# 2020 IDAHO AIRPORT SYSTEM PLAN UPDATE & AIRPORT ECONOMIC IMPACT ANALYSIS UPDATE

IDAHO AIRPORT ECONOMIC IMPACT ANALYSIS (AEIA) UPDATE FINAL TECHNICAL REPORT

JULY 2020



## 2020 Idaho Aviation System Plan (IASP) Update

Prepared for

#### Idaho Transportation Department

Division of Aeronautics 3483 Rickenbacker St Boise, ID 83705

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## CHAPTER ONE: SYSTEM GOALS AND PERFORMANCE MEASUREMENTS

### Introduction

The Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics) recognizes the significance of utilizing a proactive approach to analyze its aviation system. A proactive approach ensures aviation's role in the statewide transportation system is effective, recognized, and supported. This approach includes identifying the current and future demands of the system and developing a plan for meeting the need identified as part of that process. The 2020 Idaho Airport System Plan Update (2020 IASP Update) documents aviation industry changes, trends, and issues; includes a plan for the future development of the airport system; and ultimately, positions the airports throughout the state and the system as a whole to successfully respond to future demands, needs, and challenges. In conjunction with the 2020 IASP Update, the 2020 Airport Economic Impact Analysis (2020 AEIA Update) demonstrates the significant value of Idaho's airports. The study highlights why continued investment in aviation based on the recommendations in the 2020 IASP Update is critical to the system's continued economic vitality.

In addition to providing ITD Aeronautics with the knowledge necessary to effectively manage the statewide airport system, the 2020 IASP Update informs federal aviation efforts, such as the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) and the FAA's annual airport capital improvement program (ACIP) fund allocation. Airports that are included in the NPIAS – those airports deemed by the FAA to be critical to the National Airspace System (NAS) – are eligible for federal grants for eligible airport projects through the Airport Improvement Program (AIP). The 2020 IASP Update provides recommendations as to the airports that may be eligible for inclusion in the NPIAS, as well as analyzes airports already included in the federal system to determine if a classification change may be warranted.

The 2020 IASP Update is ITD Aeronautics "flight plan" for the development of the public-use airport system in Idaho. The plan is developed as a top-down analysis that identifies policy, funding, and priority recommendations to be implemented from the bottom up. The 2020 IASP Update analyses are conducted at a high level for the entire system and for individual airports. The findings and recommendations of the 2020 IASP Update can be used to inform local airport planning and development through consideration during the development of individual airport master plans and capital improvement plans. While the 2020 IASP Update identifies major facility and service improvements by airport, specific project needs must be evaluated at the airport-specific level. Through the local airport planning process, individual Idaho airports must consider their ability and desire to undertake facility development and service enhancements per the recommendations of the 2020 IASP Update.

At the end of the 2020 IASP Update, a plan will be delivered to ITD Aeronautics that serves as a guide for the continued development of Idaho's airport system to meet current and future user needs. To assist in this process, anticipated demands, system adequacy, and development alternatives are assessed. Stakeholder involvement is used to validate the analyses and final recommendations. At the conclusion of the 2020 IASP and AEIA Updates, a collection of tools will be delivered to ITD Aeronautics that can help communicate the economic benefits of each individual airport included in the study and aviation as a whole in Idaho, including the total economic impacts of aviation throughout the state.

In addition to helping ITD Aeronautics plan for and develop the statewide airport system, the 2020 IASP Update serves as the link between aviation and other modes in Idaho, as well as a way to link Idaho's airports to the rest of the nation and the world. The 2020 IASP and AEIA Updates are meaningful elements of ITD Aeronautics' overall program. These two studies were previously updated in 2010 using a completely new approach and framework



based on ITD's 2004 "Transportation Vision" plan. The 2010 studies incorporated new performance measures (PMs), a policy evaluation, an updated economic impact study, and the development of airport compatible land use guidelines into a traditional system plan. Transportation officials and airport partners throughout the state have used the 2010 studies' findings and recommendations more than any other planning document previously developed by the ITD Aeronautics – highlighting the relationship between recent airport improvements and accomplishments with investments in aviation throughout the state. Using the momentum and success of the 2010 effort, ITD Aeronautics initiated updates to both studies to reexamine the information and analyze aviation-related changes that have occurred at the local, state, and federal levels since 2010. These updates are crucial in maintaining the system, monitoring performance, and continuing to validate investment in Idaho's airport system.

### **Plan Components and Process**

There are two separate analyses in this update process: the IASP and the AEIA.

#### 2020 IASP Update

The purpose of the 2020 IASP Update is to collectively assess the conditions and needs of the publicly owned, public-use airports throughout the state and to identify the system's capability to meet current and future demand. This includes examining current state and federal standards, policies, procedures, and trends to aid ITD Aeronautics in successfully developing and planning for the state's airport system as a whole. To support this, forecasts of aviation demand are developed and used to identify future system improvement needs to ensure that Idaho's airport system provides adequate services to residents, businesses, and visitors.

#### 2020 AEIA Update

The 2020 AEIA Update evaluates the on-airport and other spin-off or "multiplier" economic impacts of airports throughout Idaho. Economic impacts are quantified for each individual airport included in the study and for the system as a whole. The AEIA results are used to communicate the benefits of airports and validate continued public investment in Idaho's airport system.

The 2020 IASP and AEIA Updates are documented separately, as each is considered to be a unique part of the overall system plan update process. Each element has its own focus and analysis, ultimately resulting in two separate yet complementary sets of deliverables and products.

The 2020 IASP and AEIA Updates ran concurrently and followed industry-accepted approaches, specifically the guidance provided in FAA Advisory Circular 150/5070-7, *The Airport System Planning Process*. The general steps for the 2020 IASP Update are outlined below:

- ✤ Establish system goals and PMs to identify information that was requested during the inventory data collection.
- ✤ Conduct joint data collection efforts for both the 2020 IASP and AEIA Updates. Upon completion of the initial data collection efforts, develop initial estimates of economic impact.
- ✤ Assess aviation issues and trends at local, regional, and state levels to evaluate how each might impact the system or individual airports in the future.
- ✤ Analyze and categorize airports by their role in the overall system, considering the services and facilities each airport provides.
- Develop aviation forecasts to ascertain future systemwide demand and determine the adequacy of the system based on a comparison of current and forecasted demand relative to airports' services and facilities.
- → Identify system requirements to ensure Idaho's airports are able to meet existing and projected demand.
- Examine a series of alternative development options, taking into consideration environmental issues and requirements.



- → Analyze intermodal connectivity and access needs for Idaho's airports.
- Identify a recommended airport system based on these analyses to provide the best plan for developing Idaho's airport system, concluding with a series of policy and program recommendations.
- Prepare a final implementation plan that identifies system priorities and provides justification for the plan's recommendations and future actions.

As noted, the 2020 AEIA Update is conducted concurrently but has its own unique steps to determine the economic benefits of the airports and the statewide system.

### **Project Advisory Committee (PAC)**

Public involvement in the process to update the 2020 IASP and AEIA Updates is incredibly important. A dynamic stakeholder engagement process is essential to the development of analyses and final products that reflect and address the considerations of those who use or are dependent on aviation in Idaho. This process gains consensus and assists ITD Aeronautics as the study recommendations are ready for implementation.

To provide guidance to and develop continuous consensus in the 2020 IASP and AEIA Updates, a PAC was established consisting of representatives from the following:

- ✤ Airports
- Other state modal representatives
- ✤ State economic and tourism development partners
- → Metropolitan planning organization (MPO) staff
- → Idaho Airport Managers Association (IAMA) representatives
- ✤ Members of the Idaho aviation community

Meetings were held throughout the study process to discuss system goals, PMs, and performance indicators (PIs); gain input on issues affecting Idaho's aviation system; validate the approach to assessing economic impacts and the general results; discuss airport classifications, roles, issues, and trends; quantify current system performance and future targets; and provide recommendations for the system.

In addition to coordinating with PAC membership, the study team conducted outreach to a wider audience to gather input into both studies' updates. This outreach consisted of stakeholder interviews to collect relevant data, identify system issues and trends, and generate interest in the study and meetings with modal managers within ITD. These stakeholders represent a range of groups who understand, use, or depend on Idaho's airport system.

### **System Performance Analysis**

A safe, efficient, and thriving airport system is a vital part of local, regional, and statewide economic and transportation infrastructures. The 2020 IASP Update is designed to support sustained investment in the system to allow it to continue this role. An important initial step in positioning this plan for success is the identification of the goals, PMs, and PIs for the system. ITD Aeronautics staff provided input on the system goals, PMs, and PIs early in the update process. These were also discussed with PAC members in an August 2018 PAC meeting and distributed for comment.

The results of this cooperative process yielded the goals, PMs, and PIs that are used in the 2020 IASP Update to accurately assess the statewide system. Definitions for these three components and how they are being used in this study are as follows:

→ Goals: Goals are broad targets that ITD Aeronautics, airports, statewide aviation partners, and stakeholders strive to achieve to enhance the system's effectiveness.



- PMs: PMs are used to provide a quantitative assessment of a specific characteristic. These aid in evaluating particular aspects of the performance of the system. PMs are those actionable aspects that ITD Aeronautics can theoretically influence through funding, policies, procedures, and projects.
- Pls: Similar to PMs, PIs also quantitatively assess the performance of the system by analyzing a specific aspect. Unlike PMs, PIs are informational or observational in nature and cannot be readily affected by ITD Aeronautics. Rather, they are independent of ITD Aeronautics funding, policies, procedures, and other actions, but are still important in telling the overall story of the system's performance.

## System Goals, Performance Measures, Performance Indicators, and Additional Analysis Points

The 2020 IASP Update builds on the vision of the Idaho Long Range Transportation Plan by developing the following aviation-specific goals:

- ✤ Geographic coverage
- ✤ Facility support
- ✤ Preservation
- ✤ Transportation support
- ✤ Safety and security
- ✤ Economic support

PMs and PIs have been identified for these six goals, as appropriate and determined through the collaborative process with ITD Aeronautics and the PAC. Some goals do not have PMs, as the evaluation of the system's performance in these areas is more observational with no actions likely to be implemented that could be addressed through funding, policies, procedures, or projects. Similarly, some goals do not have PIs as there are no actions that can be recommended to address the performance. In addition to the PMs and PIs, additional analysis (AA) points are planned for some goal categories as part of the evaluation process to provide information that can be used in decision-making. The following summarizes the goals, PMs, PIs, and AA points that are utilized in the 2020 IASP Update.

#### **Geographic Coverage**

Providing adequate access or mobility throughout the state is an important goal for the state's airport system. Accessibility or geographic coverage to an airport can be defined in terms of access from the ground and from the air, including areas of the state that are remote and may not be accessible except by air. In Idaho, many of the state's recreational areas are supported by backcountry airports that are included in the Idaho Airstrip Network (IAN), providing linkages between larger cities and the numerous remote areas. In larger cities served by ground transportation, intermodal access is an important consideration in the evaluation of the system's abilities to meet the access needs of the users. The FAA through the NPIAS established guidelines to evaluate the accessibility of airports. These guidelines, along with input provided by members of the PAC, are considered in the analysis of the geographic coverage needs for the Idaho airport system.

To evaluate the adequacy of Idaho's airport system as it relates to its ability to provide adequate geographic coverage (also referred to as access or mobility), the following are used:

#### **Performance Measures**

✤ None

**Performance Indicators** 

- ✤ Percent of population and area within a 90-minute drive time of a commercial service airport with multiple airlines or within a 60-minute drive time of a commercial service airport with a single airline
- ✤ Percent of population and area within a 30-minute drive time of any airport



#### **Additional Analysis Points**

- → Percent of population and area within a 30-minute drive time of a NPIAS airport
- → Percent of population and area within a 30-minute drive time of an IAN airport

#### **Facility Support**

Another goal of Idaho's state airport system plan is to provide facilities that support the needs of the state and its airport customers. A good airport system should be adequately developed, providing infrastructure and facilities to meet both current and future demand. This corresponds to the Idaho Transportation Vision principle of providing flexibility and responsiveness. As discussed in a subsequent section, minimum objectives are identified according to the roles or functions that airports play in the system. Airport criteria ranging from runway length, width, and strength; to taxiways, instrument approach procedures (IAPs), lighting, weather, visual aids, services; and specific facilities such as terminals, aircraft storage, and others are evaluated in determining the infrastructure and facility needs of the system. These criteria are used to determine how the system is providing facilities to support the functionality of the state's airports.

The following are used to evaluate facility support:

#### **Performance Measures**

→ Percent of airports meeting all minimum facility and service objectives

**Performance Indicators** 

None

**Additional Analysis Points** 

✤ None

#### Preservation

Significant investment has been made in Idaho's airport system and preserving this investment is critically important to the system's long-term viability. One method for preservation is to ensure land use controls are inplace to compatible promote uses near airports. Planning for future airport development to preserve an airport's long-term role in the system is also important. Proactive planning can also assist with protecting airports from encroachment by activities or land uses that are incompatible with their day-to-day operations. Having appropriate measures in place related to spill prevention and storm water pollution prevention also help to preserve the investment in airport facilities. Finally, one of the most significant investments in an airport is the pavements that comprise the airfield including runways, taxiways, and aprons. Preserving these pavements through maintaining a pavement management system which includes evaluating the pavement condition index (PCI) is a requirement of the FAA for NPIAS airports and is a key objective of ITD Aeronautics. ITD Aeronautics assists airports with the Network Pavement Management System (NPMS), a program established to determine the PCIs and develop a systemwide approach to pavement preservation projects.

The following are used to evaluate how well the airport system is performing relative to the preservation goal:

**Performance Measures** 

- ✤ Percent of airports with zoning for height and land use regulations
- + Percent of airports with Master Plans or Airport Layout Plans (ALPs) with narrative (within past 10 years)
- → Percent of airports meeting ITD Aeronautics pavement condition index (PCI) standards
  - Runway (65 NPIAS, 50 non-NPIAS)
  - Taxiway (60 NPIAS, 45 non-NPIAS)
  - Apron (50 NPIAS, 40 non-NPIAS)



**Performance Indicators** 

- → Percent of airports that have a spill prevention control and countermeasures (SPCC) plan
- → Percent of airports that have a storm water pollution prevention plan (SWPPP)

#### **Additional Analysis Points**

✤ None

#### **Transportation Support**

Airports are only one of the multiple transportation modes that provide residents and visitors with access to all areas of Idaho. Whether an airport provides access to large cities, remote communities or recreational areas, the connectivity or mobility that airports provide spans a spectrum of areas that add to quality of life for the citizens of Idaho. This connectivity is important, but also requires other forms of transportation, both public and private, such that users can leave the airport environment and conduct activities outside of the airport. The ability of airports to promote intermodal connectivity is vital for many users of the state transportation system and communities in Idaho.

Airports also serve in a transportation support role as they accommodate life flight activities, whether due to an emergency or another medical purpose. Beyond life flight, airports also provide a means of transportation support in battling ever-increasing wildfires within and outside of Idaho. These important roles relate to transportation as well as the safety of Idaho's residents, visitors, and natural habitat.

The following are used to evaluate the system for its ability to adequately meet the transportation support goal:

#### **Performance Measures**

✤ None

#### **Performance Indicators**

- → Percent of airports with a courtesy car and/or rental car available
- → Percent of airports with public transportation available
- → Percent of airports that support life flight activities
  - Emergency medical evacuation
  - Physician/medical transportation
  - Medical shipments/patient transfer
- → Percent of airports that support fire fighting

#### **Additional Analysis Points**

→ Percent of airports with on-demand air taxi flights serving IAN airports

#### Safety and Security

The intention of this goal is to provide a safe and secure system of airports and to identify the number of study airports that meet specific FAA and ITD Aeronautics objectives related to safety and security. Of critical importance to safety is the ability of pilots to land safely, requiring clear approaches free of obstructions. The FAA has established updated standards related to taxiway design to reduce runway incursions, thereby increasing the safety of operations on the ground. The FAA has also updated its guidance relative to controlling development in areas off the ends of runways defined as Runway Protection Zones (RPZs) that provide for safety of both the pilots and the people on the ground. Other areas such as keeping wildlife away from airports indicate the steps airports are taking to provide a safe operation.



To evaluate the adequacy of Idaho airport system as it relates to the safety and security goal, the following are used:

#### **Performance Measures**

- → Percent of airports without close-in obstructions
- → Percent of NPIAS airports meeting current FAA taxiway design standards

#### **Performance Indicators**

- > Percent of airports controlling (by fee or easement) all runway end Runway Protection Zones (RPZs)
- → Percent of airports with Wildlife Hazard Assessments (WHAs) or Management Plans (WHMPs)

#### **Additional Analysis Points**

✤ None

#### **Economic Support**

An important goal of an airport system is to support the economic growth and diversification of the state's economy. Employers typically consider the existence and efficiency of air transportation facilities when expanding or developing in a given geographic area, including those that support business-class aircraft that operate at many airports. Airports are also important in Idaho to serve the significant agricultural industry through aerial application. Airports are used to serve both in-state and out-of-state aircraft, whether commercial passenger, freight, business-class, or recreational aircraft. All of these activities contribute to the state's economy and are supported by aviation.

This goal category also enables ITD Aeronautics to determine if airport facilities at each system airport are adequately matched to the economic characteristics of the market area the airport serves, as well as supports the overall statewide economy.

The following are used in the 2020 IASP Update to evaluate the goal of the system adequately supporting the state's economy:

#### **Performance Measures**

- → Percent of population and land area within a 30-minute drive time of an airport capable of meeting business user needs (5,000-foot runway [minimum], jet fuel, instrument approach)
- → Percent of airports that accommodate aerial application services

#### **Performance Indicators**

- → Percent of airports accommodating Instrument Flight Rules (IFR) operations from outside Idaho
- → Percent of airports with air cargo/freight activities including small operators

#### **Additional Analysis Points**

- Percent of businesses with the propensity to use aviation within a 30-minute drive time of a system airport
- Percent of population and land area within a 30-minute drive time of an airport with precision or nonprecision approach
- → Recreational areas served by "Portal" airports

 Table 1-1 provides a summary of all the goals, PMs, PIs, and AA points conducted throughout this update.

#### TABLE 1-1: 2020 IASP UPDATE GOALS, PERFOREMANCE MEASURES, PERFORMANCE INDICATORS, AND ADDITIONAL ANALYSIS POINTS

AND ADDITIONAL ANALYSIS POINTS						
GOAL		PMs, PIs, and AA Points				
Geographic	PMs	None				
Coverage	PIs	<ul> <li>Percent of population and area within a 90-minute drive time of a commercial service airport with multiple airlines or within a 60-minute drive time of a commercial service airport with a single airline</li> <li>Percent of population and area within a 30-minute drive time of any airport</li> </ul>				
	AA Points	<ul> <li>Percent of population and area within a 30-minute drive time of a NPIAS airport</li> <li>Percent of population and area within a 30-minute drive time of an IAN airport</li> </ul>				
Facility	PMs	<ul> <li>Percent of airports meeting all minimum objectives</li> </ul>				
Support	PIs	None				
	AA Points	None				
Preservation	PMs	<ul> <li>Percent of airports with land use zoning including height restrictions</li> <li>Percent of airports with Master Plans or ALPs with narrative (within past 10 years)</li> <li>Percent of airports meeting ITD Aeronautics PCI standards         <ul> <li>Runway (65 NPIAS, 50 non-NPIAS)</li> <li>Taxiway (60 NPIAS, 45 non-NPIAS)</li> <li>Apron (50 NPIAS, 40 non-NPIAS)</li> </ul> </li> </ul>				
	PIs	<ul> <li>Percent of airports that have a SPCC program</li> <li>Percent of airports that have a SWPPP</li> </ul>				
	AA Points	None				
Transportation	PMs	None				
Support	PIs	<ul> <li>Percent of airports with a courtesy car and/or rental car available</li> <li>Percent of airports with public transportation available</li> <li>Percent of airports that support life flight activities         <ul> <li>Emergency medical evacuation</li> <li>Physician/medical transportation</li> <li>Medical shipments/patient transfer</li> </ul> </li> <li>Percent of airports that support fire fighting</li> </ul>				
	AA Points	<ul> <li>Percent of airports with on-demand air taxi flights serving IAN airports</li> </ul>				
Safety and Security	PMs	<ul> <li>Percent of airports without close-in obstructions</li> <li>Percent of airports meeting current FAA taxiway design standards</li> </ul>				
	Pls	<ul> <li>→ Percent of airports controlling (by fee or easement) all runway end RPZs</li> <li>→ Percent of airports with a WHA or WHMP</li> </ul>				
	AA Points	None				
Economic Support	PMs	<ul> <li>Percent of population and land area within a 30-minute drive time of an airport capable of meeting business user needs (5,000' runway, jet fuel, instrument approach)</li> <li>Percent of airports that accommodate aerial application services</li> </ul>				



GOAL		PMs, PIs, and AA Points
Economic Support (continued)	PIs	<ul> <li>Percent of airports accommodating IFR operations from outside Idaho</li> <li>Percent of airports with air cargo/freight activities including small operators</li> </ul>
	AA Points	<ul> <li>Percent of businesses with the propensity to use aviation within a 30-minute drive of a system airport</li> <li>Percent of population and land area within a 30-minute drive time of an airport with a precision or PBN approach</li> <li>Recreational areas served by "Portal" airports</li> </ul>
		Source: Kimley-Horn, 2019

### Evaluation of ITD Aeronautics' Response to the Policy Recommendations from the 2010 IASP

To provide background and input into the 2020 IASP Update, the 2010 IASP findings and policy recommendations were revisited. The 2010 IASP included a series of policy recommendations to help guide decision-making with regards to Idaho's airport system. These recommendations were developed to make certain that any airport development contributed to the long-term goals of the 2020 IASP Update and to provide a foundation for decision-making with respect to the system of airports. **Table 1-2** summarizes the policy recommendations from the 2010 IASP by goal category. The airplane symbol indicates the goal category within which each policy recommendation was organized.



	2010 IASP Goals						
POLICY RECOMMENDATION FROM 2010 IASP	Geographic Coverage	Facility Support	Preservation	Transportation Support	Safety and Security	Economic Support	Other Policy Issues
1. Promote compatible land use near airports through use of and education related to the <i>Idaho Airport Land Use Guidelines</i> and evaluate land use legislation to address evolving issues.			<b>+</b>		<b>+</b>	<b>→</b>	Transportation vision principle
<ol> <li>Maintain adequate access to public-use commercial service and general aviation (GA) airports for all of Idaho.</li> </ol>	<b>→</b>					<b>+</b>	
<ol> <li>Continue to promote the importance of backcountry airports to Idahoans quality of life and economic growth.</li> </ol>	<b>→</b>			<b>+</b>	<b>+</b>	<b>+</b>	Transportation vision principle
4. Promote the economic and social value of airports, both commercial service and GA.			<b>+</b>			<b>+</b>	
5. Advocate for the promotion of environmentally friendly actions through the adoption and implementation of SWPPPs and SPCC plans.			<b>+</b>		<b>+</b>		Transportation vision principle



	2010 IASP Goals						
POLICY RECOMMENDATION FROM 2010 IASP	Geographic Coverage	Facility Support	Preservation	Transportation Support	Safety and Security	Economic Support	Other Policy Issues
<ol> <li>Support efforts to work internally with other ITD divisions and groups to promote aviation planning efforts.</li> </ol>				<b>+</b>			Transportation vision principle
7. Evaluate and seek changes to plans and facilities to respond to new technology and aircraft fleets to accommodate future air transportation system needs.		<b>+</b>			<b>+</b>	<b>+</b>	New and emerging technology
<ol> <li>Improve remote communications and weather reporting capabilities in rural areas such as Northern and Central Idaho to fill voids in the state's system coverage.</li> </ol>	<b>→</b>	<b>+</b>			<b>→</b>	<b>+</b>	
9. Consider expanding IDAPA 39.04.06, which provides guidance on through-the-fence operations on state-owned airports, to non- NPIAS airports, as well as working with the FAA on possible beneficial through-the-fence operations at NPIAS airports.		<b>+</b>	<b>+</b>			<b>+</b>	
10. Evaluate ways to improve the priority system to provide for more accountability and reappraise the funding distribution process to allow for more flexibility as the need arises.		<b>+</b>	<b>→</b>			<b>+</b>	Funding
11. Promote and encourage in-state commercial air service development.	<b>+</b>			<b>→</b>		<b>+</b>	
12. Coordinate and maintain Continuous Airport System Planning activities.	<b>+</b>	<b>+</b>	<b>+</b>	→ →	<b>+</b>	$\rightarrow$	
13. Work to financially support the goals of the IASP.	<b>+</b>	+	<b>+</b>	<b>+</b>	$\rightarrow$	<b>+</b>	

Source: Kimley-Horn, 2019



At the onset of this update, ITD Aeronautics provided a self-assessment of their progress on each policy recommendation from the 2010 IASP. Below is a summary of ITD Aeronautics' progress, evaluated as either absent, minimal, adequate, or exceptional, and a brief notation of specific actions related to each policy recommendation.

1. Promote compatible land use near airports through use of and education related to the Idaho Airport Land Use Guidelines and evaluate land use legislation to address evolving issues.

#### Exceptional

- → ITD Aeronautics has promoted the passage of revisions (2014) to current laws and regulations to strengthen the ability of the state to assist cities and counties enact effective local land use legislation:
  - Revised Laws Land Use for Airports
  - Revised Rules, Airports Hazard Definition
- → ITD Aeronautics has also revised and rewritten the Land Use Guidebook to teach and help implement effective ordinances. ITD Aeronautics has talked to numerous groups and municipalities to help them understand the value of strong land use controls.

#### 2. Maintain adequate access to public-use commercial service and GA airports for all of Idaho.

#### Adequate

- → ITD Aeronautics has made strides to maintain adequate access and this has been a continuing work item. Topics relating to adequate access that have been addressed include contract towers, continuing grants, the ongoing Lewiston-Nez Perce County Airport versus Pullman-Moscow Regional Airport issue, and relocation of Rexburg-Madison County and Burley Municipal airports.
- 3. Continue to promote the importance of backcountry airports to Idahoans quality of life and economic growth.

#### Exceptional

- → ITD Aeronautics has organized regular IAN meetings, United States Forest Service (USFS) cooperative airport maintenance plans with ITD Aeronautics, and combined airport inspections with USFS.
- ✤ ITD Aeronautics has incorporated, as policy, the Idaho Transportation Board (ITB) hearing, and policy statement on the Big Creek Four Airports to keep them open and for public use.
- → ITD Aeronautics organized a Big Creek Four Working Group.
- → ITD Aeronautics added a new airport at Reed Ranch.
- → ITD Aeronautics added a new airport at Wapshilla.
- → ITD Aeronautics is in the process of adding a new airport at Cougar Ranch.
- ✤ ITD Aeronautics increased the aircraft registration fee to \$0.03 per pound of gross weight to invest in state backcountry airports and pilot safety programs.
  - Revised Laws Increased Revenue from Aircraft Registration
  - Revised Laws Eliminated Pilot Registration



#### 4. Promote the economic and social value of airports, both commercial service and general aviation.

#### Adequate

- ✤ ITD Aeronautics distributed reports and brochures to Idaho Legislators on at least two occasions and presented at legislative meetings and hearings on the value of airports.
- ✤ ITD Aeronautics discussed the value of airports with legislators, airports, and city and county officials at numerous professional meetings.
- → ITD Aeronautics developed a new flight safety initiative in 2014 to reduce aircraft accidents.
- ITD Aeronautics created a new performance measure relating to airport PCI ratings on a statewide basis.
   ITD Aeronautics subsequently revised the methodology to more closely match its NPMS measures and data.
- ✤ ITD Aeronautics proposed and supported numerous changes to Idaho Code and Administrative Rules to improve the administration and financing for Idaho airports. These included:
  - Revised Laws Designation of Airports
  - Revised Laws Review of Pre-Applications
  - Revised Laws Land Use for Airports
  - Revised Laws Increase Revenue from Aircraft Registration
  - Revised Laws Eliminated Pilot Registration
  - Revised Laws Exempt Parts Tax for Repairs
  - Revised Rules, Airspace Guyed Towers
  - Revised Rules, Airspace Marking Met Towers
  - Revised Rules, Airports Hazard Definition

## 5. Advocate for the promotion of environmentally friendly actions through the adoption and implementation of SWPPPs and SPCC plans.

#### Minimal

→ ITD Aeronautics has shown support for this policy. However, the State of Idaho has signed an agreement with the Environmental Protection Agency (EPA) to take over enforcement.

#### 6. Support efforts to work internally with other ITD divisions and groups to promote aviation planning efforts.

#### Adequate

- → ITD Aeronautics staff continues to work to develop a capital improvement program and grant management computer program with ITD.
- → ITD Aeronautics staff has developed their own effective grant payment computer program.
- → ITD Aeronautics staff is an active part of ITD's Long Range Transportation Plan, "IDAGO."
- → ITD Aeronautics staff has updated ITD and ITD Aeronautics Board and Administrative policies.
- ITD Aeronautics staff has regularly worked with ITD staff on proposed and supported changes to Idaho Code and Administrative Rules to improve the administration and financing for Idaho airports.



7. Evaluate and seek changes to plans and facilities to respond to new technology and aircraft fleets to accommodate future air transportation system needs.

#### Minimal

- ✤ ITD Aeronautics completed eight small ALPs and drawing sets for community airports throughout Idaho to direct and schedule maintenance and growth.
- → ITD Aeronautics has supported revised rules to enhance safety, such as:
  - Revised Rules, Airspace Guyed Towers
  - Revised Rules, Airspace Marking Met Towers
- 8. Improve remote communications and weather reporting capabilities in rural areas such as northern and central Idaho to fill voids in the state's system coverage.

#### Adequate

- ITD Aeronautics has installed web cameras and Wi-Fi at Cavanaugh Bay, Priest Lake, Johnson Creek, and Big Creek airports to enhance communications and weather reporting capabilities.
- 9. Consider expanding IDAPA 39.04.06, which provides guidance on through-the-fence operations on stateowned airports, to non-NPIAS airports, as well as working with the FAA on possible beneficial through-thefence operations at NPIAS airports.

#### Absent

- ✤ No movement on this policy to date.
- 10. Evaluate ways to improve the priority system to provide for more accountability and reappraise the funding distribution process to allow for more flexibility as the need arises.

#### Exceptional

- + ITD Aeronautics developed and revised instructions to improve the priority system:
  - "Airport Project Prioritization, Selection, and Match Rate and Annual Program Funding and Allocation, Internal Program Guidance" (May 2013): This first manual included a new and complex method for calculating project priority and instructions for allocating funds.
  - Idaho Airport Aid Program (IAAP), "Methodology for Annual Allocation of Program Funding, Version #2" (revised April 2017): This revised edition included changes to the priority method, expanded allocation method, and a new project selection method.
  - IAAP Implementation Manual (internal publication, 3<sup>rd</sup> Edition, June 2018): This revision included updates to the priority method, a new selection method, a new allocation method, and an introduction describing the entire grant process as a basis for understanding the three methodologies.

#### 11. Promote and encourage in-state commercial air service development.

#### Minimal

✤ ITD Board was briefed on general airline economics and strategic planning including that Part 135 nonscheduled charter operators were recruiting to fill routes left by departing airlines.



#### 12. Coordinate and maintain Continuous Airport System Planning activities.

#### Adequate

→ ITD Aeronautics is updating the system plan within less than 10 years.

#### 13. Work to financially support the goals of the IASP.

#### Adequate

- ✤ ITD Aeronautics has increased IAAP funding through diligent work to maintain and track funds and recover unspent amounts. This has allowed Idaho to create reserves to add to future projects.
- ✤ ITD Aeronautics proposed and supported numerous changes to Idaho Code financing for Idaho airports. These included:
  - Revised Laws Increase Revenue from Aircraft Registration
  - Revised Laws Eliminated Pilot Registration
  - Revised Laws Exempt Parts Tax for Repairs

*Chapter 9: Policy Recommendations and Implementation Plan* of the 2020 IASP Update reexamines these items, the progress ITD Aeronautics has made, and provides additional guidance on how to continue to make progress toward achieving the goals of the 2020 IASP Update.

### **Next Steps**

In subsequent chapters, the PMs and PIs are calculated at the statewide level based on inventory data and interviews from individual airports. This results in a statewide airport report card that reflects overall system performance and identifies adequacies, gaps, and surpluses in Idaho's airport system. The results of these analyses provide the basis for the development of system recommendations and the ultimate implementation plan near the end of the 2020 IASP Update process. Additionally, *Chapter 9* builds upon the recommendations of the 2010 IASP and the progress made in implementing those recommendations to provide additional guidance on future ITD Aeronautics efforts.



# CHAPTER TWO: INVENTORY OF SYSTEM CONDITIONS

### Introduction

The purpose of the inventory effort is to identify current facilities and conditions at Idaho system airports. This allows for the establishment of baseline data to be analyzed in evaluating the overall airport system. The Inventory of System Conditions presents the results of an in-depth data collection effort utilizing existing resources from the Federal Aviation Administration (FAA) and Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics) in addition to new primary data that was obtained through individual airport surveys and airport staff interviews.

The inventory results are presented as follows:

- ✤ Existing System
- ✤ Inventory Process
- ✤ Activity Indicators
- → Existing Airside Facilities
- ✤ Existing Landside Facilities
- ✤ Services and Support
- ✤ Airport Planning
- ✤ Zoning
- → State, Regional, and Local Issues and Trends
- ✤ Inventory Summary

### **Existing System**

#### **Idaho Airports**

The Airport Safety Data Program is the FAA's mechanism for obtaining the information on landing facilities, both privately owned and publicly owned that is reported using Form 5010, Airport Master Record. The data from Form 5010 is maintained within the FAA's Aeronautical Information Service and included in the National Flight Data Center (NFDC). According to the NFDC Facilities Database, Idaho currently has 295 Aeronautical Facilities<sup>1</sup> (airports, airstrips, airparks, helicopter pads, seaplane bases, etc.). Of this number, 124 are listed as public-use, while 171 are identified as private-use. Of the 124 public-use, 121 were identified as owned by public airport sponsors.

#### **IASP Airports**

The IASP is limited to publicly owned, public-use airports. Of the 121 publicly owned and public-use facilities in the state, 75 airports have been selected for incorporation into the 2020 IASP Update based on an array of variables including eligibility for federal funding, ownership, and levels of airport activity. Of the 75 airports analyzed in the 2020 IASP Update, 37 are included in the National Plan of Integrated Airport Systems (NPIAS) 2019-2023, which leaves the remaining 38 as non-NPIAS airports, a near 50/50 split. It should be noted that Craigmont Municipal Airport (S89) was recently removed from the NPIAS (01/18/2019) but continues to serve as a public-use airport within the system. This status change is reflected in the statistics listed above and will

<sup>&</sup>lt;sup>1</sup>Source: NFDC Airport Facilities Database. Data Pulled February 8, 2019: <u>https://www.faa.gov/airports/airport\_safety/airportdata\_5010/menu/</u>



continue to be reflected in the remainder of the 2020 IASP, even though the 2019-2023 NPIAS report lists Craigmont Municipal as a NPIAS airport.

Of the 75 IASP airports, the system is comprised of 7 commercial service airports and 68 general aviation (GA) airports. Of note, the 2010 IASP (started in 2008) included 75 public-use airports as well. **Table 2-1** lists the 75 airports included in the IASP, separating the commercial service from the GA with identification of the NPIAS status for each airport. **Figure 2-1** depicts the locations of the 75 airports throughout the state, reflecting the information contained in the table.

As noted, the FAA's database of airports included 295 facilities as of February 2019, of which only 75 are included in the IASP. Another system that is identified in Idaho is a series of facilities referred to as the Idaho Airstrip Network (IAN). According to their website, "the Idaho Airstrip Network is a group of airstrip owners including the U.S. Forest Service, Bureau of Land Management (BLM), Idaho Fish and Game, the ITD Aeronautics and a few private owners, along with several nonprofit aviation groups including the Idaho Aviation Association (IAA), Idaho Aviation Foundation and the Recreational Aviation Foundation (RAF), and other entities that have an interest in aviation such as Idaho Outfitters and Guides and the Idaho Department of Commerce." The IAA is currently updating the facilities included in the IAN, but the most current list provided by ITD Aeronautics lists a total of 73 facilities throughout the state.

### **Inventory Process**

The inventory process started with identification of the airports considered for participation in the plan's analysis. As indicated above, 75 airports were contacted for participation in the 2020 IASP Update, all of which are publicly owned, public-use airports.

To initiate the data collection efforts for the 75 airports, an Airport Inventory and Data Survey Form (also referred to as the inventory form) was prepared identifying all the essential data points required to evaluate the system. These data points included those necessary to measure the system's performance as documented subsequently in the study. The inventory forms were pre-populated primarily with data available from the FAA to aid airports in the completion of the forms. Letters were distributed to all airport representatives to both identify the purpose of the study and to provide a hard copy of the pre-populated inventory form. During August and September 2017, airport site visits were conducted at 25 of the 75 airports analyzed in this study. These 25 airports are identified in **Table 2-2**. These airports were selected based on discussion with ITD Aeronautics and in consideration of obtaining information that may be more difficult to obtain without a site visit. All of the visited airports are GA facilities, with no visits made to commercial service airports.

During the on-site visit to these airports, the inventory forms were thoroughly reviewed with the airport representatives for accuracy and additional input. For the remaining 50 airports, phone calls were made to review the forms and data to obtain a complete data set. The data collection from these 50 airports took place from August through December 2018, with eight airports that did not complete the inventory form despite numerous attempts to contact and request their participation. In tables that follow, "N/P" for "not provided" is used to reflect when data was not obtained from airports.



TABLE 2-	1: IASP /	AIRPORTS
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ASSOCIATED CITY	Airport	FAA ID	NPIAS Status
	COMMERCIAL SERVICE		
Boise	Boise Air Terminal/Gowen Field	BOI	NPIAS
Hailey	Friedman Memorial	SUN	NPIAS
Idaho Falls	Idaho Falls Regional	IDA	NPIAS
Lewiston	Lewiston - Nez Perce County	LWS	NPIAS
Pocatello	Pocatello Regional	PIH	NPIAS
Pullman	Pullman-Moscow Regional	PUW	NPIAS
Twin Falls	Joslin Field-Magic Valley Regional	TWF	NPIAS
	GA NPIAS	1	
Aberdeen	Aberdeen Municipal	U36	NPIAS
Arco	Arco-Butte County	AOC	NPIAS
Blackfoot	McCarley Field	U02	NPIAS
Bonners Ferry	Boundary County	65S	NPIAS
Buhl	Buhl Municipal	U03	NPIAS
Burley	Burley Municipal	BYI	NPIAS
Caldwell	Caldwell Industrial	EUL	NPIAS
Cascade	Cascade	U70	NPIAS
Challis	Challis	LLJ	NPIAS
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	NPIAS
Council	Council Municipal	U82	NPIAS
Driggs	Driggs-Reed Memorial	DIJ	NPIAS
Gooding	Gooding Municipal	GNG	NPIAS
Grangeville	Idaho County	GIC	NPIAS
Homedale	Homedale Municipal	S66	NPIAS
Jerome	Jerome County	JER	NPIAS
Kamiah	Kamiah Municipal	S73	NPIAS
Kellogg	Shoshone County	S83	NPIAS
McCall	McCall Municipal	MYL	NPIAS
Mountain Home	Mountain Home Municipal	U76	NPIAS
Nampa	Nampa Municipal	MAN	NPIAS
Orofino	Orofino Municipal	S68	NPIAS
Paris	Bear Lake County	1U7	NPIAS
Preston	Preston	U10	NPIAS
Priest River	Priest River Municipal	1S6	NPIAS
Rexburg	Rexburg-Madison County	RXE	NPIAS
Salmon	Lemhi County	SMN	NPIAS
Sandpoint	Sandpoint	SZT	NPIAS
St. Maries	St Maries Municipal	S72	NPIAS
Weiser	Weiser Municipal	S87	NPIAS

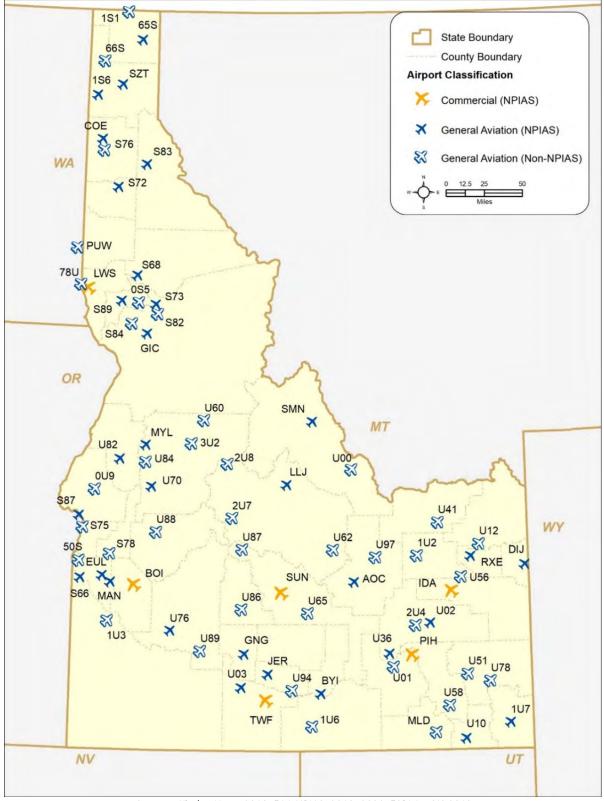


ASSOCIATED CITY	Airport	FAA ID	NPIAS Status
GA NON-NPIAS			
American Falls	American Falls	U01	Non-NPIAS
Bancroft	Bancroft Municipal	U51	Non-NPIAS
Big Creek	Big Creek	U60	Non-NPIAS
Carey	Carey	U65	Non-NPIAS
Coeur D'Alene	Brooks SPB	S76	Non-NPIAS
Coolin	Cavanaugh Bay	66S	Non-NPIAS
Cottonwood	Cottonwood Municipal	S84	Non-NPIAS
Craigmont	Craigmont Municipal	S89	Non-NPIAS
Donnelly	Donald D. Coski Memorial	U84	Non-NPIAS
Downey	Downey/Hyde Memorial	U58	Non-NPIAS
Dubois	Dubois Municipal	U41	Non-NPIAS
Emmett	Emmett Municipal	S78	Non-NPIAS
Fairfield	Camas County	U86	Non-NPIAS
Galena	Smiley Creek	U87	Non-NPIAS
Garden Valley	Garden Valley	U88	Non-NPIAS
Glenns Ferry	Glenns Ferry Municipal	U89	Non-NPIAS
Hazelton	Hazelton Municipal	U94	Non-NPIAS
Howe	Howe	U97	Non-NPIAS
Kooskia	Kooskia Municipal	S82	Non-NPIAS
Leadore	Leadore	U00	Non-NPIAS
Lewiston	Snake River SPB	78U	Non-NPIAS
Mackay	Mackay	U62	Non-NPIAS
Malad City	Malad City	MLD	Non-NPIAS
Midvale	Lee Williams Memorial	0U9	Non-NPIAS
Mud Lake	Mud Lake/West Jefferson County	1U2	Non-NPIAS
Murphy	Murphy	1U3	Non-NPIAS
Nezperce	Nezperce Municipal	0S5	Non-NPIAS
Oakley	Oakley Municipal	1U6	Non-NPIAS
Parma	Parma	50S	Non-NPIAS
Payette	Payette Municipal	S75	Non-NPIAS
Porthill	Eckhart International	1S1	Non-NPIAS
Rigby	Rigby	U56	Non-NPIAS
Rockford	Rockford Municipal	2U4	Non-NPIAS
Soda Springs	Allen H Tigert	U78	Non-NPIAS
St. Anthony	Stanford Field	U12	Non-NPIAS
Stanley	Stanley	2U7	Non-NPIAS
Stanley	Thomas Creek	2U8	Non-NPIAS
Yellow Pine	Johnson Creek	3U2	Non-NPIAS

Sources: Kimley-Horn, 2019; FAA NPIAS, 2019–2023



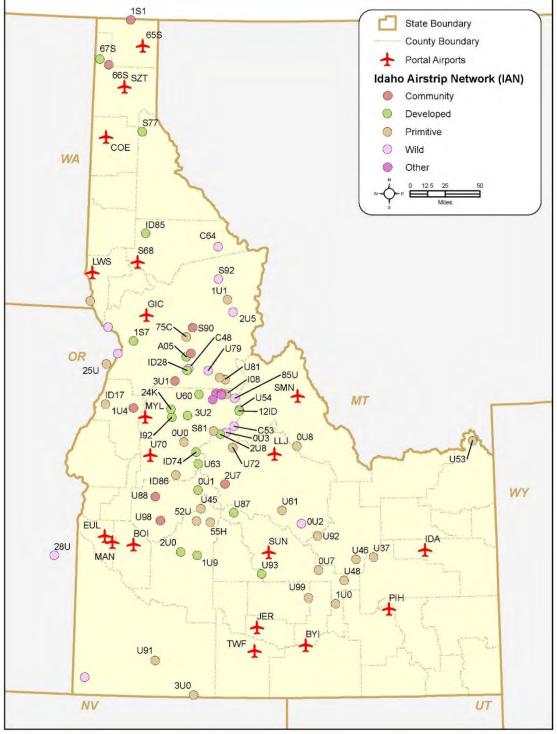
#### FIGURE 2-1: 2020 IASP UPDATE AIRPORTS



Sources: Kimley-Horn, 2019; FAA NPIAS, 2019–2023; ESRI ArcGIS 2019



### FIGURE 2-2: IDAHO IAN SYSTEM<sup>2</sup>



Source: ITD Aeronautics, 2019

<sup>&</sup>lt;sup>2</sup> Ten of the IAN Airstrips depicted are not FAA-recognized facilities. As such they have not been assigned an FAA Location ID and no label is provided for them. These airstrips include Dixie Town, Dewey Moore, Mile High, Simonds, Vines, Rogersburg, Root Ranch, 45 Ranch, Big Bar, and Dug Bar.



	TABLE 2-2: ON-SITE VISIT AIRPORTS	
ASSOCIATED CITY	Airport	FAA ID
	GA NPIAS	
Bonners Ferry	Boundary County	65S
Buhl	Buhl Municipal	U03
Caldwell	Caldwell Industrial	EUL
Cascade	Cascade	U70
Challis	Challis	LU
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE
Driggs	Driggs-Reed Memorial	DIJ
Gooding	Gooding Municipal	GNG
Grangeville	Idaho County	GIC
Homedale	Homedale Municipal	S66
Jerome	Jerome County	JER
McCall	McCall Municipal	MYL
Mountain Home	Mountain Home Municipal	U76
Nampa	Nampa Municipal	MAN
Orofino	Orofino Municipal	S68
Paris	Bear Lake County	1U7
Priest River	Priest River Municipal	1S6
Sandpoint	Sandpoint	SZT
Weiser	Weiser Municipal	S87
	GA NON-NPIAS	
American Falls	American Falls	U01
Mud Lake	Mud Lake/West Jefferson County	1U2
Nezperce	Nezperce Municipal	0\$5
Parma	Parma	50S
Rigby	Rigby	U56
Yellow Pine	Johnson Creek	3U2
	Source: Kimley-Horn, 2019	

#### TABLE 2.2. ON CITE VICIT AIRPORTS

Source: Kimley-Horn, 2019

As supplements to the inventory form and on-site visits, the following sources were gathered directly from the airport and/or FAA and examined for a more in-depth analysis of the airports and the system:

- → FAA Terminal Area Forecasts (TAF)
- → FAA Form 5010, Airport Master Record
- → Airport master plans (MPs)
- → Airport layout plans (ALPs)
- → FAA U.S. Chart Supplements
- → ITD Aeronautics Data

The following data were collected (as applicable) from each airport via the Airport Inventory and Data Survey Form, on-site visits (of the 25 identified airports), additional correspondence with airport representatives, and other available sources:



- → General airport information (e.g., sponsor name, contact information, airport website)
- → Airside facilities (e.g., runways, taxiways)
- → Aviation services (e.g., fuel, transient hangars, maintenance)
- → Visual/electronic navigational aids
- → Weather/communication facilities
- → Landside facilities (e.g., terminal building, restrooms, telecommunications, internet, aircraft storage, utilities, parking, fencing, ground transportation)
- + Aviation services (e.g., fixed-base operator [FBO], fuel, maintenance, flight instruction)
- Airport activity (e.g., airport operations, operational mix, passenger enplanements, based aircraft, critical aircraft)
- → Type of operations (e.g., recreational, corporate/business, air cargo, law enforcement/U.S. Customs and Border Patrol [US CBP], military, flight training, forest firefighting, air shows, air ambulance)
- Existing airport plans and studies (e.g., airport MPs, ALPs, noise contours, emergency plans, economic impact studies)
- Environment/land use compatibility impacts
- ✤ Development constraints
- ✤ Land use/zoning surrounding or affecting the airport
- Community/municipality relations
- → Close-in obstructions and runway protection zone (RPZ) control

All collected data is used in the subsequent evaluation of the Idaho airport system. Key data elements are summarized below.

# **Activity Indicators**

One of the best ways to determine the level of activity at an airport is evaluate the number of based aircraft, annual operations, and number of enplanements at the facility.

A based aircraft is generally defined as an aircraft that is stored at an airport for the majority of the year. An accurate based aircraft recording can provide insight to the adequacy of aircraft storage and facility capacity at an airport. It is important to note that the number of based aircraft fluctuates as aircraft owners choose to move their aircraft, buy or sell, and other factors. The number of based aircraft reported is reflective of a single point in time.

Like based aircraft, accurate annual aircraft operations data provide a detailed view of an airport's capacity and level of activity and assist airport planners in determining future facility needs. An aircraft operation represents either a take-off or landing conducted by an aircraft. For example, a touch-and-go, which includes a take-off and landing, counts as two operations. Accurate annual aircraft operations data are only available from airports that have an air traffic control tower. Non-towered airports typically estimate the number of operations using different methods that do not always reflect the actual total number of annual operations that occurred.

Lastly, enplanements represent the number of paying passengers boarding an aircraft that departs and travels to a different airport. Some airports reference passengers, which reflects both enplaning, or those boarding, as well as deplaning, people who are leaving the aircraft (generally passenger figures are close to double that of enplanements).

It should be mentioned that all data presented in the subsections below only includes data reported by each airport during the inventory data collection process. The Forecasts chapter of this report compares collected inventory data with other available sources to determine which data best represents each airport for use in projecting future demand.



# **Based Aircraft**

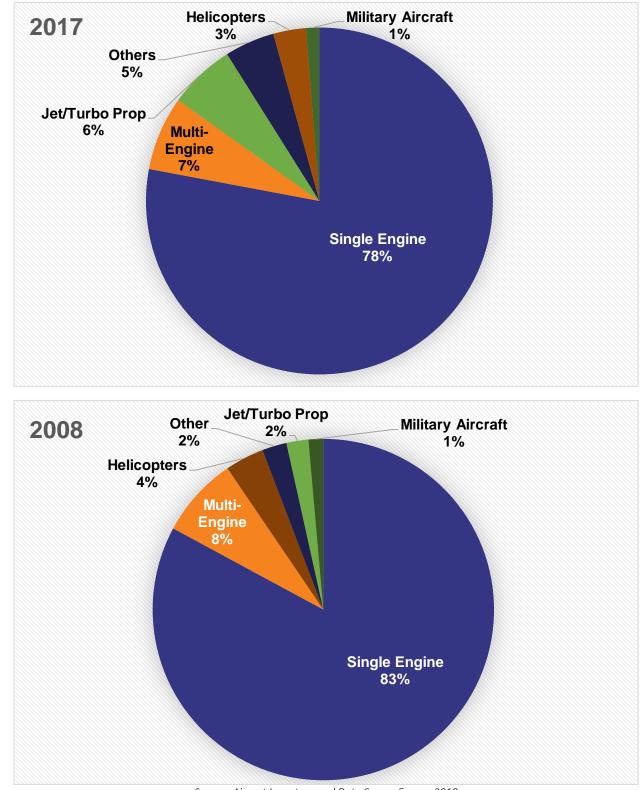
The total number of based aircraft, by type, were identified through the inventory effort for each system airport. Through this effort a total of 3,379 based aircraft of different types were identified at the state's 75 system airports. The 2010 Study reflected 3,225 based aircraft within the state system for 2008. This represents an increase of 154 reported aircraft between 2008 and 2018. **Figure 2-3** summarizes the based aircraft in the IASP system of airports by type for both 2017 and 2008 (as presented in the 2010 IASP). Since the 2010 IASP, the percentage of single-engine aircraft has decreased from 83 percent to 78 percent, while the combined percentage of multi engine, jet/turbo prop, and helicopters has increased from 14 percent to 16 percent. This trend is consistent with national trends per the *FAA Aerospace Forecast Fiscal Years 2018-2038*.

**Table 2-3** details the number of based aircraft, by type, that were identified by individual airports on their inventory forms. Of the 75 airports, based aircraft data was not provided for the following four airports and data was pulled from FAA 5010 forms:

- ✤ Bancroft Municipal
- ✤ Cavanaugh Bay
- ✤ Glenns Ferry Municipal
- ✤ Lewiston-Nez Perce County

As shown, Caldwell Municipal reported the highest number of based aircraft for 2017 at 457, while 34 airports recorded fewer than 10 based aircraft, with several reporting no based aircraft.





### FIGURE 2-3: COMPARISON OF STATEWIDE BASED AIRCRAFT BY TYPE, 2017 AND 2008

Source: Airport Inventory and Data Survey Forms, 2019



### TABLE 2-3: STATEWIDE BASED AIRCRAFT BY TYPE

ASSOCIATED		FAA			)17 Based Aircraft		/ Туре		Total Based
CITY	Airport	ID	Single	Multi	Jet/Turbo Prop	Helicopters	Others	Military	Aircraft
			сомм	ERCIAL S	ERVICE				
Boise	Boise Air Terminal/Gowen Field	BOI	140	29	37	18		42	266
Hailey	Friedman Memorial	SUN	92	17	47	1			157
Idaho Falls	Idaho Falls Regional	IDA	128	29	6	5	3		171
Lewiston	Lewiston - Nez Perce County	LWS	117	12	2	14			145
Pocatello	Pocatello Regional	PIH	35	7	5	1			48
Pullman	Pullman-Moscow Regional	PUW	55	6	4				65
Twin Falls	Joslin Field-Magic Valley Regional	TWF	70	6	38	8	1		123
			(	GA NPIAS	5				
Aberdeen	Aberdeen Municipal	U36	12	1					13
Arco	Arco-Butte County	AOC	9						9
Blackfoot	McCarley Field	U02	57	2					59
Bonners Ferry	Boundary County	65S	61	3	5	1	3		73
Buhl	Buhl Municipal	U03	42						42
Burley	Burley Municipal	BYI	41	4	6				51
Caldwell	Caldwell Industrial	EUL	398	26	4	26	3		457
Cascade	Cascade	U70	25	1					26
Challis	Challis	LLJ	18	3					21
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	222	15	8	5	2		252
Council	Council Municipal	U82	11						11
Driggs	Driggs-Reed Memorial	DIJ	75	15	12	1	103		206
Gooding	Gooding Municipal	GNG	70	3	4				77
Grangeville	Idaho County	GIC	17	1					18
Homedale	Homedale Municipal	S66	10	1		2	2		15
Jerome	Jerome County	JER	41	2	2				45
Kamiah	Kamiah Municipal	S73	11						11

# 

				AIRPONT ECONOR	IC IMPACT ANALYSIS OPD
20	017 Based Aircraft		Total Based		
lti	Jet/Turbo Prop	Helicopters	Others	Military	Aircraft
1					10

CITY	Airport	ID	Single	Multi	Jet/Turbo Prop	Helicopters	Others	Military	Aircraft
Kellogg	Shoshone County	S83	9	1					10
McCall	McCall Municipal	MYL	80	8	1	2			91
Mountain	Mountain Home Municipal	U76	22	3		2			27
Home									
Nampa	Nampa Municipal	MAN	260	10	4	8	30		312
Orofino	Orofino Municipal	S68	12						12
Paris	Bear Lake County	1U7	6						6
Preston	Preston	U10	16				1		17
Priest River	Priest River Municipal	1S6	13				2		15
Rexburg	Rexburg-Madison County	RXE	97	5					102
Salmon	Lemhi County	SMN	31	8		1			40
Sandpoint	Sandpoint	SZT	59	10		2			71
St. Maries	St Maries Municipal	S72	23	3					26
Weiser	Weiser Municipal	S87	35	1			2		38
			GA	NON-NP	IAS				
American Falls	American Falls	U01	32	1		3			36
Bancroft	Bancroft Municipal	U51							0
Big Creek	Big Creek	U60							0
Carey	Carey	U65	7						7
Coeur D'Alene	Brooks SPB	S76	2						2
Coolin	Cavanaugh Bay	66S							0
Cottonwood	Cottonwood Municipal	S84	3		1				4
Craigmont	Craigmont Municipal	S89	2						2
Donnelly	Donald D. Coski Memorial	U84							0
Downey	Downey/Hyde Memorial	U58	2						2
Dubois	Dubois Municipal	U41	1						1
Emmett	Emmett Municipal	S78	21						21
Fairfield	Camas County	U86	4						4

FAA

ASSOCIATED

# JIDAHO AIRPORT 🍓 😂 SYSTEM PLAN UPDATE A AIR ORT ECONOMIC IMPACT ANALYSIS

ASSOCIATED		FAA		20	017 Based Aircraft	as Reported by	/ Туре		Total Based
CITY	Airport	ID	Single	Multi	Jet/Turbo Prop	Helicopters	Others	Military	Aircraft
Galena	Smiley Creek	U87							0
Garden Valley	Garden Valley	U88	5						5
Glenns Ferry	Glenns Ferry Municipal	U89	5						5
Hazelton	Hazelton Municipal	U94	4		4				8
Howe	Howe	U97	3						3
Kooskia	Kooskia Municipal	S82	4						4
Leadore	Leadore	U00	1						1
Lewiston	Snake River SPB	78U							0
Mackay	Mackay	U62	2						2
Malad City	Malad City	MLD	8			1			9
Midvale	Lee Williams Memorial	0U9	2						2
Mud Lake	Mud Lake/West Jefferson County	1U2	5		5	1			11
Murphy	Murphy	1U3							0
Nezperce	Nezperce Municipal	0S5	3						3
Oakley	Oakley Municipal	1U6							0
Parma	Parma	50S	3						3
Payette	Payette Municipal	S75	22						22
Porthill	Eckhart International	1S1							0
Rigby	Rigby	U56	36	1	14				51
Rockford	Rockford Municipal	2U4	3						3
Soda Springs	Allen H Tigert	U78	6						6
St. Anthony	Stanford Field	U12	24			1	5		30
Stanley	Stanley	2U7	4						4
Stanley	Thomas Creek	2U8							0
Yellow Pine	Johnson Creek	3U2		0	0	0	0	0	0

> 234 Source: Airport Inventory and Data Survey Forms, 2019

Totals:

2,634

103

157

42

3,379

209



# **Annual Aircraft Operations**

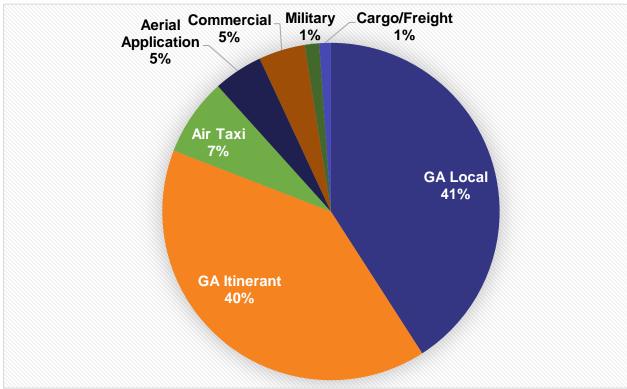
Operations measure the activity of an airport and are a factor in determining the health of the system. An operation is defined as a single landing or a single departure. Aircraft operations are typically recorded on an annual basis into several categories by the FAA:

- → Air carrier: Company transporting people or goods by an aircraft with a seating capacity of 60 or more or a maximum payload of 18,000 pounds
- → Air taxi/commuter: On-demand service that makes short flights on smaller commercial planes with less than 60 seats and maximum of 18,000 pounds of payload
- → GA: Civil operations other than scheduled air services
- **Hilitary:** Aircraft operations performed by the military and armed services

Airport inventory forms requested operations counts for commercial airlines, air cargo/freight, air taxi, military, aerial application, local GA, and itinerant GA. It should be noted that the operations categories requested on the inventory form does not reflect an exact match with the FAA classifications listed above, as the study warrants obtaining information on the level of certain types of operational activity such as air cargo/freight and aerial application.

The airports reported a total of 1,164,121 annual operations for 2017. Of note, towered airports are able to provide verified operations data while airports without a tower report estimated operations based on observed daily averages. **Figure 2-4** summarizes the estimates of Idaho system airports' annual operations by type for 2017 as provided by the airports.

# FIGURE 2-4: STATEWIDE 2017 OPERATIONS BY TYPE



Sources: Airport Inventory and Data Survey Forms, 2019; FAA Form 5010



**Table 2-4** identifies the airport-reported estimate of total annual operations at each airport in the state's system as well as operations by aircraft type. Of interest, Caldwell Industrial far outpaces any other GA airport in reported operations. In fact, Caldwell Industrial reported more than 21,000 operations over the number of operations reported by Boise Air Terminal/Gowen Field<sup>3</sup>. Of the 75 airports, 48 reported having fewer than 10,000 operations. Similarly, of those 48 airports, 36 reported fewer than 5,000 operations. Snake SPB reported the fewest number of operations with just 10 in 2017.

<sup>&</sup>lt;sup>3</sup> Caldwell's reported operations are local estimates while Boise Air Terminal/Gowen Field operations are documented by the on-site air traffic control tower (ATCT).



# TABLE 2-4: STATEWIDE ANNUAL AIRCRAFT OPERATIONS BY TYPE, 2017

				2	017 Operat	ions as Repo	orted by Type			
ASSOCIATED		FAA		Cargo/			Aerial	GA	GA	
CITY	Airport	ID	Commercial	Freight	Air Taxi	Military	Application	Local	Itinerant	Total
				COMMER	CIAL SERVICE					
Boise	Boise Air Terminal/ Gowen Field	BOI	42,756	4,298	9,068	10,735		18,975	39,085	124,917
Hailey	Friedman Memorial	SUN	3,436	1,400	6,221	140		6,369	9,126	26,692
Idaho Falls	Idaho Falls Regional	IDA	1,152		10,140	267		8,535	13,058	33,152
Lewiston	Lewiston - Nez Perce County	LWS	1,181	N/P <sup>4</sup>	3,743	130		8,832	14,254	28,140
Pocatello	Pocatello Regional	PIH	324	1,010	5,662	246		5,218	9,140	21,600
Pullman	Pullman-Moscow Regional	PUW	2,284	4,000		50	40	24,000	30,000	60,374
Twin Falls	Joslin Field-Magic Valley Regional	TWF	269	1,850	5,089	1,090	1,700	15,673	8,000	33,671
				GA	NPIAS					
Aberdeen	Aberdeen Municipal	U36					2,000	1,065	4,600	7,665
Arco	Arco-Butte County	AOC		25	100	50		1,025	6,000	7,200
Blackfoot	McCarley Field	U02			1,000			25,000	4,500	30,500
Bonners Ferry	Boundary County	65S			600	125	300	9,500	12,500	23,025
Buhl	Buhl Municipal	U03					10,000	3,000	3,000	16,000
Burley	Municipal	BYI		1,095		10		4,231	22,164	27,500
Caldwell	Caldwell Industrial	EUL			1,000	325		110,000	35,000	146,325
Cascade	Cascade	U70			6,000	25	50	2,000	1,500	9,575
Challis	Challis	LLJ			5,585	165		2,135	8,541	16,426

<sup>&</sup>lt;sup>4</sup> Cargo operations were not reported by Lewiston – Nez Perce County Airport. Alternate data suggests that cargo activity is present, and operations may be counted among the commercial or GA operations.



				2	2017 Operat	ions as Repo	orted by Type			
ASSOCIATED		FAA		Cargo/			Aerial	GA	GA	
CITY	Airport	ID	Commercial	Freight	Air Taxi	Military	Application	Local	ltinerant	Total
Coeur D'Alene	Coeur D'Alene -	COE		12	600	14	500	40,000	40,000	81,126
	Pappy Boyington Field									
Council	Council Municipal	U82						1,300	2,700	4,000
Driggs	Driggs-Reed Memorial	DIJ			1,241			6,660	2,116	10,017
Gooding	Gooding Municipal	GNG						23,000	3,800	26,800
Grangeville	Idaho County	GIC			3,000		100	4,300	10,100	17,500
Homedale	Homedale Municipal	S66					50	1,400	5,600	7,050
Jerome	Jerome County	JER		50	500	50	18,000	1,750	3,000	23,350
Kamiah	Kamiah Municipal	S73						2,000	1,000	3,000
Kellogg	Shoshone County	S83			767	76		1,226	5,596	7,665
McCall	McCall Municipal	MYL			7,000	100	28	11,500	13,372	32,000
Mountain Home	Mountain Home Municipal	U76		12	12	1,500	2,000	10,000	6,000	19,524
Nampa	Nampa Municipal	MAN		100	1,500	100		62,370	26,728	90,798
Orofino	Orofino Municipal	S68						3,000	2,000	5,000
Paris	Bear Lake County	1U7					60	381	2,159	2,600
Preston	Preston	U10				40		2,000	5,000	7,040
Priest River	Priest River Municipal	1S6						1,579	3,205	4,784
Rexburg	Rexburg-Madison County	RXE		520				8,322	6,810	15,652
Salmon	Lemhi County	SMN		600	9,048	200		7,581	7,626	25,055
Sandpoint	Sandpoint	SZT			598			9,876	19,456	29,930
St. Maries	St Maries Municipal	S72						673	1,199	1,872
Weiser	Weiser Municipal	S87				250	2,500	1,000	2,250	6,000



				i	2017 Operat	ions as Repo	orted by Type			
ASSOCIATED		FAA		Cargo/			Aerial	GA	GA	
CITY	Airport	ID	Commercial	Freight	Air Taxi	Military	Application	Local	ltinerant	Total
				GA NO	ON-NPIAS					
American Falls	American Falls	U01				25	300	5,000	7,000	12,325
Bancroft	Bancroft Municipal	U51							1,500	1,500
Big Creek	Big Creek	U60			1,001				3,003	4,004
Carey	Carey	U65						1,500	1,500	3,000
Coeur D'Alene	Brooks SPB	S76			1,193			1,193	526	2,912
Coolin	Cavanaugh Bay	66S							3,484	3,484
Cottonwood	Cottonwood Municipal	S84					1,000	1,000	2,000	4,000
Craigmont	Craigmont Municipal	S89					1,600	100	120	1,820
Donnelly	Donald D. Coski Memorial	U84				25			1,500	1,525
Downey	Downey/Hyde Memorial	U58						550	1,000	1,550
Dubois	Dubois Municipal	U41			400				1,000	1,400
Emmett	Emmett Municipal	S78			240		582	4,775	5,823	11,420
Fairfield	Camas County	U86					12	726	1,490	2,228
Galena	Smiley Creek	U87			408				4,688	5,096
Garden Valley	Garden Valley	U88			51	51		459	1,987	2,548
Glenns Ferry	Glenns Ferry Municipal	U89				20		200	1,540	1,760
Hazelton	Hazelton Municipal	U94					1,800	900	300	3,000
Howe	Howe	U97					600	488	2,996	4,084
Kooskia	Kooskia Municipal	S82						100	450	550
Leadore	Leadore	U00							200	200
Lewiston	Snake River SPB	78U							10	10



				2	2017 Operat	ions as Repo	orted by Type			
ASSOCIATED		FAA		Cargo/			Aerial	GA	GA	
CITY	Airport	ID	Commercial	Freight	Air Taxi	Military	Application	Local	Itinerant	Total
Mackay	Mackay	U62						3	1,902	1,905
Malad City	Malad City	MLD				25		200	4,200	4,425
Midvale	Lee Williams Memorial	0U9						112	36	148
Mud Lake	Mud Lake/West Jefferson County	1U2					3,500	350		3,850
Murphy	Murphy	1U3				20			2,008	2,028
Nezperce	Nezperce Municipal	0S5					1,800	200	500	2,500
Oakley	Oakley Municipal	1U6							1,200	1,200
Parma	Parma	50S						500	3,300	3,800
Payette	Payette Municipal	S75						1,474	3,986	5,460
Porthill	Eckhart International	1S1			104				1,976	2,080
Rigby	Rigby	U56					5,000	5,600	1,400	12,000
Rockford	Rockford Municipal	2U4					1,500	1,500		1,500
Soda Springs	Allen H Tigert	U78						2,309	3,463	5,772
St. Anthony	Stanford Field	U12			100	47		1,564	3,177	4,888
Stanley	Stanley	2U7			1,785			108	811	2,704
Stanley	Thomas Creek	2U8			1,200				1,000	2,200
Yellow Pine	Johnson Creek	3U2			744				4,976	5,720
		Totals:	51,402	14,972	85,700	15,901	55,022	476,387	466,237	1,164,121

Sources: Airport Inventory and Data Survey Forms, 2019; FAA Form 5010



# **Passenger Enplanements**

A passenger enplanement is defined as a revenue-paying passenger who boards an aircraft and departs to travel to a different airport destination. There are different levels of commercial service provided throughout the state from the largest airport, Boise Air Terminal/Gowen Field to smaller airports such as Pocatello Regional and Joslin Field-Magic Valley Regional (Twin Falls). With the exception of Boise Air Terminal/Gowen Field, the FAA's latest NPIAS 2019-2023 identifies all of the other commercial service airports as non-hub airports; each of which is serviced with commercial airline service by regional carriers. Boise Air Terminal/Gowen Field is identified as a small-hub airport and is served by several large commercial airlines.

For calendar year 2017, there were over 2.2 million enplaned passengers at the seven commercial service airports who reported passenger enplanements. Other airports also reported passenger enplanements, however, these airports are not classified by the FAA as commercial service airports and their data is not presented. It should be noted that all airport enplanement data in this chapter, with the exception of Lewiston-Nez Perce County and Pocatello Regional airports, was obtained from the Airport Inventory and Data Survey Forms collected as part of the 2020 IASP. The FAA's TAF data were used for both of these airports. Additional FAA data will be reviewed and documented in the Forecasts chapter.

**Table 2-5** summarizes the airport-reported passenger enplanements (or TAF data as noted) for the commercialservice airports in 2017.

	TABLE 2 5. COMMERCIAL	7.002110		1110, 2017	
ACCOCIATED		<b>F A A</b>	Scheduled		Tatal
ASSOCIATED		FAA	Commercial		Total
CITY	Airport	ID	Airline	Commuter	Enplanements
Boise	Boise Air Terminal/Gowen Field	BOI	1,765,539	8	1,765,547
Hailey	Friedman Memorial	SUN	88,635		88,635
Idaho Falls	Idaho Falls Regional	IDA	147,729		147,729
Lewiston	Lewiston-Nez Perce County	LWS	3,755	72,189	75,944
Pocatello	Pocatello Regional	PIH	333	38,578	38,911
Pullman	Pullman-Moscow Regional	PUW	58,410	150	58,560
Twin Falls	Joslin Field-Magic Valley Regional	TWF	38,000	7,300	45,300
		Totals:	2,102,401	118,225	2,220,626

# TABLE 2-5: COMMERCIAL PASSENGER ENPLANEMENTS, 2017

Sources: Airport Inventory and Data Survey Forms, 2019; FAA TAF, 2017

# **Existing Airside Facilities**

The following sections detail the most significant airside facilities available at airports in the Idaho system.

# Runways

Of the 90 runways in the Idaho airport system, Boise Air Terminal/Gowen Field's Runway 10L/28R, at 10,000 feet in length, represents the longest paved runway in the system. Brooks SPB lists a 15,000-foot long water runway. The shortest runway in the system is Runway 14/32 at the Kooskia Municipal Airport at 1,900 feet. Twenty-six runways measure over 5,000 feet in length (not counting the 15,000-foot seaplane base runways), which is significant because most 5,000-foot long runways are considered to have sufficient length to accommodate many corporate aircraft, although the airport elevation can significantly impact a runway's ability to accommodate larger aircraft such as corporate jets. Eight airports in the system have more than one runway as part of their infrastructure.

The FAA recognizes three types of runway lighting: High, Medium, and Low Intensity Runway Lights, respectively referred to as HIRL, MIRL, and LIRL. Runway lighting is necessary for night-time operations and is present at 76 percent (57) of Idaho's system airports. Of the 90 runways in the Idaho airport system, nine runways have HIRLs, 38 runways have MIRLs, seven runways have LIRLs, and 33 runways were reported as having no runway lights (three of which are seaplane base water runways). Mud Lake/West Jefferson County Airport has non-standard lighting (NSTD) which has been identified as a mix of LIRL and reflectors. Leadore Airport also reported having non-standard runway lighting for their primary runway.

# Taxiways

An efficient taxiway system enhances the operational safety and provides for the orderly flow of aircraft thereby reducing the potential for congestion and/or pilot confusion. The FAA provides taxiway design standards to facilitate overall taxiway development. However, the FAA officially recognizes four types of taxiways:

- ✤ Full-length parallel
- ✤ Partial-parallel
- ✤ Stub
- ✤ Turnaround

Inventory data was collected on the availability of full-length parallel, partial-parallel, connector, and turnaround taxiways. For purposes of this report, all stub and turnaround taxiways were grouped and reported under 'turnaround'. Additionally, connector taxiways as requested and reported with inventory data are those which connect the apron directly to the runway(s).

The Idaho airport system comprises 33 full-length parallel, nine partial-parallel, 15 connector, and six turnaround taxiways. These figures account for airports with multiple taxiways.

**Table 2-6** summarizes all runways in the system (90) in tabular format and provides detailed runway, taxiway, and lighting information.



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				_	TABLE 2-	-6: EXISTING AIRSI	<u>DE FACILITIES</u>		
ASSOCIATED		FAA				Runway	Surface		
CITY	Airport	ID	ARC	Runway	RW L/W			Runway Lighting	Taxiway Type
Boise	Boise Air Terminal/Gowen Field	BOI	C-IV	10L/28R	10000' x 150'	COMMERCIAL SEF Asphalt-GRVD	Good	HIRL	Full Parallel
20130	bolse / in renning, cowen rield	DOI	CIV	10E / 28L	9762' x 150'	Asphalt-GRVD	Good	HIRL	Full Parallel
				9/27	5000' x 90'	Asphalt	Fair	None	None
Hailey	Friedman Memorial	SUN	C-111	13/31	7550' x 100'	Asphalt-GRVD	Good	HIRL	Full Parallel
Idaho Falls	Idaho Falls Regional	IDA	B-III	3/21	9001' x 150'	Asphalt-GRVD	Good	HIRL	Full Parallel
		IDA	Dill	17/35	4051' x 75'	Asphalt	Good	MIRL	Full Parallel
Lewiston	Lewiston - Nez Perce County	LWS	C-III	8/26	6511' x 150'	Asphalt-GRVD	Excellent	HIRL	Full Parallel
Lewiston		LVVJ	C-III	12/30	5002' x 100'	Asphalt-GRVD	Fair	MIRL	Full Parallel
Pocatello	Pocatello Regional	PIH	D-IV	3/21	9060' x 150'	Asphalt-PFC	Good	HIRL	Full Parallel
FOCALEIIO	Pocatello Neglorial	FILL		17/35	7150' x 75'	Asphalt-GRVD	Good	MIRL	Connectors
Dullmon	Dullman Massau Dagional		C III						
Pullman	Pullman-Moscow Regional	PUW	C-111	6/24	6730' x 100'	Asphalt-GRVD	Good	HIRL	Full Parallel
Twin Falls	Joslin Field-Magic Valley Regional	TWF	C-III	8/26	8703' x 150'	Asphalt-PFC	Good	HIRL	Full Parallel
				12 / 30	3224' x 75'	Asphalt	Fair	None	Connectors
Aberdeen	Aberdeen Municipal	U36	B-II	7 / 25	3690' x 50'	GA NPIAS Asphalt	Poor	MIRL	Connectors
Arco	Arco-Butte County	AOC	B-II	6/24	6610' x 75'	Asphalt	Fair	MIRL	Full Parallel
Blackfoot	McCarley Field	U02	B-I	1/19	4311' x 75'	Asphalt	Good	MIRL	Full Parallel
Bonners Ferry	Boundary County	65S	B-II	2/20	4002' x 75'	Asphalt	Good	MIRL	Full Parallel
Buhl	Buhl Municipal	U03	B-I	9/27	3898' x 60'	Asphalt	Good	MIRL	Full Parallel
Burley	Burley Municipal	BYI	B-I	2/20	4092' x 75'	Asphalt	Poor	MIRL	Full Parallel
				6/24	4072' x 75'	Asphalt	Poor	MIRL	Connectors
Caldwell	Caldwell Industrial	EUL	B-II	12 / 30	5500' x 100'	Asphalt	Fair	MIRL	Full Parallel
Cascade	Cascade	U70	B-I	12 / 30	4300' x 60'	Asphalt	Excellent	MIRL	Full Parallel
Challis	Challis	LLJ	B-I	17 / 35	4600' x 60'	Asphalt	Good	MIRL	Partial Parallel
Coeur D'Alene	Coeur D'Alene - Pappy Boyington	COE	B-IV	6/24	7400' x 100'	Asphalt-GRVD	Good	HIRL	Full Parallel
	Field			2 / 20	5400' x 75'	Asphalt-GRVD	Good	MIRL	Full Parallel
Council	Council Municipal	U82	A-I	17 / 35	3600' x 60'	Asphalt	Fair	MIRL	Turnarounds
Driggs	Driggs-Reed Memorial	DIJ	C-II	4/22	7300' x 100'	Asphalt	Excellent	MIRL	Full Parallel
				4 / 22	3000' x 100'	Turf	Excellent	Retroreflective Markers	Full Parallel
Gooding	Gooding Municipal	GNG	B-II	7 / 25	4745' x 75'	Asphalt	Good	MIRL	Full Parallel
Grangeville	Idaho County	GIC	B-II	8/26	5100' x 75'	Asphalt	Excellent	MIRL	Full Parallel
Homedale	Homedale Municipal	S66	A-I	13/31	2901' x 50'	Asphalt	Fair	None	None
Jerome	Jerome County	JER	B-II	9/27	5000' x 75'	Asphalt	Good	MIRL	Full Parallel
Kamiah	Kamiah Municipal	S73	A-I	14/32	3000' x 90'	Turf	Good	LIRL	None
Kellogg	Shoshone County	S83	B-II	7 / 25	5316' x 75'	Asphalt	Excellent	MIRL	Turnarounds
McCall	McCall Municipal	MYL	B-II	16/34	6108' x 75'	Asphalt	Good	MIRL	Full Parallel
Mountain Home	Mountain Home Municipal	U76	B-II	10/28	5000' x 75'	Asphalt	Excellent	MIRL	Full Parallel

# IDAHO AIRPORT

VGSI	REIL (Y/N)	Runway Approach Lights
V4L / V4L	Yes / No	No / No
V4L / V4L	No / No	ALSF2 / MALSR
N/P / N/P	N/P / N/P	N/P / N/P
No / P4L	No / No	No / No
P4L / P4L	Yes / No	No / MALSR
P4L / P4L	No / No	No / No
Yes / Yes	Yes / No	No / MALSR
Yes / Yes	Yes / No	No / No
P4L/P4L	Yes / No	No / MALSR
P4L / P4L	Yes / No	No / No
P2L/P4L	Yes / Yes	No / No
V4L/P4L	Yes / Yes	No / MALSR
No / No	No / No	No / No
No / No	No / No	No / No
P2L/P2L	Yes / Yes	No / No
P2L/P2L	No / No	No / No
P2L/VASI	No / No	No / No
No / No	No / No	No / No
V4L / V2R	No / Yes	No / No
No / V2R	No / No	No / No
P4L / P4L	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
P4R / P4R	No / Yes	MALSR / No
P2L/P2L	Yes / No	No / No
No / No	No / No	No / No
Yes / Yes	No / Yes	No / No
No/No	No/NP	No/No
No / No	No / No	No / No
No / No	Yes / No	No / No
No / No	No / No	No / No
P4L/No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
P/V	Yes / Yes	No / No
P2L / P2L	Yes / Yes	No / No

ASSOCIATED		FAA				Runway	Surface		
СІТҮ	Airport	ID	ARC	Runway	RW L/W	Surface	Condition	Runway Lighting	Taxiway Type
Nampa	Nampa Municipal	MAN	B-II	11/29	5000' x 75'	Asphalt	Good	MIRL	Full Parallel
Orofino	Orofino Municipal	S68	B-I	9/27	2500' x 60'	Asphalt	Good	MIRL	Full Parallel
Paris	Bear Lake County	1U7	B-I	10/28	5728' x 75'	Asphalt	Good	MIRL	Partial Parallel
				16/34	4590' x 60'	Asphalt	Good	None	Connectors
Preston	Preston	U10	A-I	3/21	3457' x 50'	Asphalt	Good	LIRL	Connectors
				16/34	2437' x 30'	Gravel	Good	None	None
Priest River	Priest River Municipal	1S6	A-I	1/19	2950' x 48'	Asphalt	Good	LIRL	Turnarounds
Rexburg	Rexburg-Madison County	RXE	B-I	17 / 35	4204' x 75'	Asphalt	Good	MIRL	Full Parallel
Salmon	Lemhi County	SMN	B-II	17 / 35	5510' x 75'	Asphalt	Good	MIRL	Full Parallel
Sandpoint	Sandpoint	SZT	B-II	2 / 20	5501' x 75'	Asphalt	Fair	MIRL	Full Parallel
St. Maries	St Maries Municipal	S72	A-I	10/28	3354' x 60'	Asphalt	Good	MIRL	Partial Parallel
Weiser	Weiser Municipal	S87	A/B-I	12/30	4000' x 60'	Asphalt	Good	MIRL	Full Parallel
						GA NON-NPIA	S		
American Falls	American Falls	U01	A/B-II	3/21	4900' x 50'	Asphalt	Good	MIRL	Partial Parallel
Bancroft	Bancroft Municipal	U51	N/P	7 / 25	3280' x 30'	Gravel	Fair	None	None
Big Creek	Big Creek	U60	A-I	1/19	3550' x 110'	Turf	Fair	None	None
Carey	Carey	U65	N/P	8/26	2650' x 170'	Turf	Good	None	None
Coeur D'Alene	Brooks SPB	S76	A-I	11W / 29W	15000' x 2000'	Water	Excellent	N/A	N/A
				15W / 33W	15000' x 2000'	Water	Excellent	N/A	N/A
Coolin	Cavanaugh Bay	66S	A-I	15/33	3100' x 120'	Turf	Good	None	None
Cottonwood	Cottonwood Municipal	S84	A-I	7 / 25	3100' x 50'	Asphalt	Good	MIRL	Turnarounds
Craigmont	Craigmont Municipal	S89	A-I	7 / 25	2800' x 50'	Asphalt	Good	MIRL	Connectors
Donnelly	Donald D. Coski Memorial	U84	N/P	18/36	2500' x 125'	Turf	Fair	None	None
Downey	Downey/Hyde Memorial	U58	N/P	17 / 35	3550' x 50'	Asphalt	Good	LIRL	Turnarounds
Dubois	Dubois Municipal	U41	A-I	16/34	4600' x 100'	Gravel/Dirt	Fair	None	None
Emmett	Emmett Municipal	S78	A-I	10/28	3307' x 55'	Asphalt	Good	MIRL	Partial Parallel
Fairfield	Camas County	U86	N/P	8/26	2950' x 40'	Dirt	Good	None	Connectors
Galena	, Smiley Creek	U87	A-I	14 / 32	4900' x 150'	Turf	Excellent	None	None
Garden Valley	Garden Valley	U88	A-I	10/28	3850' x 125'	Turf	Good	None	None
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	8/26	3050' x 60'	Asphalt	Poor	MIRL	Partial Parallel
Hazelton	Hazelton Municipal	U94	B-I	6/24	2800' x 90'	Asphalt	Good	None	Connector
Howe	Howe	U97	A-I	13/31	3800' x 25'	Gravel/Dirt	Good	None	None
Kooskia	Kooskia Municipal	S82	A-I	14 / 32	1900' x 100'	Turf	Good	None	None
Leadore	Leadore	U00	A-I	11/29	3500' x 140'	Asphalt/Turf	Poor	Non-Standard	None
Leadore	Leadore	000	A-1	16/34	2903' x 90'	Turf	Poor	None	None
Lewiston	Snake River SPB	78U	N/P	N/S	3000' x 150'	Water	N/A	N/A	N/A
Mackay	Mackay	U62	A-I	12/30	4389' x 60'	Asphalt	Fair	None	Turnarounds
Malad City	Malad City	MLD	B-I	16/34	4950' x 60'	Asphalt	Poor	MIRL	Partial Parallel
				9/27	5000' x 60'	Grass	Poor	None	Connectors
Midvale	Lee Williams Memorial	0U9	A-I	8/26	2800' x 60'	Asphalt	Fair	None	Connectors

# IDAHO AIRPORT

VGSI	REIL (Y/N)	Runway Approach Lights
P2L / P2L	No / No	No / No
No / No	No / No	No / No
No / P2L	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
V4R / V4L	No / Yes	No / No
P4L/No	Yes / Yes	No / No
P2L/P2L	Yes / Yes	No / No
No / No	Yes / No	No / No
No / P4L	Yes / Yes	No / No
No / TRIL	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
N/A / N/A	N/A / N/A	N/A / N/A
N/A / N/A	N/A / N/A	N/A / N/A
No / No	No / No	No / No
No / VASI	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
No / No	No / No	No / No
N/A / N/A	N/A / N/A	N/A / N/A
No / No	No / No	No / No
No / No	No / No	No / No
N/P / N/P	N/P / N/P	N/P / N/P
No / No	No / No	No / No

ASSOCIATED		FAA		_		Runway	Surface					Runway
CITY	Airport	ID	ARC	Runway	RW L/W	Surface	Condition	Runway Lighting	Taxiway Type	VGSI	REIL (Y/N)	Approach Lights
Mud Lake	Mud Lake/West Jefferson County	1U2	N/P	2 / 20	3300' x 40'	Asphalt	Good	Non-standard LIRL & Reflectors	Connectors	No / TRIL	No / No	No / No
Murphy	Murphy	1U3	A-II	12/30	2500' x 45'	Asphalt	Good	None	None	No / No	No / No	No / No
Nezperce	Nezperce Municipal	0S5	A-I	15 / 33	2400' x 30'	Asphalt	Excellent	None	None	No / No	No / No	No / No
Oakley	Oakley Municipal	1U6	N/P	17 / 35	3795' x 40'	Gravel	Excellent	None	None	No / No	No / No	No / No
Parma	Parma	50S	A-I	12/30	2700' x 50'	Asphalt	Good	LIRL	Partial Parallel	No / No	No / No	No / No
Payette	Payette Municipal	S75	A-I	13/31	3000' x 50'	Asphalt	Good	LIRL	Full Parallel	No / No	No / No	No / No
Porthill	Eckhart International	1S1	A-I	15 / 33	3650' x 175'	Turf	Good	None	None	No / No	No / No	No / No
Rigby	Rigby	U56	A/B-I	01/19	3727' x 50'	Asphalt	Good	MIRL	Partial Parallel	No / No	Y / Y	No / No
Rockford	Rockford Municipal	2U4	A-I	16/34	2800' x 50'	Asphalt	Good	None	Connectors	No / No	No / No	No / No
Soda Springs	Allen H Tigert	U78	A-I	16/34	3500' x 50'	Asphalt	Fair	LIRL	Connectors	TRIL / TRIL	No / No	No / No
				13/31	2500' x 50'	Asphalt	Fair	None	Connectors	No / No	No / No	No / No
St. Anthony	Stanford Field	U12	A-I	04/22	4500' x 50'	Asphalt	Fair	MIRL	Connector/ Turnaround	No / No	No / No	No / No
Stanley	Stanley	2U7	A-I	17 / 35	4300' x 150'	Asphalt/Dirt	Good	None	None	No / No	No / No	No / No
Stanley	Thomas Creek	2U8	A-I	03/21	2100' x 75'	Turf/Dirt	Good	None	None	No / No	No / No	No / No
Yellow Pine	Johnson Creek	3U2	A-I	17 / 35	3400' x 150'	Turf	Excellent	None	None	No / No	No / No	No / No

Source: Airport Inventory and Data Survey Forms, 2019



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# **Pavement Condition Index (PCI)**

Pavement condition is critical to the safe and efficient operation of aircraft at airports, and its upkeep is often one of the most significant capital investments an airport makes. The PCI is an industry standard for measuring and rating airport pavements so that maintenance and repair can be planned and implemented at the appropriate time during its lifecycle. PCI is expressed on a scale from 0 (failed pavement) to 100 (new pavement in perfect condition), as shown in **Figure 2-5**. Pavement with a PCI above the identified Critical PCI value is eligible to receive a preventative maintenance treatment, while a PCI below Critical indicates that the pavement requires a major rehabilitation or reconstruction. Because preventative maintenance is significantly less costly than a major rehabilitation or reconstruction, the FAA strongly encourages preventative maintenance.

PC	CI Rating	ITD PCI Maintenance Standards
PCI Range	Pavement Condition	Critical PCI
86 –100	Good	
71 – 85	Satisfactory	Runway = 65 NPIAS, 50 Non-NPIAS
56 – 70	Fair	Toviwov - 60 NDIAS 45 Non NDIAS
41 – 55	Poor	Taxiway = 60 NPIAS, 45 Non-NPIAS
26 - 40	Very Poor	Apron = 50 NPIAS, 40 Non-NPIAS
11 – 25	Serious	Apron = 50  NF  AS, 40  Non-NF  AS
0 – 10	Failed	

# FIGURE 2-5: PCI INDEXES AND ITD MAINTENANCE STANDARDS

Source: 2017 Statewide NPMS Report

For each airport, **Table 2-7** provides a weighted average PCI rating for each runway, all taxiways at the airport, and all apron space at the airport. When summarizing PCI values, a straight mathematical average is not used as it would skew the PCI values due to the disparity of the section sizes. Instead, an area-weighted calculation is used which eliminates the possibility of skewed values. For airports with multiple paved runways, a weighted average PCI is provided for each runway. Airports with dirt, turf, gravel, or water runways are listed with "N/A". It should be noted that the PCI values presented herein for Friedman Memorial Airport were estimated using PAVER prediction modeling based on the performance curves developed for the 2017 Idaho NPMS, the pavement surface type, and the latest construction dates for each pavement section in the network. The last PCI study the airport received occurred in 2006, and much of the airfield pavement has been reconstructed since that time. Therefore, the PCI values presented for Friedman Memorial Airport were not based on actual inspection distress data, and they should be considered an approximation based on available information.



	TABLE 2-7: PCI BY PAVEMENT AREA RUN				<u></u>
ASSOCIATED		FAA	PCI by Pave		
CITY	Airport	ID	Runway	Taxiway	Apron
	COMMERCIAL S				
Boise	Boise Air Terminal/Gowen Field	BOI	RW 10L-28R – 71 RW 10R-28L – 97 RW 09-27 – N/P	65	56
Hailey	Friedman Memorial	SUN	71	89	80
Idaho Falls	Idaho Falls Regional	IDA	RW 02-20 – 88 RW 17-35 – 78	65	83
Lewiston	Lewiston-Nez Perce County	LWS	RW 08-26 - 93 RW 12-30 – 47	62	81
Pocatello	Pocatello Regional	PIH	RW 03-21 – 99 RW 17-35 – 100	52	65
Pullman	Pullman-Moscow Regional	PUW	82	63	74
Twin Falls	Joslin Field-Magic Valley Regional	TWF	RW 08-26 – 85 RW 12-30 – 70	75	70
	GA NPIAS	;			
Aberdeen	Aberdeen Municipal	U36	43	47	76
Arco	Arco-Butte County	AOC	56	73	50
Blackfoot	McCarley Field	U02	66	64	75
Bonners Ferry	Boundary County	65S	87	90	92
Buhl	Buhl Municipal	U03	77	79	83
Burley	Burley Municipal	BYI	RW 02-20 – 40 RW 06-24 – 45	28	51
Caldwell	Caldwell Industrial	EUL	67	74	90
Cascade	Cascade	U70	87	79	48
Challis	Challis	LLJ	69	70	90
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE	RW 02-20 – 90 RW 06-24 - 86	80	72
Council	Council Municipal	U82	49	60	48
Driggs	Driggs-Reed Memorial	DIJ	89	87	75
Gooding	Gooding Municipal	GNG	82	71	85
Grangeville	Idaho County	GIC	100	86	54
Homedale	Homedale Municipal	S66	80	75	76
Jerome	Jerome County	JER	70	80	69
Kamiah	Kamiah Municipal	S73	N/A	N/A	N/A
Kellogg	Shoshone County	S83	93	92	88
McCall	McCall Municipal	MYL	79	54	63
Mountain Home	Mountain Home Municipal	U76	94	87	66
Nampa	Nampa Municipal	MAN	82	85	68
Orofino	Orofino Municipal	S68	67	80	82

# TABLE 2-7: PCI BY PAVEMENT AREA RUNWAYS, TAXIWAYS, AND APRONS



ASSOCIATED		FAA	PCI by Pave	ment Area	
CITY	Airport	ID	Runway	Taxiway	Apron
Paris	Bear Lake County	1U7	RW 10-28 – 50 RW 16-34 - 62	89	56
Preston	Preston	U10	62	71	58
Priest River	Priest River Municipal	1S6	88	94	71
Rexburg	Rexburg-Madison County	RXE	59	61	73
Salmon	Lemhi County	SMN	89	83	46
Sandpoint	Sandpoint	SZT	53	59	61
St. Maries	St Maries Municipal	S72	84	76	74
Weiser	Weiser Municipal	S87	85	75	78
	GA NON-N	IPIAS			
American Falls	American Falls	U01	58	66	60
Bancroft	Bancroft Municipal	U51	N/A	N/A	N/A
Big Creek	Big Creek	U60	N/A	N/A	N/A
Carey	Carey	U65	N/A	N/A	N/A
Coeur D'Alene	Brooks SPB	S76	N/A	N/A	N/A
Coolin	Cavanaugh Bay	66S	N/A	N/A	N/A
Cottonwood	Cottonwood Municipal	S84	81	78	60
Craigmont	Craigmont Municipal	S89	62	5	20
Donnelly	Donald D. Coski Memorial	U84	N/A	N/A	N/A
Downey	Downey/Hyde Memorial	U58	54	7	N/A
Dubois	Dubois Municipal	U41	N/A	N/A	N/A
Emmett	Emmett Municipal	S78	82	84	84
Fairfield	Camas County	U86	N/A	N/A	N/A
Galena	Smiley Creek	U87	N/A	N/A	N/A
Garden Valley	Garden Valley	U88	N/A	N/A	N/A
Glenns Ferry	Glenns Ferry Municipal	U89	29	33	11
Hazelton	Hazelton Municipal	U94	71	43	39
Howe	Howe	U97	N/A	N/A	N/A
Kooskia	Kooskia Municipal	S82	N/A	N/A	N/A
Leadore	Leadore	U00	N/A	N/A	N/A
Lewiston	Snake River SPB	78U	N/A	N/A	N/A
Mackay	Mackay	U62	44	35	39
Malad City	Malad City	MLD	34	41	37
Midvale	Lee Williams Memorial	0U9	66	78	63
Mud Lake	Mud Lake/West Jefferson County	1U2	57	44	53
Murphy	Murphy	1U3	43	N/A	76
Nezperce	Nezperce Municipal	0S5	72	92	53
Oakley	Oakley Municipal	1U6	N/A	N/A	N/A
Parma	Parma	50S	93	98	95



ASSOCIATED		FAA	PCI by Pave	ment Area	
CITY	Airport	ID	Runway	Taxiway	Apron
Payette	Payette Municipal	S75	94	51	36
Porthill	Eckhart International	1S1	N/A	N/A	N/A
Rigby	Rigby	U56	70	77	83
Rockford	Rockford Municipal	2U4	65	64	89
Soda Springs	Allen H Tigert	U78	RW 13-31 – 59 RW 16-34 - 50	68	26
St. Anthony	Stanford Field	U12	50	50	45
Stanley	Stanley	2U7	N/A	N/A	N/A
Stanley	Thomas Creek	2U8	N/A	N/A	N/A
Yellow Pine	Johnson Creek	3U2	N/A	N/A	N/A

Sources: 2017 Statewide NPMS Report; 2018 PCI Survey Update Boise Airport; 2015 PCI Survey Update Boise Airport; 2015 Idaho Falls Regional Airport Pavement Condition Report; 2013 Pocatello Regional Airport Pavement Management Program; 2016 Pavement Management Program Update Lewiston Nez-Perce County Regional Airport; 2014 Pavement Conditioning Index Report Joslin Field – Magic Valley Regional Airport; Washington Airport Pavement Management Program (accessed March 2019)

# Navigational Aids, Approach Types, and Weather Observation Capabilities Navigational Aids (NAVAIDS)

NAVAIDs were initially developed to provide directional information suitable for navigation from place-to-place. With the proliferation of NAVAIDs and improvements in technology over time, it became possible to use NAVAIDs to obtain information about a fixed physical location known as a fix. A fix is a radio-generated landmark. As a result, pilots can use a series of fixes to follow a specific course to align aircraft with the runway without the need to first circle and obtain visual confirmation of its physical location. A series of fixes can also be used to regulate an aircraft's rate of descent, with pilots descending to a lower altitude when reaching a certain point. The following are different types of NAVAIDs that are used in Idaho:

- Very High Frequency (VHF) Omni-directional Range (VOR): This system radiates VHF radio signals to compatible airborne receivers. This type of approach provides pilots with a direct indication of bearing relative to the facility. The VOR is one of the most widely used non-precision approach types in the NAS. VOR approaches can be designed using facilities both on and off the airport and incorporate the use of a wide variety of equipment such as Distance Measuring Equipment (DME) and Tactical Area Navigation (TACAN). As a result of technology advances, including NextGen, the FAA has begun to decommission lesser-used VORs. The plan is to create a minimum operational network (MON) that will serve as a backup to ensure aircraft can land safely in the event of a widespread satellite navigation outage.<sup>5</sup> Of the 75 airports in the system, 13 reported having VOR approaches serving a total of 16 runways.
- → VOR with Distance Measuring Equipment (VOR/DME): A VOR radial with a DME allows a one-station position fix. The use of DME in confluence with VOR provides an accurate determination of position without timing to greatly increase situational awareness throughout the approach. Of the 13 airports reporting VOR approaches, six also reported their VOR uses DME serving a total of 7 runways.
- → TACAN: TACAN is the military equivalent of the VOR/DME system and provides both distance and direction guidance. The system includes a DME distance feature and a separate TACAN azimuth feature that provides data similar to a VOR. A co-located VOR and TACAN beacon is called a VORTAC. Boise Air

<sup>&</sup>lt;sup>5</sup> Aircraft Owners and Pilots Association



Terminal/Gowen Field and Friedman Memorial Airport are the only two airports in the system with a TACAN.

