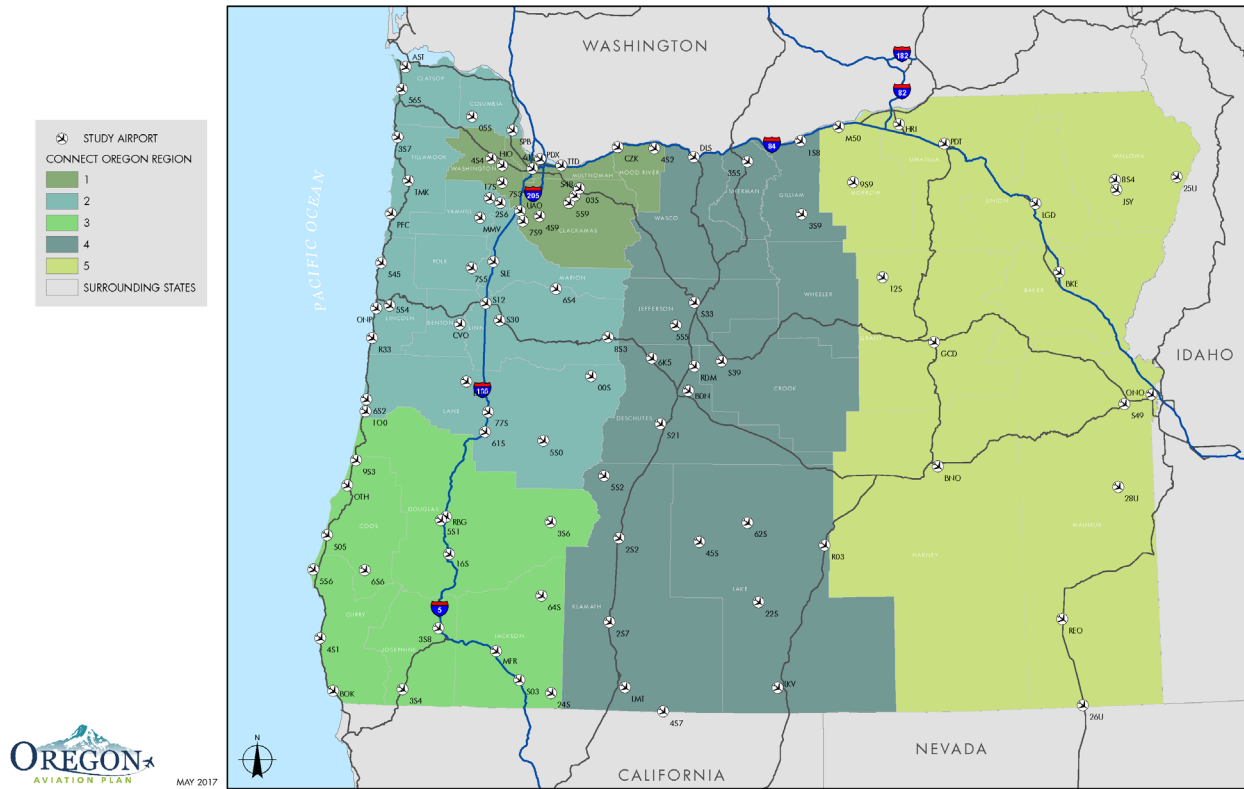
More information on the OAP can be obtained from the ODA Aviation website at https://www.oregon.gov/aviation/pages/index.aspx. In addition to the complete Technical Report, a statewide Executive Summary was produced to support the OAP. More information on all OAP-related products can be obtained from ODA.

OREGON AIRPORT ROLES/CATEGORIES

ODA's Oregon Aviation Plan was last published in 2007. This update to the OAP re-sets the bar for future system performance by evaluating each airport's facilities and services. Since 2007, a number of Oregon airports have made progress toward meeting various performance measures. As part of this study, airport infrastructure data, aviation activity projections and population growth in each airport's environs were used to determine whether the airport should be elevated to a higher OAP Category to improve overall system accessibility and performance. The OAP v6.0 Update also addressed the need for airports to support resiliency efforts related to a potential Cascadia Earthquake and Tsunami Event.