Non-Directional Beacon (NDB): An NDB is a radio beacon that aids the pilot of an aircraft with direction-finding equipment. It can be part of an instrument landing system (ILS). NDBs are most commonly used as compass locators for the outer marker of an ILS. NDBs may designate the starting area for an ILS approach or a path to follow for a standard terminal arrival procedure (STAR). Similar to the VOR approach, an NDB approach can be designed using facilities both on and off the airport, with or without a Final Approach Fix (FAF), and with or without DME availability. While it was once common for an instrument student to learn to fly an NDB approach, NDB approaches are becoming obsolete with the increasing use of Global Positioning Systems (GPS). The FAA plans to gradually phase-out NDB facilities. Currently, Freidman Memorial Airport is the only airport in the system with an NDB approach (RW 21).

# **Approach Types**

The series of procedures dictating route, direction, and rate of descent is known as an approach. The precision of the course guidance provided by NAVAIDS has improved to such a degree that it is possible to execute an approach within a few hundred feet of the ground. There are four types of approaches including visual, non-precisions, near-precision, and precision.

# **Visual Approach**

A visual approach is conducted under Visual Meteorological Conditions (VMC), which are defined as a cloud ceiling greater than 1,000 feet above ground level (AGL) and visibility conditions equal to or greater than three statute miles. Under VMC conditions, pilots approach an airport using only visual standards or cues. There are 50 airports in the Idaho system that have only visual approaches to land. This represents 67 percent of system airports.

# Instrument Approach Procedures (IAPs) and Approach Lighting Systems

IAPs are a series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to landing or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority. The three types of IAPs are described in the following sections.

# Precision Approaches

Precision instrument approaches provide both lateral and vertical guidance and have traditionally been supported by multiple ground based NAVAIDs collectively called an ILS. An ILS includes a Localizer (providing lateral guidance), a Glideslope (providing vertical guidance), and visual information providing close-in visual guidance (such as approach lights, touchdown and centerline lights, and runway lights). There are six Idaho system airports that use precision approaches as their primary approach procedure. This represents 8 percent of system airports. Of note, Coeur D'Alene – Pappy Boyington Field is the only GA airport to employ an ILS while Friedman Memorial and Pullman-Moscow Regional airports, both commercial service, do not have an ILS.

# Performance-Based Navigation (PBN)

According to the FAA, PBN is an advanced, satellite-enabled form of air navigation that creates precise threedimensional flight paths. PBN procedures require various avionics capabilities depending on the level of navigation precision involved. If an aircraft relies on satellite positioning with GPS or Wide Area Augmentation System (WAAS), its avionics can navigate a flight path with much greater precision and accuracy than with legacy navigational systems. PBN includes the following:

- → Lateral navigation (LNAV)
- ✤ Localizer performance without vertical guidance (LP)
- ✤ LNAV/vertical navigation (LNAV/VNAV)



- → Localizer performance with vertical guidance (LPV)
- → RNAV Required Navigation Performance (RNP)
- → RNAV Standard Instrument Departures (SIDs)
- ✤ RNAV Standard Arrival Routes (STARs)

In Idaho, approach minima in some locations are highly dependent on approach categories. If properly equipped, aircraft can use PBN to operate to lower minima, especially in terrain challenged environments where traditional approaches are not feasible. Today there are only non-precision and near-precision approaches that are considered PBN since an ILS (precision approach) is a legacy system.

All seven commercial service airports have PBN approach capabilities. Of the GA airports in the system, 18 of the NPIAS airports have PBN approach capabilities, while none of the non-NPIAS airports support PBN.

### Near-Precision Approaches

Near-precision approaches, also known as Approach Procedures with Vertical Guidance (APV) are a relatively recent outcome of the FAA's NextGen program. These approach procedures use GPS technology to provide ILS-like approach capability without the need for traditional ground-based ILS NAVAID equipment.

Near-Precision Approaches have been reported along with the non-precision instrument approaches for the purposes of this study. Inventory data reflects that there are 19 airports in the Idaho system that use NPI or APV approaches as their primary approach procedure. This represents 25 percent of system airports.

### Non-Precision Instrument Approaches

Non-precision Instrument (NPI) approaches provide only lateral guidance from either ground based or satellitebased GPS NAVAIDs.

# Approach Lighting Systems

An approach lighting system (ALS) provides a means to transition from instrument flight rules (IFR) to visual flight rules (VFR) (visual confirmation of the runway) for landing. An ALS is a series of marker lights off the runway end to signal the aircraft toward the touchdown zone. Some systems include high-intensity sequenced flashing lights that appear to the pilot as a ball of light traveling toward the runway. Medium Approach Light Systems with Runway Alignment Indicator Lights (MALSRs) and High Intensity Approach Lighting System with Sequenced Flashing Lights (ALSF-2) are the only ALSs in Idaho's system of airports. Of interest, of the seven commercial service airports, both Friedman Memorial and Pullman - Moscow Regional airports do not have an ALS. Coeur D'Alene – Pappy Boyington Field is the only GA airport to have an ALS.

Once an aircraft reaches the end of a runway, Runway End Identifier Lights (REILs) positively denote the runway end point. A REIL system is comprised of two unidirectionally synchronized flashing lights set on the corners of the runway's landing threshold and aimed upwards at an angle of 10-15 degrees. Nineteen system airports reported having REILs, including all seven commercial service airports. Only one non-NPIAS airport (Rigby) reported REILs.

# **Surface Weather Observation Stations**

Surface weather observation stations are increasingly common at airports. These systems consist of various sensors, a processor, computer-generated voice subsystem, and transmitter to broadcast local, minute-by-minute weather data directly to the pilot. Prior to the initiation of an instrument approach, specific weather data including the altimeter setting must be obtained. Pilots obtain weather data from the Air Traffic Control Tower (ATCT) at towered airports; information is primarily disseminated via automated weather reporting systems at airports without ATCTs. There are only six airports in Idaho with an ATCT. The following describes surface weather observation systems at airports in Idaho:



- Automated Weather Observing System (AWOS): An AWOS is a weather-data sensing, processing, and disseminating system designed to support weather forecast activities and aviation operations. The AWOS observes, archives, and transmits observations through an automatic terminal information service (ATIS) on a VHF (132.125 MHz) to pilots operating at or near the airport. An AWOS can include multiple types of systems based on the types of weather data needed.
- Automated Surface Observing System (ASOS): Similar to an AWOS, the ASOS is a weather data sensing, processing, and disseminating system; however, unlike the AWOS, the ASOS converts surface winds to magnetic direction.

Twenty-two airports in the system have on-site weather reporting. This is up from the 18 reported in 2008 as part of the 2010 IASP.

**Table 2-8** presents the best instrument approach type for each airport, the presence of ALS by runway end, andavailability of a weather reporting system at each airport in the IASP. It is important to consider that approachminima in some locations are highly dependent on approach categories. The approach minima depicted in thetable represent the lowest minimum available for each runway with a published instrument approach(es). Figure**2-6** graphically depicts the location and best type of approach available at each airport throughout the state.



			<u>TABLE 2-8:</u>	AIRPORT APP	<u>ROACH C</u>	APABILITIES		
ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
			Weather	COMMERCIAI		•		
Boise	Boise Air Terminal/Gowen	BOI	Y	Precision	10L	PBN, VOR/DME or TACAN	300 / 7/8	No
	Field				28R	ILS or LOC, PBN	300 / 3/4	No
					10R	ILS or LOC, PBN	200 / 1/2	ALSF2
					28L	PBNVOR/DME or TACAN	400 / 5/8	MALSR
					09			N/P
					27			N/P
Hailey	Friedman Memorial	SUN	Y	Non-	13			No
				Precision	31	PBN, NDB/DME or TACAN	900 / 1/4	No
Idaho Falls	Idaho Falls Regional	IDA	Y	Precision	03	LOC, PBN, VOR	200 / 3/4	No
					21	ILS or LOC, PBN, VOR	200 / 1/2	MALSR
					17			No
					35			No
Lewiston	Lewiston-Nez Perce	LWS	Y	Precision	08	PBN, VOR	300 / 3/4	No
	County				26	ILS, PBN	200 / 1/2	MALSR
					12	PBN	300/1	No
					30	PBN	400 / 1-1/8	No
Pocatello	Pocatello Regional	PIH	Y	Precision	03	PBN, VOR	300/1	No
					21	ILS or LOC, PBN	200 / 1/2	MALSR
					17			No
					35			No
Pullman	Pullman-Moscow	PUW	Y	Non-	06	PBN, VOR	500 / 1-3/8	No
	Regional			Precision	24	PBN	500/1	No

# **TABLE 2-8: AIRPORT APPROACH CAPABILITIES**



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Twin Falls	Joslin Field-Magic	TWF	Y	Precision	08	PBN, VOR, VOR/DME	300 / 3/4	No
	Valley Regional				26	ILS or LOC, PBN, VOR	200 / 1/2	MALSR
					12			No
					30			No
				GA NPI	AS			
Aberdeen	Aberdeen Municipal	U36	Ν	Visual	07			No
					25			No
Arco	Arco-Butte County	AOC	Ν	Non-	06			No
				Precision	24	PBN	600/1	No
Blackfoot	McCarley Field	U02	Ν	Non-	01	PBN, VOR/DME	900 / 1-1/4	No
				Precision	19	PBN	900/1	No
Bonners Ferry	Boundary County	65S	Y	Non-	02	PBN	1,000 / 1-1/4	No
				Precision	20			No
Buhl	Buhl Municipal	U03	Ν	Visual	09			No
					27			No
Burley	Burley Municipal	BYI	Y	Non-	02			No
				Precision	20	PBN, VOR	500/1	No
					06			No
					24			No
Caldwell	Caldwell Industrial	EUL	Y	Non-	12	PBN	300/1	No
				Precision	30	PBN	300/1	No
Cascade	Cascade	U70	Ν	Visual	12			No
					30			No
Challis	Challis	LLJ	Y	Visual	17			No
					35			No



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Coeur D'Alene	Coeur D'Alene-	COE	Y	Precision	06	ILS or LOC/DME, PBN	200 / 1/2	MALSR
	Pappy Boyington				24			No
	Field				02	VOR/DME	500/1	No
					20			No
Council	Council Municipal	U82	Ν	Visual	17			No
					35			No
Driggs	Driggs-Reed	DIJ	Y	Non-	04	PBN	300/1	No
	Memorial			Precision	22			No
					04			N/P
					22			N/P
Gooding	Gooding Municipal	GNG	Y	Non-	07	PBN	300/1	No
				Precision	25	PBN	300/1	No
Grangeville	Idaho County	GIC	Y	Non-	08	PBN	600/1	No
				Precision	26	PBN	800/1	No
Homedale	Homedale Municipal	S66	Ν	Visual	13			No
					31			No
Jerome	Jerome County	JER	Y	Non-	09	PBN	400 / 1	No
				Precision	27	PBN, VOR/DME	400 / 1-1/4	No
Kamiah	Kamiah Municipal	S73	Ν	Visual	14			No
					32			No
Kellogg	Shoshone County	S83	Ν	Visual	07			No
					25			No
McCall	McCall Municipal	MYL	Y	Non-	16	PBN	500/1	N/A
				Precision	34	PBN	300 / 7/8	N/A
Mountain Home	Mountain Home	U76	Ν	Non-	10			No
	Municipal			Precision	28	PBN	300/1	No



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Nampa	Nampa Municipal	MAN	Y	Non-	11	PBN	300 / 7/8	No
				Precision	29			No
Orofino	Orofino Municipal	S68	N	Visual	09			No
					27			No
Paris	Bear Lake County	1U7	Y	Non-	10	PBN	400 / 1	No
				Precision	28	PBN	400 / 1	No
					16			No
					34			No
Preston	Preston	U10	Ν	Visual	03			No
					21			No
					16			No
					34			No
Priest River	Priest River	1S6	Ν	Visual	01			No
	Municipal				19			No
Rexburg	Rexburg-Madison	RXE	Y	Non-	17			No
	County			Precision	35	PBN, VOR	400/1	No
Salmon	Lemhi County	SMN	Y	Non-	17	PBN, VOR	1,700 - 5	No
				Precision	35			No
Sandpoint	Sandpoint	SZT	Y	Non-	02			No
				Precision	20	LOC, PBN	400/1	No
St. Maries	St Maries Municipal	S72	Ν	Visual	10			No
					28			No
Weiser	Weiser Municipal	S87	N	Non-	12			No
				Precision	30	PBN	1,400 / 1-1/4	No



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
				GA NON-	NPIAS			
American Falls	American Falls	U01	Ν	Visual	03			No
					21			No
Bancroft	Bancroft Municipal	U51	Ν	Visual	07			No
					25			No
Big Creek	Big Creek	U60	Ν	Visual	01			No
					19			No
Carey	Carey	U65	Ν	Visual	08			No
					26			No
Coeur D'Alene	Brooks SPB	S76	Ν	Visual	11W			N/A
					29W			N/A
					15W			N/A
					33W			N/A
Coolin	Cavanaugh Bay	66S	Ν	Visual	15			No
					33			No
Cottonwood	Cottonwood	S84	Ν	Visual	07			No
	Municipal				25			No
Craigmont	Craigmont Municipal	S89	N	Visual	07			No
					25			No
Donnelly	Donald D. Coski	U84	Ν	Visual	18			No
	Memorial				36			No
Downey	Downey/Hyde	U58	Ν	Visual	17			No
	Memorial				35			No
Dubois	Dubois Municipal	U41	Ν	Visual	16			No
					34			No
Emmett	Emmett Municipal	S78	N	Visual	10			No
					28			No



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Fairfield	Camas County	U86	Ν	Visual	08			No
					26			No
Galena	Smiley Creek	U87	Ν	Visual	14			No
					32			No
Garden Valley	Garden Valley	U88	Ν	Visual	10			No
					28			No
Glenns Ferry	Glenns Ferry Municipal	U89	Ν	Visual	08			No
					26			No
Hazelton	Hazelton Municipal	U94	Ν	Visual	06			No
					24			No
Howe	Howe	U97	Ν	Visual	13			No
					31			No
Kooskia	Kooskia Municipal	S82	Ν	Visual	14			No
					32			No
Leadore	Leadore	U00	Ν	Visual	11			No
					29			No
					16			No
					34			No
Lewiston	Snake River SPB	78U	Ν	Visual	Ν			N/A
					S			N/A
Mackay	Mackay	U62	Ν	Visual	12			No
					30			No
Malad City	Malad City	MLD	Ν	Visual	16			No
					34			No
					09			N/P
					27			N/P



ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Midvale	Lee Williams Memorial	0U9	N	Visual	08			No
					26			No
Mud Lake	Mud Lake/West Jefferson County	1U2	Ν	Visual	02			No
					20			No
Murphy	Murphy	1U3	N	Visual	12			No
					30			No
Nezperce	Nezperce Municipal	0\$5	Ν	Visual	15			No
					33			No
Oakley	Oakley Municipal	1U6	N	Visual	17			No
					35			No
Parma	Parma	50S	Ν	Visual	12			No
					30			No
Payette	Payette Municipal	S75	Ν	Visual	13			No
					31			No
Porthill	Eckhart International	1S1	Ν	Visual	15			No
					33			No
Rigby	Rigby	U56	Ν	Visual	01			No
					19			No
Rockford	Rockford Municipal	2U4	Ν	Visual	16			No
					34			No
Soda Springs	Allen H Tigert	U78	Ν	Visual	16			No
					34			No
					13			No
					31			No
St. Anthony	Stanford Field	U12	Ν	Visual	04			No
					22			No

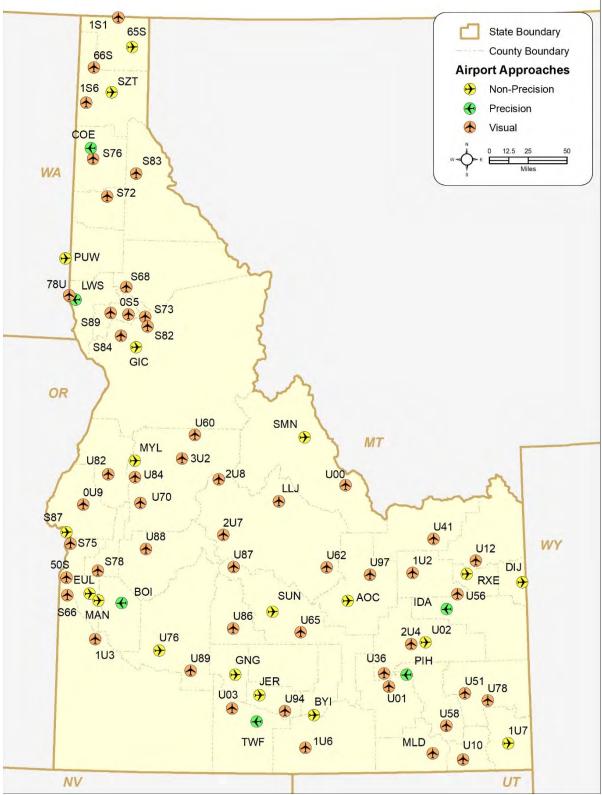


ASSOCIATED CITY	Airport	FAA ID	On-Site Weather	Best Available Approach	RW	Instrument Approach Capabilities	Approach Minimums (Decision Height [ft.]/ Visibility [statute mi.])	RW Approach Lights
Stanley	Stanley	2U7	N	Visual	17			No
					35			No
Stanley	Thomas Creek	2U8	Ν	Visual	03			No
					21			No
Yellow Pine	Johnson Creek	3U2	Ν	Visual	17			No
					35			No

Sources: Airport Inventory and Data Survey Forms, 2019; U.S. Terminal Procedures Publication Northwest Vol. 1of 1 (effective 28 February 2019)



#### FIGURE 2-6: BEST APPROACH, BY AIRPORT



Source: www.AirNav.com\_(accessed February 2019)

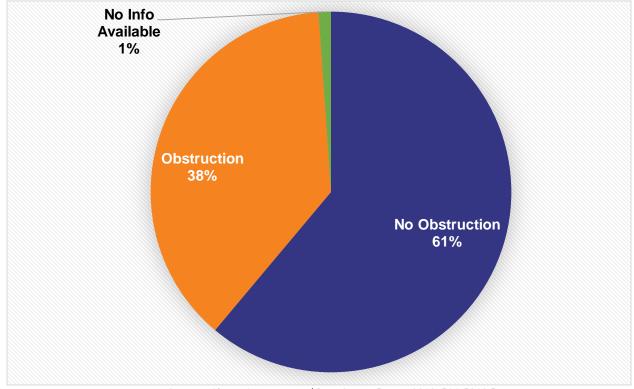


#### **Close-in Obstructions**

The FAA maintains records of approach slopes and obstructions in the FAA 5010 Master Record. These records provide optimal and actual glide slopes, in addition to details about any obstructions affecting an airport's imaginary surfaces. Obstructions can include human-made infrastructure, such as buildings, transmission lines, and cell phone towers, as well as natural features like hills, mountains, and vegetation. Airports should maintain clear approaches to all runway ends to the greatest extent feasible to optimize aircraft safety, especially during less-than-ideal weather conditions.

Airport Inventory and Data Survey Forms along with 5010 Master Records were utilized to determine the percent of airports with clear approaches to both ends of their runways. As presented in **Figure 2-7** and **Table 2-9**, approximately 61 percent of system airports have no close-in obstructions.

#### FIGURE 2-7: AIRPORTS WITH A CLOSE-IN OBSTRUCTIION



Sources: Airport Inventory and Date Survey Forms, 2019; FAA 5010 Forms



BurleyBurley MunicipalBYIB-I02/20Yes/NoCaldwellCaldwell IndustrialEULB-II12/30No/NoCascadeCascadeU70B-I12/30No/NoCascadeCascadeU70B-I12/30No/NoChallisChallisLLJB-I17/35No/NoCoeur D'AleneCoeur D'Alene-Pappy Boyington FieldCOEB-IV06/24No/NoCouncilCouncil MunicipalU82A-I17/35No/NoDriggsDriggs-Reed MemorialDIJC-II04/22No/NoGoodingGooding MunicipalGNGB-II07/25No/YesGrangevilleIdaho CountyGICB-II08/26No/No		TABLE 2-9: AIRPORTS WITH A	<u>CLOSE-IN (</u>	<u>DBSTRUCTI</u>	<u>ON BY RUNWAY</u>							
COMMERCIAL SERVICE           Boise Air Terminal/Gowen Field         BOI         C-IV         10L/28R         No / No           Hailey         Friedman Memorial         SUN         C-III         13/31         No / No           Hailey         Friedman Memorial         SUN         C-III         13/31         No / No           Idaho Falls         Idaho Falls Regional         IDA         B-III         03/21         No / No           Lewiston         Lewiston-Nez Perce County         LWS         C-III         08/26         No / No           Pocatello         Pocatello Regional         PIH         D-IV         03/21         No / No           Pullman         Pullman-Moscow Regional         PUW         C-III         06/24         Yes/Yes           Twin Falls         Joslin Field-Magic Valley Regional         TWF         C-III         08/26         No / No           Acco         McCarley Field         U02         B-II         07/25         No / No           Bardéot         McCarley Field         U02         B-II         06/24         No / No           Burley         Boundary County         655         B-II         07/25         No / No           Burley         Burley Municipal         U03		Airport		APC	Pupuov							
Boise Air Terminal/Gowen Field         BOI         C-IV         10L/28R         No / No           Hailey         Friedman Memorial         SUN         C-III         10R/28L         No / No           Idaho Falls         Idaho Falls Regional         SUN         C-III         13 / 31         No / No           Idaho Falls         Idaho Falls Regional         EWS         C-III         03 / 21         No / No           Lewiston         Lewiston-Nez Perce County         LWS         C-III         08 / 26         No / No           Pocatello         Pocatello Regional         PIH         D-IV         03 / 21         No / No           Pullman         Pocatello Regional         PUW         C-III         08 / 26         No / No           Pullman         Pullman-Moscow Regional         PUW         C-III         08 / 26         No / No           Regional         TWF         C-III         08 / 26         No / No         No / No           Burley         Aberdeen Municipal         TWF         C-III         08 / 26         No / No           Backfoot         McCarley Field         U02         B-I         01/ 19         No / No           Backfoot         McCarley Field         U03         B-I         02 / 20	ASSOCIATED CITY				Kullway							
Field10R/28LNo / NoHaileyFriedman MemorialSUNC-III13 / 31No / NoIdaho FallsIdaho Falls RegionalIDAB-III03 / 21No / NoIdaho FallsIdaho Falls RegionalIDAB-III03 / 21No / NoLewistonLewiston-Nez Perce CountyLWSC-III08 / 26No / NoPocatelloPocatello RegionalPIHD-IV03 / 21No / NoPullmanPullman-Moscow RegionalPIHD-IV03 / 21No / NoPullmanPullman-Moscow RegionalPUWC-III06 / 24Yes / YesTwin FallsJoslin Field-Magic Valley RegionalTWFC-III08 / 26No / NoAberdeenAberdeen MunicipalU36B-II07 / 25No / YesAberdeenMcCarley FieldU02B-II01 / 19No / YesBonners FerryBoundary County65SB-II02 / 20No / NoBurleyBurley MunicipalU03B-II02 / 20Yes / NoCaldwellCaldwell IndustrialEULB-II12 / 30No / NoCascadeU70B-I12 / 30No / NoNoCourcilCaucil MunicipalU03B-I02 / 20Yes / NoCourcilCaldwell IndustrialEULB-II12 / 30No / NoCourcilChallisLUB-II12 / 30No / NoCourcilCourcil MunicipalU03B-I12 / 30No	Boise				10L / 28R	No / No						
HaileyFriedman MemorialSUNC-III13 / 31No / NoIdaho FallsIdaho Falls RegionalIDAB-III03 / 21No / NoIdaho FallsIdaho Falls RegionalIDAB-III03 / 21No / NoLewistonLewiston-Nez Perce CountyPocatello RegionalPIHD-IW03 / 21No / NoPocatelloPocatello RegionalPIHD-IW03 / 21No / NoNo / NoPulmanPulman-Moscow RegionalPIWC-III06 / 24Yes / YesTwin FallsJoslin Field-Magic Valley RegionalTWFC-III08 / 26No / NoAberdeenAberdeen MunicipalU36B-II07 / 25No / NoAberdeenAberdeen MunicipalU36B-II07 / 25No / NoBalakfootMcCarley FieldU02B-II06 / 24No / NoBuhlBuhl MunicipalU03B-II02 / 20No / NoBurleyBurley MunicipalU03B-II02 / 20No / NoCaldwellCaldwell IndustrialEULB-II12 / 30No / NoCascadeU70B-I12 / 30No / NoNoCouncilChallisLUB-II12 / 30No / NoCouncilCouncil MunicipalU03B-I12 / 30No / NoCaldwellCaldwell IndustrialEULB-II12 / 30No / NoCouncilCouncil MunicipalU82A-I17 / 35No / NoCouncil			501	e n								
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Boyington Field02/20No/NoCouncilCouncil MunicipalU82A-I17/35No/NoDriggsDriggs-Reed MemorialDIJC-II04/22No/NoGoodingGooding MunicipalGNGB-II07/25No/YesGrangevilleIdaho CountyGICB-II08/26No/No	Challis	Challis	LLJ	B-I	17/35							
Boyington Field02/20No/NoCouncilCouncil MunicipalU82A-I17/35No/NoDriggsDriggs-Reed MemorialDIJC-II04/22No/NoGoodingGooding MunicipalGNGB-II07/25No/YesGrangevilleIdaho CountyGICB-II08/26No/No	Coeur D'Alene	Coeur D'Alene-Pappy	COE	B-IV	06/24							
Driggs-Reed MemorialDIJC-II04/22No/NoGoodingGooding MunicipalGNGB-II07/25No/YesGrangevilleIdaho CountyGICB-II08/26No/No		Boyington Field			02 / 20							
GoodingGooding MunicipalGNGB-II07/25No/NoGrangevilleIdaho CountyGICB-II08/26No/No	Council	Council Municipal	U82	A-I	17 / 35	No / No						
GoodingGooding MunicipalGNGB-II07/25No/YesGrangevilleIdaho CountyGICB-II08/26No/No	Driggs	Driggs-Reed Memorial	DIJ	C-II	04 / 22	No / No						
Grangeville     Idaho County     GIC     B-II     08 / 26     No / No					04 / 22	No / No						
Grangeville         Idaho County         GIC         B-II         08 / 26         No / No	Gooding	Gooding Municipal	GNG	B-II	07 / 25	No / Yes						
Homedale Homedale Municipal S66 A-I 13/31 Yes/Yes	Grangeville		GIC	B-II	08 / 26							
	Homedale	Homedale Municipal	S66	A-I	13/31	Yes / Yes						
Jerome Jerome County JER B-II 09/27 No/No	Jerome	Jerome County	JER	B-II	09 / 27	No / No						
Kamiah         Kamiah Municipal         S73         A-I         14 / 32         No / No	Kamiah	Kamiah Municipal	S73	A-I	14/32	No / No						
Kellogg         Shoshone County         S83         B-II         07 / 25         No / No	Kellogg	Shoshone County	S83	B-II	07 / 25	No / No						
	McCall	McCall Municipal	MYL	B-II	16/34	No / No						
Mountain Home         Mountain Home Municipal         U76         B-II         10 / 28         No / No	Mountain Home	Mountain Home Municipal	U76	B-II	10/28	No / No						

#### TABLE 2-9: AIRPORTS WITH A CLOSE-IN OBSTRUCTION BY RUNWAY



ASSOCIATED CITY	Airport	FAA ID	ARC	Runway	RW Obstruction Within 200'
Nampa	Nampa Municipal	MAN	B-II	11/29	No / No
Orofino	Orofino Municipal	S68	B-I	09 / 27	No / No
Paris	Bear Lake County	1U7	B-I	10/28	No / No
				16/34	No / No
Preston	Preston	U10	A-I	03/21	No / Yes
				16/34	No / No
Priest River	Priest River Municipal	1S6	A-I	01/19	No / No
Rexburg	Rexburg-Madison County	RXE	B-I	17 / 35	Yes / No
Salmon	Lemhi County	SMN	B-II	17 / 35	No / No
Sandpoint	Sandpoint	SZT	B-II	02 / 20	No / No
St. Maries	St Maries Municipal	S72	A-I	10/28	No / No
Weiser	Weiser Municipal	S87	A/B-I	12 / 30	No / No
		NON-NPIAS			
American Falls	American Falls	U01	A/B-II	03/21	Yes / No
Bancroft	Bancroft Municipal	U51	N/P	07 / 25	No / No
Big Creek	Big Creek	U60	A-I	01/19	Yes / Yes
Carey	Carey	U65	N/P	08 / 26	No / No
Coeur D'Alene	Brooks SPB	S76	A-I	11W / 29W	No / No
				15W / 33W	No / No
Coolin	Cavanaugh Bay	66S	A-I	15 / 33	Yes / Yes
Cottonwood	Cottonwood Municipal	S84	A-I	07 / 25	Yes / Yes
Craigmont	Craigmont Municipal	S89	A-I	07 / 25	No / Yes
Donnelly	Donald D. Coski Memorial	U84	N/P	18/36	No / No
Downey	Downey/Hyde Memorial	U58	N/P	17/35	Yes / Yes
Dubois	Dubois Municipal	U41	A-I	16/34	Yes / No
Emmett	Emmett Municipal	S78	A-I	10/28	No / Yes
Fairfield	Camas County	U86	N/P	08 / 26	Yes / No
Galena	Smiley Creek	U87	A-I	14/32	No / Yes
Garden Valley	Garden Valley	U88	A-I	10/28	Yes / Yes
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	08/26	Yes / Yes
Hazelton	Hazelton Municipal	U94	B-I	06/24	No / No
Howe	Howe	U97	A-I	13/31	Yes / Yes
Kooskia	Kooskia Municipal	S82	A-I	14/32	Yes / Yes
Leadore	Leadore	U00	A-I	11/29	No / Yes
		701		16/34	Yes / Yes
Lewiston	Snake River SPB	78U	N/P	N / S	No / No
Mackay	Mackay	U62	A-I	12/30	Yes / No
Malad City	Malad City	MLD	B-I	16/34	Yes / Yes
				09 / 27	No / No



ASSOCIATED CITY	Airport	FAA ID	ARC	Runway	RW Obstruction Within 200'
Midvale	Lee Williams Memorial	0U9	A-I	08 / 26	No / No
Mud Lake	Mud Lake/West Jefferson County	1U2	N/P	02 / 20	Yes / Yes
Murphy	Murphy	1U3	A-II	12/30	Yes / Yes
Nezperce	Nezperce Municipal	0S5	A-I	15/33	No / No
Oakley	Oakley Municipal	1U6	N/P	17 / 35	No / No
Parma	Parma	50S	A-I	12/30	No / Yes
Payette	Payette Municipal	S75	A-I	13/31	No / No
Porthill	Eckhart International	1S1	A-I	15/33	No / No
Rigby	Rigby	U56	A/B-I	01/19	No / Yes
Rockford	Rockford Municipal	2U4	A-I	16/34	No / No
Soda Springs	Allen H Tigert	U78	A-I	16/34	Yes / No
				13/31	No / No
St. Anthony	Stanford Field	U12	A-I	04 / 22	No / No
Stanley	Stanley	2U7	A-I	17 / 35	Yes / No
Stanley	Thomas Creek	2U8	A-I	03/21	No / No
Yellow Pine	Johnson Creek	3U2	A-I	17 / 35	Yes / No

Sources: Airport Inventory and Date Survey Forms, 2019; FAA 5010 Forms

## **Existing Landside Facilities**

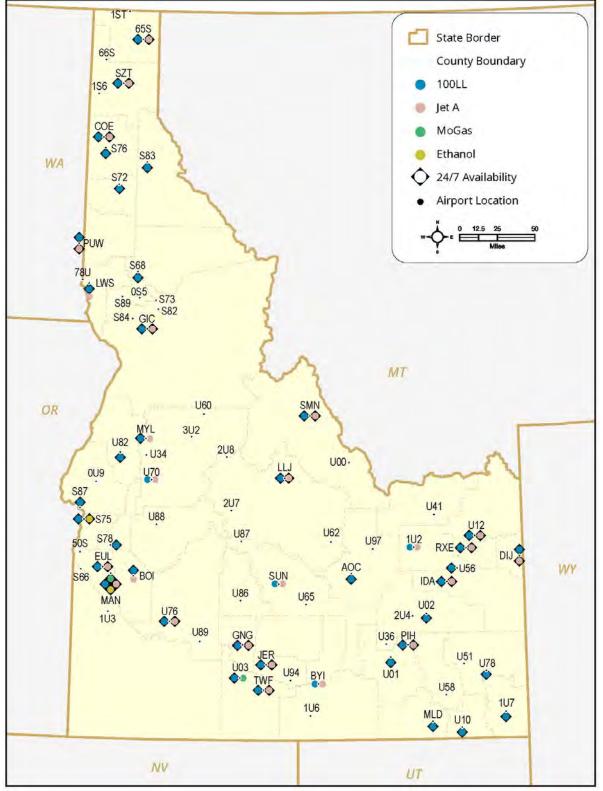
Existing landside facilities examined in the 2020 IASP Update include items such as the type(s) of fuel sold, the presence of a terminal building, and the number of aircraft storage facilities available such as hangars and tie-down spaces.

#### **Fuel**

The availability of fuel at airports, and most specifically at GA airports, can be one of the most influential factors driving operational activity. Additionally, fuel sales at GA airports are a substantial component of airport revenues. A total of 42 Idaho airports offer some type of fuel such as AvGas (100LL), Jet A, automobile gas (MoGas), or ethanol-free fuel. Fifteen airports offer AvGas only, while 25 airports offer both Jet A and AvGas. Of the 42 total airports with fuel, 35 are GA airports. Additionally, Buhl Municipal and Nampa Municipal airports reported that they offer MoGas, which can be used in some piston aircraft. Nampa Municipal and Payette Municipal airports, including whether the fuel is available. **Figure 2-8** depicts fuel availability at the Idaho system airports,



#### FIGURE 2-8: FUEL AVAILABILITY



Source: Airport Data and Inventory Survey Forms, 2019; FAA 5010 Forms



#### Terminal

For this study, the availability of a terminal, either a separate building or area within another facility, was identified for GA users or commercial passengers. Some terminal buildings included minimal services while larger GA, reliever, and commercial service airports offered pilot's lounges, phone services, and other amenities. Twenty-nine airports in the system reported having a terminal building.

#### **Aircraft Parking/Storage**

Aircraft parking and storage facilities were analyzed to provide a measure of landside capacity within the Idaho system of airports. An estimated total of 2,300 hangar spaces were identified as part of the inventory effort. This figure is comprised of conventional box hangar spaces, T-hangar spaces, and shade hangar spaces. It's important to note that the figure listed above is an approximation as the number of spaces available in each type of storage facility depends on the size of aircraft being accommodated. Airport representatives were asked to provide the number of storage spaces available based on the average number of aircraft observed within the facilities.

Additionally, the capacity of apron tie-down spaces was measured at airports in the system. A total of 1,690 tiedowns were identified. Again, this figure is an approximation as some airports use more than one tie-down space to accommodate larger aircraft. Additionally, some airports reported their tie-down capacity as square footage available on their aprons to accommodate aircraft. These square footages were converted to tie-down spaces based on 1,225 square feet per space. This estimation methodology was primarily used for tie-down spaces available at Boise Air Terminal/Gowen Field.

**Table 2-10** details existing landside facilities including total hangars, tie-down apron capacity, fuel availability, and the presence of a terminal building at IASP system airports.



#### **TABLE 2-10: EXISTING LANDSIDE FACILITIES Hangar Spaces** Tie-down Fuel Terminal FAA ID Building Airport (Conv, T, Shade) **Availability ASSOCIATED CITY Spaces** COMMERCIAL SERVICE Boise Boise Air Terminal/Gowen Field BOI Yes 140 100 LL, Jet A 120 Hailev SUN Friedman Memorial 102 57 100 LL, Jet A Yes Idaho Falls Idaho Falls Regional 100 LL, Jet A IDA Yes 90 52 98 Lewiston Lewiston-Nez Perce County LWS Yes 64 100 LL, Jet A Pocatello **Pocatello Regional** PIH 17 100 LL, Jet A Yes 64 Pullman Pullman-Moscow Regional PUW Yes 29 40 100 LL, Jet A **Twin Falls** Joslin Field-Magic Valley Regional TWF Yes 69 103 100 LL, Jet A **GA NPIAS** Aberdeen Aberdeen Municipal U36 9 4 No None 9 Arco Arco-Butte County AOC Yes 24 100 LL Blackfoot McCarley Field U02 Yes 52 43 100 LL 65S 33 33 100 LL, Jet A **Bonners Ferry** Boundary County Yes Buhl **Buhl Municipal** U03 Yes 30 14 100 LL, MoGas Burley **Burley Municipal** BYI Yes 50 54 100 LL, Jet A Caldwell Caldwell Industrial EUL 274 53 100 LL, Jet A Yes Cascade Cascade U70 36 23 100 LL, Jet A Yes Challis Challis LLJ Yes 9 37 100 LL, Jet A Coeur D'Alene-Pappy Boyington Field Coeur D'Alene COE 114 70 No 100 LL, Jet A Council Municipal Council U82 No 14 8 100 LL 85 Driggs Driggs-Reed Memorial DIJ 40 100 LL, Jet A Yes **Gooding Municipal** Gooding GNG Yes 34 16 100 LL, Jet A Grangeville Idaho County GIC Yes 9 20 100 LL, Jet A Homedale Homedale Municipal 20 9 None S66 No Jerome County JER 39 40 100 LL, Jet A Jerome Yes Kamiah Municipal Kamiah S73 No 15 15 None Kellogg 14 6 100 LL Shoshone County S83 Yes



ASSOCIATED CITY	Airport	FAA ID	Terminal Building	Hangar Spaces (Conv, T, Shade)	Tie-down Spaces	Fuel Availability
McCall	McCall Municipal	MYL	No	82	121	100 LL, Jet A
Mountain Home	Mountain Home Municipal	U76	Yes	20	25	100 LL, Jet A
Nampa	Nampa Municipal	MAN	Yes	296	73	100 LL, Jet A, MoGas, Ethanol Free
Orofino	Orofino Municipal	S68	Yes	11	8	100 LL
Paris	Bear Lake County	1U7	No	6	11	100 LL
Preston	Preston	U10	Yes	27	8	100 LL
Priest River	Priest River Municipal	1S6	No	13	7	None
Rexburg	Rexburg-Madison County	RXE	No	58	36	100 LL, Jet A
Salmon	Lemhi County	SMN	Yes	35	62	100 LL, Jet A
Sandpoint	Sandpoint	SZT	Yes	86	40	100 LL, Jet A
St. Maries	St Maries Municipal	S72	Yes	60	14	100 LL
Weiser	Weiser Municipal	S87	Yes	13	14	100 LL
		GA NON-	NPIAS			
American Falls	American Falls	U01	Yes	35	8	100 LL
Bancroft	Bancroft Municipal	U51	No	3	1	None
Big Creek	Big Creek	U60	No	0	12	None
Carey	Carey	U65	No	2	4	None
Coeur D'Alene	Brooks SPB	S76	No	N/A	N/A	None
Coolin	Cavanaugh Bay	66S	No	1	14	None
Cottonwood	Cottonwood Municipal	S84	No	8	7	None
Craigmont	Craigmont Municipal	S89	No	2	0	None
Donnelly	Donald D. Coski Memorial	U84	No	0	0	None
Downey	Downey/Hyde Memorial	U58	No	3	4	None
Dubois	Dubois Municipal	U41	No	0	0	None
Emmett	Emmett Municipal	S78	No	9	14	100 LL
Fairfield	Camas County	U86	No	4	5	None
Galena	Smiley Creek	U87	No	0	15	None



			Terminal	Hangar Spaces	Tie-down	Fuel
ASSOCIATED CITY	Airport	FAA ID	Building	(Conv, T, Shade)	Spaces	Availability
Garden Valley	Garden Valley	U88	No	0	18	None
Glenns Ferry	Glenns Ferry Municipal	U89	No	5	14	None
Hazelton	Hazelton Municipal	U94	No	3	0	None
Howe	Howe	U97	No	1	2	None
Kooskia	Kooskia Municipal	S82	No	4	4	None
Leadore	Leadore	U00	No	1	0	None
Lewiston	Snake River SPB	78U	No	N/A	N/A	None
Mackay	Mackay	U62	No	2	7	None
Malad City	Malad City	MLD	No	5	4	100 LL
Midvale	Lee Williams Memorial	0U9	No	2	6	None
Mud Lake	Mud Lake/West Jefferson County	1U2	No	4	6	100 LL, Jet A
Murphy	Murphy	1U3	No	0	4	None
Nezperce	Nezperce Municipal	0S5	No	3	5	None
Oakley	Oakley Municipal	1U6	No	4	0	None
Parma	Parma	50S	No	4	9	None
Payette	Payette Municipal	S75	No	18	16	100 LL, Ethanol Free
Porthill	Eckhart International	1S1	No	1	6	None
Rigby	Rigby	U56	Yes	60	12	100 LL
Rockford	Rockford Municipal	2U4	No	1	9	None
Soda Springs	Allen H Tigert	U78	No	24	6	100 LL
St. Anthony	Stanford Field	U12	N/P	28	7	100 LL, Jet A
Stanley	Stanley	2U7	No	1	18	None
Stanley	Thomas Creek	2U8	No	1	5	None
Yellow Pine	Johnson Creek	3U2	No	0	20	None

Source: Airport Inventory and Data Survey Forms, 2019

# **Services and Support**

#### **Airlines at Airports**

Commercial airline service provides an important link for residents of the state to the rest of the country and the world. An important variable to analyze is the amount of time it takes populations to access airports with commercial air service. Ideally, the state would have commercial service airports evenly distributed geographically amongst its population to allow for reasonable drive times between airports, communities, recreational destinations, and economic activity centers.

Based on inventory results, of the 75 IASP system airports, seven provide commercial airline service. **Table 2-11** presents each of the seven commercial service airports along with the air carriers that operate commercial flights at each airport as of February 2019.

TABLE 2 11. AIR CARRIERS AT COMMERCIAL SERVICE AIR ORTS										
ASSOCIATED CITY	Airport	FAA ID	Commercial Carriers							
Boise	Boise Air Terminal/Gowen Field	BOI	Alaska, Allegiant, American, Delta, Frontier, Southwest, United							
Hailey	Friedman Memorial	SUN	Alaska, Delta, United							
Idaho Falls	Idaho Falls Regional	IDA	Allegiant, Delta, United							
Lewiston	Lewiston-Nez Perce County	LWS	Delta							
Pocatello	Pocatello Regional	PIH	Delta							
Pullman	Pullman-Moscow Regional		Alaska							
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Delta							

#### TABLE 2-11: AIR CARRIERS AT COMMERCIAL SERVICE AIRPORTS

Sources: Individual commercial service airport websites (accessed March 2019)

#### **Transportation**

Airports represent one of the multiple transportation modes that provide residents and visitors with access to all areas of Idaho. Connections between remote communities, large cities, and recreational areas are made even more accessible through aviation, and undoubtedly provides an added measure of quality to the lives of Idaho citizens. The connectivity provided through airports is important, but other forms of transportation are required to tie the state together, both public and private, such that users can leave the airport environment and conduct activities outside of the airport. The ability of airports to promote intermodal connectivity is vital for many users of the state transportation system and communities in Idaho. Airports that offer transportation services such as loaner cars, rental cars, shuttles, or connections to public transportation are able to attract more transient air traffic.

#### **Courtesy Car Summary**

For airports located in smaller communities where public transportation, taxi service, shuttles, or rideshare (Uber/Lyft) is not available, a courtesy car is often used to provide the critical link between airports and communities. These cars are typically stored on-airport and are often sponsored by the airport owner/operator or by the FBO. Courtesy cars are often a favorite amenity for pilots and passengers who utilize these airports, as they provide a means to hop into town for meetings, meals, or entertainment. Users simply need to contact the car's overseer to gain access to keys. If the user appreciates the service, they'll typically purchase fuel for the car for the next user. Without courtesy cars, many of Idaho's airports would isolate their visitors from connecting to local communities and would repress the creation or growth of economic activity.



Of Idaho's 75 airports within the IASP, 40 provide a courtesy car for their visitors. Of these 40 airports, 27 of them listed rental cars as not being available. These 27 airports are able to provide courtesy transportation in areas which visiting pilots and passengers would otherwise have to remain at the airport, often without any other way to access the surrounding communities.

#### **Rental Car Summary**

The availability of rental cars at airports greatly increases the airport's overall ability to facilitate economic activity within the community and region. Nineteen airports reported having rental car availability, including all seven of the commercial service airports.

#### **Public Transportation Summary**

Public transportation within a community can greatly increase accessibility and encourages equitable economic opportunity to all residents and visitors. Direct connections to public transportation allow visitors quick and reliable mobility into, and within the community. This level of convenience further boosts the airport's ability to connect the community and state to the rest of the world.

Nine of the 75 system airports are serviced by public transportation. Of these airports, five are GA airports while only four are commercial service airports. **Table 2-12** details the transportation services available at Idaho's IASP airports.



#### TABLE 2-12: AVAILABLE TRANSPORTATION SERVICES

		FAA	Rental	Courtesy	Public Transportation	Uber/	Other			
ASSOCIATED CITY	Airport	ID	Car	Courtesy	(Bus, Rail)	Lyft	Transportation			
	·	OMMERC	IAL SERVICE							
Boise	Boise Air Terminal/Gowen Field	BOI	Yes		Yes	Yes	Hotel Shuttles			
Hailey	Friedman Memorial	SUN	Yes	Yes	Yes	Yes	Taxi			
Idaho Falls	Idaho Falls Regional	IDA	Yes	Yes	Yes	Yes	Taxi & Hotel Shuttle			
Lewiston	Lewiston-Nez Perce County	LWS	Yes		Yes	Yes				
Pocatello	Pocatello Regional	PIH	Yes	Yes		Yes	Taxi & Hotel Shuttle			
Pullman	Pullman-Moscow Regional	PUW	Yes			Yes				
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Yes		Yes				
GA NPIAS										
Aberdeen	Aberdeen Municipal	U36								
Arco	Arco-Butte County	AOC		Yes						
Blackfoot	McCarley Field	U02		Yes						
Bonners Ferry	Boundary County	65S	Yes	Yes	Yes	Yes				
Buhl	Buhl Municipal	U03	Yes	Yes		Yes				
Burley	Burley Municipal	BYI		Yes		Yes	Тахі			
Caldwell	Caldwell Industrial	EUL	Yes	Yes		Yes				
Cascade	Cascade	U70		Yes	Yes		Taxi			
Challis	Challis	LIJ		Yes		Yes				
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE	Yes			Yes				
Council	Council Municipal	U82								
Driggs	Driggs-Reed Memorial	DIJ	Yes			Yes				
Gooding	Gooding Municipal	GNG		Yes		Yes				
Grangeville	Idaho County	GIC	Yes	Yes						
Homedale	Homedale Municipal	S66								
Jerome	Jerome County	JER		Yes		Yes				
Kamiah	Kamiah Municipal	S73		Yes						



		FAA	Rental	Courtesy	Public Transportation	Uber/	Other
ASSOCIATED CITY	Airport	ID	Car	Car	(Bus, Rail)	Lyft	Transportation
Kellogg	Shoshone County	S83		Yes			Bicycle
McCall	McCall Municipal	MYL	Yes		Yes	Yes	IAA Bicycles
Mountain Home	Mountain Home Municipal	U76	Yes	Yes		Yes	Тахі
Nampa	Nampa Municipal	MAN	Yes	Yes		Yes	
Orofino	Orofino Municipal	S68	Yes	Yes	Yes		
Paris	Bear Lake County	1U7		Yes			
Preston	Preston	U10		Yes			
Priest River	Priest River Municipal	1S6		Yes			
Rexburg	Rexburg-Madison County	RXE		Yes			
Salmon	Lemhi County	SMN		Yes		Yes	
Sandpoint	Sandpoint	SZT	Yes	Yes	Yes	Yes	
St. Maries	St Maries Municipal	S72		Yes			
Weiser	Weiser Municipal	S87		Yes			
		GA NOI	N-NPIAS				
American Falls	American Falls	U01		Yes			
Bancroft	Bancroft Municipal	U51					
Big Creek	Big Creek	U60					
Carey	Carey	U65					
Coeur D'Alene	Brooks SPB	S76	N/P	N/P	N/P	N/P	
Coolin	Cavanaugh Bay	66S		Yes			
Cottonwood	Cottonwood Municipal	S84					
Craigmont	Craigmont Municipal	S89					
Donnelly	Donald D. Coski Memorial	U84					
Downey	Downey/Hyde Memorial	U58					
Dubois	Dubois Municipal	U41					Bicycle
Emmett	Emmett Municipal	S78		Yes			
Fairfield	Camas County	U86					



		FAA	Rental	Courtesy	Public Transportation	Uber/	Other
ASSOCIATED CITY	Airport	ID	Car	Courtesy	(Bus, Rail)	Lyft	Transportation
Galena	Smiley Creek	U87		Yes			
Garden Valley	Garden Valley	U88		Yes			
Glenns Ferry	Glenns Ferry Municipal	U89					
Hazelton	Hazelton Municipal	U94				Yes	
Howe	Howe	U97					
Kooskia	Kooskia Municipal	S82					
Leadore	Leadore	U00					
Lewiston	Snake River SPB	78U					
Mackay	Mackay	U62		Yes			
Malad City	Malad City	MLD		Yes			
Midvale	Lee Williams Memorial	0U9					
Mud Lake	Mud Lake/West Jefferson County	1U2		Yes			
Murphy	Murphy	1U3					
Nezperce	Nezperce Municipal	0S5					
Oakley	Oakley Municipal	1U6					
Parma	Parma	50S					
Payette	Payette Municipal	S75		Yes		Yes	
Porthill	Eckhart International	1S1					
Rigby	Rigby	U56	Yes	Yes		Yes	
Rockford	Rockford Municipal	2U4					
Soda Springs	Allen H Tigert	U78		Yes			
St. Anthony	Stanford Field	U12	N/P	N/P	N/P	N/P	
Stanley	Stanley	2U7					
Stanley	Thomas Creek	2U8					Middle Fork Lodge Private Shuttle
Yellow Pine	Johnson Creek	3U2		Yes			

Source: Inventory Form and Data Survey Forms, 2019



#### **Emergency Medical Services**

Medical flights offer access to patients in need of specialized or emergency medical care, as well as transport of healthcare supplies and personnel to rural areas to provide care. These services are particularly important for residents of remote and/or Tribal communities without nearby access to medical facilities. Providing a network of airports to connect medical professionals and supplies with patients is one of the most important functions an aviation system can provide.

Of the 75 IASP system airports, 56 had identified aircraft operations (fixed wing or rotorcraft) related to emergency medical evacuation, physician or patient transport, or medical shipments.

#### **Aerial Wildland Firefighting**

The state of Idaho is home to The National Interagency Fire Center (NIFC) which is headquartered at Boise Air Terminal. The NIFC coordinates the national mobilization of resources for wildland fire and other incidents throughout the United States. The NIFC is comprised of eight agencies and organizations.

Forest fires are common events in Idaho and throughout the Northwest. This is especially true in the northern and eastern areas of the state where mountainous terrain coupled with thick wooded areas can lead to dangerous situations. To combat forest and other large fires, aircraft are used as they can quickly provide access to wide geographic areas while reducing human exposure to threats on the ground and minimizing the time it takes to extinguish the flames. Both commercial service and GA airports across the state support fire suppression response teams by providing fuel, maintenance facilities, and other critical aircraft services.

Airports were asked if they support aerial firefighting operations during the airport inventory. System-wide, 72 percent of airports reported supporting aerial firefighting operations at their facilities, with 85 percent of commercial service airports serving firefighting operations (Idaho Falls Regional did not provide data), followed by 70 percent of GA airports (five GA airports did not provide data).

The National Wildfire Coordination Group (NWCG) Airtanker Base Directory, published in April of 2019, indicates that Boise Air Terminal/Gowen Field, McCall Municipal, Mountain Home Municipal, Pocatello Regional, Joslin Field-Magic Valley Regional, Coeur D'Alene-Pappy Boyington Field, and Idaho County airports are designated airtanker bases within Idaho. Both Mountain Home Municipal and Idaho County airports are specifically designated as Single Engine Air Tanker (SEAT) bases.

#### **Agricultural Aerial Application**

Agricultural aerial application activities represent a large portion of activity at several of the state's small GA airports. This is no surprise as the state's economy is heavily bolstered by agriculture. Accordingly, it is important to support this genre of aviation. Data collected during the inventory process shows that 43 of the 75 IASP system airports support agricultural aerial application activities.

#### **Cargo/Freight Activity**

Airports play an important role in promoting economic activity in Idaho and provide a critical competitive advantage in today's global marketplace. Airports are the keystone to the multibillion-dollar air cargo industry and are gateways between markets in Idaho and across the globe. Inventory results show that of the 75 airports in the IASP, 12 currently report accommodating cargo/freight operations. Of the airports that do support cargo/freight operations, four are commercial service airports, and eight are GA airports. Lewiston-Nez Perce County and Downey/Hyde Memorial airports did not return data.

#### **On-Demand Air Taxi to IAN Airports**

The IAN is comprised of a group of airstrip owners including the U.S. Forest Service, BLM, Idaho Fish and Game, the Idaho Division of Aeronautics, a few private landowners, and several nonprofit aviation groups. The airstrips contained within the IAN provide invaluable access to some of the most remote areas of the state. While these



airstrips are used by those who own/maintain the land on and surrounding them, they also provide a unique attraction for individuals looking to explore the Idaho backcountry. Various on-demand air taxi companies are available to charter flights to these remote airstrips. Inventory data shows that 29 IASP airports support on-demand air taxi/charter service to IAN airports according to survey responses.

Table 2-13 depicts the various services and support activities enabled by IASP airports.



		TABLE 2-13	: SERVIC	ES AND SUP	PORT BY AIRPOR	Ţ						
			Air	Cargo/	Aerial	Aerial	Air Taxi	Air Medical				
ASSOCIATED CITY	Airport	FAA ID	Тахі	Freight	Application	Firefighting	to Backcountry	Services				
				ERCIAL SERV								
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	Yes	No	Yes	Yes	Yes				
Hailey	Friedman Memorial	SUN	Yes	Yes	No	Yes	Yes	Yes				
Idaho Falls	Idaho Falls Regional	IDA	Yes	No	No	Yes	Yes	Yes				
Lewiston	Lewiston-Nez Perce County	LWS	Yes	Yes	Yes	Yes	N/P	Yes				
Pocatello	Pocatello Regional	PIH	Yes	No	Yes	Yes	No	Yes				
Pullman	Pullman-Moscow Regional	PUW	Yes	Yes	Yes	Yes	Yes	Yes				
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Yes	Yes	Yes	Yes	Yes				
GA NPIAS												
Aberdeen	Aberdeen Municipal	U36	No	No	Yes	Yes	No	Yes				
Arco	Arco-Butte County	AOC	Yes	Yes	Yes	Yes	Yes	Yes				
Blackfoot	McCarley Field	U02	Yes	No	Yes	No	Yes	Yes				
Bonners Ferry	Boundary County	65S	Yes	No	Yes	Yes	Yes	Yes				
Buhl	Buhl Municipal	U03	Yes	No	Yes	Yes	Yes	Yes				
Burley	Burley Municipal	BYI	No	Yes	No	No	No	No				
Caldwell	Caldwell Industrial	EUL	Yes	No	No	Yes	Yes	Yes				
Cascade	Cascade	U70	Yes	No	Yes	Yes	Yes	Yes				
Challis	Challis	LLJ	Yes	No	Yes	Yes	Yes	Yes				
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE	Yes	Yes	Yes	Yes	Yes	Yes				
Council	Council Municipal	U82	No	No	No	Yes	Yes	Yes				
Driggs	Driggs-Reed Memorial	DIJ	Yes	No	No	Yes	Yes	Yes				
Gooding	Gooding Municipal	GNG	No	No	Yes	Yes	Yes	Yes				
Grangeville	Idaho County	GIC	Yes	No	Yes	Yes	Yes	Yes				
Homedale	Homedale Municipal	S66	No	No	Yes	No	No	Yes				
Jerome	Jerome County	JER	Yes	Yes	Yes	No	No	Yes				

#### TABLE 2 12, CEDVICES AND SUDDODT DV AIDDODT



ASSOCIATED CITY	Airport	FAA ID	Air Taxi	Cargo/ Freight	Aerial Application	Aerial Firefighting	Air Taxi to Backcountry	Air Medical Services
Kamiah	Kamiah Municipal	S73	No	No	No	Yes	N/P	N/P
Kellogg	Shoshone County	S83	Yes	No	No	Yes	No	Yes
McCall	, McCall Municipal	MYL	Yes	No	Yes	Yes	Yes	Yes
Mountain Home	Mountain Home Municipal	U76	Yes	Yes	Yes	Yes	Yes	Yes
Nampa	Nampa Municipal	MAN	Yes	Yes	No	Yes	Yes	Yes
Orofino	Orofino Municipal	S68	No	No	No	Yes	No	Yes
Paris	Bear Lake County	1U7	No	No	Yes	Yes	No	Yes
Preston	Preston	U10	No	No	Yes	Yes	N/P	Yes
Priest River	Priest River Municipal	1S6	No	No	Yes	Yes	No	Yes
Rexburg	Rexburg-Madison County	RXE	No	Yes	No	No	No	Yes
Salmon	Lemhi County	SMN	Yes	Yes	No	Yes	Yes	Yes
Sandpoint	Sandpoint	SZT	Yes	No	No	Yes	No	Yes
St. Maries	St Maries Municipal	S72	No	No	No	Yes	N/P	Yes
Weiser	Weiser Municipal	S87	No	No	Yes	Yes	No	Yes
			GA	NON-NPIAS				
American Falls	American Falls	U01	No	No	Yes	No	No	Yes
Bancroft	Bancroft Municipal	U51	No	No	Yes	N/P	N/P	N/P
Big Creek	Big Creek	U60	Yes	No	No	Yes	Yes	Yes
Carey	Carey	U65	No	No	Yes	Yes	N/P	Yes
Coeur D'Alene	Brooks SPB	S76	Yes	No	No	N/P	N/P	N/P
Coolin	Cavanaugh Bay	66S	No	No	No	Yes	Yes	Yes
Cottonwood	Cottonwood Municipal	S84	No	No	Yes	Yes	No	Yes
Craigmont	Craigmont Municipal	S89	No	No	Yes	Yes	N/P	Yes
Donnelly	Donald D. Coski Memorial	U84	No	No	No	N/P	N/P	N/P
Downey	Downey/Hyde Memorial	U58	No	N/P	No	No	No	Yes
Dubois	Dubois Municipal	U41	Yes	No	Yes	No	No	No
Emmett	Emmett Municipal	S78	Yes	No	Yes	Yes	No	Yes
Fairfield	Camas County	U86	No	No	Yes	Yes	No	Yes



ASSOCIATED CITY	Airport	FAA ID	Air Taxi	Cargo/ Freight	Aerial Application	Aerial Firefighting	Air Taxi to Backcountry	Air Medical Services
Galena	Smiley Creek	U87	Yes	No	No	Yes	Yes	Yes
Garden Valley	Garden Valley	U88	Yes	No	No	Yes	No	No
Glenns Ferry	Glenns Ferry Municipal	U89	No	No	Yes	N/P	No	No
Hazelton	Hazelton Municipal	U94	No	No	Yes	Yes	Yes	No
Howe	Howe	U97	No	No	Yes	Yes	No	Yes
Kooskia	Kooskia Municipal	S82	No	No	No	No	No	Yes
Leadore	Leadore	U00	No	No	No	No	No	No
Lewiston	Snake River SPB	78U	No	No	No	No	No	No
Mackay	Mackay	U62	No	No	Yes	Yes	Yes	Yes
Malad City	Malad City	MLD	No	No	Yes	Yes	No	Yes
Midvale	Lee Williams Memorial	0U9	No	No	Yes	Yes	No	Yes
Mud Lake	Mud Lake/West Jefferson County	1U2	No	No	Yes	No	Yes	Yes
Murphy	Murphy	1U3	No	No	No	Yes	No	Yes
Nezperce	Nezperce Municipal	0S5	No	No	Yes	Yes	No	Yes
Oakley	Oakley Municipal	1U6	No	No	Yes	Yes	N/P	N/P
Parma	Parma	50S	No	No	Yes	No	No	No
Payette	Payette Municipal	S75	No	No	No	No	No	No
Porthill	Eckhart International	1S1	Yes	No	Yes	Yes	No	Yes
Rigby	Rigby	U56	No	No	Yes	Yes	No	No
Rockford	Rockford Municipal	2U4	No	No	Yes	No	No	No
Soda Springs	Allen H Tigert	U78	No	No	Yes	Yes	N/P	Yes
St. Anthony	Stanford Field	U12	Yes	No	No	N/P	N/P	N/P
Stanley	Stanley	2U7	Yes	No	No	Yes	Yes	Yes
Stanley	Thomas Creek	2U8	Yes	No	No	Yes	Yes	Yes
Yellow Pine	Johnson Creek	3U2	Yes	No	No	Yes	Yes	Yes

Source: Inventory Form and Data Survey Forms, 2019

# **Airport Planning**

## MPs and ALPs

During the inventory process, the 75 airports in the study provided dates of their most recent MP and ALP. An airport master plan represents the airport's blueprint for long-term development and typically includes an update of the ALP during the study process. The following describe the goals of a MP:

- Provide a graphic representation of the existing airport features, future airport development, and anticipated land use
- → Establish a realistic schedule for implementation of the proposed development
- → Identify a realistic financial plan to support the proposed development
- → Validate the plan technically and procedurally through an investigation of concepts and alternatives on technical, economic, and environmental grounds
- Prepare and present a plan to the public that adequately addresses all relevant issues and satisfies local, state, and federal regulations
- → Establish a framework for a continuous planning process

The FAA approves specific components of a MP for those airports that are in the NPIAS. These components consist of the forecasts of aviation demand, selection of critical aircraft, and the ALP. It is from these elements that the FAA makes a determination regarding eligibility of Airport Improvement Program (AIP) funding for proposed development.<sup>6</sup>

In addition to the airport MP, the ALP serves as a critical planning tool that depicts both existing facilities and planned development for an airport. A current ALP is a prerequisite for issuance of an FAA grant for airport development. Any sponsor who has received an FAA grant for airport development is obligated by grant assurance to "keep the ALP up-to-date at all times." The following describes the specific goals of an ALP:

- Identifies the boundaries and proposed additions to all areas owned or controlled by the sponsor for airport purposes
- → Depicts the location and nature of existing and proposed airport facilities and structures
- + Establishes the location on the airport of existing and proposed non-aviation areas and improvements

## **Small Airport Planning Studies**

Through the Idaho Airport Aid Program (IAAP), ITD Aeronautics is able to grant funds for Small Airport Planning Studies that fulfil many of the functions associated with master planning or airport layout planning. These plans consist of a Narrative Report (mini master plan) and an ALP drawing set. These plans aid in airport operations and capital improvement planning for the airport and provide appropriate and effective projects that ITD Aeronautics can fund. Small Airport Planning Studies are an important component of airport planning within the state.

**Table 2-14** details the reported completion dates on the most recent MPs and ALPs at airports in the Idahosystem.

<sup>&</sup>lt;sup>6</sup> There are many non-eligible projects that can be included in a MP and depicted on the ALP, however, FAA approval/acceptance of anything in the master plan or ALP does not constitute a guarantee of future FAA funding.



	TABLE 2-14: AIRPORT PLANNING DOC	CUMENTS BY DATE					
ASSOCIATED CITY	Airport	FAA ID	MP	MP Yr.	ALP	ALP Yr.	
		CE					
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	2019	Yes	2019	
Hailey	Friedman Memorial	SUN	Yes	2018	Yes	2018	
Idaho Falls	Idaho Falls Regional	IDA	Yes	2010	Yes	2010	
Lewiston	Lewiston-Nez Perce County	LWS	Yes	2016	Yes	2016	
Pocatello	Pocatello Regional	PIH	Yes	2012	Yes	2018	
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	2012	Yes	2012	
	GA NPIAS						
Aberdeen	Aberdeen Municipal	U36	No		Yes	2012	
Arco	Arco-Butte County	AOC	Yes	2019	Yes	N/P	
Blackfoot	McCarley Field	U02	Yes	2013	Yes	2013	
Bonners Ferry	Boundary County	65S	Yes	N/P	Yes	1997	
Buhl	Buhl Municipal	U03	Yes	2012	Yes	2012	
Burley	Burley Municipal	BYI	Yes	2018	Yes	2018	
Caldwell	Caldwell Industrial	EUL	Yes	2010	Yes	2010	
Cascade	Cascade	U70	Yes	2019	Yes	2019	
Challis	Challis	LLJ	Yes	2013	Yes	2013	
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	S76	Yes	2018	Yes	2018	
Council	Council Municipal	U82	No		Yes	N/P	
Driggs	Driggs-Reed Memorial	DIJ	Yes	2012	Yes	2012	
Gooding	Gooding Municipal	GNG	Yes	2009	Yes	2009	
Grangeville	Idaho County	GIC	No		Yes	2011	
Homedale	Homedale Municipal	S66	Yes	2016	Yes	2016	
Jerome	Jerome County	JER	Yes	2012	Yes	2016	
Kamiah	Kamiah Municipal	S73	N/P		N/P		
Kellogg	Shoshone County	S83	Yes	2015	Yes	2015	
McCall	McCall Municipal	MYL	Yes	2008	Yes	2012	
Mountain Home	Mountain Home Municipal	U76	Yes	2011	Yes	2011	
Nampa	Nampa Municipal	MAN	Yes	2010	Yes	2010	
Orofino	Orofino Municipal	S68	No		Yes	2011	
Paris	Bear Lake County	1U7	Yes	2016	Yes	2016	
Preston	Preston	U10	N/P		Yes	1998	
Priest River	Priest River Municipal	1S6	Yes	2016	Yes	2016	
Rexburg	Rexburg-Madison County	RXE	Yes	2018	Yes	2018	
Salmon	Lemhi County	SMN	Yes	2012	Yes	2014	
Sandpoint	Sandpoint	SZT	No		Yes	2015	
St. Maries	St Maries Municipal	S72	Yes	2012	Yes	2012	
Weiser	Weiser Municipal	S87	No		Yes	2016	



ASSOCIATED CITY	Airport	FAA ID	MP	MP Yr.	ALP	ALP Yr.
	GA NON-NPIAS					
American Falls	American Falls	U01	Yes	2016	Yes	2016
Bancroft	Bancroft Municipal	U51	N/P		N/P	
Big Creek	Big Creek	U60	No		No	
Carey	Carey	U65	Yes	N/P	N/P	
Coeur D'Alene	Brooks SPB	COE	N/P		N/P	
Coolin	Cavanaugh Bay	66S	No		No	
Cottonwood	Cottonwood Municipal	S84	No		No	
Craigmont	Craigmont Municipal	S89	Yes	1990	N/P	
Donnelly	Donald D. Coski Memorial	U84	N/P		N/P	
Downey	Downey/Hyde Memorial	U58	Yes	2019	Yes	2019
Dubois	Dubois Municipal	U41	No		No	
Emmett	Emmett Municipal	S78	Yes	2017	Yes	2017
Fairfield	Camas County	U86	No		Yes	N/P
Galena	Smiley Creek	U87	No		No	
Garden Valley	Garden Valley	U88	Yes	2018	Yes	2018
Glenns Ferry	Glenns Ferry Municipal	U89	Yes	2012	Yes	2012
Hazelton	Hazelton Municipal	U94	Yes	2012	Yes	2012
Howe	Howe	U97	No		No	
Kooskia	Kooskia Municipal	S82	Yes	N/P	Yes	N/P
Leadore	Leadore	U00	No		No	
Lewiston	Snake River SPB	78U	No	2019	Yes	2019
Mackay	Mackay	U62	Yes	1995	No	
Malad City	Malad City	MLD	Yes	1980	No	
Midvale	Lee Williams Memorial	0U9	No		No	
Mud Lake	Mud Lake/West Jefferson County	1U2	No		No	
Murphy	Murphy	1U3	Yes	2018	Yes	2018
Nezperce	Nezperce Municipal	0S5	Yes	2004	Yes	2004
Oakley	Oakley Municipal	1U6	N/P		N/P	
Parma	Parma	50S	Yes	2012	Yes	2012
Payette	Payette Municipal	S75	Yes	2017	Yes	2017
Porthill	Eckhart International	1S1	No		No	
Pullman	Pullman-Moscow Regional	PUW	Yes	2010	Yes	2018
Rigby	Rigby	U56	Yes	2010	Yes	2010
Rockford	Rockford Municipal	2U4	Yes	2017	Yes	2017
Soda Springs	Allen H Tigert	U78	Yes	1995	N/P	
St. Anthony	Stanford Field	U12	Yes	2018	Yes	2018
Stanley	Stanley	2U7	No		No	
Stanley	Thomas Creek	2U8	No		No	
Yellow Pine	Johnson Creek	3U2	No		No	

Source: Airport Inventory and Data Survey Forms, 2019



#### Wildlife Hazard Assessments (WHA) and Wildlife Hazard Management Plans (WHMP)

Wildlife can present serious safety risks to airport operations, potentially endangering aircraft and their occupants. While birds comprise 97 percent of all reported wildlife aircraft strikes nationwide, mammals and reptiles can also pose significant threats. Due to the rural nature of many of Idaho's airports, wildlife hazards are a frequent concern. In most parts of the state, large mammals including elk and deer can be extremely dangerous if present on an airfield. Cows in aircraft movement areas have also been reported across the state.

Airports were asked if they have conducted WHAs or WHMPs in accordance with appropriate FAA regulations during the airport inventory. As shown in **Figure 2-9** approximately 64 percent of Idaho's system airports do not have an adopted WHA or WHMP. However, 100 percent of commercial airports did report having a WHA or WHMP, while only 10 percent of GA airports reported having a WHA or WHMP. It should also be mentioned that inventory data returned with 15 percent of airports not providing data on these two points. It is also worth noting that non-NPIAS airports are not required to have a WHA and/or WHMP and would likely only undertake the effort if there were significant concerns due to cost and lack of potential grant funding for such studies.

As a side note, as of December of 2012 the FAA issued a clarification to the AIP Grant Assurance No. 19 "Operation and Maintenance" for non-certificated federally obligated airports in the NPIAS. This clarification requires that airports receiving AIP development funds either conduct a Wildlife Hazard Site Visit (WHSV) or a WHA to comply. Since the issuance of this clarification, WHSVs have typically been conducted by the FAA as a part of airport master planning processes.<sup>7</sup>

# Spill Prevention, Control, and Countermeasure (SPCC) Plans and Stormwater Pollution Prevention Plans (SWPPPs)

#### **SPCC Plans**

The U.S. Environmental Protection Agency (EPA) requires a SPCC Plan to help prevent the discharge of oil into navigable bodies of water. Airports handle a lot of petroleum products on a regular basis and the likelihood of having a spill is quite high. This is especially true at busy commercial service and GA airports. Each airport's owner or operator has the responsibility to prepare a professionally engineered and stamped SPCC Plan.

Inventory data indicates that approximately 60 percent of system airports do not have an SPCC plan. However, 43 percent of commercial airports did report having a SPCC Plan, while only 18 percent of GA airports reported having a SPCC Plan.

#### SWPPP

A SWPPP is an important part of an airport's ongoing environmental impact and sensitivity. A SWPPP identifies the appropriate mitigation measures to be used by the airport owner/operator to minimize the amount of runoff pollution, sediment runoff, and erosion is allowed to leave the airport environs. SWPPPs are especially important for airports as they typically have large amounts of impervious surfaces that allow water to collect and flow rather than permeate back into the natural subterranean aquifers.

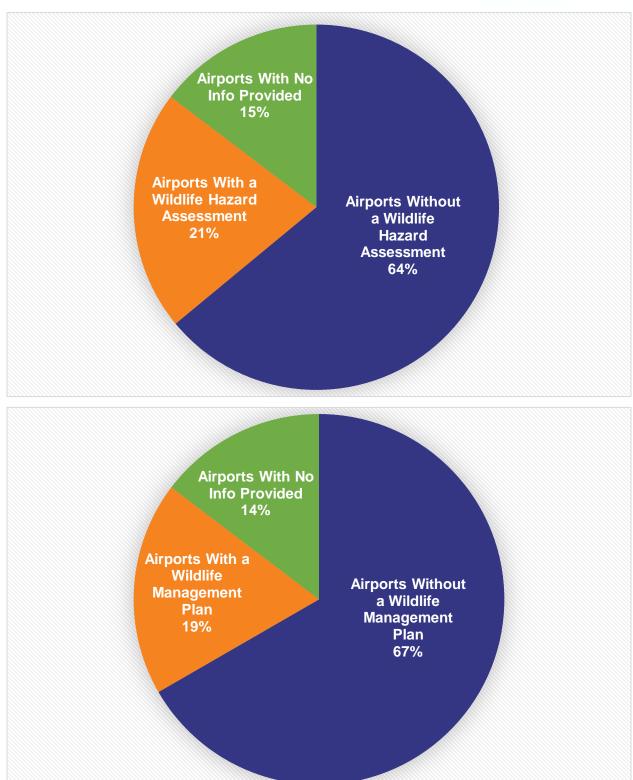
Inventory data indicates that approximately 61 percent of system airports do not have an SWPPP. However, 57 percent of commercial airports did report having a SWPPP, while only 17 percent of GA airports reported having a SWPPP.

It should also be mentioned that inventory data returned with 17 percent of airports not providing data on these two points. **Figure 2-10** depicts the percentage of SPCC Plan and SWPPP availability within the system of airports.

<sup>&</sup>lt;sup>7</sup> Clarification of Grant Assurance No. 19 "Operation and Maintenance" was published in the National Register, Vol. 77, No. 237 on Monday, December 10, 2012 / Notices

#### FIGURE 2-9: WHA AND WHMP

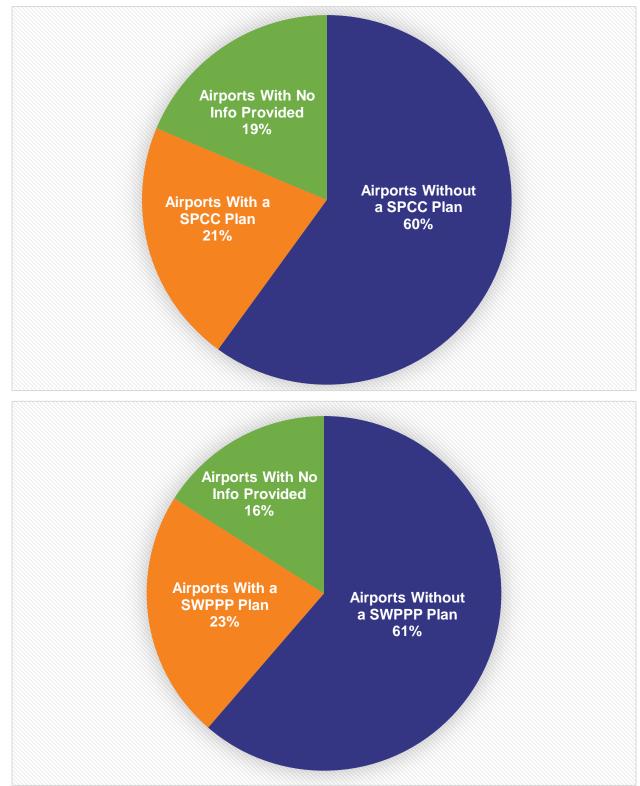




Source: Airport Inventory and Data Survey Forms, 2019



#### FIGURE 2-10: SPCC PLAN AND SWPPP



Source: Inventory Form and Data Survey Forms, 2019



# Zoning

In 2016, the state of Idaho completed the "Idaho Airport Land Use Guidelines" document to further educate airport owners/operators, local planning and zoning representatives, local elected officials, and the general public about the unique aspects of airports as they relate to compatible land use planning throughout the state. The guidelines also provide recommended techniques and mechanisms to assist stakeholders in developing and implementing effective and compatible land use measures around their airports and their communities.

Protecting the land use and airspace around an airport is critical to an airport's long-term viability. In general, the objective of airport compatible land use is to promote development that is considered compatible with airports and preclude incompatible uses such as residential areas, schools, hospitals, and churches near airports. Specific challenges regarding zoning and land use are discussed in more detail in the State, Regional, and Local Issues and Trends section of this chapter. As part of the 2020 IASP Update, both the Preservation and Safety and Security goals call for the analysis of land use and airspace surrounding system airports. For the purposes of this study an examination of Federal Aviation Regulation (FAR) Part 77 compliant zoning and airport control of Runway Protection Zones (RPZs) was conducted to determine the safe, efficient use, and preservation of land use and navigable airspace at system airports.

#### 14 Code of Federal Regulations (CFR) Part 77 Summary

FAR Part 77, "Objects Affecting Navigable Airspace" went into effect in 1965 to protect the nation's navigable airspace as a limited resource to be used efficiently and to ensure the safety of aircraft. The regulation lays out specific airspace dimensions as imaginary surfaces based on the design criteria of airports that should not be exceeded by objects or structures. These surface dimensions allow for aircraft to operate within the airport's traffic pattern and along established approaches without concern or obstructions.

**Table 2-15** represents individual airport inventory responses regarding the land use and height regulations governing their airport environs. Thirty-two airports responded as having both land use and height zoning that follow FAA Part 77 regulations. Of note, the table indicates airport responses regarding the presence of airport compatible zoning regulations. However, it does not detail unique regulatory environments for airports with surrounding land areas and airspaces under multi-jurisdictional control. In these unique situations, airports may have appropriate zoning regulations in place within one or more jurisdictions but may not have complete control within all applicable jurisdictions.



		TAB	LE 2-15: ZONIN	G				
			Land Use		Land Use	Neither	Zoning	
		FAA	Only	Height Only	and Height	Туре	Follows	Enforced
ASSOCIATED CITY	Airport	ID	(no height)	(no land use)	Zoning	of Zoning	Part 77?	Zoning
			IMERCIAL SERV	/ICE				
Boise	Boise Air Terminal/Gowen Field	BOI			Yes		Yes	Yes
Hailey	Friedman Memorial	SUN			Yes		No	Yes
Idaho Falls	Idaho Falls Regional	IDA			Yes		Yes	Yes
Lewiston	Lewiston-Nez Perce County	LWS			N/P			
Pocatello	Pocatello Regional	PIH			Yes		Yes	N/P
Pullman	Pullman-Moscow Regional	PUW			Yes		Yes	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF			Yes		Yes	Yes
			GA NPIAS					
Aberdeen	Aberdeen Municipal	U36				Yes		
Arco	Arco-Butte County	AOC				Yes		
Blackfoot	McCarley Field	U02			Yes		No	Yes
Bonners Ferry	Boundary County	65S			Yes		Yes	Yes
Buhl	Buhl Municipal	U03			Yes		Yes	Yes
Burley	Burley Municipal	BYI			Yes		Yes	Yes
Caldwell	Caldwell Industrial	EUL			Yes		Yes	Yes
Cascade	Cascade	U70			Yes		Yes	Yes
Challis	Challis	LLJ			Yes		Yes	Yes
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE			Yes		Yes	Yes
Council	Council Municipal	U82			Yes		Yes	Yes
Driggs	Driggs-Reed Memorial	DIJ			Yes		Yes	Yes
Gooding	Gooding Municipal	GNG			Yes		Yes	Yes
Grangeville	Idaho County	GIC			Yes		Yes	N/P
Homedale	Homedale Municipal	S66			Yes		Yes	Yes
Jerome	Jerome County	JER			Yes		Yes	Yes
Kamiah	Kamiah Municipal	S73			N/P			



ASSOCIATED CITY	Airport	FAA ID	Land Use Only (no height)	Height Only (no land use)	Land Use and Height Zoning	Neither Type of Zoning	Zoning Follows Part 77?	Enforced Zoning
Kellogg	Shoshone County	S83	(no neight)		Yes	01 2011ing	Yes	Yes
McCall	McCall Municipal	MYL			Yes		Yes	Yes
Mountain Home	Mountain Home Municipal	U76			Yes		Yes	Yes
Nampa	Nampa Municipal	MAN			Yes		N/P	Yes
Orofino	Orofino Municipal	S68			Yes		Yes	Yes
Paris	Bear Lake County	1U7				Yes		
Preston	Preston	U10			N/P			
Priest River	Priest River Municipal	1S6			Yes		Yes	Yes
Rexburg	Rexburg-Madison County	RXE	Yes					Yes
Salmon	Lemhi County	SMN			Yes		Yes	Yes
Sandpoint	Sandpoint	SZT			Yes		Yes	Yes
St. Maries	St Maries Municipal	S72			Yes		Yes	Yes
Weiser	Weiser Municipal	S87			Yes		Yes	Yes
		(	GA NON-NPIAS					
American Falls	American Falls	U01			Yes		No	Yes
Bancroft	Bancroft Municipal	U51			N/P			
Big Creek	Big Creek	U60				Yes		
Carey	Carey	U65			Yes		Yes	Yes
Coeur D'Alene	Brooks SPB	S76			N/P			
Coolin	Cavanaugh Bay	66S				Yes		
Cottonwood	Cottonwood Municipal	S84				Yes		
Craigmont	Craigmont Municipal	S89	Yes					Yes
Donnelly	Donald D. Coski Memorial	U84			N/P			
Downey	Downey/Hyde Memorial	U58			N/P			
Dubois	Dubois Municipal	U41			Yes		Yes	Yes
Emmett	Emmett Municipal	S78				Yes		
Fairfield	Camas County	U86			Yes		Yes	N/P



		FAA	Land Use Only	Height Only	Land Use and Height	Neither Type	Zoning Follows	Enforced
ASSOCIATED CITY	Airport	ID	(no height)	(no land use)	Zoning	of Zoning	Part 77?	Zoning
Galena	Smiley Creek	U87				Yes		
Garden Valley	Garden Valley	U88				Yes		
Glenns Ferry	Glenns Ferry Municipal	U89			Yes		Yes	N/P
Hazelton	Hazelton Municipal	U94			Yes		Yes	Yes
Howe	Howe	U97				Yes		
Kooskia	Kooskia Municipal	S82				Yes		
Leadore	Leadore	U00				Yes		
Lewiston	Snake River SPB	78U				Yes		
Mackay	Mackay	U62				Yes		
Malad City	Malad City	MLD				Yes		
Midvale	Lee Williams Memorial	0U9				Yes		
Mud Lake	Mud Lake/West Jefferson County	1U2	Yes					Yes
Murphy	Murphy	1U3	Yes					Yes
Nezperce	Nezperce Municipal	0S5				Yes		
Oakley	Oakley Municipal	1U6			N/P			
Parma	Parma	50S			Yes		Yes	Yes
Payette	Payette Municipal	S75			Yes		Yes	Yes
Porthill	Eckhart International	1S1				Yes		
Rigby	Rigby	U56			Yes		Yes	Yes
Rockford	Rockford Municipal	2U4			Yes		Yes	Yes
Soda Springs	Allen H Tigert	U78			Yes		No	Yes
St. Anthony	Stanford Field	U12			N/P			
Stanley	Stanley	2U7				Yes		
Stanley	Thomas Creek	2U8				Yes		
Yellow Pine	Johnson Creek	3U2				Yes		

Source: Inventory Form and Data Survey Forms, 2019

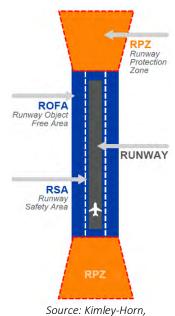


#### **RPZ Summary**

The FAA has defined several key safety areas on and adjacent to runways. As shown in **Figure 2-11** the RPZ is a trapezoid-shaped area off each end of the runway designed to protect people and property on the ground in the event of a runway overrun or undershoot. The dimensions of a runway end's RPZ are based on factors including the aircraft approach category (AAC) and airplane design group (ADG) of the most demanding aircraft utilizing the airport and visibility minimums to the runway. According to FAA Advisory Circular (AC) 150/5300-13A (Change 1), "Airport Design," the RPZ's ability to enhance safety "is best achieved through airport owner control over RPZs. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities" (FAA 2012, p. 71).

For purposes of this plan, control of an RPZ can be achieved through property interest in the form of whole ownership of the land, by securing appropriate easements to encumber the land, or a combination of both property interest options. As is shown in **Figure 2-12**, inventory data indicates that approximately 25 percent of runways in the system have 100 percent control of both ends of the runway while about 50 percent do not completely control both ends. Of all the airports in the system, 20 percent reported controlling 100 percent of all their RPZs. This includes airports with multiple runways. However, 57 percent of airports reported one or more RPZs in which they did not have full control. Of note, this data point had 23 percent of airports that did not respond with data.

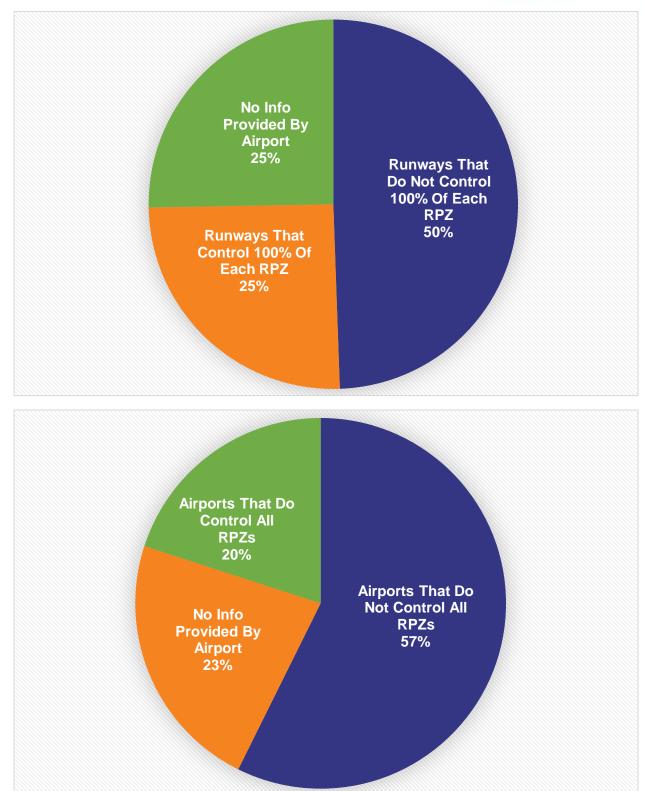




Airport managers/sponsors were asked if they controlled their runways' RPZs through either fee simple (ownership) or easement during the inventory process. **Table 2-16** presents the collected data.



#### FIGURE 2-12: RUNWAY AND AIRPORT RPZ CONTROL



Source: Inventory Form and Data Survey Forms, 2019



#### TABLE 2-16: RPZ CONTROL BY RUNWAY

		FAA		RPZ Control					
ASSOCIATED CITY	Airport	ID	RW	(Owned%, Easement%, Uncontrolled%)					
COMMERCIAL SERVICE									
Boise	Boise Air Terminal/Gowen Field	BOI	10L	RW 10L (95%, 5%, 0%)					
			28R	RW 28R (100%, 0%, 0%)					
			10R	RW 10R (87%, 10%, 2%)					
			28L	RW 28L (100%, 0%, 0%)					
			09	RW 09 (100%, 0%, 0%)					
			27	RW 27 (100%, 0%, 0%)					
Hailey	Friedman Memorial	SUN	13	RW 13 (100%, 0%, 0%)					
			31	RW 31 (0%, 0%, 100%)					
Idaho Falls	Idaho Falls Regional	IDA	03	RW 03 (N/P%, N/P%, N/P%)					
			21	RW 21 (N/P%, N/P%, N/P%)					
			17	RW 17 (N/P%, N/P%, N/P%)					
			35	RW 35 (N/P%, N/P%, N/P%)					
Lewiston	Lewiston-Nez Perce County	LWS	08	RW 08 (N/P%, N/P%, N/P%)					
			26	RW 26 (N/P%, N/P%, N/P%)					
			12	RW 12 (N/P%, N/P%, N/P%)					
			30	RW 30 (N/P%, N/P%, N/P%)					
Pocatello	Pocatello Regional	PIH	03	RW 03 (100%, 0%, 0%)					
			21	RW 21 (100%, 0%, 0%)					
			17	RW 17 (100%, 0%, 0%)					
			35	RW 35 (100%, 0%, 0%)					
Pullman	Pullman-Moscow Regional	PUW	06	RW 06 (65%, 35%, 0%)					
			24	RW 24 (100%, 0%, 0%)					
Twin Falls	Joslin Field-Magic Valley Regional	TWF	08	RW 08 (100%, 0%, 0%)					
			26	RW 26 (100%, 0%, 0%)					
			12	RW 12 (100%, 0%, 0%)					
			30	RW 30 (20%, 80%, 0%)					



ASSOCIATED CITY	Airport	FAA ID	RW	RPZ Control (Owned%, Easement%, Uncontrolled%)
	GA NPI/	AS		
Aberdeen	Aberdeen Municipal	U36	07	RW 07 (5%, 0%, 90%)
			25	RW 25 (50%, 0%, 50%)
Arco	Arco-Butte County	AOC	06	RW 06 (0%, 0%, 100%)
			24	RW 24 (0%, 0%, 100%)
Blackfoot	McCarley Field	U02	01	RW 01 (10%, 0%, 90%)
			19	RW 19 (0%, 0%, 100%)
Bonners Ferry	Boundary County	65S	02	RW 02 (50%, 0%, 50%)
			20	RW 20 (10%, 0%, 90%)
Buhl	Buhl Municipal	U03	09	RW 09 (100%, 0%, 0%)
			27	RW 27 (80%, N/P%, N/P%)
Burley	Burley Municipal	BYI	02	RW 02 (N/P%, N/P%, N/P%)
			20	RW 20 (N/P%, N/P%, N/P%)
			06	RW 06 (N/P%, N/P%, N/P%)
			24	RW 24 (N/P%, N/P%, N/P%)
Caldwell	Caldwell Industrial	EUL	12	RW 12 (100%, 0%, 0%)
			30	RW 30 (100%, 0%, 0%)
Cascade	Cascade	U70	12	RW 12 (95%, 0%, 5%)
			30	RW 30 (100%, 0%, 0%)
Challis	Challis	LLJ	17	RW 17 (100%, 0%, 0%)
			35	RW 35 (100%, 0%, 0%)
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE	06	RW 06 (100%, 0%, 0%)
			24	RW 24 (100%, 0%, 0%)
			02	RW 02 (100%, 0%, 0%)
			20	RW 20 (90%, 0%, 10%)
Council	Council Municipal	U82	17	RW 17 (100%, 0%, 0%)
			35	RW 35 (100%, 0%, 0%)



ASSOCIATED CITY	Airport	FAA ID	RW	RPZ Control (Owned%, Easement%, Uncontrolled%)
Driggs	Driggs-Reed Memorial	DIJ	04	RW 04 (70%, 0%, 30%)
			22	RW 22 (50%, 0%, 50%)
			04	RW 04 (N/P%, N/P%, N/P%)
			22	RW 22 (N/P%, N/P%, N/P%)
Gooding	Gooding Municipal	GNG	07	RW 07 (100%, 0%, 0%)
			25	RW 25 (95%, 0%, 5%)
Grangeville	Idaho County	GIC	08	RW 08 (67%, 33%, 0%)
			26	RW 26 (100%, 0%, 0%)
Homedale	Homedale Municipal	S66	13	RW 13 (20%, 0%, 80%)
			31	RW 31 (0%, 0%, 100%)
Jerome	Jerome County	JER	09	RW 09 (100%, 0%, 0%)
			27	RW 27 (100%, 0%, 0%)
Kamiah	Kamiah Municipal	S73	14	RW 14 (N/P%, N/P%, N/P%)
			32	RW 32 (N/P%, N/P%, N/P%)
Kellogg	Shoshone County	S83	07	RW 07 (100%, 0%, 0%)
			25	RW 25 (100%, 0%, 0%)
McCall	McCall Municipal	MYL	16	RW 16 (100%, 0%, 0%)
			34	RW 34 (0%, 100%, 0%)
Mountain Home	Mountain Home Municipal	U76	10	RW 10 (85%, 0%, 15%)
			28	RW 28 (90%, 0%, 10%)
Nampa	Nampa Municipal	MAN	11	RW 11 (50%, 0%, 50%)
			29	RW 29 (95%, 0%, 5%)
Orofino	Orofino Municipal	S68	09	RW 09 (100%, 0%, 0%)
			27	RW 27 (100%, 0%, 0%)
Paris	Bear Lake County	1U7	10	RW 10 (100%, 0%, 0%)
			28	RW 28 (30%, 0%, 70%)
			16	RW 16 (100%, 0%, 0%)
			34	RW 34 (100%, 0%, 0%)



ASSOCIATED CITY	Airport	FAA ID	RW	RPZ Control (Owned%, Easement%, Uncontrolled%)
Preston	Preston	U10	03	RW 03 (100%, 0%, 0%)
			21	RW 21 (100%, 0%, 0%)
			16	RW 16 (N/P%, N/P%, N/P%)
			34	RW 34 (N/P%, N/P%, N/P%)
Priest River	Priest River Municipal	1S6	01	RW 01 (90%, 0%, 10%)
			19	RW 19 (95%, 0%, 5%)
Rexburg	Rexburg-Madison County	RXE	17	RW 17 (65%, 0%, 35%)
			35	RW 35 (80%, 0%, 20%)
Salmon	Lemhi County	SMN	17	RW 17 (100%, 0%, 0%)
			35	RW 35 (78%, 22%, 0%)
Sandpoint	Sandpoint	SZT	02	RW 02 (60%, 0%, 40%)
			20	RW 20 (40%, 0%, 60%)
St. Maries	St Maries Municipal	S72	10	RW 10 (N/P%, N/P%, N/P%)
			28	RW 28 (N/P%, N/P%, N/P%)
Weiser	Weiser Municipal	S87	12	RW 12 (40%, 60%, 0%)
			30	RW 30 (75%, 0%, 25%)
	GA NOI	N-NPIAS		
American Falls	American Falls	U01	03	RW 03 (75%, 0%, 25%)
			21	RW 21 (100%, 0%, 0%)
Bancroft	Bancroft Municipal	U51	07	RW 07 (N/P%, N/P%, N/P%)
			25	RW 25 (N/P%, N/P%, N/P%)
Big Creek	Big Creek	U60	01	RW 01 (0%, 0%, 100%)
			19	RW 19 (0%, 0%, 100%)
Carey	Carey	U65	08	RW 08 (N/P%, N/P%, N/P%)
			26	RW 26 (N/P%, N/P%, N/P%)



ASSOCIATED CITY	Airport	FAA ID	RW	RPZ Control (Owned%, Easement%, Uncontrolled%)
Coeur D'Alene	Brooks SPB	S76	11W	RW 11W (N/P%, N/P%, N/P%)
			29W	RW 29W (N/P%, N/P%, N/P%)
			15W	RW 15W (N/P%, N/P%, N/P%)
			33W	RW 33W (N/P%, N/P%, N/P%)
Coolin	Cavanaugh Bay	66S	15	RW 15 (0%, 0%, 100%)
			33	RW 33 (0%, 0%, 100%)
Cottonwood	Cottonwood Municipal	S84	07	RW 07 (0%, 0%, 100%)
			25	RW 25 (0%, 0%, 100%)
Craigmont	Craigmont Municipal	S89	07	RW 07 (0%, 0%, 100%)
			25	RW 25 (0%, 0%, 100%)
Donnelly	Donald D. Coski Memorial	U84	18	RW 18 (N/P%, N/P%, N/P%)
			36	RW 36 (N/P%, N/P%, N/P%)
Downey	Downey/Hyde Memorial	U58	17	RW 17 (N/P%, N/P%, N/P%)
			35	RW 35 (N/P%, N/P%, N/P%)
Dubois	Dubois Municipal	U41	16	RW 16 (0%, 0%, 100%)
			34	RW 34 (0%, 0%, 100%)
Emmett	Emmett Municipal	S78	10	RW 10 (15%, 0%, 85%)
			28	RW 28 (40%, 0%, 60%)
Fairfield	Camas County	U86	08	RW 08 (0%, 0%, 100%)
			26	RW 26 (0%, 0%, 100%)
Galena	Smiley Creek	U87	14	RW 14 (0%, 0%, 100%)
			32	RW 32 (0%, 0%, 100%)
Garden Valley	Garden Valley	U88	10	RW 10 (0%, 0%, 100%)
			28	RW 28 (0%, 0%, 100%)
Glenns Ferry	Glenns Ferry Municipal	U89	08	RW 08 (N/P%, N/P%, N/P%)
			26	RW 26 (N/P%, N/P%, N/P%)
Hazelton	Hazelton Municipal	U94	06	RW 06 (100%, 0%, 0%)
			24	RW 24 (100%, 0%, 0%)



ASSOCIATED CITY	Airport	FAA ID	RW	RPZ Control (Owned%, Easement%, Uncontrolled%)
Howe	Howe	U97	13	RW 13 (N/P%, N/P%, N/P%)
			31	RW 31 (N/P%, N/P%, N/P%)
Kooskia	Kooskia Municipal	S82	14	RW 14 (100%, 0%, 0%)
			32	RW 32 (100%, 0%, 0%)
Leadore	Leadore	U00	11	RW 11 (0%, 0%, 100%)
			29	RW 29 (0%, 0%, 100%)
			16	RW 16 (0%, 0%, 100%)
			34	RW 34 (0%, 0%, 100%)
Lewiston	Snake River SPB	78U	Ν	RW N (100%, 0%, 0%)
			S	RW S (100%, 0%, 0%)
Mackay	Mackay	U62	12	RW 12 (15%, 0%, 85%)
			30	RW 30 (25%, 0%, 75%)
Malad City	Malad City	MLD	16	RW 16 (0%, 0%, 100%)
			34	RW 34 (0%, 0%, 100%)
			09	RW 09 (0%, 0%, 100%)
			27	RW 27 (0%, 0%, 100%)
Midvale	Lee Williams Memorial	0U9	08	RW 08 (0%, 0%, 100%)
			26	RW 26 (0%, 0%, 100%)
Mud Lake	Mud Lake/West Jefferson County	1U2	02	RW 02 (0%, 0%, 100%)
			20	RW 20 (0%, 0%, 100%)
Murphy	Murphy	1U3	12	RW 12 (0%, 0%, 100%)
			30	RW 30 (0%, 0%, 100%)
Nezperce	Nezperce Municipal	0S5	15	RW 15 (N/P%, N/P%, N/P%)
			33	RW 33 (N/P%, N/P%, N/P%)
Oakley	Oakley Municipal	1U6	17	RW 17 (N/P%, N/P%, N/P%)
			35	RW 35 (N/P%, N/P%, N/P%)
Parma	Parma	50S	12	RW 12 (10%, 0%, 90%)
			30	RW 30 (10%, 0%, 90%)



		FAA		RPZ Control
ASSOCIATED CITY	Airport	ID	RW	(Owned%, Easement%, Uncontrolled%)
Payette	Payette Municipal	S75	13	RW 13 (50%, 0%, 50%)
			31	RW 31 (50%, 0%, 50%)
Porthill	Eckhart International	1S1	15	RW 15 (50%, 0%, 50%)
			33	RW 33 (0%, 0%, 100%)
Rigby	Rigby	U56	01	RW 01 (75%, 0%, 25%)
			19	RW 19 (50%, 0%, 50%)
Rockford	Rockford Municipal	2U4	16	RW 16 (15%, 0%, 85%)
			34	RW 34 (0%, 0%, 100%)
Soda Springs	Allen H Tigert	U78	16	RW 16 (N/P%, N/P%, N/P%)
			34	RW 34 (N/P%, N/P%, N/P%)
			13	RW 13 (N/P%, N/P%, N/P%)
			31	RW 31 (N/P%, N/P%, N/P%)
St. Anthony	Stanford Field	U12	04	RW 04 (N/P%, N/P%, N/P%)
			22	RW 22 (N/P%, N/P%, N/P%)
Stanley	Stanley	2U7	17	RW 17 (20%, 0%, 80%)
			35	RW 35 (0%, 0%, 100%)
Stanley	Thomas Creek	2U8	03	RW 03 (10%, 0%, 90%)
			21	RW 21 (50%, 0%, 50%)
Yellow Pine	Johnson Creek	3U2	17	RW 17 (0%, 0%, 100%)
			35	RW 35 (0%, 0%, 100%)

Source: Inventory Form and Data Survey Forms, 2019



### State, Regional, and Local Issues and Trends

Aviation is influenced by a wide array of trends, issues, technological advances, and social and economic conditions. The industry is ever-changing, and the fast pace of a few recent events has had a substantial impact on future airport needs. Understanding the existing industry issues and trends that impact aviation in Idaho, while also being mindful that new trends will emerge, is imperative to developing a system plan that will remain fluid and adaptable. Specific system-wide issues identified and discussed in the 2010 IASP are reexamined and new issues and trends are also identified and evaluated. To set the stage, national industry issues and trends are presented as they also affect aviation on state, regional, and local levels.

This review serves to inform the policy analysis and investigation recommendations in future chapters, setting the stage for ITD Aeronautics to successfully adapt to changing conditions over the planning horizon addressed of this plan.

### **National Aviation Issues and Trends**

To provide a wider discussion of the statewide issues and trends and their potential impacts on the system, national issues and trends such as Unmanned Aircraft Systems (UAS), the FAA's Next Generation Air Transportation System (NextGen), and the changing GA landscape are briefly summarized below.

### UAS

The prevalence of UAS, sometimes referred to as drones, has rapidly increased in recent years. In 2016 – the first year the FAA reported remote pilot (those who operate UAS) statistics – Idaho had 170 remote pilots.<sup>8</sup> That number jumped to 672 in 2017, compared to 5,095 certificated pilots of manned aircraft in Idaho for the same period.<sup>9</sup> In July 2018, the FAA announced that more than 100,000 remote pilot certificates had been issued nationwide, and by 2022, that number is projected to increase by 400 percent.<sup>10</sup> Federal regulations pertaining to the operation and piloting of UAS continues to evolve to meet the demands and growth of this fast-changing facet of aviation. The FAA is currently underway with a UAS Integration Pilot Program that is aiming to increase the integration of UAS in the national system as well as test innovative uses of UAS. While there are certainly coordination issues that must be considered related to UAS and airports, there are also tremendous positive applications and possibilities. The Transportation Research Board's Airport Cooperative Research Program (ACRP) is undergoing a series of research projects studying the potential applications of UAS as well as how airports can leverage unmanned systems and how they should be planning for their increased presence in the National Airspace System (NAS).

One potential trend that could significantly alter manned aviation is the introduction of UAS for "urban air mobility" similar to air taxi and/or ride-sharing services. These services are being focused initially in dense urban markets but there has been speculation regarding whether these services may one day replace short haul flights from smaller communities to larger, similar to current regional airline service.

For Idaho and other states with significant agricultural activity, the increasing use of UAS is also being realized, potentially changing airport usage for these activities. Similarly, aerial wildland firefighting is also being looked at for potential UAS applications. As UAS operations increase over time for activities such as these, they may become a notable safety hazard to Idaho's low-altitude operators and may affect the airport facility needs and use.

<sup>&</sup>lt;sup>8</sup> https://gama.aero/wp-content/uploads/2016-GAMA-Databook\_forWeb.pdf

<sup>&</sup>lt;sup>9</sup> https://gama.aero/wp-content/uploads/GAMA\_2017\_AnnualReport\_ForWeb\_0518.pdf

<sup>&</sup>lt;sup>10</sup> https://www.faa.gov/news/updates/?newsId=91086



### NextGen

The FAA's NextGen initiative aims to implement a satellite-based air navigation system to replace the existing ground-based air navigation system. Modernized tracking, communication, reporting, monitoring, and forecasting systems will work together to increase operational efficiencies, reduce fuel consumption, airspace congestion, and delay, maximize existing capacity, improve safety, and decrease the length of flight routes. While NextGen implementation has been underway for years, many of the positive results are just now being realized at airports and in the airspace. For example, PBN approaches are now able to provide improved minima in terrain challenged environments where traditional ground-based approaches were not feasible.

One particular element that is still in implementation is automatic dependent surveillance-broadcast (ADS-B). Aircraft with ADS-B Out equipment transmit information about altitude, airspeed, and location to ground stations and to other equipped aircraft in the vicinity. There is a January 1, 2020, deadline for aircraft to be equipped with ADS-B avionics to continue to be able to fly in certain airspace. As of February 2018, the FAA estimated that 11 percent of aircraft registered in Idaho had met this equipage requirement.<sup>11</sup> ADS-B in is not part of the mandate and requires additional equipment but offers equipped aircraft to receive traffic and weather information from ADS-B ground stations and nearby aircraft broadcasting their positions through ADS-B out. ADS-B is a significant element of NextGen and FAA is emphasizing the need for equipage of aircraft, including GA.

### The Changing GA Landscape

There has been a notable decrease in GA activity in recent years. This decrease is attributable, at least in part, to fluctuations in the price of oil (which ultimately impacts the cost of aviation fuel, a major cost associated with GA operations), increased security restrictions, economic uncertainty combined with the rising overall costs of recreational flying, restrictive federal regulations and medical requirements that can burden pilots and prospective pilots, and an overall decreased interest in flying. These factors have led to decreased or unpredictable levels of GA activity and pilots across the nation. This spills over to the airline industry as airline pilots come from the GA world – a decrease in GA pilots ultimately results in a smaller pool of pilots that might one day fly for an airline.

While GA as a whole is experiencing decreasing or unstable activity levels, business-class aircraft and operations are experiencing growth, offsetting the single-engine piston decline. Many companies and affluent individuals have realized that business or private aviation is an acceptable, even preferred, alternative to flying on an airline. Business travelers can forgo airport security and unpredictable airline and airport delays and opt for private aircraft at a reasonably comparable price while also gaining the ability to tailor travel to specific airports and times that suit travelers better than airline schedules and routes.

### System-wide Issues

During the data collection process, system-wide issues were identified by ITD Aeronautics, the Project Advisory Committee (PAC), other stakeholders, and through various discussions with airport managers. Ultimately, six main topics were identified as issues that affect the current statewide aviation system including:

- → Availability of land
- ✤ Funding availability
- ✤ Land use compatibility
- ✤ Through-the-fence activity
- ✤ Air service
- ✤ Backcountry airports

<sup>&</sup>lt;sup>11</sup> Marks, J (2018). "FAA ADS-B Outreach Activity Update," Continuing Florida Aviation System Planning Process Statewide Meeting, April 11, 2018.



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### Availability of Land

The availability of land to meet both current airport needs and future development is essential to the continued success and compatibility of an airport. Airports must have land to protect certain buffers around the airport, such as runway safety areas (RSAs) and RPZs, although not all airports have these buffers in terms of land ownership and/or control through efforts like avigation easements. Future land availability concerns revolve around having sufficient land to grow the airport's physical footprint to meet increasing demand as well as accommodate newer, larger aircraft or tenants. Runway extensions, new hangars, increased non-aeronautical development, and other capital projects require additional land and access to the airport. If an airport does not have available land for future development or the ability to acquire new land (due to existing land uses, political concerns, existing surrounding infrastructure, etc.), it can greatly limit an airport's ability to increase capacity to accommodate future growth. Land is also a component in financial sustainability of an airport as it provides a means for airports to generate revenue to fund airport operational and capital needs. Whether the land is used for aeronautical and/or non-aeronautical purposes, having a sufficient land envelope that both protects the airport and offers opportunities for revenue enhancement is critical to the future success of an airport.

### **Funding Availability**

The availability of funding for airport development is a major factor in an individual airport's or a system's ability to preserve its assets and experience sustained growth. Airports rely on a blend of federal and state grants, in addition to local funds, to assist in development. Airports that are included in the FAA's NPIAS are eligible for federal AIP funds<sup>12</sup>. For state funding, ITD Aeronautics implements state aviation grants through the IAAP. Only Idaho's state-managed airports and those non-NPIAS airports operated by public entities are eligible for the IAAP<sup>13</sup>. To supplement federal and state grants, airports often must provide a local share. In addition to the FAA's AIP and ITD Aeronautics IAAP, there are other sources of airport funding available, especially for commercial service airports such as the FAA's Passenger Facility Charge Program (PFC) and Customer Facility Charges (CFCs).

The FAA's AIP is funded through fees taxes imposed on aviation fuel, airline tickets, waybills, and international departure and arrivals. ITD Aeronautics IAAP is funded through state aviation fuel taxes. Both the AIP and the IAAP depend on activity levels for funding – during times when activity levels are down, less revenues are generated to feed both programs' funding pots and thus less funding is available. In addition to fluctuating input levels, airports must compete against each other for these limited funds. At the local level, airports must compete against other local needs such as roads, schools, parks, and the general operating requirements of their government sponsor.

### Land Use Compatibility

The compatibility of land uses surrounding airports has been a national concern for decades. Airports are like magnets, attracting development – this has often resulted in the encroachment of incompatible uses such as schools, residential development, places of worship, and healthcare facilities. Protecting the airport environment is crucial to ensuring the safety of aircraft and people as well as preserving an airport's ability to grow. Common airport land use priorities include preventing incompatible land uses, protecting navigable airspace (limiting structure heights near airports), and eliminating or minimizing/mitigating to the greatest extent possible wildlife attractants, noise and overflights, light emissions and reflectivity, power and frequency interference, and the

<sup>&</sup>lt;sup>12</sup> Thirty-seven of Idaho's airports are included in the NPIAS.

<sup>&</sup>lt;sup>13</sup> Any country, city, village, or agency designated in Idaho Code, is deemed an eligible public entity for the purpose of participation in the IAAP.



generation of smoke, dust, and airborne debris. Just as important as protecting the airport environment is preserving the quality of life for those living and working in the vicinity of airports. A balanced, cooperative approach to airport land use compatibility planning can ensure that airports and surrounding developments can exist together.

In the 2010 IASP, 21 (four commercial service and 17 GA) of the 75 study airports (28 percent) indicated that they had local land use zoning in place and 33 airports (six commercial service and 27 GA) of the 75 study airports (44 percent) indicated that they had zoning in place to restrict structure heights around airports. As previously noted, some airports impact multiple jurisdictions and while they may have zoning in place for some of the impacted jurisdictions, information was not provided on whether or not all of the impacted areas have appropriate zoning.

### Since 2010, ITD Aeronautics updated the Airport Idaho Land Use Compatibility Guidelines

(https://itd.idaho.gov/wp-content/Aero/Publications/LandUse\_Guidelines.pdf) and made progress with Idaho Senate Bill 1265 effective July 1, 2014, which amended Idaho Code Title 21, Chapter 5, Airport Zoning Act, and Title 67, Chapter 65, Local Land Use Planning. These changes were passed to "require more proactive land use compatibility planning around the state's airports by city and county entities through the local comprehensive planning process."<sup>14</sup> The new legislation has resulted in better partnership between local zoning authorities, local airport authorities and ITD Aeronautics.

Following the successful Senate Bill 1265 in 2014, ITD Aeronautics has compiled a list of prevailing land use and zoning issues that will need to be addressed in order to provide a full measure of protections needed for Idaho airports in the years to come. These items include:

- Provide a definition for an airport influence area
- → Redefine an Aviation Hazard Area to include the concept of the airport influence area
- ✤ Provide a definition for a potential aviation hazard
- → Redefine a structure to include objects of natural growth
- Clarify the policy statement concerning aviation hazards to include such items as the airport influence area, potential aviation hazard, and the redefined structure
- Require political subdivisions with planning and zoning authority, which have an airport(s) or airport influence area(s) within their jurisdiction, to include local public airports as potentially needing mitigation of the effects of subdivision development

These additional provisions will provide enhanced predictability from a land use planning perspective to landowners, land developers, and local land use planners.

### **Through-the-Fence Activity**

Through-the-fence access or activity refers to an off-airport property owner that has permission from the airport operator to access the airfield through a fence that separates the off-airport site to the airfield. Through-the-fence activity can consist of residential or commercial access. The FAA prohibits new residential through-the-fence access at commercial service airports, though new residential through-the-fence access is permitted at GA airports if the airport sponsor is compliant with various federal requirements. This is also true for commercial through-the-fence activities. While through-the-fence activities do provide an opportunity for increased aeronautical benefits and activity such as increased operations and more fuel sales, through-the-fence access also comes with its set of concerns. Specifically, through-the-fence items that should be considered and addressed include security, access control, and the requirement of a through-the-fence fee structure that ensures that anyone with through-the-fence access is paying their fair share to use the airport, just as on-airport tenants do through monthly leases and other fees.

<sup>&</sup>lt;sup>14</sup> Idaho Transportation Department, Airport Land Use Guidelines, 2016.



### **Air Service Trends**

Air service and air carrier trends can impact planning and development at commercial service airports throughout Idaho. With major airline consolidation resulting in only three remaining major legacy carriers – American, Delta, and United – it is not yet fully known how this will impact large airlines' hubs and focus cities throughout the country and ultimately how this will trickle down through the entire route network and affect "spoke" airports in airlines' hub and spoke systems. Parallel to airline consolidation has been the expansion of low-cost carriers (LCCs) and ultra-low-cost carriers (ULCCs). LCCs and ULCCs offer extremely low fares, often to smaller, secondary cities whose airports have lower airline operating costs. LCCs and ULCCs can often provide an opportunity to travel more frequently to those who would have otherwise not traveled by air, as well as introduce air service to airports that previously did not have it.

Additionally, aircraft manufacturers and airlines have been working together to increase the overall capacity of the nation's commercial aircraft fleet, also known as upgauging. Upgauging is the common term for the move to aircraft with greater seating capacities. This allows airlines to fly more people without directly increasing the number of flights. This is an item for consideration as larger capacity aircraft require larger holding and processing areas at airports in order to accommodate more people arriving or departing at the same time. Additionally, the upgauging of commercial aircraft fleet can result in airports experiencing higher annual enplanements without an increase in total annual operations. This trend has been encountered at Idaho airports and will continue to add stress to existing terminal facilities. Particularly, terminal stress has been identified at Idaho Falls Regional and Friedman Memorial airports.

Finally, changes to regional airline service that have historically served most of the small and non-hub airports in the U.S., including many in Idaho, have had a tremendous impact on the availability of airline service. There are many reasons for the changes including a reduction in the number of available pilots, due to both unprecedented retirement of pilots from major airlines and fewer qualified pilots to replace them. A national pilot shortage has been increasingly on the rise due to changes in the number of hours required to obtain a rating to fly a commercial airliner and many of the regional pilots being hired at the major airlines to replace the retiring pilots. In addition to the pilot shortage, the number of aircraft with fewer than 50 seats which were traditionally used to serve small markets have nearly disappeared from the fleet, with even the 50-seat regional jets leaving the system. Turboprop aircraft that were the mainstay of service to these markets are now being replaced by aircraft that are 70 seats and larger, which cannot be supported in many small markets.

As part of the 1978 deregulation of the commercial airline industry, the Essential Air Service (EAS) program was established to ensure that smaller communities would continue to receive air service through government subsidy. However, the list of EAS eligible airports was established in 1978 based on communities that were receiving air service prior to deregulation and additional airports cannot be easily added as the requirements are quite stringent and require congressional action. Unfortunately, the EAS program continues to get costlier with more of the original list of airports requiring EAS designation. Additionally, there are fewer airlines providing EAS service which led to many communities losing service altogether.

### **Recreational/Backcountry Airports/Airstrips**

Throughout the U.S., recreational airports that are referred to in Idaho as backcountry airports or airstrips are used by fliers that are interested in accessing recreational locations that can sometimes only be accessed by air. These airports often have limited facilities including unpaved runways as they are aiming to serve a distinct segment of the industry. Their popularity amongst local and non-local visitors continues to increase across the U.S. with the RAF created to support preservation of these facilities in all states. These facilities are gateways into the wilderness for outdoor activities such as hunting, whitewater rafting, camping, and hiking, and have a substantial indirect economic impact on the communities that are served.



In Idaho, the IAN was formed to coalesce the owners of the airstrips serving the backcountry. These owners included the U.S. Forest Service, BLM, Idaho Fish and Game, ITD Aeronautics and several private owners. Backcountry flying, and the availability of the airstrips has continued to be a concern for pilots, businesses, and visitors. During the 2020 IASP Update inventory process and through discussions with PAC members and stakeholders, it was noted that as the popularity of these backcountry airports increase, so do required maintenance projects and additional facilities to keep pace with the uptick in usage. Additionally, it was identified that backcountry airports have been experiencing closures due not only to a lack of maintenance, but by pressure from other governmental agencies. Backcountry airports have proven to be a staple of the Idaho aviation system, but it has been made clear that these airports continue to face financial, operational, and political challenges.

### Issues Identified During the Inventory Data Collection and the PAC Meeting

The issues identified the data collection process and PAC meetings are presented individually below.

### Issues Identified During the Inventory Data Collection

In addition to the issues discussed above, the IASP Update inventory process which included a survey of all 75 study airports included questions in which the airport sponsors were asked to identify the top three issues that concern them or that the IASP Update should consider. **Table 2-17** details those issues identified by the study airports in order of prevalence, including the number and percentage of the 75 study airports that identified each issue on their inventory form.

### TABLE 2-17: TOP IASP ISSUES

IDENTIFIED ISSUE	Number of Airports	Percent of Study Airports
Airside Pavement Maintenance	30	40%
Land Use and Development Concerns	24	32%
Aging or Needed Airport Facilities & Equipment	19	25%
Shortage of Hangar Space	15	20%
Airside Pavement Expansion	14	19%
Availability of Funds	10	13%

Source: Inventory Form and Data Survey Forms, 2019

### **Issues Identified During the PAC Meeting**

The project team conducted an interactive exercise during the first PAC meeting to obtain additional input from members on specific issues facing the Idaho aviation system. This exercise involved two breakout groups where participants identified trends and issues that were important to the Idaho system, that they were experiencing now, or that they thought were reasonably likely to occur in the future and should be considered during this 2020 IASP Update. These issues were then grouped into three categories: limited impact, moderate impact, and most impact based on the group's consensus on how likely each issue would be to affect airports in Idaho and how much of an impact each issue would have should it occur. **Table 2-18** presents the results of the exercise by each group.



### TABLE 2-18: IDAHO AVIATION ISSUES IDENTIFIED IN PAC MEETING

LEVEL OF		
IMPACT	Group 1	Group 2
High Impact	<ul> <li>Airport access</li> <li>Changing GA landscape</li> <li>Cost of private pilot license/flight training</li> <li>Encroachment</li> <li>Land use compatibility</li> <li>Local funding</li> <li>Through-the-fence activity</li> <li>UAS</li> </ul>	<ul> <li>Agricultural spraying aircraft as the critical (design) aircraft</li> <li>Airport focus: agricultural or GA</li> <li>Intrastate commercial air service</li> <li>Education: public, flight training, pilot shortage impacts</li> <li>Funding: user fees, taxes, back-country airports, local</li> <li>Land use (encroachment, multi-jurisdictional)</li> <li>Limited airport goals by ownership</li> <li>Technology (UAS, electric aircraft, fuel)</li> </ul>
Moderate Impact	<ul> <li>Air service development</li> <li>Airport competition and cooperation</li> <li>Availability of aviation fuel</li> <li>Backcountry airports</li> <li>Business growth and development</li> <li>Commercial service availability</li> <li>Community communication and partnerships</li> <li>Forest fires</li> <li>GA and commercial service operational costs</li> <li>Interagency partnerships</li> <li>Land ownership</li> <li>National funding</li> <li>Political climate</li> <li>Technology mandates</li> </ul>	<ul> <li>Changes in economy (type/sector)</li> <li>Economic development</li> <li>GA access and recreational area fees</li> <li>Instrument approach development</li> <li>Land manager regulation (U.S. Forest Service, BLM)</li> <li>Population growth (demographic shifts)</li> </ul>
Low Impact	<ul> <li>Autonomous vehicles</li> <li>Cost of hangar construction</li> <li>Commercial service pilot shortage</li> <li>Electric aircraft</li> <li>Geographic isolation</li> <li>NextGen</li> <li>Noise</li> <li>Shrinking rural Idaho</li> <li>Tax structure</li> <li>Tribal issues</li> </ul>	<ul> <li>Airport quality</li> <li>Backcountry airports (access, increased usage [U.S. Forest Service], decrease usage [other users], maintenance and preservation, decrease in wildlife leads to fewer hunters and decreased income)</li> <li>Expansion</li> <li>Growth (industry and traders)</li> <li>Liability insurance costs</li> <li>Local official turnover</li> <li>Maintenance</li> </ul>

Source: Kimley-Horn, 2018



### **Issues Identified Through Stakeholder Interviews**

The project team also conducted several interviews of system stakeholders to better gauge aeronautical issues within the state. These stakeholders were selected from varying corners of the aeronautical landscape and included board members from the Idaho Aviation Advisory Committee, aeronautical related business owners, agricultural aerial applicators, pilots, and most importantly, system users.

Through these interviews, various issues became consistent themes as respondents identified trends and issues that they thought were impactful to aviation within the Idaho system. Individual responses were based on what they were experiencing now or that they thought were likely to occur in the future.

One respondent with particular exposure to the backcountry airstrips indicated that many of these backcountry facilities are worse off than they were five years ago. Additional feedback exposed concern that many airstrips are being closed by new owners and others are not being well maintained due to a variety of factors.

As a group however, all respondents indicated that the holistic aviation system was better today than it was five years ago and that they continue to see it improve as time goes on. A summary of additional consistent themes from these stakeholder interviews are listed below.

- → Development encroachment
- ✤ Adjacent land use concerns
- → Limited weather reporting capability (particularly in the backcountry)
- ✤ Limited funding
- ✤ Maintenance and preservation of existing runways and facilities
- ✤ Hangar shortages
- Noise
- ✤ Increasing popularity of backcountry recreation
- Limited intrastate commercial air service
- Limited intermodal connectivity to airports

### **Issues Summary**

The intent of identifying these issues and trends is not to solve them through the state aviation system planning process; there are too many uncertainties about the timing, likelihood, severity, and ultimate impacts of these or any other aviation-related issues to try to resolve any of them through this 2020 IASP Update. Rather, identifying them and considering them throughout the entire process can help ITD Aeronautics prepare to address the issues. The identification of these issues will aid in future tasks in this Update, specifically the policy analysis and investigation recommendations tasks. During the analysis and refinement of ITD Aeronautics' policies, procedures, priorities, and the development of IASP recommendations, these issues will be considered to ensure that all policies and recommendations will, among other things, serve as the foundation for ITD Aeronautics to address any of these issues as they arise and provide the knowledge and flexibility needed to adapt to changes and trends in the industry. The identification of these issues will also aid in informing individual airport master plans to assist airports in growing their partnership with ITD Aeronautics to successfully overcome these or any other issues if and when they do arise.

### **Inventory Summary**

This chapter presented an in-depth view of Idaho's airport system assets, as reported by individual airports, including airside and landside facilities, ground transportation options, NAVAIDs, approach types, planning documentation, and issues to name a few. Additionally, this chapter laid out the vast amount of airport activities, support roles, and services available throughout the system. This data is essential to the subsequent evaluation of the system's needs and results from this chapter are used as the baseline for analysis in future chapters.



# **CHAPTER THREE: AIRPORT ROLE ANALYSIS**

### Introduction

Determining how airports function within a state system is a foundation of the system planning process. If planned and developed within the context of the state system, individual airports can effectively support a subset of aviation activities without impacting service levels within specific regions or communities. Airport planning from the system-wide perspective identifies duplication, gaps, and deficiencies of aviation services in localized areas. This approach supports informed decision-making and resource allocation.

Idaho's airport classification structure is designed to establish a network of facilities that supports the state's access, mobility, and economic needs while supporting the long-term viability of all airports within the system. This process recognizes that all airports contribute to the system; however, the level and type of contribution varies among airports due to numerous factors. Some of these factors are inherent to the airport itself (e.g., available services and facilities), while others are driven by external conditions such as proximity to markets, other airports, and population centers. Because each airport within a system plays a different role, the availability of facilities and services must align with what an airport is and how it functions.

Following a review of federal methodologies, types of classification methodologies, and an evaluation of Idaho's existing roles system, this chapter classifies each system airport in a manner that aligns with the current needs and policies of the Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics). These classifications are utilized in subsequent analyses to identify strategies and recommendations for the optimization of the system under current and future conditions. In addition, objectives for the development of facilities and services that are appropriate for the various classifications are identified at the end of the chapter.

The information in this chapter is presented as follows:

- → Federal Classifications
- ✤ Types of State Classification Methodologies
- ✤ 2010 IASP Airport Roles
- ✤ 2020 IASP Update Classifications
- ✤ Facility and Service Objectives

## **Federal Classifications**

Airports are classified at the state and federal levels to reflect the diverse roles that airports play in each of these spheres. Depending on the unique needs of the airport system, federal and state classifications can be identical, partially overlap, or be completely different. The following section explains the federal classification system established by the Federal Aviation Administration (FAA) known as the National Plan of Integrated Airport Systems (NPIAS).

### **National Plan of Integrated Airport Systems**

The *Report to Congress, NPIAS 2019-2023* (2019-2023 NPIAS) is the latest publication from the FAA that identifies 3,331 existing and seven proposed public-use airports as significant to the national air system (3,338 total). These airports encompass all types of landing areas specifically developed for conventional fixed-wing aircraft, helicopters, and seaplanes.<sup>1</sup> Ninety-eight percent of NPIAS airports are publicly owned (3,249), while two percent (72) are owned by private entities. These airports serve various functions within the system, and each plays an integral role in the economic, social, and/or physical well-being of the residents of and visitors to the U.S., as well

<sup>&</sup>lt;sup>1</sup> FAA 2019-2023 NPIAS. p.2.



as the private and public institutions that operate within its borders. Most NPIAS airports are eligible to receive federal entitlement funds through the Airport Improvement Program (AIP) for planning and development projects including improvements related to enhancing airport safety, capacity, security, and environmental concerns.<sup>2</sup>

As summarized in **Table 3-1**, NPIAS airports are categorized as either Primary or Nonprimary. Primary airports are defined as receiving scheduled air carrier service with 10,000 or more enplaned passengers per year. Primary airports are subcategorized based on the percent of total U.S. enplanements (i.e., passengers boarding an aircraft) annually occurring at their facility. There are 380 Primary airports in the U.S. Nonprimary airports encompass Nonprimary Commercial Service, Reliever, and General Aviation (GA) airports and are generally defined in terms of activity type and level. The 2,941 Nonprimary airports included in the NPIAS account for 59 percent of the active GA fleet, 64 percent of aircraft operations, and 38 percent of the AIP-eligible development through 2023.<sup>3</sup>

### TABLE 3-1: NPIAS CLASSIFICATIONS

ТҮРЕ	Definition
	PRIMARY <sup>1</sup>
Large Hub	One percent or more
Medium Hub	At least 0.25 but less than 1.0 percent
Small Hub	At least 0.05 but less than 0.25 percent
Nonhub	Less than 0.05 percent but more than 10,000
	NONPRIMARY
Commercial	Public airports receiving scheduled passenger service and at least 2,500 but no
Service	more than 10,000 enplaned passengers per year
Reliever	Public or private airports designated by the FAA to relieve GA traffic
	congestion at nearby commercial service airports and provide improved GA
	access to the overall community
GA	Public-use airports that do not have scheduled air carrier service or have less
	than 2,500 enplanements

Note: <sup>1</sup>Defined in terms of percent of total U.S. enplanements. Source: FAA NPIAS 2019–2023

There are 37 airports in Idaho currently shown in the 2019-2023 NPIAS.<sup>4</sup> The total number of NPIAS airports within each classification is presented in **Table 3-2**, along with an example of an Idaho airport or airports in that classification.

<sup>2</sup> FAA. (2017). Overview: What is AIP? Available online www.faa.gov/airports/aip/overview/#eligible\_projects. Accessed April 2019.

<sup>&</sup>lt;sup>3</sup> FAA 2019-2023 NPIAS. p.7.

<sup>&</sup>lt;sup>4</sup> Of these 37 airports, Craigmont Municipal (S89) and Kamiah Municipal (S73) are listed as Unclassified. Unclassified airports have limited aeronautical activities and may be removed in the next NPIAS update if activity levels do not increase. In December 2018, Craigmont Municipal was official removed from the system by the FAA. It is therefore analyzed as a non-NPIAS airport during this IASP Update.



			Airporto	
		No. of Airports		
CLASSIF	ICATION	U.S.	Idaho	Idaho Airport Example
Primary	Large Hub	30	0	Not applicable (N/A)
	Medium Hub	31	0	N/A
	Small Hub	72	1	Boise Air Terminal/Gowen Field
	Nonhub	247	5	Friedman Memoria, Idaho Falls, Pocatello Regional
	Subtotal	380	6	N/A
Nonprimary <sup>1</sup>	Commercial service	126	0	N/A
	Reliever	261	1	Caldwell Industrial
	GA	2,554	30	Challis, Nampa Municipal, Weiser Municipal
	Subtotal	2,941	31	N/A
	Total	3,321	37	

### TABLE 3-2: TOTAL NPIAS AIRPORTS (U.S. AND IDAHO)

Note: <sup>1</sup>The FAA removed Craigmont Municipal (S89) from the NPIAS in December 2018, reducing the total number of NPIAS airports in Idaho to 36. However, the 2019-2023 NPIAS still reports S89 as an Unclassified airport. It is thus reported here as a matter of continuity. Source: FAA NPIAS 2019–2023

 Table 3-3 presents the current (2019-2023) classifications for all NPIAS airports in Idaho.

#### TABLE 3-3: IDAHO'S NPIAS AIRPORTS

ASSOCIATED CITY	Airport	FAA ID	Classification
	PRIMARY		
Boise	Boise Air Terminal/Gowen Field	BOI	Small
Hailey	Friedman Memorial	SUN	Nonhub
Idaho Falls	Idaho Falls Regional	IDA	Nonhub
Lewiston	Lewiston-Nez Perce County	LWS	Nonhub
Pocatello	Pocatello Regional	PIH	Nonhub
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Nonhub
	NONPRIMARY		
Aberdeen	Aberdeen Municipal	U36	GA
Arco	Arco-Butte County	AOC	GA
Blackfoot	McCarley Field	U02	GA
Bonners Ferry	Boundary County	65S	GA
Buhl	Buhl Municipal	U03	GA
Burley	Burley Municipal	BYI	GA
Caldwell	Caldwell Industrial	EUL	Reliever
Cascade	Cascade	U70	GA
Challis	Challis	LLJ	GA
Coeur d'Alene	Coeur D'Alene-Pappy Boyington Field	COE	GA
Council	Council Municipal	U82	GA
Craigmont <sup>1</sup>	Craigmont Municipal	S89	GA
Driggs	Driggs-Reed Memorial	DIJ	GA
Gooding	Gooding Municipal	GNG	GA
Grangeville	Idaho County	GIC	GA
Homedale	Homedale Municipal	S66	GA



ASSOCIATED CITY	Airport	FAA ID	Classification
Jerome	Jerome County	JER	GA
Kamiah	Kamiah Municipal	S73	GA
Kellogg	Shoshone County	S83	GA
McCall	McCall Municipal	MYL	GA
Mountain Home	Mountain Home Municipal	U76	GA
Nampa	Nampa Municipal	MAN	GA
Orofino	Orofino Municipal	S68	GA
Paris	Bear Lake County	1U7	GA
Preston	Preston	U10	GA
Priest River	Priest River Municipal	1S6	GA
Rexburg	Rexburg-Madison County	RXE	GA
Salmon	Lemhi County	SMN	GA
Sandpoint	Sandpoint	SZT	GA
St. Maries	St. Maries Municipal	S72	GA
Weiser	Weiser Municipal	S87	GA

Note: <sup>1</sup>The FAA removed Craigmont Municipal (S89) from the NPIAS in December 2018. Source: FAA NPIAS 2019–2023

### **FAA ASSET Study**

Approximately 88 percent of NPIAS airports in the U.S. are GA. Encompassing all civilian airports that do not provide scheduled commercial service, these facilities support a wide variety of aeronautical activities integral to the nation's air transportation network. Activities such as wildland firefighting, aerial medical evacuations, and search and rescue operations cannot always be economically supported at commercial service airports but can mean the difference between life and death. In some cases, alternative modes of delivery, such as fighting forest fires without aerial support, are less effective and pose greater risks to human life.

In 2012, the FAA reviewed the network of GA facilities within the NPIAS to better capture their diverse functions and economic contributions. The results of this study were compiled in *General Aviation Airports: A National Asset* (referred to as ASSET 1 or the ASSET Study). This report highlights the following key aeronautical functions provided by the GA airport system:

- ✤ Emergency preparedness and response
- ✤ Critical community access for remote areas
- → Commercial, industrial, and economic activity functions
- ✤ Access to tourism and special events
- → Other aviation-specific functions, including corporate flights and flight instruction

The ASSET Study divided GA airports into four new categories designed to provide policymakers with a better understanding of the vast and diverse nature of the GA system. ASSET categories capture the true value of GA airports at local and regional levels and fill the gap left by the NPIAS in describing the activities and relative roles of airports in the national GA system. Categories are primarily based on existing activity levels, number and type of based aircraft, and volume and types of flights. Evaluation criteria also incorporate the aeronautical functions economically and operationally supported by the airport. As a result, the ASSET Study in part classifies airports based on their roles in serving the public interest. ASSET 1 also recognizes Unclassified NPIAS airports, as they do not meet other criteria and have limited activity and number of based aircraft. **Table 3-4** defines the ASSET categories for GA airports.



#### TABLE 3-4: GA AIRPORT ASSET CLASSIFICATIONS AND SYSTEM ROLES

CLASSIFICATION	System Role
National	Support the national airport system by providing communities access to national and international markets in multiple states and throughout the U.S. National airports have very high levels of aviation activity with many jets and multiengine propeller aircraft.
Regional	Support regional economies by connecting communities to regional and national markets. Generally located in metropolitan areas and serve relatively large populations. Regional airports have high levels of activity with some jets and multiengine propeller aircraft. The metropolitan areas in which regional airports are located can be Metropolitan Statistical Areas with an urban core population of at least 50,000 or Micropolitan Statistical Areas with a core urban population between 10,000 and 50,000.
Local	Supplement local communities by providing access to markets within a state or immediate region. Local airports are most often located near larger population centers, but not necessarily in metropolitan or micropolitan areas. Most of the flying at local airports is by piston aircraft in support of business and personal needs. These airports typically accommodate flight training, emergency services, and charter passenger service.
Basic	Provide a means for GA flying and link the community to the national airport system. These airports support GA activities such as emergency response, air ambulance service, flight training, and personal flying. Most of the flying at Basic airports is self-piloted for business and personal reasons using propeller-driven aircraft. They often fulfill their role with a single runway or helipad, and minimal infrastructure.
Unclassified	Currently in the NPIAS but with limited activity. If the next review of an Unclassified airport's activity shows levels that meet the criteria for one of the classifications, the airport will be reclassified in the next published NPIAS.

Source: ASSET 1 2012

Following the release of ASSET 1, the FAA requested additional information from airport sponsors regarding the aeronautical functions supported by and sophistication of flying occurring at their airports.<sup>5</sup> Based in part on this subsequent investigation, the FAA released *ASSET 2: In-Depth Review of 497 Unclassified Airports* (ASSET 2) in 2014. This report further evaluated the Unclassified airports from ASSET 1 to review if additional data were available to categorize these airports. In ASSET 1 conducted in 2012, Idaho had six Unclassified airports:

- ✤ Aberdeen Municipal (U36)
- ✤ Council Municipal (U82)
- ✤ Craigmont Municipal (S89)
- → Kamiah Municipal (S73)
- ✤ Shoshone County (S83)
- → Preston (U10)

Four of the six Idaho airports were re-classified as Basic and two remained Unclassified (Craigmont and Council municipals) during ASSET 2 in 2014. ASSET categories have been subsequently reevaluated during biennial NPIAS updates. The *2017-2021 NPIAS* reclassified Council Municipal as Basic, and the 2019-2023 update reclassified Kamiah Municipal as Unclassified (as in 2012). **Table 3-5** presents the current ASSET categories of Idaho's GA airports reflected in the *2019-2023 NPIAS*.

<sup>&</sup>lt;sup>5</sup> Ibid. p.3



ASSOCIATED	SSET CATEGORIES OF IDAHO'S GA AIRPO		ASSET
CITY	Airport	FAA ID	Category
Aberdeen	Aberdeen Municipal	U36	Basic
Arco	Arco-Butte County	AOC	Basic
Blackfoot	McCarley Field	U02	Local
Bonners Ferry	Boundary County	65S	Local
Buhl	Buhl Municipal	U03	Basic
Burley	Burley Municipal	BYI	Local
Caldwell	Caldwell Industrial	EUL	Regional
Cascade	Cascade	U70	Local
Challis	Challis	LLJ	Basic
Coeur d'Alene	Coeur D'Alene-Pappy Boyington Field	COE	Regional
Council	Council Municipal	U82	Basic
Craigmont <sup>1</sup>	Craigmont Municipal	S89	Unclassified
Driggs	Driggs-Reed Memorial	DIJ	Regional
Gooding	Gooding Municipal	GNG	Local
Grangeville	Idaho County	GIC	Local
Homedale	Homedale Municipal	S66	Basic
Jerome	Jerome County	JER	Local
Kamiah	Kamiah Municipal	S73	Unclassified
Kellogg	Shoshone County	S83	Basic
McCall	McCall Municipal	MYL	Local
Mountain Home	Mountain Home Municipal	U76	Local
Nampa	Nampa Municipal	MAN	Local
Orofino	Orofino Municipal	S68	Basic
Paris	Bear Lake County	1U7	Basic
Preston	Preston	U10	Local
Priest River	Priest River Municipal	1S6	Basic
Rexburg	Rexburg-Madison County	RXE	Local
Salmon	Lemhi County	SMN	Local
Sandpoint	Sandpoint	SZT	Local
St. Maries	St. Maries Municipal	S72	Local
Weiser	Weiser Municipal	S87	Local

### TABLE 3-5: ASSET CATEGORIES OF IDAHO'S GA AIRPORTS (2019-2023 NPIAS)

Note: <sup>1</sup>The FAA removed Craigmont Municipal (S89) from the NPIAS in December 2018. Accordingly, the airport will be analyzed as a non-NPIAS airport for the purposes of the study. Source: FAA NPIAS 2019–2023



### **Types of State Classification Methodologies**

In addition to the federal-level NPIAS utilized by the FAA to classify airports significant to the national airspace system, states typically develop tailored methodologies designed to describe airports' roles at the state, regional, and/or local levels. These roles or classifications are based on the aviation characteristics and functions most important to a state's specific needs and priorities and generally encompass both NPIAS and non-NPIAS airports. Nomenclature is often comprehendible by the aviation and non-aviation public, such as "business class, recreational, local service, general utility, or basic utility" (Advisory Circular [AC] 150-5070, Change 1, §209b).

Most state aviation system planning role classification structures employ one of just a few basic methodologies. These methodologies range from very complex systems that assign points based on airport services and facilities, to relatively straightforward flow chart methodologies. The following section provides an overview of three common role stratification methodologies identified during the system plan review.

### **Strict Set of Role Criteria**

Applying a strict set of role criteria to each airport role is the most straightforward approach for stratifying a state's airport system. It is also the methodology utilized by the FAA ASSET Study. The approach is simple: to be in the highest airport role, an airport must meet the most demanding set of criteria, followed by continually less-strict criteria for lower airport roles. This methodology typically uses the same type of criteria for all roles, although some system plans modify this methodology to use different criteria depending on the role level. For example, FAA ASSET uses the number of instrument flight rule (IFR) operations, number of based jet aircraft, number of international departures, annual interstate operations, annual enplanements, and air cargo landed weight as criteria for placing airports in the national airport classification. This methodology can also be adapted to allow airports to meet one of several sets of criteria to be placed within a specific role. For example, to be a Regional airport in the ASSET Study, an airport must meet one of the following criteria:

- The airport is in a metropolitan or micropolitan statistical area, has at least 10 annual domestic IFR flights over 500 miles in radius, at least 1,000 annual IFR operations, at least one based jet, or at least 100 based aircraft <u>or</u>
- The airport is in a metropolitan or micropolitan statistical area, and the airport meets the definition of commercial service

This methodology's adaptability is its most notable advantage. By employing different criteria based on role and/or the use of "or" statements, the strict sets of role criteria methodology can be modified for use in small or complex airport systems while remaining relatively easy to communicate to clients and the public. Conversely, without such modifications, the methodology is often too rigid to be adequate for all but the simplest of airport systems.

### **Flow Chart**

A flow chart methodology uses an "if-then" series of decisions to categorize airports based on prioritized criteria as defined by the state. For example, a system of airports may first be divided based on tiers of primary runway length, then by the type of available fuel or instrument approach capabilities, number of based aircraft, and so on as deemed important to the specific state's airport system. An airport is assigned a role based on the path it takes along the flow chart. In addition to utilizing fewer criteria than other methodologies, advantages of the flow chart methodology include:

- → Achieves detailed results with just a few decision criteria
- ✤ Easy to communicate to clients and the public
- ✤ Easy to duplicate when updating system plans



However, a flow chart can be less customizable than other structures, particularly the points system methodology described in the following section.

### **Points System**

A points system methodology assigns points to airports based on airport characteristics such as activities and facilities as selected by the state. While this methodology can vary widely amongst states, facilities and services supporting higher levels of activity and larger aircraft are typically assigned a higher points value. For example, an airport with a 5,500-foot-long runway would gain more points for runway length than would an airport with a 3,800-foot-long runway. Similarly, an airport with a population of 450,000 people in its market area would earn more points for population coverage than would an airport with a smaller population in its market area. Different criteria may also be weighted differently based on their relative importance in the system. For example, the point total for runway length may be 10, while the total points available for population coverage may be five.

To determine roles, each airport's points are summed, and roles are assigned based on ranges of total points (e.g., 50-36 for Primary airports, 35-20 for secondary airports, etc.). The state may also decide to establish a set number of airports in each role and categorize airports based on their relative scores to fit within the preestablished percentage structure. The primary advantage of the points system is that it can be customized to be as complex and nuanced as the airport system requires. However, this methodology is often difficult to clearly communicate to clients and the public and can be challenging to update between system plan updates.

### **2010 IASP Airport Roles**

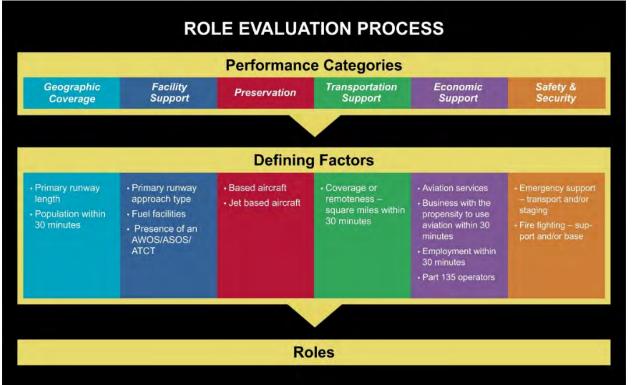
Based on the outcomes of the 2010 IASP, Idaho's existing airport system classification methodology most closely aligns with the points system. All airports were first evaluated equally in terms of the propensity of demand for aviation. Then, specific defining factors were applied to each airport and its associated city or county to quantitatively evaluate airports and their roles within the system. This section describes the existing classification methodology and resultant roles that have governed the treatment of Idaho's system airports since 2010.

### **2010 IASP Roles Evaluation**

At the outset of the 2010 IASP, six performance categories rooted in Idaho's Transportation Vision were established to evaluate the system's ability to meet existing and future aviation needs. In addition to providing the framework within which system could be evaluated, these performance measures guided the role definition process. A set of defining factors within each performance category identified by ITD Aeronautics were used to determine the functional role of each airport in the state. By interlinking the goals of the overall system with the function of each airport, this methodology gave ITD Aeronautics the ability to clearly identify underserved areas of the state in terms of specific aviation functions.

Figure 3-1 depicts the role evaluation process of the 2010 IASP.

### FIGURE 3-1: 2010 ROLE EVALUATION PROCESS



Source: Wilbur Smith and Associates, 2009

The 2010 IASP recognized that state-specific classifications could be developed based on an evaluation of many different factors that influence an airport's role in a defined system. Factors such as geography, demographic characteristics, and the current and anticipated future demand for aviation services could be assessed to understand the needs an airport fills in its community. Other key factors, such as airside and landside facilities and infrastructure, are also significantly important to consider when defining state functional classifications using this type of methodology. As shown in the process methodology graphic above, 14 defining factors were identified to define the roles of Idaho's airports within the state system:

- ✤ Geographic Coverage
  - Primary runway length
  - Population within 30 minutes
- ✤ Facility Support
  - Primary runway approach type
  - Fuel facilities
  - Presence of an automated weather observing system (AWOS), automated surface observing system (AWOS), automated surface observing system (ASOS), and/or air traffic control tower (ATCT)
- ✤ Preservation
  - Based aircraft
  - Jet based aircraft
- → Transportation Support: Coverage or remoteness square miles within 30 minutes



- ✤ Economic Support
  - Aviation services
  - Business with the propensity to use aviation within 30 minutes
  - Employment within 30 minutes
  - Part 135 operators
- ✤ Safety & Security
  - Emergency support transport and/or staging
  - Firefighting support and/or base

Each airport's performance was evaluated for each of these 14 unique factors and assigned a score from low to high. The airport or airport(s) determined to optimally meet the defining factor were given a score of high. All other airports were then scored in terms of their performance relative to these optimally performing facilities. The results of all 14 evaluations were summed to provide a total score for each airport. Total scores were assessed to identify logical and reasonable breaks in the scoring process. These breaks were used to group peer airports into five categories.<sup>6</sup>

### **Airport Role Definitions**

Informed by the categories of airports emerging from the performance evaluation methodology described above, ITD Aeronautics developed five roles to define Idaho's airports based on a review of previous system plans and the classification methodologies of the FAA and other states. The five functional roles developed by the 2010 IASP are as follows:

- Commercial Service Airports: Commercial service airports accommodate scheduled major/national or regional/commuter commercial air carrier service in addition to air cargo, business aviation, and all types of GA.
- Regional Business Airports: Regional business airports accommodate regional economic activities, connecting to state and national economies, and serve all types of GA aircraft. They also accommodate local business activities and various types of GA users.
- Community Business Airports: Community business airports serve a limited role in regional economies, primarily supporting community economies. They accommodate a variety of GA activities such as business, recreational, and personal flying.
- Local Recreational Airports: Local recreational airports serve a supplemental role in local economies, primarily serving recreational, personal flying, and limited local business activities.
- → Basic Service: Basic service airports serve a limited role in the local economy, primarily serving recreational and personal flying.

**Table 3-6** provides the outcome of the 2010 IASP airport role evaluation process by airport. **Figure 3-2** is a map of airport roles as presented in the 2010 plan. Note that Elk City Airport (ELK) was included in the 2010 evaluation but removed and replaced with Thomas Creek (2U8) during this 2020 IASP Update. Neither Elk City nor Thomas Creek are included in table below.

<sup>&</sup>lt;sup>6</sup> The role evaluation process also considered each airport's Airport Reference Code (ARC), which relates airport design criteria to the most demanding aircraft in terms of wingspan and approach speed that regularly (at least 500 operations annually) uses the airport.



### TABLE 3-6: 2010 IASP AIRPORT ROLES

ASSOCIATED	TABLE 5-0. 2010 TASP AINFORT ROLLS				
CITY	Airport	FAA ID	Service	2010 IASP Role	
Aberdeen	Aberdeen Municipal	U36	GA	Local Recreational	
American Falls	American Falls	U01	GA	Regional Business	
Arco	Arco-Butte County	AOC	GA	Community Business	
Bancroft	Bancroft Municipal	U51	GA	Basic Service	
Big Creek	Big Creek	U60	GA	Local Recreational	
Blackfoot	McCarley Field	U02	GA	Regional Business	
Boise	Boise Air Terminal/Gowen Field	BOI	Commercial	Commercial Service	
Bonners Ferry	Boundary County	65S	GA	Regional Business	
Buhl	Buhl Municipal	U03	GA	Community Business	
Burley	Burley Municipal	BYI	GA	Community Business	
Caldwell	Caldwell Industrial	EUL	GA	Regional Business	
Carey	Carey	U65	GA	Basic Service	
Cascade	Cascade	U70	GA	Community Business	
Challis	Challis	LLJ	GA	Regional Business	
Coeur D'Alene	Brooks SPB	S76	GA	Basic Service	
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	GA	Regional Business	
Coolin	Cavanaugh Bay	66S	GA	Local Recreational	
Cottonwood	Cottonwood Municipal	S84	GA	Community Business	
Council	Council Municipal	U82	GA	Community Business	
Craigmont	Craigmont Municipal	S89	GA	Local Recreational	
Donnelly	Donald D. Coski Memorial	U84	GA	Basic Service	
Downey	Downey/Hyde Memorial	U58	GA	Community Business	
Driggs	Driggs-Reed Memorial	DIJ	GA	Regional Business	
Dubois	Dubois Municipal	U41	GA	Basic Service	
Emmett	Emmett Municipal	S78	GA	Local Recreational	
Fairfield	Camas County	U86	GA	Basic Service	
Galena	Smiley Creek	U87	GA	Local Recreational	
Garden Valley	Garden Valley	U88	GA	Local Recreational	
Glenns Ferry	Glenns Ferry Municipal	U89	GA	Basic Service	
Gooding	Gooding Municipal	GNG	GA	Regional Business	
Grangeville	Idaho County	GIC	GA	Regional Business	
Hailey	Friedman Memorial	SUN	Commercial	Commercial Service	
Hazelton	Hazelton Municipal	U94	GA	Local Recreational	
Homedale	Homedale Municipal	S66	GA	Community Business	
Howe	Howe	U97	GA	Basic Service	
Idaho Falls	Idaho Falls Regional	IDA	Commercial	Commercial Service	
Jerome	Jerome County	JER	GA	Regional Business	
Kamiah	Kamiah Municipal	S73	GA	Local Recreational	

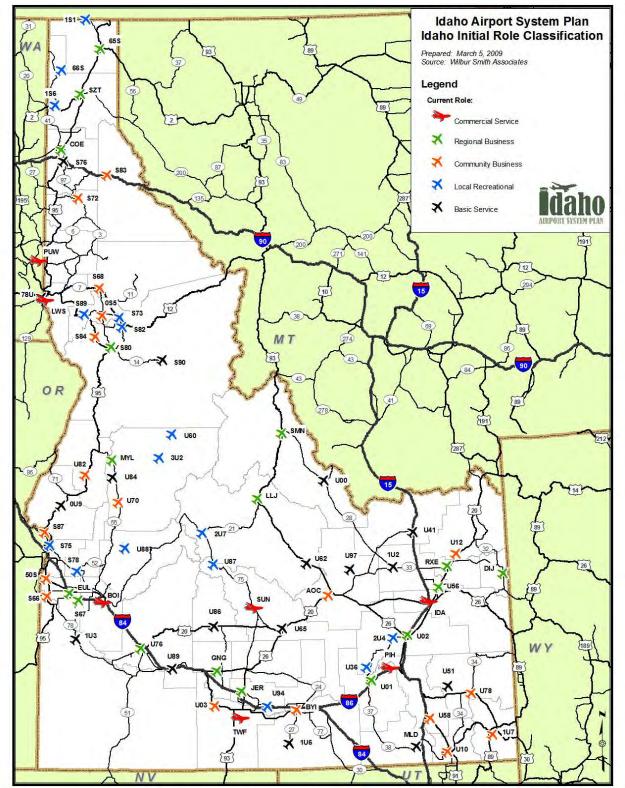


ASSOCIATED CITY	Airport	FAA ID	Service	2010 IASP Role
Kellogg	Shoshone County	S83	GA	Community Business
Kooskia	Kooskia Municipal	S82	GA	Local Recreational
Leadore	Leadore	U00	GA	Basic Service
Lewiston	Lewiston - Nez Perce County	LWS	Commercial	Commercial Service
Lewiston	Snake River SPB	78U	GA	Basic Service
Mackay	Mackay	U62	GA	Basic Service
Malad City	Malad City	MLD	GA	Basic Service
McCall	McCall Municipal	MYL	GA	Regional Business
Midvale	Lee Williams Memorial	0U9	GA	Basic Service
Mountain Home	Mountain Home Municipal	U76	GA	Regional Business
Mud Lake	Mud Lake/West Jefferson County	1U2	GA	Basic Service
Murphy	Murphy	1U3	GA	Basic Service
Nampa	Nampa Municipal	MAN	GA	<b>Regional Business</b>
Nezperce	Nezperce Municipal	0S5	GA	Community Business
Oakley	Oakley Municipal	1U6	GA	Basic Service
Orofino	Orofino Municipal	S68	GA	Community Business
Paris	Bear Lake County	1U7	GA	Community Business
Parma	Parma	50S	GA	Community Business
Payette	Payette Municipal	S75	GA	Local Recreational
Pocatello	Pocatello Regional	PIH	Commercial	Commercial Service
Porthill	Eckhart International	1S1	GA	Local Recreational
Preston	Preston	U10	GA	Community Business
Priest River	Priest River Municipal	1S6	GA	Local Recreational
Pullman	Pullman-Moscow Regional	PUW	Commercial	Commercial Service
Rexburg	Rexburg-Madison County	RXE	GA	Regional Business
Rigby	Rigby	U56	GA	Regional Business
Rockford	Rockford Municipal	2U4	GA	Local Recreational
Salmon	Lemhi County	SMN	GA	Regional Business
Sandpoint	Sandpoint	SZT	GA	Regional Business
Soda Springs	Allen H Tigert	U78	GA	Community Business
St. Anthony	Stanford Field	U12	GA	Community Business
St. Maries	St Maries Municipal	S72	GA	Community Business
Stanley	Stanley	2U7	GA	Local Recreational
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Commercial	Commercial Service
Weiser	Weiser Municipal	S87	GA	Community Business
Yellow Pine	Johnson Creek	3U2	GA	Local Recreational

Source: Wilbur Smith and Associates, 2009



#### FIGURE 3-2: 2010 IASP AIRPORT ROLES



Source: Wilbur Smith and Associates, 2009



### 2020 IASP Update Classifications

As discussed above, state roles are developed to reflect the existing and future needs of the state. The 2010 IASP role methodology employed 14 determining factors associated with the six system plan goal categories (i.e., geographic coverage, facility support, preservation, transportation support, economic support, and safety and security). According to the 2010 report, these factors "were chosen because they are the most significant determinants in establishing the role or function of an airport within the system."

A detailed evaluation process was conducted during the 2010 IASP to score each airport in terms of its performance against each of these factors. Data were gathered via geographic information system (GIS) mapping analyses, the system plan inventory process, and other third-party sources including the FAA. The results of this assessment were then used to classify airports based on their abilities to support various aviation functions within their communities and regions, as well as the level of activity that occurs there.

The 2020 IASP Update re-evaluated the 2010 methodology to determine its continued ability to classify Idaho's airports in a manner that accurately identifies each airport's role in the system while meeting the needs of ITD Aeronautics. Most notably, the 2010 methodology evaluated NPIAS and non-NPIAS airports together and resulting classifications accordingly mixed these two groups of airports. This led to several operational issues for ITD Aeronautics. For one, NPIAS airports are eligible for AIP funds, while non-NPIAS airports do not have access to these federal dollars. ITD Aeronautics had to establish different state grant funding policies for NPIAS/non-NPIAS airports within the same state-level classification. Additionally, the ASSET nomenclature introduced in 2012 closely mirrored that of the 2010 IASP (i.e., Regional, Local, and Basic). This overlap exacerbated the difficulty in explaining the differences between the state and federal systems and the associated funding implications to airports, airports ponsors, and local policymakers.

This and other state-specific issues underline the importance of re-examining the 2010 airport roles during this 2020 IASP Update process. Based on discussions with ITD Aeronautics and the Project Advisory Committee (PAC), as well as the overall needs of Idaho's airports, several key considerations emerged during the development of the updated methodology:

- Federal/state alignment: ITD Aeronautics and the PAC agree that the FAA's existing classifications effectively describe the functions of Idaho's NPIAS airports. As such, it was determined that separate, state-level classifications for these NPIAS airports would be redundant and serve a limited purpose further describing the role of these airports in a regional or local context.
- Simplicity: The inherent complexity of the 2010 plan's 14 determining factors made it difficult for airports to take proactive steps to impact their roles in the system. The updated methodology should allow airports to understand why they are classified in a specific manner and have the ability to change their classifications by increasing activity levels, service offerings, etc.
- Objectivity: Idaho's airports should be classified using a quantitative, data-driven approach that is defensible and clear to all audiences.
- Capacity to conduct ongoing reviews: The 2020 IASP Update methodology should provide a straightforward process for assigning roles during the initial study and during interim updates.
   NPIAS/ASSET classifications are updated every two years. Non-NPIAS airport roles could be re-evaluated on a similar timeframe at the discretion of ITD Aeronautics.



### 2020 IASP Update Methodology

Based on these key considerations and discussions with ITD Aeronautics and the PAC, the 2020 IASP Update developed a flow chart methodology that provides a systematic process for the classification of Idaho's airports. The flow chart methodology applies a logical approach to categorize airports based on quantitative data that can be independently validated to evaluate the type and volume of activity occurring at an airport.

As a first step, NPIAS airports are separated from non-NPIAS airports so the two types of facilities can be evaluated independently and in a manner that recognizes their unique roles at state, regional, and local levels. NPIAS airports are then categorized in accordance with the federal systems summarized in **Table 3-1** and **Table 3-4**. The factors used in the NPIAS evaluation are described in the *2019-2023 NPIAS Report* with additional details in *Appendix C: Statutory and Policy Airport Categories Use in the NPIAS Report.*<sup>7</sup> The ASSET methodology used to classify GA airports in the NPIAS is described in the technical appendix of the ASSET Study, *Appendix A-1: Criteria Used to Categorize General Aviation Airports.*<sup>8</sup>

Idaho's 38 non-NPIAS airports are then assessed using a set of criteria designed to indicate the airport's activity levels, type of activity, and community support as follows (presented alphabetically):

- → Based aircraft (number)
- ✤ Fuel availability (AvGas/100LL)
- → Idaho Airport Aid Program (IAAP) grant history
- ✤ Paved runway
- Seaplane base

The relevancy of the factors used in the non-NPIAS role classification processes and the source(s) of data used for each factor are described below.

### **Based Aircraft**

A based aircraft is an aircraft that is operational and air-worthy based at a specific facility for the majority of the year. Based aircraft are one of the best indicators of the level of activity occurring at an airport and reflect the role an airport is playing in meeting the air transportation and economic needs of the market it serves. Updated based aircraft data were obtained from airport management during the 2019 inventory process. Four airports did not provide this information; in these cases, data were obtained from the FAA's latest available 5010 Master Record.

### Fuel Availability (AvGas/100LL)

The type of fuel at an airport impacts the aircraft that a facility can optimally support. AvGas (also known as 100 low lead [100LL]) is used by piston-powered aircraft that typify small GA aircraft. Pilots are drawn to airports that provide fuel to both base their aircraft and to visit during transient operations. These pilots and their passengers may then go on to spend additional money at the airport or in the surrounding community. Fuel sales provide an important source of revenue for airports either directly (if the airport sponsor operates the pump) or via a fuel flowage fee or other arrangement if operated by a third-party such as a fixed base operator (FBO). Data for this analysis were obtained from the 2020 IASP Update's Airport Data and Inventory Survey Forms (2019) and the FAA's latest available 5010 Master Record.

<sup>8</sup> FAA (2010. Appendix A-1: Criteria Used to Categorize General Aviation Airport. Available online at

<sup>&</sup>lt;sup>7</sup> FAA (2019). Appendix C: Statutory and Policy Airport Categories Used in the NPIAS. Available at

www.faa.gov/airports/planning\_capacity/npias/reports/media/NPIAS-Report-2019-2023-Appendix-C.pdf. Accessed April 2019.

www.faa.gov/airports/planning\_capacity/ga\_study/media/2012AssetReportAppA.pdf. Accessed April 2019.



### **IAAP Grant History**

The IAAP is a discretionary fund derived from Idaho's aviation fuel tax providing grant money to Idaho's publicly owned airports. Funds are awarded on a fair and competitive basis in a manner designed to improve the statewide system of airports and maximize available federal dollars. Funds are available for capital improvements; maintenance and safety supplies; emergency projects; and small airport planning studies such as a narrative report with a capital improvement program (CIP), land use and zoning plan, or an airport layout plan (ALP) drawing set. IAAP projects are selected, in part, on their abilities to improve the statewide system and are thus beneficial beyond local airport constituents. As a competitive, application-based funding mechanism that requires a local match (either monetary or in-kind), airports that have received one or multiple IAAP grants have demonstrated community support for their facility. Data for this analysis were obtained from ITD Aeronautics.

### **Paved Runway**

The FAA recognizes over 20 different runway surfaces; pavement (either asphalt or concrete) is the most common type of hard surface. Pavement provides a stabilized and strengthened runway environment that can accommodate aircraft with conventional landing gear. The presence of a paved runway generally indicates access to an adjacent roadway due to its initial construction and ongoing maintenance needs, as well as the presence of an airport sponsor that is responsible for addressing those needs. Paved runways also typically have more associated facilities than their unpaved (i.e., natural) counterparts. Data for this evaluation criteria were obtained from the FAA's latest available 5010 Master Record.

#### **Seaplane Base**

A seaplane base is a unique type of aviation facility with a water surface that aircraft can use for operations with no or few additional support facilities. These airports can provide air service to remote regions and communities that may otherwise lack access to the benefits of aviation, such as emergency response and medical transportation. In addition to serving as the centers of business, seaplane bases provide recreational opportunities for enthusiasts and tourists. Visitors can reach remote destinations to engage in a multitude of outdoor activities like fishing, rafting, hiking, or camping in some of the most undeveloped areas of the state. In other cases, seaplanes are located within busy urban areas and supplement air service provided by land-based facilities. Data for this criterion were obtained for the FAA's latest available 5010 Master Record.

### **Classification Analysis**

An airport's NPIAS status/classification and the five non-NPIAS factors described above are used in a flow chart methodology to assign classifications to Idaho's 75 system airports. Table 3-7 describes the roles played by the three non-NPIAS classifications developed for Idaho's airports. Note that NPIAS classifications are federally defined by the NPIAS and align with the system roles presented in Table 3-4.

TABLE 3-7 NON-NPIAS AIRPORT CLASSIFICATION				
CLASSIFICATION	System Role			
Utility	These airports serve a moderate to significant role in regional economic activities;			
	accommodate a variety of GA activities including business, recreational, and safety and			
	security-related aviation; and access to intrastate locations. These airports may be			
	appropriate to consider for NPIAS inclusion in the future. They may have moderate levels			
	of activity with some or few jet and multi-propeller aircraft. Utility airports may consider			
	airport improvements that would allow them to be considered for NPIAS inclusion at			
	some point in the future.			

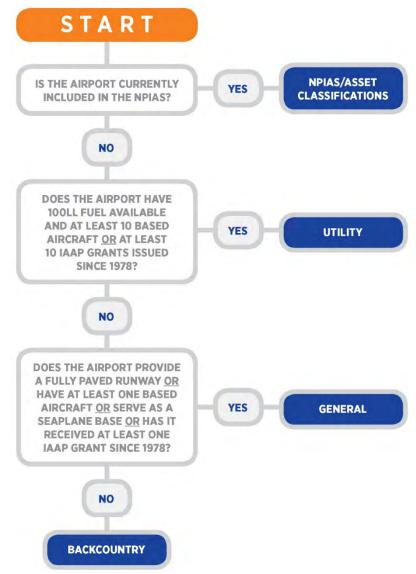


CLASSIFICATION	System Role
General	General airports serve a supplemental role in regional economics and primarily serve local communities. General airports support a variety of GA activities including smaller business, recreational, and personal flying. General airports typically have moderate to low levels of activity, primarily by single-engine aircraft and few or no jet and multi- propeller aircraft.
Backcountry	These airports have limited activity with no jet activity, but play a significant role in supporting mobility, access, and safety and security in rural areas of the state.

Source: Kimley-Horn, 2019

**Figure 3-3** depicts the proposed flow chart methodology for the classification of the 75 airports within the Idaho system.





Source: Kimley-Horn, 2019



As a final issue, ITD Aeronautics observed that many planning studies (e.g., master plans, master plan updates, ALPs with narrative) conducted at small, non-NPIAS airports generally assume that airport improvements should focus on infrastructure and services required for potential inclusion in the NPIAS. This assumption, however, can cause major issues for small airports in the long-term. NPIAS airport sponsors who accept AIP grant offers must accept obligations associated with the FAA's 39 grant assurances (the acceptance of grant assurances is required for ITD Aeronautics grants as well). These conditions include obligations to operate and maintain the airport in a safe and serviceable condition, not grant exclusive rights to certain airport users, mitigate airspace hazards, and properly spend airport revenue. If an airport is unable to comply with these assurances through the life of the project, the sponsor is required to pay back the grant to the FAA. These long-term commitments can be onerous and risky for small airports, their owners, and their communities.

For these and other reasons, NPIAS status is not appropriate for all airports and airport sponsors should carefully weigh the benefits and potential risks associated with it. The 2020 IASP Update methodology recognizes that inclusion in the NPIAS may not be in the best interest of all communities over the long-term. Utility airports are the only classifications that should consider pursuing the facilities, services, levels of activity, and other criteria that would allow them to be considered for the NPIAS at some point in the future.

### **Airport Role Definitions**

This flow chart methodology was applied to the 75 publicly owned, public-use airports that compose the Idaho airport system. **Table 3-8** summarizes the results of this analysis by classification and compares the results to the 2010 IASP roles. Note that the methodologies and associated categories are significantly different, and a direct comparison between historic and current roles/classifications is not appropriate.

TABLE 5 6. SOMMART RESOLTS						
2010 IASP AIRPORTS			2020 IASP Update Airports			
Role	Number	Percent (%)	Classification	Number	Percent (%)*	
Commercial Service	7	9%	NPIAS - Primary	7	9%	
Regional Business	17	23%	NPIAS - National	0	0%	
Community Business	18	24%	NPIAS - Regional	3	1%	
Local Recreational	16	21%	NPIAS - Local	16	21%	
Basic	17	23%	NPIAS - Basic	10	13%	
TOTAL	75	100%	NPIAS - Unclassified	1	1%	
			Utility	8	11%	
			General	23	31%	
			Backcountry	7	9%	
			TOTAL	75	100%	

### TABLE 3-8: SUMMARY RESULTS

Notes: Totals may not add due to rounding. As described earlier, the 2020 IASP Update removed Elk City from the evaluation and added Thomas Creek. As a result, the total number of airports has remained the same. Craigmont Municipal was removed from the NPIAS in December 2019. It has been categorized here at a General airport. Sources: Wilbur Smith and Associates, 2009; Kimley-Horn, 2019

**Table 3-9** lists Idaho's airports by associated city, provides their status in the NPIAS, and identifies each airport's classification developed as part of the 2020 IASP Update. **Table 3-10** presents similar information with the airports grouped by classification. These results represent the initial airport classifications that will be used as a baseline for further analyses of the Idaho airport system in subsequent chapters. The *2019-2023 NPIAS* does not designate any National airports in Idaho at this time; however, the FAA updates the report every two years and an Idaho airport may move into this classification in the future.



	TABLE 5-5. ZUZUTASP UPDATE CLAS	SIFICATIO	N SUIVIIVIANT	
ASSOCIATED				2020 IASP Update
CITY	Airport	FAA ID	NPIAS Status	Classification
Aberdeen	Aberdeen Municipal	U36	NPIAS	Basic
American Falls	American Falls	U01	Non-NPIAS	Utility
Arco	Arco-Butte County	AOC	NPIAS	Basic
Bancroft	Bancroft Municipal	U51	Non-NPIAS	General
Big Creek	Big Creek	U60	Non-NPIAS	Backcountry
Blackfoot	McCarley Field	U02	NPIAS	Local
Boise	Boise Air Terminal/Gowen Field	BOI	NPIAS	Primary
Bonners Ferry	Boundary County	65S	NPIAS	Local
Buhl	Buhl Municipal	U03	NPIAS	Basic
Burley	Burley Municipal	BYI	NPIAS	Local
Caldwell	Caldwell Industrial	EUL	NPIAS	Regional
Carey	Carey	U65	Non-NPIAS	General
Cascade	Cascade	U70	NPIAS	Local
Challis	Challis	LLJ	NPIAS	Basic
Coeur D'Alene	Brooks SPB	S76	Non-NPIAS	General
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	NPIAS	Regional
Coolin	Cavanaugh Bay	66S	Non-NPIAS	Backcountry
Cottonwood	Cottonwood Municipal	S84	Non-NPIAS	General
Council	Council Municipal	U82	NPIAS	Basic
Craigmont	Craigmont Municipal	S89	Non-NPIAS	General
Donnelly	Donald D. Coski Memorial	U84	Non-NPIAS	Backcountry
Downey	Downey/Hyde Memorial	U58	Non-NPIAS	General
Driggs	Driggs-Reed Memorial	DIJ	NPIAS	Regional
Dubois	Dubois Municipal	U41	Non-NPIAS	General
Emmett	Emmett Municipal	S78	Non-NPIAS	Utility
Fairfield	Camas County	U86	Non-NPIAS	General
Galena	Smiley Creek	U87	Non-NPIAS	Backcountry
Garden Valley	Garden Valley	U88	Non-NPIAS	General
Glenns Ferry	Glenns Ferry Municipal	U89	Non-NPIAS	General
Gooding	Gooding Municipal	GNG	NPIAS	Local
Grangeville	Idaho County	GIC	NPIAS	Local
Hailey	Friedman Memorial	SUN	NPIAS	Primary
Hazelton	Hazelton Municipal	U94	Non-NPIAS	General
Homedale	Homedale Municipal	S66	NPIAS	Basic
Howe	Howe	U97	Non-NPIAS	General
Idaho Falls	Idaho Falls Regional	IDA	NPIAS	Primary
Jerome	Jerome County	JER	NPIAS	Local
Kamiah	Kamiah Municipal	S73	NPIAS	Unclassified
Kellogg	Shoshone County	S83	NPIAS	Basic

### TABLE 3-9: 2020 IASP UPDATE CLASSIFICATION SUMMARY

S82

Non-NPIAS

General

Kooskia Municipal

Kooskia



ASSOCIATED				2020 IASP Update
CITY	Airport	FAA ID	NPIAS Status	Classification
Leadore	Leadore	U00	Non-NPIAS	General
Lewiston	Lewiston - Nez Perce County	LWS	NPIAS	Primary
Lewiston	Snake River SPB	78U	Non-NPIAS	General
Mackay	Mackay	U62	Non-NPIAS	General
Malad City	Malad City	MLD	Non-NPIAS	Utility
McCall	McCall Municipal	MYL	NPIAS	Local
Midvale	Lee Williams Memorial	0U9	Non-NPIAS	General
Mountain Home	Mountain Home Municipal	U76	NPIAS	Local
Mud Lake	Mud Lake/West Jefferson County	1U2	Non-NPIAS	Utility
Murphy	Murphy	1U3	Non-NPIAS	General
Nampa	Nampa Municipal	MAN	NPIAS	Local
Nezperce	Nezperce Municipal	0S5	Non-NPIAS	General
Oakley	Oakley Municipal	1U6	Non-NPIAS	General
Orofino	Orofino Municipal	S68	NPIAS	Basic
Paris	Bear Lake County	1U7	NPIAS	Basic
Parma	Parma	50S	Non-NPIAS	General
Payette	Payette Municipal	S75	Non-NPIAS	Utility
Pocatello	Pocatello Regional	PIH	NPIAS	Primary
Porthill	Eckhart International	1S1	Non-NPIAS	Backcountry
Preston	Preston	U10	NPIAS	Local
Priest River	Priest River Municipal	1S6	NPIAS	Basic
Pullman	Pullman-Moscow Regional	PUW	NPIAS	Primary
Rexburg	Rexburg-Madison County	RXE	NPIAS	Local
Rigby	Rigby	U56	Non-NPIAS	Utility
Rockford	Rockford Municipal	2U4	Non-NPIAS	General
Salmon	Lemhi County	SMN	NPIAS	Local
Sandpoint	Sandpoint	SZT	NPIAS	Local
Soda Springs	Allen H Tigert	U78	Non-NPIAS	Utility
St. Anthony	Stanford Field	U12	Non-NPIAS	Utility
St. Maries	St Maries Municipal	S72	NPIAS	Local
Stanley	Stanley	2U7	Non-NPIAS	General
Stanley	Thomas Creek	2U8	Non-NPIAS	Backcountry
Twin Falls	Joslin Field-Magic Valley Regional	TWF	NPIAS	Primary
Weiser	Weiser Municipal	S87	NPIAS	Local
Yellow Pine	Johnson Creek	3U2	Non-NPIAS	Backcountry

Source: Kimley-Horn, 2019



### TABLE 3-10: 2020 IASP UPDATE AIRPORTS BY CLASSIFICATION

TABLE 3-10: 2020 IASP UPDATE AIRPORTS BY CLASSIFICATION					
ASSOCIATED CITY	Airport	FAA ID			
	NPIAS - PRIMARY				
Boise	Boise Air Terminal/Gowen Field	BOI			
Hailey	Friedman Memorial	SUN			
Idaho Falls	Idaho Falls Regional	IDA			
Lewiston	Lewiston - Nez Perce County	LWS			
Pocatello	Pocatello Regional	PIH			
Pullman	Pullman-Moscow Regional	PUW			
Twin Falls	Joslin Field-Magic Valley Regional	TWF			
	NPIAS - REGIONAL				
Caldwell	Caldwell Industrial	EUL			
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE			
Driggs	Driggs-Reed Memorial	DIJ			
	NPIAS - LOCAL				
Blackfoot	McCarley Field	U02			
Bonners Ferry	Boundary County	65S			
Burley	Burley Municipal	BYI			
Cascade	Cascade	U70			
Gooding	Gooding Municipal	GNG			
Grangeville	Idaho County	GIC			
Jerome	Jerome County	JER			
McCall	McCall Municipal	MYL			
Mountain Home	Mountain Home Municipal	U76			
Nampa	Nampa Municipal	MAN			
Preston	Preston	U10			
Rexburg	Rexburg-Madison County	RXE			
Salmon	Lemhi County	SMN			
Sandpoint	Sandpoint	SZT			
St. Maries	St Maries Municipal	S72			
Weiser	Weiser Municipal	S87			
	NPIAS - BASIC				
Aberdeen	Aberdeen Municipal	U36			
Arco	Arco-Butte County	AOC			
Buhl	Buhl Municipal	U03			
Challis	Challis	LLJ			
Council	Council Municipal	U82			
Homedale	Homedale Municipal	S66			
Kellogg	Shoshone County	S83			
Orofino	Orofino Municipal	S68			
Paris	Bear Lake County	1U7			
Priest River	Priest River Municipal	1S6			
NPIAS - UNCLASSIFIED					
Kamiah	Kamiah Municipal	S73			



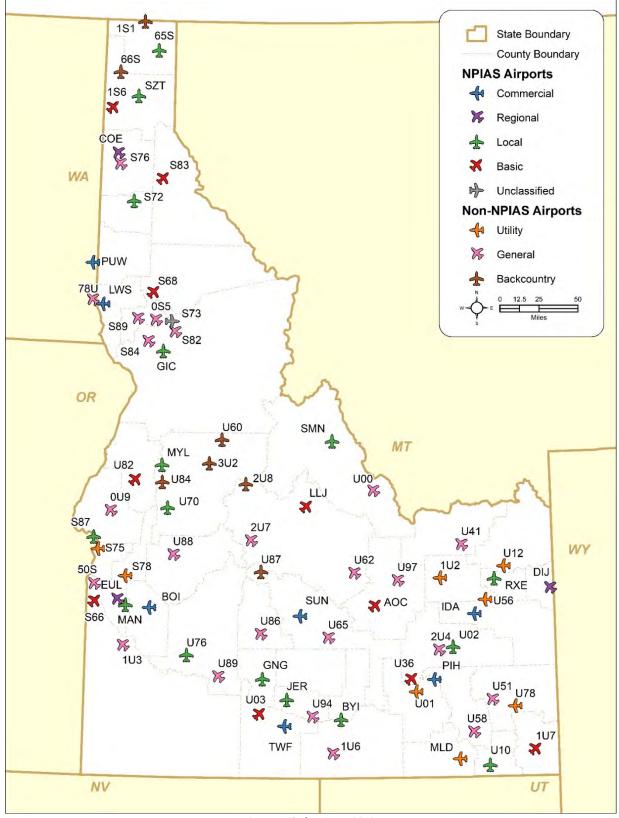
ASSOCIATED CITY	Airport	FAA ID
ASSOCIATED CITT	UTILITY	
American Falls	American Falls	U01
Emmett	Emmett Municipal	S78
	•	MLD
Malad City	Malad City	
Mud Lake	Mud Lake/West Jefferson County	1U2
Payette	Payette Municipal	S75
Rigby	Rigby	U56
Soda Springs	Allen H Tigert	U78
St. Anthony	Stanford Field	U12
	GENERAL	
Bancroft	Bancroft Municipal	U51
Carey	Carey	U65
Coeur D'Alene	Brooks SPB	S76
Cottonwood	Cottonwood Municipal	S84
Craigmont	Craigmont Municipal	S89
Downey	Downey/Hyde Memorial	U58
Dubois	Dubois Municipal	U41
Fairfield	Camas County	U86
Garden Valley	Garden Valley	U88
Glenns Ferry	Glenns Ferry Municipal	U89
Hazelton	Hazelton Municipal	U94
Howe	Howe	U97
Kooskia	Kooskia Municipal	S82
Leadore	Leadore	U00
Lewiston	Snake River SPB	78U
Mackay	Mackay	U62
Midvale	Lee Williams Memorial	0U9
Murphy	Murphy	1U3
Nezperce	Nezperce Municipal	0S5
Oakley	Oakley Municipal	1U6
Parma	Parma	50S
Rockford	Rockford Municipal	2U4
Stanley	Stanley	2U7
	BACKCOUNTRY	
Big Creek	Big Creek	U60
Coolin	Cavanaugh Bay	66S
Donnelly	Donald D. Coski Memorial	U84
Galena	Smiley Creek	U87
Porthill	Eckhart International	151
Stanley	Thomas Creek	2U8
Yellow Pine	Johnson Creek	3U2
	Source: Kimley-Horn, 2019	552

Source: Kimley-Horn, 2019

Figure 3-4 depicts the 2020 IASP Update classifications of Idaho's airports.



#### FIGURE 3-4: 2020 IASP UPDATE AIRPORTS BY CLASSIFICATION



Source: Kimley-Horn, 2019



### **Facility and Service Objectives**

An efficient and well-functioning airport system provides a comprehensive suite of facilities and services required to meet the needs of all airport users. As part of the system planning process, it is important to identify the facilities and services that each classification of airport should offer to effectively perform its role at the federal, state, and/or local levels. Facility and service objectives outline minimum recommended standards by classification regarding the infrastructure, facilities, and services required to optimally support the type and volume of aviation activity typified by that classification. They offer specific guidance on how airports can improve their abilities to serve constituents and enhance the statewide aviation system.

It is important to note that these objectives are not requirements or mandates but serve as guidelines for airports and ITD Aeronautics to use during the airport planning process. An airport that offers facilities and services above or below these objectives can still be fulfilling its role based on local needs and context; however, the inability to meet certain guidelines may impact the future functionality of the system. While airports should consider these objectives when planning for future development, specific needs should be discussed with ITD Aeronautics and the FAA and tailored by airport depending on existing and anticipated future requirements. The reduction or removal of existing facilities and services is not considered during the system analysis.

### **Defining Facility and Service Objectives**

The facility and service objectives of the 2020 IASP Update represent the components of an airport with the greatest potential to significantly impact or support the type and amount of activity that normally occurs there. This study evaluated the following airport components for each of the five NPIAS and three non-NPIAS classifications of the Idaho aviation system:<sup>9</sup>

- > Runway length (ability to accommodate a certain percentage of aircraft by type)
- → Runway width (feet)
- → Runway strength (single-wheel landing gear in pounds)
- → Taxiway (full parallel, partial parallel, connectors, or turnarounds)
- Instrument approach (precision, localizer precision with vertical guidance [LPV], near-precision approach, non-precision approach, visual)
- Visual aids (rotating beacon, lighted wind cone, wind cone, runway end identifier lights [REILs], precision approach path indicator lights [PAPIs], visual approach slope indicators [VASI], approach light systems [ALS])
- → Runway lighting (high intensity runway lighting [HIRL], medium intensity runway lighting [MIRL], low intensity runway lighting [LIRL], reflectors)
- → Weather reporting (ATCT, ASOS, AWOS, Unicom, dual barometers)
- Services (phone [landline and/or cell coverage], Wi-Fi, FBO, maintenance services, snow removal equipment [SRE], fuel [AvGas/100LL and/or Jet A], ground transportation [rental car and/or loaner car]
- → Facilities (terminal [commercial service and/or GA facilities including public restrooms, conferences rooms, and/or pilots lounge], hangar storage [percent storage for based and/or transient aircraft], apron [percent tie-down availability for based and/or transient aircraft], fencing, auto parking

**Table 3-11** presents the facility and service objectives defined for each of the eight classifications of Idaho's system airports. In some cases, it is recommended that airports maintain existing facilities and/or services, as it is assumed that they meet the local and/or regional needs but are not required by all airports within that classification to most effectively serve the needs of typical airport users. Objectives that are not relevant to specific classifications are noted as "None."

<sup>&</sup>lt;sup>9</sup> The system also includes one Unclassified airport (Kamiah Municipal). This airport will be considered a NPIAS – Basic airport for the purposes of the 2020 IASP Update.



#### TABLE 3-11: IDAHO SYSTEM AIRPORT FACILITY AND SERVICE OBJECTIVES BY CLASSIFICATION

			NPIAS			Non-NPIAS				
OBJECTIVE	Primary	National	Regional	Local	Basic	Utility	General	Backcountry		
				AIRSIDE FACILITIES						
Runway Length	Future runway length from ALP/MP	Future runway length from ALP/MP	To accommodate 100 percent of small aircraft fleet	To accommodate 95 percent of small aircraft fleet	Maintain existing	To accommodate 95 percent of small aircraft fleet	Maintain existing	Maintain existing		
Runway Width	100 feet	75 feet	75 feet NPIAS	60 feet NPIAS	Maintain existing	60 feet <sup>10</sup>	50 feet <sup>11</sup>	Maintain existing		
Runway Strength	Single-wheel landing gear (60,000 pounds)	Single-wheel landing gear (30,000 pounds)	Single-wheel landing gear (12,500 pounds)	Single-wheel landing gear (12,500 pounds)	Maintain existing	Single-wheel landing gear (12,500 pounds)	Maintain existing	Maintain existing		
Taxiway	Full Parallel	Full or Partial Parallel	Partial Parallel, Connectors, or Turnarounds	Turnarounds	Maintain existing	Partial Parallel or Turnarounds	Maintain existing	Maintain existing		
Instrument Approach	Precision or PBN	PBN	PBN	Visual, PBN desired	Visual	Visual	Visual	Visual		
Visual Aids	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs, VASIs, ALS	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs, VASIs, ALS as required	Rotating Beacon, Wind Cone, REILs, PAPIs, VASIs	Rotating Beacon, Wind Cone	Rotating Beacon as required, Wind Cone	Rotating Beacon as required, Wind Cone	Wind Cone	Wind Cone		
Runway Lighting	MIRL, HIRL desired	MIRL, HIRL as required	MIRL	LIRL	Reflectors, LIRL desired	Reflectors, LIRL desired	Reflectors	None		

<sup>&</sup>lt;sup>10</sup> A 60-foot runway width reflects the FAA design standard for Aircraft Approach Category B and below (AC 150/5300-13A, Change 1, "Airport Design"). While Utility airports are not in the NPIAS, this classification has been designed to prepare airports for inclusion should they meet eligibility criteria and decide to pursue NPIAS designation in the future. <sup>11</sup> A 50-foot runway width approximates the desired width as described in the *ITD Aeronautics Desk Manual*, Chapter 201, in accordance with the "Idaho VFR Airport Design Dimensional

Standards" checklist.



			NPIAS				Non-NPIAS	
OBJECTIVE	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
Weather Reporting	ATCT, On-site ASOS or AWOS	On-site ASOS or AWOS	On-site ASOS or AWOS as required	On-site ASOS or AWOS as required	None	Unicom and Dual Barometers	None	None
				LANDSIDE FACILITIES	S			
Landside Facilities	Terminal (Commercial Service and GA Facility(ies]) with Public Restrooms, Conference Rooms, and Pilots Lounge; Hangar Storage for 80% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie- Downs) for 20% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking	GA Terminal with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie- Downs) for 40% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking	GA Terminal/ Facilities with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft; Apron (Tie- Downs) for 40% of Based Aircraft and 50% of Transient Aircraft; Partial Perimeter Fencing; Auto Parking	GA Facility with Public Restrooms and Pilots Lounge; Hangar Storage for 50% of Based Aircraft; Apron (Tie- Downs) for 50% of Based Aircraft and 50% of Transient Aircraft; Partial Perimeter Fencing; Auto Parking	Public Restroom; Apron (Tie- Downs) for 100% of Based Aircraft and 50% of Transient Aircraft; Full Perimeter Fencing; Auto Parking	Public Restrooms or Portable Toilets; Apron (Tie-Downs) for 100% of Based Aircraft and 25% of Transient Aircraft; Full Perimeter Fencing	Public Restrooms or Portable Toilets; Apron (Tie- Downs) for 100% of Based Aircraft and 25% of Transient Aircraft of Maximum Daily Totals	Public Restrooms or Portable Toilets; Apron (Tie- Down) for At Least One Aircraft and up to 25% of Maximum Daily Totals



			NPIAS		Non-NPIAS			
OBJECTIVE	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
				SERVICES				
Services	Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas and Jet A Fuel, Rental Car Access	Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas and Jet A Fuel, Rental Car Access	Cell Coverage, Wi-Fi, SRE, AvGas and Jet A as needed, Courtesy/ Loaner Car	Cell Coverage, Wi-Fi, AvGas, Courtesy/Loaner Car	Cell Coverage	Cell Coverage, Courtesy/ Loaner Car	Cell Coverage	Cell Coverage

Note: <sup>1</sup>The most current NPIAS report (2019-2023) does not designate any airports in Idaho as National. However, the NPIAS is updated every two years and an Idaho airport could move into this classification in the future. Thus, National facility and services objectives are included because they might occur. Source: Kimley-Horn, 2019



# **Classifications Summary**

The 2020 IASP Update has adopted a systematic, data-driven flow chart methodology to classify Idaho's 75 system airports. This methodology first delineates NPIAS airports based on their federal classifications. Non-NPIAS airports are then evaluated using five criteria that provide key insight into how each airport operates in its local and regional contexts. This methodology is straightforward, allows ITD Aeronautics to conduct interim classification evaluations at its discretion, and aligns with existing state and federal policies. Facility and service objectives were then identified for each classification. These objectives provide minimum development recommendations to help airports optimally support the type and volume of aviation activities that typically occur there. The classifications established in this chapter will be used in later analyses to:

- → Assess the current and future performance of the airport system
- + Evaluate the ability of Idaho's airports to function as a system
- ✤ Pinpoint areas of service/facility duplication or deficiency
- → Prioritize future recommendations in terms of geographic coverage and type of need



# CHAPTER FOUR: FORECASTS OF AVIATION ACTIVITY

# Introduction

An important indicator of potential aviation needs is the level of demand that is expected to utilize the airport system in the future. Demand includes both commercial service and general aviation (GA) activity and is typically examined in terms of indicators such as enplanements, based aircraft, and operations. This chapter summarizes the forecasts of commercial service and GA airport activity projected to occur at Idaho airports over the next 20 years. While forecasts provide an indicator of demand, their value to the system planning process is more acute relative to the type of demand projected to use an airport and if an increase in an activity indicator such as annual operations is such that it would have a major effect on future facility needs. The aviation trends that are considered in development of the forecasts are also important as they impact potential facility needs specific to aircraft types and activity levels that may reveal additional projects that should be considered at airports.

The components of Idaho's aviation activity are documented in the following sections:

- ✤ National Aviation Trends
  - Commercial Service
  - GA
- ✤ Socioeconomic Trends
- ✤ Idaho Commercial Service Activity
  - Historical and Current Aviation Activity
  - Forecasts of Commercial Service
- ✤ Idaho GA Activity
  - Historical and Current GA Activity
  - Forecasts of GA Activity
- ✤ Summary

Several forecasting methodologies are used in the 2020 IASP Update to achieve the most reliable and accurate projections for the airport system. A combination of national, state, and local-level data was used to estimate forecasts responding to market changes throughout all levels of Idaho's airport system. These projections include examination of Idaho's entire airport system in a "top-down" approach and also use "bottom-up" methodologies relating population or employment trends affecting individual airport's growth.

Data for each aviation indicator are derived from Federal Aviation Administration (FAA) sources, individual airport reporting, and other important industry reports that assess aviation activity. Forecasts generated in the 2020 IASP Update are compared to the FAA's Terminal Area Forecasts (TAF) and other data sources, where available, to determine reliability of the projected estimates. The 2020 IASP Update uses 2017 as the base year for data as this is when data were obtained from airports and other sources, with a 20-year horizon ending in 2037.

Forecast figures presented in this chapter assume that Idaho's airport system will continue operating under preferred, unconstrained conditions. Any short- or long-term fluctuations in demand projections due to unanticipated factors should be taken into consideration. It is also important to recognize that statewide forecasts



are meant to serve as a comparison to other forecasts prepared by FAA and individual airports as part of other planning processes. During airport master plans, bottom-up methodologies that factor in specific local conditions are likely to result in different forecasts than those reported in the 2020 IASP Update.