Recommended categories for airports in the Oregon Aviation Plan are shown below.

OAP AIRPORT CATEGORIES
RECOMMENDED OREGON AIRPORT ROLES

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Category I	**Commercial Service Airport**: These airports support some level of scheduled commercial airline service in addition to supporting a full range of general aviation aircraft activities. Commercial service includes both domestic and international destinations. Objectives call for a minimum runway length of 6,000 feet.
Category II	**Urban General Aviation Airport**: These airports support all general aviation aircraft and accommodate corporate aviation activity, including piston and turbine engine aircraft, business jets, helicopters, gliders, and other general aviation activity. The most demanding user requirements are business-related. These airports service a large/multi-state geographic region or experience high levels of general aviation activity. The minimum runway length objective for Category II airports is 5,000 feet.
Category III	**Regional General Aviation**: These airports support most twin and single-engine aircraft and may accommodate occasional business jets. These airports support regional transportation needs with a large and often sparsely populated service area. The minimum runway length objective for Category III airports is 4,000 feet.
Category IV	**Local General Aviation Airport**: These airports support primarily single-engine general aviation aircraft but are capable of accommodating smaller twin-engine general aviation aircraft. These airports support local air transportation needs and special-use aviation activities. The minimum runway length objective for Category IV airports is 3,000 feet.
Category V	**Remote Access/Emergency Services (RAES)**: These airports support primarily single-engine general aviation aircraft, special-use aviation activities, access to remote areas, or provide emergency service access. These airports should have at least 2,500 feet of runway.

Source: Jviation

PAISLEY AIRPORT
OVERVIEW

The remote location of Paisley State Airport is important to the State's airport system for geographic coverage and access. The Airport is also important to companies that conduct business with personnel from the area's cattle industry. The Airport is located approximately 35 miles north of Lake County-Lakeview Airport and 50 miles south of Christmas Valley Airport. The Paisley State Airport is also located in a recreational area, with Summer Lake west of the Airport and Lake Abert southeast of the Airport. In addition, there are several sand dunes located near the lakes.

Paisley State Airport is located east of State Route 31, approximately three miles north of the community of Paisley. Paisley State Airport was acquired in 1972 on a use permit from the Bureau of Land Management. Runway 13/31, a visual runway, is 4,300 feet long by 60 feet wide and has LIRL. The Airport handles an estimated 400 general aviation operations annually. It is estimated that 67 percent of these operations are itinerant. There are currently no aircraft based at the Airport.

30-MINUTE DRIVE TIME SERVICE AREA AND POPULATION OAP CATEGORY V AIRPORTS
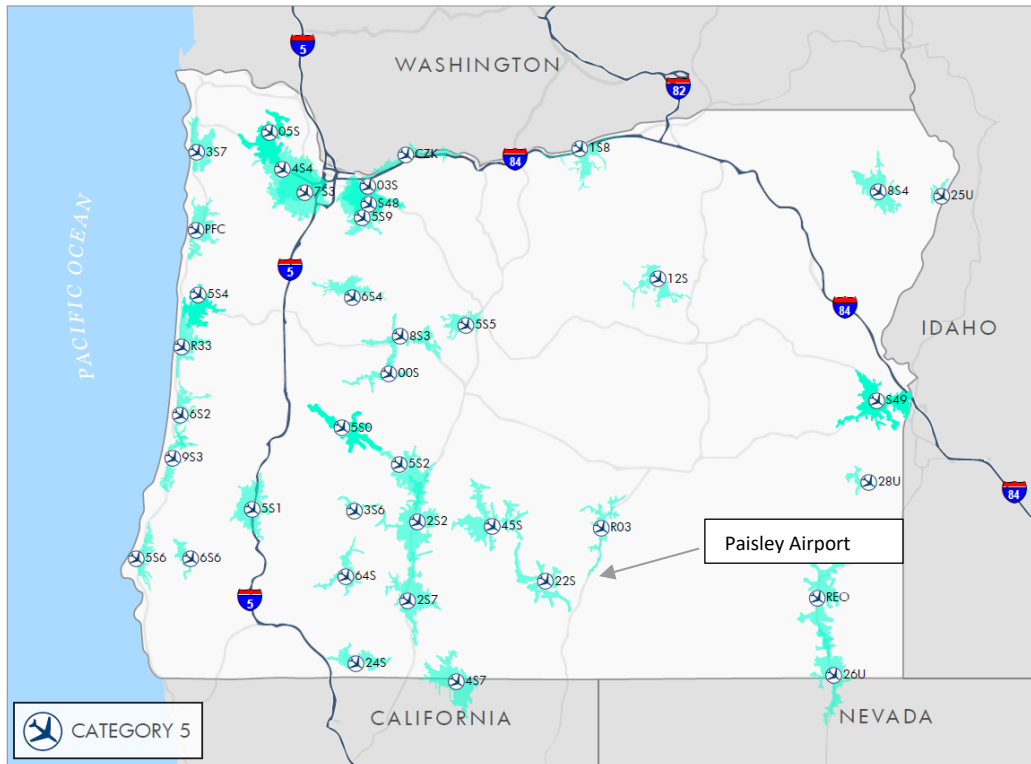
Source: Jviation

Airport roles consider the characteristics of the area the airport serves. Analysis for the OAP was conducted using a geographic information system (GIS) and a 30-minute drive time for each airport. There are approximately 351 residents within a 30-minute drive of 22S and a labor force of approximately 137.

Paisley Airport	
Population	
2016 30-minute drive	351
2016 Associated city	237
Labor force	
2016 30-minute drive	137

Source: US Census Bureau, Jviation Analysis, Oregon Zoomprospector.com, Oregon Population Center – Portland State University

RECOMMENDED ROLE FOR PAISLEY AIRPORT

Each airport's level generally reflects the type of aircraft and customers the airport serves as well as the characteristics of the airport's service area. Paisley Airport will remain a Category V – Remote Access/Emergency Services (RAES) Airport within the OAP.

As a Category V airport, the OAP has identified certain facilities and services that should ideally be in place. These objectives are considered the "minimums" to which the Airport should be developed. Based on local needs and other justifications, it is quite possible that the Airport could exceed its minimum development objectives established in the OAP. Paisley Airport's specific objectives, as they pertain to the Airport's Category V role in the state airport system, are listed below.

OBJECTIVES FOR CATEGORY V – REMOTE ACCESS/EMERGENCY SERVICES (RAES) MINIMUM STANDARD

Airside Facilities

» **Airport ARC: A-I (or A-I Small)**

» **NPIAS: Not an Objective**

» **Based Aircraft: Not an Objective**

» **Runway orientation: Varies by Airport**

» **Runway Pavement Type: Turf, Dirt, Gravel**

» **PCI: 55 (if paved)**

» **Runway Pavement Strength: Varies by Airport**

» **Runway length: 2,500 feet Turf**

» **Runway width: 60 feet Turf**

» **Taxiway: Not an Objective**

» **Lighting systems: MIRL and MITL**

» **Approach: Visual**

» **Visual Approach Aids: One Runway End**