# **National Aviation Trends**

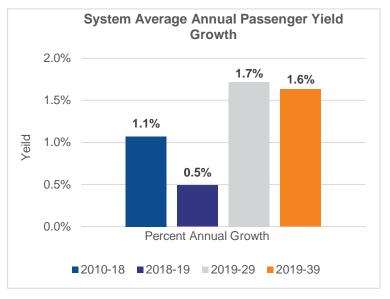
Trends in national aviation are summarized both for commercial service and GA below. The two types of aviation activity are influenced by some similar factors, but also by others that are specific to each industry.

# **Commercial Service**

The following commercial service trends are highlighted for their potential impact on future Idaho commercial service indicators including enplanements and commercial service operations.

# Industry Consolidation and Restructuring

The U.S. airline industry has historically experienced cyclical swings in market stability ever since deregulation in 1978. However, following the 2007-2009 economic recession, the airline industry fundamentally changed its business model.



 Use of expense minimization, elimination of unprofitable service

routes, and replacement of older inefficient aircraft minimized market volatility.

→ The culmination of recent consolidations and restructuring efforts allowed the industry to post 10 consecutive years of profitable operations.



# **Continued Capacity Discipline**

→ Rightsizing of aircraft to gain efficiencies in available seat miles (ASMs), revenue passenger miles (RPMs), and resulting load factors allowed airlines to be more profitable and reduce capital overhead.



- → According to FAA Aerospace Forecast Fiscal Years 2019-2039, ASMs and RPMs are anticipated to see an average annual increase of 2.1 percent and 2.2 percent, respectively, over the next 20 years.
- → The FAA estimates load factors to increase from 83.9 percent in 2019 to 84.9 percent in 2039. System passenger yields saw an increase in 2018 which had not been seen since 2014.

### **Ancillary Revenues**

- → Airlines started offering new services and amenities and charging for existing services that had historically been wrapped into ticketing prices.
- These new ala carte options for consumers offer additional revenue generation for the airlines in the form of ancillary fees. These fees are untaxed and therefore do not contribute to the Airport and Airway Trust Fund (AATF).

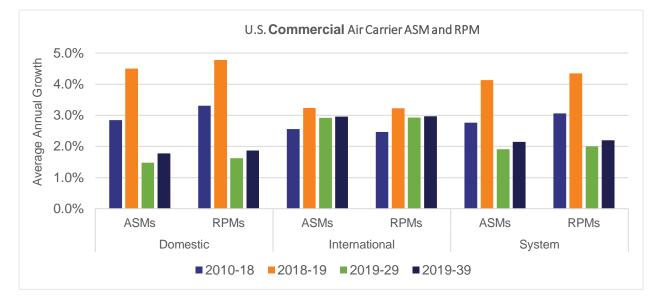


 Table 4-1 summarizes the key factors influencing commercial service aviation.

#### TABLE 4-1: FACTORS INFLUENCING COMMERCIAL SERVICE AVIATION

Positive Factors Influencing Commercial Service	Negative Factors Influencing Commercial Service
Student Pilot Certifications New regulations extended the validity of student pilot certificates for those under the age of 40 from 36 months to 60 months. Subsequent regulatory changes eliminated the expiration dates altogether, removing time and cost constraints from students transitioning to other certifications. These changes helped to	<b>"1,500-Hour Rule"</b> New regulations mandate flight crews serving Second in Command to obtain an Airline Transport Pilot (ATP) certification requiring 1,500 hours of experience as a pilot. Previous regulations only required a commercial pilot certificate which could be obtained after 250 hours as a pilot.
facilitate the student pilot population jump from 72,280 in 2009 to 167,804 in 2018.	
Air Traffic Control FAA and contract tower activities are forecasted to intensify to 10.2 million more operations due to rising air travel and business aviation. New technology such as remote towers will allow multiple airports to be controlled from a single facility at lower capital and labor costs.	U.S. Commercial Pilot Population Passing of the "1,500-hour rule" brought initial declines in commercial pilots. The FAA projects that commercial pilot certifications will continue to experience a slow decline of -0.2% annually through 2039.



#### **Positive Factors Influencing Commercial Service**

#### **Commercial Aircraft Fleet**

The FAA forecasts that nearly 1,400 new aircraft will be introduced to the fleet by 2039 at a rate of 0.9 percent compound annual growth rate (CAGR). Approximately 51 new jet aircraft are expected to be introduced per year until 2039 due to a growing need for more fuel-efficient, wide-bodied aircraft.

# **Negative Factors Influencing Commercial Service**

#### Oil Prices

The industry has benefited from relatively low oil prices in recent years resulting in aviation activity growth as consumers enjoy lower trip expenditures. The FAA is projecting the cost of oil will further decline to \$59 per barrel in 2021 and then gradually increase to \$98 per barrel by 2039.

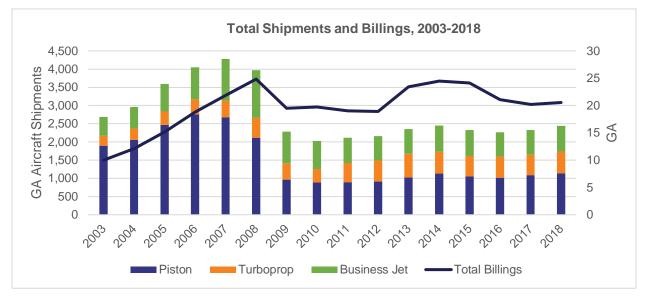
Sources: FAA Aerospace Forecast Fiscal Years 2019-2039; Kimley-Horn, 2019

# **General Aviation**

The following GA trends are highlighted for their potential impact to Idaho's future GA demand. GA demand is evaluated in terms of based aircraft and operations, the two primary indicators of activity levels.

# Growth Recovery of GA Aircraft Shipments and Billings

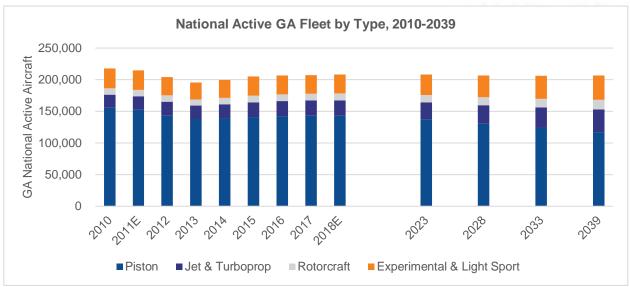
- ✤ Due to the economic recession of 2007-2009, the annual number of GA aircraft delivered to market through 2018 has struggled to recover to the volumes seen in the years leading up to the recession.
- → Piston, turboprop, and business jet deliveries have only seen nominal fluctuations since 2013.
- → 2018 saw a modest gain over 2017 with an average annual increase of aircraft deliveries and billings (i.e., the price value of aircraft sold) by 4.3 percent with the largest contributor being turboprops at 6.75 percent.



# **Constrained Growth of National Active GA Fleet**

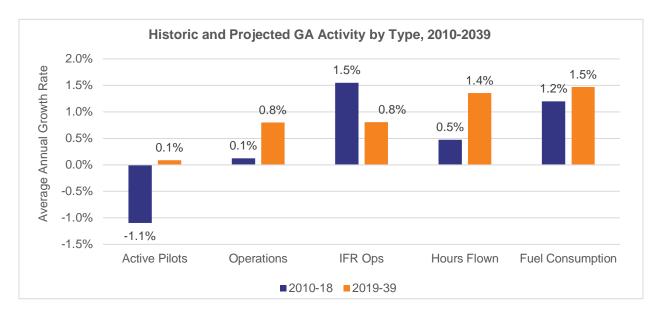
- ✤ In the time between 2010 and 2018, an average annual decrease of 0.6 percent was seen amongst the national fleet of GA aircraft. This decrease is primarily attributable to piston powered aircraft as jet and turboprop aircraft saw an increase of 2 percent CAGR in the same period.
- ✤ FAA projected 20-year compound annual growth of active GA fleet by type:
  - Piston: -1%
  - Jet & Turbo Prop: 1.8%
  - Rotorcraft: 1.7%
  - Experimental & Light Sport: 1.2%
  - Total Aircraft: 0%





# **Minimal Projected Growth of GA Activity**

- → The number of active pilots is not anticipated substantially grow over the next 20 years.
- → The overall number of operations, including those operating under instrument flight rules (IFR), is estimated to grow by less than one percentage point over the next 20 years.
- ✤ Total GA hours flown, along with the overall consumption of fuel, are anticipated to grow by about 1.5 percent each on an average annual basis.



→ Overall, minimal growth is anticipated in all aspects of GA activity.



 Table 4-2 summarize the key factors influencing GA activity at the national level.

### TABLE 4-2: FACTORS INFLUENCING GA ACTIVITY

Positive Factors Influencing GA	Negative Factors Influencing GA
Cheaper Used Aircraft Costs The decline in used GA aircraft costs has resulted in a growth of aircraft ownership by individuals and companies. Record low prices in 2017 were recorded for used aircraft values and decreased 16 percent from 2016.	Rising New Aircraft Costs Inversely, new GA aircraft costs are continuing to rise as aircraft ownership grows. Various single- engine piston plane prices have risen between 3.4 to 6.5 percent annually since 2008. Some GA aircraft have reached the \$1 million price point.
Corporate Flying Growth Business-related GA trends continue to rise due to convenience, low oil prices, and additional savings through the Tax Cuts and Jobs Act of 2017 on corporate- use aircraft. Business-related aviation is considered a consistent, high-level revenue generator for airport operations.	Single-Engine Piston Fleet Reduction New single-engine piston aircraft sales declined dramatically following the recession and are yet to recover due to rising costs and other factors. The FAA predicts a shrinkage in total single-engine piston aircraft for the next 20 years at -1.0 percent annually.
<b>Opportunities for GA Travel</b> Decreased scheduled service activity by mainline U.S. commercial service carriers creates new opportunities for GA operations to fill the gaps left by these service reductions.	GA Operations at Towered Airport Decline GA operations decreased -0.5 percent annually between 2010 and 2017. Minimal GA operations growth has been predicted to occur at airports with air traffic control towers for the next 20 years at 0.3 percent until 2037.
Increased Charter Activity Business-related GA continues to impact the on-demand charter industry, resulting in a 7 percent increase from 2016 to 2017. The healthy economic climate results in businesses investing in different charter aviation offerings without the need to own an aircraft.	Shrinking Private Pilot Populations New medical requirements and mounting costs of flying have caused a decline in active private pilot certifications since 2010, and this is projected to remain flat through 2037. These pilot shortages will affect the growing business aviation operations.
<b>Growth in GA Aircraft Production</b> GA aircraft is projected to experience healthy annual growth in the next 20 years. Turboprop, rotorcraft, and turbo jet aircraft will see a 1.7 to 2.2 percent CAGR. Light sport and experimental aircraft may see a 3.6 percent and	Transition to Non-leaded Fuel AvGas production has decreased in the last 10 years as aircraft manufacturers begin to phase out 100LL fuel to non-leaded fuel. The transition to non-leaded fuel is expected to further decrease

the size of the piston powered GA fleet.

Sources: FAA Aerospace Forecast Fiscal Years 2019-2039; General Aviation Manufacturers Association (GAMA) Annual Report 2018; Kimley-Horn, 2019; Missouri State Airport System Plan Update, 2019

0.8 percent CAGR, respectively. While not forecast yet,

new electric aircraft are also in the testing phase which will present additional opportunities for growth.



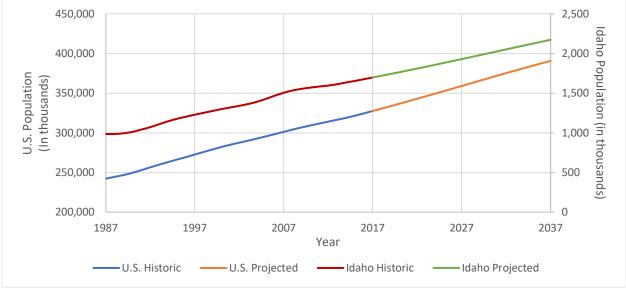
# **Socioeconomic Trends**

Aviation demand is closely tied to socioeconomic trends, especially population. As population and economic conditions grow, so too does the opportunity for aviation demand increase. Historical and projected socioeconomic trends in Idaho are highlighted below for reference in considering the potential impact to future aviation demand in the state.

This section examines current and future demographic trends across Idaho, including social and economic indicators. The data used for this socioeconomic discussion has been gathered from the most recent edition of Woods & Poole Economics, Inc. (Woods & Poole). All other data sources are referenced. It is important to note that all monetary amounts have been standardized to 2009 dollars to account for inflation and thereby more accurately compare the value of money across years.<sup>1</sup>

# **Population Trends**

**Figure 4-1** shows the historic and projected population of Idaho and the U.S. Between 1987 and 2017, Idaho's population increased in a nearly linear fashion at a rate of 3.8 percent annually, which outpaced the U.S. population's growth of 1.0 percent during this time. The Idaho population is anticipated to grow 1.2 percent annually and will continue to surpass the national population's anticipated growth rate of 0.9 percent. Idaho's population is expected to reach over 2.17 million people by 2037, a total increase of nearly 1.2 million people between 2017 and 2037.



# FIGURE 4-1: IDAHO AND U.S. HISTORIC AND PROJECTED POPULATION

Source: Woods & Poole, 2017

**Table 4-3** presents the population trends for each of Idaho's counties. With over 400,000 people in 2017, Ada County — the seat of the state's capital — has the largest population of all Idaho counties. Ada County is projected to have steady population growth between 1.6 percent and 1.7 percent annually and is projected to add approximately 173,300 more people through 2037. Madison County is projected to experience the greatest rate of growth during all three forecasting periods (2022, 2027, and 2037), with CAGR just over 2.0 percent.

<sup>&</sup>lt;sup>1</sup> Woods & Poole data standardizes to 2009 dollars to accurately compare monetary amounts across different years.

Through all three forecast periods, 14 of the 44 counties are projected to have an equal or higher growth rate than the U.S. average. Clearwater and Shoshone counties in northwestern Idaho, however, show negative growth rates in all three forecasting periods.

	Historic	Base		Projected			CAG	R	
	nistoric	Dase		FIOJECIEU		1987 to	2017 to	2017 to	2017 to
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037
Ada	192.9	448.4	488.3	531.0	621.7	2.9%	1.7%	1.7%	1.6%
Adams	3.2	3.9	4.0	4.1	4.3	0.7%	0.5%	0.5%	0.5%
Bannock	66.1	86.3	91.5	96.9	107.5	0.9%	1.2%	1.2%	1.1%
Bear Lake	6.3	6.0	6.0	6.1	6.1	-0.2%	0.2%	0.1%	0.1%
Benewah	8.3	9.3	9.5	9.7	10.1	0.4%	0.5%	0.5%	0.4%
Bingham	38.2	46.2	47.7	49.3	51.9	0.6%	0.7%	0.7%	0.6%
Blaine	12.7	22.5	24.3	26.2	30.2	1.9%	1.6%	1.5%	1.5%
Boise	3.4	7.1	7.5	8.0	9.0	2.5%	1.3%	1.2%	1.2%
Bonner	25.7	42.9	45.1	47.5	52.0	1.7%	1.0%	1.0%	1.0%
Bonneville	70.4	113.3	121.7	130.4	148.4	1.6%	1.4%	1.4%	1.4%
Boundary	7.9	11.2	11.6	12.1	12.8	1.2%	0.7%	0.7%	0.7%
Butte	3.1	2.7	2.7	2.8	2.9	-0.5%	0.4%	0.4%	0.4%
Camas	0.8	1.1	1.1	1.1	1.2	1.1%	0.6%	0.6%	0.5%
Canyon	87.6	212.3	228.7	246.1	281.9	3.0%	1.5%	1.5%	1.4%
Caribou	7.2	6.9	6.9	7.0	7.0	-0.2%	0.2%	0.2%	0.1%
Cassia	19.9	23.9	24.6	25.3	26.4	0.6%	0.6%	0.5%	0.5%
Clark	0.8	0.9	0.9	0.9	1.0	0.3%	0.6%	0.6%	0.6%
Clearwater	9.1	8.5	8.4	8.3	8.0	-0.2%	-0.3%	-0.3%	-0.3%
Custer	4.6	4.2	4.4	4.5	4.8	-0.3%	0.7%	0.7%	0.6%
Elmore	21.3	26.4	26.9	27.4	28.2	0.7%	0.4%	0.4%	0.3%
Franklin	9.3	13.4	14.1	14.8	16.1	1.2%	1.0%	1.0%	0.9%
Fremont	10.8	13.1	13.6	14.1	14.9	0.7%	0.7%	0.7%	0.6%
Gem	11.4	17.2	17.9	18.6	19.8	1.4%	0.8%	0.7%	0.7%
Gooding	11.8	15.4	15.9	16.4	17.2	0.9%	0.6%	0.6%	0.6%
Idaho	13.8	16.4	16.8	17.2	17.8	0.6%	0.5%	0.5%	0.4%
Jefferson	16.3	28.0	29.8	31.7	35.4	1.8%	1.3%	1.2%	1.2%
Jerome	15.3	23.2	24.0	24.7	25.9	1.4%	0.6%	0.6%	0.5%
Kootenai	66.2	154.7	167.8	181.9	211.6	2.9%	1.6%	1.6%	1.6%
Latah	30.3	39.0	40.1	41.2	43.0	0.8%	0.6%	0.5%	0.5%
Lemhi	6.9	7.9	8.1	8.3	8.7	0.5%	0.6%	0.6%	0.5%
Lewis	3.5	3.9	3.9	3.9	4.0	0.4%	0.2%	0.2%	0.2%
Lincoln	3.2	5.4	5.6	5.8	6.0	1.8%	0.6%	0.6%	0.5%
Madison	22.8	40.6	45.2	50.3	61.7	1.9%	2.2%	2.2%	2.1%
Minidoka	19.7	20.6	21.0	21.4	22.0	0.1%	0.4%	0.4%	0.3%
Nez Perce	32.9	40.5	41.3	42.1	43.2	0.7%	0.4%	0.4%	0.3%
Oneida	3.4	4.3	4.4	4.6	4.8	0.7%	0.7%	0.7%	0.6%

# TABLE 4-3: POPULATION (IN THOUSANDS)



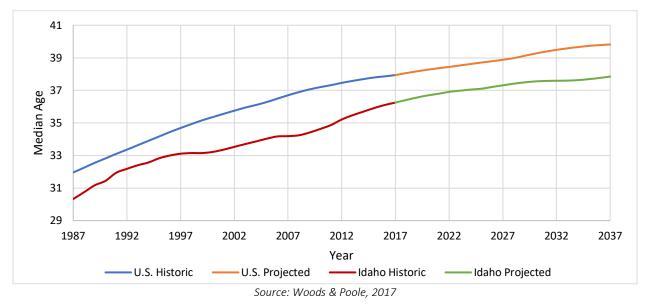
	Historic	Base		Projected			CAG	GR	
						1987 to	2017 to	2017 to	2017 to
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037
Owyhee	8.4	11.5	11.8	12.2	12.7	1.0%	0.5%	0.5%	0.5%
Payette	16.3	23.3	24.1	24.8	26.2	1.2%	0.7%	0.6%	0.6%
Power	7.2	7.7	7.8	7.9	8.0	0.2%	0.3%	0.3%	0.2%
Shoshone	14.5	12.3	12.1	12.0	11.5	-0.5%	-0.3%	-0.3%	-0.3%
Teton	3.5	10.7	11.4	12.1	13.5	3.8%	1.2%	1.2%	1.2%
Twin Falls	53.2	84.3	90.4	96.8	109.9	1.5%	1.4%	1.4%	1.3%
Valley	6.2	10.2	10.9	11.7	13.2	1.7%	1.3%	1.3%	1.3%
Washington	8.5	10.1	10.3	10.5	10.7	0.6%	0.4%	0.3%	0.3%
Idaho	985	1,698	1,810	1,929	2,173	1.8%	1.3%	1.3%	1.2%
U.S.	242,290	327,505	342,963	359,050	390,716	1.0%	0.9%	0.9%	0.9%

Source: Woods & Poole, 2017

# **Age Trends**

**Figure 4-2** shows national and state historic and projected median ages. Idaho's median age is projected to continue rising through the planning horizon, generally mirroring the national rise in median age. By 2037, Idaho's median age is projected to be nearly two years younger than the U.S. median age of 39.82 in 2017. Though the rate of increase in median age is projected to slow down, the median age is still increasing, signaling an aging population nationally and within Idaho.

#### FIGURE 4-2: HISTORIC AND PROJECTED MEDIAN AGE, U.S. AND IDAHO



At the county level, Adams, Boise, and Lemhi counties have the highest current median ages in Idaho, showing 53 years old or older as shown in **Table 4-4.** Similarly, Adams, Bonner, Idaho, and Shoshone counties have the highest projected median ages in Idaho, with many showing 50 years or older. Madison County has the lowest current and projected median ages in Idaho, ranging from 23 to 25 years of age, driven largely by a growing college-aged population tied to Brigham-Young University-Idaho. Ten of the 44 counties in Idaho have a projected reduction in the median age for all forecast periods. An additional 12 counties show reduction in the median age for at least one of the three forecast periods.



	TABLE 4-4: MEDIAN AGE BY COUNTY													
	Historic	Base		Projected			CA	GR						
						1987 to	2017 to	2017 to	2017 to					
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037					
Ada	31	37	38	38	39	0.6%	0.5%	0.4%	0.3%					
Adams	35	55	54	51	42	1.5%	-0.2%	-0.8%	-1.3%					
Bannock	28	33	34	35	35	0.5%	0.6%	0.5%	0.2%					
Bear Lake	29	39	37	35	33	0.9%	-0.9%	-1.0%	-0.7%					
Benewah	33	46	45	42	38	1.1%	-0.6%	-0.8%	-0.9%					
Bingham	27	34	35	35	36	0.8%	0.4%	0.5%	0.3%					
Blaine	32	43	45	47	47	1.0%	0.9%	0.7%	0.4%					
Boise	34	53	54	53	43	1.5%	0.3%	0.0%	-1.1%					
Bonner	35	49	50	51	51	1.1%	0.6%	0.4%	0.2%					
Bonneville	28	33	34	34	34	0.5%	0.5%	0.4%	0.2%					
Boundary	32	46	46	46	44	1.2%	0.3%	0.1%	-0.2%					
Butte	31	42	41	38	37	1.0%	-0.6%	-1.0%	-0.7%					
Camas	34	44	45	46	39	0.8%	0.6%	0.4%	-0.5%					
Canyon	31	33	33	33	34	0.3%	-0.1%	-0.1%	0.0%					
Caribou	28	37	36	34	34	0.9%	-0.5%	-0.9%	-0.5%					
Cassia	28	33	33	34	36	0.5%	0.2%	0.4%	0.4%					
Clark	32	36	37	37	37	0.4%	0.8%	0.2%	0.1%					
Clearwater	35	52	52	51	49	1.3%	0.3%	-0.1%	-0.2%					
Custer	34	52	53	53	49	1.5%	0.4%	0.1%	-0.3%					
Elmore	27	31	32	33	32	0.5%	0.5%	0.6%	0.2%					
Franklin	27	33	33	33	35	0.7%	-0.4%	-0.1%	0.3%					
Fremont	27	37	38	38	38	1.0%	0.4%	0.2%	0.1%					
Gem	35	45	46	47	47	0.9%	0.4%	0.3%	0.1%					
Gooding	34	37	37	37	37	0.3%	0.0%	-0.2%	0.0%					
Idaho	35	51	52	53	54	1.3%	0.6%	0.5%	0.3%					
Jefferson	26	31	32	33	33	0.6%	0.3%	0.3%	0.3%					
Jerome	31	33	34	34	34	0.2%	0.4%	0.4%	0.1%					
Kootenai	34	41	42	42	44	0.6%	0.6%	0.4%	0.3%					
Latah	27	29	30	32	32	0.2%	0.9%	1.1%	0.5%					
Lemhi	36	53	53	51	48	1.3%	0.0%	-0.4%	-0.5%					
Lewis	35	48	45	43	38	1.0%	-1.2%	-1.1%	-1.1%					
Lincoln	33	35	33	33	35	0.2%	-0.7%	-0.4%	0.1%					
Madison	20	24	24	23	25	0.5%	0.1%	0.0%	0.3%					
Minidoka	29	36	37	37	39	0.7%	0.2%	0.3%	0.3%					
Nez Perce	34	42	43	44	47	0.7%	0.5%	0.5%	0.6%					
Oneida	31	39	37	33	33	0.7%	-1.0%	-1.8%	-0.8%					
Owyhee	30	38	37	35	35	0.9%	-0.9%	-0.9%	-0.5%					
Payette	33	39	39	39	39	0.5%	0.1%	0.0%	0.1%					
Power	29	34	32	31	30	0.5%	-0.7%	-0.7%	-0.6%					

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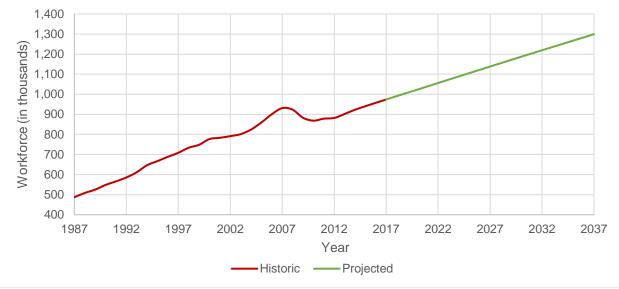
	Historic	Base	Projected			CAGR				
						1987 to	2017 to	2017 to	2017 to	
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037	
Shoshone	34	49	50	51	52	1.2%	0.6%	0.5%	0.3%	
Teton	29	37	38	37	35	0.8%	0.5%	-0.1%	-0.3%	
Twin Falls	32	35	36	36	36	0.3%	0.4%	0.3%	0.1%	
Valley	35	50	50	50	46	1.2%	0.2%	0.0%	-0.4%	
Washington	36	45	45	43	41	0.7%	-0.1%	-0.4%	-0.4%	
IDAHO	30.33	36.25	36.91	37.31	37.85	0.6%	0.4%	0.3%	0.2%	
U.S.	31.96	37.94	38.44	38.88	39.82	0.6%	0.3%	0.2%	0.2%	

Source: Woods & Poole, 2017

# **Employment Trends**

**Figure 4-3** shows the historical and projected workforce trends in Idaho. From 1987 to 2008, the workforce population steadily increased. However, the Great Recession of 2007-2009 caused the employment number to fall 6.7 percent from 931,102 people in 2007 to 868,673 people in 2010. By 2015, the workforce surpassed prerecession numbers. By 2037, the workforce is expected to near 1.3 million people, which is nearly 60 percent of the total population projected for that same year. This is an indication of a growing economy requiring more workers.

# FIGURE 4-3: IDAHO'S WORKFORCE OVER TIME



Source: Woods & Poole, 2017

**Table 4-5** shows Idaho's current and projected workforce by sector. Educational services, healthcare, finance, and the arts/entertainment/recreation sectors are anticipated to experience considerable growth, with average annual growth rates ranging from 2.0 to 3.0 percent over the three forecast horizons. These sectors are expected to continue expanding to support Idaho's growing population.

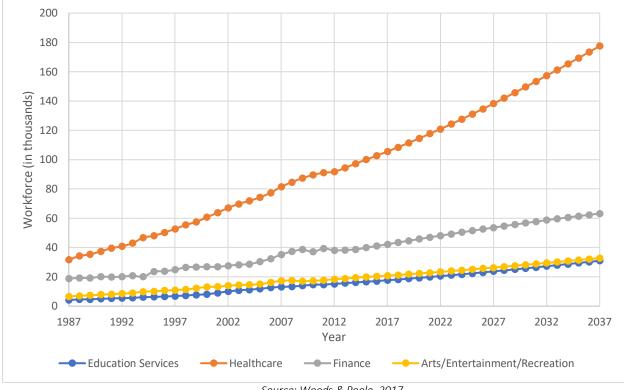


	<u>T</u> /	ABLE 4-5: I	DAHO'S E	MPLOYM	ENT BY SE	<u>CTOR</u>			
	Historic	Base	Projected				CA	GR	
						1987 -	2017 -	2017 -	2017 -
INDUSTRY	1987	2017	2022	2027	2037	2017	2022	2027	2037
Farm	39.1	40.3	41.1	41.6	42.0	0.1%	0.4%	0.3%	0.2%
Forestry, Fishing,	11.0	13.6	14.6	15.6	17.6	0.7%	1.4%	1.4%	1.3%
Related Activities									
and Other	0.5		<u> </u>			4 70/	1 00(	1.00/	1 224
Mining	3.5	5.7	6.1	6.5	7.4	1.7%	1.3%	1.3%	1.3%
Utilities	1.4	3.3	3.6	3.9	4.5	3.0%	1.6%	1.6%	1.5%
Construction	25.5	60.8	66.5	70.8	75.3	2.9%	1.8%	1.5%	1.1%
Manufacturing	51.2	69.2	71.6	72.9	74.2	1.0%	0.7%	0.5%	0.4%
Wholesale Trade Retail Trade	17.7	33.8	35.7	37.5	40.6	2.2%	1.1%	1.0%	0.9%
Transportation and	59.4 15.7	111.1 27.8	119.6 29.3	127.7 31.2	145.3 34.8	2.1% 1.9%	1.5% 1.1%	1.4% 1.2%	1.3% 1.1%
Warehousing	15.7	27.0	29.5	51.2	34.6	1.9%	1.170	1.270	1.170
Information	6.5	12.3	12.8	13.2	14.0	2.1%	0.7%	0.7%	0.6%
Finance and	18.8	42.2	48.1	53.6	63.2	2.1%	2.6%	2.4%	2.0%
Insurance	10.0	72.2	40.1	55.0	05.2	2.770	2.070	2.470	2.070
Real Estate and	16.9	45.9	50.8	56.2	68.0	3.4%	2.1%	2.1%	2.0%
Rental and Lease						, .	,	,	
Professional and	21.7	56.3	60.3	64.6	74.3	3.2%	1.4%	1.4%	1.4%
Technical Services									
Management of	4.0	6.2	6.4	6.6	6.8	1.5%	0.7%	0.6%	0.4%
Companies and									
Enterprises									
Administrative and	17.1	55.9	60.7	65.9	75.7	4.0%	1.7%	1.7%	1.5%
Waste Services									
Educational Services	4.2	17.6	20.5	23.7	30.9	4.9%	3.0%	3.0%	2.9%
Health Care and	31.7	105.6	120.9	138.3	177.5	4.1%	2.7%	2.7%	2.6%
Social Assistance Arts, Entertainment,	6.6	20.8	22.4	26.2	22.0	2.00/	2 40/	2 40/	2 20/
and Recreation	6.6	20.8	23.4	26.3	32.8	3.9%	2.4%	2.4%	2.3%
Accommodation and	28.1	64.3	69.5	74.7	83.0	2.8%	1.6%	1.5%	1.3%
Food Services	20.1	04.5	05.5	/ 4. /	05.0	2.070	1.070	1.570	1.570
Other Services,	21.4	47.9	51.7	55.8	64.9	2.7%	1.6%	1.6%	1.5%
Except Public									
Administration									
Federal Civilian	11.9	12.5	12.6	12.8	13.2	0.1%	0.3%	0.3%	0.3%
Government									
Federal Military	12.8	9.2	9.3	9.3	9.4	-1.1%	0.1%	0.1%	0.1%
State and Local	61.2	111.6	120.9	129.5	143.8	2.0%	1.6%	1.5%	1.3%
Government									

Source: Woods & Poole, 2017



**Figure 4-4** shows the graphical trends of the four fastest-growing employment sectors. Each of the four sectors (educational services, healthcare, finance, and arts/entertainment/recreation) are anticipated to realize at least 2.0 percent annual growth.



#### FIGURE 4-4: IDAHO EMPLOYMENT BY SELECTED SECTOR

Source: Woods & Poole, 2017

In addition to having the fastest projected population growth and lowest current and projected median ages, Madison County also is expected to experience the highest employment growth of all Idaho counties. Madison County is expected to grow at a 2.4 percent rate annually with an over 12.6 thousand additional workers. Ada County, which includes the State's capital, Boise, also shows high growth rates near 2.0 percent for each planning period as shown in **Table 4-6**.

	TABLE 4-6: IDAHO'S EMPLOYMENT BY COUNTY (IN THOUSANDS)										
	Historic	Base		Projected		CAGR					
						1987 -	2017 -	2017 -	2017 -		
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037		
Ada	114.6	305.1	337.0	369.9	437.7	3.3%	2.0%	1.9%	1.8%		
Adams	1.5	2.4	2.6	2.7	3.0	1.6%	1.2%	1.2%	1.0%		
Bannock	28.5	47.6	51.3	54.9	61.8	1.7%	1.5%	1.4%	1.3%		
Bear Lake	2.2	3.4	3.6	3.8	4.1	1.4%	1.2%	1.1%	0.9%		
Benewah	3.8	5.2	5.4	5.7	6.0	1.1%	1.0%	0.9%	0.8%		
Bingham	15.8	22.4	23.7	24.9	27.0	1.2%	1.2%	1.1%	0.9%		
Blaine	9.5	20.8	22.6	24.4	27.9	2.6%	1.7%	1.6%	1.5%		
Boise	1.2	2.7	2.9	3.1	3.5	2.8%	1.6%	1.6%	1.5%		
Bonner	12.0	23.8	25.3	26.7	29.2	2.3%	1.2%	1.2%	1.0%		



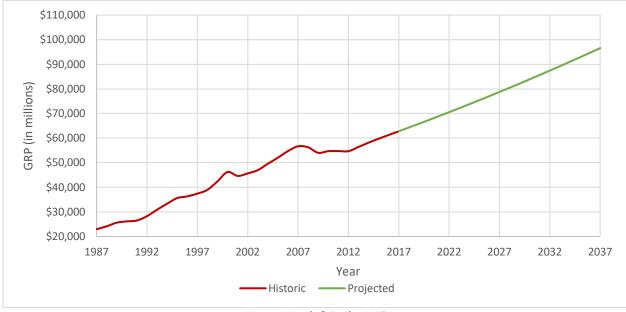
	Historic	Base		Projected			CA	GR	
						1987 -	2017 -	2017 -	2017 -
COUNTY	1987	2017	2022	2027	2037	2017	2022	2027	2037
Bonneville	33.8	66.5	71.7	76.8	86.4	2.3%	1.5%	1.4%	1.3%
Boundary	3.3	5.8	6.0	6.3	6.7	1.9%	0.9%	0.9%	0.7%
Butte	8.3	8.4	8.8	9.2	10.0	0.0%	0.9%	0.9%	0.9%
Camas	0.5	1.0	1.1	1.2	1.3	2.6%	1.3%	1.2%	1.0%
Canyon	40.1	87.0	95.0	103.0	118.9	2.6%	1.8%	1.7%	1.6%
Caribou	3.8	5.1	5.3	5.6	6.0	0.9%	1.1%	1.0%	0.8%
Cassia	9.5	15.1	15.9	16.7	17.9	1.6%	1.0%	1.0%	0.8%
Clark	0.6	1.0	1.1	1.1	1.3	1.6%	1.2%	1.2%	1.0%
Clearwater	4.4	4.6	4.7	4.9	5.1	0.1%	0.7%	0.6%	0.5%
Custer	2.3	3.1	3.3	3.5	3.8	0.9%	1.2%	1.1%	1.0%
Elmore	10.9	13.4	13.9	14.5	15.5	0.7%	0.8%	0.8%	0.7%
Franklin	3.5	6.4	6.9	7.3	8.1	2.1%	1.4%	1.3%	1.2%
Fremont	3.9	5.8	6.2	6.5	7.1	1.3%	1.3%	1.2%	1.0%
Gem	4.1	6.7	7.2	7.7	8.6	1.7%	1.4%	1.3%	1.2%
Gooding	5.4	8.9	9.4	9.9	10.9	1.7%	1.2%	1.2%	1.0%
Idaho	6.0	8.5	9.0	9.5	10.3	1.2%	1.2%	1.1%	1.0%
Jefferson	5.6	11.1	11.9	12.7	14.1	2.3%	1.4%	1.3%	1.2%
Jerome	6.8	12.0	12.7	13.3	14.4	1.9%	1.1%	1.1%	0.9%
Kootenai	29.7	84.0	92.4	101.0	117.9	3.5%	1.9%	1.9%	1.7%
Latah	15.0	21.6	22.8	23.8	25.3	1.2%	1.0%	0.9%	0.8%
Lemhi	3.2	4.3	4.6	4.8	5.2	1.0%	1.1%	1.0%	0.9%
Lewis	1.8	2.7	2.8	3.0	3.2	1.4%	1.2%	1.1%	1.0%
Lincoln	1.7	2.8	2.9	3.1	3.4	1.6%	1.2%	1.1%	0.9%
Madison	9.4	21.7	24.4	27.4	34.0	2.8%	2.4%	2.4%	2.3%
Minidoka	9.2	10.1	10.5	10.9	11.4	0.3%	0.8%	0.7%	0.6%
Nez Perce	19.3	27.0	28.4	29.5	31.3	1.1%	1.0%	0.9%	0.7%
Oneida	1.3	2.4	2.6	2.8	3.0	2.0%	1.3%	1.3%	1.1%
Owyhee	3.3	4.6	4.8	5.0	5.3	1.1%	0.9%	0.9%	0.8%
Payette	6.1	10.2	10.8	11.3	12.3	1.7%	1.1%	1.1%	0.9%
Power	4.5	4.8	4.9	5.0	5.2	0.2%	0.6%	0.5%	0.4%
Shoshone	5.4	6.4	6.6	6.9	7.2	0.6%	0.8%	0.7%	0.6%
Teton	1.3	5.6	6.0	6.5	7.3	5.0%	1.6%	1.5%	1.4%
Twin Falls	27.3	50.7	54.7	58.6	66.1	2.1%	1.5%	1.5%	1.3%
Valley	3.6	6.8	7.4	8.0	9.1	2.2%	1.7%	1.6%	1.5%
Washington	3.5	4.7	4.9	5.1	5.5	1.0%	1.0%	0.9%	0.8%
Idaho	487	974	1056	1138	1299	2.3%	1.6%	1.6%	1.5%
U.S.	129,548	194,802	209,148	223,284	250,169	1.4%	1.4%	1.4%	1.3%

Source: Woods & Poole, 2017



# **Gross Regional Product (GRP) Trends**

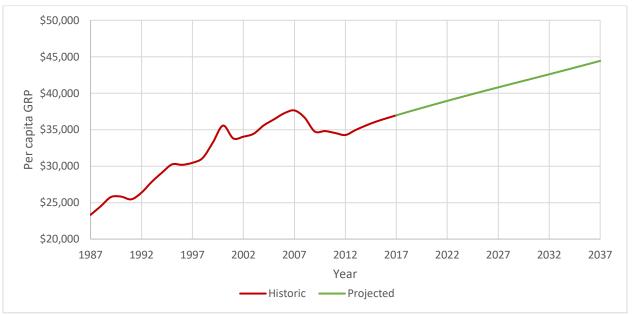
**Figure 4-5** shows the GRP of Idaho. The GRP is the gross domestic product (GDP) at the state level (Woods and Poole Economics, Inc. 2017). Though there was significant decline during the Great Recession, Idaho's GRP is projected to increase an estimated \$34 billion between 2017 and 2037.



#### FIGURE 4-5: IDAHO GRP OVER TIME

**Figure 4-6** shows the per capita GRP scaled to account for the increase in population to accurately project economic growth. Even scaled by population, the per capita Idaho GRP shows a definitive upward trend. It is anticipated that the per capita GRP will increase by nearly \$10,000 between 2017 and 2037.

# FIGURE 4-6: IDAHO PER CAPITA GRP OVER TIME



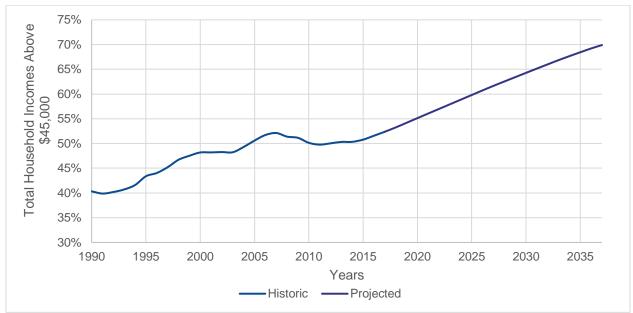
Source: Woods & Poole, 2017

Source: Woods & Poole, 2017



# **Income Trends**

In 2004, the median household income for Idaho was \$45,000 and 40 percent of all households earned above the median household income. **Figure 4-7** shows the historic and projected percentage of household incomes earning above \$45,000. In 2017, the percentage of households earning more than \$45,000 exceeded 53 percent and is projected to continue growing through 2037 at an annual rate of 2.68 percent. The percent of households to earn above the median income is projected to reach 70 percent by 2037.



#### FIGURE 4-7: PERCENT OF IDAHO HOUSEHOLDS EARNING MORE THAN \$45,000

Note: 1990 is the latest year for historical data. Source: Woods & Poole, 2017

**Table 4-7** demonstrates the historic and projected percentage of households that earn less than the median household income of \$45,000. In comparison to all counties in Idaho, Teton County saw the lowest percentage of households earning less than the median households at only 36 percent. Owyhee County, the county with the lowest median income, has and will continue to have the highest percentage (64 percent) of households earning less than \$45,000 until 2037. In 2017, three counties (Jefferson, Teton, and Valley counties) had a higher median income than the U.S. average.

TABLE 4-	7: PERCENTA	<u>GE OF HC</u>	USEHOLE	<mark>S WITH I</mark>	NCOMES	BELOW \$	45,000 B)	COUNTY	, -
	Historic	Base		Projected			CA	GR	
						1990 -	2017 -	2017 -	2017 -
COUNTY	1990*	2017	2022	2027	2037	2017	2022	2027	2037
Ada	49%	41%	37%	34%	27%	-0.6%	-1.9%	-1.9%	-2.0%
Adams	71%	61%	56%	49%	36%	-0.5%	-1.8%	-2.3%	-2.6%
Bannock	57%	50%	45%	40%	32%	-0.5%	-1.9%	-2.0%	-2.2%
Bear Lake	65%	53%	49%	41%	32%	-0.6%	-1.9%	-2.5%	-2.5%
Benewah	71%	60%	52%	43%	32%	-0.6%	-2.7%	-3.2%	-3.1%
Bingham	62%	47%	43%	38%	30%	-0.9%	-2.1%	-2.1%	-2.2%
Blaine	45%	38%	35%	32%	27%	-0.5%	-1.7%	-1.7%	-1.7%
Boise	64%	50%	44%	38%	30%	-0.8%	-2.4%	-2.7%	-2.6%
Bonner	70%	54%	48%	43%	34%	-0.8%	-2.3%	-2.4%	-2.2%



	Historic	Base	F	Projected		CAGR			
						1990 -	2017 -	2017 -	2017 -
COUNTY	1990*	2017	2022	2027	2037	2017	2022	2027	2037
Bonneville	48%	44%	40%	36%	30%	-0.3%	-1.8%	-1.9%	-2.0%
Boundary	74%	58%	55%	50%	39%	-0.8%	-1.1%	-1.5%	-2.0%
Butte	64%	54%	47%	42%	34%	-0.5%	-2.8%	-2.5%	-2.2%
Camas	62%	54%	49%	46%	36%	-0.5%	-1.7%	-1.6%	-2.0%
Canyon	66%	51%	46%	40%	30%	-0.8%	-2.3%	-2.4%	-2.7%
Caribou	54%	44%	41%	36%	27%	-0.6%	-1.6%	-2.0%	-2.5%
Cassia	65%	53%	48%	43%	34%	-0.7%	-1.8%	-2.0%	-2.2%
Clark	68%	57%	52%	43%	31%	-0.6%	-2.0%	-2.8%	-3.0%
Clearwater	64%	55%	48%	42%	30%	-0.5%	-2.5%	-2.5%	-2.9%
Custer	57%	54%	50%	47%	37%	-0.2%	-1.4%	-1.2%	-1.8%
Elmore	67%	51%	44%	40%	31%	-0.9%	-2.7%	-2.4%	-2.4%
Franklin	65%	44%	40%	37%	28%	-1.3%	-1.9%	-1.9%	-2.2%
Fremont	67%	53%	47%	42%	34%	-0.8%	-2.4%	-2.3%	-2.3%
Gem	72%	51%	46%	39%	30%	-1.1%	-2.4%	-2.6%	-2.7%
Gooding	73%	58%	56%	50%	38%	-0.8%	-0.7%	-1.5%	-2.2%
Idaho	68%	60%	54%	48%	37%	-0.4%	-1.8%	-2.1%	-2.4%
Jefferson	62%	<u>41%</u>	36%	32%	26%	-1.4%	-2.3%	-2.2%	-2.2%
Jerome	70%	54%	48%	41%	31%	-0.8%	-2.3%	-2.8%	-2.8%
Kootenai	59%	45%	40%	35%	28%	-0.9%	-2.3%	-2.4%	-2.4%
Latah	61%	57%	53%	48%	40%	-0.2%	-1.3%	-1.6%	-1.8%
Lemhi	75%	58%	55%	51%	40%	-0.8%	-1.2%	-1.4%	-1.8%
Lewis	74%	58%	52%	46%	36%	-0.8%	-2.1%	-2.2%	-2.3%
Lincoln	69%	53%	44%	38%	29%	-0.9%	-3.4%	-3.1%	-2.9%
Madison	65%	60%	57%	53%	43%	-0.2%	-0.8%	-1.2%	-1.7%
Minidoka	67%	50%	45%	39%	29%	-1.0%	-1.9%	-2.4%	-2.7%
Nez Perce	59%	49%	45%	40%	32%	-0.6%	-1.8%	-2.0%	-2.1%
Oneida	67%	49%	41%	36%	26%	-1.0%	-3.4%	-3.2%	-3.1%
Owyhee	74%	64%	62%	55%	42%	-0.4%	-0.9%	-1.6%	-2.1%
Payette	72%	53%	47%	41%	29%	-1.0%	-2.1%	-2.4%	-3.0%
Power	64%	51%	44%	38%	28%	-0.8%	-2.9%	-2.9%	-2.9%
Shoshone	70%	58%	51%	46%	37%	-0.6%	-2.7%	-2.3%	-2.2%
Teton	68%	36%	32%	29%	25%	-2.1%	-2.6%	-2.0%	-1.8%
Twin Falls	64%	52%	47%	41%	31%	-0.7%	-2.2%	-2.3%	-2.5%
Valley	61%	42%	38%	33%	24%	-1.2%	-2.4%	-2.5%	-2.8%
Washington	75%	59%	53%	47%	36%	-0.8%	-2.2%	-2.3%	-2.4%
Idaho	60%	48%	43%	38%	30%	-0.7%	-2.0%	-2.1%	-2.3%
U.S.	48%	43%	40%	36%	30%	-0.3%	-1.8%	-1.8%	-1.9%

Source: Woods & Poole, 2017

# **Tourism Trends**

Tourism comprises Idaho's third-largest industry and generates economic activity for the state. In a report analyzing tourism impacts in the state published by Dean Runyan and Associates, Idaho benefitted greatly from tourism activity with the following key results reported for 2017:

- → 34.3 million visitor trips to Idaho
- → \$3.7 billion dollars of direct travel spending (from visitors and by Idaho residents travelling outside the state)
- ✤ \$212 million dollars spent on air transportation
- ✤ 45,800 jobs created by Idaho tourism<sup>2</sup>

In the report, visitors arriving by air experienced a dramatic increase from 2014 with an approximately 8 percent annual growth rate since 2014. Domestic air travel to Idaho saw a growth of 9.3 percent between 2016 and 2017, following similar growth of 9.0 percent between 2015 and 2016.<sup>3</sup> Idaho's fast-growing tourism sector signals an increasing demand for more travel-related operations to and from the state, as well as intrastate operations as visitors travel between destinations within Idaho.

# Idaho Socioeconomic Trends Summary

Idaho's population is expected to outpace the nation's growth rates and is anticipating a shift in higher median ages across the state. By 2037, the state is projected to see an additional 325,000 people entering the workforce.

The educational services, healthcare, finance, and arts/entertainment/recreation employment are anticipated to see the highest percentages of growth per year. Likewise, Idaho's GRP is projected to increase an estimated \$34 billion by 2037.

On the county level, Ada County, which houses the capital, and Boise County currently have the largest populations and are projected to experience continued growth through 2037. Madison County is anticipated to see a growing, younger population with the highest employment growth rate of all Idaho counties through the planning horizon years.

The use of socioeconomic trends in the state assists in the determination of future aviation demand. Anticipated positive shifts in almost all socioeconomic sectors indicate a resulting increase in aviation-related activity for both commercial service and GA airports. A growing population increased discretionary spending due to higher projected incomes, and a healthy tourism sector signify a growing demand for commercial service activity. Projected expansion of the state's GRP and predicted growth in overall employment sectors signal an overall demand increase for GA.

# Idaho Commercial Service Activity

# **Historical and Current Commercial Service Activity**

Examining historical and current contexts of commercial service airport activities across the state is crucial to determining future demand forecasts. Although individual airports report data on their own activities, the FAA's TAF data were used to establish a consistent baseline for all commercial service forecasts. The TAF was also used for the commercial service airports to indicate the anticipated level of future activity. Many of the commercial service airports conduct their own forecasts for purposes of financial planning and examining terminal and other needs; however, current forecasts are not available from all of Idaho's commercial service airports. Therefore, the TAF was used since this is what the FAA compares all forecasts to in its approval process. It should be noted that

<sup>&</sup>lt;sup>2</sup> Dean Runyan & Associates Idaho Travel Impacts 2010-2017

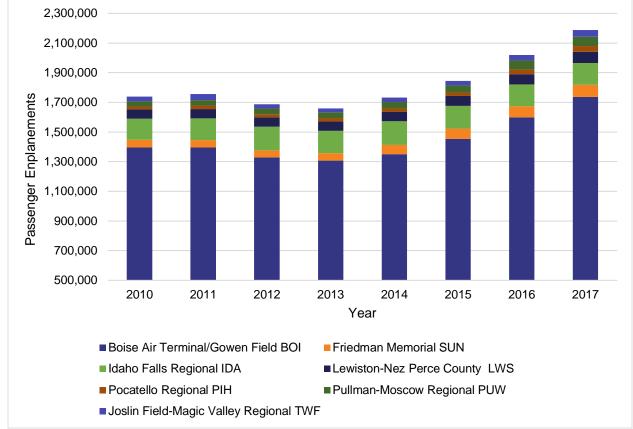
<sup>&</sup>lt;sup>3</sup> Bureau of Transportation Statistics Origin and Destination Survey

the number of enplanements reported by the FAA for Boise Air Terminal/Gowen Field is roughly 33,000 less than what was reported by the airport. Additionally, Pocatello Regional enplanement data are 7,000 more and Lewiston-Nez Perce Regional are 4,000 more in TAF data than the airport reported. Overall, the approximate statewide difference between TAF and airport-reported enplaned passengers is roughly 20,000 (less than one percent).

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### **Enplanements**

The seven commercial service airports that serve the state of Idaho handled 2.2 million enplanements in 2017. Per **Figure 4-8**, almost 79 percent of enplanement activity happened at Boise Air Terminal/Gowen Field with remaining enplanements occurring at Idaho Falls Regional, Friedman Memorial, Lewiston-Nez Perce County, Pullman-Moscow Regional, Joslin Field-Magic Valley Regional, and Pocatello Regional, respectively. Recent enplanement data demonstrates increased enplanements throughout nearly all commercial service airports between 2010 and 2017.



### FIGURE 4-8: ENPLANEMENT GROWTH BY COMMERCIAL SERVICE AIRPORT, 2010-2017

Source: FAA TAF, February 22, 2019

**Table 4-8** shows enplaned passenger activity for the past five years for these airports. Commercial service airports experienced an CAGR between -0.87 percent and 11.35 percent. Friedman Memorial maintained the highest growth at 11.35 percent annually. Idaho Falls Regional experienced a small decline in enplanements with a -0.87 percent CAGR.



#### TABLE 4-8: RECENT ENPLANEMENT GROWTH AT IDAHO AIRPORTS, 2013-2017

ASSOCIATED		FAA						CAGR
CITY	Airport	ID	2013	2014	2015	2016	2017	2013 - 2017
Boise	Boise Air Terminal/Gowen Field	BOI	1,307,620	1,349,518	1,454,535	1,598,226	1,732,174	5.78%
Hailey	Friedman Memorial	SUN	49,106	63,174	68,067	75,933	84,071	11.35%
Idaho Falls	Idaho Falls Regional	IDA	152,205	160,133	154,750	145,917	145,730	-0.87%
Lewiston	Lewiston-Nez Perce County	LWS	62,022	61,463	65,164	70,770	74,618	3.77%
Pocatello	Pocatello Regional	PIH	22,832	25,480	24,573	31,570	38,172	10.83%
Pullman	Pullman-Moscow Regional	PUW	39,549	42,511	47,334	60,005	61,142	9.10%
Twin Falls	Joslin Field-Magic Valley Regional	TWF	26,571	29,291	31,024	37,682	44,941	11.08%
		Total	1,659,905	1,731,570	1,845,447	2,020,103	2,180,848	5.61%

Source: FAA TAF, February 22, 2019

Idaho's total share of U.S. enplanements remained between 0.23 percent and 0.26 percent from 2010 to 2017 as shown in **Table 4-9**.

	TABLE 4-9: IDAHO SHARE OF U.S. ENPLANEMENTS, 2010-2017										
			Idaho's		n Rates o Year)						
YEAR	Idaho	U.S.	Share of U.S.	Idaho	U.S.						
2010	1,737,866	702,818,621	0.25%	-	-						
2011	1,757,068	722,926,202	0.24%	0.01%	0.03%						
2012	1,686,737	731,053,513	0.23%	-0.04%	0.01%						
2013	1,659,905	734,336,521	0.23%	-0.02%	0.01%						
2014	1,731,570	753,529,877	0.23%	0.04%	0.03%						
2015	1,845,447	786,384,586	0.23%	0.07%	0.04%						
2016	2,020,103	822,586,152	0.25%	0.09%	0.05%						
2017	2,180,848	846,556,739	0.26%	0.08%	0.03%						

# TABLE 4-9: IDAHO SHARE OF U.S. ENPLANEMENTS, 2010-2017

Source: FAA TAF, February 22, 2019

# **Operations**

Operations are defined as either a takeoff or a landing occurring at an airport. A takeoff constitutes one operation, while a landing constitutes another, for a total of two operations. For purposes of the 2020 IASP Update, commercial airport operations are considered the sum of air carrier and air taxi/commuter operations. Definitions of the FAA's operational categories are provided below:<sup>4</sup>

- Air Carrier Operations: Airport operations performed by aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds, carrying passengers or cargo for hire or compensation.
- Air Taxi /Commuter Operations: Airport operations performed by aircraft with seating capacity of 60 seats or less or a maximum payload capacity of 18,000 pounds or less, carrying passengers or cargo for hire or compensation on either a scheduled or charter basis (five or more round trip flights per week on at least one route according to published flight schedules), and/or carries passengers on an on-demand basis or limited scheduled basis.
- → GA Operations: Airport operations performed by all civil aircraft, except air carriers or air taxis/commuters.
- → Military Operations: Operations performed by military aircraft.

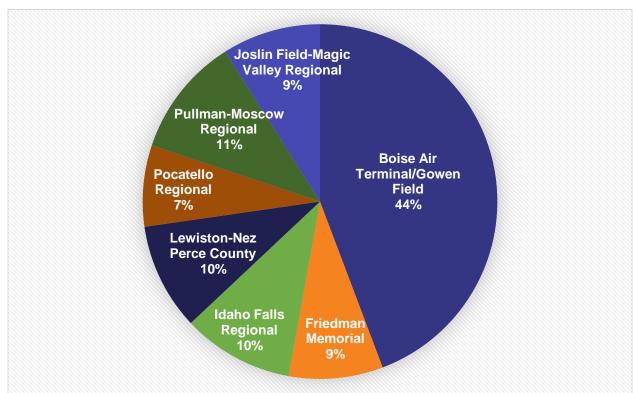
Other operations may be conducted by commercial airlines that do not fit the above definitions set by the FAA.<sup>5</sup> For purposes of the 2020 IASP Update, air carrier and air taxi/commuter figures presented in the following charts are assumed to generally reflect commercial service operations that relate to passenger enplanements.

**Table 4-10** presents operations by type reported for 2017, including commercial, GA, and military. "Total Operations" in the chart and the operations shown by type are derived from the FAA TAF, which differ from operation counts that were reported by the airports for the 2020 IASP Update. The number of total operations reported by the TAF is slightly lower than those reported by the airports and used as the baseline for the 2020 IASP Update. The difference between the two equals to nearly 17,000 more operations in the 2020 IASP Update than TAF-reported operations.

<sup>&</sup>lt;sup>4</sup> FAA TAF Glossary



**Figure 4-9** displays the market share of operations each airport contributes to the total number of operations conducted at commercial service airports in Idaho. The largest share of operations in 2017 occurred at Boise Air Terminal/Gowen Field with 44 percent of all operations conducted at commercial service airports. Joslin Field-Magic Valley Regional, Idaho Falls Regional, and Pullman-Moscow Regional airports generated the next largest operations share, respectively. Pocatello Regional, with the smallest share at 7 percent, still saw 21,276 operations occurring for the year. The most significant share of all operations occurring at Idaho's commercial service airports by type were derived from air carrier and GA operations.



# FIGURE 4-9: PERCENT OF TOTAL COMMERCIAL SERVICE OPERATIONS, 2017

Sources: FAA TAF, February 22, 2019



				TAF Iti	nerant Ope	rations			ocal Oper		11120, 2017	2020 1465
ASSOCIATED CITY	Airport	FAA ID	Air Carrier	Air Taxi & Commuter	GA	Military	Subtotal Itinerant	Civil	Military	Subtotal Local	Total TAF Operations	2020 IASP Update Airport- Reported Operations
Boise	Boise Air Terminal/ Gowen Field	BOI	47,488	8,076	38,524	7,906	101,994	19,853	2,454	22,307	124,301	124,917
Hailey	Friedman Memorial	SUN	3,294	5,784	13,902	86	23,066	1,076	2	1,078	24,144	26,692
Idaho Falls	Idaho Falls Regional	IDA	1,268	11,258	9,644	259	22,429	5,931	137	6,068	28,497	33,152
Lewiston	Lewiston-Nez Perce County	LWS	1,765	3,855	13,525	157	19,302	7,888	142	8,030	27,332	28,751
Pocatello	Pocatello Regional	PIH	318	6,651	9,008	178	16,155	4,604	68	4,672	20,827	21,276
Pullman	Pullman-Moscow Regional	PU W	0	5,101	13,391	80	18,572	12,006	0	12,006	30,578	29,350
Twin Falls	Joslin Field-Magic Valley Regional	TW F	314	5,096	14,054	585	20,049	4,664	512	5,176	25,225	33,671
		Total	54,447	42,821	112,048	9,251	221,567	56,022	3,315	59,337	280,904	297,809

#### TABLE 4-10: 2017 IDAHO COMMERCIAL SERVICE AIRPORT OPERATIONS BY TYPE, FAA TAF AND AIRPORT-REPORTED, 2017

Sources: FAA TAF, February 22, 2019; Airport Inventory and Data Survey Forms, 2019



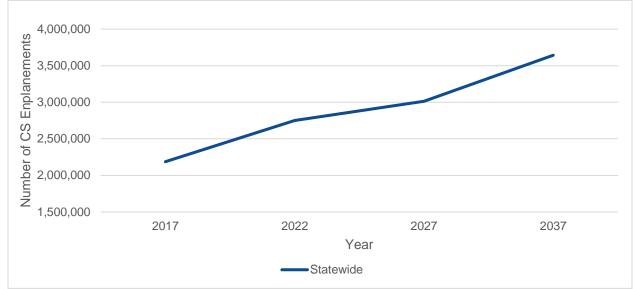
# **Forecasts of Commercial Service**

This section estimates future passenger enplanements, based GA aircraft, and aircraft operations across Idaho's seven commercial service airports. FAA TAF data were used for all commercial service forecasts in this section. Although the seven commercial service airports produce their own forecasts, historical and forecast data collected by the TAF were used to establish a uniform baseline for projections. Forecast estimates are made for a 20-year planning horizon to the year 2037.

In line with the 2010 IASP, Boise Air Terminal/Gowen Field and Idaho Falls Regional are anticipated to maintain their position as the largest scheduled service providers in the state with sustained enplanement growth. Continued growth at Friedman Memorial and Pullman-Moscow Regional airports are expected to support more scheduled air service, but at a lesser intensity than Boise Air Terminal/Gowen Field and Idaho Falls Regional. Lewiston-Nez Perce County, Pocatello Regional, and Joslin Field-Magic Valley Regional airports will continue to serve the growing enplanement demand for the remaining Idaho communities.

### **Enplanement Forecasts**

**Figure 4-10** demonstrates the total enplanements forecast for commercial service airports through the planning horizon. The total number of enplanements are anticipated to continue to steadily increase over the next 20 years. Statewide enplanements are projected to increase at 2.3 percent annually and reach nearly 3.5 million by 2037.



# FIGURE 4-10: COMMERCIAL SERVICE ENPLANEMENT FORECAST, 2017-2037

Source: FAA TAF, February 22, 2019

**Table 4-11** presents forecasts of enplaned passenger activity for all commercial airports in Idaho. All airports are projected to see an increase of enplanements between a 1.5 to 3.0 percent annually to 2037. Boise Air Terminal/Gowen Field is anticipated to experience over 1 million additional enplanements over the 20-year period. Pullman-Moscow Regional, with the highest growth rates per year, is expecting to see over 48,000 more enplanements by 2037. Friedman Memorial Airport, the airport with the smallest growth rate, is estimated to see nearly 30,000 more enplaned passengers in 2037. Overall, the expected enplaned passenger activity is estimated to increase by nearly 1.3 million enplanements across the state over the next 20 years.



			Historic	Forec	ast Enplanen	nents	CAGR
ASSOCIATED		FAA					2017-
CITY	Airport	ID	2017	2022	2027	2037	2037
Boise	Boise Air Terminal/ Gowen Field	BOI	1,732,174	2,057,590	2,277,674	2,789,030	2.4%
Hailey	Friedman Memorial	SUN	84,071	90,565	97,564	113,230	1.5%
Idaho Falls	Idaho Falls Regional	IDA	145,730	154,619	170,401	205,584	1.7%
Lewiston	Lewiston-Nez Perce County	LWS	74,618	81,718	89,521	107,515	1.8%
Pocatello	Pocatello Regional	PIH	38,172	43,147	48,765	62,321	2.5%
Pullman	Pullman-Moscow Regional	PUW	60,005	78,060	86,984	108,050	3.0%
Twin Falls	Joslin Field-Magic Valley Regional	TWF	44,941	49,374	54,243	65,471	1.9%
		Total	2,179,711	2,555,073	2,825,152	3,451,201	2.3%

#### TABLE 4-11: COMMERCIAL SERVICE AIRPORT ENPLANEMENT FORECASTS, 2017-2037

Source: FAA TAF, February 22, 2019

### **Commercial Operations Forecasts**

**Table 4-12** portrays commercial operations forecasts through 2037. Boise Air Terminal/Gowen Field is expected to continue handling the bulk of the growth with a 2.1 percent annual growth amounting to over 28,000 added operations by 2037.

The FAA expects a fairly minor increase in operations at Idaho Falls Regional and slightly less than a 1.0 percent CAGR for Friedman Memorial and Lewiston-Nez Perce County. The minor increase in operations may result from the utilization of larger aircraft, higher load capacities, or other factors reducing the number of operations taking place in the future. Commercial operations across the state are anticipated to grow 1.5 percent annually. This would mean an increase of approximately 36,000 additional commercial operations taking place in Idaho in 2037.

ASSOCIATED		FAA	Historic	Forecast	CAGR 2017-		
CITY	Airport	ID	2017	2022	2027	2037	2037
Boise	Boise Air Terminal/ Gowen Field	BOI	55,564	61,350	70,191	83,888	2.1%
Hailey	Friedman Memorial	SUN	9,078	9,376	9,685	10,357	0.7%
Idaho Falls	Idaho Falls Regional	IDA	12,526	11,795	12,304	13,394	0.3%
Lewiston	Lewiston-Nez Perce County	LWS	5,620	5,836	6,064	6,566	0.8%
Pocatello	Pocatello Regional	PIH	6,969	7,313	7,671	8,440	1.0%
Pullman	Pullman-Moscow Regional	PUW	5,101	7,283	7,283	7,283	1.8%
Twin Falls	Joslin Field-Magic Valley Regional	TWF	5,410	5,642	5,884	6,409	0.9%
		Total	100,268	108,595	119,082	136,337	1.5%

#### TABLE 4-12: COMMERCIAL SERVICE OPERATIONS FORECASTS, 2017-2037\*

\*Note: Commercial service operation counts and forecast estimates combine air carrier and air taxi/commuter operations. Source: FAA TAF, February 22, 2019



# **GA and Military Operations Forecasts**

Although GA includes all aviation activity except commercial service operations (air carrier and air taxi/commuter operations), commercial service airports also have GA and military activity. The GA services can range from helicopter operations, personal transportation, and business or corporate flights supporting various industries. Agricultural spraying, natural disaster response, medical or emergency airlift, and recreational flights are amongst other reasons that GA activity occurs at commercial service airports, depending on the airport and its level of commercial activity. Military activity ranges from the Idaho Air National Guard based on Boise Air Terminal/Gowen Field to many itinerant military operations at other commercial service airports.

#### FIGURE 4-11: GA AND MILITARY OPERATION FORECAST FOR COMMERCIAL SERVICE AIRPORTS, 2017-2037



Source: FAA TAF, February 22, 2019

**Figure 4- 11** displays the total number of GA and military operations projected to occur at commercial airports through 2037. Based on the TAF forecasts for all commercial airports, GA operations are projected to grow annually at 0.4 percent, whereas military operations are projected to increase slightly by 0.1 percent annually across the state. It should be noted that military operations are determined by national security issues and are generally unknown for the future; due to these considerations military operations are forecasted to remain flat.

**Table 4-13** shows forecasts for GA and military operations taking place at commercial service airports. GA operations are estimated to reach approximately 180,000 operations by 2037. All commercial service airports are expected to see an increase in GA operations; however, the increases are fairly minor, ranging from 0.0 percent to 1.6 percent. Excluding Pullman-Moscow Regional, Idaho Falls Regional is expected to see the most growth of slightly more than 1,000 additional GA operations anticipated by 2037.

TABLE 4-13: GA AND MILITARY OPERATIONS FORECASTS, 2017-2037												
			Histo	rical		Forecas	t GA and N	lilitary Ope	rations		c	AGR
ASSOCIATED			20:	17	20	22	20	27	20	37	201	7-2037
CITY	Airport	FAA ID	GA	Military	GA	Military	GA	Military	GA	Military	GA	Military
Boise	Boise Air Terminal/ Gowen Field	BOI	58,377	10,360	56,619	10,360	57,070	10,360	57,995	10,360	0.0%	0.0%
Hailey	Friedman Memorial	SUN	14,978	88	14,900	88	15,116	88	15,561	88	0.2%	0.0%
Idaho Falls	Idaho Falls Regional	IDA	15,575	396	16,343	421	16,530	449	16,911	529	0.4%	1.5%
Lewiston	Lewiston-Nez Perce County	LWS	21,413	299	21,581	299	21,796	299	22,232	299	0.2%	0.0%
Pocatello	Pocatello Regional	PIH	13,612	246	13,456	246	13,586	246	13,855	246	0.1%	0.0%
Pullman	Pullman-Moscow Regional	PUW	25,000	80	26,997	80	29,095	80	34,153	80	1.6%	0.0%
Twin Falls	Joslin Field-Magic Valley Regional	TWF	18,718	1,097	19,344	1,097	19,579	1,097	20,057	1,097	0.3%	0.0%
		Total	167,673	12,566	169,240	12,591	172,772	12,619	180,764	12,699	0.4%	0.1%

#### TABLE 4 12, CA AND MULTABY OPERATIONS FORECASTS 2017 2027

Source: FAA TAF, February 22, 2019



# **Total Operations at Commercial Service Airports**

**Table 4-14** shows projected estimates for total operations taking place at commercial service airports. Total operations include commercial (air carrier and air taxi/commuter), GA, and military operations.

Total operations for commercial service airports are projected to experience growth in the next 20 years. Boise Air Terminal/Gowen Field is expected to have almost 25,000 more operations by 2037. Pullman-Moscow Regional anticipates 13,000 more total operations annually in 20 years and will experience the fastest growth rate of 1.8 percent CAGR. Overall, total operations occurring at commercial service airports are expected to increase 0.8 percent annually for a total of over 48,000 additional statewide operations at the seven commercial service airports by 2037.

			Historic	Forecas	erations	CAGR	
ASSOCIATED		FAA					2017-
CITY	Airport	ID	2017	2022	2027	2037	2037
Boise	Boise Air Terminal/	BOI	124,301	128,509	134,438	149,073	0.9%
	Gowen Field						
Hailey	Friedman Memorial	SUN	24,144	24,364	24,889	26,006	0.4%
Idaho Falls	Idaho Falls Regional	IDA	28,497	28,559	29,283	31,374	0.5%
Lewiston	Lewiston-Nez Perce County	LWS	27,332	27,716	28,159	29,097	0.3%
Pocatello	Pocatello Regional	PIH	20,827	21,015	21,503	22,541	0.4%
Pullman/	Pullman-Moscow Regional	PUW	30,578	36,232	38,391	43,597	1.8%
Twin Falls	Joslin Field-Magic Valley	TWF	25,225	26,083	26,560	27,563	0.4%
	Regional						
		Total	280,904	292,478	303,223	329,251	0.8%
	Source: EA	A TAE Eak	ruary 22 201	0			

#### TABLE 4-14: TOTAL OPERATIONS FORECASTS AT COMMERCIAL SERVICE AIRPORTS, 2017-2037

Source: FAA TAF, February 22, 2019

#### **GA Based Aircraft Forecasts**

Table 4-15 depicts based aircraft projections to 2037 for the seven commercial service airports. There were 978 based aircraft at commercial service airports in 2017. Boise Air Terminal/Gowen Field is estimated to have the largest increase over the next 20 years, with 90 more based aircraft projected in 2037. Friedman Memorial will also experience a growth of 43 more based aircraft over the next 20 years. Minimal growth is expected across the state with a total increase of 159 additional based aircraft at commercial service airports in 2037, for a CAGR of 0.8 percent. Notably, this is the same CAGR as total operations at these airports.



			Historic	Forecast Based Aircraft			CAGR		
ASSOCIATED		FAA					2022-		
CITY	Airport	ID	2017	2022	2027	2037	2037		
Boise	Boise Air Terminal/	BOI	270	291	314	360	1.4%		
	Gowen Field								
Hailey	Friedman Memorial	SUN	159	167	182	202	1.2%		
Idaho Falls	Idaho Falls Regional	IDA	171	171	171	171	0.0%		
Lewiston	Lewiston-Nez Perce County	LWS	146	153	159	169	0.7%		
Pocatello	Pocatello Regional	PIH	50	50	50	50	0.0%		
Pullman	Pullman-Moscow Regional	PUW	70	72	73	73	0.2%		
Twin Falls	Joslin Field-Magic Valley Regional	TWF	112	112	112	112	0.0%		
		Total	978	1,016	1,061	1,137	0.8%		
Source: FAA TAF, February 22, 2019									

#### TABLE 4-15: BASED AIRCRAFT FORECASTS AT COMMERCIAL SERVICE AIRPORTS, 2017-2037

# **Idaho GA Activity**

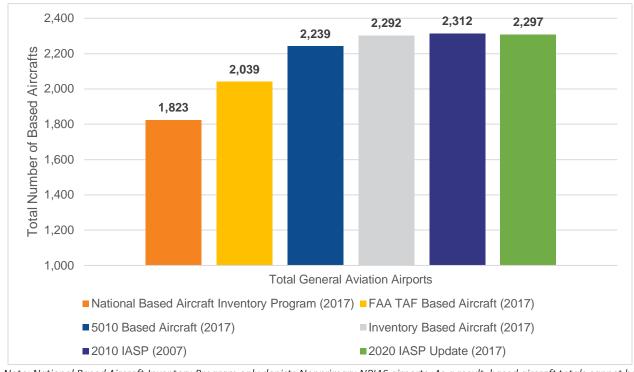
# **Historical and Current GA Activity**

GA activity is the predominant activity at the majority of Idaho's airports, with Boise Air Terminal/Gowen Field as the only exception. GA has a long history in Idaho, serving a critical access, emergency response, and economic roles in many communities. Historic and current conditions at Idaho's GA airports lend insights to trends that are unique in Idaho. Analysis of overall GA activity assists in the identification of indicators that will influence aviation activity in the future. For the 2020 IASP Update, FAA TAF data, self-reported airport data, and other sources were analyzed in this section and then compared for reliability.

# **Based Aircraft**

The FAA collects data through the National Based Aircraft Inventory Program, commonly referred to by its website name "basedaircraft.com," to verify based aircraft inventories for all Nonprimary airports in the National Plan of Integrated Airport Systems (NPIAS). The counts submitted to the program are then validated and submitted to the 5010 Master Record inspection data. The FAA uses this number to determine NPIAS eligibility, allocate appropriate federal funding, and determine system-wide improvement needs.

Based aircraft inventories were gathered from numerous sources and compared against one another to attain the most accurate and complete snapshot for based aircraft inventories on GA airports. Based aircraft inventory counts differ from source to source due to when and if the latest count was reported. Figure 4-12 shows the different 2017 based aircraft inventory counts by source and compares them to the 2010 IASP inventory.



### FIGURE 4-12: GA AIRPORTS BASED AIRCRAFT BY SOURCE, 2007 AND 2017

Note: National Based Aircraft Inventory Program only depicts Nonprimary NPIAS airports. As a result, based aircraft totals cannot be compared to the other sources presented. Sources: National Based Aircraft Inventory; FAA 5010 Form; Airport Inventory and Data Survey Forms, 2019; 2010 IASP

**Table 4-16** shows the inventory counts used to determine the final counts used in the 2020 IASP Update. All airports' inventories were gathered from the following sources: FAA Form 5010, FAA TAF 2019-2039, and airport responses to the 2020 IASP Update inventory surveys. Based on a comparison of aircraft inventory data sources, the following method was used to determine the final based aircraft counts for the 2020 IASP Update analyses:

- ✤ If the airport reported based aircraft in response to the 2020 IASP Update inventory survey, this data was used as it is the most recent and accurate data.
- → If the airport did not respond to the 2020 IASP Update inventory survey, then the FAA TAF data was used.
- → If the airport did not respond to the 2020 IASP Update inventory survey and did not have any information reported from the FAA TAF 2019-2039, then the latest FAA Form 5010 data was used.

The 2020 IASP Update finalized that, for purposes of forecasting, the 2017 inventory comprises 2,292 based aircraft at all GA airports in Idaho. Of the total inventory, 2,048 based aircraft were located on NPIAS GA airports and 244 at non-NPIAS airports (all of which are GA). In comparison to the 2,312 based aircraft reported in the 2010 IASP, the total number of based aircraft and those located at NPIAS GA airports remained flat, while slight growth was experienced in based aircraft at non-NPIAS airports.



#### TABLE 4-16: GA BASED AIRCRAFT BY SOURCE, 2017

				Assettable D	Final for		
					ata Sources (airc	2020 IASP	Analysis
				National Based		Update	2020 IASP Update
			5010	Aircraft		Airport-	Based
			Based	Inventory	FAA TAF	Reported	Aircraft for
ASSOCIATED CITY	Airport	FAA ID	Aircraft	Program	2019 -2039	Inventory	2017
Aberdeen	Aberdeen Municipal	U36	13	13	13	13	13
American Falls	American Falls	U01	36	0	N/A	36	36
Arco	Arco-Butte County	AOC	5	5	6	9	9
Bancroft	Bancroft Municipal	U51	0	0	N/A	0	0
Big Creek	Big Creek	U60	0	0	N/A	0	0
Blackfoot	McCarley Field	U02	63	61	64	59	59
Bonners Ferry	Boundary County	65S	65	64	65	73	73
Buhl	Buhl Municipal	U03	44	44	44	42	42
Burley	Burley Municipal	BYI	78	39	78	51	51
Caldwell	Caldwell Industrial	EUL	438	385	437	457	457
Carey	Carey	U65	6	0	N/A	7	7
Cascade	Cascade	U70	20	17	20	26	26
Challis	Challis	LLJ	21	13	21	21	21
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	253	252	259	262	262
Coeur D'Alene	Brooks SPB	S76	2	0	N/A	2	2
Coolin	Cavanaugh Bay	66S	0	0	N/A	0	0
Cottonwood	Cottonwood Municipal	S84	7	0	N/A	4	4
Council	Council Municipal	U82	11	11	11	11	11
Craigmont	Craigmont Municipal	S89	2	2	2	2	2
Donnelly	Donald D. Coski Memorial	U84	0	0	N/A	0	0
Downey	Downey/Hyde Memorial	U58	2	0	N/A	2	2
Driggs	Driggs-Reed Memorial	DIJ	81	70	81	103	103
Dubois	Dubois Municipal	U41	1	0	N/A	1	1
Emmett	Emmett Municipal	S78	21	0	N/A	21	21



			-	Available D		Final for Analysis	
ASSOCIATED CITY	Airport	FAA ID	5010 Based Aircraft	National Based Aircraft Inventory Program	FAA TAF 2019 -2039	2020 IASP Update Airport- Reported Inventory	2020 IASP Update Based Aircraft for 2017
Fairfield	Camas County	U86	5	0	N/A	4	4
Galena	Smiley Creek	U87	0	0	N/A	0	0
Garden Valley	Garden Valley	U88	5	0	N/A	5	5
Glenns Ferry	Glenns Ferry Municipal	U89	5	0	N/A	5	5
Gooding	Gooding Municipal	GNG	85	86	85	77	77
Grangeville	Idaho County	GIC	18	17	19	18	18
Hazelton	Hazelton Municipal	U94	5	0	N/A	8	8
Homedale	Homedale Municipal	S66	15	14	15	15	15
Howe	Howe	U97	3	0	N/A	3	3
Jerome	Jerome County	JER	51	26	51	45	45
Kamiah	Kamiah Municipal	S73	8	8	8	8	8
Kellogg	Shoshone County	S83	10	10	10	10	10
Kooskia	Kooskia Municipal	S82	4	0	N/A	4	4
Leadore	Leadore	U00	1	0	N/A	1	1
Lewiston	Snake River SPB	78U	0	0	N/A	0	0
Mackay	Mackay	U62	0	0	N/A	2	2
Malad City	Malad City	MLD	5	0	N/A	9	9
McCall	McCall Municipal	MYL	89	87	89	91	91
Midvale	Lee Williams Memorial	0U9	2	0	N/A	2	2
Mountain Home	Mountain Home Municipal	U76	23	23	23	27	27
Mud Lake	Mud Lake/West Jefferson County	1U2	8	0	N/A	11	11
Murphy	Murphy	1U3	0	0	N/A	0	0
Nampa	Nampa Municipal	MAN	298	276	298	312	312
Nezperce	Nezperce Municipal	0S5	3	0	N/A	3	3
Oakley	Oakley Municipal	1U6	0	0	N/A	0	0
Orofino	Orofino Municipal	S68	12	12	12	12	12



				Available D	ata Sources (airc	raft count)	Final for Analysis
ASSOCIATED CITY	Airport	FAA ID	5010 Based Aircraft	National Based Aircraft Inventory Program	FAA TAF 2019 -2039	2020 IASP Update Airport- Reported Inventory	2020 IASP Update Based Aircraft for 2017
Paris	Bear Lake County	107	5	5	5	6	6
Parma	Parma	50S	4	0	N/A	3	3
Payette	Payette Municipal	S75	15	0	N/A	22	22
Porthill	Eckhart International	1S1	0	0	N/A	0	0
Preston	Preston	U10	17	17	17	16	16
Priest River	Priest River Municipal	156	15	12	15	15	15
Rexburg	Rexburg-Madison County	RXE	107	100	107	102	102
Rigby	Rigby	U56	28	0	N/A	51	51
Rockford	Rockford Municipal	2U4	0	0	N/A	3	3
Salmon	Lemhi County	SMN	40	40	40	40	40
Sandpoint	Sandpoint	SZT	71	44	71	71	71
Soda Springs	Allen H Tigert	U78	6	0	N/A	6	6
St Anthony	Stanford Field	U12	30	0	N/A	30	30
St Maries	St Maries Municipal	S72	26	26	26	26	26
Stanley	Stanley	2U7	4	0	N/A	4	4
Stanley	Thomas Creek	2U8	0	0	N/A	0	0
Weiser	Weiser Municipal	S87	47	44	47	38	38
Yellow Pine	Johnson Creek	3U2	0	0	N/A	0	0
	Total (	GA Airports	2,239	1,823	2,039	2,297	2,297
	Total NPIAS (	GA Airports	2,031	1,823	2,039	2,048	2,048
	Total Non-NPIAS (	GA Airports	208	0	0	249	249

Note: National Based Aircraft Inventory Program only depicts Nonprimary NPIAS airports. Sources: FAA 5010 Forms; FAA TAF 2019-2039, February 22, 2019; Airport Inventory and Data Survey Forms, 2019; National Based Aircraft Inventory Program, 2019



### **GA** Operations

GA operation estimates for the 2020 IASP Update were gathered through different sources to obtain the most reliable picture of how many operations occurred at GA airports in 2017. None of Idaho's GA airports have an air traffic control tower (ATCT) and none have formal recording methods in place to track all takeoffs and landings. Therefore, the number of annual aircraft operations are estimated by airports using methods such as fuel sales, considering an average number of operations per based aircraft (OPBA), asking major operators such as flight schools or others, or estimating based on local knowledge. **Table 4-17** demonstrates the operation counts by source that were gathered to determine the final 2020 IASP Update operations count for 2017. Final 2020 IASP Update GA operations numbers were derived in the following way:

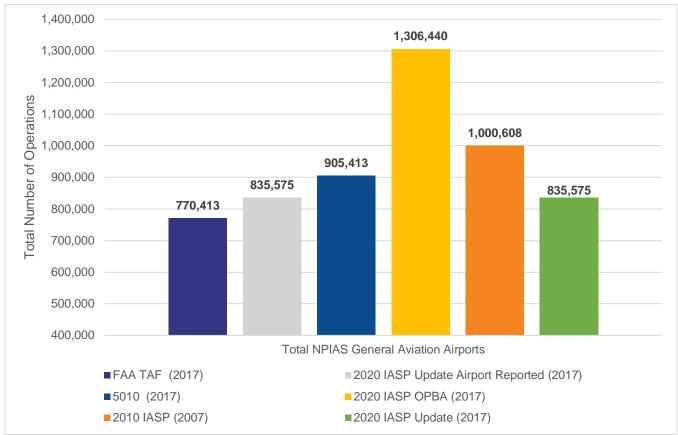
- → If the airport submitted operations data in response to the 2020 IASP Update inventory survey, survey data was used.
- ✤ If the airport did not submit operations data to the 2020 IASP Update inventory survey, available TAF data was used.
- ✤ If the airport did not submit operations data to the 2020 IASP Update inventory survey nor had available TAF data, 5010 operations data was used.

As noted, out of the 75 airports in Idaho, the six that have ATCTs are commercial service airports. These airports handled 297,809 operation in 2017. GA airports handled the rest of the state's operations, totaling 835,575 operations according to final 2020 IASP Update counts for 2017. Of these, NPIAS GA airports handled 706,799 operations and non-NPIAS GA airports conducted 128,776 operations.

**Figure 4-13** exhibits the count differences from each source and compares the counts to the 2010 IASP operations count. The FAA TAF baseline numbers are not reflected since none of the non-NPIAS airports are included in this source, thereby not presenting a true statewide estimate for comparison. For this reason, the reported operations count was decided to be the most accurate snapshot of GA airports operations and are used as the baseline for the 2020 IASP Update. The decrease in operations between the 2010 IASP and the 2020 IASP Update amounts to nearly 165,000 operations.



FIGURE 4-13: GA AIRPORT OPERATIONS, 2007 AND 2017



Notes: 2010 IASP Operations data was not available for Stanley, Thomas Creek Airport, 2U8. Sources: FAA TAF pulled February 2019, FAA 5010 Forms; Airport Inventory and Data Survey Forms, 2019; 2010 IASP



TABLE 4-17: GA OPERATIONS, 20	17
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			Avai		ces (operations o	count)	Final for Analysis
			5010	FAA TAF	2020 IASP Update Airport Reported	2020 IASP OPBA Estimated	2020 IASP Update Total Operations for
ASSOCIATED CITY	Airport	FAA ID	Operations	Operations	Operations	Operations	2017
Aberdeen	Aberdeen Municipal	U36	7,500	7,500	7,665	7,410	7,665
American Falls	American Falls	U01	18,025	N/A	12,325	20,520	12,325
Arco	Arco-Butte County	AOC	7,150	7,150	7,200	5,130	7,200
Bancroft	Bancroft Municipal	U51	1,500	N/A	1,500	0	1,500
Big Creek	Big Creek	U60	4,000	N/A	4,004	0	4,004
Blackfoot	McCarley Field	U02	30,500	30,500	30,500	33,630	30,500
Bonners Ferry	Boundary County	65S	19,025	19,025	23,025	41,610	23,025
Buhl	Buhl Municipal	U03	15,010	15,010	16,000	23,940	16,000
Burley	Burley Municipal	BYI	27,750	27,750	27,500	29,070	27,500
Caldwell	Caldwell Industrial	EUL	147,325	147,325	146,325	260,490	146,325
Carey	Carey	U65	3,000	N/A	3,000	3,990	3,000
Cascade	Cascade	U70	9,050	9,050	9,575	14,820	9,575
Challis	Challis	LLJ	16,350	16,350	16,426	11,970	16,426
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	123,048	123,048	81,126	149,340	81,126
Coeur D'Alene	Brooks SPB	S76	2,900	N/A	2,912	1,140	2,912
Coolin	Cavanaugh Bay	66S	3,500	N/A	3,484	0	3,484
Cottonwood	Cottonwood Municipal	S84	4,000	N/A	4,000	2,280	4,000
Council	Council Municipal	U82	4,000	4,000	4,000	6,270	4,000
Craigmont	Craigmont Municipal	S89	12,750	12,750	1,820	1,140	1,820
Donnelly	Donald D. Coski Memorial	U84	1,525	N/A	1,525	0	1,525
Downey	Downey/Hyde Memorial	U58	1,550	N/A	1,550	1,140	1,550
Driggs	Driggs-Reed Memorial	DIJ	8,000	8,000	10,017	58,710	10,017
Dubois	Dubois Municipal	U41	1,410	N/A	1,400	570	1,400
Emmett	Emmett Municipal	S78	12,000	N/A	11,420	11,970	11,420



			Avai	lable Data Sourc	ces (operations o	count)	Final for Analysis
			5010	FAA TAF	2020 IASP Update Airport Reported	2020 IASP OPBA Estimated	2020 IASP Update Total Operations for
ASSOCIATED CITY	Airport	FAA ID	Operations	Operations	Operations	Operations	2017
Fairfield	Camas County	U86	2,260	N/A	2,228	2,280	2,228
Galena	Smiley Creek	U87	5,100	N/A	5,096	0	5,096
Garden Valley	Garden Valley	U88	2,550	N/A	2,548	2,850	2,548
Glenns Ferry	Glenns Ferry Municipal	U89	1,760	N/A	1,760	2,850	1,760
Gooding	Gooding Municipal	GNG	26,800	26,800	26,800	43,890	26,800
Grangeville	Idaho County	GIC	17,500	17,500	17,500	10,260	17,500
Hazelton	Hazelton Municipal	U94	2,900	N/A	3,000	4,560	3,000
Homedale	Homedale Municipal	S66	7,000	7,000	7,050	8,550	7,050
Howe	Howe	U97	3,500	N/A	4,084	1,710	4,084
Jerome	Jerome County	JER	25,510	25,510	23,350	25,650	23,350
Kamiah	Kamiah Municipal	S73	3,000	3,000	3,000	4,560	3,000
Kellogg	Shoshone County	S83	7,500	7,500	7,665	5,700	7,665
Kooskia	Kooskia Municipal	S82	550	N/A	550	2,280	550
Leadore	Leadore	U00	200	N/A	200	570	200
Lewiston	Snake River SPB	78U	10	N/A	10	0	10
Mackay	Mackay	U62	1,900	N/A	1,905	1,140	1,905
Malad City	Malad City	MLD	4,425	N/A	4,425	5,130	4,425
McCall	McCall Municipal	MYL	43,600	43,600	32,000	51,870	32,000
Midvale	Lee Williams Memorial	0U9	2,000	N/A	148	1,140	148
Mountain Home	Mountain Home Municipal	U76	17,500	17,500	19,524	15,390	19,524
Mud Lake	Mud Lake/West Jefferson County	1U2	3,505	N/A	3,850	6,270	3,850
Murphy	Murphy	1U3	2,025	N/A	2,028	0	2,028
Nampa	Nampa Municipal	MAN	72,000	72,000	90,798	177,840	90,798
Nezperce	Nezperce Municipal	0S5	2,500	N/A	2,500	1,710	2,500
Oakley	Oakley Municipal	1U6	1,200	N/A	1,200	0	1,200



			Avai	lable Data S <u>our</u> d	ces (operations o	count)	Final for Analysis
ASSOCIATED CITY	Airport	FAA ID	5010 Operations	FAA TAF Operations	2020 IASP Update Airport Reported Operations	2020 IASP OPBA Estimated Operations	2020 IASP Update Total Operations for 2017
Orofino	Orofino Municipal	S68	4,100	4,100	5,000	6,840	5,000
Paris	Bear Lake County	1U7	2,600	2,600	2,600	3,420	2,600
Parma	Parma	50S	3,795	N/A	3,800	1,710	3,800
Payette	Payette Municipal	S75	5,500	N/A	5,460	12,540	5,460
Porthill	Eckhart International	1S1	2,100	N/A	2,080	0	2,080
Preston	Preston	U10	7,040	7,040	7,040	9,120	7,040
Priest River	Priest River Municipal	1S6	4,800	4,800	4,784	8,550	4,784
Rexburg	Rexburg-Madison County	RXE	31,150	31,150	15,652	58,140	15,652
Rigby	Rigby	U56	10,800	N/A	12,000	29,070	12,000
Rockford	Rockford Municipal	2U4	1,500	N/A	1,500	1,710	1,500
Salmon	Lemhi County	SMN	24,505	24,505	25,055	22,800	25,055
Sandpoint	Sandpoint	SZT	30,100	30,100	29,930	40,470	29,930
Soda Springs	Allen H Tigert	U78	5,800	N/A	5,772	3,420	5,772
St Anthony	Stanford Field	U12	4,910	N/A	4,888	17,100	4,888
St Maries	St Maries Municipal	S72	13,100	13,100	1,872	14,820	1,872
Stanley	Stanley	2U7	2,700	N/A	2,704	2,280	2,704
Stanley	Thomas Creek	2U8	2,350	N/A	2,200	0	2,200
Weiser	Weiser Municipal	S87	5,150	5,150	6,000	21,660	6,000
Yellow Pine	Johnson Creek	3U2	5,750	N/A	5,720	0	5,720
	Total G	A Airports	904,313	770,413	834,625	1,315,560	834,625
	Total NPIAS G	A Airports	770,413	770,413	706,799	1,173,060	706,799
	Total Non-NPIAS G	A Airports	133,900	0	127,826	142,500	127,826

Sources: FAA's Form 5010 data; FAA National Based Aircraft Inventory Program; FAA TAF, February 22, 2019; 2020 IASP Update Airport Reported Based Aircraft Inventory, 2019



### **Forecasts of GA Activity**

GA activity constitutes all other aviation activity outside of commercial operations. GA forecasts are focused on predicting based aircraft and GA operations to assess future demand for the next 20 years.

### **Based Aircraft Forecasts**

Two methodologies were used to facilitate estimates for Idaho based aircraft to the year 2037. The use of several methods ensured that various indicators unique to Idaho were considered in the production of reliable forecasts for the state. Once results of the two methodologies were generated, a preferred method was selected to demonstrate the most realistic projected figures. Based aircraft projections were derived through the following methods:

- Population Growth Methodology (option 1): This method utilizes Idaho's current and projected population growth by county to apply to the baseline based aircraft at the airport(s) in the county. This method assumes that the based aircraft growth rate will mirror the population growth rate through the forecast years.
- Based Aircraft by Type Methodology (Option 2): This method utilizes each individual airport's reported 2017 based aircraft by type and then applies a projected annual growth rate on the type of based aircraft at the airport and what is projected by the FAA in terms of growth for the different active aircraft fleet types on the national level. The following growth rates were utilized to generate future based aircraft forecasts:
  - If **only single-engine based aircraft** exist in the airport's inventory, then a 0.8% growth rate was applied.
  - If some multi-engine based aircraft exist in the airport's inventory, then a 1.0% growth rate was applied.
  - If **any jet or turboprop based aircraft** exist in the airport's inventory, then a 1.5% growth rate was applied.
- → The purpose of these specific growth rate percentages is to tie anticipated future trends in GA active fleet growth at the national level with future growth at individual airports based on the type of aircraft they are currently supporting in their based fleets. Note that Idaho's population growth rate is anticipated to outpace national population growth over the next 20 years (see Population Trends section above). As such, based aircraft growth in Idaho will likely mirror the state's population trends more closely than national-level projections. By looking at specific aircraft types in Idaho in relationship to the FAA's forecasts at the national level, the based aircraft by type methodology (Option 2) utilizes a blended approach in which national trends are applied to state-specific conditions. Accordingly, both state and national perspectives are reflected in Option 2.

**Table 4-18** demonstrates the application of the population growth method (Option 1) to predict forecast numbersfor GA airports in the state.**Table 4-19** demonstrates the application of the based aircraft by type methodology(Option 2).