» **Instrument Approach Aids: Not an Objective**

» **Runway Lighting: Not an Objective**

» **Taxiway Lighting: Not an Objective**

» **Fencing: Not an Objective**

General Aviation Facilities

» **Rotating Beacon: Not an Objective**

» **Weather reporting: Not an Objective**

» **Lighted Wind Indicator: Not an Objective**

» **Hangared aircraft storage: Not an Objective**

» **Apron parking/storage: Not an Objective**

» **Terminal/Building: Not an Objective**

» **Auto parking: Not an Objective**

» **Fencing: Not an Objective**

» **Cargo: Not an Objective**

» **Deicing Facility: Not an Objective**

Services

» **Fuel: Not an Objective**

» **FBO: Not an Objective**

» **Transportation: Not an Objective**

» **Food Service: Not an Objective**

» **Restrooms: Not an Objective**

» **Pilot Lounge: Not an Objective**

» **Snow Removal: Not an Objective**

» **Telephone: Not an Objective**

PAISLEY AIRPORT
PROJECTIONS OF AVIATION DEMAND

Over the past 10 years, general aviation has experienced a general decline on a nationwide basis and in Oregon. The high cost of acquiring and maintaining a general aviation aircraft, the cost to secure a private pilot's license, competing opportunities for allocation of disposable income, the economic recession, along with significant increases in the cost of aviation fuel, have all contributed to a contraction in general aviation demand.
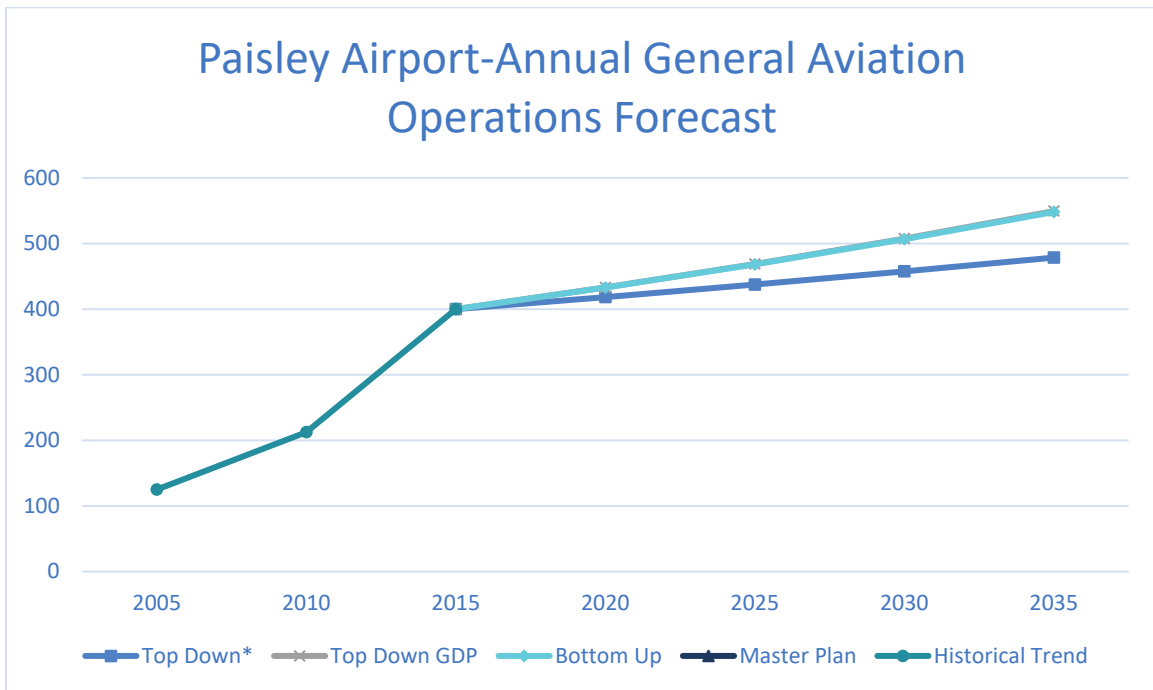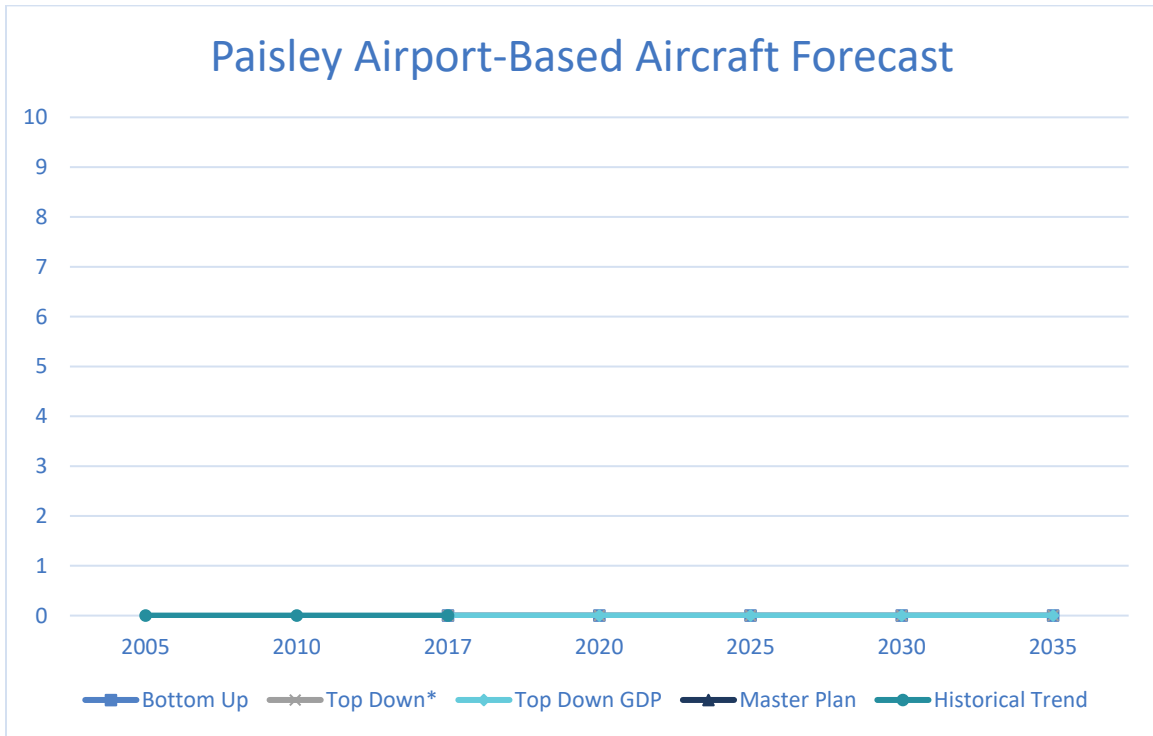
Recent economic recovery and increased use of general aviation as a tool to improve business efficiency have helped to stabilize the general aviation industry. For most airports in Oregon, however, including Paisley Airport, anticipated growth in general aviation demand will be modest at best. The two graphs below show projections of based aircraft and annual general aviation operations for Paisley Airport as they were developed in the OAP update.

Three based aircraft projection methodologies were developed in this forecast. The bottom-up methodology produced an average annual growth rate of 0.8 percent and the top-down methodology based on historical Per Capita Real GDP produced the highest average annual growth rate, of the three projections, at 1.6 percent. The alternative top-down methodology utilizing FAA Terminal Area Forecast (TAF) projections for NPIAS airports in Oregon produced more moderate growth rate. Comparing the results of the forecasts indicated that the historical Per Capita Real GDP projection had the strongest growth, but was considered to be overly optimistic, since sustaining a 1.6 percent GDP growth rate over the planning period is unlikely. Therefore, the more conservative bottom-up growth rate of 1.1 percent, which is based on FAA TAF growth rates for based aircraft, was chosen as the preferred forecast. There are no based aircraft at Paisley Airport (in 2017) and none are forecasted from 2017 to 2035.

The results from the three general aviation operations projection methodologies developed in this forecast are compared in the graphs below. The bottom-up methodology produced an average annual growth rate of 1.1 percent while the top-down methodology based on FAA Hours Flown projections produced an average annual growth rate of 0.9 percent. The alternative top-down methodology based on historical GDP growth produced an average annual growth rate of 1.6 percent. The top-down growth rate of 0.9 percent was chosen as the preferred growth rate since it is based on FAA national average growth forecasted for hours flown. Annual general aviation aircraft operations[1] at Paisley Airport are projected to increase from 400 to 479 by 2035.