TABLE 4-18: BASED AIRCRAFT FORECASTS USING POPULATION GROWTH MET	HOD, 2017-2037
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				Population	Historic	Foreca	ist Based Ai	rcraft
ASSOCIATED CITY	Airport	FAA ID	County	Growth Rate 2017 - 2037	2017	2022	2027	2037
Aberdeen	Aberdeen Municipal	U36	Bingham	0.6%	13	13	14	15
American Falls	American Falls	U01	Power	0.2%	36	36	37	37
Arco	Arco-Butte County	AOC	Butte	0.4%	9	9	9	10
Bancroft	Bancroft Municipal	U51	Caribou	0.1%	0	0	0	0
Big Creek	Big Creek	U60	Valley	1.3%	0	0	0	0
Blackfoot	McCarley Field	U02	Bingham	0.6%	59	61	63	66
Bonners Ferry	Boundary County	65S	Boundary	0.7%	73	76	78	84
Buhl	Buhl Municipal	U03	Twin Falls	1.3%	42	45	48	54
Burley	Burley Municipal	BYI	Cassia	0.5%	51	52	54	56
Caldwell	Caldwell Industrial	EUL	Canyon	1.4%	457	490	525	603
Carey	Carey	U65	Blaine	1.5%	7	8	8	9
Cascade	Cascade	U70	Valley	1.3%	26	28	30	34
Challis	Challis	LLJ	Custer	0.6%	21	22	22	24
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Kootenai	1.6%	262	284	307	360
Coeur D'Alene	Brooks SPB	S76	Kootenai	1.6%	2	2	2	3
Coolin	Cavanaugh Bay	66S	Bonner	1.0%	0	0	0	0
Cottonwood	Cottonwood Municipal	S84	Idaho	0.4%	4	4	4	4
Council	Council Municipal	U82	Adams	0.5%	11	11	12	12
Craigmont	Craigmont Municipal	S89	Lewis	0.2%	2	2	2	2
Donnelly	Donald D. Coski Memorial	U84	Valley	1.3%	0	0	0	0
Downey	Downey/Hyde Memorial	U58	Bannock	1.1%	2	2	2	2
Driggs	Driggs-Reed Memorial	DIJ	Teton	1.2%	103	109	116	131
Dubois	Dubois Municipal	U41	Clark	0.6%	1	1	1	1
Emmett	Emmett Municipal	S78	Gem	0.7%	21	22	23	24
Fairfield	Camas County	U86	Camas	0.5%	4	4	4	4
Galena	Smiley Creek	U87	Blaine	1.5%	0	0	0	0



				Population	Historic	Foreca	st Based Ai	rcraft
ASSOCIATED CITY	Airport	FAA ID	County	Growth Rate 2017 - 2037	2017	2022	2027	2037
Garden Valley	Garden Valley	U88	Boise	1.2%	5	5	6	6
Glenns Ferry	Glenns Ferry Municipal	U89	Elmore	0.3%	5	5	5	5
Gooding	Gooding Municipal	GNG	Gooding	0.6%	77	79	82	87
Grangeville	Idaho County	GIC	Idaho	0.4%	18	18	19	19
Hazelton	Hazelton Municipal	U94	Jerome	0.5%	8	8	8	9
Homedale	Homedale Municipal	S66	Owyhee	0.5%	15	15	16	17
Howe	Howe	U97	Butte	0.4%	3	3	3	3
Jerome	Jerome County	JER	Jerome	0.5%	45	46	47	50
Kamiah	Kamiah Municipal	S73	Idaho	0.4%	8	8	8	9
Kellogg	Shoshone County	S83	Shoshone	-0.3%	10	10	10	9
Kooskia	Kooskia Municipal	S82	Idaho	0.4%	4	4	4	4
Leadore	Leadore	U00	Lemhi	0.5%	1	1	1	1
Lewiston	Snake River SPB	78U	Nez Perce	0.3%	0	0	0	0
Mackay	Mackay	U62	Custer	0.6%	2	2	2	2
Malad City	Malad City	MLD	Oneida	0.6%	9	9	10	10
McCall	McCall Municipal	MYL	Valley	1.3%	91	97	104	118
Midvale	Lee Williams Memorial	0U9	Washington	0.3%	2	2	2	2
Mountain Home	Mountain Home Municipal	U76	Elmore	0.3%	27	27	28	29
Mud Lake	Mud Lake/West Jefferson County	1U2	Jefferson	1.2%	11	12	12	14
Murphy	Murphy	1U3	Owyhee	0.5%	0	0	0	0
Nampa	Nampa Municipal	MAN	Canyon	1.4%	312	334	359	412
Nezperce	Nezperce Municipal	0S5	Nez Perce	0.3%	3	3	3	3
Oakley	Oakley Municipal	1U6	Cassia	0.5%	0	0	0	0
Orofino	Orofino Municipal	S68	Clearwater	-0.3%	12	12	12	11
Paris	Bear Lake County	1U7	Bear Lake	0.1%	6	6	6	6
Parma	Parma	50S	Canyon	1.4%	3	3	3	4
Payette	Payette Municipal	S75	Payette	0.6%	22	23	23	25



				Population	Historic	Foreca	st Based Ai	rcraft
ASSOCIATED CITY	Airport	FAA ID	County	Growth Rate 2017 - 2037	2017	2022	2027	2037
Porthill	Eckhart International	1S1	Boundary	0.7%	0	0	0	0
Preston	Preston	U10	Franklin	0.9%	16	17	17	19
Priest River	Priest River Municipal	1S6	Bonner	1.0%	15	16	17	18
Rexburg	Rexburg-Madison County	RXE	Madison	2.1%	102	113	126	155
Rigby	Rigby	U56	Jefferson	1.2%	51	54	57	65
Rockford	Rockford Municipal	2U4	Bingham	0.6%	3	3	3	3
Salmon	Lemhi County	SMN	Lemhi	0.5%	40	41	42	44
Sandpoint	Sandpoint	SZT	Bonner	1.0%	71	75	78	87
Soda Springs	Allen H Tigert	U78	Caribou	0.1%	6	6	6	6
St Anthony	Stanford Field	U12	Fremont	0.6%	30	31	32	34
St Maries	St Maries Municipal	S72	Benewah	0.4%	26	27	27	28
Stanley	Stanley	2U7	Custer	0.6%	4	4	4	5
Stanley	Thomas Creek	2U8	Custer	0.6%	0	0	0	0
Weiser	Weiser Municipal	S87	Washington	0.3%	38	39	39	40
Yellow Pine	Johnson Creek	3U2	Valley	1.3%	0	0	0	0
			Total	1.1%	2,292	2,423	2,564	2,874

Sources: Woods & Poole, 2017; Kimley-Horn, 2019



	TABLE 4-19: BASED AIRCE	AFT FUREU		DAJEU AIR	CRAFI BY ITP		<i>J</i> , <u>2017-20</u>			
			Airport						ecast Ba	
			Reference		Aircraft (%)		Historic		Aircraft	
ASSOCIATED			Code	Multi-	Jet/	Growth				1
CITY	Airport	FAA ID	(ARC)	engine	Turboprop	Rate	2017	2022	2027	2037
Aberdeen	Aberdeen Municipal	U36	B-II	7.7%	0.0%	1.0%	13	14	14	16
American Falls	American Falls	U01	B-II	2.8%	0.0%	1.0%	36	38	40	44
Arco	Arco-Butte County	AOC	B-II	0.0%	0.0%	1.0%	9	9	10	11
Bancroft	Bancroft Municipal	U51	A-I	0.0%	0.0%	0.8%	0	0	0	0
Big Creek	Big Creek	U60	A-I	0.0%	0.0%	0.8%	0	0	0	0
Blackfoot	McCarley Field	U02	B-I	3.4%	0.0%	0.8%	59	61	64	69
Bonners Ferry	Boundary County	65S	B-II	4.1%	6.8%	1.0%	73	77	81	89
Buhl	Buhl Municipal	U03	B-I	0.0%	0.0%	0.8%	42	44	45	49
Burley	Burley Municipal	BYI	B-II	7.8%	11.8%	1.0%	51	54	56	62
Caldwell	Caldwell Industrial	EUL	B-II	5.7%	0.9%	1.0%	457	480	505	558
Carey	Carey	U65	A-I	0.0%	0.0%	0.8%	7	7	8	8
Cascade	Cascade	U70	B-I	3.8%	0.0%	0.8%	26	27	28	30
Challis	Challis	LLJ	B-I	14.3%	0.0%	0.8%	21	22	23	25
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	B-IV	11.8%	16.5%	1.5%	262	282	304	353
Coeur D'Alene	Brooks SPB	S76	A-I	0.0%	0.0%	0.8%	2	2	2	2
Coolin	Cavanaugh Bay	66S	A-I	0.0%	0.0%	0.8%	0	0	0	0
Cottonwood	Cottonwood Municipal	S84	A-I	0.0%	25.0%	0.8%	4	4	4	5
Council	Council Municipal	U82	A-I	0.0%	0.0%	0.8%	11	11	12	13
Craigmont	Craigmont Municipal	S89	A-I	0.0%	0.0%	0.8%	2	2	2	2
Donnelly	Donald D. Coski Memorial	U84	A-I	0.0%	0.0%	0.8%	0	0	0	0
Downey	Downey/Hyde Memorial	U58	A-I	0.0%	0.0%	0.8%	2	2	2	2
Driggs	Driggs-Reed Memorial	DIJ	C-II	14.6%	11.7%	1.0%	103	108	114	126
Dubois	Dubois Municipal	U41	A-I	0.0%	0.0%	0.8%	1	1	1	1
Emmett	Emmett Municipal	S78	A-I	0.0%	0.0%	0.8%	21	22	23	25
Fairfield	Camas County	U86	A-I	0.0%	0.0%	0.8%	4	4	4	5

### TABLE 4-19: BASED AIRCRAFT FORECASTS USING BASED AIRCRAFT BY TYPE METHOD, 2017-2037



			Airport Reference	Based	Aircraft (%)		Historic		Forecast Based Aircraft	
ASSOCIATED			Code	Multi-	Jet/	Growth				
CITY	Airport	FAA ID	(ARC)	engine	Turboprop	Rate	2017	2022	2027	2037
Galena	Smiley Creek	U87	A-I	0.0%	0.0%	0.8%	0	0	0	0
Garden Valley	Garden Valley	U88	A-I	0.0%	0.0%	0.8%	5	5	5	6
Glenns Ferry	Glenns Ferry Municipal	U89	A-I	0.0%	0.0%	0.8%	5	5	5	6
Gooding	Gooding Municipal	GNG	B-II	3.9%	5.2%	1.0%	77	81	85	94
Grangeville	Idaho County	GIC	B-II	5.6%	0.0%	1.0%	18	19	20	22
Hazelton	Hazelton Municipal	U94	B-I	0.0%	50.0%	0.8%	8	8	9	9
Homedale	Homedale Municipal	S66	A-I	6.7%	0.0%	0.8%	15	16	16	18
Howe	Howe	U97	A-I	0.0%	0.0%	0.8%	3	3	3	4
Jerome	Jerome County	JER	B-II	4.4%	4.4%	1.0%	45	47	50	55
Kamiah	Kamiah Municipal	S73	A-I	0.0%	0.0%	0.8%	8	8	9	9
Kellogg	Shoshone County	S83	B-II	10.0%	0.0%	1.0%	10	11	11	12
Kooskia	Kooskia Municipal	S82	A-I	0.0%	0.0%	0.8%	4	4	4	5
Leadore	Leadore	U00	A-I	0.0%	0.0%	0.8%	1	1	1	1
Lewiston	Snake River SPB	78U	A-I	0.0%	0.0%	0.8%	0	0	0	0
Mackay	Mackay	U62	A-I	0.0%	0.0%	0.8%	2	2	2	2
Malad City	Malad City	MLD	B-I	0.0%	0.0%	0.8%	9	9	10	11
McCall	McCall Municipal	MYL	B-II	8.8%	1.1%	1.0%	91	96	101	111
Midvale	Lee Williams Memorial	0U9	A-I	0.0%	0.0%	0.8%	2	2	2	2
Mountain	Mountain Home	U76	B-II	11.1%	0.0%	1.0%	27	28	30	33
Home	Municipal									
Mud Lake	Mud Lake/West Jefferson County	1U2	A-I	0.0%	45.5%	0.8%	11	11	12	13
Murphy	Murphy	1U3	A-II	0.0%	0.0%	1.0%	0	0	0	0
Nampa	Nampa Municipal	MAN	B-II	3.2%	1.3%	1.0%	312	328	345	381
Nezperce	Nezperce Municipal	0S5	A-I	0.0%	0.0%	0.8%	3	3	3	4
Oakley	Oakley Municipal	1U6	A-I	0.0%	0.0%	0.8%	0	0	0	0
Orofino	Orofino Municipal	S68	B-I	0.0%	0.0%	0.8%	12	12	13	14
Paris	Bear Lake County	1U7	B-I	0.0%	0.0%	0.8%	6	6	6	7



			Airport Reference Based Aircraft (%) Historic			ecast Ba Aircraft				
ASSOCIATED CITY	Airport	FAA ID	Code (ARC)	Multi- engine	Jet/ Turboprop	Growth Rate	2017	2022	2027	2037
Parma	Parma	50S	A-I	0.0%	0.0%	0.8%	3	3	3	4
Payette	Payette Municipal	S75	A-I	0.0%	0.0%	0.8%	22	23	24	26
Porthill	Eckhart International	1S1	A-I	0.0%	0.0%	0.8%	0	0	0	0
Preston	Preston	U10	A-I	0.0%	0.0%	0.8%	16	17	17	19
Priest River	Priest River Municipal	1S6	A-I	0.0%	0.0%	0.8%	15	16	16	18
Rexburg	Rexburg-Madison County	RXE	B-I	4.9%	0.0%	0.8%	102	106	110	120
Rigby	Rigby	U56	A/B-I	2.0%	27.5%	0.8%	51	53	55	60
Rockford	Rockford Municipal	2U4	A-I	0.0%	0.0%	0.8%	3	3	3	4
Salmon	Lemhi County	SMN	B-II	20.0%	0.0%	1.0%	40	42	44	49
Sandpoint	Sandpoint	SZT	B-II	14.1%	0.0%	1.0%	71	75	78	87
Soda Springs	Allen H Tigert	U78	A-I	0.0%	0.0%	0.8%	6	6	6	7
St Anthony	Stanford Field	U12	A-I	0.0%	0.0%	0.8%	30	31	32	35
St Maries	St Maries Municipal	S72	A-I	11.5%	0.0%	0.8%	26	27	28	30
Stanley	Stanley	2U7	A-I	0.0%	0.0%	0.8%	4	4	4	5
Stanley	Thomas Creek	2U8	A-1	0.0%	0.0%	0.8%	0	0	0	0
Weiser	Weiser Municipal	S87	A/B-I	2.6%	0.0%	0.8%	38	40	41	45
Yellow Pine	Johnson Creek	3U2	A-I	0.0%	0.0%	0.8%	0	0	0	0
	-				Total	1.0%	2,292	2,409	2,533	2,800

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



### Results and Selection of Preferred Based Aircraft Forecast Methods

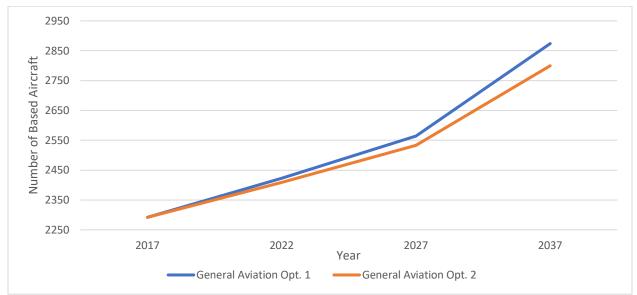
Table 4-20 demonstrates the results from both methodologies for GA based aircraft forecasts. Through use of the population growth method, based aircraft is projected to grow at 1.1 percent CAGR from 2,292 in 2017 to 2,874 in 2037. This equals an introduction of 582 based aircraft to the GA fleet in Idaho. Results from the based aircraft by type methodology predicted that based aircraft will increase at an annual compound growth rate of 1.0 percent and result in 508 additional aircraft for a total of 2,800 based aircraft inventory in 2037.

TABLE 4-20: BASED AIRCRAFT FORECASTS, 2017-2037											
	Historic		Forecast		CAGR						
METHODOLOGY	2017	2022	2027	2037	2017-2037						
GA Based Aircraft Option 1	2,292	2,423	2,564	2,874	1.1%						
GA Based Aircraft Option 2	2,292	2,409	2,533	2,800	1.0%						
C	aumaan Kimalan I	1									

Source: Kimley-Horn, 2019

Figure 4-14 demonstrates the differences in growth rates from the above table. The use of Option 1 (population growth methodology) predicts a much higher growth rate than that of Option 2 (based aircraft by type). Both methodologies predict an increase in based aircraft through the year 2037.





Source: Kimley-Horn, 2019

The results from the two methodologies were compared to select preferred forecast figures. Option 2 was selected as the preferred forecast method because it utilized FAA forecasted growth rates for active aircraft by type.

FAA Aerospace Forecast 2019-2039 estimates a slight growth in single-engine aircraft due to an anticipated increase in experimental and light sport aircraft but is expected to see a decline in single- and multi-engine piston active aircraft resulting in the 0.8 percent growth rate application. Similar factors influence the multi-engine aircraft rate, but anticipated conversion to jet and turboprop aircraft in the GA sector is growing resulting in the 1.0 percent growth rate application. Finally, turboprop and jet aircraft are projected to see growth between 1.7 -2.2 percent annually in GA, resulting in a mean average of 1.5 percent growth rate application for the forecast presented in this section.



### **GA** Operations Forecasts

Several forecasting methodologies were utilized to generate forecasts for GA operations out to the 20-year planning horizon. The two methodologies focus on different indicators influencing GA operation growth patterns in the future. Once results of the two methodologies were generated, a preferred method was selected to demonstrate the most realistic projected figures. A summary of the two forecasting methodologies is presented below:

- → OPBA Methodology (Option 1): This method determines a ratio between the number of operations and the number of based aircraft, generally reflecting a relationship between the number of annual aircraft operations and the number of aircraft based at an airport. This methodology uses each individual airport's preferred forecast of based aircraft (as previously outlined) and applies the OPBA established for 2017 to generate the operational forecast estimates. The OPBA ratio generated from this method represents all GA activity and not just those conducted by based aircraft.
- → ARC Category Growth Rate Method (Option 2): This method uses the airport's ARC identified from the Airport Inventory and Survey Data Form and designates a specific growth rate to them. ARC essentially describes the most demanding types of aircrafts that can be served based on the airport's design criteria in meeting specific aircraft needs. Once the ARC was determined, a CAGR was assigned to the airport:
  - A-I through B-I: 0% growth CAGR was applied
  - B-II through C-II: 0.8% growth CAGR was applied
  - C-III or Greater: 1.6% growth CAGR was applied

**Table 4-21** demonstrates the application of the OPBA method (Option 1) to predict forecast numbers for GA airports in the state. **Table 4-22** demonstrates the application of the ARC method (Option 2).

TABLE 4-21: GA OPERATIONS FORECAST U	JSING OPBA METHOD, 2017-2037
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						Fore			
				listoric 2017			Operation	S	CAGR
		FAA	Based						2017 -
ASSOCIATED CITY	Airport	ID	Aircraft	Operations	OPBA	2022	2027	2037	2037
Aberdeen	Aberdeen Municipal	U36	13	7,665	590	8,056	8,467	9,353	1.0%
American Falls	American Falls	U01	36	12,325	342	12,954	13,614	15,039	1.0%
Arco	Arco-Butte County	AOC	9	7,200	800	7,567	7,953	8,785	1.0%
Bancroft	Bancroft Municipal	U51	0	1,500	N/A	1,561	1,624	1,759	0.8%
Big Creek	Big Creek	U60	0	4,004	N/A	4,167	4,336	4,696	0.8%
Blackfoot	McCarley Field	U02	59	30,500	517	31,740	33,030	35,769	0.8%
Bonners Ferry	Boundary County	65S	73	23,025	315	24,200	25,434	28,095	1.0%
Buhl	Buhl Municipal	U03	42	16,000	381	16,650	17,327	18,764	0.8%
Burley	Burley Municipal	BYI	51	27,500	539	28,903	30,377	33,555	1.0%
Caldwell	Caldwell Industrial		457	146,325	320	153,789	161,634	178,544	1.0%
Carey	Carey	U65	7	3,000	429	3,122	3,249	3,518	0.8%
Cascade	Cascade	U70	26	9,575	368	9,964	10,369	11,229	0.8%
Challis	Challis	LLJ	21	16,426	782	17,094	17,788	19,264	0.8%
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	262	81,126	310	87,396	94,150	109,265	1.5%
Coeur D'Alene	Brooks SPB	S76	2	2,912	1,456	3,030	3,154	3,415	0.8%
Coolin	Cavanaugh Bay	66S	0	3,484	N/A	3,626	3,773	4,086	0.8%
Cottonwood	Cottonwood Municipal	S84	4	4,000	1,000	4,163	4,332	4,691	0.8%
Council	Council Municipal	U82	11	4,000	364	4,163	4,332	4,691	0.8%
Craigmont	Craigmont Municipal	S89	2	1,820	910	1,894	1,971	2,134	0.8%
Donnelly	Donald D. Coski Memorial	U84	0	1,525	N/A	1,587	1,651	1,788	0.8%
Downey	Downey/Hyde Memorial	U58	2	1,550	775	1,613	1,679	1,818	0.8%
Driggs	Driggs-Reed Memorial	DIJ	103	10,017	97	10,528	11,065	12,223	1.0%
Dubois	Dubois Municipal	U41	1	1,400	1,400	1,457	1,516	1,642	0.8%
Emmett	Emmett Municipal	S78	21	11,420	544	11,884	12,367	13,393	0.8%
Fairfield	Camas County	U86	4	2,228	557	2,319	2,413	2,613	0.8%



			Historic 2017			Fore	cast Total A Operation		CAGR
		FAA	Based				Operation	3	2017 -
ASSOCIATED CITY	Airport	ID	Aircraft	Operations	ОРВА	2022	2027	2037	2037
Galena	Smiley Creek	U87	0	5,096	N/A	5,303	5,519	5,976	0.8%
Garden Valley	Garden Valley	U88	5	2,548	510	2,652	2,759	2,988	0.8%
Glenns Ferry	Glenns Ferry Municipal	U89	5	1,760	352	1,832	1,906	2,064	0.8%
Gooding	Gooding Municipal	GNG	77	26,800	348	28,167	29,604	32,701	1.0%
Grangeville	Idaho County	GIC	18	17,500	972	18,393	19,331	21,353	1.0%
Hazelton	Hazelton Municipal	U94	8	3,000	375	3,122	3,249	3,518	0.8%
Homedale	Homedale Municipal	S66	15	7,050	470	7,337	7,635	8,268	0.8%
Howe	Howe	U97	3	4,084	1,361	4,250	4,423	4,790	0.8%
Jerome	Jerome County	JER	45	23,350	519	24,541	25,793	28,491	1.0%
Kamiah	Kamiah Municipal		8	3,000	375	3,122	3,249	3,518	0.8%
Kellogg	Shoshone County	S83	10	7,665	767	8,056	8,467	9,353	1.0%
Kooskia	Kooskia Municipal	S82	4	550	138	572	596	645	0.8%
Leadore	Leadore	U00	1	200	200	208	217	235	0.8%
Lewiston	Snake River SPB	78U	0	10	N/A	10	11	12	0.8%
Mackay	Mackay	U62	2	1,905	953	1,982	2,063	2,234	0.8%
Malad City	Malad City	MLD	9	4,425	492	4,605	4,792	5,189	0.8%
McCall	McCall Municipal	MYL	91	32,000	352	33,632	35,348	39,046	1.0%
Midvale	Lee Williams Memorial	0U9	2	148	74	154	160	174	0.8%
Mountain Home	Mountain Home Municipal	U76	27	19,524	723	20,520	21,567	23,823	1.0%
Mud Lake	Mud Lake/West Jefferson County	1U2	11	3,850	350	4,006	4,169	4,515	0.8%
Murphy	Murphy	1U3	0	2,028	N/A	2,131	2,240	2,475	1.0%
Nampa	Nampa Municipal	MAN	312	90,798	291	95,430	100,297	110,791	1.0%
Nezperce	Nezperce Municipal	0\$5	3	2,500	833	2,602	2,707	2,932	0.8%
Oakley	Oakley Municipal	1U6	0	1,200	N/A	1,249	1,300	1,407	0.8%
Orofino	Orofino Municipal	S68	12	5,000	417	5,203	5,415	5,864	0.8%



			Historic 2017			Fore	CAGR		
ASSOCIATED CITY	Airport	FAA ID	Based Aircraft	Operations	ОРВА	2022	2027	2037	2017 - 2037
Paris	Bear Lake County	1U7	6	2,600	433	2,706	2,816	3,049	0.8%
Parma	Parma		3	3,800	1,267	3,954	4,115	4,457	0.8%
Payette	Payette Municipal		22	5,460	248	5,682	5,913	6,403	0.8%
Porthill	Eckhart International	1S1	0	2,080	N/A	2,165	2,253	2,439	0.8%
Preston	Preston	U10	16	7,040	440	7,326	7,624	8,256	0.8%
Priest River	Priest River Municipal	1S6	15	4,784	319	4,978	5,181	5,611	0.8%
Rexburg	Rexburg-Madison County	RXE	102	15,652	153	16,288	16,950	18,356	0.8%
Rigby	Rigby	U56	51	12,000	235	12,488	12,995	14,073	0.8%
Rockford	Rockford Municipal	2U4	3	1,500	500	1,561	1,624	1,759	0.8%
Salmon	Lemhi County	SMN	40	25,055	626	26,333	27,676	30,572	1.0%
Sandpoint	Sandpoint	SZT	71	29,930	422	31,457	33,061	36,520	1.0%
Soda Springs	Allen H Tigert	U78	6	5,772	962	6,007	6,251	6,769	0.8%
St Anthony	Stanford Field	U12	30	4,888	163	5,087	5,293	5,732	0.8%
St Maries	St Maries Municipal	S72	26	1,872	72	1,948	2,027	2,195	0.8%
Stanley	Stanley	2U7	4	2,704	676	2,814	2,928	3,171	0.8%
Stanley	Thomas Creek	2U8	0	2,200	N/A	2,289	2,382	2,580	0.8%
Weiser	Weiser Municipal	S87	38	6,000	158	6,244	6,498	7,037	0.8%
Yellow Pine	Johnson Creek	3U2	0	5,720	N/A	5,952	6,194	6,708	0.8%
		Total	2,292	835,575	N/A	877,782	922,203	1,018,182	0.99%

Source: Kimley-Horn, 2019



### TABLE 4-22: GA OPERATIONS USING ARC METHOD, 2017-2037

				Historic	Forecast Total Aircraft Operations			CAGR
ASSOCIATED CITY	Airport	FAA ID	ARC	2017	2022	2027	2037	2017-2037
Aberdeen	Aberdeen Municipal	U36	B-II	7,665	7,977	8,301	8,989	0.8%
American Falls	American Falls	U01	B-II	12,325	12,826	13,347	14,454	0.8%
Arco	Arco-Butte County	AOC	B-II	7,200	7,493	7,797	8,444	0.8%
Bancroft	Bancroft Municipal	U51	A-I	1,500	1,500	1,500	1,500	0.0%
Big Creek	Big Creek	U60	A-I	4,004	4,004	4,004	4,004	0.0%
Blackfoot	McCarley Field	U02	B-I	30,500	30,500	30,500	30,500	0.0%
Bonners Ferry	Boundary County	65S	B-II	23,025	23,961	24,935	27,003	0.8%
Buhl	Buhl Municipal	U03	B-I	16,000	16,000	16,000	16,000	0.0%
Burley	Burley Municipal	BYI	B-II	27,500	28,618	29,781	32,251	0.8%
Caldwell	Caldwell Industrial	EUL	B-II	146,325	152,272	158,462	171,605	0.8%
Carey	Carey	U65	A-I	3,000	3,000	3,000	3,000	0.0%
Cascade	Cascade	U70	B-I	9,575	9,575	9,575	9,575	0.0%
Challis	Challis	LLJ	B-I	16,426	16,426	16,426	16,426	0.0%
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	B-IV	81,126	87,827	95,082	111,438	1.6%
Coeur D'Alene	Brooks SPB	S76	A-I	2,912	2,912	2,912	2,912	0.0%
Coolin	Cavanaugh Bay	66S	A-I	3,484	3,484	3,484	3,484	0.0%
Cottonwood	Cottonwood Municipal	S84	A-I	4,000	4,000	4,000	4,000	0.0%
Council	Council Municipal	U82	A-I	4,000	4,000	4,000	4,000	0.0%
Craigmont	Craigmont Municipal	S89	A-I	1,820	1,820	1,820	1,820	0.0%
Donnelly	Donald D. Coski Memorial	U84	A-I	1,525	1,525	1,525	1,525	0.0%
Downey	Downey/Hyde Memorial	U58	A-I	1,550	1,550	1,550	1,550	0.0%
Driggs	Driggs-Reed Memorial	DIJ	C-II	10,017	10,424	10,848	11,748	0.8%
Dubois	Dubois Municipal	U41	A-I	1,400	1,400	1,400	1,400	0.0%
Emmett	Emmett Municipal	S78	A-I	11,420	11,420	11,420	11,420	0.0%
Fairfield	Camas County	U86	A-I	2,228	2,228	2,228	2,228	0.0%
Galena	Smiley Creek	U87	A-I	5,096	5,096	5,096	5,096	0.0%
Garden Valley	Garden Valley	U88	A-I	2,548	2,548	2,548	2,548	0.0%
Glenns Ferry	Glenns Ferry Municipal	U89	A-I	1,760	1,760	1,760	1,760	0.0%



				Historic	Forecast To	tal Aircraft (	Operations	CAGR
ASSOCIATED CITY	Airport	FAA ID	ARC	2017	2022	2027	2037	2017-2037
Gooding	Gooding Municipal	GNG	B-II	26,800	27,889	29,023	31,430	0.8%
Grangeville	Idaho County	GIC	B-II	17,500	18,211	18,951	20,523	0.8%
Hazelton	Hazelton Municipal	U94	B-I	3,000	3,000	3,000	3,000	0.0%
Homedale	Homedale Municipal	S66	A-I	7,050	7,050	7,050	7,050	0.0%
Howe	Howe	U97	A-I	4,084	4,084	4,084	4,084	0.0%
Jerome	Jerome County	JER	B-II	23,350	24,299	25,287	27,384	0.8%
Kamiah	Kamiah Municipal	S73	A-I	3,000	3,000	3,000	3,000	0.0%
Kellogg	Shoshone County	S83	B-II	7,665	7,977	8,301	8,989	0.8%
Kooskia	Kooskia Municipal		A-I	550	550	550	550	0.0%
Leadore	Leadore	U00	A-I	200	200	200	200	0.0%
Lewiston	Snake River SPB	78U	A-I	10	10	10	10	0.0%
Mackay	Mackay	U62	A-I	1,905	1,905	1,905	1,905	0.0%
Malad City	Malad City	MLD	B-I	4,425	4,425	4,425	4,425	0.0%
McCall	McCall Municipal	MYL	B-II	32,000	33,301	34,654	37,528	0.8%
Midvale	Lee Williams Memorial	0U9	A-I	148	148	148	148	0.0%
Mountain Home	Mountain Home Municipal	U76	B-II	19,524	20,318	21,143	22,897	0.8%
Mud Lake	Mud Lake/West Jefferson County	1U2	A-I	3,850	3,850	3,850	3,850	0.0%
Murphy	Murphy	1U3	A-II	2,028	2,110	2,196	2,378	0.8%
Nampa	Nampa Municipal	MAN	B-II	90,798	94,488	98,329	106,485	0.8%
Nezperce	Nezperce Municipal	0S5	A-I	2,500	2,500	2,500	2,500	0.0%
Oakley	Oakley Municipal	1U6	A-I	1,200	1,200	1,200	1,200	0.0%
Orofino	Orofino Municipal	S68	B-I	5,000	5,000	5,000	5,000	0.0%
Paris	Bear Lake County	1U7	B-I	2,600	2,600	2,600	2,600	0.0%
Parma	Parma	50S	A-I	3,800	3,800	3,800	3,800	0.0%
Payette	Payette Municipal	S75	A-I	5,460	5,460	5,460	5,460	0.0%
Porthill	Eckhart International	1S1	A-I	2,080	2,080	2,080	2,080	0.0%
Preston	Preston	U10	A-I	7,040	7,040	7,040	7,040	0.0%
Priest River	Priest River Municipal	1S6	A-I	4,784	4,784	4,784	4,784	0.0%
Rexburg	Rexburg-Madison County	RXE	B-I	15,652	15,652	15,652	15,652	0.0%



				Historic	Forecast Total Aircraft Operations			CAGR
ASSOCIATED CITY	Airport	FAA ID	ARC	2017	2022	2027	2037	2017-2037
Rigby	Rigby	U56	A/B-I	12,000	12,000	12,000	12,000	0.0%
Rockford	Rockford Municipal	2U4	A-I	1,500	1,500	1,500	1,500	0.0%
Salmon	Lemhi County	SMN	B-II	25,055	26,073	27,133	29,384	0.8%
Sandpoint	Sandpoint	SZT	B-II	29,930	31,147	32,412	35,101	0.8%
Soda Springs	Allen H Tigert	U78	A-I	5,772	5,772	5,772	5,772	0.0%
St Anthony	Stanford Field	U12	A-I	4,888	4,888	4,888	4,888	0.0%
St Maries	St Maries Municipal	S72	A-I	1,872	1,872	1,872	1,872	0.0%
Stanley	Stanley	2U7	A-I	2,704	2,704	2,704	2,704	0.0%
Stanley	Thomas Creek	2U8	A-I	2,200	2,200	2,200	2,200	0.0%
Weiser	Weiser Municipal	S87	A/B-I	6,000	6,000	6,000	6,000	0.0%
Yellow Pine	Johnson Creek	3U2	A-I	5,720	5,720	5,720	5,720	0.0%
			Total	835,575	862,953	891,724	953,774	0.66%

Source: Kimley-Horn, 2019



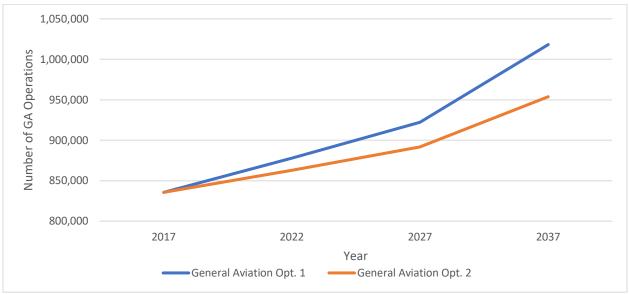
### **Results and Selection of GA Operations Forecast Method**

**Table 4-23** demonstrates the forecast estimates for both methodologies for comparison. The OPBA method projects a 0.99 percent CAGR for annual operations through 2037. The use of this forecast tool indicates that a total of almost 182,607 additional operations are projected to occur over the next 20 years at the GA airports. Per the ARC method, GA operations are predicted to grow at a 0.66 percent annually, amounting to nearly 118,199 more operations at GA facilities across the state by 2037.

TABLE 4-23: GA OPERATIONS FORECASTS, 2017-2037											
	Historic	Foi	ecast Opera	ations	CAGR						
METHODOLOGY	2017	2022	2027	2037	2017-2037						
GA Operations Option 1	835,575	877,782	922,203	1,018,182	0.99%						
GA Operations Option 2	835,575	862,953	891,724	953,774	0.66%						
	Source: Kii	mley-Horn, 20	19								

**Figure 4-15** demonstrates the results generated by the two GA operations methodologies. Both methods projected a growth in GA operations for the state of Idaho through the 20-year planning horizon. OPBA (Option 1) predicts that GA operations will increase at a much faster pace than the ARC method (Option 2) anticipates.





Sources: Kimley-Horn, 2019

Results from the two methodologies were compared to select the preferred method for forecasting GA operations. The ARC estimates were selected as the preferred method because it demonstrates more conservative growth patterns than the OPBA method. The ARC estimates produced by this chapter are more aligned with historic growth rates for GA airports indicated between the 2010 IASP (2007 base year) and the 2020 IASP Update (2017 base year). This method is also more reflective of the overall GA environment in Idaho and incorporates specific growth rates tailored to individual airports (i.e., greater increase in based aircraft results in greater increases in operations).



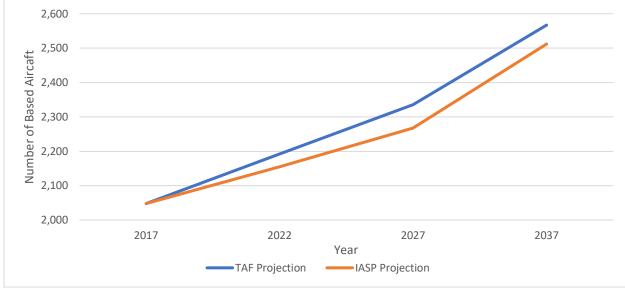
### **Forecast Summary**

The forecasts presented in this chapter are used to determine areas of potential growth in Idaho over the next 20 years. The previous results have shown that growth is expected in all indicators, but that the range of growth is likely to vary depending on whether the airport has commercial service or only serves GA, as well as the type of aircraft being served at the GA airports. The forecasts considered trends that have occurred within the state, as well as national trends that are likely to affect future aviation activity in Idaho.

The preferred forecasts are required to be compared to the FAA's TAF. Of note, only the NPIAS airports are included in the TAF and are subject to the FAA's approval. Based aircraft and operation forecasts have been adjusted to show only NPIAS airports for an accurate comparison between the two forecast sources. The following summarize the results of the comparison.

### **Based Aircraft Forecast Comparison**

**Figure 4- 16** depicts the 2020 IASP Update findings and compares them to the TAF projections for based aircraft to the year 2037. The results for based aircraft growth generated from the 2020 IASP Update closely fit the TAF projections. The TAF expects the based aircraft inventory to rise at a 1.1 percent growth rate annually. This growth will amount to over 500 based aircraft being added to the inventory by 2037. The TAF anticipates the growth of based aircraft will be slightly faster than what the 2020 IASP Update is predicting and estimates 55 more aircraft by 2037 than the 2020 IASP Update. The inventory for based aircraft is expected to rise at a rate of 1.1 percent per TAF findings, just slightly higher than the 1.0 percent growth the 2020 IASP Update is projecting.



### FIGURE 4-16: 2020 IASP UPDATE & FAA TAF BASED AIRCRAFT FORECASTS, NPIAS AIRPORTS ONLY, 2017-2037

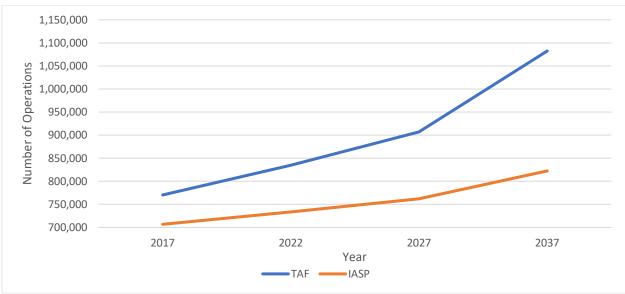
Sources: FAA TAF, February 22, 2019; Kimley-Horn, 2019



### **Operations Forecast Comparison**

Similar to the forecasts for based aircraft in the state, TAF and 2020 IASP Update forecasts predict growth in GA operations as shown in **Figure 4- 17.** The 2020 IASP Update findings are projecting a slower growth rate to occur in the state than the TAF predictions. The 2020 IASP Update anticipates GA operations to increase at 0.8 percent annually, slower than the 2.2 percent growth TAF projects. The TAF estimates an addition of 260,000 more operations in the next 20 years than the 2020 IASP Update predicts.

### FIGURE 4-17: 2020 IASP UPDATE & FAA TAF OPERATIONS FORECASTS, NPIAS AIRPORTS ONLY, 2017-2037



Sources: FAA TAF, February 22, 2019; Kimley-Horn, 2019



# **CHAPTER FIVE: SYSTEM ADEQUACY ANALYSIS**

### Introduction

As previously discussed, the 2020 Idaho Airport System Plan Update (2020 IASP Update) builds on the vision of the Idaho Long Range Transportation Plan. For the 2020 IASP Update, six goals were established to describe a statewide system of airports that fully meets the needs of citizens, visitors, and businesses. The goals established to evaluate the system include:

- ✤ Geographic Coverage
- ✤ Facility Support
- ✤ Preservation
- ✤ Transportation Support
- ✤ Safety and Security
- ✤ Economic Support

Performance measures (PMs), performance indicators (PIs), and additional analysis (AA) points have been identified for each of these six goals as appropriate as determined through a collaborative process with the Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics) and the Project Advisory Committee (PAC). PMs quantitatively evaluate specific aspects of system performance that can be directly affected by project funding, policies, and other external inputs. PIs serve as reporting mechanisms on aspects of system performance that do not have actions that can be taken; however, the results of some PIs may influence a policy decision and/or be related to a PM that has an action associated with enhancing the system's performance. AA points further elaborate on specific goal performance by providing additional context for review and monitoring. Each of these measurement benchmarks provide insight in three primary areas:

- 1. Areas of the state where the system can sufficiently serve existing and future needs
- 2. Specific airport or system deficiencies within the state
- 3. Areas of surplus or duplication of service within the system

Specific PMs, PIs, and AA points were developed for each of the goal categories. These provide the framework for measuring the system's ability to serve existing and future demands, while assessing the overall health and adequacy of the aviation system. It is important to note that some goals do not have associated PMs, as the system's performance in these areas is for informational purposes only. Performance is unlikely to change through actions such as funding, policies, or procedures undertaken by the ITD Aeronautics or airports. Similarly, some goals do not have PIs or AA points, as system performance may improve through actionable steps. These steps will be discussed in further detail in subsequent chapters of the 2020 IASP Update.

Another way to guide system performance is to develop objectives for airport facilities and services based on an airport's role or classification in the state system (the terms role and classification are used interchangeably throughout the 2020 IASP Update). *Chapter 3: Airport Role Analysis* describes the process and results of the classification analysis for each airport in the system. The objectives set for each classification are also detailed in Chapter 3. This chapter measures each airport's current ability to meet the facility and service objectives established for its classification.

The following six sections present analyses of the PMs, PIs, and AA points associated with each goal, with the results of each analysis reported by airport role and statewide. The primary source of data for the evaluation was the 2020 IASP Update inventory effort, with several other sources including the Federal Aviation Administration (FAA), ITD Aeronautics, and other third-party sources. Additional details about the data collection process for the



2020 IASP Update are provided in *Chapter 2: Inventory of System Conditions*. As applicable, the system's current performance is compared to the results of the previous IASP completed in 2010 (2010 IASP or 2010 study) to highlight changes over time.

However, as a caveat to the system adequacy analysis methodology used in this chapter, Kamiah Municipal has been analyzed as a Basic airport. The *Report to Congress, National Plan of Integrated Airport Systems (NPIAS) 2019-2023* (2019-2023 NPIAS) lists Kamiah Municipal as the only Unclassified airport in Idaho. The FAA does not intend for airports to remain Unclassified. As such, Unclassified airports are reevaluated during the next NPIAS review and reclassified if their activity levels meet the criteria for one of the NPIAS classifications. The 2019-2023 NPIAS was published using data from as far back as 2016. Data collected in 2017 and 2018 show enough activity at Kamiah Municipal to warrant its reclassification as a Basic NPIAS airport if the NPIAS analysis was conducted based on these updated data. Accordingly, Kamiah Municipal has been analyzed under the assumption that it will be reclassified as a Basic airport during the next NPIAS review.<sup>1</sup>

As a general note regarding some of the Geographic Information System (GIS) drive time maps presented in subsequent sections of this chapter. Production of these drive time maps has shown that modern GIS mapping tools available through the Environmental Systems Research Institute (ESRI) produce highly accurate drive time results. These results differ from the results presented in the 2010 study due to changes in technology, as well as changes to roadway networks and population within the state. The changes to the GIS software have specifically resulted in a reduction in the calculated drive time coverages of land area between the 2020 and 2010 maps. While the actual coverage of land has not changed, this change and the resulting reduction in the calculations does not allow for a direct side-by-side comparison between land area and population coverages reported in the 2010 IASP and 2020 IASP Update.

The results of the existing system evaluation are presented below by goal category.

### **Goal: Geographic Coverage**

Providing adequate access or mobility throughout the state is an important goal for the state's airport system. Airport accessibility or geographic coverage can be defined in terms of access from the ground and from the air, including areas of the state that are remote and may not be accessible except by air. In Idaho, many of the state's remote and recreational areas are supported by backcountry airstrips. Some of these airstrips are included in the state system, while others are part of the Idaho Airstrip Network (IAN). All airports provide linkages between larger cities or communities and the numerous remote areas of the state.

Additionally, scheduled commercial airline service is critical to providing linkages between Idaho and the rest of the U.S. This service is how many residents and visitors travel to and from Idaho for business, recreation, and other personal reasons. In addition to commercial service airports, Idaho's system contains many general aviation (GA) airports that provide access and geographic coverage to smaller communities and areas of the state, including the backcountry, that do not currently support scheduled commercial airline service.

The following geographic coverage analyses evaluate the percent of Idaho's population with access to each classification of commercial service and GA airport within the state system. The combined analyses depicting drive times to any system airport reflects the capacity of the whole system of airports to serve the state's access needs.

The following PIs and AAs are used to evaluate the adequacy of Idaho's airport system as it relates to geographic coverage:

<sup>&</sup>lt;sup>1</sup> See *Chapter 3: Airport Role Analysis* for details about the classification of airports at federal and state levels.



### **Performance Indicators**

- Percent of population and area within a 90-minute drive time of a commercial service airport with multiple airlines or within a 60-minute drive time of a commercial service airport with a single airline
- → Percent of population and area within a 30-minute drive time of any airport

### **Additional Analysis**

- → Percent of population and area within a 30-minute drive time of a NPIAS airport
- → Percent of population and area within a 30-minute drive time of an IAN airport

### PI: Percent of Population and Area Within A 90-Minute Drive Time of a Commercial Service Airport with Multiple Airlines or Within a 60-Minute Drive Time of a Commercial Service Airport with a Single Airline

Access to an airport with commercial airline service is essential to Idaho residents, visitors, and businesses alike. At present, there are seven commercial service airports in the Idaho airport system. These airports have varying levels of service from a single airline providing nonstop access to one airport to others served by multiple airlines with many nonstop destinations. Due to the amount of commercial airline activity available within Idaho, air travelers frequently travel a significant distance to find more options in airline service. For that reason, a 90minute drive time service area was selected for system airports that have multiple airline service (Boise Air Terminal/Gowen Field, Friedman Memorial, and Idaho Falls Regional airports), and a 60-minute drive time service area was selected for those with single air carrier service (Lewiston-Nez Perce County, Pocatello Regional, Pullman-Moscow Regional, and Joslin Field-Magic Valley Regional airports). Of note, Pullman-Moscow Regional Airport is in Washington; however, it is evaluated as part of the Idaho system of airports due to its proximity to the state border and its substantial use by residents and visitors to the state.

As depicted in **Figure 5-1**, 78 percent of the state's population has access to commercial air service at one or more of the state's seven commercial service airports using the 90-minute and 60-minute drive time distances. These coverage areas represent 22 percent of the state's land area.

### PI: Percent of Population and Area Within a 30-minute Drive Time of Any Airport

Access to any public-use airport, both commercial service and GA, is a crucial aspect of a successful aviation system. The state's eight classifications reflect the unique roles airports play in Idaho, as well as regional and local levels. This analysis evaluated residents' access to each classification of airports, then combined the analyses to show the population's access to any system airport. The result provides a holistic view of aviation access throughout the state.

GA airports support a smaller market area, typically defined as 30 minutes for purposes of serving population and economic activity. It should also be noted that commercial service airports also typically serve GA traffic. The level of GA traffic varies depending on the commercial service airport and the availability of other nearby GA airports that provide similar levels of facilities and services.

**Figure 5-2** depicts all 2020 IASP Update airports and their 30-minute drive time service areas. As shown, 84 percent of the state's population and 14 percent of the land area are within a 30-minute drive of any system airport.

#### AA: Percent of Population and Area Within a 30-minute Drive Time of a NPIAS Airport

The NPIAS is the FAA's primary planning document that categorizes airports deemed significant to the national airspace system (NAS), and thus eligible for Airport Improvement Program (AIP) funding. Of the 75 airports in the Idaho system, 37 are included in the NPIAS. This is an important distinction, as NPIAS airports have access to FAA funding for improvements. Idaho's 38 non-NPIAS airports are not eligible for FAA funding and must rely on state and local funding, as available.



This analysis evaluates residents' access to a NPIAS airport using a 30-minute drive time. As identified in **Figure 5-3**, 81 percent of the population and nine percent of the state land area are within a 30-minute drive of a NPIAS airport. Based on the previous analysis of 30-minute drive times to any Idaho airport and removing duplicative coverage, Idaho's 38 non-NPIAS airports only provide coverage to an additional three percent of the state's population and five percent of the state's land area.

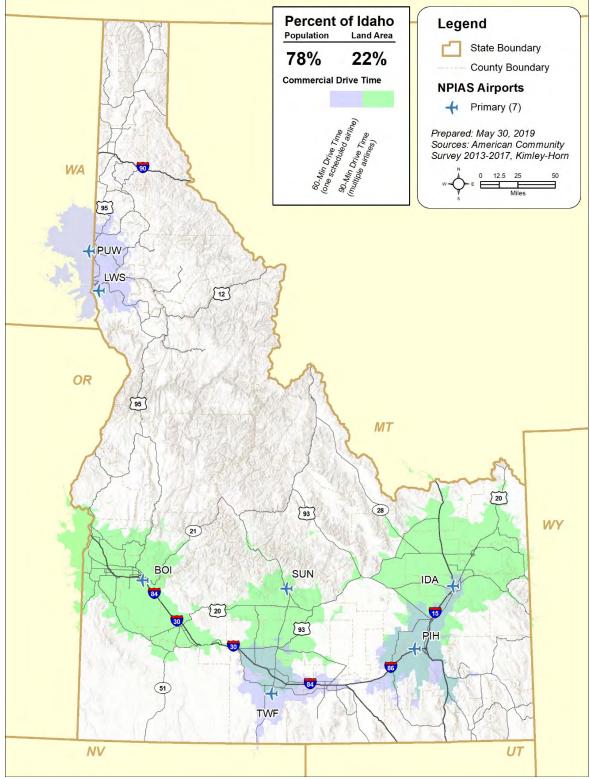
### AA: Percent of Population and Area Within a 30-minute Drive Time of an IAN Airport

The IAN includes airstrips that have turf and dirt surfaces yet still provide public access to aircraft operators. While most of the IAN airstrips are not included in the 2020 IASP Update, the IAN provides important linkages between larger cities and the numerous remote areas in the state, particularly for recreational activities, emergency services, and natural resource management. IAN airports included in the 2020 IASP Update are Cavanaugh Bay, Eckhart International, Garden Valley, Stanley, Big Creek, Johnson Creek, Smiley Creek, and Thomas Creek. It is important to understand where IAN facilities are distributed across the state for current and future planning purposes. This analysis evaluates population access from the backcountry via remote airstrips included in the IAN.

**Figure 5-4** shows 0.4 percent of the state's population and 1.9 percent of the land area are serviced by an IAN airstrip within a 30-mintue drive time.



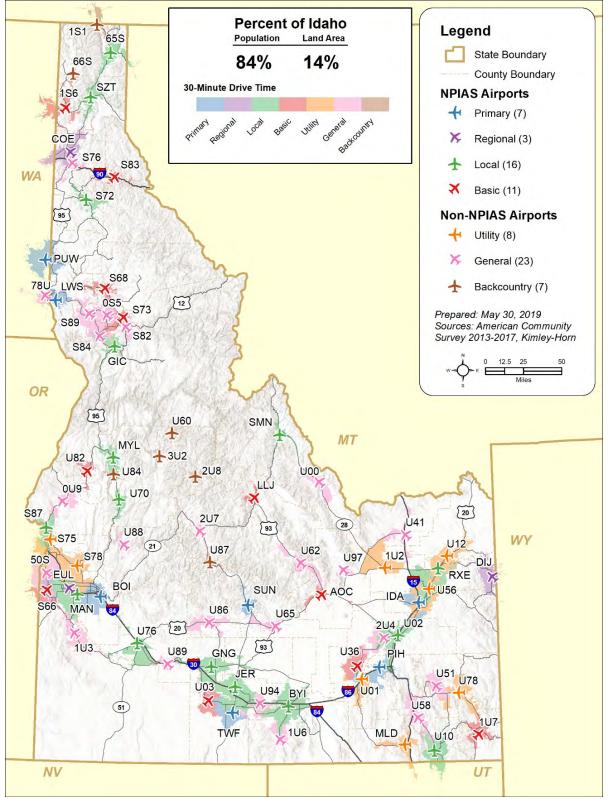
### FIGURE 5-1: GEOGRAPHIC COVERAGE – PERCENT OF POPULATION AND AREA WITHIN A 90-MINUTE DRIVE TIME OF A COMMERCIAL SERVICE AIRPORT WITH MULTIPLE AIRLINES OR WITHIN A 60-MINUTE DRIVE TIME OF A COMMERCIAL SERVICE AIRPORT WITH A SINGLE AIRLINE



Sources: American Community Survey, 2013-2017; Kimley-Horn, 2019



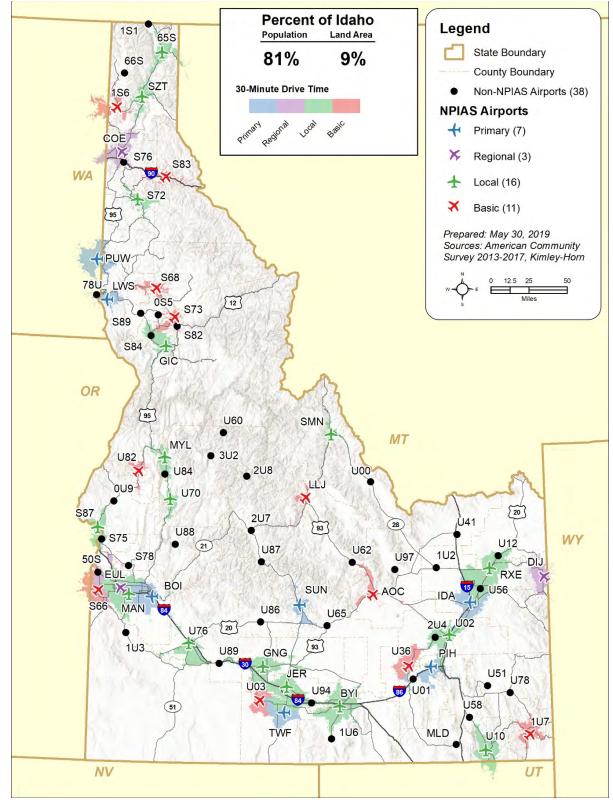
FIGURE 5-2: GEOGRAPHIC COVERAGE – PERCENT OF POPULATION AND AREA WITHIN A 30-MINUTE DRIVE TIME OF ANY AIRPORT



Sources: American Community Survey, 2013-2017; Kimley-Horn, 2019



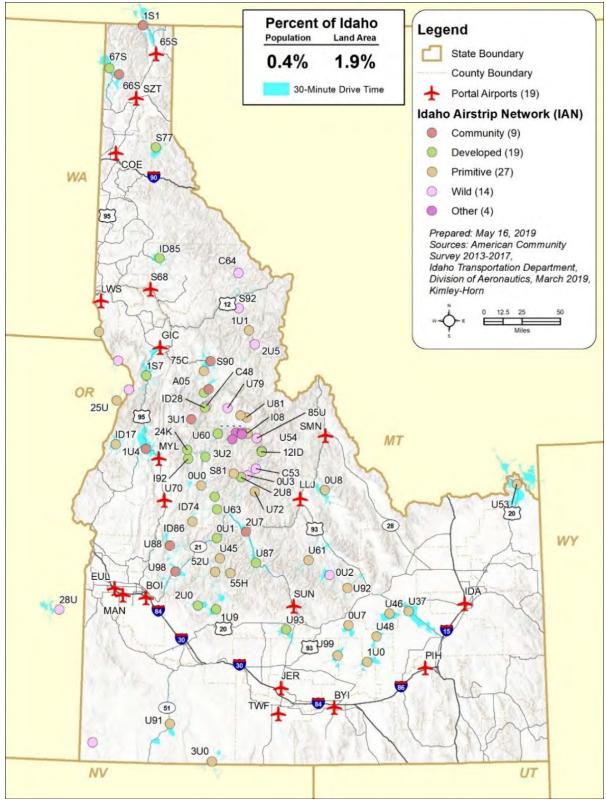
FIGURE 5-3: GEOGRAPHIC COVERAGE – PERCENT OF POPULATION AND AREA WITHIN A 30-MINUTE DRIVE TIME OF A NPIAS AIRPORT



Sources: American Community Survey, 2013-2017; Kimley-Horn, 2019



# FIGURE 5-4: GEOGRAPHIC COVERAGE – PERCENT OF POPULATION AND AREA WITHIN A 30-MINUTE DRIVE TIME OF AN IAN AIRPORT



Sources: American Community Survey, 2013-2017; ITD Aeronautics; Kimley-Horn, 2019



## **Goal: Facility Support**

Another goal of Idaho's state airport system plan is to provide airport facilities and services that support the needs of the state and the system's diverse user base. A robust system of airports should be adequately developed by providing infrastructure, facilities, and services to meet both current and future demand. It is important that airports meet the minimum facility and service objectives as set for each classification of airport. These objectives were established as a minimum level of facilities and services that should be provided based on the most likely airport users for each role or classification. Due to the nature of this goal, there is only one PM; however, this measure contains significant analysis because it addresses each objective individually.

### **Performance Measure**

→ Percent of airports meeting all minimum objectives

### PM: Percent of Airports Meeting all Minimum Service and Facility Objectives

Each system airport in Idaho provides a unique set of facilities and services available to users and the public. Often, the development of facilities and provision of services is based on available funding and long-term planning goals which may leave an airport lacking needed features. An airport that lacks essential facilities and services may not fully serve its local community, and thus other investments in that airport's facilities may not have their intended benefits. For example, an airport may have the runway dimensions and navigational equipment to accommodate corporate jet aircraft, but without jet fuel or ground transportation to serve those aircraft, an airport and its community may not attract or have the means to support jet aircraft. This can cause regional capacity and service shortages for local and transient aircraft.

Through the comprehensive 2020 IASP Update process, objectives for the development of facilities (both landside and airside) and on-site services for each airport role have been established as provided in **Table 5-1**. These objectives can be viewed as the minimum desired threshold for facility development and provision of aviation services which each airport should strive to achieve. The evaluation of airports meeting these facility and service objectives measures the ability of each airport to optimally fulfill its role within the Idaho airport system. The specific facilities and services needed at each airport depend on the role that the airport plays, with more extensive facilities needed at airports that serve larger, more sophisticated aircraft. In the 2020 IASP Update, the facility and service objectives were established separately for NPIAS and non-NPIAS airports, recognizing that a higher level of funding is available for NPIAS airports to achieve the objectives. While objectives were established during the 2010 IASP, significant modifications to the facility and service objectives occurred in association with the changes to the airport classifications that occurred during the 2020 IASP Update. Therefore, a comparison between the results of the 2010 study and 2020 IASP Update is not appropriate.

Additionally, the availability of a land line public telephone was a 2010 service objective; however, this has been removed during the 2020 IASP Update. Telecommunication is a vital service for any airport: pilots rely on telecommunications to check weather, perform flight planning duties, conduct business, and communicate emergencies. Accordingly, the availability of a land line public telephone has historically been desired at every airport. As technology has advanced, land line telephones have become increasingly obsolete in favor of cell phones. With this change in technology, a land line public telephone has not been included as a service objective for any airport classification in the 2020 IASP Update. Conversely, increased cell phone coverage is desired for all airports. Analysis of airport-reported telecommunication data reveals that only three Backcountry airports have neither a land line public telephone service. These airports include Big Creek, Smiley Creek, and Thomas Creek.



**Figure 5-5** summarizes the statewide analysis of the existing airside facilities. **Figure 5-6** shows the statewide analysis of existing landside facilities. **Figure 5-7** presents the statewide analysis of existing aviation services. Note that the runway length objectives for Primary and National airports have been set to reflect the future runway design lengths identified in each airport's airport layout plan (ALP) or master plan. Large aircraft (12,500 pounds or larger) with similar seating capacity can vary widely in their performance. As a result, runway length objectives are reflective of individual airport needs based on their unique critical aircraft.

A slightly different approach was taken to determine the runway length objectives for Regional, Local, and Utility airports. First, each airport's elevation above sea level and mean daily maximum temperature of the hottest month of the year were identified. These unique variables were then plugged into runway length curves for small aircraft. Runway length curve tables for small aircraft are provided in the FAA Advisory Circular (AC) 150/5325-4B, "Runway Length Requirements for Airport Design" (these tables are anticipated to carry forward in the draft AC 150/5325-4C intended to replace 4B). The length curves depicted in these tables assume small aircraft weigh under 12,500 pounds and have a capacity of less than ten passengers. Regional airport objectives were calculated using the AC length curves that accommodate 100 percent of the small aircraft fleet, while the objectives for Local and Utility airports were calculated using length curves that accommodate 95 percent of the small aircraft fleet.

As a caveat to the length objectives to support small aircraft, there are several Regional, Local, and Utility airports throughout the state that may require longer runways to support aerial application activity. Based on data collection and analysis efforts conducted during the 2020 IASP Update, it was determined that many airports supporting aerial application activity list the Air Tractor AT-802A as their most demanding aircraft. Some smaller Air Tractor models (AT-402 and AT-502) are under 12,500 pounds, while others weigh-in at between 12,500 and 16,000 pounds (AT-602 and AT-802A). As such, a fully loaded AT-602 or AT-802A would exceed the weight associated with the definition of a "small aircraft" and would thereby fall within the definition of a "large aircraft". Accordingly, airports with runway length objectives designed to support small aircraft may need to consider longer runway lengths to support specific aerial application activity occurring at their facilities.



#### TABLE 5-1: FACILITY AND SERVICE OBJECTIVES BY AIRPORT CLASSIFICATION

			NPIAS				Non-NPIAS	
OBJECTIVE CATEGORY	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
			Alf	RSIDE FACILITIES				
Runway Length	Future runway length from ALP/MP	Future runway length from ALP/MP	To accommodate 100 percent of small aircraft fleet	To accommodate 95 percent of small aircraft fleet	Maintain existing	To accommodate 95 percent of small aircraft fleet	Maintain existing	Maintain existing
Runway Width	100 feet	75 feet	75 feet NPIAS	60 feet NPIAS	Maintain existing	60 feet <sup>2</sup>	50 feet <sup>3</sup>	Maintain existing
Runway Strength	Single-wheel landing gear (60,000 pounds)	Single-wheel landing gear (30,000 pounds)	Single-wheel landing gear (12,500 pounds)	Single-wheel landing gear (12,500 pounds)	Maintain existing	Single-wheel landing gear (12,500 pounds)	Maintain existing	Maintain existing
Taxiway	Full Parallel	Full or Partial Parallel	Partial Parallel, Connectors, or Turnarounds	Turnarounds	Maintain existing	Partial Parallel or Turnarounds	Maintain existing	Maintain existing
Instrument Approach	Precision or PBN	PBN	PBN	Visual, PBN desired	Visual	Visual	Visual	Visual
Visual Aids	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs, VASIs, ALS	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs, VASIs, ALS as required	Rotating Beacon, Wind Cone, REILs, PAPIs, VASIs	Rotating Beacon, Wind Cone	Rotating Beacon as required, Wind Cone	Rotating Beacon as required, Wind Cone	Wind Cone	Wind Cone
Runway Lighting	MIRL, HIRL desired	MIRL, HIRL as required	MIRL	LIRL	Reflectors, LIRL desired	Reflectors, LIRL desired	Reflectors	None
Weather Reporting	ATCT, On-site ASOS or AWOS	On-site ASOS or AWOS	On-site ASOS or AWOS as required	On-site ASOS or AWOS as required	None	Unicom and Dual Barometers	None	None

<sup>&</sup>lt;sup>2</sup> A 60-foot runway width reflects the FAA design standard for Aircraft Approach Category B and below (AC 150/5300-13A Change 1, "Airport Design"). While Utility airports are not in the NPIAS, this classification has been designed to prepare airports for inclusion should they meet eligibility criteria and decide to pursue NPIAS designation in the future. Additional information about the Utility classification is available in Chapter 3: Airport Role Analysis.

<sup>&</sup>lt;sup>3</sup> A 50-foot runway width approximates the desired width as described in the *ITD Aeronautics Desk Manual*, Chapter 201 in accordance with the "Idaho VFR Airport Design Dimensional Standards" checklist.

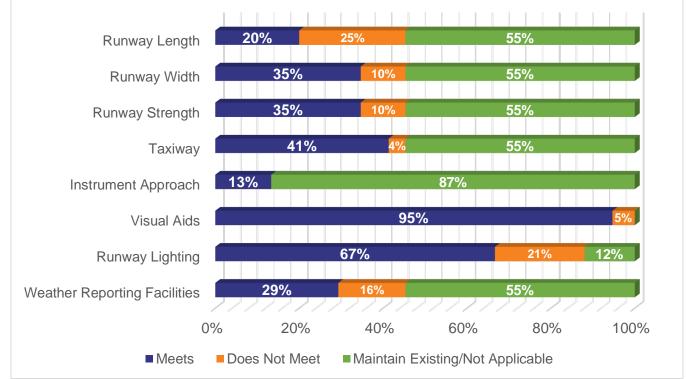


			NPIAS				Non-NPIAS	
OBJECTIVE			INPIAS					
CATEGORY	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
			LAN	IDSIDE FACILITIES				
Landside	Terminal	GA Terminal with	GA Terminal/	GA Facility with	Public Restroom;	Public	Public	Public
Facilities	(Commercial	Public Restrooms	Facilities with	Public Restrooms	Apron (Tie-Downs)	Restrooms or	Restrooms or	Restrooms or
	Service and GA	and Pilots Lounge;	Public Restrooms	and Pilots Lounge;	for 100% of Based	Portable Toilets;	Portable Toilets;	Portable Toilets;
	Facility(ies]) with	Hangar Storage for	and Pilots Lounge;	Hangar Storage for	Aircraft and 50% of	Apron (Tie-	Apron (Tie-	Apron (Tie-
	Public Restrooms,	60% of Based	Hangar Storage for	50% of Based	Transient Aircraft;	Downs) for	Downs) for	Down) for At
	Conference Rooms,	Aircraft and 25% of	60% of Based	Aircraft; Apron (Tie-	Full Perimeter	100% of Based	100% of Based	Least One
	and Pilots Lounge;	Transient Aircraft;	Aircraft; Apron (Tie-	Downs) for 50% of	Fencing; Auto	Aircraft and	Aircraft and	Aircraft and up
	Hangar Storage for	Apron (Tie-Downs)	Downs) for 40% of	Based Aircraft and	Parking	25% of	25% of	to 25% of
	80% of Based	for 40% of Based	Based Aircraft and	50% of Transient		Transient	Transient	Maximum Daily
	Aircraft and 25% of	Fleet and 50% of	50% of Transient	Aircraft; Partial		Aircraft; Full	Aircraft of	Totals
	Transient Aircraft;	Transient; Full	Aircraft; Partial	Perimeter Fencing;		Perimeter	Maximum Daily	
	Apron (Tie-Downs)	Perimeter Fencing;	Perimeter Fencing;	Auto Parking		Fencing	Totals	
	for 20% of Based	Auto Parking	Auto Parking					
	Fleet and 50% of							
	Transient; Full							
	Perimeter Fencing;							
	Auto Parking							
				SERVICES				
Services	Cell Coverage,	Cell Coverage,	Cell Coverage,	Cell Coverage,	Cell Coverage	Cell Coverage,	Cell Coverage	Cell Coverage
	Wi-Fi, FBO,	Wi-Fi, FBO,	Wi-Fi, SRE, AvGas	Wi-Fi, AvGas,		Courtesy/		
	Maintenance	Maintenance	and Jet A as	Courtesy/Loaner		Loaner Car		
	Services, SRE, 24/7	Services, SRE, 24/7	needed, Courtesy/	Car				
	AvGas and Jet A	AvGas and Jet A	Loaner Car					
	Fuel, Rental Car	Fuel, Rental Car						
	Access	Access						

Acronyms: Acronyms: ALP = Airport Layout Plan, MP = master plan, PBN = performance based navigation, REIL = runway end identifier lights, PAPIs = precision approach path indicator lights, VASIs = visual approach slope indicators, ALS = approach light systems, HIRL = high intensity runway lighting, MIRL = medium intensity runway lighting, LIRL = low intensity runway lighting, ATCT = air traffic control tower, ASOS = automated surface observing system, AWOS = automated weather observing system, FBO = fixed base operator, SRE = snow removal equipment. Source: Kimley -Horn, 2019

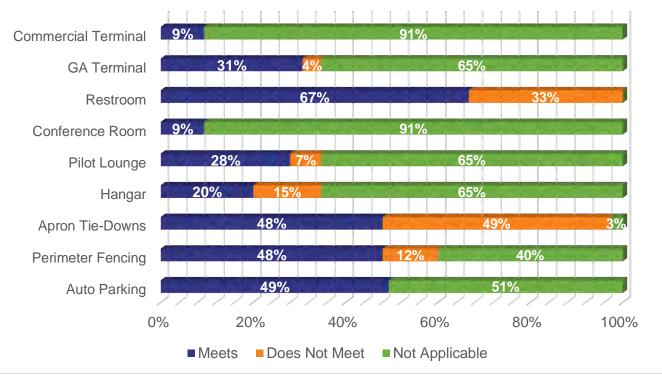






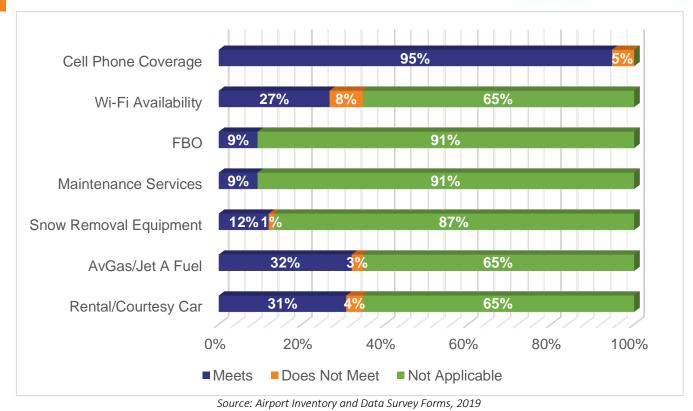
Source: Airport Inventory and Data Survey Forms, 2019

FIGURE 5-6: FACILITY AND SERVICE OBJECTIVES – LANDSIDE FACILITIES (STATEWIDE)



Source: Airport Inventory and Data Survey Forms, 2019





### FIGURE 5-7: FACILITY AND SERVICE OBJECTIVES - AVIATION SERVICES (STATEWIDE)

## **Goal: Preservation**

It is important for Idaho to ensure longevity in the quality and quantity of its airport system. Significant investments have been made in Idaho's airport system and preserving this investment is critically important to the system's long-term viability. Preservation of the airport system is achieved in a number of ways. Thoughtful planning processes that promote land-use compatibility for future development is crucial to ensure airports can meet changing demands. One of the most significant investments in an airport are the pavements that comprise the airfield including runways, taxiways, and aprons. In addition to preserving the airport's existing and future infrastructure, it is vital that environmental preservation is considered and that a healthy relationship between an airport and its surrounding environment is maintained. The following PMs and PIs demonstrate how the airport system is performing relative to the preservation goal.

### **Performance Measures**

- → Percent of airports with zoning for height and land use regulations
- > Percent of airports with master plans or ALPs with Narrative (within past 10 years)
- ✤ Percent of airports meeting ITD Aeronautics Pavement Condition Index (PCI) standards
  - Runway (PCI of 65 for NPIAS airports, 50 for non-NPIAS)
  - Taxiway (PCI of 60 for NPIAS airports, 45 for non-NPIAS)
  - Apron (PCI of 50 for NPIAS airports, 40 for non-NPIAS)

### **Performance Indicators**

- → Percent of airports that have a spill prevention control and countermeasures (SPCC) plan
- → Percent of airports that have a storm water pollution prevention plan (SWPPP)

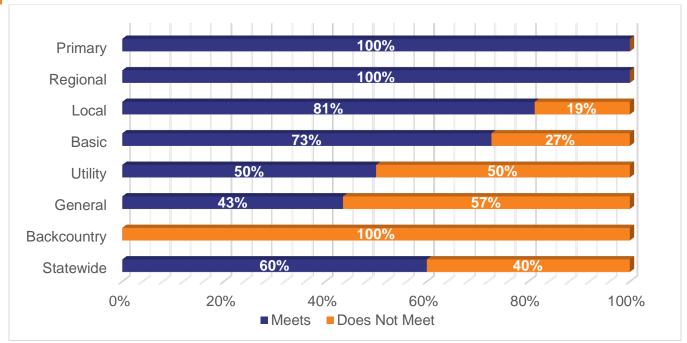


#### PM: Percent of Airports with Zoning for Height and Land Use Regulations

Protecting the land use and airspace around an airport is essential to an airport's long-term viability. In general, airport compatible land use promotes development that is considered compatible with airports and precludes incompatible uses such as residential areas, schools, hospitals, and churches near airports. While aircraft noise is one of the most recognized incompatibility concerns, issues such as future airport expansion potential, the safety of people and property (both in the sky and on the ground), and environmental impacts also influence the types of development and activities considered compatible with airport operations and development.

Although the FAA has developed standards and programs designed to promote airport land use compatibility, the primary responsibility for regulating development near an airport lies with local governments. County and municipal governments are responsible for preparing comprehensive plans, reviewing and implementing zoning, and land use policies that consider impacts to their local airport. Controls such as height and land use zoning aim to reduce incompatible land uses and activities in an airport's immediate environs. This PM reports the percent of airports that have adopted compatible zoning and land use regulations as reported by airport managers during the 2020 IASP Update inventory effort.

**Figure 5-8** shows the analysis results by each classification of airport. Data indicates that 60 percent of all system airports have zoning for both height and land use in place.<sup>4</sup> In comparison, the 2010 study showed only 28 percent of airports meeting this PM. The largest improvements in this measure have been made within the higher airport classifications, specifically at Primary and Regional airports. This may be attributed to Senate Bill 1265 (2014) which requires proactive land use compatibility planning around the state's airports. While difficult to measure the full impact of this bill over the past five years, it has likely had a positive impact in ensuring adequate zoning regulations are being implemented around system airports.



#### FIGURE 5-8: PRESERVATION - PERCENT OF AIRPORTS WITH ZONING FOR HEIGHT AND LAND USE

Source: Airport Inventory and Data Survey Forms, 2019

<sup>&</sup>lt;sup>4</sup> Results of this analysis only reflect airport responses regarding the implementation of zoning regulations. However, many airports have multiple land use authorities controlling the land within the environs of their airport. In many cases, zoning regulations are not identical between jurisdictions, leaving gaps in height and use protections in the airport environs.



PM: Percent of Airports with Master Plans or ALPs with Narrative (Within the Past 10 Years)

Airport master plans provide a comprehensive assessment of an airport's ability to accommodate existing and future demands and identify short-, medium-, and long-term development needs. The completion of an airport master plan demonstrates the airport sponsor's commitment to responsible airport investment and maintenance by ensuring resources are allocated in a manner that meets current and future needs. For some airports, an ALP with narrative can be prepared instead of a full master plan. An ALP with narrative is typically used when an airport has a master plan or ALP that does not require substantial changes, especially to the general character and use of the airport. A proposed project must be shown on a NPIAS airport's ALP to receive federal AIP funding. A current master plan or ALP with narrative also indicates a community's engagement in and support for its airport.

The system's performance on this PM indicates an airport sponsor's recognition of airport needs and commitment to planning for the future of the airport. Updates to a master plan and/or ALP should be done regularly and as necessitated by increased demands. Typically, updates occur every 10 years but can be done on shorter intervals based on the pace of airport development.

**Table 5-2** details the master plan and ALP availability for each system airport and the year when each document was last completed or updated. **Figure 5-9** indicates that 71 percent of responsive system airports have a master plan or ALP developed or updated within the last 10 years.

	L 5-2. FRESERVATION - AIRFORTS					
ASSOCIATED		FAA	Airport	MP Yr.		ALP Yr.
CITY	Airport	ID	MP	Complete	ALP	Complete
		PRIMARY	/			
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	2019	Yes	2019
Hailey	Friedman Memorial	SUN	Yes	2018	Yes	2018
Idaho Falls	Idaho Falls Regional	IDA	Yes	2010	Yes	2010
Lewiston	Lewiston-Nez Perce County	LWS	Yes	2016	Yes	2016
Pocatello	Pocatello Regional	PIH	Yes	2012	Yes	2018
Pullman	Pullman-Moscow Regional	PUW	Yes	2010	Yes	2018
Twin Falls	Joslin Field-Magic Valley	TWF	Yes	2012	Yes	2012
	Regional					
	R	EGIONA	L			
Caldwell	Caldwell Industrial	EUL	Yes	2010	Yes	2010
Coeur D'Alene	Coeur D'Alene - Pappy	COE	Yes	2018	Yes	2018
	Boyington Field					
Driggs	Driggs-Reed Memorial	DIJ	Yes	2012	Yes	2012
		LOCAL				
Blackfoot	McCarley Field	U02	Yes	2013	Yes	2013
Bonners Ferry	Boundary County	65S	Yes	N/P	Yes	1997
Burley	Burley Municipal	BYI	Yes	2018	Yes	2018
Cascade	Cascade	U70	Yes	2019	Yes	2019
Gooding	Gooding Municipal	GNG	Yes	2009	Yes	2009
Grangeville	Idaho County	GIC	No	-	Yes	2011
Jerome	Jerome County	JER	Yes	2012	Yes	2016
McCall	McCall Municipal	MYL	Yes	2008	Yes	2012

#### TABLE 5-2: PRESERVATION - AIRPORTS WITH MASTER PLANS OR ALPS WITH NARRATIVE



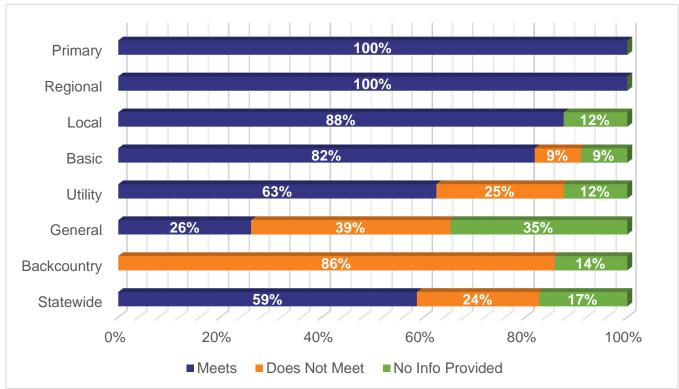
ASSOCIATED		FAA	Airport	MP Yr.		ALP Yr.
CITY	Airport	ID	MP	Complete	ALP	Complete
Mountain Home	Mountain Home Municipal	U76	Yes	2011	Yes	2011
Nampa	Nampa Municipal	MAN	Yes	2011	Yes	2011
Preston	Preston	U10	N/P	-	Yes	1998
Rexburg	Rexburg-Madison County	RXE	Yes	2018	Yes	2018
Salmon	Lemhi County	SMN	Yes	2012	Yes	2014
Sandpoint	Sandpoint	SZT	No	-	Yes	2015
St. Maries	St. Maries Municipal	S72	Yes	2012	Yes	2012
Weiser	Weiser Municipal	S87	No	-	Yes	2016
		BASIC				
Aberdeen	Aberdeen Municipal	U36	No	-	Yes	2012
Arco	Arco-Butte County	AOC	Yes	2019	Yes	N/P
Buhl	Buhl Municipal	U03	Yes	2012	Yes	2012
Challis	Challis	LIJ	Yes	2013	Yes	2013
Council	Council Municipal	U82	Yes	1998	Yes	1998
Homedale	Homedale Municipal	S66	Yes	2016	Yes	2016
Kamiah	Kamiah Municipal	S73	N/P	-	N/P	-
Kellogg	Shoshone County	S83	Yes	2015	Yes	2015
Orofino	Orofino Municipal	S68	No	-	Yes	2011
Paris	Bear Lake County	1U7	Yes	2016	Yes	2016
Priest River	Priest River Municipal	1S6	Yes	2016	Yes	2016
		UTILITY				
American Falls	American Falls	U01	No	-	Yes	2016
Emmett	Emmett Municipal	S78	Yes	2017	Yes	2017
Malad City	Malad City	MLD	Yes	1980	No	-
Mud Lake	Mud Lake/West Jefferson County	1U2	No	-	No	-
Payette	Payette Municipal	S75	Yes	2000	Yes	2017
Rigby	Rigby	U56	Yes	2010	Yes	2010
Soda Springs	Allen H Tigert	U78	Yes	1995	N/P	-
St. Anthony	Stanford Field	U12	N/P	-	Yes	2018
		GENERAL	_			
Bancroft	Bancroft Municipal	U51	N/P	-	N/P	-
Carey	Carey	U65	Yes	N/P	N/P	-
Coeur D'Alene	Brooks SPB	S76	N/P	-	N/P	-
Cottonwood	Cottonwood Municipal	S84	No	-	No	-
Craigmont	Craigmont Municipal	S89	Yes	1990	N/P	-
Downey	Downey/Hyde Memorial	U58	Yes	N/P	N/P	-
Dubois	Dubois Municipal	U41	No	-	No	-
Fairfield	Camas County	U86	No	-	Yes	N/P



ASSOCIATED CITY	Airport	FAA ID	Airport MP	MP Yr. Complete	ALP	ALP Yr. Complete
Garden Valley	Garden Valley	U88	No	complete	Yes	2018
Glenns Ferry	Glenns Ferry Municipal	U89	Yes	2012	Yes	2018
Hazelton						
	Hazelton Municipal	U94	Yes	2012	Yes	2012
Howe	Howe	U97	No	-	No	-
Kooskia	Kooskia Municipal	S82	Yes	N/P	Yes	N/P
Leadore	Leadore	U00	No	-	No	-
Lewiston	Snake River SPB	78U	No	-	No	-
Mackay	Mackay	U62	Yes	1995	No	-
Midvale	Lee Williams Memorial	0U9	No	-	No	-
Murphy	Murphy	1U3	No	-	Yes	2018
Nezperce	Nezperce Municipal	0S5	No	-	Yes	2004
Oakley	Oakley Municipal	1U6	N/P	-	N/P	-
Parma	Parma	50S	No	-	Yes	2012
Rockford	Rockford Municipal	2U4	No	-	Yes	2017
Stanley	Stanley	2U7	No	-	No	-
	BA	CKCOUN	TRY			
Big Creek	Big Creek	U60	No	-	No	-
Coolin	Cavanaugh Bay	66S	No	-	No	-
Donnelly	Donald D. Coski Memorial	U84	N/P	-	N/P	-
Galena	Smiley Creek	U87	No	-	No	-
Porthill	Eckhart International	1S1	No	-	No	-
Stanley	Thomas Creek	2U8	No	-	No	-
Yellow Pine	Johnson Creek	3U2	No	-	No	-
	Comment Almost Income		ь. с	- 2010		

Source: Airport Inventory and Data Survey Forms, 2019





# FIGURE 5-9: PRESERVATION – PERCENT OF AIRPORTS WITH MASTER PLANS OR ALPS WITH NARRATIVE (WITHIN THE PAST 10 YEARS)

Note: 62 of the 75 Idaho system airports provided data regarding master plans and/or ALPs with narrative, 44 of which achieve the established PM. As such, 71 percent of responsive airports meet the objective as cited above. Source: Airport Inventory and Data Survey Forms, 2019

### PM: Percent of Airports Meeting ITD Aeronautics PCI Standards

Pavement condition is critical to the safe and efficient operation of aircraft at airports, and its upkeep is often one of the most significant capital investments an airport makes. PCI is an industry standard for measuring and rating airport pavements so that maintenance and repair can be planned and implemented at the appropriate time during its lifecycle. It is most cost-effective to periodically maintain runway pavements to retain higher PCI values than to allow those pavements to deteriorate completely and then replace them. PCI is expressed on a scale from 0 (failed pavement) to 100 (new pavement in perfect condition).

System airports with runways consisting of turf, gravel, or dirt are not assigned PCI values due to their lack of pavements and are therefore not subject to this benchmark. Fifty-five airports in Idaho have paved surfaces and are thus included in the scope of this PM. Additionally, airports with more than one runway were analyzed by their primary runway for the runway PCI objective. All PCI measurements analyzed are weighted averages of all pavement sections associated with an airport's primary runway, all taxiways, and all apron space. The PCI performance objectives for runways, taxiways, and apron space at system airports by NPIAS status are as follows:

- Runway (65 NPIAS, 50 non-NPIAS)<sup>5</sup>
- → Taxiway (60 NPIAS, 45 non-NPIAS)

Apron (50 NPIAS, 40 non-NPIAS)

<sup>&</sup>lt;sup>5</sup> Only primary runways are analyzed for PCI adequacy in this analysis. Taxiways and apron spaces were analyzed using a weighted average for all taxiway and apron space present at an airport. These weighted averages for taxiways and apron spaces are reported as a single weighted average PCI value.



**Table 5-3** lists the PCI values for all system airports' primary runways, taxiways, and apron spaces as reported by the airport or ITD Aeronautics through its Network Pavement Management System (NPMS). As mentioned, airports with turf, dirt, and/or gravel surfaces are shown as "not applicable" values in the table. **Figure 5-10** indicates that 64 percent of all applicable system airports (i.e., with paved surfaces) have PCI values that meet or exceed the objective performance values, whether NPIAS or non-NPIAS. Eighty-six percent of Primary airports have been found to meet the PCI objectives. Pocatello Regional airport's taxiways fall below the PCI objective (currently reported as 51 with the objective set at 60).

TABL	<u>E 5-3: PRESERVATION – AIRPORTS MI</u>	<u>ETING II</u>	<u>D AERONAU</u>	TICS PCI STA	ANDARDS		
ASSOCIATED CITY	Airport	FAA ID	Runway PCI	Taxiway PCI	Apron PCI	Meets All Objectives	
PRIMARY							
Boise	Boise Air Terminal/Gowen Field	BOI	71	65	56	Yes	
Hailey	Friedman Memorial	SUN	71	89	80	Yes	
Idaho Falls	Idaho Falls Regional	IDA	88	65	83	Yes	
Lewiston	Lewiston-Nez Perce County	LWS	47	62	81	Yes	
Pocatello	Pocatello Regional	PIH	99	52	65	No	
Pullman	Pullman-Moscow Regional	PUW	82	63	74	Yes	
	REGI	ONAL					
Twin Falls	Joslin Field-Magic Valley Regional	TWF	85	75	70	Yes	
Caldwell	Caldwell Industrial	EUL	67	74	90	Yes	
Coeur D'Alene	Coeur D'Alene-Pappy Boyington Field	COE	90	80	72	Yes	
Driggs	Driggs-Reed Memorial	DIJ	89	87	75	Yes	
	LO	CAL					
Blackfoot	McCarley Field	U02	66	64	75	Yes	
Bonners Ferry	Boundary County	65S	87	90	92	Yes	
Burley	Burley Municipal	BYI	40	28	51	No	
Cascade	Cascade	U70	87	79	48	No	
Gooding	Gooding Municipal	GNG	82	71	85	Yes	
Grangeville	Idaho County	GIC	100	86	54	Yes	
Jerome	Jerome County	JER	70	80	69	Yes	
McCall	McCall Municipal	MYL	79	54	63	No	
Mountain Home	Mountain Home Municipal	U76	94	87	66	Yes	
Nampa	Nampa Municipal	MAN	82	85	68	Yes	
Preston	Preston	U10	62	71	58	No	
Rexburg	Rexburg-Madison County	RXE	59	61	73	No	
Salmon	Lemhi County	SMN	89	83	46	Yes	
Sandpoint	Sandpoint	SZT	53	59	61	No	
St. Maries	St Maries Municipal	S72	84	76	74	Yes	
Weiser	Weiser Municipal	S87	85	75	78	Yes	

## TABLE 5-3: PRESERVATION – AIRPORTS MEETING ITD AERONAUTICS PCI STANDARDS



ASSOCIATED		FAA	Runway	Taxiway	Apron	Meets All
CITY	Airport	ID	PCI	PCI	PCI	Objectives
	BA					
Aberdeen	Aberdeen Municipal	U36	43	47	76	No
Arco	Arco-Butte County	AOC	56	73	50	No
Buhl	Buhl Municipal	U03	77	79	83	Yes
Challis	Challis	LLJ	69	70	90	Yes
Council	Council Municipal	U82	49	60	48	No
Homedale	Homedale Municipal	S66	80	75	76	Yes
Kamiah	Kamiah Municipal	S73	N/A	N/A	N/A	N/A
Kellogg	Shoshone County	S83	93	92	88	Yes
Orofino	Orofino Municipal	S68	67	80	82	Yes
Paris	Bear Lake County	1U7	50	89	56	No
Priest River	Priest River Municipal	1S6	88	94	71	Yes
	UTI	LITY				
American Falls	American Falls	U01	58	66	60	Yes
Emmett	Emmett Municipal	S78	82	84	84	Yes
Malad City	Malad City	MLD	34	41	37	No
Mud Lake	Mud Lake/West Jefferson County	1U2	57	44	53	No
Payette	Payette Municipal	S75	94	51	36	No
Rigby	Rigby	U56	70	77	83	Yes
Soda Springs	Allen H Tigert	U78	59	68	26	Yes
St. Anthony	Stanford Field	U12	50	50	45	Yes
	GEN	ERAL				
Bancroft	Bancroft Municipal	U51	N/A	N/A	N/A	N/A
Carey	Carey	U65	N/A	N/A	N/A	N/A
Coeur D'Alene	Brooks SPB	S76	N/A	N/A	N/A	N/A
Cottonwood	Cottonwood Municipal	S84	81	78	60	Yes
Craigmont	Craigmont Municipal	S89	62	5	20	No
Downey	Downey/Hyde Memorial	U58	54	7	N/A	No
Dubois	Dubois Municipal	U41	N/A	N/A	N/A	N/A
Fairfield	Camas County	U86	N/A	N/A	N/A	N/A
Garden Valley	Garden Valley	U88	N/A	N/A	N/A	N/A
Glenns Ferry	Glenns Ferry Municipal	U89	29	33	11	No
Hazelton	Hazelton Municipal	U94	71	43	39	No
Howe	Howe	U97	N/A	N/A	N/A	N/A
Kooskia	Kooskia Municipal	S82	N/A	N/A	N/A	N/A
Leadore	Leadore	U00	N/A	N/A	N/A	N/A
Lewiston	Snake River SPB	78U	N/A	N/A	N/A	N/A
Mackay	Mackay	U62	44	35	39	No
Midvale	Lee Williams Memorial	0U9	66	78	63	Yes



		Ú					
ASSOCIATED		FAA	Runway	Taxiway	Apron	Meets All	
CITY	Airport	ID	PCI	PCI	PCI	Objectives	
Murphy	Murphy	1U3	43	N/A	76	No	
Nezperce	Nezperce Municipal	0S5	72	92	53	Yes	
Oakley	Oakley Municipal	1U6	N/A	N/A	N/A	N/A	
Parma	Parma	50S	93	98	95	Yes	
Rockford	Rockford Municipal	2U4	65	64	89	Yes	
BACKCOUNTRY							
Stanley	Stanley	2U7	N/A	N/A	N/A	N/A	
Big Creek	Big Creek	U60	N/A	N/A	N/A	N/A	
Coolin	Cavanaugh Bay	66S	N/A	N/A	N/A	N/A	
Donnelly	Donald D. Coski Memorial	U84	N/A	N/A	N/A	N/A	
Galena	Smiley Creek	U87	N/A	N/A	N/A	N/A	
Porthill	Eckhart International	1S1	N/A	N/A	N/A	N/A	
Stanley	Thomas Creek	2U8	N/A	N/A	N/A	N/A	
Yellow Pine	Johnson Creek	3U2	N/A	N/A	N/A	N/A	

Note: This analysis is applicable to the 55 system airports with paved surfaces. Sources: 2017 Statewide NPMS Report; 2018 PCI Survey Update Boise Airport; 2015 PCI Survey Update Boise Airport; 2015 Idaho Falls Regional Airport Pavement Condition Report; 2013 Pocatello Regional Airport Pavement Management Program; 2016 Pavement Management Program Update Lewiston Nez-Perce County Regional Airport; 2014 Pavement Conditioning Index Report Joslin Field – Magic Valley Regional Airport; Washington Airport Pavement Management Program (accessed March 2019)

5-22



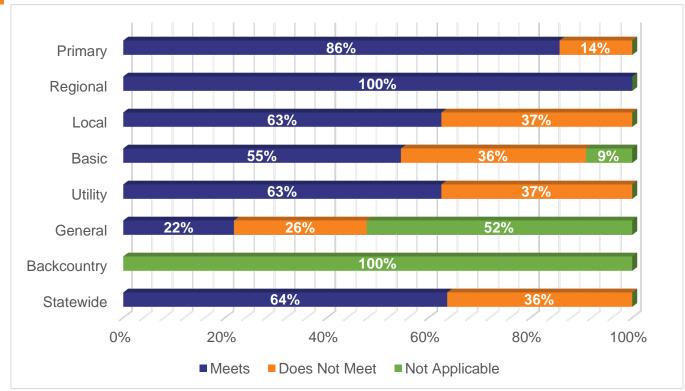


FIGURE 5-10: PRESERVATION – PERCENT OF AIRPORTS MEETING ITD AERONAUTICS PCI STANDARDS

Note: Statewide total are reported based on the 55 airports with paved surfaces within the Idaho airport system, 35 of which achieve the PCI standards for all surface areas (64 percent). Sources: 2017 Statewide NPMS Report; 2018 PCI Survey Update Boise Airport; 2015 PCI Survey Update Boise Airport; 2015 Idaho Falls Regional Airport Pavement Condition Report; 2013 Pocatello Regional Airport Pavement Management Program; 2016 Pavement Management Program Update Lewiston Nez-Perce County Regional Airport; 2014 Pavement Conditioning Index Report Joslin Field – Magic Valley Regional Airport; Washington Airport Pavement Management Program (accessed March 2019)

### PI: Percent of Airports that Have a SPCC Plan

The U.S. Environmental Protection Agency requires a SPCC plan to help prevent the discharge of oil into navigable bodies of water. As many airports in the state handle oils and fuels on a regular basis, the likelihood of a spill occurring is high, especially at busy airports. This PI was chosen to assess environmental preservation at Idaho's airports because a SPCC program promotes prevention, control, and countermeasures of hazardous discharge.

Of all system airports, 21 percent reported having a SPCC plan in place in the 2020 IASP Update. This information is graphically depicted in **Figure 5-11**. This reflects a slight increase from 19 percent of airports in the 2010 IASP that reported having a SPCC plan. **Table 5-4** presents airport-specific results for this PI as well as the following, Percent of Airports that Have a SWPPP.



TABLE 5-4	4: PRESERVATION – AIRPORTS THAT HAVE A	SPCC PLAN	AND/OR SWP	<u>PP</u>
ASSOCIATED CITY	Airport	FAA ID	SPCC Plan	SWPPP
	PRIMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	Yes
Hailey	Friedman Memorial	SUN	N/P	N/P
Idaho Falls	Idaho Falls Regional	IDA	N/P	Yes
Lewiston	Lewiston-Nez Perce County	LWS	N/P	Yes
Pocatello	Pocatello Regional	PIH	Yes	No
Pullman	Pullman-Moscow Regional	PUW	Yes	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF	No	No
	REGIONAL			
Caldwell	Caldwell Industrial	EUL	No	Yes
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes	Yes
Driggs	Driggs-Reed Memorial	DIJ	No	No
	LOCAL			
Blackfoot	McCarley Field	U02	Yes	No
Bonners Ferry	Boundary County	65S	Yes	No
Burley	Burley Municipal	BYI	No	Yes
Cascade	Cascade	U70	No	No
Gooding	Gooding Municipal	GNG	Yes	Yes
Grangeville	Idaho County	GIC	No	No
Jerome	Jerome County	JER	Yes	Yes
McCall	McCall Municipal	MYL	No	No
Mountain Home	Mountain Home Municipal	U76	No	No
Nampa	Nampa Municipal	MAN	Yes	Yes
Preston	Preston	U10	N/P	N/P
Rexburg	Rexburg-Madison County	RXE	N/P	N/P
Salmon	Lemhi County	SMN	Yes	Yes
Sandpoint	Sandpoint	SZT	Yes	Yes
St. Maries	St Maries Municipal	S72	N/P	N/P
Weiser	Weiser Municipal	S87	No	No
	BASIC			
Aberdeen	Aberdeen Municipal	U36	No	No
Arco	Arco-Butte County	AOC	No	No
Buhl	Buhl Municipal	U03	No	No
Challis	Challis	LIJ	No	No
Council	Council Municipal	U82	Yes	Yes
Homedale	Homedale Municipal	S66	Yes	Yes
Kamiah	Kamiah Municipal	S73	N/P	N/P
Kellogg	Shoshone County	S83	No	Yes
Orofino	Orofino Municipal	S68	No	No

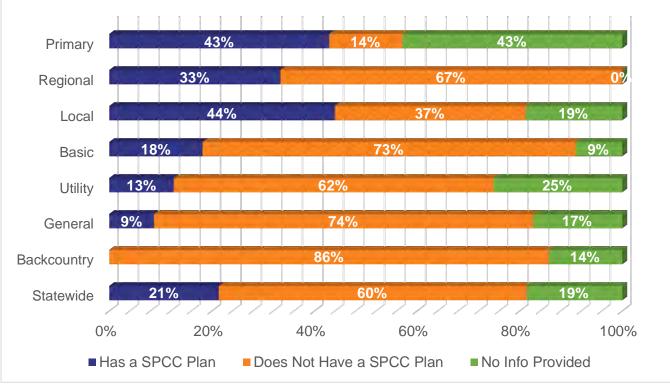


ASSOCIATED CITY	Airport	FAA ID	SPCC Plan	SWPPP
Paris	Bear Lake County	1U7	No	No
Priest River	Priest River Municipal	1S6	No	No
	UTILITY			
American Falls	American Falls	U01	No	No
Emmett	Emmett Municipal	S78	No	No
Malad City	Malad City	MLD	No	No
Mud Lake	Mud Lake/West Jefferson County	1U2	No	No
Payette	Payette Municipal	S75	No	No
Rigby	Rigby	U56	Yes	No
Soda Springs	Allen H Tigert	U78	N/P	N/P
St. Anthony	Stanford Field	U12	N/P	N/P
	GENERAL			
Bancroft	Bancroft Municipal	U51	N/P	N/P
Carey	Carey	U65	No	No
Coeur D'Alene	Brooks SPB	S76	N/P	N/P
Cottonwood	Cottonwood Municipal	S84	No	No
Craigmont	Craigmont Municipal	S89	Yes	Yes
Downey	Downey/Hyde Memorial	U58	N/P	N/P
Dubois	Dubois Municipal	U41	No	No
Fairfield	Camas County	U86	No	No
Garden Valley	Garden Valley	U88	No	No
Glenns Ferry	Glenns Ferry Municipal	U89	No	No
Hazelton	Hazelton Municipal	U94	No	No
Howe	Howe	U97	No	No
Kooskia	Kooskia Municipal	S82	No	No
Leadore	Leadore	U00	No	No
Lewiston	Snake River SPB	78U	No	No
Mackay	Mackay	U62	No	No
Midvale	Lee Williams Memorial	0U9	No	No
Murphy	Murphy	1U3	No	No
Nezperce	Nezperce Municipal	0S5	No	No
Oakley	Oakley Municipal	1U6	N/P	N/P
Parma	Parma	50S	Yes	Yes
Rockford	Rockford Municipal	2U4	No	No
Stanley	Stanley	2U7	No	No
	BACKCOUNTRY			
Big Creek	Big Creek	U60	No	No
Coolin	Cavanaugh Bay	66S	No	No
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P
Galena				



ASSOCIATED CITY	Airport	FAA ID	SPCC Plan	SWPPP	
Porthill	Eckhart International	1S1	No	No	
Stanley	Thomas Creek	2U8	No	No	
Yellow Pine	Johnson Creek	3U2	No	No	
Source: Airport Inventory and Data Survey Forms, 2019					

#### FIGURE 5-11: PRESERVATION – PERCENT OF AIRPORTS THAT HAVE A SPCC PLAN

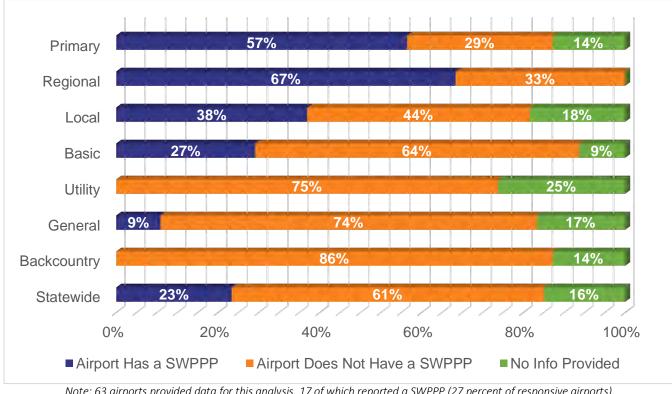


Note: 61 airports provided data for this analysis, 16 of which reported having a SPCC plan (26 percent of responsive airports). Source: Airport Inventory and Data Survey Forms, 2019

#### PI: Percent of Airports that Have a SWPPP

Similar to a SPCC plan, a SWPPP is a vital part of an airport's continuous impact to the environment. A SWPPP identifies the appropriate mitigation measures to be used by the airport owner/operator to minimize the amount of runoff pollution, sediment runoff, and erosion that can leave the airport environs. SWPPPs are especially important for airports as they typically have large amounts of impervious surfaces that allow water to collect and flow. With a proper SWPPP in place, potentially contaminated waters are retained on-site and filtered before being discharged or allowed to permeate back into natural subterranean aquifers.

As shown in **Figure 5-12**, 23 percent of all 2020 IASP Update airports reported having a SWPPP in place. In 2010, only 16 percent of 2020 IASP Update airports reported having an adopted SWPPP. **Table 5-4** above presents airport-specific information for this PI.



### FIGURE 5-12: PRESERVATION – PERCENT OF AIRPORTS THAT HAVE A SWPPP

Note: 63 airports provided data for this analysis, 17 of which reported a SWPPP (27 percent of responsive airports). Source: Airport Inventory and Data Survey Forms, 2019

# **Goal: Transportation Support**

Airports are only one of the multiple transportation modes that provide residents and visitors with access to all areas of Idaho, and it is important that the many modes of transportation are well connected to best serve the population and the movement of goods and services. Additionally, airports play an important role in emergency and medical transportation through life flight activities. This connectivity also requires other forms of transportation, both public and private, so that users can leave the airport environment and conduct activities outside of the immediate area. An airport's ability to promote intermodal connectivity is vital for many users of the state transportation system and communities in Idaho. The following PIs and AA point were selected to demonstrate different ways that airports interconnect with the multimodal transportation system.

## **Performance Indicators**

- → Percent of airports with a courtesy car and/or rental car available
- → Percent of airports with public transportation available
- → Percent of airports that support life flight activities
  - Emergency medical evacuation
  - Physician/medical transportation
  - Medical shipments/patient transfer
- → Percent of airports that support firefighting

### **Additional Analysis**

✤ Percent of airports with on-demand air taxi flights serving IAN airports



#### PI: Percent of Airports with a Courtesy Car and/or Rental Car Available

Rental car or courtesy car availability creates a more robust ground transportation system that can promote connectivity to/from airports within the state. This is especially true when no other mode of transportation is available within a community. Rental cars and/or courtesy cars allow visitors arriving via aircraft to leave the airport to conduct business or recreate, thus boosting the airport's ability to support the local economy.

**Table 5-5** lists the system airports that have either a rental or courtesy car available. **Figure 5-13** indicates that 61 percent of the state's system of airports have one or both vehicular options available. This is an increase from the 2010 study when only 58 percent of the 2020 IASP Update airports reported having either form of transportation available.

#### TABLE 5-5: TRANSPORTATION SUPPORT – AIRPORTS WITH A COURTESY CAR AND/OR RENTAL CAR AVAILABLE

			Rental and/or Courtesy
ASSOCIATED CITY	Airport	FAA ID	Car Available
	PRIMARY		
Boise	Boise Air Terminal/Gowen Field	BOI	Yes
Hailey	Friedman Memorial	SUN	Yes
Idaho Falls	Idaho Falls Regional	IDA	Yes
Lewiston	Lewiston-Nez Perce County	LWS	Yes
Pocatello	Pocatello Regional	PIH	Yes
Pullman	Pullman-Moscow Regional	PUW	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes
	REGIONAL		
Caldwell	Caldwell Industrial	EUL	Yes
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes
Driggs	Driggs-Reed Memorial	DIJ	Yes
	LOCAL		
Blackfoot	McCarley Field	U02	Yes
Bonners Ferry	Boundary County	65S	Yes
Burley	Burley Municipal	BYI	Yes
Cascade	Cascade	U70	Yes
Gooding	Gooding Municipal	GNG	Yes
Grangeville	Idaho County	GIC	Yes
Jerome	Jerome County	JER	Yes
McCall	McCall Municipal	MYL	Yes
Mountain Home	Mountain Home Municipal	U76	Yes
Nampa	Nampa Municipal	MAN	Yes
Preston	Preston	U10	Yes
Rexburg	Rexburg-Madison County	RXE	Yes
Salmon	Lemhi County	SMN	Yes
Sandpoint	Sandpoint	SZT	Yes
St. Maries	St Maries Municipal	S72	Yes
Weiser	Weiser Municipal	S87	Yes



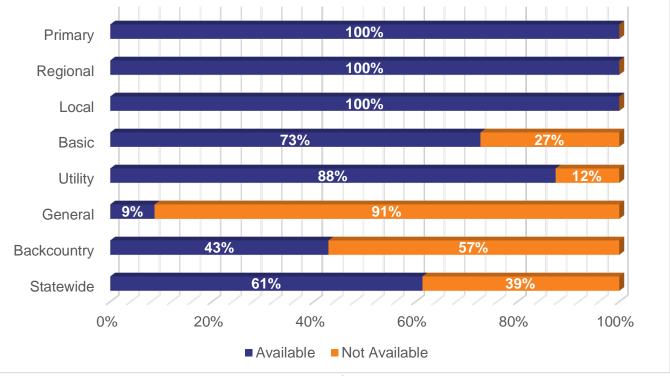
			Rental and/or Courtesy
ASSOCIATED CITY	Airport	FAA ID	Car Available
	BASIC		
Aberdeen	Aberdeen Municipal	U36	No
Arco	Arco-Butte County	AOC	Yes
Buhl	Buhl Municipal	U03	Yes
Challis	Challis	LLJ	Yes
Council	Council Municipal	U82	No
Homedale	Homedale Municipal	S66	No
Kamiah	Kamiah Municipal	S73	Yes
Kellogg	Shoshone County	S83	Yes
Orofino	Orofino Municipal	S68	Yes
Paris	Bear Lake County	1U7	Yes
Priest River	Priest River Municipal	1S6	Yes
	UTILITY		
American Falls	American Falls	U01	Yes
Emmett	Emmett Municipal	S78	Yes
Malad City	Malad City	MLD	Yes
Mud Lake	Mud Lake/West Jefferson County	1U2	Yes
Payette	Payette Municipal	S75	Yes
Rigby	Rigby	U56	Yes
Soda Springs	Allen H Tigert	U78	Yes
St. Anthony	Stanford Field	U12	No
	GENERAL		
Bancroft	Bancroft Municipal	U51	No
Carey	Carey	U65	No
Coeur D'Alene	Brooks SPB	S76	No
Cottonwood	Cottonwood Municipal	S84	No
Craigmont	Craigmont Municipal	S89	No
Downey	Downey/Hyde Memorial	U58	No
Dubois	Dubois Municipal	U41	No
Fairfield	Camas County	U86	No
Garden Valley	Garden Valley	U88	Yes
Glenns Ferry	Glenns Ferry Municipal	U89	No
Hazelton	Hazelton Municipal	U94	No
Howe	Howe	U97	No
Kooskia	Kooskia Municipal	S82	No
Leadore	Leadore	U00	No
Lewiston	Snake River SPB	78U	No
Mackay	Mackay	U62	Yes
Midvale	Lee Williams Memorial	0U9	No
Murphy	Murphy	1U3	No



			Rental and/or Courtesy
ASSOCIATED CITY	Airport	FAA ID	Car Available
Nezperce	Nezperce Municipal	0S5	No
Oakley	Oakley Municipal	1U6	No
Parma	Parma	50S	No
Rockford	Rockford Municipal	2U4	No
Stanley	Stanley	2U7	No
	BACKCOUNTRY		
Big Creek	Big Creek	U60	No
Coolin	Cavanaugh Bay	66S	Yes
Donnelly	Donald D. Coski Memorial	U84	No
Galena	Smiley Creek	U87	Yes
Porthill	Eckhart International	1S1	No
Stanley	Thomas Creek	2U8	No
Yellow Pine	Johnson Creek	3U2	Yes

Source: Airport Inventory and Data Survey Forms, 2019

#### FIGURE 5-13: TRANSPORTATION SUPPORT – PERCENT OF AIRPORTS WITH A COURTESY CAR



Source: Airport Inventory and Data Survey Forms, 2019



#### PI: Percent of Airports with Public Transportation Available

Bus services and other forms of public transit provide users with a cost-effective mode of transportation that can provide connections between most metropolitan areas in Idaho. Public transportation services are commonly provided at the local level, so services provided vary throughout the state. In general, the availability of public transportation is limited to more densely populated areas, meaning many of the more remote airports will not have public transportation services available. Just as vital as courtesy and rental car availability, public transportation integration with the state's airports can provide viable economic benefits to local communities. Fifty-seven percent of Primary airports provide access to public transportation, followed by 25 percent of Local and nine percent of Basic airports. No other airport classifications reported any access to public transportation. Performance has remained virtually flat over the past decade: The 2010 IASP indicated that 13 percent of all airports had access to public transportation.

Table 5-6 lists the availability of bus and/or rail service for each of the 2020 IASP Update airports. Figure 5-14summarizes public transportation availability on a statewide basis by airport classification. As indicated, only 12percent of 2020 IASP Update airports reported having public transportation connectivity.

			Public Transportation				
ASSOCIATED CITY	Airport	FAA ID	(Bus, Rail)				
PRIMARY							
Boise	Boise Air Terminal/Gowen Field	BOI	Yes				
Hailey	Friedman Memorial	SUN	Yes				
Idaho Falls	Idaho Falls Regional	IDA	Yes				
Lewiston	Lewiston-Nez Perce County	LWS	Yes				
Pocatello	Pocatello Regional	PIH	No				
Pullman	Pullman-Moscow Regional	PUW	No				
Twin Falls	Joslin Field-Magic Valley Regional	TWF	No				
	REGIONAL						
Caldwell	Caldwell Industrial	EUL	No				
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	No				
Driggs	Driggs-Reed Memorial	DIJ	No				
	LOCAL						
Blackfoot	McCarley Field	U02	No				
Bonners Ferry	Boundary County	65S	Yes				
Burley	Burley Municipal	BYI	No				
Cascade	Cascade	U70	Yes				
Gooding	Gooding Municipal	GNG	No				
Grangeville	Idaho County	GIC	No				
Jerome	Jerome County	JER	No				
McCall	McCall Municipal	MYL	Yes				
Mountain Home	Mountain Home Municipal	U76	No				
Nampa	Nampa Municipal	MAN	No				
Preston	Preston	U10	No				
Rexburg	Rexburg-Madison County	RXE	No				
Salmon	Lemhi County	SMN	No				

#### TABLE 5-6: TRANSPORTATION SUPPORT – AIRPORTS WITH PUBLIC TRANSPORTATION AVAILABLE



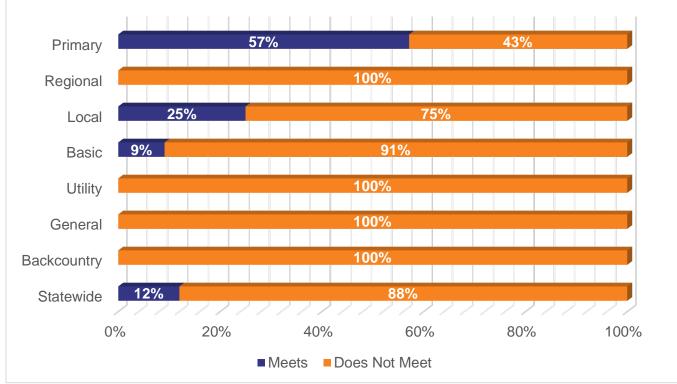
			Public Transportation	
ASSOCIATED CITY	Airport	FAA ID	(Bus, Rail)	
Sandpoint	Sandpoint	SZT	Yes	
St. Maries	St Maries Municipal	S72	No	
Weiser	Weiser Municipal	S87	No	
	BASIC			
Aberdeen	Aberdeen Municipal	U36	No	
Arco	Arco-Butte County	AOC	No	
Buhl	Buhl Municipal	U03	No	
Challis	Challis	LLJ	No	
Council	Council Municipal	U82	No	
Homedale	Homedale Municipal	S66	No	
Kamiah	Kamiah Municipal	S73	No	
Kellogg	Shoshone County	S83	No	
Orofino	Orofino Municipal	S68	Yes	
Paris	Bear Lake County	1U7	No	
Priest River	Priest River Municipal	1S6	No	
	UTILITY			
American Falls	American Falls	U01	No	
Emmett	Emmett Municipal	S78	No	
Malad City	Malad City	MLD	No	
Mud Lake	Mud Lake/West Jefferson County	1U2	No	
Payette	Payette Municipal	S75	No	
Rigby	Rigby	U56	No	
Soda Springs	Allen H Tigert	U78	No	
St. Anthony	Stanford Field	U12	No	
	GENERAL			
Bancroft	Bancroft Municipal	U51	No	
Carey	Carey	U65	No	
Coeur D'Alene	Brooks SPB	S76	No	
Cottonwood	Cottonwood Municipal	S84	No	
Craigmont	Craigmont Municipal	S89	No	
Downey	Downey/Hyde Memorial	U58	No	
Dubois	Dubois Municipal	U41	No	
Fairfield	Camas County	U86	No	
Garden Valley	Garden Valley	U88	No	
Glenns Ferry	Glenns Ferry Municipal	U89	No	
Hazelton	Hazelton Municipal	U94	No	
Howe	Howe	U97	No	
Kooskia	Kooskia Municipal	S82	No	
Leadore	Leadore	U00	No	
Lewiston	Snake River SPB	78U	No	



ASSOCIATED CITY	Airport		Public Transportation (Bus, Rail)
Mackay	Mackay	FAA ID U62	No
Midvale	Lee Williams Memorial	0U9	No
Murphy	Murphy	1U3	No
Nezperce	Nezperce Municipal	0S5	No
Oakley	Oakley Municipal	1U6	No
Parma	Parma	50S	No
Rockford	Rockford Municipal		No
Stanley	Stanley		No
	BACKCOUNTRY		
Big Creek	Big Creek	U60	No
Coolin	Cavanaugh Bay	66S	No
Donnelly	Donald D. Coski Memorial	U84	No
Galena	Smiley Creek	U87	No
Porthill	Eckhart International	1S1	No
Stanley	Thomas Creek	2U8	No
Yellow Pine	Johnson Creek	3U2	No

Source: Airport Inventory and Data Survey Forms, 2019

#### FIGURE 5-14: TRANSPORTATION SUPPORT – PERCENT OF AIRPORTS WITH PUBLIC TRANSPORTATION AVAILABLE



Source: Airport Inventory and Data Survey Forms, 2019



### PI: Percent of Airports that Support Life Flight Activities

Medical flights provide access to specialized treatments or emergency medical services for patients in need, as well as provide transport for healthcare personnel who must travel to remote areas to provide care. These services are particularly important for residents of remote communities without nearby access to medical facilities. Providing a network of airports to connect medical professionals with patients is one of the most important functions an aviation system can provide.

To capture the full extent of medical operations occurring in Idaho, airport managers/sponsors were asked if their airport accommodates any of the following types of activities by either fixed-wing aircraft or rotorcraft on a daily, weekly, or monthly basis:

- ✤ Emergency medical evacuation
- Physician/medical transportation
- ✤ Medical shipments/patient transfer

**Table 5-7** provides a detailed breakdown of life flight activities occurring at each of the system airports. Figure**5-15** provides the percentage of each airport classification that reported having life flight activity. Figure 5-16depicts the geographic location of airports that indicated the presence of life flight activities.

Statewide, 77 percent of 2020 IASP Update airports indicated providing some type of medical evacuation/air ambulance activity either daily, weekly, or monthly. Twelve percent reported never accommodating life flight activities, and 13 percent did not provide the information necessary to conduct this evaluation. This is up from the 69 percent reported in the 2010 study. Of interest, all responsive Backcountry airports reported having monthly life flight activity. This information further supports these airports' roles as a critical component to urgent medical access for individuals who find themselves in emergency situations deep in the Idaho backcountry.

#### TABLE 5-7: TRANSPORTATION SUPPORT – AIRPORTS THAT SUPPORT LIFE FLIGHT ACTIVITIES

ASSOCIATED CITY	Airport	FAA ID	Life Flight Activity	Frequency	
	PRIMARY				
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	Daily	
Hailey	Friedman Memorial	SUN	Yes	Weekly	
Idaho Falls	Idaho Falls Regional	IDA	Yes	Weekly	
Lewiston	Lewiston-Nez Perce County	LWS	Yes	Daily	
Pocatello	Pocatello Regional	PIH	Yes	Weekly	
Pullman	Pullman-Moscow Regional	PUW	Yes	Weekly	
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Weekly	
REGIONAL					
Caldwell	Caldwell Industrial		Yes	Daily	
Coeur D'Alene	Alene Coeur D'Alene - Pappy Boyington Field		Yes	Monthly	
Driggs	Driggs-Reed Memorial	DIJ	Yes	Daily	
	LOCAL				
Blackfoot	McCarley Field	U02	Yes	Monthly	
Bonners Ferry	Boundary County	65S	Yes	Monthly	
Burley	Burley Municipal	BYI	Yes	Daily	
Cascade	Cascade	U70	Yes	Monthly	
Gooding	Gooding Municipal	GNG	Yes	Monthly	
Grangeville	Idaho County	GIC	Yes	Daily	



ASSOCIATED CITY	Airport	FAA ID	Life Flight Activity	Frequency
Jerome	Jerome County	JER	Yes	Monthly
McCall	McCall Municipal	MYL	Yes	Daily
Mountain Home	Mountain Home Municipal	U76	Yes	Monthly
Nampa	Nampa Municipal	MAN	Yes	Monthly
Preston	Preston	U10	Yes	Monthly
Rexburg	Rexburg-Madison County	RXE	Yes	Daily
Salmon	Lemhi County	SMN	Yes	Weekly
Sandpoint	Sandpoint SZT		Yes	Daily
St. Maries	St Maries Municipal S72 Yes		Yes	Weekly
Weiser	Weiser Municipal	S87	Yes	Monthly
	BASIC			
Aberdeen	Aberdeen Municipal	U36	Yes	Monthly
Arco	Arco-Butte County	AOC	Yes	Weekly
Buhl	Buhl Municipal	U03	N/P	N/P
Challis	Challis	LLJ	Yes	Monthly
Council	Council Municipal	U82	Yes	Monthly
Homedale	Homedale Municipal	S66	Yes	Monthly
Kamiah	Kamiah Municipal	S73	N/P	N/P
Kellogg	Shoshone County	S83	Yes	Monthly
Orofino	Orofino Municipal	S68	Yes	Weekly
Paris	Bear Lake County	1U7	Yes	Weekly
Priest River	Priest River Municipal	1S6	Yes	Monthly
	UTILITY			
American Falls	American Falls	U01	Yes	Monthly
Emmett	Emmett Municipal	S78	Yes	Monthly
Malad City	Malad City	MLD	Yes	Monthly
Mud Lake	Mud Lake/West Jefferson County	1U2	Yes	Monthly
Payette	Payette Municipal	S75	No	Never
Rigby	Rigby	U56	No	Never
Soda Springs	Allen H Tigert	U78	Yes	Monthly
St. Anthony	Stanford Field	U12	N/P	N/P
	GENERAL			
Bancroft	Bancroft Municipal	U51	N/P	N/P
Carey	Carey	U65	Yes	Monthly
Coeur D'Alene	Brooks SPB	S76	N/P	N/P
Cottonwood	Cottonwood Municipal	S84	Yes	Monthly
Craigmont	Craigmont Municipal	S89	Yes	Monthly
Downey	Downey/Hyde Memorial	U58	Yes	Monthly
Dubois	Dubois Municipal	U41	No	Never
Fairfield	Camas County	U86	Yes	Monthly



ASSOCIATED CITY	Airport	FAA ID	Life Flight Activity	Frequency
Garden Valley	Garden Valley	U88	No	Never
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	N/P
Hazelton	Hazelton Municipal	U94	No	Never
Howe	Howe	U97	Yes	Monthly
Kooskia	Kooskia Municipal	S82	Yes	Monthly
Leadore	Leadore	U00	No	Never
Lewiston	Snake River SPB	78U	No	Never
Mackay	Mackay	U62	Yes	Monthly
Midvale	Lee Williams Memorial	0U9	Yes	Monthly
Murphy	Murphy 1U3 Yes		Monthly	
Nezperce	Nezperce Municipal 0S5		Yes	Monthly
Oakley	Oakley Municipal	1U6	N/P	N/P
Parma	Parma 50S No		No	Never
Rockford	Rockford Municipal	Rockford Municipal 2U4 No		Never
Stanley	Stanley	2U7	Yes	Monthly
	BACKCOUNTRY			
Big Creek	Big Creek	U60	Yes	Monthly
Coolin	Cavanaugh Bay	66S	Yes	Monthly
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P
Galena	Smiley Creek	Smiley Creek U87 Yes		Monthly
Porthill	Eckhart International	1S1 Yes		Monthly
Stanley	Thomas Creek	2U8	Yes	Monthly
Yellow Pine	Johnson Creek	3U2	Yes	Monthly

Source: Airport Inventory and Data Survey Forms, 2019



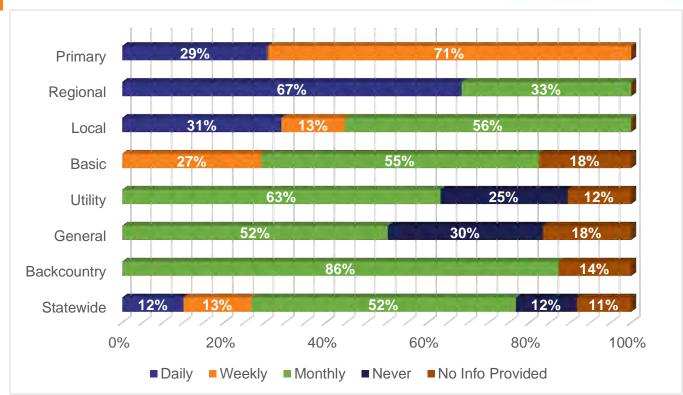
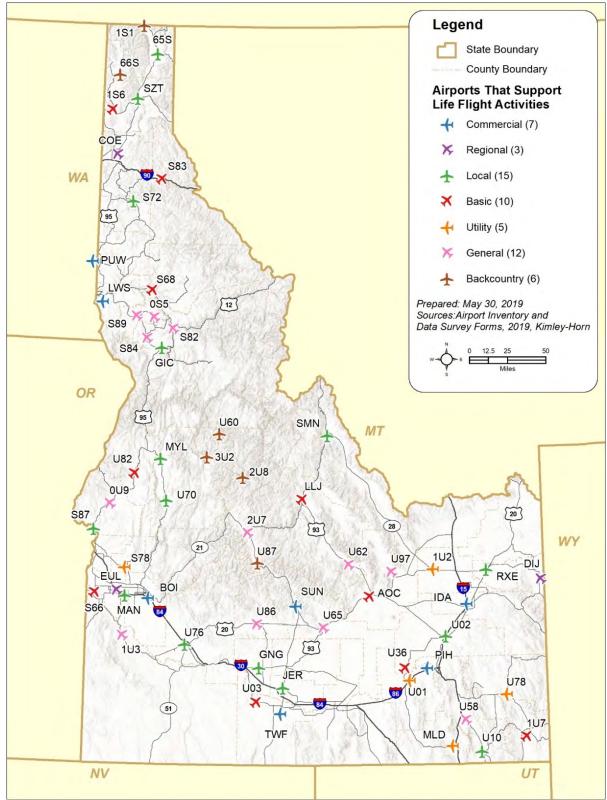


FIGURE 5-15: TRANSPORTATION SUPPORT – PERCENT OF AIRPORTS THAT SUPPORT LIFE FLIGHT ACTIVITIES

Note: 67 2020 IASP Update airports provided data for this analysis. Nine airports reported daily operations, 10 reported weekly operations, 39 reported monthly operations, and nine airports reported that they never experience life flight activities. Source: Airport Inventory and Data Survey Forms, 2019







Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



#### **PI:** Percent of Airports that Support Firefighting

Forest fires are common events in Idaho, especially during the dry and hot months of the year. Aerial firefighting is critical to the protection of Idaho's national forests, rangeland areas, and communities. During a forest fire, aircraft can quickly provide access to wide geographic areas while reducing human exposure to threats on the ground and minimizing the time it takes to extinguish a fire. Both commercial service and GA airports across the state support fire suppression response teams by providing fuel, maintenance facilities, and other critical aircraft and personnel services. Because aerial firefighting is an emergency operation that airports in Idaho must be ready to support when the situation arises, it is important to understand the aviation system's capacity to respond to these emergency events.

As of April 2019, the National Wildfire Coordinating Group (NWCG) lists Boise Air Terminal/Gowen Field, McCall Municipal, Pocatello Regional, Joslin Field/Magic Valley Regional, and Coeur d'Alene/Pappy Boyington Field as designated air tanker bases. Each of these airports employ specific firefighting infrastructure and facilities to support air tanker firefighting operations. Additionally, the NWCG lists Idaho County and Mountain Home Municipal airports as designated Single Engine Air Tanker (SEAT) bases which also means that they have specific infrastructure and facilities to support SEAT operations.

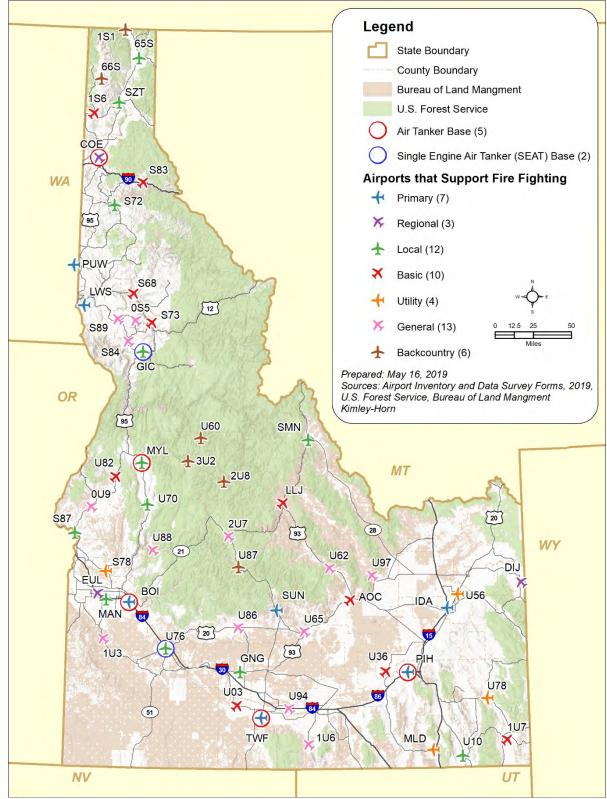
**Figure 5-17** depicts the geographic location of airports that indicated having aerial firefighting activity and their proximity to U.S. Forest Service (USFS) lands and Bureau of Land Management (BLM) areas. **Table 5-8** presents all 2020 IASP Update airports that noted supporting aerial firefighting operations on a daily, weekly, or monthly basis. Owing to the seasonality of aerial firefighting, frequency of firefighting support is assumed to be daily, weekly, or monthly on a seasonal basis with no operations occurring during the winter months. Lastly, **Figure 5-18** reports the aerial firefighting activity that occurs at system airports as reported by airport classification.

Statewide, 75 percent of responsive airports reported experiencing aerial firefighting activity. This is up from the 69 percent of airports reported in the 2010 report. A diverse level of activity was reported within all airport classifications with most of the activity occurring at NPIAS airports.

Interestingly, all responsive Backcountry airports reported supporting aerial firefighting activity—the same percentage that reported supporting life flight activities. This information further reinforces Backcountry airports' importance within the 2020 IASP Update as a critical component of the state's network of emergency response.



#### FIGURE 5-17: TRANSPORTATION SUPPORT – AIRPORTS THAT SUPPORT FIREFIGHTING



Sources: Airport Inventory and Data Survey Forms, 2019; NWCG Air Tanker Base Directory, 2019; Kimley-Horn, 2019



### TABLE 5-8: TRANSPORTATION SUPPORT – AIRPORTS THAT SUPPORT FIREFIGHTING

	<u>E 5-8: TRANSPORTATION SUPPORT – AIRPC</u>			
ASSOCIATED			Aerial Firefighting	<b>.</b>
CITY	Airport	FAA ID	Activity	Frequency
Boise	PRIMARY Boise Air Terminal/Gowen Field	BOI	Yes	Daily
Hailey	Friedman Memorial	SUN	Yes	Monthly
Idaho Falls	Idaho Falls Regional	IDA	Yes	Monthly
Lewiston	Jan Stranger			Monthly
	Lewiston-Nez Perce County	LWS PIH	Yes	Daily
Pocatello	Pocatello Regional		Yes	,
Pullman	Pullman-Moscow Regional	PUW	Yes	Monthly
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Weekly
	REGIONAL	ELU.		
Caldwell	Caldwell Industrial	EUL	Yes	Monthly
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes	Weekly
Driggs	Driggs-Reed Memorial	DIJ	Yes	Monthly
	LOCAL			
Blackfoot	McCarley Field	U02	No	Never
Bonners Ferry	Boundary County	65S	Yes	Daily
Burley	Burley Municipal	BYI	Yes	Monthly
Cascade	Cascade	U70	Yes	Monthly
Gooding	Gooding Municipal	GNG	Yes	Daily
Grangeville	Idaho County	GIC	Yes	Weekly
Jerome	Jerome County	JER	No	Never
McCall	McCall Municipal	MYL	Yes	Daily
Mountain Home	Mountain Home Municipal	U76	Yes	Daily
Nampa	Nampa Municipal	MAN	Yes	Daily
Preston	Preston	U10	Yes	Monthly
Rexburg	Rexburg-Madison County	RXE	No	Never
Salmon	Lemhi County	SMN	Yes	Daily
Sandpoint	Sandpoint	SZT	Yes	Monthly
St. Maries	St Maries Municipal	S72	Yes	Daily
Weiser	Weiser Municipal	S87	Yes	Monthly
	BASIC			
Aberdeen	Aberdeen Municipal	U36	Yes	Monthly
Arco	Arco-Butte County	AOC	Yes	Monthly
Buhl	Buhl Municipal	U03	Yes	Weekly
Challis	Challis	LLJ	Yes	Weekly
Council	Council Municipal	U82	Yes	Monthly
Homedale	Homedale Municipal	S66	No	Never
Kamiah	Kamiah Municipal	S73	Yes	Monthly
Kellogg	Shoshone County	S83	Yes	, Daily



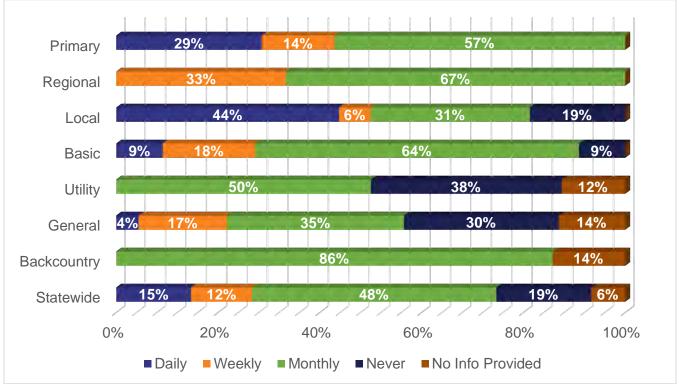
ASSOCIATED	CITY Airport		Aerial Firefighting Activity	Fraguanay
Orofino	Orofino Municipal	FAA ID S68	Yes	Frequency Monthly
Paris	Bear Lake County	107	Yes	Monthly
Priest River	Priest River Municipal	156	Yes	Monthly
	UTILITY	100	100	Wolleny
American Falls	American Falls U01 N			Never
Emmett	Emmett Municipal	S78	Yes	Monthly
Malad City	Malad City	MLD	Yes	Monthly
Mud Lake	Mud Lake/West Jefferson County	1U2	No	Never
Payette	Payette Municipal	S75	No	Never
Rigby	Rigby	U56	Yes	Monthly
Soda Springs	Allen H Tigert	U78	Yes	Monthly
St. Anthony	Stanford Field	U12	N/P	N/P
	GENERAL			
Bancroft	Bancroft Municipal		N/P	N/P
Carey	Carey	U65	Yes	Monthly
Coeur D'Alene	Brooks SPB	S76	N/P	N/P
Cottonwood	Cottonwood Municipal	S84	Yes	Monthly
Craigmont	Craigmont Municipal	S89	Yes	Daily
Downey	Downey/Hyde Memorial	U58	No	Never
Dubois	Dubois Municipal	U41	No	Never
Fairfield	Camas County	U86	Yes	Weekly
Garden Valley	Garden Valley	U88	Yes	Weekly
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	N/P
Hazelton	Hazelton Municipal	U94	Yes	Monthly
Howe	Howe	U97	Yes	Monthly
Kooskia	Kooskia Municipal	S82	No	Never
Leadore	Leadore	U00	No	Never
Lewiston	Snake River SPB	78U	No	Never
Mackay	Mackay	U62	Yes	Monthly
Midvale	Lee Williams Memorial	0U9	Yes	Weekly
Murphy	Murphy	1U3	Yes	Monthly
Nezperce	Nezperce Municipal	0S5	Yes	Monthly
Oakley	Oakley Municipal	1U6	Yes	Monthly
Parma	Parma	50S	No	Never
Rockford	Rockford Municipal	2U4	No	Never
Stanley	Stanley	2U7	Yes	Weekly
	BACKCOUNT			
Big Creek	Big Creek	U60	Yes	Monthly
Coolin	Cavanaugh Bay	66S	Yes	Monthly



ASSOCIATED CITY	Airport	FAA ID	Aerial Firefighting Activity	Frequency
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P
Galena	Smiley Creek	U87	Yes	Monthly
Porthill	Eckhart International	1S1	Yes	Monthly
Stanley	Thomas Creek	2U8	Yes	Monthly
Yellow Pine	Johnson Creek	3U2	Yes	Monthly

Source: Airport Inventory and Data Survey Forms, 2019

#### FIGURE 5-18: TRANSPORTATION SUPPORT – PERCENT OF AIRPORTS THAT SUPPORT FIREFIGHTING



Note: 70 airports provided information to conduct this analysis. Eleven airports reported daily operations, nine weekly, 36 monthly, and 14 airports reported that they never experience wildlife firefighting operations. Source: Airport Inventory and Data Survey Forms, 2019

#### Percent of Airports with On-Demand Air Taxi Flights Serving IAN Airports

IAN airports provide invaluable access to some of the most remote areas of the state for recreation, emergency services, and environmental evaluations. These airstrips are often used by landowners and managers. Users can either fly into these airstrips themselves or charter an on-demand air taxi flight. This service is similar to the hub and spoke system employed by larger commercial airlines. Through use of portal airports, air taxi operators provide an additional and essential connections with the state's aviation system.

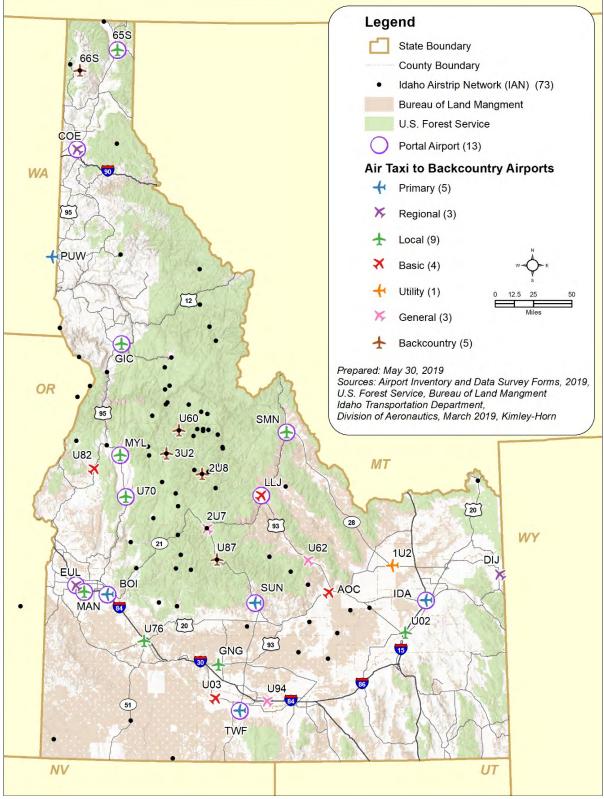
Based on feedback from system airports, 30 airports (40 percent of all airports) indicated having air taxi activity with connections to the backcountry. This is up from the 20 airports reporting air taxi activity in the 2010 report. **Figure 5-19** depicts the geographic disbursement of these 30 airports within the state. **Figure 5-20** presents the air taxi operations into the backcountry activity by airport classification.



Naturally, Backcountry airports reported a high percentage of air taxi activity (five of the six Backcountry airports). The four NPIAS classifications reported the majority of air taxi activity servicing the backcountry (21 airports). The General and Utility (non-NPIAS) classifications only reported four total airports servicing the backcountry.



# FIGURE 5-19: TRANSPORTATION SUPPORT – AIRPORTS WITH ON-DEMAND AIR TAXI FLIGHTS SERVING IAN AIRPORTS



Sources: Airport Inventory and Data Survey Forms, 2019; USFS, 2019; BLM, 2019; ITD Aeronautics, 2019; Kimley-Horn, 2019

5-45



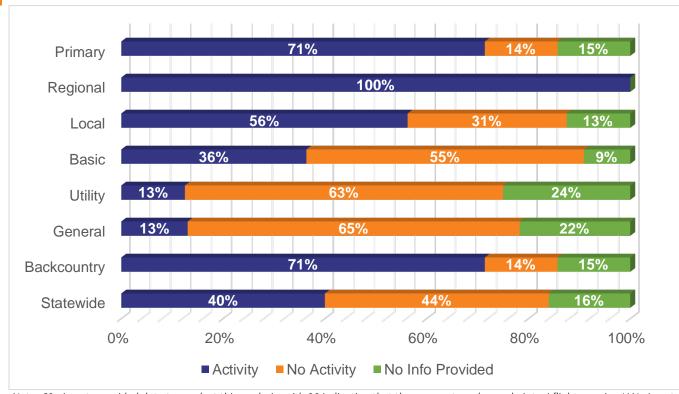


FIGURE 5-20: TRANSPORTATION SUPPORT- PERCENT OF AIRPORTS WITH ON-DEMAND AIR TAXI FLIGHTS

Note: 63 airports provided data to conduct this analysis, with 30 indicating that they support on-demand air taxi flights serving IAN airports (47 percent of responsive airports). Source: Airport Inventory and Data Survey Forms, 2019

# **Goal: Safety and Security**

One of the most common phrases associated with airport planning and design is "safety first". The safety of pilots and passengers in the sky, as well as individuals and property on the ground, must remain at the forefront of all policies, projects, procedures, and other components of aviation. Accordingly, safety and security are keystones of a properly functioning aviation system.

The FAA has established safety standards designed to mitigate risks to people and property associated with aviation. While an assessment of an individual airport's ability to meet all standards is generally a function of the master planning process, it is important for a statewide system plan to provide an overview of the system's ability to meet appropriate standards. The following PMs and PIs demonstrate different aspects of safety and security that affect the state's aviation system.

### **Performance Measures**

- ✤ Percent of airports without close-in obstructions
- → Percent of NPIAS airports meeting current FAA taxiway design standards

### **Performance Indicators**

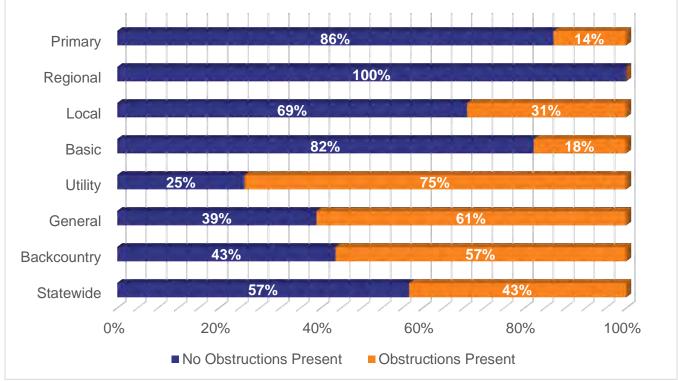
- → Percent of airports controlling (by fee or easement) all runway end Runway Protection Zones (RPZs)
- Percent of airports with Wildlife Hazard Assessments (WHAs) or Wildlife Hazard Management Plans (WHMPs)



#### PM: Percent of Airports without Close-in Obstructions

The FAA maintains records of close-in obstructions in the FAA 5010 Master Record, identified in the section of the form for controlling obstacles. Close-in obstructions are considered those within 200 feet of the runway threshold. Close-in obstructions can include man-made infrastructure such as buildings, transmission lines, and cell phone towers, as well as natural features like hills, mountains, and vegetation. Airports should maintain clear approaches to all runway ends to the greatest extent possible to optimize aircraft safety, especially during less-than-ideal weather conditions.

To measure this PM, only primary runways were analyzed for airports with multiple runways in use. As reported in **Figure 5-21**, 43 percent of system airports currently have close-in obstructions within 200 feet of their primary runway thresholds. Of note, Pullman-Moscow Regional airport's FAA 5010 Master Record Form indicates that the airport does not have close-in obstructions; however, the airport manager indicated obstructions in the Airport Inventory and Data Survey Form. Clarification of this discrepancy found that Pullman-Moscow Regional is was undergoing a major runway relocation project that has created temporary obstructions at the time of this writing (2019). When complete, this airport not have any close-in obstructions. This PM was not analyzed in the prior 2010 IASP.



# FIGURE 5-21: SAFETY AND SECURITY - PERCENT OF AIRPORTS WITHOUT CLOSE-IN OBSTRUCTIONS AFFECTING THEIR PRIMARY RUNWAYS

Sources: Airport Inventory and Data Survey Forms, 2019; FAA 5010 Master Records



### PM: Percent of NPIAS Airports Meeting Current FAA Taxiway Design Standards

In recent years, federal standards for airfield geometric design have been amended to increase the overall operational safety of airports. This includes the development of new taxiway design standards, as well as the identification of airport "hot spots" to identify where there are significant deficiencies in airfield geometry. The number of 2020 IASP Update NPIAS airports that meet current FAA taxiway design standards were determined by examining three types of taxiway design deficiencies:

- ✤ Direct runway access
- ✤ Three-node conflicts
- → Wide expanse of pavement

NPIAS airports were the focus of this PM since these airports are required to meet FAA standards if they accept FAA funding. While the FAA's taxiway design standards are based on significant research, these standards have recently changed and have resulted in a new approach to taxiway geometry than what has historically been viewed as the typical design. These changes could be considered for non-NPIAS airports as an ultimate goal but were not considered to be a minimum standard for airports that are not eligible for FAA funding.

To perform this analysis, a visual survey was completed using Google Earth to determine if any of these deficiencies existed at each NPIAS system airport. As shown in **Table 5-9**, most airports do not meet the current design criteria regarding direct taxiway access to a runway. It is important to note that this is a newer FAA design standard. It is assumed that these airports did meet the applicable standards when they were initially designed. Prior standards focused on efficient access from the aircraft parking area to the runway and did not account for the requirement for pilots to make "a conscious turn" to access the runway. **Figure 5-22** shows that only three percent of the NPIAS airports statewide meet the latest FAA taxiway design standards. Removing direct runway access as a design criterion results in 92 percent of NPIAS airports meeting the design requirements for three-node conflicts and wide expanses of pavement. This PM was not analyzed in the 2010 IASP.

TABLE 5-5.	SAFETT AND SECURITY - INP				DESIGN STANL	
ASSOCIATED CITY	Airport	FAA ID	Direct Access to Runway	Three-Node Intersection	Wide Expanse of Pavement	Meets FAA Taxiway Design Standards
		PR	IMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	No	No	No
Hailey	Friedman Memorial	SUN	Yes	No	No	No
Idaho Falls	Idaho Falls Regional	IDA	Yes	No	No	No
Lewiston	Lewiston-Nez Perce County	LWS	Yes	No	No	No
Pocatello	Pocatello Regional	PIH	Yes	No	No	No
Pullman	Pullman-Moscow Regional	PUW	Yes	No	No	No
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	No	No	No
		RE	GIONAL			
Caldwell	Caldwell Industrial	EUL	Yes	No	No	No
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes	No	No	No

#### TABLE 5-9: SAFETY AND SECURITY - NPIAS AIRPORTS MEETING FAA TAXIWAY DESIGN STANDARDS



ASSOCIATED CITY	Airport	FAA ID	Direct Access to Runway	Three-Node Intersection	Wide Expanse of Pavement	Meets FAA Taxiway Design Standards
Driggs	Driggs-Reed Memorial	DIJ	Yes	No	No	No
			OCAL		••	•••
Blackfoot	McCarley Field	U02	Yes	No	No	No
Bonners Ferry	Boundary County	65S	Yes	No	No	No
Burley	Burley Municipal	BYI	Yes	No	No	No
Cascade	Cascade	U70	Yes	No	No	No
Gooding	Gooding Municipal	GNG	Yes	No	No	No
Grangeville	Idaho County	GIC	Yes	No	No	No
Jerome	Jerome County	JER	No	No	No	Yes
McCall	McCall Municipal	MYL	Yes	No	Yes	No
Mountain Home	Mountain Home Municipal	U76	Yes	No	No	No
Nampa	Nampa Municipal	MAN	Yes	No	No	No
Preston	Preston	U10	Yes	No	No	No
Rexburg	Rexburg-Madison County	RXE	Yes	No	No	No
Salmon	Lemhi County	SMN	Yes	No	No	No
Sandpoint	Sandpoint	SZT	Yes	No	No	No
St. Maries	St Maries Municipal	S72	Yes	No	No	No
Weiser	Weiser Municipal	S87	Yes	No	No	No
		E	BASIC			
Aberdeen	Aberdeen Municipal	U36	Yes	No	No	No
Arco	Arco-Butte County	AOC	Yes	No	No	No
Buhl	Buhl Municipal	U03	Yes	No	No	No
Challis	Challis	LLJ	Yes	No	No	No
Council	Council Municipal	U82	Yes	No	No	No
Homedale	Homedale Municipal	S66	Yes	No	Yes	No
Kamiah	Kamiah Municipal	S73	Yes	No	Yes	No
Kellogg	Shoshone County	S83	Yes	No	No	No
Orofino	Orofino Municipal	S68	Yes	No	No	No
Paris	Bear Lake County	1U7	Yes	No	No	No
Priest River	Priest River Municipal	1S6	Yes	No	No	No

Sources: FAA AC 150/5300-13A, Change 1; Google Earth Aerial Imagery, 2019



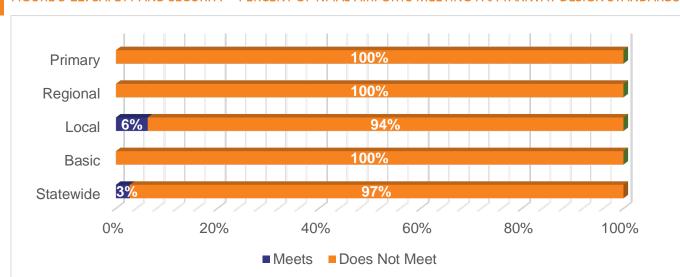


FIGURE 5-22: SAFETY AND SECURITY - PERCENT OF NPIAS AIRPORTS MEETING FAA TAXIWAY DESIGN STANDARDS

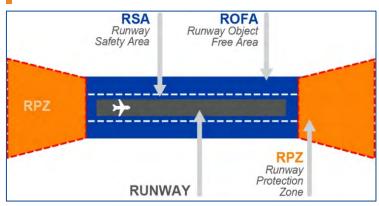
#### PI: Percent of Airports Controlling (by Fee or Easement) All Runway End RPZs

The FAA has defined several key safety areas on and adjacent to runways. One of those key areas is referred to as the RPZ. As shown in **Figure 5-23**, the RPZ is a trapezoid-shaped area off each end of the runway designed to protect people and property on the ground in the event of a runway overrun or undershoot. The dimensions of a runway's RPZs are based on several factors including its aircraft approach category (AAC), airplane design group (ADG) of the most demanding aircraft utilizing the airport, and published visibility minimums. RPZ control is typically achieved through ownership (i.e., fee simple) of the land within each RPZ area. If ownership is not possible, a permanent easement over the land can be utilized to encumber the area within the RPZ. RPZ control either by fee simple ownership or easement ensures no obstructions can develop within the RPZ.

For this analysis, an airport is considered to have full control of their primary runway RPZs if it controls both RPZs in their entireties either through ownership, easement, or a combination of both. Partial control is listed for airports with some ownership or easement control of their RPZs, while "no control" is used for airports with no control of any land within their primary runway RPZs. Each airport was requested to provide information on their

control of the RPZs since this data is not readily available through other means. It should be noted that the FAA's guidance regarding RPZ control has changed over time to recommend more stringent standards including, whenever possible, ownership of the property under the runway approach and departure areas to at least the limits of the RPZ. The FAA also recommends that RPZ areas should be kept free of all aboveground objects and limits land use to a few compatible uses such as farming and access roads.<sup>6</sup>

#### FIGURE 5-23: AIRPORT RPZS AND OTHER SAFETY AREAS



Source: Kimley-Horn, 2019

Note: Statewide totals only reflect the 37 NPIAS airports, as this PI is aimed exclusively to those facilities. Sources: FAA AC 150/5300-13A, Change 1; Google Earth Aerial Imagery, 2019

<sup>&</sup>lt;sup>6</sup> FAA guidance on RPZ control is listed in AC 150/5300-13A Change 1, Chapter 3, section 310.



At present, only 20 percent of 2020 IASP Update airports reported full control over all RPZs, while 37 percent reported partial control. Together, 57 percent of all airports reported full or partial control over all runway RPZs. The level of control (i.e., full, partial, or none) for each runway end reported by classification and statewide is summarized in **Figure 5-24**. One hundred percent of Regional airports reported either full or partial control over all runway end RPZs, followed by 79 percent of RPZs at Local airports. Sixty-five percent of Primary airports reported either full or partial control over their RPZs; data was not provided by either Idaho Falls Regional or Lewiston-Nez Perce County.

The following **Figure 5-25** reports the percent of airports that achieve this PI by classification and statewide (i.e., full control over all RPZs; airports with only partial control over any runway end RPZ are non-compliant). At 36 percent, Basic airports reported the highest compliance with this measure, followed by Regional (33 percent) and Local (31 percent) airports. No Utility or Backcountry airports comply with this measure. **Table 5-10** presents each airport's reported control of each runway end RPZ by full control, partial control, or no control and indicates compliance with the PI by runway end.

Note that the 2010 IASP only analyzed primary runway RPZS; as a result, a direct comparison between study years cannot be made. At that time, 53 percent of all airports reported full or partial control of both ends of their primary runway RPZs through fee simple ownership or easement.

	LTT AND SECONT -T				Meets		
ASSOCIATED CITY	Airport	Runway	Runway RPZ Control (Owned, Easement, Uncontrolled [%])	Level of Control	Objective		
PRIMARY							
Boise	Boise Air	10L/28R	Runway 10L (95%, 5%, 2%)	Partial	No		
	Terminal/Gowen		Runway 28R (100%, 0%, 0%)	Full	Yes		
	Field	10R / 28L	Runway 10R (87%, 10%, 2%)	Partial	No		
			Runway 28L (100%, 0%, 0%)	Full	Yes		
		09 / 27	Runway 09 (100%, 0%, 0%)	Full	No		
			Runway 27 (100%, 0%, 0%)	Full	Yes		
Hailey	Friedman	13/31	Runway 13 (100%, 0%, 0%)	Full	Yes		
	Memorial		Runway 31 (0%, 0%, 100%)	Uncontrolled	No		
Idaho Falls	Idaho Falls Regional	03/21	Runway 03 (N/P)	N/P	No		
			Runway 21 (N/P)	N/P	No		
		17 / 35	Runway 17 (N/P)	N/P	No		
			Runway 35 (N/P)	N/P	No		
Lewiston	Lewiston-Nez	08 / 26	Runway 08 (N/P) Runway 26 (N/P)	N/P	No		
	Perce County			N/P	No		
		12/30	Runway 12 (N/P)	N/P	No		
			Runway 30 (N/P)	N/P	No		
Pocatello	Pocatello Regional	03/21	Runway 03 (100%, 0%, 0%)	Full	Yes		
			Runway 21 (100%, 0%, 0%)	Full	Yes		
		17 / 35	Runway 17 (100%, 0%, 0%)	Full	Yes		
			Runway 35 (100%, 0%, 0%)	Full	Yes		
Pullman	Pullman-Moscow	06 / 24	Runway 06 (65%, 35%, 0%)	Partial	No		
	Regional		Runway 24 (100%, 0%, 0%)	Full	Yes		

#### TABLE 5-10: SAFETY AND SECURITY - TYPE AND EXTENT OF AIRPORTS' CONTROL OVER ALL RUNWAY END RPZS

SYSTEM PLAN UPDATE

			Durante DD7 Control (Orman	Loughat	Meets
ASSOCIATED CITY	Airport	Runway	Runway RPZ Control (Owned, Easement, Uncontrolled [%])	Level of Control	Objective
Twin Falls	Joslin Field-Magic	08 / 26	Runway 08 (100%, 0%, 0%)	Full	Yes
	Valley Regional	00,20	Runway 26 (100%, 0%, 0%)	Full	Yes
		12/30	Runway 12 (100%, 0%, 0%)	Full	Yes
		,	Runway 30 (20%, 80%, 0%)	Partial	No
		F	REGIONAL		
Caldwell	Caldwell Industrial	12 / 30	Runway 12 (100%, 0%, 0%)	Full	Yes
		,	Runway 13 (100%, 0%, 0%)	Full	Yes
Coeur D'Alene	Coeur D'Alene -	06 / 24	Runway 06 (100%, 0%, 0%)	Full	Yes
	Pappy Boyington	,	Runway 24 (100%, 0%, 0%)	Full	Yes
	Field	02 / 20	Runway 02 (100%, 0%, 0%)	Full	Yes
		,	Runway 20 (90%, 0%, 10%)	Partial	No
Driggs	Driggs-Reed	04 / 22	Runway 04 (70%, 0%, 30%)	Partial	No
	Memorial	(Asphalt)	Runway 22 (50%, 0%, 50%)	Partial	No
		04/22	Runway 04 (N/P)	N/P	No
		(Turf)	Runway 22 (N/P)	N/P	No
		· · ·	LOCAL	.,,,	110
Blackfoot	McCarley Field	01/19	Runway 01 (10%, 0%, 90%)	Partial	No
		01/10	Runway 19 (0%, 0%, 100%)	None	No
Bonners Ferry	Boundary County	02 / 20	Runway 02 (50%, 0%, 50%)	Partial	No
			Runway 20 (10%, 0%, 90%)	Partial	No
Burley		02 / 20 06 / 24	Runway 02 (N/P)	N/P	No
			Runway 20 (N/P)	N/P	No
			Runway 06 (N/P)	N/P	No
			Runway 24 (N/P)	N/P	No
Cascade	Cascade	12 / 30	Runway 12 (95%, 0%, 5%)	Partial	No
	Cubbuuc	12,00	Runway 30 (100%, 0%, 0%)	Full	Yes
Gooding	Gooding Municipal	07 / 25	Runway 07 (100%, 0%, 0%)	Full	Yes
	0	,	Runway 25 (95%, 0%, 5%)	Partial	No
Grangeville	Idaho County	08/26	Runway 08 (67%, 33%, 0%)	Partial	No
		-,	Runway 26 (100%, 0%, 0%)	Full	Yes
Jerome	Jerome County	09 / 27	Runway 09 (100%, 0%, 0%)	Full	Yes
	,		Runway 27 (100%, 0%, 0%)	Full	Yes
McCall	McCall Municipal	16/34	Runway 16 (100%, 0%, 0%)	Full	Yes
		/	Runway 34 (0%, 100%, 0%)	Full	Yes
Mountain	Mountain Home	10/28	Runway 10 (85%, 0%, 15%)	Partial	No
Home	Municipal	,	Runway 28 (90%, 0%, 10%)	Partial	No
Nampa	Nampa Municipal	11/29	Runway 11 (50%, 0%, 50%)	Partial	No
		,	Runway 29 (95%, 0%, 5%)	Partial	No
				, artiar	110

SYSTEM PLAN UPDATE

ASSOCIATED			Runway RPZ Control (Owned,	Level of	Meets
CITY	Airport	Runway	Easement, Uncontrolled [%])	Control	Objective
Preston	Preston	03/21	Runway 03 (100%, 0%, 0%)	Full	Yes
			Runway 21 (100%, 0%, 0%)	Full	Yes
Rexburg	Rexburg-Madison	17 / 35	Runway 17 (65%, 0%, 35%)	Partial	No
	County		Runway 35 (80%, 0%, 20%)	Partial	No
Salmon	Lemhi County	17 / 35	Runway 17 (100%, 0%, 0%)	Full	Yes
			Runway 35 (78%, 22%, 0%)	Full	Yes
Sandpoint	Sandpoint	02 / 20	Runway 02 (60%, 0%, 40%)	Partial	No
			Runway 20 (40%, 0%, 60%)	Partial	No
St. Maries	St Maries	10/28	Runway 10 (N/P)	N/P	No
	Municipal		Runway 28 (N/P)	N/P	No
Weiser	Weiser Municipal	12/30	Runway 12 (40%, 60%, 0%)	Partial	No
			Runway 30 (75%, 0%, 25%)	Partial	No
	2		BASIC		
Aberdeen	Aberdeen	07 / 25	Runway 07 (5%, 0%, 90%)	Partial	No
	Municipal		Runway 25 (50%, 0%, 50%)	Partial	No
Arco	Arco-Butte County	06 / 24	Runway 06 (0%, 0%, 100%)	None	No
			Runway 24 (0%, 0%, 100%)	None	No
Buhl	Buhl Municipal	09 / 27	Runway 09 (100%, 0%, 0%)	Full	Yes
			Runway 27 (80%, N/P%, N/P%)	Partial	No
Challis	Challis	17 / 35	Runway 17 (100%, 0%, 0%)	Full	Yes
			Runway 35 (100%, 0%, 0%)	Full	Yes
Council	Council Municipal	17 / 35	Runway 17 (100%, 0%, 0%)	Full	Yes
			Runway 35 (100%, 0%, 0%)	Full	Yes
Homedale	Homedale	13/31	Runway 13 (20%, 0%, 80%)	Partial	No
	Municipal		Runway 31 (0%, 0%, 100%)	None	No
Kamiah	Kamiah Municipal	14 / 32	Runway 14 (N/P) Runway 32 (N/P)	N/P	No
- Kallana		07/25		N/P	No
Kellogg	Shoshone County	07 / 25	Runway 07 (100%, 0%, 0%) Runway 25 (100%, 0%, 0%)	Full	Yes
Orofina	Onofine Municipal	00 / 27		Full	Yes
Orofino	Orofino Municipal	09 / 27	Runway 09 (100%, 0%, 0%) Runway 27 (100%, 0%, 0%)	Full	Yes
Daria	Poor Lake County	10/20		Full Partial	Yes
Paris	Bear Lake County	10/28	Runway 10 (100%, 0%, 0%) Runway 28 (30%, 0%, 70%)	Partial Partial	No No
		16/34		Full	
			Runway 16 (100%, 0%, 0%) Runway 34 (100%, 0%, 0%)		No Yes
Driggt Diver	Priest River	01/19	Runway 01 (90%, 0%, 10%)	Full Partial	
Priest River	Municipal	01/19	Runway 01 (90%, 0%, 10%) Runway 19 (95%, 0%, 5%)		No
	wunicipal		Kuliway 15 (3576, 076, 576)	Partial	No



ASSOCIATED			Runway RPZ Control (Owned,	Level of	Meets
CITY	Airport	Runway	Easement, Uncontrolled [%])	Control	Objective
			UTILITY		
American Falls	American Falls	03/21	Runway 03 (75%, 0%, 25%)	Partial	No
			Runway 21 (100%, 0%, 0%)	Full	Yes
Emmett	Emmett Municipal	10/28	Runway 10 (15%, 0%, 85%)	Partial	No
			Runway 28 (40%, 0%, 60%)	Partial	No
Malad City	Malad City	16/34	Runway 16 (0%, 0%, 100%)	None	No
			Runway 34 (0%, 0%, 100%)	None	No
		09 / 27	Runway 09 (0%, 0%, 100%)	None	No
			Runway 27 (0%, 0%, 100%)	None	No
Mud Lake	Mud Lake/West	02 / 20	Runway 02 (0%, 0%, 100%)	None	No
	Jefferson County		Runway 20 (0%, 0%, 100%)	None	No
Payette	Payette Municipal	13/31	Runway 13 (50%, 0%, 50%)	Partial	No
			Runway 31 (50%, 0%, 50%)	Partial	No
Rigby	Rigby	01/19	Runway 01 (75%, 0%, 25%)	Partial	No
			Runway 19 (50%, 0%, 50%)	Partial	No
Soda Springs	Allen H Tigert	16/34	Runway 16 (N/P)	N/P	No
			Runway 34 (N/P)	N/P	No
		13/31	Runway 13 (N/P)	N/P	No
			Runway 31 (N/P)	N/P	No
St. Anthony	Stanford Field	04 / 22	Runway 04 (N/P)	N/P	No
			Runway 22 (N/P)	N/P	No
	· ·		GENERAL		
Bancroft	Bancroft Municipal	07 / 25	Runway 07 (N/P)	N/P	No
	-		Runway 25 (N/P)	N/P	No
Carey	Carey	08 / 26	Runway 08 (N/P)	N/P	No
		4444 / 2004	Runway 26 (N/P)	N/P	No
Coeur D'Alene	Brooks SPB	11W / 29W	Runway 11W (N/P) Runway 29W (N/P)	N/P	No
		45144 / 22144		N/P	No
		15W / 33W	Runway 15W (N/P) Runway 33W (N/P)	N/P	No
Catternue a d	Cattanuna al	07/25		N/P	No
Cottonwood	Cottonwood Municipal	07 / 25	Runway 07 (0%, 0%, 100%) Runway 25 (0%, 0%, 100%)	None	No
Croismont		07/25		None	No
Craigmont	Craigmont Municipal	07 / 25	Runway 07 (0%, 0%, 100%) Runway 25 (0%, 0%, 100%)	None None	No
	•	17/25	, , , , ,	None N/P	No
Downey	Downey/Hyde Memorial	17 / 35	Runway 17 (N/P) Runway 35 (N/P)	N/P N/P	No
Dubois	Dubois Municipal	16/34	Runway 16 (0%, 0%, 100%)	None	No
		10/ 54	Runway 16 (0%, 0%, 100%) Runway 34 (0%, 0%, 100%)	None	
			Kanway 3 1 (670, 670, 10070)	NOUL	No

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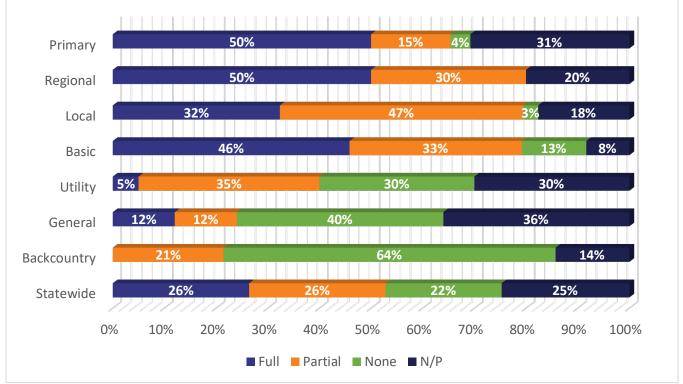
ASSOCIATED			Runway RPZ Control (Owned,	Level of	Meets
CITY	Airport	Runway	Easement, Uncontrolled [%])	Control	Objective
Fairfield	Camas County	08 / 26	Runway 08 (0%, 0%, 100%)	None	No
	,		Runway 26 (0%, 0%, 100%)	None	No
Garden Valley	Garden Valley	10/28	Runway 10 (0%, 0%, 100%)	None	No
			Runway 28 (0%, 0%, 100%)	None	No
Glenns Ferry	Glenns Ferry	08 / 26	Runway 08 (N/P)	N/P	No
	Municipal		Runway 26 (N/P)	N/P	No
Hazelton	Hazelton Municipal	06 / 24	Runway 06 (100%, 0%, 0%)	Full	Yes
			Runway 24 (100%, 0%, 0%)	Full	Yes
Howe	Howe	13/31	Runway 13 (N/P)	N/P	No
			Runway 31 (N/P)	N/P	No
Kooskia	Kooskia Municipal	14/32	Runway 14 (100%, 0%, 0%)	Full	Yes
			Runway 32 (100%, 0%, 0%)	Full	Yes
Leadore	Leadore	11/29	Runway 11 (0%, 0%, 100%)	None	No
			Runway 29 (0%, 0%, 100%)	None	No
		16/34	Runway 16 (0%, 0%, 100%)	None	No
			Runway 34 (0%, 0%, 100%)	None	No
Lewiston	Snake River SPB	N / S	Runway N (100%, 0%, 0%)	Full	Yes
			Runway S (100%, 0%, 0%)	Full	Yes
Mackay	Mackay	12 / 30	Runway 12 (15%, 0%, 85%)	Partial	No
			Runway 30 (25%, 0%, 75%)	Partial	No
Midvale	Lee Williams Memorial	08 / 26	Runway 08 (0%, 0%, 100%)	None	No
		10 / 00	Runway 26 (0%, 0%, 100%)	None	No
Murphy	Murphy	12 / 30	Runway 12 (0%, 0%, 100%) Runway 30 (0%, 0%, 100%)	None	No
	Nerven	15 / 22		None	No
Nezperce	Nezperce Municipal	15 / 33	Runway 15 (N/P) Runway 33 (N/P)	N/P	No
Oaklay	Oakley Municipal	17 / 35	Runway 17 ((N/P)	N/P N/P	No
Oakley	Oakley Mullicipal	17/55	Runway 35 (N/P)	N/P	No No
Parma	Parma	12 / 30	Runway 12 (10%, 0%, 90%)	Partial	No
	i di fild	12/30	Runway 30 (10%, 0%, 90%)	Partial	No
Rockford	Rockford Municipal	16/34	Runway 16 (15%, 0%, 85%)	Partial	No
		10/01	Runway 34 (0%, 0%, 100%)	None	No
Stanley	Stanley	17 / 35	Runway 17 (20%, 0%, 80%)	Partial	No
	1	,	Runway 35 (0%, 0%, 100%)	None	No
		RA	CKCOUNTRY	_	
Big Creek	Big Creek	01 / 19	Runway 01 (0%, 0%, 100%)	None	No
		01,10	Runway 19 (0%, 0%, 100%)	None	No
Coolin	Cavanaugh Bay	15 / 33	Runway 15 (0%, 0%, 100%)	None	No
			Runway 33 (0%, 0%, 100%)	None	No



ASSOCIATED CITY	Airport	Runway	Runway RPZ Control (Owned, Easement, Uncontrolled [%])	Level of Control	Meets Objective
Donnelly	Donald D. Coski Memorial	18/36	Runway 18 (N/P) Runway 36 (N/P)	N/P N/P	No No
Galena	Smiley Creek	14/32	Runway 14 (0%, 0%, 100%) Runway 32 (0%, 0%, 100%)	None None	No No
Porthill	Eckhart International	15 / 33	Runway 15 (50%, 0%, 50%) Runway 33 (0%, 0%, 100%)	Partial None	No No
Stanley	Thomas Creek	03 / 21	Runway 03 (10%, 0%, 90%) Runway 21 (50%, 0%, 50%)	Partial Partial	No No
Yellow Pine	Johnson Creek	17 / 35	Runway 17 (0%, 0%, 100%) Runway 35 (0%, 0%, 100%)	None None	No No

Source: Airport Inventory and Data Survey Forms, 2019

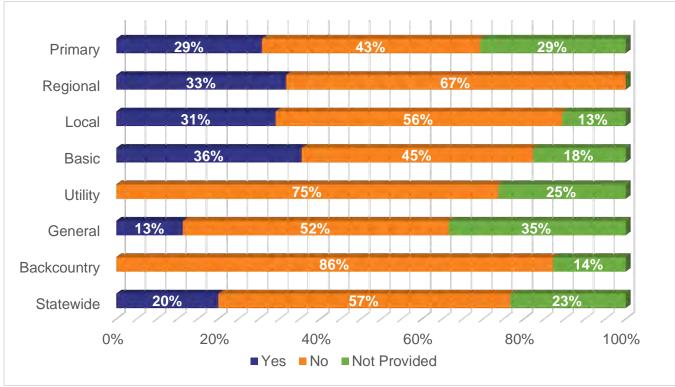
#### FIGURE 5-24: SAFETY AND SECURITY – LEVEL OF CONTROL BY INDIVIDUAL RUNWAY END



Note: Data was available for 58 airports with 67 runways to conduct this analysis. Of all responsive airports, 47 indicated full control over one or more of their runway ends, 47 indicated partial control over one or more of their runway ends, and airports have no control over 40 of these runway ends. Source: Airport Inventory and Data Survey Forms, 2019







Note: Data was available for 58 airports to conduct this analysis. Fifteen airports indicated full control over all runway end RPZs while 43 airports reported either partial or no control. As a result, 26 percent of responsive airports report full control over all runway end RPZs to comply with this measure. Source: Airport Inventory and Data Survey Forms, 2019

#### PI: Percent of Airports with WHAs or WHMPs

Wildlife can present serious safety risks to airport operations, potentially endangering aircraft and their occupants. While birds are the primary offender, mammals and reptiles can also pose significant threats. This is especially true due to the rural nature of many airports in Idaho.

While airport fencing is the primary means of preventing wildlife from entering the airfield, not all wildlife can be kept out with fencing, nor does every airport in the system employ a full perimeter wildlife fence. Because animals are attracted to areas that reflect their natural habitat or areas that provide food and water, airports can control their land use and landscaping to minimize potential animal attractants. Airports can also perform wildlife hazard site visits to understand what potential threats exist for their airport or develop WHAs or WHMPs to develop a strategy for mitigating against these hazards. The FAA requires that Part 139-certified airports conduct a WHA when certain qualifying events occur, such as when an air carrier experiences multiple or substantial wildlife strikes. The FAA then uses the WHA to determine if the airport is required to develop a WHMP base on the level of risk identified at the facility. While required for some facilities, a WHA is encouraged for all airports. To assess this PI, data was collected statewide through Airport Inventory and Data Survey Forms to determine which airports have completed WHAs and/or WHMPs.

**Figure 5-26** indicates that only 20 percent of system airports reported either a WHA or WHMP in the 2020 IASP Update. One hundred percent of Primary airports and 67 percent of Regional airports reported having adopted a WHA or WHMP. Airport-specific results are presented in **Table 5-11**. This PI was not analyzed in the prior 2010 IASP.



TABLE 5	5-11: SAFETY AND SECURITY – AIRPORTS WI	<u>TH A WHA A</u>		<u>1P</u>
ASSOCIATED CITY	Airport	FAA ID	WHA	WHMP
	PRIMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	Yes	Yes
Hailey	Friedman Memorial	SUN	Yes	Yes
Idaho Falls	Idaho Falls Regional	IDA	Yes	Yes
Lewiston	Lewiston-Nez Perce County	LWS	Yes	Yes
Pocatello	Pocatello Regional	PIH	Yes	Yes
Pullman	Pullman-Moscow Regional	PUW	Yes	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Yes
	REGIONAL			
Caldwell	Caldwell Industrial	EUL	Yes	Yes
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes	Yes
Driggs	Driggs-Reed Memorial	DIJ	No	No
	LOCAL			
Blackfoot	McCarley Field	U02	Yes	Yes
Bonners Ferry	Boundary County	65S	No	No
Burley	Burley Municipal	BYI	Yes	Yes
Cascade	Cascade	U70	Yes	Yes
Gooding	Gooding Municipal	GNG	No	No
Grangeville	Idaho County	GIC	No	No
Jerome	Jerome County	JER	No	No
McCall	McCall Municipal	MYL	Yes	No
Mountain Home	Mountain Home Municipal	U76	No	No
Nampa	Nampa Municipal	MAN	Yes	Yes
Preston	Preston	U10	N/P	N/P
Rexburg	Rexburg-Madison County	RXE	N/P	N/P
Salmon	Lemhi County	SMN	No	No
Sandpoint	Sandpoint	SZT	Yes	Yes
St. Maries	St Maries Municipal	S72	N/P	N/P
Weiser	Weiser Municipal	S87	No	No
	BASIC			
Aberdeen	Aberdeen Municipal	U36	No	No
Arco	Arco-Butte County	AOC	No	No
Buhl	Buhl Municipal	U03	No	No
Challis	Challis	LLJ	No	No
Council	Council Municipal	U82	No	No
Homedale	Homedale Municipal	S66	No	No
Kamiah	Kamiah Municipal	S73	N/P	N/P
Kellogg	Shoshone County	S83	Yes	No
Orofino	Orofino Municipal	S68	No	No

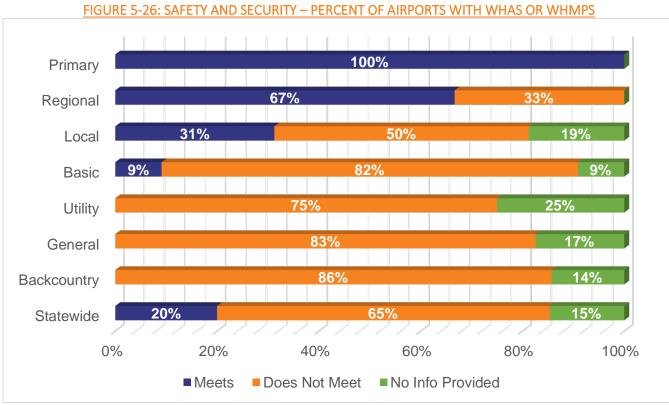


ASSOCIATED CITY	Airport	FAA ID	WHA	WHMP
Paris	Bear Lake County	1U7	No	No
Priest River	Priest River Municipal	1S6	No	No
	UTILITY			
American Falls	American Falls	U01	No	No
Emmett	Emmett Municipal	S78	No	No
Malad City	Malad City	MLD	No	No
Mud Lake	Mud Lake/West Jefferson County	1U2	No	No
Payette	Payette Municipal	S75	No	No
Rigby	Rigby	U56	No	No
Soda Springs	Allen H Tigert	U78	N/P	N/P
St. Anthony	Stanford Field	U12	N/P	N/P
	GENERAL			
Bancroft	Bancroft Municipal	U51	N/P	N/P
Carey	Carey	U65	No	No
Coeur D'Alene	Brooks SPB	S76	N/P	N/P
Cottonwood	Cottonwood Municipal	S84	No	No
Craigmont	Craigmont Municipal	S89	No	No
Downey	Downey/Hyde Memorial	U58	N/P	N/P
Dubois	Dubois Municipal	U41	No	No
Fairfield	Camas County	U86	No	No
Garden Valley	Garden Valley	U88	No	No
Glenns Ferry	Glenns Ferry Municipal	U89	No	No
Hazelton	Hazelton Municipal	U94	No	No
Howe	Howe	U97	No	No
Kooskia	Kooskia Municipal	S82	No	No
Leadore	Leadore	U00	No	No
Lewiston	Snake River SPB	78U	No	No
Mackay	Mackay	U62	No	No
Midvale	Lee Williams Memorial	0U9	No	No
Murphy	Murphy	1U3	No	No
Nezperce	Nezperce Municipal	0S5	No	No
Oakley	Oakley Municipal	1U6	N/P	N/P
Parma	Parma	50S	No	No
Rockford	Rockford Municipal	2U4	No	No
Stanley	Stanley	2U7	No	No
	BACKCOUNTRY			
Big Creek	Big Creek	U60	No	No
Coolin	Cavanaugh Bay	66S	No	No
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P
Galena	Smiley Creek	U87	No	No



ASSOCIATED CITY	Airport	FAA ID	WHA	WHMP			
Porthill	Eckhart International	1S1	No	No			
Stanley	Thomas Creek	2U8	No	No			
Yellow Pine	Johnson Creek	3U2	No	No			
Comment Almont Incomment Duty Comment 2010							

Source: Airport Inventory and Data Survey Forms, 2019



Note: 64 airports provided data for this analysis, 15 of which reported having a WHA, WHMP, or both (23 percent of responsive airports). Source: Airport Inventory and Data Survey Forms, 2019

### **Goal: Economic Support**

Airports play an important role in promoting economic activity in Idaho and provide a critical competitive advantage in today's global economy. In fact, airports are the key infrastructure component to the multibillion-dollar air cargo industry and are used to provide gateways between local markets in the state and across the world. Businesses in Idaho and across the U.S. regularly report that the presence of an airport network is a critical factor in their relocation and expansion decisions. The ability to attract new businesses or retain existing businesses can be highly competitive, and a robust airport network is vital to providing these businesses with the connectivity they need to thrive. In addition to business activity, a large portion of visitors to Idaho arrive through commercial service and GA airports. These visitors, whether visiting on business or leisure, greatly contribute to the overall economic vitality of the state.

Based on the multitude of significant economic impacts provided by the aviation industry, investing in and maintaining Idaho's airports provides a significant return on investment for Idaho's residents and businesses. The following PMs, PIs, and AA points are used to evaluate the system for its ability to adequately support the state's economy.



### **Performance Measures**

- Percent of population and land area within a 30-minute drive time of an airport capable of meeting business user needs (5,000-foot runway [minimum], jet fuel, instrument approach)
- → Percent of airports that accommodate aerial application services

### **Performance Indicators**

- → Percent of airports accommodating Instrument Flight Rules (IFR) operations from outside Idaho
- → Percent of airports with air cargo/freight activities including small operators

### **Additional Analysis**

- Percent of businesses with the propensity to use aviation within a 30-minute drive time of a system airport
- Percent of population and land area within a 30-minute drive time of an airport with a precision or performance-based navigation (PBN) approach
- → Recreational areas served by "Portal" airports

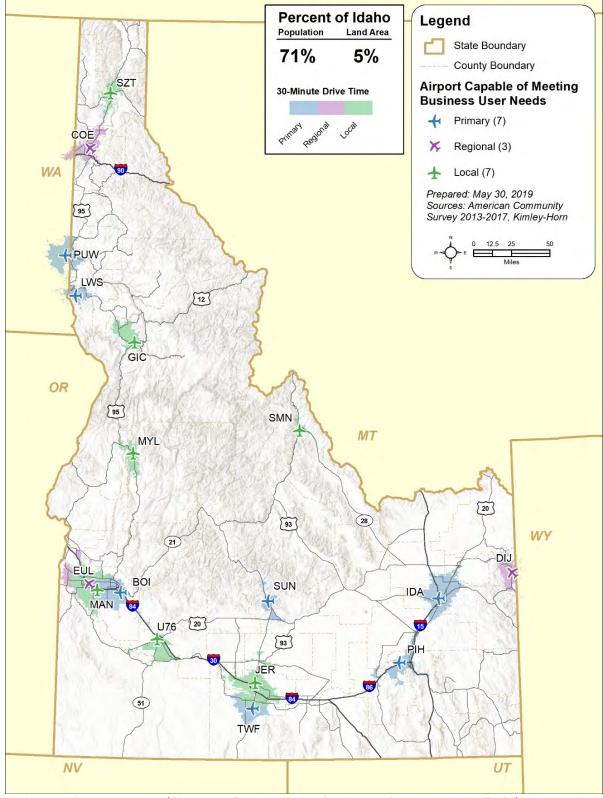
### PM: Percent of Population and Land Area Within a 30-minute Drive Time of an Airport Capable of Meeting Business User Needs (5,000-foot Runway, Jet Fuel, Instrument Approach)

Airports able to support business and corporate aviation is an important indicator of the health of the local and regional economy. Business aircraft typically require specific facilities and infrastructure to support their aircraft's operational needs. For the purposes of this analysis, airports that have at least a 5,000-foot-long runway, an instrument approach, and jet fuel available are considered able to support business users' needs. While the analysis utilizes 5,000 feet as a baseline, depending on elevation and/or the hot temperatures in some areas, this runway length may not be able to support larger business aircraft, as they may require even more length given the local conditions.

During the airport inventory effort, airports confirmed the length of their runways and provided updated information regarding fuel availability. A review of published instrument approach procedures (IAPs) was also conducted to determine which airports had at least a non-precision approach available. As indicated in **Figure 5-27**, 71 percent of Idaho's population and five percent of the state land area are within a 30-minute drive time of an airport capable of meeting business user needs as defined by the 2020 IASP Update. **Table 5-12** provides a detailed breakdown of the corporate- and business-aviation-dependent infrastructure and services available at each system airport. **Figure 5-28** provides a statewide summary of each airport classification's ability to meet business user needs. When compared to the 2010 IASP, the only additional airport now capable of meeting business user needs to 23 percent as compared to 21 percent in 2010. All airports that achieve this measure are classified as Primary, Regional, or Local.



### FIGURE 5-27: ECONOMIC SUPPORT – POPULATION AND LAND AREA WITHIN A 30-MINUTE DRIVE TIME OF AN AIRPORT CAPABLE OF MEETING BUSINESS USER NEEDS



Sources: Airport Inventory and Data Survey Forms, 2019; American Community Survey 2013-2017; Kimley-Horn, 2019



TADLE	5-12: ECONOMIC SUPPORT	- AIRPURI	<b>SACHIEVEIVIEIN</b>	T OF FACILITY AND	SERVICE CRI	
ASSOCIATED			Fuel	Best Available	Longest	Meets
CITY	Airport	FAA ID	Availability	Approach	RW (feet)	Objective
		F	PRIMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	100 LL, Jet A	Precision	10,000'	Yes
Hailey	Friedman Memorial	SUN	100 LL, Jet A	PBN	7,550'	Yes
Idaho Falls	Idaho Falls Regional	IDA	100 LL, Jet A	Precision	9,001'	Yes
Lewiston	Lewiston-Nez Perce County	LWS	100 LL, Jet A	Precision	6,511'	Yes
Pocatello	Pocatello Regional	PIH	100 LL, Jet A	Precision	9,060'	Yes
Pullman	Pullman-Moscow Regional	PUW	100 LL, Jet A	PBN	6,730'	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF	100 LL, Jet A	Precision	8,703'	Yes
		R	EGIONAL			
Caldwell	Caldwell Industrial	EUL	100 LL, Jet A	PBN	5,500'	Yes
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	100 LL, Jet A	Precision	7,400'	Yes
Driggs	Driggs-Reed Memorial	DIJ	100 LL, Jet A	PBN	7,300'	Yes
						LOCAL
Blackfoot	McCarley Field	U02	100 LL	PBN	4,311'	No
Bonners Ferry	Boundary County	65S	100 LL, Jet A	PBN	4,002'	No
Burley	Burley Municipal	BYI	100 LL, Jet A	PBN	4,092'	No
Cascade	Cascade	U70	100 LL, Jet A	Visual	4,300'	No
Gooding	Gooding Municipal	GNG	100 LL, Jet A	PBN	4,745'	No
Grangeville	Idaho County	GIC	100 LL, Jet A	PBN	5,100'	Yes
Jerome	Jerome County	JER	100 LL, Jet A	PBN	5,000'	Yes
McCall	McCall Municipal	MYL	100 LL, Jet A	PBN	6,108'	Yes
Mountain Home	Mountain Home Municipal	U76	100 LL, Jet A	PBN	5,000'	Yes
Nampa	Nampa Municipal	MAN	100 LL, Jet A, MoGas, Ethanol Free	PBN	5,000'	Yes
Preston	Preston	U10	100 LL	Visual	3,457'	No
Rexburg	Rexburg-Madison County	RXE	100 LL, Jet A	PBN	4,204'	No
Salmon	Lemhi County	SMN	100 LL, Jet A	PBN	5,510'	Yes
Sandpoint	Sandpoint	SZT	100 LL, Jet A	PBN	5,501'	Yes
St. Maries	St Maries Municipal	S72	100 LL	Visual	3,354'	No
Weiser	Weiser Municipal	S87	100 LL	PBN	4,000'	No



ASSOCIATED			Fuel	Best Available	Longest	Meets
CITY	Airport	FAA ID	Availability	Approach	RW (feet)	Objective
			BASIC			
Aberdeen	Aberdeen Municipal	U36	None	Visual	3,690'	No
Arco	Arco-Butte County	AOC	100 LL	PBN	6,610'	No
Buhl	Buhl Municipal	U03	100 LL, MoGas	Visual	3,898'	No
Challis	Challis	LLJ	100 LL, Jet A	Visual	4,600'	No
Council	Council Municipal	U82	100 LL	Visual	3,600'	No
Homedale	Homedale Municipal	S66	None	Visual	2,901'	No
Kamiah	Kamiah Municipal	S73	None	Visual	3,000'	No
Kellogg	Shoshone County	S83	100 LL	Visual	5,316'	No
Orofino	Orofino Municipal	S68	100 LL	Visual	2,500'	No
Paris	Bear Lake County	1U7	100 LL	PBN	5,728'	No
Priest River	Priest River Municipal	1S6	None	Visual	2,950'	No
			UTILITY			
American Falls	American Falls	U01	100 LL	Visual	4,900'	No
Emmett	Emmett Municipal	S78	100 LL	Visual	3,307'	No
Malad City	Malad City	MLD	100 LL	Visual	5,000'	No
Mud Lake	Mud Lake/West Jefferson County	1U2	100 LL, Jet A	Visual	3,300'	No
Payette	Payette Municipal	S75	100 LL, Ethanol Free	Visual	3,000'	No
Rigby	Rigby	U56	100 LL	Visual	3,727'	No
Soda Springs	Allen H Tigert	U78	100 LL	Visual	3,500'	No
St. Anthony	Stanford Field	U12	100 LL, Jet A	Visual	4,500'	No
		(	GENERAL			
Bancroft	Bancroft Municipal	U51	None	Visual	3,280'	No
Carey	Carey	U65	None	Visual	2,650'	No
Coeur D'Alene	Brooks SPB	S76	100LL	Visual	15,000'	No
Cottonwoo d	Cottonwood Municipal	S84	None	Visual	3,100'	No
Craigmont	Craigmont Municipal	S89	None	Visual	2,800'	No
Downey	Downey/Hyde Memorial	U58	None	Visual	3,550'	No
Dubois	Dubois Municipal	U41	None	Visual	4,600'	No
Fairfield	Camas County	U86	None	Visual	2,950'	No
Garden Valley	Garden Valley	U88	None	Visual	3,850'	No
Glenns Ferry	Glenns Ferry Municipal	U89	None	Visual	3,050'	No

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ASSOCIATED			Fuel	Best Available	Longest	Meets
CITY	Airport	FAA ID	Availability	Approach	RW (feet)	Objective
Hazelton	Hazelton Municipal	U94	None	Visual	2,800'	No
Howe	Howe	U97	None	Visual	3,800'	No
Kooskia	Kooskia Municipal	S82	None	Visual	1,900'	No
Leadore	Leadore	U00	None	Visual	3,500'	No
Lewiston	Snake River SPB	78U	None	Visual	3,000'	No
Mackay	Mackay	U62	None	Visual	4,389'	No
Midvale	Lee Williams Memorial	0U9	None	Visual	2,800'	No
Murphy	Murphy	1U3	None	Visual	2,500'	No
Nezperce	Nezperce Municipal	0S5	None	Visual	2,400'	No
Oakley	Oakley Municipal	1U6	None	Visual	3,795'	No
Parma	Parma	50S	None	Visual	2,700'	No
Rockford	Rockford Municipal	2U4	None	Visual	2,800'	No
Stanley	Stanley	2U7	None	Visual	4,300'	No
		BAC	CKCOUNTRY			
Big Creek	Big Creek	U60	None	Visual	3,550'	No
Coolin	Cavanaugh Bay	66S	None	Visual	3,100'	No
Donnelly	Donald D. Coski Memorial	U84	None	Visual	2,500'	No
Galena	Smiley Creek	U87	None	Visual	4,900'	No
Porthill	Eckhart International	1S1	None	Visual	3,650'	No
Stanley	Thomas Creek	2U8	None	Visual	2,100'	No
Yellow Pine	Johnson Creek	3U2	None	Visual	3,400'	No

Source: Airport Inventory and Data Survey, 2019



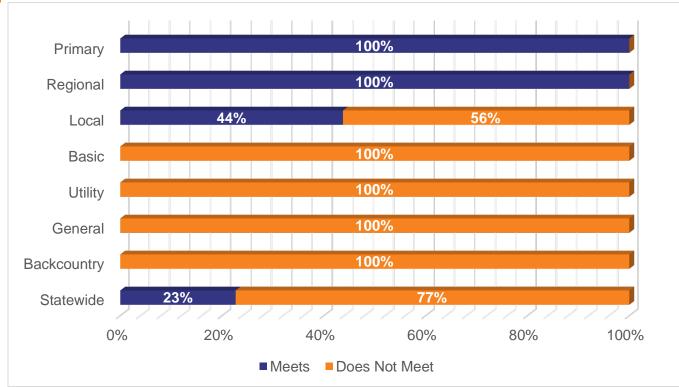


FIGURE 5-28: ECONOMIC SUPPORT - PERCENT OF AIRPORTS CAPABLE OF MEETING BUSINESS USER NEEDS

Source: Airport Inventory and Data Survey Forms, 2019

#### PM: Percent of Airports that Accommodate Aerial Application Services

According to the Idaho Department of Agriculture, the agricultural industry accounts for 20 percent of the state's overall gross state product (GSP), making it the largest contributor to the state's economy.<sup>7</sup> Aerial application services or agricultural spraying is an essential aviation activity in Idaho, especially within the agricultural production regions of the state. Specially equipped aircraft spray pesticides or fertilizers over designated agricultural areas to protect crops from pests and diseases. Aerial application aircraft can also be converted to support forest fire fighting operations when needed. Therefore, it is important that the aviation system support these aircraft and the associated industries they serve by accommodating aerial application operations.

During the inventory process, airports were asked if they accommodate aerial application activities. Figure 5-29 geographically depicts the airports that reported aerial application operations. This figure also depicts the state's cultivated crop land as provided by the U.S. Department of Agriculture Farm Service Agency (USDA FSA).<sup>8</sup> Additionally, airport managers were asked about the frequency in which aerial application activities were occurring at their facilities. Responses are listed in Table 5-13 for each 2020 IASP Update airport and reported in Figure 5-30 by statewide airport classification totals.

Statewide, 55 percent of all airports reported some level of aerial application activity. Local airports report the highest frequency of aerial activity, with 38 percent of facilities reporting that it occurs daily. Approximately one-third of Primary and one-fourth of Utility and General airports report daily aerial application operations. Just 14 and 18 percent of Backcountry and Basic airports (respectively) report daily operations; this is likely attributed to the facilities and services requirements of the aircraft involved, such as the Air Tractor described above. Given this

<sup>&</sup>lt;sup>7</sup> Idaho State Department of Agriculture. (no date). *About Idaho Agriculture*. Available online at agri.idaho.gov/main/about/about-idaho-agriculture/ (accessed June 2019).

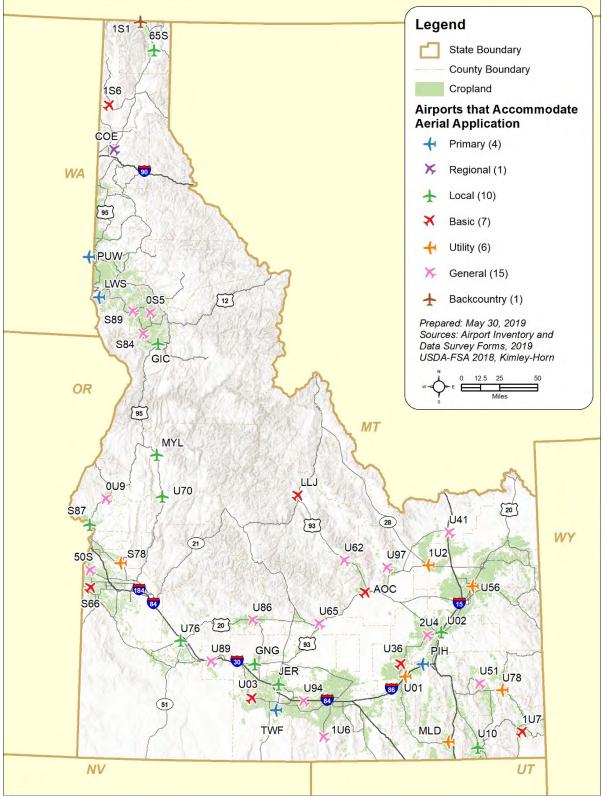
<sup>&</sup>lt;sup>8</sup> USDA-FSA, 2018.



consideration, it is noteworthy that no Local airports reported daily operations, although 63 percent do support aerial application operations either weekly or monthly. Overall, the highest percentage of Utility airports reported some level of activity, with 76 percent of facilities supporting aerial application activities either daily, weekly, or monthly. The ubiquity of aerial application across Idaho and the frequency at which it occurs at Idaho's airports underscores the important role of airports in the state's prosperous agricultural economy. Airports' overall performance against this measure has increased by eight percent since the 2010 IASP, at which time 47 percent of facilities reported some frequency of aerial application activity.