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[1] Includes air taxi and commuter operations

Paisley Airport-Based Aircraft Forecast

Legend: Bottom Up — Top Down* — Top Down GDP — Master Plan — Historical Trend

Paisley Airport-Annual General Aviation Operations Forecast

Legend: Top Down* — Top Down GDP — Bottom Up — Master Plan — Historical Trend

Source: FAA TAF, Jviation analysis
 * indicates preferred growth rate

PAISLEY AIRPORT
ECONOMIC IMPACT UPDATE

Annual economic impacts for 97 study airports were estimated as part of ODA's economic impact research. Total annual economic impacts for the Airport are attributed to one or more of the following four economic activity centers: airport management, airport tenants, average annual capital investment, and spending by visitors who arrive on general aviation aircraft.

This study uses three primary measures to express both statewide and airport-specific annual economic impacts:

» Employment

» Annual Payroll

» Sales/Output (or total annual economic activity)

Paisley Airport is owned and operated by Lake County. The Airport supports access to rural areas of Oregon as well as serves as an emergency landing facility. The total economic impact associated with the airport is less than $30,000 annually and there are no full-time jobs on-airport or within the visitor industry associated the airport. Construction impacts related to Capital Improvement Projects (CIP) are included in aggregate with other general aviation airports. While the economic impact is minimal the Airport provides other benefits such as access for air ambulance, forest fire fighting, search and rescue, recreational activities, and government agency access.

PAISLEY AIRPORT

	Direct	Indirect/Induced	Total
Employment			
Tenant	0.0	0.0	0.0
GA Visitor	0.1	0.0	0.1
CIP			
Employment Total	*0.1*	*0.0*	*0.1*
Payroll			
Tenant	$-	$-	$-
GA Visitor	$1,899	$1,491	$3,390
CIP			
Payroll Total	*$1,899*	*$1,491*	*$3,390*
Sales/Output			
Tenant	$-	$-	$-
GA Visitor	$2,783	$1,938	$4,722
CIP			
Sales/Output Total	*$2,783*	*$1,938*	*$4,722*

Source: Mead and Hunt, EDR Group, Jviation, IMPLAN econometric package

MUNICIPALITIES NEAR PAISLEY AIRPORT
WITH LAND USE CONTROLS

Having land uses adjacent to airports that are compatible with aircraft operations is imperative from a safety standpoint. Airports that accept state and/or federal grants are obligated to take steps to promote compatible land use and activities in the environs of their airport. For the OAP analysis, airports and their immediate or adjacent municipalities in the environs of the airport were identified. Analysis of each airport's airspace were compared to local jurisdiction boundaries on Google Earth. If a jurisdiction was entirely or partly under the airport's airspace local zoning ordinances were reviewed. County land use ordinances related to airports and height restrictions were also analyzed.

Research was undertaken for municipalities identified during the OAP to determine if the municipalities are taking steps to promote compatible land use and protect the operating environments for airports. Municipalities near Oregon airports were investigated to determine the following key land uses controls:

» **Has the municipality adopted land use zoning controls?**

» **Does the municipality have an airport-specific overlay zone or district?**

» **Does the municipality have a land use map that shows the location of the airport?**

» **Has the municipality adopted some type of height zoning?**

The following table shows municipalities near Paisley Airport and summarizes the status of land use controls for each. Municipalities and airports throughout Oregon should work together to help ensure airports are protected from incompatible land uses and from the encroachment of obstacles that pose a height hazard to safe airport operations.

LAND USE CONTROL SUMMARY FOR
PAISLEY AIRPORT

Type of Control	Jurisdictions Impacting Airport	
	City of Paisley*	Lake County
Airport Zone	-	Yes
Adopted Height Zoning Restrictions	-	Yes
RPZ Protection	-	Yes
Airport Safety Overlay Zone	-	Yes

Source: Angelo Planning Group, Jviation
*Information was not gathered for cities where 100% of the airport's horizontal surface is located outside the municipal boundary

AIRPORT REPORT CARD AND RECOMMENDATIONS

This section provides information on ODA facility/service objectives associated with a Category V airport in the OAP. The "report card" on the following pages shows Paisley Airport's ability to meet its objectives. If the Airport does not meet an objective, an estimated cost to enable the Airport to meet the objective was developed. The report card for Paisley Airport, developed as part of the OAP, is shown below. There are no facility and services deficiencies identified at the Airport.

Category V Performance Criteria		22S	Paisley	Paisley
Facilities	**Basic Criteria**	**Actual**	**Action Needed to Meet Criteria**	**Estimated Cost**
Airside Facilities				
FAA – ARC	A-I	A-I		
NPIAS	Not an Objective	No		
Based Aircraft	Not an Objective	0		
Runway Orientation	Varies by Airport	V NOT NEEDED		
Runway Length	2,500 feet Turf	4,300		$ -
Runway Width	60 feet Turf	60		$ -
Runway Pavement Type	Turf, Gravel, Dirt	Bituminous		
Rwy Pavement Strength	Varies by Airport	Not available		$ -
Runway Pavement PCI	55	83		
Taxiways	Not an Objective	Stub		
Approach Type	Visual	Visual		
Visual Approach Aids	Not an Objective	None		
Instrument Approach	Not an Objective	None		
Runway Lighting	Not an Objective	LIRL		
Taxiway Lighting	Not an Objective	None		
General Facilities				
Rotating Beacon	Not an Objective	Yes		
Lighted Wind Indicator	Not an Objective	Wind Cone		
Weather Reporting	Not an Objective	None		
Hangared Aircraft Storage	Not an Objective	#N/A		
Apron Parking/Storage	Not an Objective	#N/A		
Terminal Building	Not an Objective	No		
Auto Parking Spaces	Not an Objective	#N/A		
Fencing	Not an Objective	#N/A		
Cargo	Not an Objective	#N/A		
Deicing Facility	Not an Objective	None		
Services				
Fuel	Not an Objective	0		
FBO	Not an Objective	No		
Ground Transportation	Not an Objective	#N/A		
Food Service	Not an Objective	No		
Restrooms	Not an Objective	No		
Pilot Lounge	Not an Objective	No		
Snow Removal	Not an Objective	No		
Telephone	Not an Objective	No		
Total				$ -

Source: Jviation, Century West, Marr Arnold Planning

OTHER IDENTIFIED FACILITY IMPROVEMENT COSTS

Projects identified in the deficiencies analysis from the OAP represent a portion of the total development and maintenance costs that Oregon airports could require in the near term. In order to have a better picture of total investment needs for Oregon's airport system, it is important to also consider projects identified in each airport's current Statewide Capital Improvement Program (SCIP) and in Oregon's most recent Statewide Pavement Maintenance Program (PMP).

SCIP - Current SCIPs were reviewed to provide ODA with a general understanding of what projects are already being considered on the local level that would address deficiencies noted in the OAP. A review was performed to ensure project costs were not duplicated between the OAP and current SCIP projects for each airport. Analysis of 2018 SCIP data indicates no improvements for Paisley Airport are identified in the SCIP over the next five to ten years.

PMP - ODA's Pavement Maintenance Program (PMP) identifies maintenance, repair, and rehabilitation projects needed to sustain functional pavements at Oregon airports. The PMP program provides some level of pavement maintenance for all paved airports across the state. For NPIAS airports receiving federal monies, this work assists the airports in meeting their grant assurances. Projects in the PMP for Paisley Airport are estimated at nearly $109,000 between 2018 and 2023. Projects range from slurry and overcoats to complete pavement rehabilitation. These projects were identified independently of the SCIP as part of Oregon's PMP.

Cost Summary - The OAP v6.0 summarized the Airport's development needs over the next five to ten years. Costs to improve and maintain the Airport over that time frame consider not only projects identified by the OAP, but also projects from ODA's Pavement Maintenance Program and the Airport's own locally generated capital improvement plan reported to ODA (SCIP). These three sources indicate an estimated $109,000 will be needed to maintain and improve the Airport over the next ten years.