FIGURE 5-29: ECONOMIC SUPPORT – AIRPORTS THAT ACCOMMODATE AERIAL APPLICATION SERVICES



Source: Airport Inventory and Data Survey Forms, 2019; USDA-FSA, 2018; Kimley-Horn, 2019



	CONOMIC SUPPORT – AIRPORTS THAT ACCO	MMODATE /		ERVICES
ASSOCIATED	<b>.</b> .		Aerial Application	_
CITY	Airport PRIMARY	FAA ID	Activity	Frequency
Boise	Boise Air Terminal/Gowen Field	BOI	No	Never
Hailey	Friedman Memorial	SUN	No	Never
Idaho Falls	Idaho Falls Regional	IDA	N/P	N/P
Lewiston	Lewiston-Nez Perce County	LWS	Yes	Daily
Pocatello	Pocatello Regional	PIH	Yes	Monthly
Pullman	Pullman-Moscow Regional	PUW	Yes	Monthly
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes	Daily
	REGIONAL		103	Daily
Caldwell	Caldwell Industrial	EUL	No	Never
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes	Weekly
Driggs	Driggs-Reed Memorial	DIJ	No	Never
	LOCAL	DIJ	NO	Never
Blackfoot	McCarley Field	U02	N/P	N/P
Bonners Ferry	Boundary County	655	Yes	Daily
Burley	Burley Municipal	BYI	Yes	Daily
Cascade	Cascade	U70	Yes	Monthly
Gooding	Gooding Municipal	GNG	Yes	Daily
Grangeville	Idaho County	GIC	Yes	Monthly
Jerome	Jerome County	JER	Yes	Daily
McCall	McCall Municipal	MYL	Yes	Monthly
Mountain Home	Mountain Home Municipal	U76	Yes	Daily
Nampa	Nampa Municipal	MAN	No	Never
Preston	Preston	U10	Yes	Monthly
Rexburg	Rexburg-Madison County	RXE	No	Never
Salmon	Lemhi County	SMN	No	Never
Sandpoint	Sandpoint	SZT	No	Never
St. Maries	St Maries Municipal	S72	N/P	N/P
Weiser	Weiser Municipal	S87	Yes	Daily
Weiser	BASIC	507	103	Dully
Aberdeen	Aberdeen Municipal	U36	Yes	Daily
Arco	Arco-Butte County	AOC	Yes	Weekly
Buhl	Buhl Municipal	U03	Yes	Daily
Challis	Challis	LLJ	Yes	Monthly
Council	Council Municipal	U82	No	Never
Homedale	Homedale Municipal	S66	No	Never
Kamiah	Kamiah Municipal	S73	N/P	N/P
Kellogg	Shoshone County	S83	No	Never
Orofino	Orofino Municipal	S68	No	Never



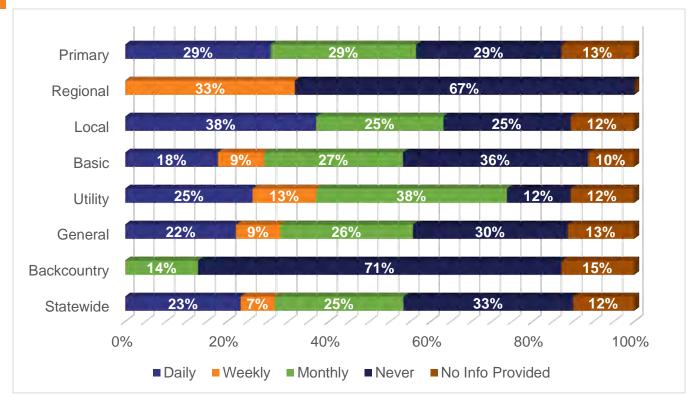
ASSOCIATED CITY	Airport	FAA ID	Aerial Application Activity	Frequency
Paris	Bear Lake County	1U7	Yes	Monthly
Priest River	Priest River Municipal	1S6	Yes	Monthly
	UTILITY			
American Falls	American Falls	U01	Yes	Monthly
Emmett	Emmett Municipal	S78	Yes	Weekly
Malad City	Malad City	MLD	Yes	Monthly
Mud Lake	Mud Lake/West Jefferson County	1U2	Yes	Daily
Payette	Payette Municipal	S75	No	Never
Rigby	Rigby	U56	Yes	Daily
Soda Springs	Allen H Tigert	U78	Yes	Monthly
St. Anthony	Stanford Field	U12	N/P	N/P
	GENERAL			
Bancroft	Bancroft Municipal	U51	Yes	Daily
Carey	Carey	U65	Yes	Monthly
Coeur D'Alene	Brooks SPB	S76	N/P	N/P
Cottonwood	Cottonwood Municipal	S84	Yes	Monthly
Craigmont	Craigmont Municipal	S89	Yes	Daily
Downey	Downey/Hyde Memorial	U58	No	Never
Dubois	Dubois Municipal	U41	Yes	Monthly
Fairfield	Camas County	U86	N/P	N/P
Garden Valley	Garden Valley	U88	No	Never
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	N/P
Hazelton	Hazelton Municipal	U94	Yes	Daily
Howe	Howe	U97	Yes	Weekly
Kooskia	Kooskia Municipal	S82	No	Never
Leadore	Leadore	U00	No	Never
Lewiston	Snake River SPB	78U	No	Never
Mackay	Mackay	U62	Yes	Monthly
Midvale	Lee Williams Memorial	0U9	Yes	Monthly
Murphy	Murphy	1U3	No	Never
Nezperce	Nezperce Municipal	0S5	Yes	Daily
Oakley	Oakley Municipal	1U6	Yes	Monthly
Parma	Parma	50S	Yes	Weekly
Rockford	Rockford Municipal	2U4	Yes	Daily
Stanley	Stanley	2U7	No	Never
	BACKCOUNTF	RY		
Big Creek	Big Creek	U60	No	Never
Coolin	Cavanaugh Bay	66S	No	Never
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P
Galena	Smiley Creek	U87	No	Never



ASSOCIATED CITY	Airport	FAA ID	Aerial Application Activity	Frequency
Porthill	Eckhart International	1S1	Yes	Monthly
Stanley	Thomas Creek	2U8	No	Never
Yellow Pine	Johnson Creek	3U2	No	Never

Source: Airport Inventory and Data Survey Forms, 2019

## FIGURE 5-30 :ECONOMIC SUPPORT – PERCENT OF AIRPORTS THAT ACCOMMODATE AERIAL APPLICATION SERVICES



Note: 66 airports provided data to conduct this analysis. Seventeen airports support aerial application services daily, five on a weekly basis, 19 on a monthly basis, and 25 reported that they never support this activity. Accordingly, 62 percent of responsive airports support some level aerial application services. Source: Airport Inventory and Data Survey Forms, 2019

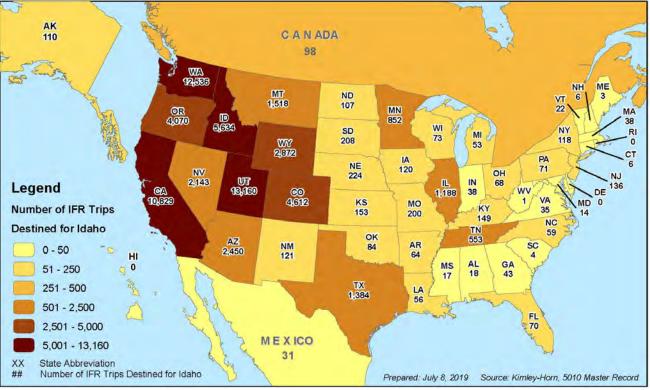


# PI: Percent of Airports Accommodating Instrument Flight Rules (IFR) Operations from Outside Idaho

IFR are a set of regulations that dictate how an aircraft should be operated when the pilot is unable to navigate using visual references under visual flight rules (VFR). The majority of IFR operations in Idaho, particularly those originating from outside Idaho, are attributable to airline, air cargo, and GA business aircraft. To identify the airports that provide the largest contribution to the national air transportation system and support business activity in the state, IFR arrivals for calendar year 2018 were calculated using GCR Airport IQ data. In this way, IFR arrivals from aircraft originating from out-of-state were used as a means to analyze each airport's level of support. Of note, this data source does not account for any IFR arrivals that occurred using aircraft with blocked tail numbers; as a result, the figures reported may be slightly lower than actual activity.

As shown in **Figure 5-31**, each U.S. state, Canada, and Mexico are depicted with the total number of 2018 out-ofstate IFR trips destined for Idaho. The number listed within Idaho (5,634) represents total intrastate IFR arrivals. **Figure 5-32** depicts the number of out-of-state IFR arrivals per 2020 IASP Update airport. **Table 5-14** lists out-ofstate IFR arrival activity for each airport. **Figure 5-33** provides a summary of this information by classification.

This analysis reveals that 72 percent of 2020 IASP Update airports experienced at least one IFR arrival during the 2018 calendar year. All Primary, Regional, Local, and Utility airports experienced at least one IFR arrival from outof-state. This type of activity occurred at 91 percent of Basic, 72 percent of Backcountry, and 26 percent of General airports. Statewide, this is a 27 percent increase over the past decade: The 2010 IASP indicated that 45 percent of all airports accommodated IFR operations from out-of-state origins.

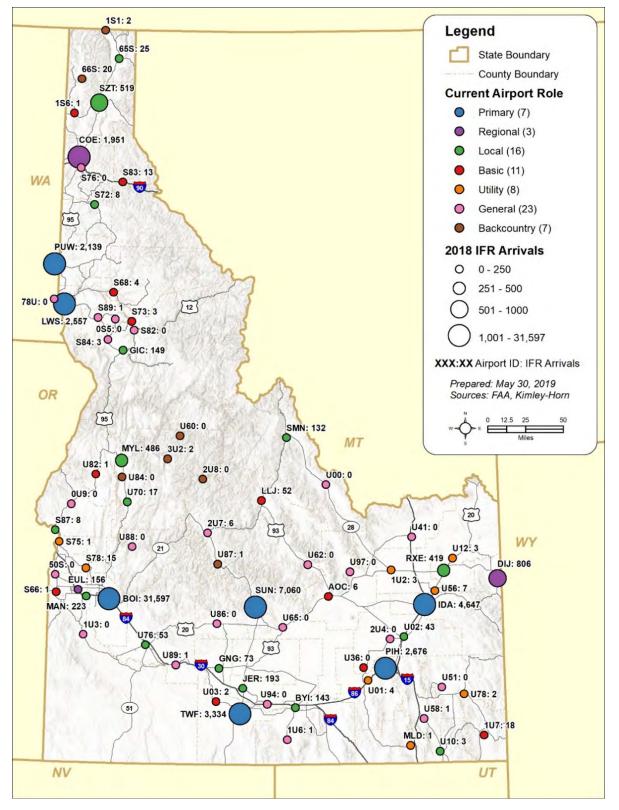


#### FIGURE 5-31: NUMBER OF IFR OPERATIONS DESTINED FOR IDAHO FROM U.S. STATE, CANADA, AND MEXICO

Sources: Kimley-Horn, 2019; GCR Airport IQ IRF Arrivals, 2018



FIGURE 5-32: ECONOMIC SUPPORT – AIRPORTS ACCOMODATING IFR OPERATIONS FROM OUTSIDE OF IDAHO (ARRIVALS PER AIRPORT)



Sources: Kimley-Horn, 2019; GCR Airport IQ IRF Arrivals, 2018



#### TABLE 5-14: ECONOMIC SUPPORT- AIRPORTS ACCOMODATING IFR OPERATIONS FROM OUTSIDE IDAHO (NUMBER OF ARRIVALS PER AIRPORT)

	<u>(NUMBER OF ARRIVALS P</u>	<u>ER AIRPORT)</u>		
ASSOCIATED CITY	Airport	FAA ID	No. of Out-of-State IFR Arrivals (2018)	IFR Ops Present
	PRIMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	31,597	Yes
Hailey	Friedman Memorial	SUN	7,060	Yes
Idaho Falls	Idaho Falls Regional	IDA	4,647	Yes
Lewiston	Lewiston-Nez Perce County	LWS	2,557	Yes
Pocatello	Pocatello Regional	PIH	2,676	Yes
Pullman	Pullman-Moscow Regional	PUW	2,139	Yes
Twin Falls	Joslin Field-Magic Valley Regional	TWF	3,334	Yes
	REGIONAL			
Caldwell	Caldwell Industrial	EUL	156	Yes
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	1,951	Yes
Driggs	Driggs-Reed Memorial	DIJ	806	Yes
	LOCAL			
Blackfoot	McCarley Field	U02	43	Yes
Bonners Ferry	Boundary County	65S	25	Yes
Burley	Burley Municipal	BYI	143	Yes
Cascade	Cascade	U70	17	Yes
Gooding	Gooding Municipal	GNG	73	Yes
Grangeville	Idaho County	GIC	149	Yes
Jerome	Jerome County	JER	193	Yes
McCall	McCall Municipal	MYL	486	Yes
Mountain Home	Mountain Home Municipal	U76	53	Yes
Nampa	Nampa Municipal	MAN	223	Yes
Preston	Preston	U10	3	Yes
Rexburg	Rexburg-Madison County	RXE	419	Yes
Salmon	Lemhi County	SMN	132	Yes
Sandpoint	Sandpoint	SZT	519	Yes
St. Maries	St Maries Municipal	S72	8	Yes
Weiser	Weiser Municipal	S87	8	Yes
	BASIC			
Aberdeen	Aberdeen Municipal	U36	0	No
Arco	Arco-Butte County	AOC	6	Yes
Buhl	Buhl Municipal	U03	2	Yes
Challis	Challis	LLJ	52	Yes
Council	Council Municipal	U82	1	Yes
Homedale	Homedale Municipal	S66	1	Yes
Kamiah	Kamiah Municipal	S73	3	Yes



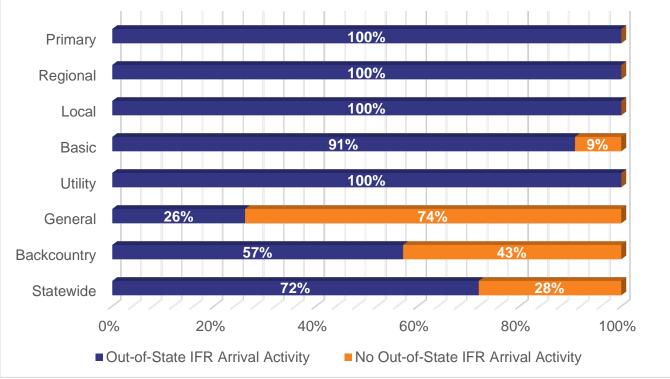
ASSOCIATED CITYAirportFAA IDNo. of Out-of-State IFR Arivals (2018)IFR Ops PresentKelloggShoshone CountyS8313YesOrofinoOrofino MunicipalS684YesParisBear Lake County1U718YesPriest RiverPriest River Municipal1561YesTotal County1014YesYesAmerican FallsMo. of No4YesAmerican FallsU014YesAmarican FallsMud Lake/West Jefferson County1023YesMud LakeMud Lake/West Jefferson County1023YesMada CityMLD1YesYesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesCareyCareyU65ONoNoCareyCareyU65ONoNoCottonwoodCottonwood MunicipalS843YesDuboisDubois MunicipalS891YesDuboisDubois MunicipalU86ONoGlenns FerryGlenns Ferry MunicipalU94ONoKooskiaKooskia MunicipalS82ONoLeadoreLeadoreU00ONoNoMud Lake/West JeffersonU94ONoNoCareyCareyU65ONoNoCareyCarey<					
KelloggShoshone CountyS83113YesOrofinoOrofino MunicipalS6844YesParisBear Lake County1U718YesPriest RiverDirest River Municipal10718YesPriest River MunicipalS0014YesAmerican FallsAmerican FallsU014YesAmerican FallsMud Lake/West Jefferson County1U23YesMud LakeMud Lake/West Jefferson County1U23YesRigbyU5677YesYesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesCoeur D'AleneBancroft MunicipalS570NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDowney/Hyde MemorialU581YesDuboisDubois MunicipalS891YesDuboisDubois MunicipalU860NoCraigmontCraigmont MunicipalU860NoFairfieldCamas CountyU860NoGenes FerryGlenns Ferry MunicipalU880NoFairfieldGarden ValleyU880NoGenes FerryGlenns Ferry MunicipalU940NoHazeltonHoweU970NoLeadoreLeadoreU00NoNo<		Airport	FAA ID		
ParisBear Lake County1U718YesPriest RiverPriest River Municipal1561YesTurner Can FallsAmerican FallsU014YesAmerican FallsMol 1YesYesMalad CityMalad CityMLD1YesMalad CityMalad CityMLD1YesMalad CityMul Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesSoda SpringsAllen H TigertU782YesSoda SpringsAllen H TigertU782YesSoda SpringsCareryU560NoCareryGarcoft MunicipalS110NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDowney/Downey/Hyde MemorialU581YesDuboisDubois MunicipalU880NoGeneryGeneryGeneryU880NoCraigmontCraigmont MunicipalU880NoGeneryGeneryU880NoDuboisMunicipalU880NoCareyGeneryU880NoCareyDowney/Hyde MemorialU880NoCareyGeneryGeneryU880NoCareyGeneryGeneryU860NoCarey	Kellogg		S83		Yes
Priest RiverPriest River Municipal1561YesUTILITYAmerican FallsAmerican FallsU014YesEmmettEmmett MunicipalS7815YesMalad CityMLD1YesMud LakeMud Lake/West Jefferson County1023YesPayettePayette MunicipalS751YesRigbyRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesCENERALBancroftBancroft MunicipalU510NoCareyU550NoNoCottonwoodCottonwood MunicipalS843YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCaraas CountyU860NoGenen SerryGarden ValleyU880NoGenen SerryGlenns Ferry MunicipalU940NoFairfieldKooskia MunicipalS820NoGenens FerryGlenns Ferry MunicipalU970NoKooskiaKooskia MunicipalS820NoGueryGarden ValleyU880NoGueryGarden ValleyU880NoGarden ValleyGarden Serry MunicipalU940NoGuery<	Orofino	Orofino Municipal	S68	4	Yes
UTILITYAmerican FallsAmerican FallsU014YesEmmettEmmett MunicipalS7815YesMalad CityMuD1YesMulad CityMuD1YesMud LakeMud Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesSoda SpringsAllen H TigertU782YesSoda SpringsAllen H TigertU782YesStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyU650NoCottonwood MunicipalS843YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU860NoGarden ValleyGarden ValleyU880NoGarden ValleyGarden ValleyU880NoHazeltonHazelton MunicipalS820NoHaweHoweU970NoKooskiaKooskia MunicipalS820NoLeadoreEudoreU000NoLeadoreLeadoreU000NoLeadoreLeadoreU000NoLeadoreLeadoreU00NoNoLeadoreLee Williams Memorial0U90No	Paris	Bear Lake County	1U7	18	Yes
American FallsAmerican FallsU014YesEmmettEmmett MunicipalS78115YesMalad CityMLD1YesMud LakeMud Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesBancroftBancroft MunicipalU510NoCareyU650NoNoCodur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDuboisDubois MunicipalU581YesDuboisDubois MunicipalU860NoGarden ValleyU860NoNoGarden ValleyU880NoNoGarden ValleyU880NoNoHazeltonHazelton MunicipalU891YesHazeltonGarden ValleyU880NoKooskiaKooskia MunicipalU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoMudakayU970.0NoNoLowKooskia MunicipalS820NoGlenns Ferry MunicipalU940NoLeadoreU000No <th>Priest River</th> <td>Priest River Municipal</td> <td>1S6</td> <td>1</td> <td>Yes</td>	Priest River	Priest River Municipal	1S6	1	Yes
American FallsAmerican FallsU014YesEmmettEmmett MunicipalS78115YesMalad CityMLD1YesMud LakeMud Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesBancroftBancroft MunicipalU510NoCareyU650NoNoCodur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDuboisDubois MunicipalU581YesDuboisDubois MunicipalU860NoGarden ValleyU860NoNoGarden ValleyU880NoNoGarden ValleyU880NoNoHazeltonHazelton MunicipalU891YesHazeltonGarden ValleyU880NoKooskiaKooskia MunicipalU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoMudakayU970.0NoNoLowKooskia MunicipalS820NoGlenns Ferry MunicipalU940NoLeadoreU000No <th></th> <th>UTILITY</th> <th></th> <th></th> <th></th>		UTILITY			
Malad CityMalad CityMLD1YesMud LakeMud Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesRigbyRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalS891YesGlenns FerryGlenns Ferry MunicipalU890NoHazeltonHazelton MunicipalS820NoHoweU970NoNoLeadoreU000NoLeadoreU000NoMackayMackayU620No	American Falls	American Falls	U01	4	Yes
Mud LakeMud Lake/West Jefferson County1U23YesPayettePayette MunicipalS751YesRigbyRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesBancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU880NoGarden ValleyGarden ValleyU880NoGenns FerryGlenns Ferry MunicipalU940NoHazeltonHazelton MunicipalS820NoGlenns FerryGlenns Ferry MunicipalU970NoLeadoreLeadoreU000NoLeadoreLeadoreU000NoMackayMackayU620No	Emmett	Emmett Municipal	S78	15	Yes
PayettePayette MunicipalS751YesRigbyRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesYesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCaraas CountyU860NoGenne FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU940NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoLeadoreU000NoNoLeadoreLee Williams MemorialU620No	Malad City	Malad City	MLD	1	Yes
RigbyRigbyU567YesSoda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyU650NoNoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU940NoHazeltonHazelton MunicipalS820NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoKooskiaKooskia MunicipalS820NoHazeltonLeadoreU000NoLeadoreU000NoNoLeadoreU000NoNoMackayMackayU620No	Mud Lake	Mud Lake/West Jefferson County	1U2	3	Yes
Soda SpringsAllen H TigertU782YesSt. AnthonyStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesYesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU940NoHazeltonHoweU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoLeadoreU000NoNoMackayMackayU620No	Payette	Payette Municipal	S75	1	Yes
St. AnthonyStanford FieldU123YesGENERALBancroftBancroft MunicipalU510NoCareyCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU940NoHazeltonHazelton MunicipalS820NoKooskiaKooskia MunicipalS820NoLeadoreU000NoMackayMackayU620No	Rigby	Rigby	U56	7	Yes
GENERALBancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCamas CountyU860NoGarden ValleyGarden ValleyU880NoHazeltonHazelton MunicipalU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoMackayMackayU620No	Soda Springs	Allen H Tigert	U78	2	Yes
BancroftBancroft MunicipalU510NoCareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCaraas CountyU860NoGarden ValleyGarden ValleyU880NoHazeltonHazelton MunicipalU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoMackayU620NoMidvaleLee Williams Memorial0U90No	St. Anthony	Stanford Field	U12	3	Yes
CareyU650NoCoeur D'AleneBrooks SPBS760NoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCamas CountyU8600NoGarden ValleyGarden ValleyU880NoHazeltonHazelton MunicipalU940NoHoweU970NoKooskiaKooskia MunicipalS820NoLeadoreU000NoMackayMackayU620No		GENERAL			
Coeur D'AleneBrooks SPBS76ONoCottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU41ONoFairfieldCamas CountyU86ONoGarden ValleyGarden ValleyU88ONoGlenns FerryGlenns Ferry MunicipalU94ONoHazeltonHazelton MunicipalU94ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoNoMackayMackayU62ONoMidvaleLee Williams MemorialOU9ONo	Bancroft	Bancroft Municipal	U51	0	No
CottonwoodCottonwood MunicipalS843YesCraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCamas CountyU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU940NoKooskiaKooskia MunicipalS820NoLeadoreU000NoMackayMackayU620No	Carey	Carey	U65	0	No
CraigmontCraigmont MunicipalS891YesDowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCamas CountyU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU940NoKooskiaKooskia MunicipalS820NoLeadoreU000NoNoMackayU620NoNo	Coeur D'Alene	Brooks SPB	S76	0	No
DowneyDowney/Hyde MemorialU581YesDuboisDubois MunicipalU410NoFairfieldCamas CountyU860NoGarden ValleyGarden ValleyU880NoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU940NoHoweU970NoNoLeadoreU000NoLewistonSnake River SPB78U0NoMidvaleLee Williams Memorial0U90No	Cottonwood	Cottonwood Municipal	S84	3	Yes
DuboisDubois MunicipalU41ONoFairfieldCamas CountyU86ONoGarden ValleyU88ONoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU94ONoHoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoLewistonSnake River SPB78UONoMidvaleLee Williams Memorial0U9ONo	Craigmont	Craigmont Municipal	S89	1	Yes
FairfieldCamas CountyU86ONoGarden ValleyGarden ValleyU88ONoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU94ONoHoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoNoLewistonSnake River SPB78UONoMackayU62ONoNoMidvaleLee Williams Memorial0U9ONo	Downey	Downey/Hyde Memorial	U58	1	Yes
Garden ValleyGarden ValleyU88ONoGlenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU94ONoHoweHoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoLewistonSnake River SPB78UONoMackayU62ONoMidvaleLee Williams MemorialOU9OU9No	Dubois	Dubois Municipal	U41	0	No
Glenns FerryGlenns Ferry MunicipalU891YesHazeltonHazelton MunicipalU94ONoHoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoLewistonSnake River SPB78UONoMackayU62ONoMidvaleLee Williams MemorialOU9ONo	Fairfield	Camas County	U86	0	No
HazeltonHazelton MunicipalU94ONoHoweHoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoLewistonSnake River SPB78UONoMackayU62ONoMidvaleLee Williams MemorialOU9ONo	Garden Valley	Garden Valley	U88	0	No
HoweU97ONoKooskiaKooskia MunicipalS82ONoLeadoreU00ONoLewistonSnake River SPB78UONoMackayU62ONoMidvaleLee Williams MemorialOU9ONo	Glenns Ferry	Glenns Ferry Municipal	U89	1	Yes
KooskiaKooskia MunicipalS820NoLeadoreU000NoLewistonSnake River SPB78U0NoMackayU620NoMidvaleLee Williams Memorial0U90No	Hazelton	Hazelton Municipal	U94	0	No
LeadoreU000NoLewistonSnake River SPB78U0NoMackayU620NoMidvaleLee Williams Memorial0U90No	Howe	Howe	U97	0	No
LewistonSnake River SPB78U0NoMackayU620NoMidvaleLee Williams Memorial0U90No	Kooskia	Kooskia Municipal	S82	0	No
MackayU62ONoMidvaleLee Williams MemorialOU9ONo	Leadore	Leadore	U00	0	No
Midvale         Lee Williams Memorial         0U9         0         No	Lewiston	Snake River SPB	78U	0	No
	Mackay	Mackay	U62	0	No
Murphy Murphy 1113 0 No	Midvale	Lee Williams Memorial	0U9	0	No
	Murphy	Murphy	1U3	0	No
NezperceNezperceMunicipal0S50No	Nezperce	Nezperce Municipal	0S5	0	No
OakleyOakley Municipal1U61Yes	Oakley	Oakley Municipal	1U6	1	Yes
Parma50S0No	Parma	Parma	50S	0	No
RockfordRockford Municipal2U40No	Rockford	Rockford Municipal	2U4	0	No
Stanley2U76Yes	Stanley	Stanley	2U7	6	Yes



ASSOCIATED CITY	Airport	FAA ID	No. of Out-of-State IFR Arrivals (2018)	IFR Ops Present
	BACKCOUNTF	Y		
Big Creek	Big Creek	U60	0	No
Coolin	Cavanaugh Bay	66S	20	Yes
Donnelly	Donald D. Coski Memorial	U84	0	No
Galena	Smiley Creek	U87	1	Yes
Porthill	Eckhart International	1S1	2	Yes
Stanley	Thomas Creek	2U8	0	No
Yellow Pine	Johnson Creek	3U2	2	Yes

Sources: Kimley-Horn, 2019; GCR Airport IQ IFR Arrivals, 2018

# FIGURE 5-33: ECONOMIC SUPPORT– PERCENT OF AIRPORTS ACCOMODATING IFR OPERATIONS FROM OUTSIDE IDAHO



Sources: Kimley-Horn, 2019; GCR Airport IQ IFR Arrivals, 2018

#### PI: Percent of Airports with Air Cargo/Freight Activities Including Small Operators

Airports with scheduled and/or charter air cargo flights are an economic resource to communities and regions within Idaho. Although providing this service is not a system plan objective for any airport, this type of activity is still recognized as having significant economic value. As reported through the inventory process, airports supporting air cargo activity are identified in **Table 5-15**. Figure 5-34 shows that 18 percent of 2020 IASP Update airports reported some type of air cargo or freight activities. Primary airports represent the largest percentage of airports reporting cargo/freight activities at 71 percent. Note that air cargo/freight activity can be challenging for airport managers to track, as there are no mandatory reporting requirements for operators at state or federal levels. As a result, this activity may be occurring at other facilities without being monitored or tracked.



TABLE 5-15: ECONOMIC SUPPORT- AIRPORTS WITH AIR CARGO/FREIGHT ACTIVITIES INCLUDING SMALL

<u>OPERATORS</u>					
ASSOCIATED CITY	Airport	FAA ID	Cargo/Freight		
	PRIMARY				
Boise	Boise Air Terminal/Gowen Field	BOI	Yes		
Hailey	Friedman Memorial	SUN	Yes		
Idaho Falls	Idaho Falls Regional	IDA	No		
Lewiston	Lewiston-Nez Perce County	LWS	Yes		
Pocatello	Pocatello Regional	PIH	No		
Pullman	Pullman-Moscow Regional	PUW	Yes		
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Yes		
	REGIONAL				
Caldwell	Caldwell Industrial	EUL	No		
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Yes		
Driggs	Driggs-Reed Memorial	DIJ	No		
	LOCAL				
Blackfoot	McCarley Field	U02	No		
Bonners Ferry	Boundary County	65S	No		
Burley	Burley Municipal	BYI	Yes		
Cascade	Cascade	U70	No		
Gooding	Gooding Municipal	GNG	No		
Grangeville	Idaho County	GIC	No		
Jerome	Jerome County	JER	Yes		
McCall	McCall Municipal	MYL	No		
Mountain Home	Mountain Home Municipal	U76	Yes		
Nampa	Nampa Municipal	MAN	Yes		
Preston	Preston	U10	No		
Rexburg	Rexburg-Madison County	RXE	Yes		
Salmon	Lemhi County	SMN	Yes		
Sandpoint	Sandpoint	SZT	No		
St. Maries	St Maries Municipal	S72	No		
Weiser	Weiser Municipal	S87	No		
	BASIC				
Aberdeen	Aberdeen Municipal	U36	No		
Arco	Arco-Butte County	AOC	Yes		
Buhl	Buhl Municipal	U03	No		
Challis	Challis	LLJ	No		
Council	Council Municipal	U82	No		
Homedale	Homedale Municipal	S66	No		
Kamiah	Kamiah Municipal	S73	No		
Kellogg	Shoshone County	S83	No		
Orofino	Orofino Municipal	S68	No		



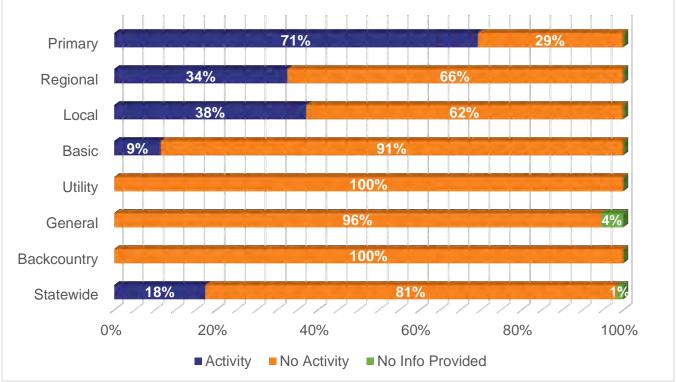
ASSOCIATED CITY	Airport	FAA ID	Cargo/Freight
Paris	Bear Lake County	107	No
Priest River	Priest River Municipal	1S6	No
	UTILITY		
American Falls	American Falls	U01	No
Emmett	Emmett Municipal	S78	No
Malad City	Malad City	MLD	No
Mud Lake	Mud Lake/West Jefferson County	1U2	No
Payette	Payette Municipal	S75	No
Rigby	Rigby	U56	No
Soda Springs	Allen H Tigert	U78	No
St. Anthony	Stanford Field	U12	No
	GENERAL		
Bancroft	Bancroft Municipal	U51	No
Carey	Carey	U65	No
Coeur D'Alene	Brooks SPB	S76	No
Cottonwood	Cottonwood Municipal	S84	No
Craigmont	Craigmont Municipal	S89	No
Downey	Downey/Hyde Memorial	U58	N/P
Dubois	Dubois Municipal	U41	No
Fairfield	Camas County	U86	No
Garden Valley	Garden Valley	U88	No
Glenns Ferry	Glenns Ferry Municipal	U89	No
Hazelton	Hazelton Municipal	U94	No
Howe	Howe	U97	No
Kooskia	Kooskia Municipal	S82	No
Leadore	Leadore	U00	No
Lewiston	Snake River SPB	78U	No
Mackay	Mackay	U62	No
Midvale	Lee Williams Memorial	0U9	No
Murphy	Murphy	1U3	No
Nezperce	Nezperce Municipal	0S5	No
Oakley	Oakley Municipal	1U6	No
Parma	Parma	50S	No
Rockford	Rockford Municipal	2U4	No
Stanley	Stanley	2U7	No
	BACKCOUNTRY		
Big Creek	Big Creek	U60	No
Coolin	Cavanaugh Bay	66S	No
Donnelly	Donald D. Coski Memorial	U84	No
Galena	Smiley Creek	U87	No



ASSOCIATED CITY	Airport	FAA ID	Cargo/Freight
Porthill	Eckhart International	1S1	No
Stanley	Thomas Creek	2U8	No
Yellow Pine	Johnson Creek	3U2	No

Source: Airport Inventory and Data Survey Forms, 2019

### FIGURE 5-34: ECONOMIC SUPPORT- PERCENT OF AIRPORTS WITH AIR CARGO/FREIGHT ACTIVITIES INCLUDING SMALL OPERATORS



Note: 74 airports provided data for this analysis, 13 of which support air cargo/freight activities. Accordingly, 18 percent of responsive airports support this activity. Source: Airport Inventory and Data Survey Forms, 2019

### AA: Percent of Businesses with the Propensity to Use Aviation Within a 30-minute Drive Time of a System Airport

Employers or businesses within Idaho with a propensity to use aviation services were identified to understand business-related demand for Idaho airports. These businesses may use airports for employee travel; to conduct client site visits, aerial inspections, or real estate tours; or ship high-value or time-sensitive goods via air transport such as perishable agricultural products or pharmaceuticals, high-dollar electronics, or manufacturing supplies— among many other services provided by aviation. Identifying the percent of businesses within the state with a propensity to use aviation within a 30-minute drive of a system airport allows for targeted economic growth strategies that focus on businesses most likely to rely on and support the aviation system. Additionally, this analysis demonstrates how effectively the aviation system is serving the businesses in the state.

Data was gathered from the U.S. Census Bureau's Statistics of U.S. Businesses (SUSB) to determine the total number of businesses within Idaho. Data was also gathered through ESRI's Community Analyst tool to identify all businesses that fall within a 30-minute drive time of each 2020 IASP Update airport. These businesses (as listed in each data source) were then sorted by their North American Industry Classification System (NAICS) codes.



Businesses listed under the following NAICS codes were deemed likely to have a propensity to use aviation to conduct operations:

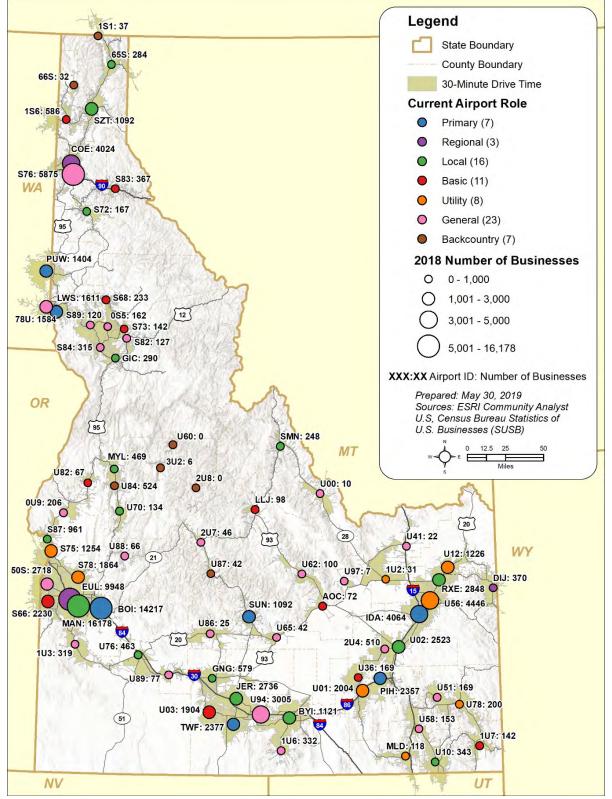
- → Accommodation and food services (Code 72)
- → Arts, entertainment, and recreation (Code 71)
- ✤ Construction (Code 23)
- → Finance and insurance (Code 52)
- → Healthcare and social assistance (Code 62)
- ✤ Information (Code 51)
- ✤ Manufacturing (Codes 31-33)
- → Professional, scientific, and technical services (Code 54)
- → Real estate and rental and leasing (Code 53)
- → Retail trade (Codes 44-45)
- → Transportation and warehousing (Codes 48-49)
- Utilities (Code 22)

Sorting of each data source by the identified NAICS codes yielded the total number of businesses with the propensity to use aviation, both on a statewide level (U.S. Census SUSB data) and within each airport's 30-minute drive time (ESRI Community Analyst data). The total number of air-reliant businesses within each airport's 30-minute drive time was then divided by the total statewide number. This analysis identified 130,996 business establishments in Idaho with a propensity to use aviation, 105,684 of which are located within a 30-minute airport drive time. As a result, 81 percent of all businesses with a propensity to use aviation are within 30 minutes of a 2020 IASP Update airport. Local airports support 29 percent of these businesses, followed closely by Primary airports (26 percent), General (15 percent), Regional (14 percent), Utility (11 percent), Basic (six percent), and Backcountry (one percent).

**Figure 5-35** reflects the number of businesses identified as having a propensity to use aviation within a 30-minute drive time of each 2020 IASP Update airport.



FIGURE 5-35: ECONOMIC SUPPORT – NUMBER OF BUSINESSES WITH THE PROPENSITY TO USE AVIATION WITHIN A 30-MINUTE DRIVE TIME OF A SYSTEM AIRPORT



Sources: ESRI Community Analyst, June 2019; SUSB, 2019



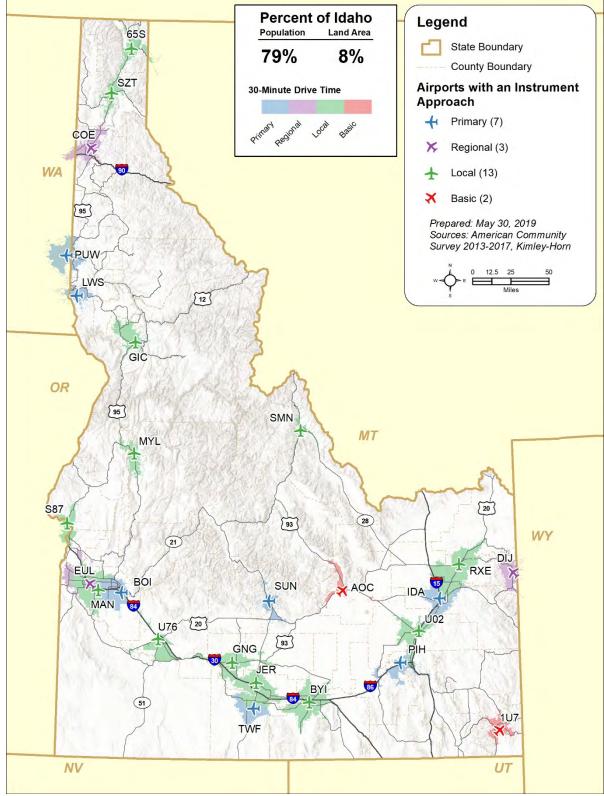
# AA: Percent of Population and Land Area Within a 30-minute Drive Time of an Airport with a Precision or PBN Approach

Several types of runway approaches are available throughout Idaho ranging from the most precise (precision or PBN) down to a simple visual approach. Instrument approaches (precision or PBN) are used to provide safe and efficient access to airports for aircraft operating under instrument meteorological conditions (IMC). The types of available approaches at each airport were reported in *Chapter 2: Inventory of System Conditions*. All Primary, National, and Regional airports are desired to have a published IAP in accordance with their airport facility and service objectives (see **Table 5.1**).

**Figure 5-36** provides a geographical depiction of all airports with an instrument approach along with a 30-minute drive time coverage area. As depicted, 79 percent of the state's population and eight percent of the state's land area fall within a 30-minute drive time of an airport with an instrument approach.



### FIGURE 5-36: ECONOMIC SUPPORT – PERCENT OF POPULATION AND LAND AREA WITHIN A 30-MINUTE DRIVE TIME OF AN AIRPORT WITH A PRECISION OR PBN APPROACH



Sources: American Community Survey 2013-2017; FAA, 2018; Kimley-Horn, 2019



### AA: Recreational Areas Served by "Portal" Airports

With so much of the state's area and topography inaccessible by roadway, Idaho's airports provide an essential link in providing residents and visitors access to Idaho's remote recreational areas. The term "portal" airport refers to those airports that serve as a gateway into Idaho's backcountry and recreational areas. 2020 IASP Update airports that have been identified as being heavily used as portals into the backcountry are:

- ✤ Boise Air Terminal/Gowen Field
- ✤ Nampa Municipal
- ✤ Caldwell Industrial
- → Joslin Field-Magic Valley Regional
- ✤ Freidman Memorial
- ✤ Jerome County
- ✤ Burley Municipal
- ✤ Pocatello Regional
- ✤ Idaho Falls Regional
- ✤ Lemhi County

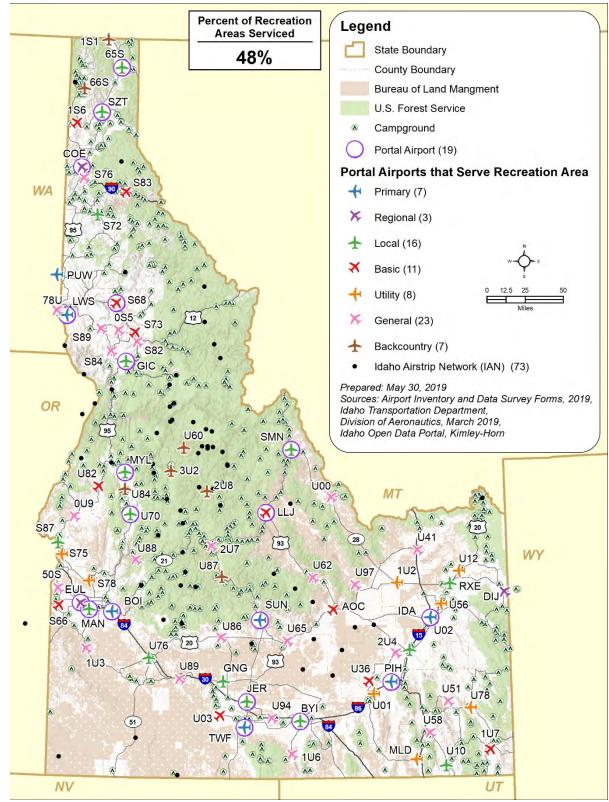
- ✤ Challis
- ✤ McCall Municipal
- → Cascade
- Idaho County
- ✤ Lewiston-Nez Perce County
- ✤ Orofino Municipal
- ✤ Coeur d'Alene-Pappy Boyington Field
- ✤ Sandpoint
- ✤ Boundary County

Because backcountry recreational opportunities are a large source of economic activity supported by "portal" airports, it is important to evaluate the extent to which these remote areas are being served. To measure this metric, the number of recreational areas (defined as developed campgrounds and RV parks) within 10 nautical miles of a system or IAN airport was determined.<sup>9</sup> As depicted in **Figure 5-37**, 421 of the state's 875 recreational areas (48 percent) fall within 10 nautical miles of a system or IAN airport.

<sup>&</sup>lt;sup>9</sup> State recreational areas used in the analysis include developed campgrounds and RV parks under USFS and BLM control. Geospatial data of these recreational areas was provided by the Idaho Geospatial Office (June 2019).



# FIGURE 5-37: ECONOMIC SUPPORT – RECREATIONAL AREAS SERVED BY "PORTAL" AIRPORTS



Sources: Airport Inventory and Date Survey Forms, 2019; ITD Aeronautics, 2019; USFS, 2019; BLM, 2019; Idaho Open Data Portal, 2019; Kimley-Horn, 2019



# System Adequacy Summary

Assessing airports in terms of PMs, PIs, and AA points identified areas in Idaho that effectively serve existing aviation needs and pinpointed areas of potential improvement. Eighty-four percent of Idaho's population has access to an airport within a 30-minute drive time, providing residents, visitors, and business with exemplary levels of access, mobility, and resiliency in emergency situations—among the many other benefits associated with aviation. Together, Primary and Regional airports make up 47 percent of all statewide aircraft operations (for year 2017) and generally offer the widest range of facilities and services to airport users.

While population coverage was a bright spot in the system, other PMs offer important insight into system-wide opportunities for improvement. These should be further evaluated to ensure the system continues to offer an optimal level of service to all users. Only 37 percent of airports in the state are meeting all facility objectives, and only slightly more than half (55 percent) are meeting all service objectives. Many airports are only missing one or two items in their list of facilities and service objectives; therefore, there are significant opportunities to enhance the ability of these airports to optimally serve their constituents, potentially without major investment.

One of the greatest areas in need of improvement is the number of airports that are not meeting FAA taxiway design standards. Only three percent of NPIAS airports in Idaho meet current design criteria. The primary issue with taxiway design is the number of taxiways that provide direct access to runways. Direct access increases the chances of runway incursion events and greatly reduces the overall airfield safety. Improvements to reduce the direct access taxiways would greatly enhance airport safety in Idaho. The FAA has specifically requested that NPIAS airports evaluate taxiway standards as part of master plans and ALP with narrative projects, as well as when other projects are planned that would affect non-compliant taxiways.

For all measures, increasing the percent of airports that meet their PMs is advised to maintain a safe and efficient system of airports in Idaho and the NAS. Accordingly, specific recommendations for airport-specific and system-wide improvements will be developed in a subsequent chapter.



# **CHAPTER SIX: SUPPLEMENTAL SYSTEM CONTEXT**

# Introduction

In 2014, the Federal Aviation Administration (FAA) added intermodal integration/airport access and environmental considerations in Advisory Circular 150/5070-7, Change 1, "The Airport System Planning Process" to topics that should be addressed in an aviation system plan. These elements provide for a more holistic evaluation of an airport system's ability to achieve current and future demands by looking at the broader context within which the system operates. Airports rely on roadway networks, rail lines, and other modal options to move people and goods between the airport and their next destinations, such as a home, business, or recreational site. The integration between transportation modes promotes interstate and intrastate commerce and facilitates mobility and access throughout Idaho.

Airport are similarly affected by their surrounding environs. Natural and manmade features influence or even drive how and when an airport can operate. Topographic features, protected areas, ecosystems, waterways, and other features on and in the vicinity of airports can influence development activities, including where expansion can occur. Airports and airport sponsors are obligated to comply with a multitude of federal, state, and local laws and regulations that pertain to the airport environs. This final point is particularly germane when federal dollars are involved—as they often are when airport capital improvement projects are conducted at airports eligible to receive federal funding.

For these reasons and others, intermodal integration/airport access and environmental considerations compose the supplemental system context of the Idaho airport system. It is important to conduct a high-level overview of these elements during the system planning process so that subsequent analyses and final recommendations account for future system needs in terms of multimodal connectivity and environmental compliance, as well as constraints and opportunities that lie beyond the aviation system directly. While related in purpose, intermodal integration/airport access and environmental considerations are addressed separately in the sections that follow.

# **Intermodal Integration/Airport Access**

Airports represent one of the multiple transportation modes that provide residents and visitors with quick and convenient access to all areas of Idaho. Connections between remote communities, large cities, and recreational areas in the Idaho backcountry are made even more accessible through aviation.

# **Airport Roadway Connections**

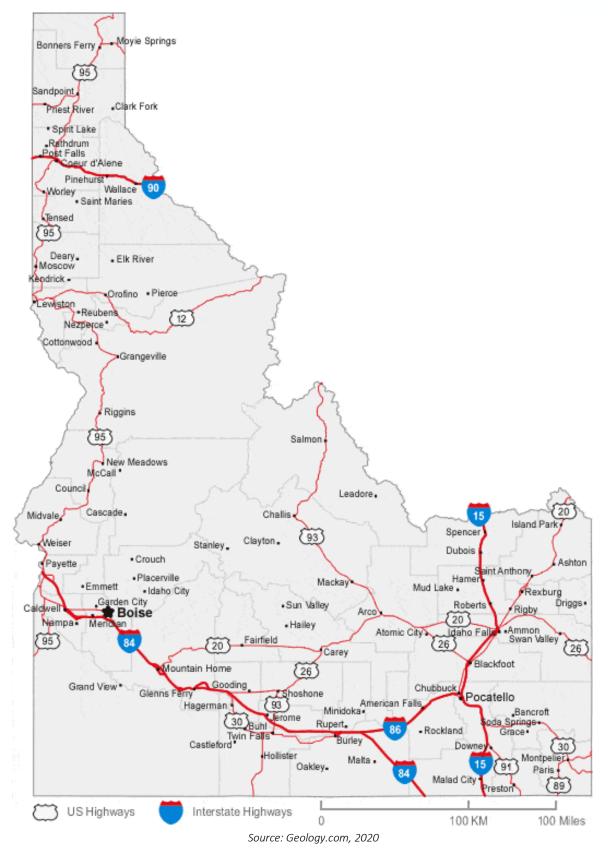
To access the state's aviation system from the ground to depart from an airport, residents and visitors primarily utilize Idaho's network of roadways. These roadways include interstates, United States (U.S.) highways, state highways, county roads, and city roads. There are five interstates in Idaho including:

- → I-15: Runs north-south connecting Utah and Montana across the eastern part of Idaho
- → I-84: Runs east-west across the southern portion of the state from west of Boise to the Idaho/Utah border south of Pocatello; it is the longest interstate portion in Idaho
- → I-86: Connects I-84 and I-15 from Burley to Pocatello
- + I-90: Connects Washington and Montana through the Idaho panhandle
- → I-184: Provides additional connectivity between the Boise metro area and I-84 to the south

There are also 10 U.S. highways and 66 state highways. U.S. 95 is the only north/south highway in the state, connecting Canada with Mexico via Idaho, Oregon, Nevada, California, and Arizona. As such, it is a particularly important freight route not only in Idaho but across the western U.S. **Figure 6-1** depicts Idaho's major roadway network.



#### FIGURE 6-1: IDAHO'S MAJOR ROADWAY NETWORKS



A summary of the roadway connectivity analysis for each 2020 IASP Update airport is provided in **Table 6-1**. Airport connectivity to adjacent roadway linkages was determined through online resources including Google Earth and Google Maps. The table presents the road(s) that provide direct access to each airport. Direct access is defined by the airport being located on a major highway or road or connected via an airport access road. The driving distance to the closest interstate, U.S. highway, or state highway via indirect access is also presented.

	<u>TABLI</u>	<u>E 6-1: IDA</u>		T ROADWAY		<u>/ITY</u>		
				Access Roa	-			
			1	(no. of lanes	1	Inc	direct Acce	
					State			Miles
ASSOCIATED				U.S.	Road/	Major	No. of	from
CITY	Airport	FAA ID	Interstate		Highway	Roadway	Lanes	Airport
				CIAL SERVIC				
Boise	Boise Air	BOI	I-84 (8L)	US-30 (8L)	None	ID-21	2	4
	Terminal/Gowen Field			US-20/26 (4L)		I-184	6	12
Hailey	Friedman	SUN	None	None	ID-75	US-20	2	14
	Memorial				(2L)	I-84	4	63
Idaho Falls	Idaho Falls	IDA		None		I-15	4	1
	Regional					US-20	4	1
						US-26	4	3
						ID-43	2	6
Lewiston	Lewiston-Nez	LWS		None		WA-129	2	2
	Perce County					US-12	4	3
						ID-128	2	4
						US-95	4	4
						1-90	4	110
Pocatello	Pocatello	PIH	I-86 (4L)	US-30	None	US-91	4	6
	Regional			(4L)		I-15	4	8
						ID-39	2	16
Pullman	Pullman-Moscow	PUW	None	None	WA-	US-95	6	6
	Regional				270/ ID-8 (4L)	I-90	4	73
Twin Falls	Joslin Field-Magic	TWF		None		ID-72	2	2
	Valley Regional					US-93	2	5
						1-84	4	11
				GA				
Aberdeen	Aberdeen	U36		None		ID-39	2	1.5
	Municipal					I-86	4	16
						US-30	2	16
American Falls	American Falls	U01	I-86 (4L)	US-30 (4L)	ID-39 (2L)			
Arco	Arco-Butte	AOC	None	US-20/26	None	ID-33	2	10
	County	AUC	NOTE	(2L)	NOTIC	I-15	4	65
Bancroft	Bancroft	U51		None		US-30	4	6
	Municipal	0.51		None		ID-34	2	10
	Wanterpar					ID-34	4	27
						1-12	4	27

#### TABLE 6-1: IDAHO AIRPORT ROADWAY CONNECTIVITY



			Direct Access Roadways					
				no. of lanes	)	Inc	lirect Acces	SS
					State			Miles
ASSOCIATED				U.S.	Road/	Major	No. of	from
CITY	Airport	FAA ID	Interstate	Highway	Highway	Roadway	Lanes	Airport
Big Creek	Big Creek	U60		None		ID-55	2	84
						US-95	2	95
						I-86	4	187
Blackfoot	McCarley Field	U02	I-15 (4L)	US-26 (4L)	None	ID-39	2	2
				US-91 (2L)		I-86	4	22
Bonners	Boundary County	65S	None	US-2 (2L)	None	US-95	2	1
Ferry						ID-1	2	12
						I-90	4	88
Buhl	Buhl Municipal	U03		None		US-30	2	1
						US-93	2	12
						ID-74	2	15
						I-84	4	16
Burley	Burley Municipal	BYI	None	US-30	ID-81	ID-27	2	1
				(4L)	(2L)	I-84	4	3
Caldwell	Caldwell	EUL		None		I-84	4	2
	Industrial					US-20/26	4	2
						ID-55	2	5
Carey	Carey	U65	None	US-	None	ID-75	2	18
				20/26/ 93 (2L)		I-84	4	65
Cascade	Cascade	U70	None	None	ID-55	US-95	2	43
					(2L)	I-84	8	75
Challis	Challis	LLJ	None	US-93	None	ID-75	2	3
				(2L)		I-15	4	135
Coeur	Brooks SPB	S76		None		US-95	2	1
D'Alene						I-90	4	2
						ID-41	2	9
Coeur	Coeur D'Alene -	COE		None		US-95	4	1
D'Alene	Pappy Boyington					I-90	4	5
	Field					ID-53	2	5
Coolin	Cavanaugh Bay	66S		None		ID-57	2	9
						US-2	2	30
						I-90	4	70
Cottonwood	Cottonwood	S84	None	US-95	None	ID-162	2	13
	Municipal			(2L)		ID-13	2	15
						I-90	4	155
Council	Council	U82		None		US-95	2	2
	Municipal					ID-71	2	24
						I-84	4	68



			Direct Access Roadways					
				no. of lanes	)	Inc	direct Acces	ss
					State			Miles
ASSOCIATED				U.S.	Road/	Major	No. of	from
CITY	Airport	FAA ID	Interstate	Highway	Highway	Roadway	Lanes	Airport
Craigmont	Craigmont	S89		None		US-95	2	1
	Municipal					ID-62	2	1
						I-84	4	68
Donnelly	Donald D. Coski	U84		None		ID-55	3	0.5
	Memorial					US-95	2	25
						I-84	4	117
Downey	Downey/Hyde	U58		None		US-91	2	1
	Memorial					ID-36	2	21
						I-84/I-184	8	94
Driggs	Driggs-Reed	DIJ	None	None	ID-33	ID-32	2	9
	Memorial				(2L)	US-191	4	32
						US-20	4	37
						I-15	4	62
Dubois	Dubois Municipal	U41		None		I-15	4	1
						ID-22	2	1
	-					US-20	4	45
Emmett	Emmett	S78		None		ID-52	2	1
	Municipal					ID-162	2	3
						I-84	4	17
						US-30	4	17
Fairfield	Camas County	U86	None	US-20	None	ID-46	2	4
		1107	<b>N</b> 1	(2L)	10.75	1-84	4	46
Galena	Smiley Creek	U87	None	None	ID-75	US-20	2	63
Candan	Condon Mollow	1100		News	(2L)	I-84	4	112
Garden	Garden Valley	U88		None		ID-55 ID-21	2	12
Valley						US-21	2	21 49
						I-84/I-184	2 8	
Glenns	Clappe Form	U89		None		I-84		53
Ferry	Glenns Ferry Municipal	089		None		US-26/30	4	3
Terry	Municipai					ID-78	2	11
						ID-76	Z	ΤT
Gooding	Gooding	GNG	None	US-26	None	ID-46	2	3
	Municipal			(2L)		1-84	4	9
Grangeville	Idaho County	GIC		None		US-95	2	1
						ID-13	2	1
						1-90	4	165
Hazelton	Hazelton	U94		None		ID-25	2	1
	Municipal					1-84	4	2
						US-30	2	9
						00.00	-	-



			Direct Access Roadways					
			(	no. of lanes	)	Inc	direct Acces	SS
					State			Miles
ASSOCIATED				U.S.	Road/	Major	No. of	from
CITY	Airport	FAA ID	Interstate	Highway	Highway	Roadway	Lanes	Airport
Homedale	Homedale	S66	None	US-95	ID-19	ID-55	2	8
	Municipal			(2L)	(2L)	I-84	6	15
Howe	Howe	U97		None		ID-33	2	3
						ID-22	2	12
						US-26	2	19
						I-15	4	45
Jerome	Jerome County	JER	None None ID-25			US-93	2	0.5
				• •	(2L)	1-84	4	5
Kamiah	Kamiah	S73		None		ID-162	2	1
	Municipal					ID-64	2	1
						US-12	2	1.5
				• •	• •	1-90	6	155
Kellogg	Shoshone County	S83	I-90 (4L)	None	None	ID-3	2	14
						ID-4	2	15
Kaadita	Ka a alvia	600	Nerre	News	10 10	US-95	4	36
Kooskia	Kooskia	S82	None	None	ID-13	US-12	2	1
Londono	Municipal	1100	Nene	Nana	(2L)	I-90	4	145
Leadore	Leadore	U00	None	None	ID-28	ID-29	2	0.5
					(2L)	US-93 I-15	2	45
Lewiston	Snake River SPB	78U		None		WA-129	4	48
Lewiston	SHAKE NIVEL SPD	780		NOTE		ID-128	2	3
						US-128	4	3
						I-90	4	112
Mackay	Mackay	U62	None	US-93	None	US-26	2	26
Widekdy	Widekdy	002	None	(2L)	None	ID-33	2	34
				(22)		I-15	4	82
Malad City	Malad City	MLD	None	None	ID-38	I-15	4	3
					(2L)	ID-36	2	7
					X /	US-91	2	23
McCall	McCall Municipal	MYL	None	None	ID-55	US-95	2	13
					(2L)	I-84/184	8	105
Midvale	Lee Williams	0U9	None	US-95	None	, ID-71	2	11
	Memorial			(2L)		I-84	4	35
Rigby	<b>Rigby-Jefferson</b>	U56		None		US-20	4	2
	County					ID-48	2	2
						ID-43	2	2
						I-15	4	8
Rockford	Rockford	2U4	None	None	ID-39	I-15	4	9
	Municipal				(3L)	US26	4	9



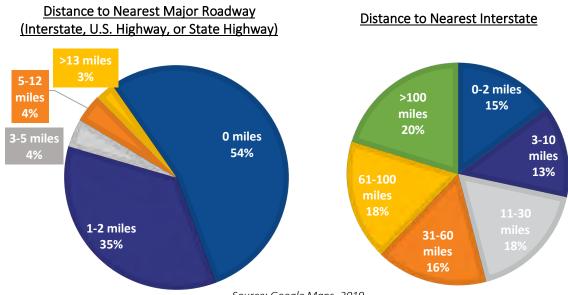
			Direct Access Roadways					
			(	no. of lanes		Inc	direct Acces	
					State			Miles
ASSOCIATED				U.S.	Road/	Major	No. of	from
СІТҮ	Airport	FAA ID	Interstate	Highway	Highway	Roadway	Lanes	Airport
Salmon	Lemhi County	SMN	None	US-93	None	ID-28	2	5
				(2L)		I-15	4	71
Sandpoint	Sandpoint	SZT		None		US-2	4	1.5
						US-95	4	1.5
						ID-200	2	2
						I-90	4	47
Soda	Allen H Tigert	U78	None	US-30	None	ID-34	4	1
Springs				(2L)		I-15	4	34
St. Anthony	Stanford Field	U12		None		US-20	4	1
						ID-33	2	5
						I-15	4	31
St. Maries	St Maries	S72	None	None	ID-3	ID-5	2	1
	Municipal				(2L)	US-95	3	20
						I-90	4	31
Stanley	Stanley	2U7	None	None	ID-21	ID-75	2	1
					(2L)	US-93	2	55
						I-84	4	125
Stanley*	Thomas Creek	2U8			Not applic	able (N/A)		
Weiser	Weiser Municipal	S87	None	US-95	None	OR-201	2	6
				(2L)		I-84	4	16
Yellow Pine	Johnson Creek	3U2		None		ID-55	2	48
						US-95	2	88
						I-84/I-184	8	126

\*Note: Thomas Creek (2U8) is only accessible via air and is thus excluded from analysis. Sources: Google Earth & Google Maps 2019

**Figure 6-2** presents the percent of airports within certain distances from the nearest major roadway (i.e., interstate, U.S. highway, and state highway) and interstate. Only one backcountry airport, Thomas Creek, was excluded from the analysis since it can only be reached via air. The analysis shows that all airports have access to at least one major roadway within a reasonable distance (13 miles or less). Fifty-four percent of the airports in Idaho have direct access (0 miles) to an interstate, U.S. highway, or state highway. Airports that are not directly connected with a major roadway are connected by short distances over county or city roads. Thirty-five percent of airports are within one to two miles of the closet major roadway. Only seven percent of system airports in this analysis (five of 74) are greater than five miles from the closest major road.

Figure 6-2 also shows that 28 percent of system airports are within 10 miles of one of the five major interstates that traverse the state. There is limited access to an interstate for airports located in the west central and central areas of Idaho. In fact, 14 of the 74 airports (20 percent) included in this analysis are at least 100 miles away from their nearest interstate. Another 13 airports (18 percent) are at least 60 miles from their nearest interstate. Much of these distances are due to the topographical nature of the state, as increased distances are required to traverse or circumnavigate mountainous areas. However, as indicated in the discussion above, the majority of these distant airports are well-connected via U.S. and state highways.

# FIGURE 6-2: DISTANCE FROM IDAHO AIRPORTS TO MAJOR ROADWAYS



#### Source: Google Maps, 2019

# **Intermodal Integration**

The 2020 IASP Update analyzed the availability and connectivity of rental cars, transit (i.e., bus), passenger rail, rideshare, courtesy cars, and other applicable modes of transportation within the Idaho airport system. This assessment indicates the overall integration and interconnectivity of multimodal transportation modes between airports and their local communities and regions. The following subsections summarize this analysis.

# **Rental Car Availability**

Rental cars allow airport users the freedom and mobility to travel within the state upon landing and reduce their reliance on other modes of ground transportation including local pickups, courtesy cars, or public transit systems (as available). Of equal importance, rental cars at airports often increase the airport's overall ability to facilitate economic activity within their vicinities.

Data on the availability of rental car service was collected from airports during the 2020 IASP Update airport inventory and data collection process. Of the 75 airports analyzed in the 2020 IASP Update, 19 reported having access to rental car services. This includes the seven commercial service airports and 12 of the 68 GA airports.

# **Public Transportation (Bus)**

Public transportation via bus (also referred to as transit) within a community increases accessibility and facilitates equitable economic opportunity for all residents and visitors. Transit is a unique mode of transportation as it can substantially reduce vehicular traffic on community roadways. Because of this benefit, transit is often promoted as a preferred mode by local and state transportation agencies. Direct connections from airports to public transportation allow visitors reliable mobility into and within the community, particularly if transit schedules coincide with passenger arrival schedules. This level of convenience further boosts the airport's ability to connect the community and state with the rest of the world. However, it is important to note that many people use aviation because of the speed of air travel. Therefore, traveler reliance on public transit generally aligns with the ability to quickly and seamlessly transition between the airport and bus service.

During the data collection process, airport managers indicated that nine of the 75 system airports are directly serviced by public transportation. Of these airports, four are commercial service airports and five are GA airports. Three commercial service airports (Pocatello Regional, Pullman-Moscow Regional, and Joslin Field-Magic Valley

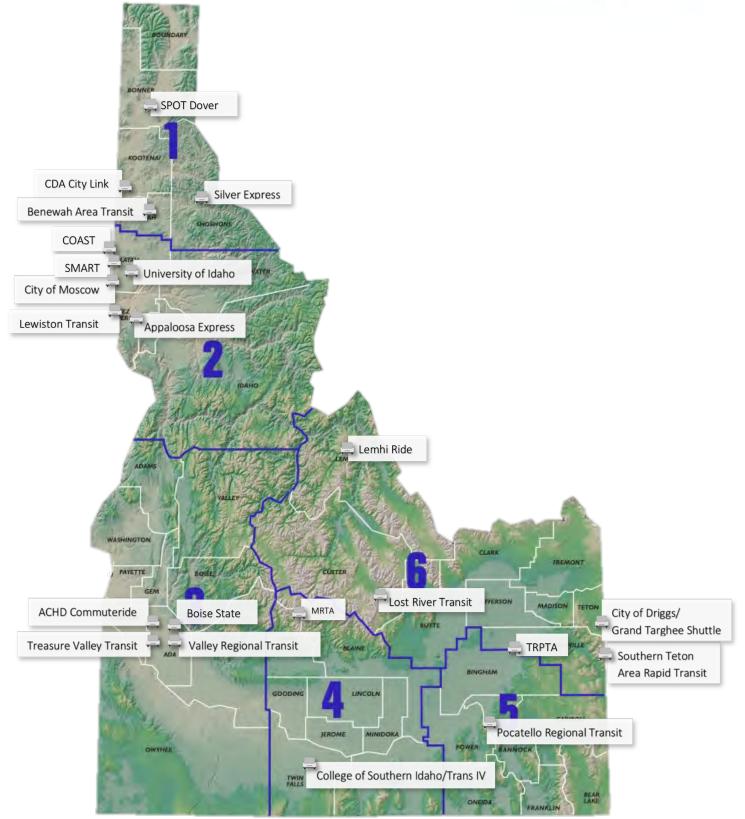


Regional airports) reported not having access to public transportation. It is important to note that Idaho is one of two states that does not have a dedicated funding stream for public transportation. This makes funding future transit projects and improvements more difficult.

Per the "Idaho Public Transportation Plan" published in April 2018, there are 22 public transit providers in the state. As shown in **Figure 6-3**, each of the six ITD transportation districts has at least one public transit operator. The largest public transit operator in the state is Valley Regional Transit which serves the Boise Metro Area and Ada and Canyon counties. Three private providers offer intercity bus service in Idaho: Northwestern Trailways, Greyhound, and Salt Lake Express. By 2028, the "Idaho Public Transportation Plan" estimates a 28 percent increase in transit ridership statewide. It is anticipated that Kootenai, Ada, and Canyon counties will experience the highest rates of growth in public transit ridership over the next 10 years.



# FIGURE 6-3: IDAHO PUBLIC TRANSIT OPERATORS



Source: Idaho Public Transportation Plan, 2018



# Shared Mobility (Rideshare, Bikeshare, and Scootershare)

Over the last several years, shared mobility, defined as the shared use of a mobility device, has become a popular mode of transportation. Instead of each user owning their own car, bike, or scooter, these vehicles are shared amongst a large user base. Rideshare companies such as Uber and Lyft pioneered this new shared mobility model and leveraged their users' independently owned vehicles to provide rides to other users. Uber and Lyft rideshares are available in many communities throughout the state. Twenty-four of the 75 2020 IASP Update airports (32 percent) reported rideshare availability in their associated cities.

As rideshare has evolved, both Uber and Lyft have further improved their services to not only provide users with a ride using another user's vehicle, but also to allow for shared carpooling. Uber has branded their carpool service as "UberPool," while Lyft has branded their service as "Shared". In these rideshare carpools, users can further share their ride with other users traveling in the same direction. This allows Uber and Lyft to achieve higher occupancy levels per trip. Using these services is enticing for users, as it further reduces the cost of their commute because everyone in the carpool pays an equitable share for the trip.

In addition to Uber and Lyft's shared carpooling programs, there are several ride-matching services in Idaho that connect rideshare participants with others traveling between similar places. These services allow users to arrange shared trips or coordinate carpools. Share the Ride Idaho is ITD's official ride-matching service available for transit providers and transit users to use statewide. Ada County Highway District's (ACHD) has a subsite for Share the Ride Idaho called Commuter Crew. In addition to Commuter Crew's ride-matching program, ACHD offers a larger Transportation Demand Management (TDM) program called Commuteride for Treasure Valley residents including vanpool club memberships, bike and walk resources, and bus resources that connect users to Valley Regional Transit. In addition, several companies have created subsites to Share the Ride Idaho for their specific company to find ridesharing opportunities. The City of Moscow's Carpool Moscow also utilizes Share the Ride Idaho. Mountain Rides in Blaine also partners with Share the Ride to offer carpool and vanpool services in addition to free town and commuter bus services.

The Uber/Lyft business model has since caught on with other mobility devices such as bikes and scooters. This business model partners private firms with communities to establish a network of shared bikes or scooters. Networks are often designed to place bikes or scooters within the vicinity of other modal linkages such as bus stations. This provides a mobility option that helps solve the first- and last-mile connection issues between traditional transportation modes and users' final destinations. Currently Boise and Coeur D'Alene have bikeshare programs in place, while scootershare programs can be found in Meridian, Boise, and Rexburg.

# **Taxis and Courtesy Cars**

For airports located in smaller communities where rental cars, public transportation, or rideshare programs may not be available, taxi service often provides the link between airports and their communities. Courtesy cars can also be used to maintain links with nearby communities at airports with this type of limited modal integration. These cars are typically stored on-airport and sponsored by the airport owner/operator or by the fixed base operator (FBO). Courtesy cars are often a favorite amenity for pilots and passengers who utilize these airports, as they provide a means to travel into town for meetings, meals, or entertainment. Data provided in the airport inventory and data forms show that 40 of the 75 2020 IASP Update airports (53 percent) report having courtesy cars available.

# **Integration Summary**

**Table 6-2** and **Figure 6-4** provide a tabular and visual summary of the intermodal integration at 2020 IASP Update airports. As indicated below, 25 system airports reported having no transportation modes available. The Idaho airport system includes many rural and mountain airstrips that provide important access into remote parts of the state but have limited facilities and amenities. As a result, the ability of pilots and passengers to leave the airport is similarly limited.



	TABLE 6-2: 2020 IASP UPDATE	AIRPORT	INTERN	<u>/IODAL</u>	AVAIL		<u>Y</u>			
ASSOCIATED CITY	Airport	FAA ID	Rental Car	Bus	Rideshare	Courtesy Car	Taxi	Hotel/Private Shuttle	Bicycle	None
-		ERCIAL SE								
Boise	Boise Air Terminal/Gowen Field	BOI	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	$\checkmark$		
Hailey	Friedman Memorial	SUN	<b>√</b>	<b>√</b>	<b>√</b>	√	<b>√</b>			
Idaho Falls	Idaho Falls Regional	IDA	<b>√</b>	<b>√</b>	<b>√</b>	$\checkmark$	$\checkmark$	$\checkmark$		
Lewiston	Lewiston-Nez Perce County	LWS	<b>√</b>	✓	<b>√</b>	,	,		_	
Pocatello	Pocatello Regional	PIH	<b>√</b>		<b>√</b>	$\checkmark$	✓	$\checkmark$		
Pullman	Pullman-Moscow Regional	PUW	<b>√</b>		<b>√</b>				_	
Twin Falls	Joslin Field-Magic Valley Regional	TWF	$\checkmark$		$\checkmark$	$\checkmark$				
		GA								
Aberdeen	Aberdeen Municipal	U36								✓
American Falls	American Falls	U01				<b>√</b>				
Arco	Arco-Butte County	AOC				~			_	1
Bancroft	Bancroft Municipal	U51								<b>√</b>
Big Creek	Big Creek	U60				1				V
Blackfoot	McCarley Field	U02				<b>√</b>				
Bonners Ferry	Boundary County	65S	<b>√</b>	~	<b>√</b>	<b>√</b>			_	
Buhl	Buhl Municipal	U03	$\checkmark$		$\checkmark$	$\checkmark$				
Burley	Burley Municipal	BYI	1			<b>√</b>	~			
Caldwell	Caldwell Industrial	EUL	$\checkmark$		$\checkmark$	V				
Carey	Carey	U65		1		1	1			
Cascade	Cascade	U70		✓		<b>√</b>	v			
Challis	Challis	LU			~	~				
Coeur D'Alene	Brooks SPB	S76								
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	✓		✓					
Coolin	Cavanaugh Bay	66S				$\checkmark$				
Cottonwood	Cottonwood Municipal	S84								$\checkmark$
Council	Council Municipal	U82								$\checkmark$
Craigmont	Craigmont Municipal	S89								$\checkmark$
Donnelly	Donald D. Coski Memorial	U84								$\checkmark$
Downey	Downey/Hyde Memorial	U58								$\checkmark$
Driggs	Driggs-Reed Memorial	DIJ	$\checkmark$		$\checkmark$					
Dubois	Dubois Municipal	U41							✓	
Emmett	Emmett Municipal	S78				$\checkmark$				
Fairfield	Camas County	U86								
Galena	Smiley Creek	U87				$\checkmark$				
Garden Valley	Garden Valley	U88				$\checkmark$				
Glenns Ferry	Glenns Ferry Municipal	U89								$\checkmark$
Gooding	Gooding Municipal	GNG			$\checkmark$	$\checkmark$				

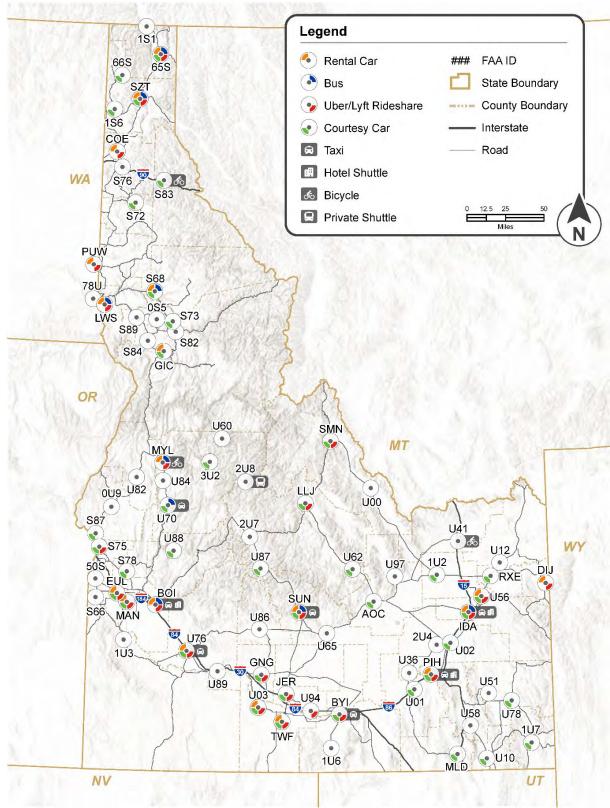


						ar		ate		
			Rental Car		are	Courtesy Car		Hotel/Private Shuttle	-	
ASSOCIATED			ntal	(0)	Rideshare	urte	·=	Hotel/P Shuttle	Bicycle	he
CITY	Airport	FAA ID	Rer	Bus	Rid	Co	Taxi	Shu	Bic	None
Grangeville	Idaho County	GIC	$\checkmark$			$\checkmark$				
Hazelton	Hazelton Municipal	U94			$\checkmark$					
Homedale	Homedale Municipal	S66								$\checkmark$
Howe	Howe	U97								$\checkmark$
Jerome	Jerome County	JER			$\checkmark$	$\checkmark$				
Kamiah	Kamiah Municipal	S73				$\checkmark$				
Kellogg	Shoshone County	S83				$\checkmark$			$\checkmark$	
Kooskia	Kooskia Municipal	S82								$\checkmark$
Leadore	Leadore	U00								$\checkmark$
Lewiston	Snake River SPB	78U								$\checkmark$
Mackay	Mackay	U62				$\checkmark$				
Malad City	Malad City	MLD				$\checkmark$				
McCall	McCall Municipal	MYL	$\checkmark$	$\checkmark$	$\checkmark$					
Midvale	Lee Williams Memorial	0U9								
Mountain Home	Mountain Home Municipal	U76	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			
Mud Lake	Mud Lake/West Jefferson County	1U2				$\checkmark$				
Murphy	Murphy	1U3								$\checkmark$
Nampa	Nampa Municipal	MAN	$\checkmark$		$\checkmark$	$\checkmark$				
Nezperce	Nezperce Municipal	0S5								$\checkmark$
Oakley	Oakley Municipal	1U6								$\checkmark$
Orofino	Orofino Municipal	S68	$\checkmark$	$\checkmark$		$\checkmark$				
Paris	Bear Lake County	1U7				$\checkmark$				
Parma	Parma	50S								$\checkmark$
Payette	Payette Municipal	S75			$\checkmark$	$\checkmark$				
Porthill	Eckhart International	1S1								$\checkmark$
Preston	Preston	U10				$\checkmark$				
Priest River	Priest River Municipal	1S6				$\checkmark$				
Rexburg	Rexburg-Madison County	RXE				$\checkmark$				
Rigby	Rigby	U56	$\checkmark$		$\checkmark$	$\checkmark$				
Rockford	Rockford Municipal	2U4								$\checkmark$
Salmon	Lemhi County	SMN			<ul> <li>✓</li> </ul>	√				
Sandpoint	Sandpoint	SZT	✓	$\checkmark$	$\checkmark$	✓				
Soda Springs	Allen H Tigert	U78				$\checkmark$				
St. Anthony	Stanford Field	U12								$\checkmark$
St. Maries	St Maries Municipal	S72				$\checkmark$				
Stanley	Stanley	2U7								✓
Stanley	Thomas Creek	2U8						$\checkmark$		
Weiser	Weiser Municipal	S87				✓				
Yellow Pine	Johnson Creek	3U2				$\checkmark$				

Source: Airport Inventory and Data Survey Forms, 2019



### FIGURE 6-4: 2020 IASP UPDATE AIRPORT INTERMOAL INTEGRATION



Source: Airport Inventory and Data Survey Forms, 2019

# **Idaho's Freight Network**

Idaho's freight network consists of road, rail, air, water, and pipeline assets as well as the terminals and connecting points that link these modes together to accommodate freight. In terms of goods movement, air cargo provides the most reliable service for time-sensitive transport although it is the costliest. Truck, rail, pipeline, and water are used to move goods that are either less time-sensitive or are bulk commodities at a lower cost. Water transport is the slowest and least costly option for freight movement. The majority of goods in Idaho move by truck. **Figure 6-5** presents the multimodal freight network in Idaho.

The 2017 Idaho Transportation Department Statewide Freight Strategic Plan found that there are six key multimodal freight facilities in Idaho (see **Table 6-2**).<sup>1</sup> Boise Air Terminal/Gowen Field serves as the main air-land multimodal facility in the state. The report also notes that airports in other cities, including Idaho Falls, Twin Falls, Pocatello, Coeur d'Alene, and Lewiston, support air freight but in smaller quantities.

FACILITY NAME	Facility Location	Modes Involved	Capacity	Commodities Handled
Port of Lewiston	Lewiston	Water/Truck/ Rail	N/A	Pulses, Grain, Project Cargo
Boise Air Terminal/ Gowen Field	Boise	Air/Truck	344 million pounds of cargo (2014)	All
Gavilon Grain	Burley	Rail/Truck	110 railcars	Grain
Land O Lakes Farmland Feed	Gooding	Rail/Truck	100 railcars	Grain
Lansing Grain	Bliss	Rail/Truck	100 railcars	Grain
Simplot Land and Livestock	Mountain Home	Rail/Truck	110 railcars	Grain

# TABLE 6-3: SUMMARY OF KEY MULTIMODAL FREIGHT FACILITIES IN IDAHO

Source: ITD Statewide Freight Strategic Plan, 2017

The Federal Highway Administration (FHWA) identifies the key intermodal connectors across the U.S. that are part of the National Highway System. Six are in Idaho, including two that provide access between the major freight terminal at Boise Air Terminal/Gowen Field (BOI) and the highway system. The intermodal connectors between BOI and the highway system are summarized as follows:

- → Eastbound ramps at I-84 to South Capital Boulevard (2.1 miles long)
- → Vista Avenue to eastbound ramps at I-84 (0.1 miles long)

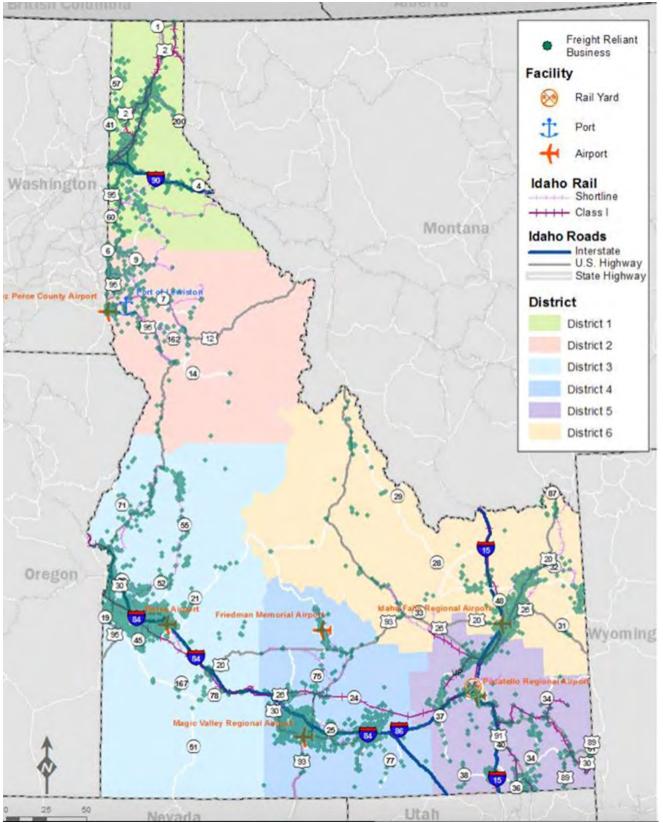
There are currently no large multimodal facilities or coordinated freight transportation systems that integrate trucks, rail, waterways, and air cargo in Idaho. The closest intermodal activities occur in Salt Lake City, Utah and Spokane, Washington. The "Idaho Statewide Rail Plan" published in 2013 notes that there has long been interest in establishing an intermodal hub near logistics centers in Boise or Idaho Falls.<sup>2</sup> However, the cost, practicality, and concerns of traffic volumes have thus far deterred its development.

<sup>&</sup>lt;sup>1</sup> Cambridge Systematics (February 2017). "ITD Statewide Freight Strategic Plan". Available online at https://apps.itd.idaho.gov/apps/freight/FreightPlan.pdf (accessed December 2019).

<sup>&</sup>lt;sup>2</sup> David Evans and Associates Inc. (June 2013). "Idaho Statewide Rail Plan". Available online at

https://apps.itd.idaho.gov/apps/freight/Idaho-Statewide-Rail-Plan.pdf (accessed December 2019).





# FIGURE 6-5: IDAHO'S MULTIMODAL FREIGHT NETWORK AND FREIGHT-RELIANT BUSINESS LOCATIONS

Source: ITD Statewide Freight Strategic Plan, 2017



When integrated with airports, heavy rail provides a unique connection that can facilitate the movement of goods and commodities. While this type of connection is rare, it does represent a transportation mode that can be integrated with airports. Based on inventory data collected for the 2020 IASP Update, there are no Idaho system airports with integrated heavy rail. However, several system airports are within close proximity of one or more rail lines. The City of Boise is pushing to reactivate a spur line serving a city-owned vacant land near BOI that potentially could support industrial uses or a transload/intermodal site. The Boise Valley Railroad would operate the 18.2 miles of city-owned rail and will connect with the Union Pacific mainline.

The Port of Lewiston is the only port in Idaho and is the most inland port on the west coast. The port supports Columbia-Snake River barge traffic that transports bulk commodities and containerized cargo. The Port of Lewiston provides a large crane and warehouse facility on the inland river system. The Lewis-Clark Terminal, a privately-owned business adjacent to the port, provides the largest grain storage facilities on the river system. The port has direct access to rail lines and trucking routes. Air transportation is available at the Lewiston-Nez Perce County Airport two miles away; however, there is no direct access between the port and the airport.

The 2017 ITD Statewide Freight Strategic Plan undertook an in-depth stakeholder interview process to identify priority needs and concerns regarding the movement of goods in Idaho. This process revealed no major issues or needs pertaining to Idaho's aviation system to support freight movements.

BOI recently completed its Airport Master Plan Study Update in 2018. The airport identified the need to construct a new consolidated air cargo facility and a more robust road network within the next 10 to 20 years. FedEx and UPS currently utilize the airport for air cargo and have warehouse facilities nearby. Additionally, it is anticipated that Amazon's use of the airport will increase when it opens a warehouse and a new distribution fulfillment center in Nampa in 2020.

# **Transportation Areas of Concern**

The opportunity for airport intermodal connections in Idaho are limited primarily due to the state's population and rugged geography. Airport access and future intermodal connections will most likely impact the sprawling urban area of Boise and, to a lesser extent, the other growing large cities in the state including Idaho Falls, Pocatello, Twin Falls, and Coeur D'Alene.

Through the 2020 IASP Update process, several areas of concern were identified by ITD Aeronautics staff, ITD modal managers, metropolitan planning agencies, Project Advisory Committee (PAC) members, and other stakeholders. A few of the most concerning areas regarding airport accessibility and intermodal integration in Idaho include:

- → Implications of high growth in the Treasure Valley region
  - BOI development
  - Airport inclusion in the Boise City Comprehensive Plan
  - Traffic congestion
  - Potential traffic reduction considerations
- ✤ Rideshare concerns
- ✤ Bike/ped access at airports
- ✤ State and regional planned transportation Improvements

Each of these topics is discussed below.



# Implications of High Growth in the Treasure Valley Region

Idaho is currently experiencing large shifts in population that require constant adjustments to the state's transportation and mobility infrastructure. Commonly known as "rural flight" and "urban explosion," these types of population changes generally entail shrinking rural populations and growing urban populations. This dynamic is predominantly driven by younger generations migrating to urban areas for economic opportunities. As shown in **Table 6-3**, the U.S. Census Bureau reports that Idaho was the second fastest-growing state by percentage of population growth from 2017 to 2018.

	TABLE 6-4: TOP 10 STATES IN PERCENT GROWTH, 2017-2018								
RANK	Name	2010	2017	2018	Percent Growth				
1	Nevada	2,700,679	2,972,405	3,034,392	2.1%				
2	Idaho	1,567,657	1,718,904	1,754,208	2.1%				
3	Utah	2,763,891	3,103,118	3,161,105	1.9%				
4	Arizona	6,392,288	7,048,876	7,171,646	1.7%				
5	Florida	18,804,580	20,976,812	21,299,325	1.5%				
6	Washington	6,724,540	7,425,432	7,535,591	1.5%				
7	Colorado	5,029,316	5,615,902	5,695,564	1.4%				
8	Texas	25,146,114	28,322,717	28,701,845	1.3%				
9	South Carolina	4,625,381	5,021,219	5,084,127	1.3%				
10	North Carolina	9,535,736	10,270,800	10,383,620	1.1%				

# TABLE 6-4: TOP 10 STATES IN PERCENT GROWTH, 2017-2018

Source: U.S. Census Bureau, 2019

Rapid population growth typically leads to congestion of existing infrastructure due to an increase of users that stretch its capacity. Unfortunately, rapid population shifts can be somewhat difficult to predict during long-range planning efforts which can inhibit a community's ability to keep pace with new infrastructure demands.

Coupled with the slow and costly development of new/expanded infrastructure, traffic congestion is rapidly becoming a mobility and accessibility issue for the state, especially in the Treasure Valley region. Ada and Canyon counties' combined population is expected to surpass one million people in the next 20 years. The socioeconomic growth of the Boise area has intermodal implications that will not be experienced by the rest of the state. A few of the key transportation challenges in the Treasure Valley are highlighted below, including the growth of BOI, traffic congestion, and rideshare concerns.

# **BOI Development**

BOI completed its Airport Master Plan Update in 2018. The recent population growth of the region and anticipated future socioeconomic changes will also increase enplanements and operations at the airport. *Chapter 4: Forecasts of Aviation* corroborates the projected growth presented in the master plan, with BOI enplanements anticipated to reach 2.9 million by 2037, up from 1.7 million in 2017.

To accommodate the growth projected for the region and the airport, the Boise Airport Master Plan Update identified an ambitious development program through 2035. ITD recognizes that many of the projects identified have implications on road usage, congestion, traffic flows, and changes in traffic patterns that will need to be considered in its own roadway development plans. ITD must consider roadway expansions as well as new ways to accommodate the additional movements of people. ITD has also noted that many of the projects in the Boise Airport Master Plan Update have broader intermodal implications for region. Freight, rail, transit, and new emerging surface transportation modes such as autonomous vehicles may also be impacted by the projects identified in the plan. Close coordination between BOI, ITD, and other regional planning entities will be imperative to ensuring a smooth transition to accommodating future demand in a safe and efficient way. Key projects



included in the Boise Airport Master Plan Update for the short- (2015-2020), mid- (2020-2025), and long-terms (2025-2035) are highlighted as follows:

- → Short-term projects (2015-2020)
  - New cell phone waiting area lot possibly located in the Victory Road/ Orchard Street area
  - Several new parking garages, including a five-story employee garage with space for 880 cars and a four-story rental car garage with space for 769 cars
  - New long-term parking lot within the existing employee parking lot with a new toll plaza
  - New airport Concourse A
  - New consolidated cargo facility
- Mid-term projects (2020-2025)
  - Third public parking, four-level garage that would add another 960 cars, increasing public garage parking inventory to over 3,000 spaces
  - Third runway southeast of airport
  - Complete realignment of Orchard Street to allow for an expanded road grid and other new facilities (completed by the Ada County Highway District)
  - Expanded economy parking lot
  - New heliport and hangars
- ✤ Long-term and "ultimate" projects (2025-2035)
  - New consolidated cargo facility
  - Realignment of Gowen Road to accommodate new cargo facility
  - Expansion of terminal and Concourse A

# BOI's Inclusion in the Local Comprehensive Plan

The City of Boise's Comprehensive Plan, Blueprint Boise, recognizes the important asset that BOI is to the community. One of the goals of the comprehensive plan is to "protect the long-term viability of BOI as part of the city's multi-modal transportation system". In order to meet this goal, the city outlined the following steps:

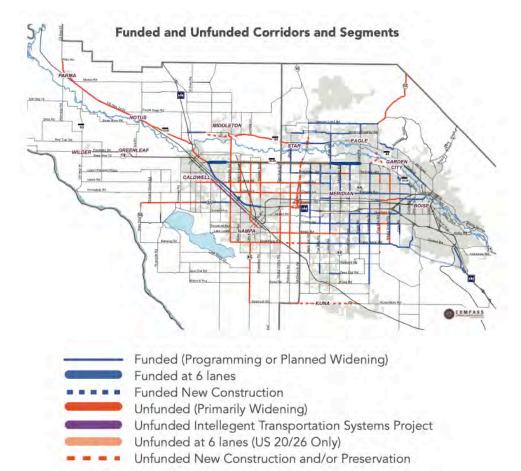
- → Airport compatibility
  - Adopt 2018 Boise Airport Master Plan Update
  - Adopt land use, zoning, and subdivision standards necessary to prevent the establishment of uses that are noise-sensitive or conflict with safe operation at the airport
  - Ensure the ability to expand BOI as needed to meet the regional air travel needs
  - Provide access to the airport for all modes of travel and improve public information and signage regarding public transportation service
- Incorporate high occupancy vehicle (HOV) facilities in future airport improvements such as bus pullouts, loading platforms, shelters, and passenger information facilities
- Continue annual reporting of enplanements and roadway system demand in the vicinity of the airport to ensure convenient access to the airport is provided

# **Traffic Congestion**

The Community Planning Association of Southwest Idaho (COMPASS) published its most recent regional longrange transportation plan for Ada and Canyon counties known as Communities in Motion 2040 2.0 in 2018. The plan notes the urgency of accommodating the future traffic associated with population growth. Communities in Motion 2040 2.0 includes over \$1.5 billion in funded transportation capital improvements between 2018 and



2040, in addition to operations, maintenance, and other associated expenses. Unfunded project needs identified by the plan including public transportation; bicycle and pedestrian infrastructure needs; and I-84, state highway, and local roadway projects totaling over \$5.4 billion, equating to an estimated shortfall of \$235 million per year. Funded and unfunded projects planned through 2040 for the Treasure Valley are shown in **Figure 6-6**. Anticipated congestion and future projects will undoubtedly impact access to the airports in this region.



# FIGURE 6-6: BOISE REGIONAL FUTURE TRANSPORTATION NEEDS

Source: Communities in Motion 2040 2.0, 2018

# **Considerations for Traffic Reduction**

Oftentimes building additional infrastructure or widening roadways does not solve congestion. When constraints are placed on infrastructure, travelers will look to alternative routes or modal options instead. Perhaps they will decide to use transit or telecommute rather than drive to their office, or perhaps they will look for carpool opportunities. Congestion can also lead to delays in passengers and employees reaching the airport and freight movements to and from the airport. As congestion increase in the Treasure Valley the solution to stressed infrastructure will need to be alleviated through alternative traffic reduction methods.

# Promotion of Transit

As traffic congestion increases in the Treasure Valley, public transportation can move more people in less space and transit will likely become a more popular option. COMPASS has explored the opportunities to build a regional light rail system in the Boise area, but the project has not been advanced to date. Valley Regional Transit's ValleyConnect 2.0 is the most recent regional transit services plan for the Treasure Valley, which is anticipated to



experience the greatest population growth in the state. The study includes the following transit improvement needs over the next decade:

- → Quadruple the amount of fixed-route service
- → Provide more frequent, late night, and weekend service
- ✤ Invest in roadway improvements
- ✤ Increase transit usage by 800 percent
- + Expand fleet considering electric and autonomous vehicles in the future
- → Double the number of park and ride lots from 20 to 40
- → Significantly improve access to BOI in terms of bus frequency and additional routes

The ValleyConnect 2.0 plan provides for frequent connections between downtown Boise, the Broadway Corridor, the Roosevelt Corridor, Curtis Road and associated hospital facilities, Garden City, and State Street. There will also be transit connections to Meridian, Nampa, and Micron. During the evening peak period, approximately 20 transit vehicles per hour are anticipated to serve BOI, compared to just three per peak-hour today. Further promotion of the Treasure Valley regional transit network, as well as increased use of park-and-ride facilities and shared mobility options can help to increase awareness and ridership, thus reducing the number of single occupancy vehicles (SOVs) on the roadways.

# Disincentives for SOVs and Incentives for HOVs

A large portion of vehicles on Idaho roadways are SOVs. These types of vehicular trips take up a large proportion of roadway capacity per person. In comparison, an HOV (carpool, van pool, or bus) can transport a larger number of people per vehicle, thereby significantly reducing the roadway capacity required per person. Currently Idaho law does not allow for HOV lanes except in counties with populations of less than 25,000 residents that also have resort cities within their boundaries. Changing this state policy may help ease some of the traffic congestion anticipated in the urban areas of the state.

Share the Ride Idaho, UberPool, and Lyft's Shared carpool services could be promoted as not only a way to help form HOV trips, but to also help users save money. When users form these shared carpools, each member of the pooled trip pays an equitable share of the trip cost, thereby making a single-occupancy rideshare trip less affordable and less attractive.

# **Rideshare Concerns**

Another concern specific to airport access entails the rapid growth of rideshare including Uber and Lyft as an emerging mode of transportation. A few concerns regarding rideshare interaction with airports are discussed below.

- Propagation of Vehicular Traffic: The popularity and growth of rideshare as a mode of transportation encourages the continued use (and perhaps growth) of motorized vehicles providing transportation.
   Encouraging the use of rideshare in the form of carpools rather than single passenger trips helps reduce the overall impact of increased vehicular congestion at an airport.
- Congestion of Airport Curb Fronts: As the use of rideshare continues to increase, a larger percentage of airport users will be dropped-off and picked-up at airport curb fronts rather than parking a vehicle in traditional parking facilities. This naturally causes curb fronts to exceed their originally designed capacities. Associated concerns with crowded curb fronts include increased vehicle/vehicle and vehicle/pedestrian interactions leading to higher collision risks and reduced user experience due to congestion and delay. Commercial service airports are testing various methods of ridesharing pick-up and drop-off points to reduce curb front congestion. The preferred method depends on the airport and will be based on available space, the roadway network, and other issues potentially impacting curb front congestion.



- Reduction of Airport Parking Revenue: Increased use of rideshare as a mode of transportation reduces the demand on existing airport parking facilities. Similarly, any increased ridership of transit options (bus or light rail) will also affect the demand for parking. This presents a problem for airport operators, as parking fees generally represent one of their largest revenue sources. Future sources of revenue will need to be explored to sustain operating budgets, as all indications point to the continued growth of alternative transportation modes such as rideshare and transit providing access to and from airports.
- Inequitable Americans with Disabilities Act (ADA) Accessibility: There is also a limited capacity of rideshare companies that have the capacity to accommodate ADA users. As most drivers for rideshare companies use their own personal vehicles, the vast majority of the overall rideshare fleet is not configured to accommodate wheelchairs or other mobility equipment. Therefore, as rideshare grows as a transportation mode, the equitable share of ADA compatible transportation may decrease. Both Uber and Lyft have implemented accessibility programs to provide a limited number of vehicles that can accommodate non-folding wheelchairs. However, these services are only available in select markets and available vehicles can often take a considerable amount of time to arrive once a trip has been requested. ITD actively advocates for accessibility as required by the ADA. The provision of ADA-compatible vehicles is left to the various transit districts, rideshare companies, taxi services, etc. The challenge exists in ensuring these types of entities, especially among growing rideshare companies, provide an equitable number of ADA-compliant vehicles across all service areas.

# **Bike/Pedestrian (Ped) Accessibility at Airports**

While biking to an airport for an employee may be an option, most airport users do not expect to arrive at an airport entirely by foot or bike due to baggage, including flight bags for pilots, gear such as recreational equipment, or other luggage that is not conducive to being transported on a bike or by foot. However, improvements can always be made to the intermodal connectivity of transportation modes by providing bike and pedestrian infrastructure. These types of connectivity improvements provide users with greater first- and last-mile connectivity to the rest of the transportation system and can provide options for employees, potentially reducing SOV trips and parking needs specific to employees.

At more rural airports in Idaho, a trend has arisen in which FBOs or primary airport users provide bikes to reach town center or communities that are just a few miles away, especially in the summer months. ITD Aeronautics has a courtesy car program to purchase vehicles for the most remote airports in Idaho to provide users with the ability to easily leave the airport. However, this program is being scaled back. Providing bikes at these airports may be an alternative to maintain or increase mobility. There may also be an opportunity at Backcountry airports to provide additional hiking trails or mountain bike paths to provide access to the surrounding wilderness.

ITD produced the Idaho Statewide Bicycle and Pedestrian Study in 2014. Although the study does not provide content on the integration of bike and pedestrian infrastructure with airports, it does recommend providing more bicycle- and pedestrian-friendly infrastructure to improve transportation choices. The study recommends that linkages between bike and pedestrian systems should be provided wherever possible to interconnect with two or more modes of transportation.

# **State and Regional Planned Transportation Improvements**

Planning is a critical component of ensuring viable growth and coverage of the state's overall accessibility and modal interconnectivity. Planning allows communities to anticipate future growth and shifts in demand to effectively plan for desired outcomes. Following planning efforts, specific improvements can be identified and implemented along planned timelines or upon reaching specific milestones. The following subsections touch on local long-range planning efforts and specific infrastructure improvements that are either in process or planned for the near future for Idaho's transportation/mobility systems.



# Include Airports in Local Land Use Planning

A primary goal of aviation system planning is to help airports integrate their needs and impacts with local land use and transportation planning efforts. Collaboration between airports and local land use authorities through local and regional planning efforts helps to ensure that airports are better integrated into their communities and specific access and other needs are being met by all parties involved. Coordinated planning efforts also promote airport compatible land uses adjacent to and in the vicinity of airports to promote safety and reduce the noise nuisances associated with aircraft overflight activities.

# ITD Long-Range Transportation Plan, IDAGO 2040

ITD's current long-range statewide transportation plan entitled IDAGO 2040 is intended to guide the state's multimodal transportation system through 2040. The plan outlines the state's multimodal transportation options over the next 10 to 25 years. The plan was developed by integrating the priority features and findings from regional transportation plans; council of government plans; and modal plans from transit, freight, rail, aviation, and bicycle and pedestrian modes. With the intention of being a living document, the plan is an important tool to help the state respond to changing needs over time. While the study does not identify specific transportation projects, it does provide the guidance and framework to help ITD effectively plan for and manage the state's transportation needs over the next 20 years. The plan allows ITD to more nimbly respond to challenges that may impact all modes of transportation such as aging infrastructure, changing demographics, congestion, and inflation.

# **Planned Transportation Infrastructure Improvements**

Through the statewide transportation planning efforts, ITD identified \$543 million dollars of total transportation needs in fiscal year (FY) 2019. In the same time, ITD generated \$138 million in revenue. If this continues over the next 20 years of the planning period, the shortfall in funding will reach \$8.1 billon. Substantial effort on the part of the Idaho public is needed to help bridge the funding gap.

Idaho's transportation needs for highways, transit, and aeronautics/aviation have been prioritized within in the Idaho Transportation Investment Program (ITIP) and the State Transportation Improvement Program (STIP). These funding mechanisms lay out a program of planned transportation projects to be undertaken over the next seven years. The ITIP and STIP also incorporate the transportation improvement plans (TIPs) from each of the state's metropolitan planning organizations (MPOs). The ITIP and STIP are updated annually to add a new year's worth of projects to the seven-year program. The 2019 ITIP summary report, which lists each of the planned projects for FY 2020 through FY 2026, was published in September 2019.

# **Summary**

Idaho is a unique state with specific accessibility and intermobility challenges and opportunities. However, the state enjoys a robust aviation system, roadway network, and transit options that link urban areas with rural parts of the state. This integrated system provides mobility, access, and economic opportunity to residents and businesses across Idaho. Coordinated planning efforts between airports and communities will ensure that improvements to the existing transportation and aviation systems will further enhance airport access and multimodal integration with communities and statewide.



# **Environmental Considerations**

AC 150/5070-7 requires that certain environmental considerations are addressed during the airport system planning process to identify conditions which may impact future airport development. The FAA also released Order 5050.4B, "National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions", which details airports' responsibilities under NEPA. It is important to note that the environmental considerations addressed here as part of the 2020 IASP Update are not designed nor intended for NEPA compliance. Instead, they provide a broad overview of the types of environmental concerns that are generally affecting airports in the state. This information is provided only as a high-level overview for statewide planning purposes. Individual airport sponsors should work with the appropriate agencies when conducting an airport master plan and specific airport improvement projects to determine compliance responsibilities.

This section outlines environmental impacts of significance to Idaho's airport system, including:

- ✤ Air Quality
- ✤ Biological Resources
- → United States Department of Transportation (USDOT) Section 4F Lands
- ✤ Historic Resources
- ✤ Land Use
- Environmental Impacts by Airport

Data presented in this section were obtained from available third-party sources including federal and state agencies such as the U.S. Environmental Protection Agency (EPA), Idaho Fish and Game, and the U.S. Fish and Wildlife Service (USFWS). Airport-specific impacts were provided by airport managers via the Airport Inventory and Data Form.

# **Air Quality**

Pursuant to the Clean Air Act of 1970 (CAA), the EPA established the National Ambient Air Quality Standards (NAAQS) for six criteria pollutants:

- → Carbon monoxide (CO1)
- ✤ Nitrogen dioxide (NO<sub>2</sub>)
- → Ozone (O<sub>3</sub>)
- → Particulate matter (PM) including PM<sub>10</sub> and PM<sub>2.5</sub>
- $\rightarrow$  Sulfur dioxide (SO<sub>2</sub>)
- ✤ Lead (Pb)

Areas in compliance with the NAAQS are deemed safe for human health, public welfare, and the environment. States are responsible for designating areas that are in attainment, nonattainment, or maintenance for each of these criteria pollutants. Each pollutant is assessed individually; as such, nonattainment areas are designated for specific pollutants. Nonattainment areas for different pollutants may overlap, share common boundaries, or be completely separate from one another. For each nonattainment area, states must develop an EPA-approved State Implementation Plan (SIP) that outlines regulations, programs, and measures to be used to attain and maintain the NAAQS within the timeline established by the CAA. When a nonattainment area attains the NAAQS, it is designated as a "maintenance area" to ensure continued adherence with the SIP. Maintenance status can last up to 20 years before an area is re-designated as in attainment. These areas are regularly monitored for ongoing attainment of the NAAQS and have established contingency measures that can be implemented should levels of criteria begin to rise.



The Idaho Department of Environmental Quality (DEQ) is responsible for issuing air quality permits and enforcing the state's air quality regulations as provided in the Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01). Idaho's SIP is composed of these rules and the site-specific area plans for each of the state's three nonattainment areas. **Table 6-4** lists the three nonattainment and four maintenance areas in Idaho, as well as the airport (as applicable) located within the area. These areas are depicted on **Figure 6-7**.

AREA NAME	Area Status	Pollutant(s)	Affected Airport
Pinehurst Valley	Maintenance	PM10	Shoshone County
West Silver Valley	Non-Attainment	PM <sub>2.5</sub>	Shoshone County
Cache Valley / Logan UT/ID	Non-Attainment	PM <sub>2.5</sub>	Preston
Fort Hall*	Non-Attainment	PM <sub>10</sub>	Pocatello Regional
Sandpoint	Maintenance	PM <sub>10</sub>	Sandpoint
Northern Ada County	Maintenance	$CO_1$ and $PM_{10}$	Boise Air Terminal/Gowen Field
Portneuf Valley	Maintenance	PM <sub>10</sub>	N/A

# TABLE 6-5: IDAHO NON-ATTAINMENT AREAS

\*Note: Fort Hall is a Tribal non-attainment area administered by the EPA. Source: Idaho DEQ, 2019

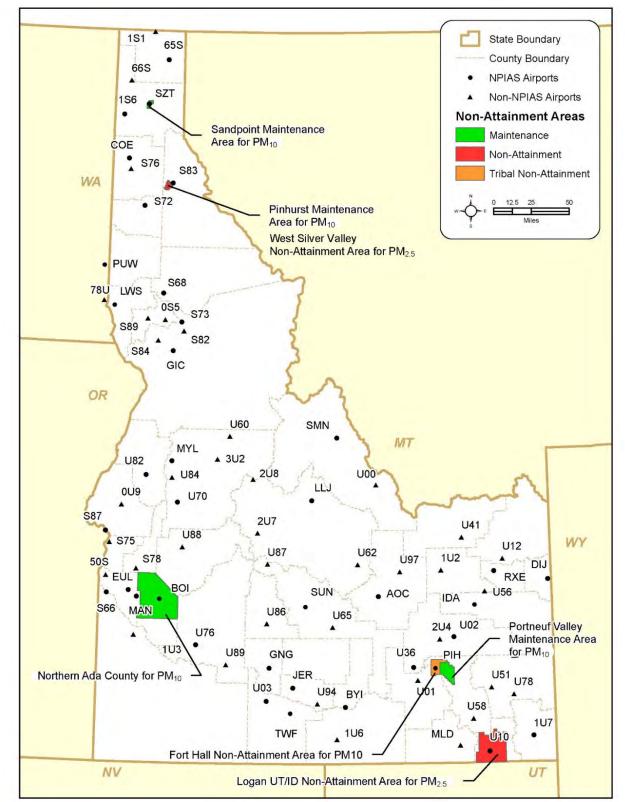
To ensure federal agencies uphold the objectives of the CAA, help maintain the NAAQS, and remain compliant with SIPs, proposed airport actions and development at federally funded airports within nonattainment and/or maintenance areas require an air quality analysis. Known as the General Conformity Rule, this requirement is designed so that aviation-related activities do not contribute to a new violation of the NAAQS, worsen existing violations, or delay attainment of the NAAQS. Airports within non-attainment areas must prepare an Airport Emissions Inventory to be included in their area's SIP. This can be challenging and difficult to quantify, as airports emissions come from a variety of sources that include aircraft engines and auxiliary power units, as well as various types of powered ground support equipment. To help airports in this process and comply with the General Conformity Rule, the Airport Cooperative Research Program (ACRP) developed *Report 84: Guidebook for Preparing Airport Emissions Inventories for SIPs* (2013).

In addition to the requirements that are specific to airports in nonattainment and/or maintenance areas, an air quality analysis may also be required for NEPA purposes in the following cases:

- → GA airports with a total of 180,000 or more annual GA and air taxi operations
- → Commercial service airports with more than 1.3 million annual enplanements
- Proposed projects that would increase automobile traffic congestion at off-airport road intersections to a level of service of D, E, or F

For more information on air quality policies and procedures, airports should also consult FAA Order 1050.1F, Environmental Impacts: Policies and Procedures and FAA Order 5050.4B, NEPA Implementing Instructions for Airport Actions. Other ACRP resources pertaining to airports and air quality include ACRP Report 11: Guidebook on Preparing Airport Greenhouse Gas Emissions Inventories, Report 71: Guidance for Quantifying the Contribution of Airport Emissions to Local Air Quality, and Project 02-33: Guidance for Estimating Airport Construction Emissions.





#### FIGURE 6-7: IDAHO'S AIR QUALITY NON-ATTAINMENT AND MAINTENANCE AREAS

Sources: Idaho DEQ Interactive Numeric & Spatial Information Data Engine, 2019; Kimley-Horn, 2019



# **Biological Resources**

Proposed federal actions that may affect the nation's water resources and designated threatened and endangered species are subject to numerous laws and regulations designed to maintain healthy levels of flora (plants) and fauna (fish, birds, mammals, reptiles, amphibians, etc.) within the U.S.<sup>3</sup> Federally-designated threatened and endangered species are in danger of extinction now or within the foreseeable future. These species are of highest conservation priority and fall under the protection of the Endangered Species Act (ESA). Aquatic species, as well as the habitats upon which they depend, are managed by multiple laws and regulations including the Fish and Wildlife Coordination Act, Magnuson-Stevens Fishery Conservation and Management Act, Migratory Bird Treaty Act, and Marine Mammal Protection Act.

Airports must evaluate any proposed development action for potential impacts on biotic resources or threatened or endangered species. These evaluations should be conducted in consultation with the USFWS, National Marine Fisheries Service, or both (as applicable). The Idaho Department of Fish and Game regulates fish and wildlife at the state level.

There are 21 threatened and endangered species in Idaho, 13 of which have been identified as Tier 1 Species of Greatest Conservation Need (SGCN) in the Idaho State Wildlife Action Plan (SWAP).<sup>4</sup> These species are presented in **Table 6-5**.

COMMON NAME	Scientific Name	Category	Listing Under ESA
Banbury Springs Limpet	Idaholanx fresti	Invertebrate	Endangered
Bliss Rapids Snail	Taylorconcha serpenticola	Invertebrate	Threatened
Bruneau Hot Springsnail	Pyrgulopsis bruneauensis	Invertebrate	Endangered
Bull Trout	Salvelinus confluentus	Fish	Threatened
Canada Lynx	Lynx canadensis	Mammal	Threatened
Caribou	Rangifer tarandus	Mammal	Endangered
Chinook Salmon (Snake River fall-run Evolutionarily Significant Unit [ESU])	Oncorhynchus tshawytscha	Fish	Threatened
Chinook Salmon (Snake River spring/ summer-run ESU)	Oncorhynchus tshawytscha	Fish	Threatened
Grizzly Bear	Ursus arctos	Mammal	Threatened
Macfarlane's Four-o'clock	Mirabilis macfarlanei	Plant	Threatened
Northern Idaho Ground Squirrel	Urocitellus brunneus	Mammal	Threatened
Slickspot Peppergrass	Lepidium papilliferum	Plant	Threatened
Snake River Physa	Physa natricina	Invertebrate	Endangered

# TABLE 6-6: IDAHO'S FEDERALLY DESIGNATED THREATENED AND ENDANGERED SPECIES

<sup>&</sup>lt;sup>3</sup> NEPA documents distinguish between biotic resources and federally listed endangered and threatened species. Biotic resources compose the various flora and fauna that inhabit aquatic environments, as well as river, lake, wetland, forest, and other habitat types upon which they rely. Federally listed threatened and endangered species specifically refer to those protected by the ESA and their critical habitats. This section of the 2020 IASP Update addresses both federally listed species protected by the ESA as well as the biotic resources that are not. Biotic resources may include state-listed rare or unique species and their habitats.

<sup>&</sup>lt;sup>4</sup> Idaho Department of Fish and Game. (January 2017). "State Wildlife Action Plan 2015". Available online at idfg.idaho.gov/sites/default/files/state-wildlife-action-plan.pdf (accessed August 2018).



COMMON NAME	Scientific Name	Category	Listing Under ESA
Sockeye Salmon (Snake River ESU)	Oncorhynchus nerka	Fish	Endangered
Spalding's Catchfly	Silene spaldingii	Plant	Threatened
Steelhead (Snake River Basin DPS)	Oncorhynchus mykiss	Fish	Threatened
Ute Ladies' Tresses	Spiranthes diluvialis	Plant	Threatened
Water Howellia	Howellia aquatilis	Plant	Threatened
White Sturgeon (Kootenai River DPS)	Acipenser transmontanus	Fish	Endangered
Woodland Caribou	Rangifer tarandus caribou	Mammal	Endangered
Yellow-billed Cuckoo	Coccyzus americanus	Bird	Threatened

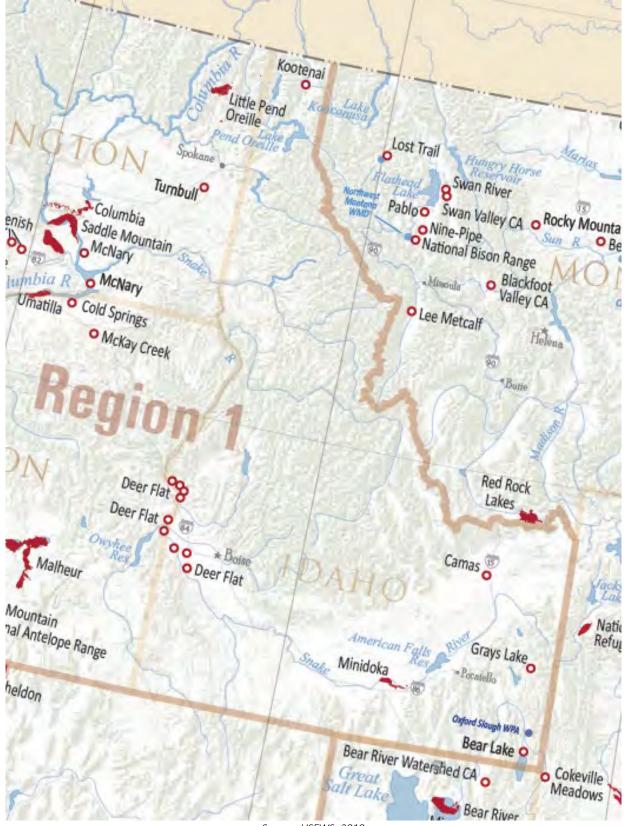
Sources: Idaho Fish and Game, 2019; SWAP, 2017

In addition to administering the ESA, the USFWS manages the country's National Wildlife Refuge (NWR) System, a national network of lands and waters designated for conservation; management; and the restoration of fish, wildlife, and plant resources and their habitats. There are seven NWRs in Idaho as depicted in **Figure 6-8** and are as follows:

- ✤ Bear Lake NWR
- ✤ Camas NWR
- ✤ Deer Flat NWR
- ✤ Grays Lake NWR
- ✤ Kootenai NWR
- ✤ Minidoka NWR
- ✤ Oxford Sough Waterfowl Production Area



# FIGURE 6-8: NWRS IN IDAHO



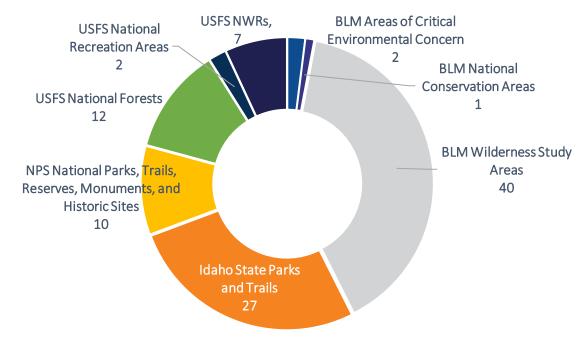
Source: USFWS, 2019



# **USDOT Section 4F Lands**

Section 4(f) of the USDOT Act of 1966, 49 United States Code (USC) Section 303(c), provides that the Secretary of Transportation will not approve a transportation program or project that requires the use of various types of protected publicly-owned land unless there is no feasible or prudent alternative or the USDOT determines the use of the property will have minimal impact. If such a program or project is approved, it must include all possible planning to minimize harm resulting from the use. As shown in **Figure 6-9**, Idaho hosts various types of federally-and state-protected land, with over 100 significant protected areas in the state. The federal government manages 34.5 million acres of land in Idaho and the state manages an additional 2.4 million acres. Together, public lands comprise approximately 69 percent of Idaho's total land mass.<sup>5</sup> **Figure 6-10** depicts the major federal lands in the state.

# FIGURE 6-9: NUMBER OF MAJOR PROTECTED LANDS IN IDAHO

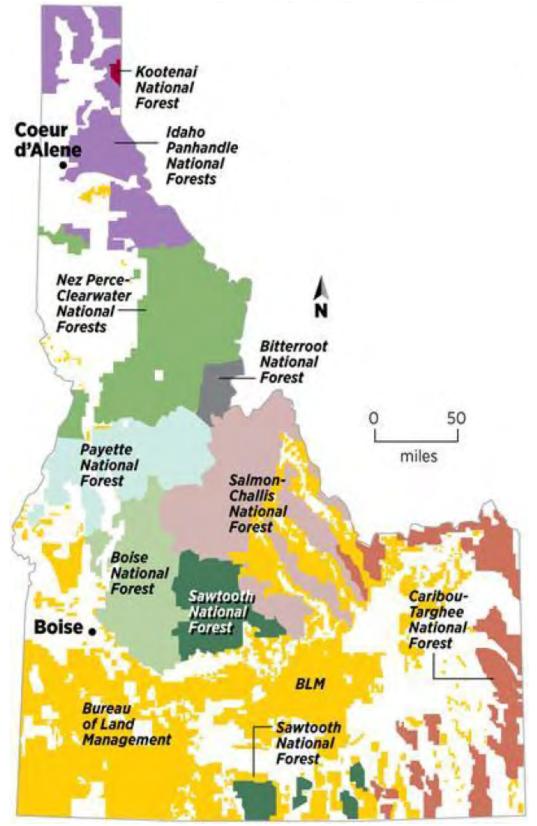


Sources: NPS, 2019; USFS, 2019; BLM, 2019; Idaho Parks and Recreation, 2019

This information does not encompass all of the public lands that may qualify as Section 4(f) properties, including local parks, recreation, and other protected areas. Therefore, before beginning any airport improvement program or project, it is important that Idaho airports coordinate with the appropriate local, state, and federal authorities to determine if there are any Section 4(f) properties within the vicinity of the airport. If so, it is incumbent to then determine potential impacts the proposed program or project may have on those properties.

<sup>&</sup>lt;sup>5</sup> Idaho Department of Lands (no date [n.d.]). "Federal Lands Task Force". Available online at idl.idaho.gov/land-board/federal-lands/index.html (accessed August 2019).

#### FIGURE 6-10: FEDERAL LANDS IN IDAHO



Source: Nationalmap.gov, 2019



# **Historic Resources**

The National Historic Preservation Act of 1966 (NHPA) and the Archaeological and Historic Preservation Act of 1974 primarily regulate and protect historical, architectural, archaeological, and cultural resources at the federal level. These laws protect a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. These resources can include structures, objects, and districts considered important to culture or community, as well as aspects of the physical environment, natural features, and biota.

Section 106 of the NHPA specifically requires federal agencies to consider the effects of their actions on properties listed or eligible for listing on the National Register of Historic Places (NRHP or National Register). The Idaho State Historical Preservation Office (SHPO) is responsible for implementing this process in Idaho. SHPO consults with federal funding agencies (e.g., the FAA) and project applicants (e.g., airport sponsors) to conduct Section 106 reviews in compliance with the NHPA. A site only must be eligible for inclusion on the NRHP to trigger a Section 106 review, so it is critical that airports work with the SHPO early in the planning process to identify any potentially significant sites in their vicinities.

Idaho has approximately 1,000 National Register listings comprised of over 6,700 buildings, sites, structures, objects and districts (referred to as features). All counties have at least one feature as summarized in **Table 6-6**. Twin Falls County has the highest number of features (1,097), followed by Ada (1,078), Bannock (890), Shoshone (615), and Canyon (537) counties. Airports in these counties should be particularly cognizant of airport development projects that may conflict with listed historic places in their vicinities. **Figure 6-11** depicts the density of designated NRHPs in Idaho by county.

COUNTIES	No. of Features*
Twin Falls	1,097
Ada	1,078
Bannock	890
Shoshone	615
Canyon	537
Latah	428
Boise, Bonneville	245 - 256
Kootenai, Nez Perce, Valley	108 - 152
Bear Lake, Bonner, Idaho, Cassia, Custer	74 - 97
Jerome, Bingham, Minidoka, Lincoln, Oneida, Owyhee, Fremont, Caribou, Blaine, Washington, Clearwater, Elmore	33 - 63
Payette, Lemhi, Gooding, Power, Gem, Franklin, Boundary, Benewah, Adams, Jefferson, Teton, Clark, Lewis, Madison, Butte, Camas	1 - 16

# TABLE 6-7: NUMBER OF NRHPS IN IDAHO BY COUNTY

\*Note: Features are comprised of buildings, sites, structures, objects, and districts. The NPS aggregates these features into National Registrar listings. Source: SHPO, 2019

Additionally, 37 communities in Idaho have committed to preserving their unique historic character by becoming a Certified Local Government (CLGs). In partnership with SHPO and the NPS, these communities have adopted local ordinances and created a historical preservation commission. In return, the CLG program offers these communities technical assistance and small grants to conduct historical surveys, nominate sites for inclusion in the National Register, and develop historic preservation plans, among other types of projects. Idaho's CLGs are provided below. Airports that fall within these jurisdictions may be subject to additional ordinances pertaining to historic preservation, as well as resources available to assist airports in their protection:

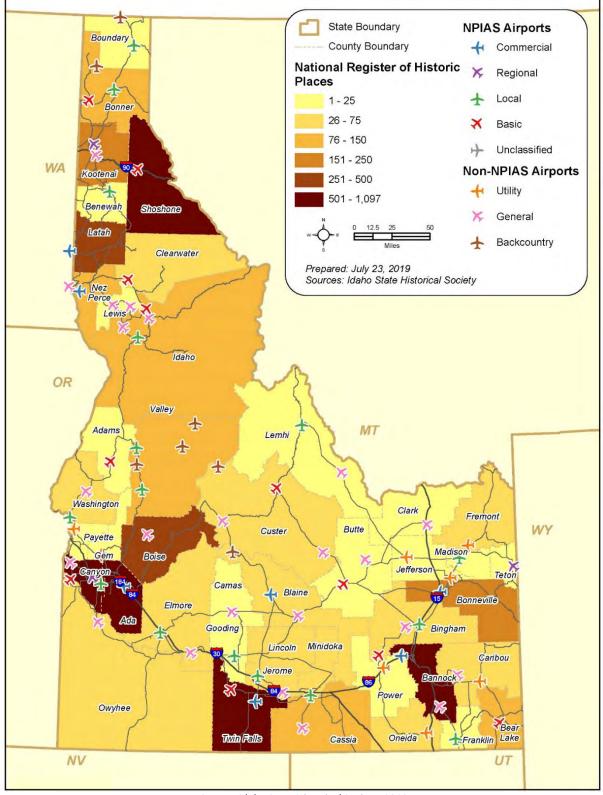


- ✤ Ada County
- ✤ Adams County
- ✤ American Falls
- ✤ Boise
- → Caldwell
- ✤ Cambridge
- ✤ Canyon County
- ✤ Clearwater County
- → Eagle
- ✤ Elmore County
- ✤ Franklin County
- ✤ Gem County
- → Hailey
- → Hayden
- ✤ Idaho City
- ✤ Idaho County
- ✤ Idaho Falls
- ✤ Ketchum
- ✤ Kootenai County

- ✤ Latah County
- ✤ Lewiston
- → McCall
- ✤ Meridian
- ✤ Moscow
- Nampa
- → Owyhee County
- → Payette
- ✤ Pocatello
- ✤ Power County
- ✤ Priest River
- → Rupert
- ✤ Sandpoint
- → Twin Falls
- ✤ Twin Falls County
- → Wallace
- ✤ Washington County
- → Weiser



#### FIGURE 6-11: DENSITY OF NRHPS BY COUNTY



Source: Idaho State Historical Society, 2019



#### Land Use

Airport compatible land use occurs when the land adjacent to or near an airport can coexist with a nearby airport without constraining the safe and efficient operations of the airport or exposing people to unacceptable levels of noise and safety hazards. Incompatibility can result in undue noise-related nuisance to persons on the ground or safety-related concerns affecting airspace, overflights, and accident severity. It can also result in pressures to limit airport operations, close airports, or restrict access such as by displacing runway thresholds or changing instrument approach procedures which increase safety for an airport and the community it serves. Cases of airport land use incompatibility can arise when previously undeveloped land becomes populated with residential or other incompatible development. In other cases, areas may be redeveloped from a compatible use, such as farmland or industrial use, to an incompatible one, such as a sensitive-use property like a hospital, school, daycare facility, or church.

In addition to the incompatibility associated with land use, other concerns are related to height. 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, was enacted to protect navigable airspace and ensure the safety of aircraft. Codified as Federation Aviation Regulation (FAR) Part 77, the regulation establishes specific airspace dimensions as "imaginary surfaces" based on the design criteria of airports that should not be exceeded by objects or structures. Imaginary surfaces are designed to allow aircraft to operate within the airport's traffic pattern and along established approaches and routes into and out of the airport. Part 77 incursions occur when manmade and natural objects penetrate an imaginary surface. Airports with instrument flight procedures must also adhere to the FAA's Terminal Instrument Procedures (TERPS) criteria. TERPS establishes the minimum measure of obstacle clearance to provide an adequate level of vertical protection from obstructions during normal aircraft operations.

Incompatible land use and Part 77 incursions result in degraded airport operations, increased safety risks, and more limited future economic and airport expansion and modification opportunities. Other impacts include disruption of communities, relocation, induced socioeconomic impacts, and impacts on other public facilities (such as previously discussed regarding USDOT Section 4(f) properties). To mitigate these issues, federal and state authorities have enacted legislation specifically addressing land use controls and Part 77 surfaces. 49 USC Section 47107(a)(10) requires airport sponsors to provide documented assurance that appropriate action has been or will be taken to restrict the land use adjacent to or in the immediate vicinity of an airport to activities and purposes compatible with normal airport operations (e.g., landing and takeoff of aircraft).

Building upon this federal framework, Idaho has established multiple state-level laws and regulations pertaining to land use and height applicable to all public-use airports in the state. While the size, type, and allowable land uses are not specifically defined by state law, the following legislation and rules establish some level of control over land adjacent to and in the vicinity of Idaho's airports:

- Idaho Code Title 67, State Government and State Affairs, Chapter 65 Local Land Use Planning: Requires political subdivisions to address airports in their comprehensive plans in a separate Public Airport Facilities section
- Idaho Code 67, State Government and State Affairs, Chapter 65 Zoning Ordinance: Requires political subdivisions to have zoning districts in accordance with the policies set forth in their adopted comprehensive plans
- Idaho Code, Title 21, Aeronautics, Chapter 5 Airport Zoning Act: Establishes the authority to mitigate impacts to aviation hazards to air flight including the prevention or removal of structure that present or may become an obstruction to airspace
- Idaho Administrative Code (IDAPA) Code 39, Title 4, Chapter 2 Rules Governing Marking of Hazards to Air Flight: Establishes the requirements for marking hazards to air flight through the airspace of and over the state of Idaho



IDAPA Code 39, Title 4, Chapter 4 – Rules Governing the Idaho Airport Aid Program (IAAP): Establishes that the airport sponsor should have the airport zoned to prevent the creation or establishment of structures that would constitute hazards or obstructions to aircraft operations (aligns with state grant assurance 23)

Most recently, Idaho Senate Bill (SB) 1265 (effective July 1, 2014) amended Idaho Code Title 21, Chapter 5, Airport Zoning Act, and Title 67, Chapter 65, Local Land Use Planning, to require more proactive land use compatibility planning through the local comprehensive planning process. The key provisions of this legislation include:

- Requires that cities and counties with zoning ordinance authority to complete planning and zoning around airports in accordance with Title 67, Chapter 65, Local Land Use Planning (that authority had previously been with ITD Aeronautics)
- → Identifies public airports as essential community facilities
- ✤ Requires that planning and zoning commissions consider the current and future needs and community impacts of airports with the assistance of ITD Aeronautics and the local airport manager
- Requires that airport planning and zoning commissions notify the local airport manager when making changes to the comprehensive plan or otherwise conducting a land use action that may encroach on the airport or create an aviation hazard

Airports that have received state funds through the IAAP are obligated to adhere to these laws and rules through the grant assurance program. Additionally, airports that have received federal Airport Improvement Program (AIP) funds must also comply with several grant assurances pertaining to local plans and compatible land uses.

ITD Aeronautics developed the *Idaho Airport Land Use Guidelines* (Land Use Guidelines or Guidelines) to help airports, airport owners/sponsors, local planning and zoning officials, policymakers, and the general public understand land use compatibility and height restrictions, as well as their affiliated state and federal statutory obligations.<sup>6</sup> These guidelines were first developed as part of the 2010 IASP and subsequently updated in 2016. The document provides information about best practices associated with developing and implementing effective compatible land use measures around airports and within communities. ITD Aeronautics has also established minimum zoning ordinance standards that must be met by a local political subdivision or agency. These standards address specific land uses (e.g., residential development, industrial land uses that cause emissions, landfills, etc.), height controls, noise impacts, lighting, wildlife attractants, and obstruction marking and lighting, among other factors. Appendix B of the Guidelines provides a model zoning ordinance for Idaho cities and towns to consider when developing and implementing their own zoning ordinances.

ITD Aeronautics developed a further addition to the Land Use Guidelines known as the *Draft Guide for Comprehensive Plan – Section Q – Airports* (dated October 18, 2018). This document provides guidelines for cities and counties in the preparation of the Public Airport Facilities section of a comprehensive plan as mandated by Idaho Code Section 67-6508 (q) (noted above). In general, the Public Airport Facilities section should outline details for the financing, protection, maintenance, operation, and long-term growth and development of the airport.<sup>7</sup>

Since the IASP was last conducted in 2010, the percent of airports that reported having zoning for airport compatible land use and height has significantly increased. In 2010, 28 percent of airports reported zoning for

<sup>&</sup>lt;sup>6</sup> T-O Engineers, Inc. (July 2016). *Idaho Airport Land Use Guidelines*. Available online at

https://itd.idaho.gov/wp-content/Aero/Publications/LandUse\_Guidelines.pdf (accessed December 2019).

<sup>&</sup>lt;sup>7</sup> ITD Division of Aeronautics (October 2018). "Recommended Guidance for Cities and Counties to Prepare Section Q for Your Comprehensive Plan". Available online at https://itd.idaho.gov/wp-content/Aero/Publications/Draft-Guide-for-Comprehensive-Plan-Section-Q-Airports.pdf (accessed January 2020).

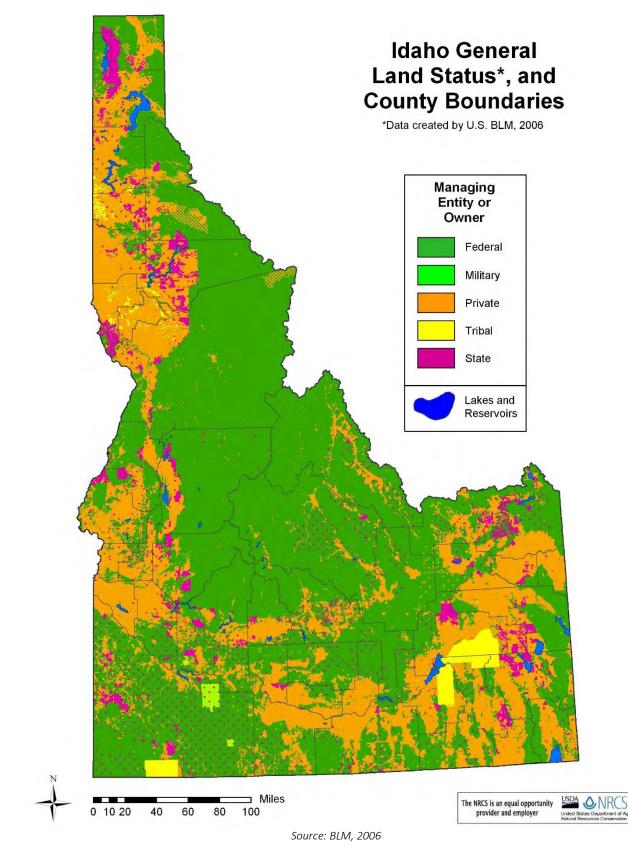


land use compatibility and 51 percent reported zoning for height. Today, 60 percent of airports statewide reported zoning for both land use and height. The most significant increases are apparent in the state's largest airports, with 100 percent of Primary and Regional airports located in areas with enacted zoning ordinances. Much of this improvement can be attributed to SB 1265; the updated Land Use Guidelines; and ITD Aeronautics' focused effort on working with airports, cities, and counties to ensure airport compatible land are enacted across the state.

While improvements are apparent across the state, 16 percent of airport managers reported incompatible land uses adjacent to or near their facilities during the airport inventory process. These compatibility issues include residential encroachment and other special uses generally considered incompatible with airport operations. It is possible that these issues arose prior to the enactment of state-level airport compatible land use legislation, and the percent of airports with concerns could decrease over time as zoning ordinances become ubiquitous across the state. **Figure 6-12** depicts land ownership in Idaho by owner type. As noted previously, 69 percent of land in Idaho is publicly owned, with most of that land being controlled by federal agencies. Airport sponsors should work closely with other government entities to enact and enforce airport compatible land use regulations including restrictions on both land use and height.



#### FIGURE 6-12: IDAHO LAND OWNERSHIP BY OWNER TYPE



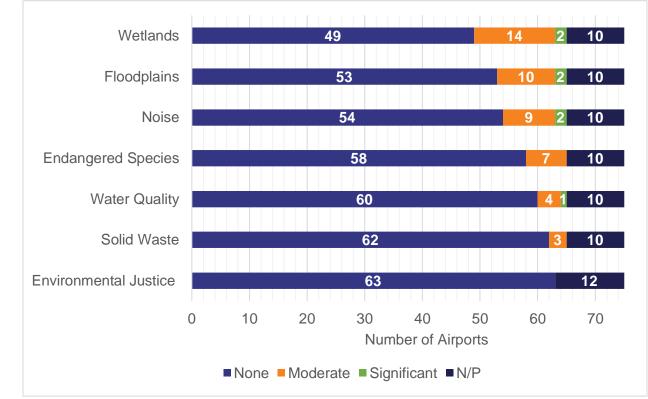


#### **Environmental Impacts by Airport**

As part of the 2020 IASP Update inventory process, airport managers were asked for information about any major environmental concerns affecting their airport including:

- ✤ Wetlands
- ✤ Floodplains
- ✤ Noise
- ✤ Endangered species
- ✤ Water quality
- ✤ Solid waste
- ✤ Environmental justice

Brief descriptions of each type of environmental impact are provided below. Forty-seven percent of airports (35 airports) reported that no environmental concerns affect their facilities, while the remaining 53 percent (40 airports) stated that at least one type of issue has at least a moderate impact on current or future operations, development, or both. As shown in **Figure 6-13**, wetlands are the most concerning issue for airports, with 16 airports (22 percent) reporting either moderate or significant levels of concern. Twelve airports (16 percent) reported moderate or significant levels of concern regarding floodplains and 11 (15 percent) reported noise issues. Environmental justice is least concerning, with 63 airports (84 percent) reporting no concern, followed closely by solid waste (62 reporting no concern, 83 percent) and water quality (60 reporting no concern, 80 percent). **Table 6-7** at the end of this section provides airport-specific details about the environmental concerns reported by airport managers during the 2020 IASP Update.



#### FIGURE 6-13: SUMMARY OF ENVIRONMENTAL IMPACT LEVELS AT 2020 IASP UPDATE AIRPORTS

Source: Airport Inventory and Data Survey Forms, 2019



#### Wetlands

According to the USDOT's Order 5660.1A, *Preservation of the Nation's Wetlands*, wetlands are defined as "lowlands covered with shallowing and sometimes temporary or intermittent waters," including (but not limited to) swamps, marshes, wet meadows, river overflows, and shallow lakes and ponds with emergent vegetation. In general, wetlands are defined in terms of their hydrology, vegetation, and soil type. Wetlands can be nonjurisdictional or jurisdictional depending on whether they involve a navigable water of the U.S.; this distinction governs the agencies and procedures for actions affecting those ecosystems. In both cases, federally funded airport development projects must identify potential impacts on wetlands and avoid impacts when a practicable alternative exists. Examples of airport actions that could cause wetland impacts include new or expanded terminal and hangar facilities or access roadways, runway and taxiway construction or expansion, and the installation of navigational aids (NAVAIDS).

Wetlands and riparian habitations are essential habitats for many of Idaho's fish, wildlife, invertebrate, and plant species. Nearly 50 percent of bird species rely on this type of habitat, as well as up to 50 percent of Idaho's SGCN.<sup>8</sup> The Idaho Department of Fish and Game is the lead state agency responsible for the management and protection of Idaho's wetlands. The agency manages around 33 high-priority wetlands, 90 percent of which lie within specially designated publicly accessible habitats known as Wildlife Management Areas. Although there are no system airports that fall directly inside any of these areas, a multitude lie almost directly beyond their defined boundaries. Idaho airports must work with the Idaho Department of Fish and Game to assess if a proposed action may adversely impact a wetland ecosystem and identify all applicable state and federal laws and regulations.

#### Floodplains

Floodplains are lowland areas connected to inland and/or coastal waters that periodically flood. Executive Order 11988, *Floodplains*, and USDOT Order 5650.2, *Floodplain Management and Protection*, 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. Among other potential impacts, improperly designed or constructed facilities in floodplains can increase upstream flood elevations, downstream peak flow volumes, and/or flood flow velocities. Each of these impacts has the potential to adversely affect people, property, and the environment. Typical airport actions that may result in floodplain impacts include airside and landside new construction or expansion, land acquisition for airport-related use, and new or relocated access roadways.

Airport actions occurring within a floodplain may require the authorization of the U.S. Army Corps of Engineers, the Federal Emergency Management Agency (FEMA), and state and local floodplain management agencies. The Idaho Department of Water Resources is responsible for managing floodplains in Idaho, including reviewing work conducted in floodplains to ensure it will not cause an increase in flood levels if flooding does occur. In addition to mapping applications provided by FEMA, the Idaho Department of Water Resources provides an online flood hazard map where airports can check if they are in a floodplain. This interactive map is available at https://idwr.idaho.gov/floods/map.html (accessed November 2019).

#### Noise

Noise pollution can be one of the most controversial environmental impacts association with proposed airport development. Airport noise analyses generally determine how a proposed airport action would change the cumulative noise exposure of individuals to aircraft noise surrounding an airport. Noise pollution is an essential component of airport compatible land use as described in the Land Use section above. It also may be a concern when determining potential effects associated with Section 4(f)-protected resources and historic and cultural sites. Typical airport actions that could cause noise impacts include new or extended runways and taxiways, land

<sup>&</sup>lt;sup>8</sup> Idaho Department of Fish and Game (n.d.) "Idaho's Wetlands." Available online at idfg.idaho.gov/conservation/wetlands (accessed August 2019).



purchases for airport-related use, substantial changes affecting the frequency or type of aircraft operations, or new or revised traffic patterns.

In addition to developing airport noise contour maps and conducting noise analyses, an airport can consider a project's potential impacts in terms of community annoyance, sleep disturbance, and speech and school learning interference. Measures to mitigate noise pollution may include operational measures such as changing flight tracks or runway usage, implementing voluntary noise abatement procedures, and otherwise modifying how and when the airport is used; land-use measures including installing noise barriers and enforcing airport land use compatibility guidelines; and construction measures such as limiting the time of day when heavy equipment may operate.

#### **Endangered Species**

See Biological Resources section above.

#### Water Quality

Many airport activities may cause impacts to water quality, including construction activities which may cause sediment-laden runoff to enter waterways; the chemical and biological breakdown of deicing chemicals; and operations and maintenance activities which may result in metals, oils, greases, and other potentially hazardous materials entering waterways. If not properly controlled, these and other activities can adversely affect animal, plant, and human populations; accordingly, the FAA, U.S. EPA, and Idaho DEQ work together to minimize discharge and protect navigable waterways, municipal drinking water supplies, aquifers, and groundwater.

In particular, the Idaho DEQ and the U.S. EPA jointly established the Idaho Water Quality Standards Program to protect human health, enhance the state's water quality, and meet the requirements of the CWA. Airports should coordinate with the Idaho DEQ to determine if proposed actions may impact Idaho's water quality. The agency also issues National Pollutant Discharge Elimination System (NPDES) permits authorizing point source discharges into navigable waters of the U.S., including Construction General Permits (CGPs) and Multi-Sector General Permits (MSGs) for Stormwater Discharges from Industrial Activities. Additionally, many airports are required to have an updated Stormwater Pollution Prevention Plan (SWPPP) to identify potential sources of stormwater pollution, describes control measures to reduce or eliminate pollutants, and define procedures for stormwater management. SWPPPs are typically required for ongoing airport activities and nearly always for specific construction activities. Airports should work with the Idaho DEQ to determine if a NPDES permit is required for ongoing operations and maintenance activities and/or proposed improvement projects.

#### Solid Waste

Many on-airport activities produce solid waste in the form of construction debris, municipal solid waste, compostable, and deplaned waste. Solid waste is defined in Idaho's Solid Waste Management Rules (IDAPA 58.01.06) as any garbage, refuse, and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and community activities. This also includes any discarded material that meets certain requirements, and includes items such as garbage, scrap metal, chemical by-products, and sludge from either industrial facilities or wastewater treatment plants. Note that the term "solid waste" does not include hazardous wastes, substances, or materials. Each of these types of waste must be handled in accordance with specific statutory and regulatory mandates designed to protect human and environmental health and safety.

The Idaho DEQ's Waste Management and Remediation Division is responsible for monitoring and controlling the generation, treatment, storage, and disposal of wastes in Idaho. The agency implements the federal Resource Conservation and Recovery Act (RCRA) to protect human health and the environment, reduce the amount of waste generated, and ensure waste is managed in a responsible manager. Additionally, the agency is responsible



for regulating most solid waste management facilities in Idaho under the Idaho Solid Waste Facilities Act (Idaho Code §39-74) and IDAPA 58.01.06.

Airports should consider how ongoing maintenance and operations and construction-related activities may impact solid waste volumes and identify strategies to reduce, reuse, or recycle waste to the greatest extent possible. It is important to note that the FAA Modernization and Reform Action of 2012 (FMRA) amended USC Title 49 to provide a number of changes to the AIP, including the inclusion of two changes regarding recycling, reuse, and waste reduction at airports. Most significantly, FMRA requires that airports that receive AIP funding address issues related to solid waste recycling within their master plan. FMRA outlines five specific elements that should be included in an airport recycling, reuse, and waste reduction plan:

- → Feasibility of solid waste recycling at the airport
- → Minimizing the generation of solid waste at the airport
- → Operation and maintenance requirements
- → Review of waste management contracts
- → Potential for cost savings or the generation of revenue

The FAA released a memorandum on September 30, 2014 to assist airports prepare an FMRA-compliant airport recycling, reuse, and waste reduction plans as an element of a master plan or master plan update.<sup>9</sup> All airports, regardless of their ability to access AIP funds, can use this document to guide the development of waste reduction strategies at their facilities. *FAA Synthesis Document: Recycling, Reuse, and Waste Reduction Plans at Airports* is another resource for airport sponsors that are developing or broadening on-airport recycling programs.

#### **Environmental Justice**

Environmental justice considers the potential for actions to disproportionally affect low-income or minority populations to ensure that no population is unduly burdened by public actions. The U.S. EPA's Office of Environmental Justice provides the following definition:

The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental effects resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Impacts may arise due to aircraft noise, air quality, water quality, and traffic. To identify if issues of environmental justice may occur due to a proposed airport action, it is important for airport sponsors to understand their communities and carefully consider the demographics of the populations adjacent to and near their facilities. Airports can obtain data on from the U.S. Census Bureau, state and local planning agencies, and local community associations. Public outreach is also a critical component to identify and understand potential impacts on specific populations, as well as reasonable alternatives that could be implemented.

Additionally, the U.S. EPA's Environmental Justice Screening and Mapping Tool provides a nationally consistent dataset and approach to identifying potential areas of concern. Airports can use this tool to preliminarily identify populations within their vicinities who might be unduly affected by proposed airport development. The interactive map is available online at https://www.epa.gov/ejscreen (accessed November 2019).

<sup>&</sup>lt;sup>9</sup> This memorandum, as well as other resources associated with enhancing airport recycling, reuse, and waste reduction projects, is available online at www.faa.gov/airports/environmental/airport\_recycling.



#### **Environmental Summary**

**Table 6-7** reports the extent to which each airport in the 2020 IASP Update is affected by the seven types of environmental impacts described above. Note that this information was reported by airport managers during the inventory process, and independent validation was not conducted during the system planning process. Airports, airport sponsors, and ITD Aeronautics may need to conduct additional analyses during planning and decision processes to further investigate these issues and identify federal, state, and local regulations applicable to specific situations.

# **Supplemental System Context Summary**

Intermodal integration/access and environmental considerations represent key topics that ITD Aeronautics and airport sponsors should address during future planning processes, including statewide or regional studies as well as project-specific planning and design processes. Considering how proposed changes interact with, affect, or are impacted by the surrounding manmade and natural environs helps decision makers prioritize investments, implement effective and germane airport policies, and implement airport improvement projects that align with the broader context within which the airport operates. This level of integration necessitates collaboration between various ITD modal divisions; local officials; federal authorities including but not limited to the FHWA, FAA, EPA, USDOT, and NPS; state agencies such as Idaho Fish and Game and DEQ; and airports and their sponsors. Working together, ITD Aeronautics can maximize its investments in the system and ensure viability over time.



#### TABLE 6-8: ENVIRONMENTAL IMPACTS BY AIRPORT

			LL 0-0. LIVVINC		PACISOTAIN				
ASSOCIATED		FAA			Water	Endangered		Solid	Env.
CITY	Airport	ID	Wetlands	Noise	Quality	Species	Floodplains	Waste	Justice
Aberdeen	Aberdeen Municipal	U36	None	None	None	None	None	None	None
American Falls	American Falls	U01	None	None	None	None	None	None	None
Arco	Arco-Butte County	AOC	None	None	None	None	None	None	None
Bancroft	Bancroft Municipal	U51	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Big Creek	Big Creek	U60	Moderate	None	None	None	None	None	None
Blackfoot	McCarley Field	U02	None	None	None	None	None	None	None
Boise	Boise Air Terminal/Gowen Field	BOI	No	Moderate	No	No	No	Moderate	No
Bonners Ferry	Boundary County	65S	None	None	None	None	None	None	None
Buhl	Buhl Municipal	U03	None	None	None	None	None	None	None
Burley	Burley Municipal	BYI	Moderate	None	None	None	None	None	None
Caldwell	Caldwell Industrial	EUL	Moderate	None	None	None	None	None	None
Carey	Carey	U65	None	None	None	None	None	None	None
Cascade	Cascade	U70	Moderate	None	None	None	None	None	None
Challis	Challis	LLJ	None	None	None	None	None	None	None
Coeur D'Alene	Brooks SPB	S76	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	None	None	None	None	None	None	None
Coolin	Cavanaugh Bay	66S	Moderate	None	None	None	None	None	None
Cottonwood	Cottonwood Municipal	S84	Moderate	None	None	None	None	None	None
Council	Council Municipal	U82	None	None	None	None	None	None	None
Craigmont	Craigmont Municipal	S89	None	None	None	None	None	None	None
Donnelly	Donald D. Coski Memorial	U84	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Downey	Downey/Hyde Memorial	U58	None	None	None	None	None	None	None



ASSOCIATED CITY	Airport	FAA ID	Wetlands	Noise	Water Quality	Endangered Species	Floodplains	Solid Waste	Env. Justice
Driggs	Driggs-Reed Memorial	DIJ	None	Moderate	None	None	None	None	None
Dubois	Dubois Municipal	U41	None	None	None	None	None	None	None
Emmett	Emmett Municipal	S78	None	None	None	None	None	None	None
Fairfield	Camas County	U86	None	None	None	None	None	None	None
Galena	Smiley Creek	U87	Moderate	None	None	Moderate	Moderate	None	None
Garden Valley	Garden Valley	U88	Moderate	None	None	None	None	None	None
Glenns Ferry	Glenns Ferry Municipal	U89	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Gooding	Gooding Municipal	GNG	None	None	None	None	None	None	None
Grangeville	Idaho County	GIC	None	None	None	None	None	None	None
Hailey	Friedman Memorial	SUN	None	Significant	None	None	None	None	None
Hazelton	Hazelton Municipal	U94	None	None	None	None	None	None	None
Homedale	Homedale Municipal	S66	Moderate	None	Moderate	None	Moderate	None	None
Howe	Howe	U97	None	None	None	None	None	None	None
Idaho Falls	Idaho Falls Regional	IDA	None	None	None	None	None	None	None
Jerome	Jerome County	JER	None	None	None	None	None	None	None
Kamiah	Kamiah Municipal	S73	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Kellogg	Shoshone County	S83	Significant	Moderate	None	None	Moderate	None	None
Kooskia	Kooskia Municipal	S82	None	None	None	None	Moderate	None	None
Leadore	Leadore	U00	None	None	None	None	None	None	None
Lewiston	Lewiston-Nez Perce County	LWS	None	Moderate	None	None	None	None	N/P
Lewiston	Snake River SPB	78U	None	Moderate	Moderate	Moderate	None	None	None
Mackay	Mackay	U62	None	None	None	None	None	None	None
Malad City	Malad City	MLD	None	None	None	None	None	None	None
McCall	McCall Municipal	MYL	Moderate	Moderate	Moderate	None	None	None	None



ASSOCIATED		FAA			Water	Endangered		Solid	Env.
CITY	Airport	ID	Wetlands	Noise	Quality	Species	Floodplains	Waste	Justice
Midvale	Lee Williams Memorial	0U9	None	None	None	None	None	None	None
Mountain Home	Mountain Home Municipal	U76	None	Moderate	None	None	None	None	None
Mud Lake	Mud Lake/West Jefferson County	1U2	None	None	None	None	None	Moderate	None
Murphy	Murphy	1U3	None	None	None	None	None	None	None
Nampa	Nampa Municipal	MAN	None	None	None	None	None	None	None
Nezperce	Nezperce Municipal	0S5	Moderate	Significant	None	None	Moderate	None	None
Oakley	Oakley Municipal	1U6	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Orofino	Orofino Municipal	S68	None	None	None	None	Significant	None	None
Paris	Bear Lake County	1U7	Moderate	None	None	Moderate	Moderate	None	None
Parma	Parma	50S	None	None	None	None	None	None	None
Payette	Payette Municipal	S75	None	None	None	None	None	None	None
Pocatello	Pocatello Regional	PIH	None	None	None	None	None	None	None
Porthill	Eckhart International	1S1	None	None	None	Moderate	Moderate	None	None
Preston	Preston	U10	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Priest River	Priest River Municipal	1S6	None	None	None	None	None	None	None
Pullman	Pullman-Moscow Regional	PUW	Significant	None	Moderate	None	Significant	None	None
Rexburg	Rexburg-Madison County	RXE	Moderate	None	None	None	Moderate	None	None
Rigby	Rigby	U56	None	Moderate	None	None	None	None	None
Rockford	Rockford Municipal	2U4	None	None	None	None	None	None	None
Salmon	Lemhi County	SMN	Moderate	Moderate	None	Moderate	Moderate	None	None
Sandpoint	Sandpoint	SZT	None	None	None	None	None	None	None
Soda Springs	Allen H Tigert	U78	N/P	N/P	N/P	N/P	N/P	N/P	N/P
St. Anthony	Stanford Field	U12	N/P	N/P	N/P	N/P	N/P	N/P	N/P



ASSOCIATED CITY	Airport	FAA ID	Wetlands	Noise	Water Quality	Endangered Species	Floodplains	Solid Waste	Env. Justice
St. Maries	St Maries Municipal	S72	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Stanley	Stanley	2U7	None	None	None	None	None	None	None
Stanley	Thomas Creek	2U8	None	None	Significant	Moderate	None	Moderate	N/P
Twin Falls	Joslin Field-Magic Valley Regional	TWF	None	None	None	None	None	None	None
Weiser	Weiser Municipal	S87	None	None	None	None	Moderate	None	None

Source: Airport Inventory and Data Survey Forms, 2019



# CHAPTER SEVEN: FUTURE SYSTEM PERFORMANCE

### Introduction

This chapter looks ahead to establish future performance targets to guide policies and development through the 20-year planning horizon of the 2020 IASP Update. This information expands upon the findings presented in *Chapter 5: System Adequacy Analysis*, is informed by projected aviation demands established in *Chapter 4: Forecasts of Aviation Activity* and is rooted in the wider context of the aviation system presented in *Chapter 6: Supplemental System Context*. Each of these previous chapters provides unique insight into the Idaho airport system in terms of:

- → Current system performance
- → Projected future activity levels
- → Opportunities and constraints associated with the airport environs

Together, these perspectives build upon one another to provide the framework to assess the existing system's ability to meet the aviation demands of tomorrow. In addition to this forward-looking approach, this chapter documents system progress since that last Idaho Aviation Plan (IASP) was published in 2010. By comparing the airport system's current performance with the results of similar analyses conducted nearly a decade ago, the Idaho Transportation Department Division of Aeronautics (ITD Aeronautics) can obtain valuable insight into how the airport system has evolved over time and the trajectory of progress. High-level actions to improve system performance for airports and ITD Aeronautics are also offered. The results presented in this chapter will inform all subsequent analyses and recommendations prepared as part of the 2020 IASP Update.

Future system needs identified in this chapter are based on performance measure (PM) targets established by ITD Aeronautics and the Project Advisory Committee (PAC). These targets indicate the percent of airports by classification that should achieve each PM to provide an optimized airport system that safely and efficiently meets existing and future aviation demands. The 2020 IASP Update recognizes that it would be ideal if 100 percent of Idaho system airports met all PMs; however, such a target is not practicable. Accordingly, PM targets are established based on a comprehensive assessment of airports' roles in the system and the potential for an action to be undertaken based factors such as resource availability, political will, environmental constraints, and other variables at statewide and airport-specific levels. It is also important to note that future system performance only comprises PMs, as these areas can be directly impacted by actions or policies undertaken by ITD Aeronautics or airports. Performance indicators (PIs) and additional analysis (AA) points presented in Chapter Five are informational in nature and are not designed to assess the system's ability to meet current or future aviation demands. These elements do provide ITD Aeronautics and airports information that can be used to inform other decisions, as well as portray the overall condition and health of Idaho's airport system.

Serving as the foundation of this future needs assessment, this chapter also provides two complementary analyses that address the future context that the airport system may be operating within, as well as its potential composition. The first analysis considers how non-aviation-related outside influences, such as economic and technological shifts, planned improvements to the multimodal transportation network, and population growth, may affect future aviation needs. These influences may impact the type and level of demands placed upon the system, the anticipated timeframe of those shifts, and the geographic areas that could be most affected.



Following the outside influences discussion, this chapter assesses the 37 Idaho airports currently included in the Federal Aviation Administration's (FAA's) National Plan of Integrated Airport Systems (NPIAS). As discussed in *Chapter 3: Airport Roles Assessment*, this federal plan identifies airports considered integral to the National Airspace System (NAS). Airports in the NPIAS are eligible to receive federal funding through the Airport Improvement Program (AIP). For this and other reasons, Idaho's NPIAS airports are only classified by the federal system and do not hold a unique designation for state-level planning and funding processes. The 2020 IASP Update re-evaluated existing federal NPIAS and associated ASSET classifications to identify any airports that may change classifications in the future. This analysis also assessed airports that are not currently included in the NPIAS to determine their potential for inclusion at some point in the future based on current FAA criteria. These analyses provide insight into the future composition of the Idaho airport system, airport-specific facility and service needs, as well as potential funding sources for airport improvement projects identified as part of the system planning process. As such, future performance targets and associated airport-specific needs are established by potential future system roles based on the results of the NPIAS evaluation.

As such, this chapter is divided into the following sections:

- ✤ Outside Influences
- → Evaluation of Potential Changes to NPIAS and ASSET Classifications
- ✤ Review of Historical, Current, and Future Performance
- ✤ Summary

# **Outside Influences**

Many non-aviation factors have the potential to impact the demand for aviation and the needs of the state airport system. With an understanding of these factors, Idaho and its airports will be better prepared to respond to changes that may arise. ITD Aeronautics and airports may need to shift their priorities and funding strategies to address these and other non-aviation factors that will undoubtedly impact aviation in Idaho during the next 20 years. Key outside influences that may impact the future of aviation in Idaho include:

- ✤ Population growth
- ✤ Economic growth
- → Tourism, recreation, and the Idaho backcountry
- ✤ Transportation projects
- ✤ Emerging technologies
- ✤ State issues and policies

Each of these factors are discussed in turn in the sections that follow. Note that additional background information is provided in *Chapter 4: Forecasts of Aviation Activity* and *Chapter 6: Supplemental System Context*.

#### **Population Growth**

Extensive population growth is closely associated with increased demand for both commercial service and general aviation (GA). Understanding projected growth in Idaho allows ITD Aeronautics and airports to plan projects to accommodate the increased demand. **Figure 7-1** presents the correlation between population and commercial service enplanements in Idaho between 2010 and 2018. After a few years of unchanging levels of population and enplanements following the 2008 economic recession, population grew 8.7 percent between 2013 and 2018 while enplanements were up 42.9 percent during that same five-year period. As population continues to grow in Idaho, enplanements and, to a lesser extent, operations and based aircraft, are anticipated to follow suit.



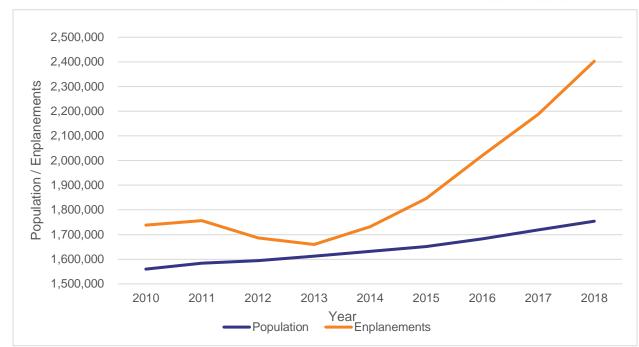


FIGURE 7-1: GROWTH IN IDAHO POPULATION AND ENPLANEMENTS, 2010-2018

Sources: U.S. Census Bureau, 2019; FAA Terminal Area Forecast (TAF), 2019; U.S. Department of Transportation (DOT) Bureau of Transportation Statistics (BTS) Trans Stats, 2019

Idaho and Nevada are the two fastest growing states in the United States (U.S.). Between 2017 and 2018, Idaho's population grew from 1,718,904 to 1,754,208 for a growth rate of 2.1 percent. The U.S. national growth rate was 0.6 percent during that same period. In 2010, the Idaho population was 1,567,657 for an 11.9 percent growth rate in less than a decade. This compares with the U.S.'s national population growth rate of 5.8 percent over the same eight-year period. The Idaho Department of Labor noted that many people from across the western U.S. are moving to Idaho, led by California, Washington, and Utah (respectively). Migration to Idaho can be attributed to its low cost of living, business-friendly state government, and proximity to the outdoors as many West Coast residents look to escape their expensive metro areas. The fastest-growing cities in Idaho include Boise and its suburbs of Meridian, Nampa, and Caldwell; Coeur D'Alene; Twin Falls; and Idaho Falls.

According to the July 2019 *Idaho Economic Forecast* prepared by the Idaho Division of Financial Management, statewide population growth is expected to slow slightly to 1.6 percent per year on average through 2022 but will still greatly outpace the national projection of 0.7 percent per year. According to Woods & Poole, Inc. and as documented in *Chapter 4: Forecasts of Aviation Activity*, Idaho's population is anticipated to grow at an average annual rate at 1.2 percent through the 20-year forecast period. Most of the recent and projected population growth has been occurring in the urban areas of Idaho. The population in the most rural areas of the state is expected to remain constant or decline.

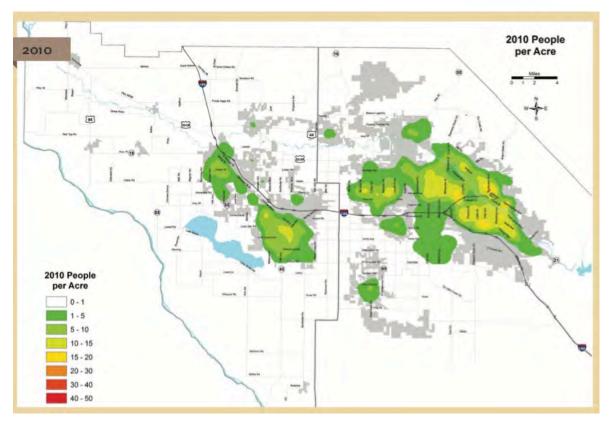
While positive in terms of economic development, some areas of Idaho are struggling to keep pace with this rapid growth. In particular, the Treasure Valley area near Boise is feeling the strain with issues such as urban sprawl, traffic congestion, housing shortages, rising housing costs, and pressure on environmental preservation efforts. According to Boise Regional Realtors, the median home price for Ada County, which includes the City of Boise, was \$209,900 in 2014. By the end of 2018, it was \$324,950—an increase of 55 percent. Expansive planned communities, including a 2,000-home development near Syringa Valley, may help address the area's housing shortage.



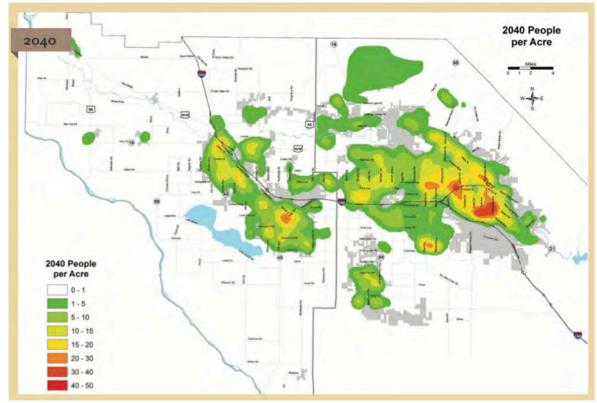
Much of the state population lives in the Boise City metropolitan statistical area (MSA) which includes Ada and Canyon counties (population 700,000). COMPASS, the community planning association of southwest Idaho, developed projections of population, households, and jobs in these counties as part of its regional long-range transportation plan known as "Communities in Motion 2040". According to the Association's projections, 1,022,000 people and 463,000 jobs are estimated to be in the region by 2040. **Figure 7-2** presents the actual 2010 and projected 2040 population densities in Ada and Canyon counties from COMPASS.

The growth in the Treasure Valley will undoubtedly continue to impact the demand for commercial airline service at Boise Air Terminal/Gowen Field. GA airports in the Boise metro area including Nampa Municipal and Caldwell Industrial will also feel the pressure to accommodate additional activity including growth in business aviation associated with the growing population and economy. Projected population growth will also likely impact the aviation demand associated with other major cities in Idaho including Idaho Falls, Twin Falls, Coeur D'Alene, Pocatello, Mountain Home, and Sandpoint.





#### FIGURE 7-2: PROJECTED CHANGE IN POPULATION DENSITY IN ADA AND CANYON COUNTIES



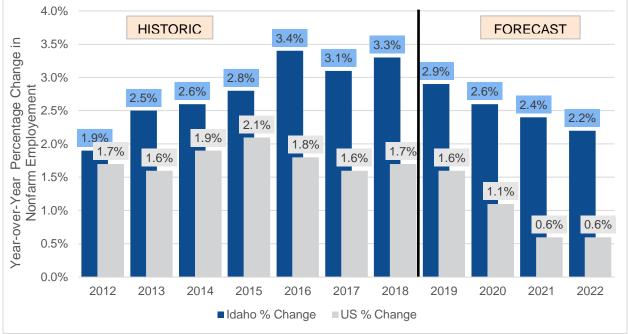
Source: COMPASS, Communities in Motion 2040, 2014



#### **Economic Growth**

Like population, employment and economic growth are catalysts for aviation activity. A strong economy and job growth in Idaho will continue to bolster commercial service and GA demands throughout the state. Business investment in Idaho has become steady and well-diversified over the last several years and this trend is anticipated to continue. Idaho is ranked fifth in the nation for overall lowest tax rates in terms of property, sales, individual income, and corporate taxes. This will continue to draw both business development and new residents.

According to the July 2019 *Idaho Economic Forecast*, the state is expected to support 815,000 nonfarm jobs by 2022, up from 760,000 in 2019. Recent historic and projected Idaho income and nonfarm employment have outpaced the nation, as shown in **Figure 7-3**. The southwestern region, which includes the Boise City MSA, is expected to accommodate about half of the job growth over the next several years. Employment in the northern region (i.e., Coeur D'Alene MSA) is projected to account for 17 percent of the job growth while the south central and east regions will each account for 12 percent of the job growth.



#### FIGURE 7-3: YEAR-OVER-YEAR CHANGE IN IDAHO AND U.S. NONFARM EMPLOYMENT

Source: Idaho Economic Forecast, July 2019

The major industries in Idaho include technology, manufacturing, agriculture, food processing, tourism, and energy. These are industries with a high propensity to use air travel. Two Fortune 500 companies were headquartered in the state in 2018: Albertsons (supermarket chain) ranked #52 with \$59.9 billion in revenue and Micron (semiconductors) ranked #105 with \$30.4 billion in revenue. Other large companies in the state include JR Simplot Co. (food processing), Hewlett Packard, Inc. (HP Inc.) (computers), and Melaleuca (wellness and nutritional supplements). Idaho is unique in that many existing companies— whether it be in technology, food processing, or another industry—complement and foster growth in new companies. These companies often work closely together to achieve profits.

#### Technology

Idaho has an established tech industry, with Hewlett-Packard Company starting operations in the Boise area nearly 50 years ago. In 2015, the company split into two smaller companies—HP Inc. and Hewlett-Packard Enterprises (HPE). Together, these new companies now employ a total of 4,000 workers in the Boise area.



Micron, located in southeast Boise, started its operations in 1978 and now employs more than 30,000 workers worldwide–over 6,000 of whom are in Boise.

The established tech industry led by HP Inc., HPE, and Micron has drawn newcomers such as Payocity, Retrolux, and Inergy to locate their business operations in the state. The Idaho Department of Commerce reports that 2,000 technology enterprises are in Idaho. This is impressive for a state with a population of 1.75 million people. It appears that Idaho's history of entrepreneurship in innovation and technology will remain alive and well into the future.

#### **Agriculture and Food Processing**

Twenty percent of Idaho sales come from farming and food processing, which together account for 16 percent of state gross domestic product (GDP) and 14 percent of jobs. Dairy was the biggest single contributor to the economy at 33 percent, followed by cattle and calves at 23 percent, and potatoes and wheat at 12 percent and 7 percent, respectively. Exports account for about half of Idaho's crop production, including the bulk of the wheat grown in the state. Agriculture will continue to be a driver in Idaho's economy despite continued challenges related to farm income and expenses and uncertainty over exports with the threat of an ongoing trade war with the export partners abroad.

The agriculture industry has always been one of Idaho's most innovative industries. The University of Idaho and GenZ Technology have recently partnered to develop a new, hooded pesticide application system now being used on strawberry fields and lettuce crops. The University of Idaho is developing the largest research dairy in the U.S. called the Center for Agriculture, Food, and Environment (CAFÉ). Idaho State University and Simplot are also working together to advance remote sensing applications in data collection using unmanned aerial systems (UAS) which has an obvious direct relationship to aviation.

Many food processing companies are based specifically in Idaho to have direct access to farms. Access to water, largely due to the Snake River and its aquifer, and inexpensive and reliable electricity capacity are also part of the decision to establish or expand operations in Idaho or contract with Idaho growers. Simplot, Lamb Weston, McCain Foods, and Ore Ida are all well-known manufacturers associated with potato processing. McCain Foods recently added a \$200 million third line to its Burley plant and hired 180 new employees.

NewCold, based in the Netherlands, works closely with McCain Foods. The company recently made a \$90 million investment into a cold-storage warehouse in Burley. With a rail spur to transport perishable food items, this facility provides Idaho food processors with additional options for shipping while supporting several hundred jobs.

With access to fresh dairy, Chobani opened its second domestic manufacturing plant in Twin Falls in 2012. The \$450 million plant is the largest yogurt manufacturing facility in the world and employs hundreds of workers. Chobani recently broke ground on an additional 70,000-squarefoot office building that will also host its global research and development team and a business startup incubator.

Chobani's presence in Idaho has served as a catalyst for new jobs and continues to have a significant positive economic impact on the region by attracting additional businesses that support its operations. One example is Fabri-Kal, which makes compostable yogurt and food service containers out of wheat straw at its thermoforming factory in Burley. The \$4.2 million Fabri-Kal plant was built in 2015 to supply the Chobani plant in Twin Falls, 37 miles away.

#### Aerospace

The I-90 Aerospace Corridor in northern Idaho is part of the supply chain for major manufacturers in the Seattle area such as Boeing. The corridor is also home to a dynamic group of aerospace manufacturers. Quest Aircraft completes the final step in the manufacturing process of single-engine aircraft at its Sandpoint facility. Empire Aerospace overhauls and maintains its airliner fleet in Coeur d'Alene. A variety of component manufacturers that

produce products ranging from seaplane floats to electronic components are located nearby. Northern Idaho's aerospace sector has helped support other advanced manufacturing industries including plastics, advanced thermoplastic composites, and UAS. These companies employee hundreds of nearby residents.

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#### **Future Developments**

A few of the additional key developments in the next several years that are likely to continue to further fuel Idaho's economic success include:

- → The Idaho National Laboratory (INL) in Idaho Falls, which employs 4,000, is currently developing the most powerful super computing system in the world. The laboratory is at the forefront of developing a revolutionary small modular reactor technology. Battelle Energy Alliance (BEA) is the largest government contractor operating at the INL. Construction began on the Cybercore Integration Center and the Collaborative Computing Center (C3) in 2018. It is estimated that INL development will generate 3,500 construction jobs for four years and more than 300 permanent jobs over the next 40 years.
- → ON Semiconductor has committed to investing \$76 million into its Pocatello plant by 2021.
- → Autoval Manufacturing, which manufactures construction industry materials, is building a \$100 million facility in Nampa that will support 350 jobs.
- → ICCU in Chubbock and Melaleuca in Idaho Falls are developing new data centers.
- → Jayco, the travel trailer manufacturer, broke ground in February 2019 on a significant expansion project expected to create 300 or more jobs in Twin Falls.
- ✤ Midas Gold's Stibnite Gold Project in central Idaho is anticipated to attract \$1 billion in mining investment.
- ✤ A proposed \$130 million, 2.6 million-square-foot Amazon fulfillment center in Nampa is anticipated to support 3,000 employees.

#### Tourism, Recreation, and the Idaho Backcountry

The quality of life in Idaho, which is an underpinning of economic growth, can in part be attributed to its scenery and access to outdoor activities. Idaho's mountains, lakes, rivers, and state parks provide endless opportunities for exploration by both residents and visitors. Over 60 percent of Idaho is federal public land.

Travel and tourism is the third-largest industry in Idaho behind agriculture and technology. Statewide tourism is growing every year, rising over 10 percent year over year between 2013 and 2017. From Boise to Coeur d'Alene to Idaho Falls, there are hundreds of travel opportunities throughout the state that include aviation and non-aviation modes of transportation. According to a report published in September 2018 by the Idaho Department of Commerce (*Idaho Travel Impacts 2010-2017*), Idaho's multimodal travel industry generated the following:

- → Travelers spent \$3.7 billion in Idaho in 2017, a 6.5 percent increase over the preceding year.
- → Traveler spending added \$1.6 billion to the Idaho's gross state product (GSP) in 2017.
- $\rightarrow$  63,000 Idahoans are directly or indirectly employed by the travel industry.
- $\rightarrow$  Employment in the travel industry has increased by 3.1 percent per year since 2010.
- → Local, state, and federal tax revenues generated by travel spending totaled \$475 million in 2017 equivalent to \$740 for each Idaho household.

Tourism in Idaho heavily relies on aviation to bring in visitors from around the country and the world. The industry is continuing to grow at a record pace, due in part to the destinations and hospitality offered in the state. For the next 20 years, tourism and aviation are anticipated to grow hand-in-hand.

The existing network of backcountry airstrips provide an important recreational asset in the state. These airstrips serve a growing niche of recreation. The Idaho Aviation Association, Idaho Aviation Foundation, ITD Aeronautics, and the Recreational Aviation Foundation (RAF) are working together to preserve these backcountry airstrips. Facilities such as lodging and restrooms are being added at many airstrips, and fly-ins are growing in popularity.



Pilots from around the world fly into Idaho's backcountry to enjoy reveling in the remote beauty. The network of airstrips will continue to be recreational and community assets if they continue to be maintained and improved over time.

Idaho Fish and Game built a new airstrip in the summer of 2019 on agency property in the Frank Church-River of No Return Wilderness Area and plans are underway for additional remote airstrips to provide sportsmen access points to the backcountry. It will be important for these airstrips to adhere to same operational standards as the existing publicly owned airstrips to maintain a system of backcountry airstrips that is both safe and environmentally sensitive.

Numerous efforts are underway to market Idaho as a vacation destination. Among them are an "18 Summers" campaign that encourages parents to make the most of family vacations during the years while their kids are growing up. To support the tourism in its region, Idaho Falls is spending money on promoting itself as the western point of entry to Yellowstone Park and the Tetons 40 miles away. Sun Valley continues to invest in the "Visit Sun Valley" campaign to provide various recreational offerings that are competitive with resort areas across the country. Boise's capacity for conventions and meetings increased dramatically with the 2017 completion of the Boise Centre, leading to an associated boom in hotel development.

#### **Transportation Projects**

According to ITD's 2010 report, *Growing the Idaho Economy Moving into the Future*, "Idaho's transportation system will play a vital role in determining whether economic opportunities can be realized." Idaho's transportation system comprises an integrated network of more than 60,000 miles of roads, approximately 4,000 bridges, 1,887 miles of rail lines, 125 public airports (75 of which are part of the state airport system), and the Port of Lewiston. Across the state, the highway system provides interstate access to major urban hubs and more rural parts of the state. The routes make it possible for passengers and freight to move into, out of, and within Idaho. Planned and ongoing roadway and rail improvements will continue to improve travel along corridors, as well as stimulate new economic growth. These improvements may also provide improved access to the state airport system, including those which are located in rural areas.

ITD's draft 2040 Long-Range Transportation Plan known as "IDAGO 2040" was released in February 2019. While the study does not identify specific transportation projects, it does provide guidance and framework for ITD to effectively plan for and manage the transportation needs of the state over the next 20 years. IDAGO 2040 strengthens the commitment of ITD to work with MPOs and other agencies while giving all modes equal consideration, improving information used in decision-making, and readying the state for the potential impacts of new and emerging technologies. The guidance in the plan will allow ITD to more nimbly respond to challenges that may impact all modes of transportation such as aging infrastructure, changing demographics, congestion, and inflation.

According to COMPASS, the drive time between Nampa and Boise Air Terminal/Gowen Field will increase from 23 minutes to 45 minutes by 2040 due to congested roadways brought by the influx of new residents. Few highways near Boise support this fast-growing region, so arterial roads will continue to become more congested, particularly those going between downtown and the Boise Air Terminal/Gowen Field. There have been discussions about adding a bypass to the south of the region. Another concept that has been considered is the development of Interstate 11 (I-11) from Nogales, Arizona through Reno, Nevada and into Idaho. If completed, I-11 would connect Arizona with Canada. At this time, the only completed section of I-11 extends 22.8 miles along U.S. 93 between the Arizona state line and Henderson, Nevada. Neither a bypass south of Boise nor I-11 in Idaho have moved beyond the conceptual phase, and the financial and environmental costs of implementing these projects would be extremely high.



Each year the five MPOs in Idaho (i.e., COMPASS, Kootenai Metropolitan Transportation Association [KMPO], Lewis-Clark Valley MPO [LCVMPO], Bonneville Metropolitan Planning Organization [BMPO], Bannock Transportation Planning Organization [BTPO]) and the six ITD Transportation Areas analyze their near- and longterm highway and transit project needs. These projects are then compiled by ITD in its seven-year Idaho Transportation Investment Program (ITIP) and the Statewide Transportation Improvement Program (STIP). It is important to note that recommendations for additional roadway, rail, and freight improvements will continuously evolve as needs change over time. Select major non-aviation transportation projects that are planned to be underway in Idaho in the next five to 10 years are listed in **Table 7-1**.

LOCATION	Project	Purpose
Caldwell, Nampa Canyon County	Widen I-84 to three lanes in each direction on a 10-mile stretch in Canyon County near Boise from Franklin Boulevard to Centennial Way	Ease congestion along main artery
Meridian Canyon County	Rebuild I-84 at Meridian Road interchange	Provide better movement of traffic
Caldwell, Meridian Canyon County	Widen US-20/26 (Chinden Boulevard) to six lanes	Relieve congestion
Boise, Garden City, Eagle, Star Canyon & Ada Counties	Construct high-capacity multimodal transit for State Street (Highway 44)	Ease congestion into downtown Boise
Nampa, Meridian Canyon & Ada Counties	Add lanes to U.S. 20/26 between Eagle Road and I-84 and to Idaho Highway 55 (Karcher Road) from Midway Road to Middleton Road	Ease congestion
Pocatello, Chubbock Bannock County	Construct an I-86/I-15 interchange complex	Improve traffic flow
Moscow Latah County	Replace a two-lane section of highway U.S. 95 from Thorncreek to Moscow with a divided four-lane section	Improve highway safety and capacity
Kooskia Idaho County	Widen portions of U.S. 12 between Kooskia and the Montana border	Improve safety and highway capacity
Lewiston Nez Perce County	Reconstruct US-12 Clearwater Memorial Bridge	Improve safety, functionality, and economic development opportunities
Kootenai & Bonner Counties	Construct US-95 and ID-53 interchange from Garwood to Sagle	Improve safety
Post Falls, Huetter Kootenai County	Construct a new I -90/SH-41, (Exit 7) interchange and structure	Improve safety, functionality, and economic development opportunities
Sandpoint Bonner County	Construct railroad bridges across Lake Pend Oreille and Sand Creek	Improve traffic flow and enhance safety

#### TABLE 7-1: PLANNED LARGE TRANSPORTATION PROJECTS IN IDAHO

Sources: ITD, 2019; BTPO, 2019; BMPO, 2019; COMPASS, 2019; KMPO, 2019; LCVMPO, 2019

# SYSTEM PLAN UPDATE

#### **Emerging Technologies**

Several technologies are on the horizon that have the potential to shape transportation in the future. These include unmanned aerial systems (UASs)<sup>1</sup>, rapidly developing autonomous vehicles, electric and other alternate fuel source vehicles, and other developments. While it is not currently known how these technologies will ultimately develop, this section provides insight into a few of the technological developments and potential impacts that the Idaho airport system may face in the coming years.

#### UASs

A UAS refers to a pilotless aircraft system that operates through a combination of technologies including an unmanned aerial vehicle (UAV) utilizing computer vision, artificial intelligence, and object avoidance systems; a ground-based controller; and a system of communications between the two. UAS technology is becoming more widely-used every day, and the benefits of this technology extend well beyond recreational use. As more companies look to capitalize on commercial opportunities, investment into UAS continues to grow. UASs offer safe, cost-effective solutions for applications ranging from data collection to delivery. As autonomy and collision-avoidance technologies improve, so too will UASs' abilities to perform increasingly complex tasks. According to a 2016 report by PwC, the emerging global market for business services using UASs is valued at over \$127 billion.

In the aviation industry, UASs are commonly used for inspecting aircraft, airfields, powerlines, and buildings as well as for wildlife control. UASs are also replacing aircraft in missions such agricultural spraying, search and rescue, and aerial photography. The use of UASs for the transport of goods is currently underway. The technology for utilizing UASs for passengers is also getting closer to fruition each year and will likely be available in the next decade and prevalent in 20 years.

The FAA started the UAS Integration Pilot Program in 2018 to investigate safely integrating UAS into the NAS. This pilot program allows the facilitation of government and private-sector partnerships to evaluate various operational opportunities, including night-time operations, package delivery, and other uses. The program has also been at the forefront of research associated with passenger transportation as an alternative mode of mobility.

Several companies have already developed prototypes for passenger UAVs including Airbus, Boeing, Uber, and the Chinese company eHang. Most of the prototypes and concepts of passenger UAVs consider vertical take-off and landing (VTOL) aircraft as opposed to the more conventional fixed-wing aircraft because VTOL aircraft do not require a runway.

Urban air mobility (UAM) is envisioned as an efficient on-demand system for air passenger and cargo transportation within an urban area. The development of the UAM industry is in its infancy with commercialization anticipated in 2023. These systems are anticipated to be propelled by a combination of UAVs, VTOL vehicles, and electric VTOL vehicles. NASA and several other agencies are developing a concept for operating a potential air taxi system. The proposed system identifies the step-by-step flow of operations for a singular flying taxi trip starting from the passenger requesting the flight to the aircraft undergoing service and maintenance.

It is important to note that UAVs also have the potential to disrupt the NAS if flown too close to airports and flight paths. This highlights the difficulty of regulating UAV activity. There are still many challenges and uncertainty that surround passenger and cargo UAVs and their operations. These and other potential challenges will require a

<sup>&</sup>lt;sup>1</sup> While common usage generally does not differentiate between UAS and unmanned aerial vehicles (UAVs), the two terms are not interchangeable. A UAV is a vehicle without an on-board pilot that can either fly autonomously (i.e., without a human in control) or remotely (i.e., controlled via a ground-based system). A UAS includes not only the UAV, but also the person on the ground controlling the flight and the communications system that connects them.



more robust regulatory framework and involvement from the FAA, state departments of transportation, and local jurisdictions.

#### **Autonomous Vehicles**

As driverless cars become more capable and common, they will change people's travel habits not only around their own communities but across much larger distances. The impacts of these new technologies will likely affect and may substantially change many facets of the aviation industry and airport system. A future with driverless cars means people will have more options instead of driving their own vehicles. Airlines may reduce route availability and frequency as more people chose to drive to regional destinations. In turn, airports may receive lower revenue from parking lots and will likely need to accommodate autonomous vehicles for passenger drop-off and pick-off. Vehicles that support aviation activities such as maintenance equipment; baggage, cargo handling, and other carts; airport shuttles; and other ground transportation options may also become autonomous.

Autonomous vehicles could likely become convenient substitutes for short-haul trips on airlines. For instance, it would be easy enough to travel overnight in an autonomous vehicle from Boise to Seattle and passengers could avoid the hassles of air travel such as getting to and from the airport and getting through security. Airlines that mainly serve short-haul routes may respond by changing their route offerings and frequency.

Like UAVs, regulatory requirements may slow the advance of autonomous vehicles and safety concerns must be addressed before the technology gains widespread usage. Legal concerns about who would be at fault in an accident abound as regulators are just starting to address the myriad of liability issues that would emanate from self-driving car usage. Still, the effects of the autonomous vehicle revolution are already beginning to be felt in a multitude of industries.

#### **Alternative Fuels**

The advancement of alternative and sustainable fuel will undoubtedly impact aviation and airport planning in Idaho and around the world. Using alternative fuels and advanced vehicles (zero emissions and zero gas) instead of conventional fuels and vehicles helps conserve fuel and lowers vehicle and aircraft emissions. For cars, more than a dozen alternative fuels are in production or under development. While government and private-sector vehicle fleets are the primary users for most of these alternative fuels and vehicles today, an increasing number of individual consumers are expressing interest in them.

In addition to alternative fuels for car, producers, airlines, government agencies, and research partners are heavily investing in alternative jet fuel as part of the industry's commitment to reduce carbon and other greenhouse gas (GHG) emissions. In just one example, United Airlines recently partnered with Fulcrum Bioenergy to develop a sustainable biofuel. Alternative biofuels introduce less carbon dioxide into the atmosphere compared with refined crude oil and could reduce jet emissions by 50 to 70 percent. Currently, several types of biofuels are available that can be blended with conventional oil-based products with no effects on aircraft performance or safety. However, these alternative fuels exceed the cost of their conventional counterparts, generally due to a lack of competitiveness in the market. Because fuel is an airline's largest component (accounting for approximately 30 percent of total operating costs) and airlines have only limited ability to pass additional costs to consumers, the market and technology will need to continue to evolve before the industry witnesses more widespread deployment.

Extensive research is also being conducted to remove lead from 100 low lead (100LL) or AvGas utilized by the piston-powered engines of many GA aircraft. AvGas is the only transportation fuel that still contains lead, which has been linked to serious environmental and health concerns. Despite heavy investment and a partnership between the U.S. Environmental Protection Agency (EPA) and FAA to remove lead from AvGas, an acceptable alternative in terms of safety and performance has not yet been identified.



Additionally, electric vehicles both on the ground and in the sky will place new demands on the power grid and airports as owners seek the charging stations and electricity necessary to meet their power needs. These alternative fuel advancements will continue to evolve over the next 20 years, both in terms of the technology and marketplaces that support them. Airports must start preparing now for the significant implications of these and other emerging technologies, which will likely impact nearly all aspect of the aviation industry and change the way that people and goods move into, out of, and within Idaho.

#### **State Issues and Policies**

State issues such as education and tax incentives have the potential to impact the growth of the Idaho economy and, in turn, future demand for aviation. As part of this economic development, it is important that Idaho continue to provide a skilled workforce that aligns with the needs of the high-tech, aerospace, and other industries in the state. According to Idaho's Workforce Development Task Force, "If an adequate workforce is not available, businesses will go elsewhere to create new, high-quality jobs, damaging every local economy" (2017).

Idaho's educational system is taking active steps to meet economic demands for a technologically skilled workforce. According to the STEM Action Center, 6,200 STEM jobs in Idaho went unfilled in 2018, marking a significant need for increased STEM education in the state's primary, secondary, and post-secondary education systems. Idaho recently passed legislation that will require every high school to offer at least one computer science course by 2020. The Idaho Legislature appropriated over \$2 million to increase computer science in Idaho's K-12 system, and there has been growth in the number of computer science graduates at Boise State University, University of Idaho, and Idaho State University.

The Idaho Tax Reimbursement Incentive (TRI), which went into effect July 1, 2014, continues to be instrumental in the state's efforts to encourage business growth and expansion and has enabled the state to generate significant momentum by investing in Idaho's existing and emerging industries. The TRI provides up to a 30 percent post-performance tax credit for up to 15 years on all payroll, sales, and income taxes. To qualify, companies must hire at least 50 new employees in an urban area (25,000 or more residents) or 20 new employees in a rural area and wages must meet or exceed the average wage in the county where the job is located.

In 2018, Idaho also established 28 Opportunity Zones as an investment tool for capital. Businesses who invest in an Opportunity Zone can receive tax benefits for up to 10 years and pay zero tax on all capital gain. The zones also promote and reward innovation.

#### Conclusion

ITD Aeronautics and the state's airport system face numerous outside influences that may affect future aviation trends. A few of the outside influences discussed that are anticipated to have the highest propensity to impact Idaho airports include:

- ✤ Population and economic growth will undoubtedly impact the demand for commercial air service and business aviation in Idaho, which could affect airport infrastructure needs.
- The emerging development of UAS could impact the airspace surrounding Idaho airports. It will be important to ensure that airports of all sizes are prepared for the entry of UAV into the National Airspace System (NAS). The development of UAM systems could also affect airport infrastructure and airspace in more urban areas.
- Alternative fuels including electric vehicles are anticipated to increase demand for commercial service and GA aviation with implications for nearly all aspects of airport development and operations. In addition to potential airside and landside infrastructure, workforce, and other needs, airports and ITD Aeronautics may have to consider potential revenue implications should demand for conventional fossil fuels decrease as technologies shift over time.



By recognizing and monitoring these changes, the state will be able to prepare for and respond to potential impacts on the airport system. More specifically, these impacts may mean that there are airport needs beyond those outlined in the 2020 IASP Update, particularly at airports located in the Treasure Valley and other larger cities in Idaho.

# **Evaluation of Potential Changes to NPIAS and ASSET Classifications**

The purpose of this section is to review and evaluate potential changes to NPIAS and associated GA ASSET classifications of airports in Idaho. The analysis is tailored towards evaluating non-NPIAS airports' inclusion in the NPIAS and assessing the need to revise the *2019-2023 ASSET* classifications of existing NPIAS airports. Based on the results of the analyses, the evaluation identifies potential changes to the NPIAS and ASSET categories that should be considered by ITD Aeronautics for Idaho's future airport system and its needs. These potential future NPIAS/ASSET categories are used in the future system performance analysis presented in the following section.

#### **NPIAS Overview**

The NPIAS is submitted by the FAA to Congress every two years to identify the aviation facilities that are significant to the NAS and the financial needs of the system. Airports included in the NPIAS are eligible for federal funding under the AIP. The *2019-2023 NPIAS* identifies 3,328 existing U.S. aviation facilities (3,321 existing and seven proposed) representing approximately 65 percent of public landing facilities in the U.S. Ninety-eight percent (3,249) of the facilities included in this NPIAS Report are owned by public entities while the remaining 72 facilities are privately owned. There are 37 NPIAS airports in Idaho in this latest NPIAS publication.<sup>2</sup>

#### **NPIAS Classification Criteria**

The FAA has specific criteria including activity levels and type of activity, as well as geographic proximity to existing NPIAS facilities for airports to be considered eligible for inclusion in the NPIAS. The NPIAS criteria for both commercial service and GA airports are defined in FAA Order 5090.5, *Formulation of the NPIAS and ACIP* (2019), which A commercial service or GA airport must meet the following criteria (by airport type) to be considered eligible for inclusion in the NPIAS:

An existing **commercial service** airport must meet the following criteria:

Publicly owned, publicly accessible airport that receives scheduled air carrier service and annually enplanes 2,500 or more passengers

An existing **GA airport** must meet all the following criteria:

- → Operated by a sponsor eligible to receive federal funds and meet [grant] obligations
- Used by at least 10 operational and airworthy aircraft based at the airport validated against the FAA Aircraft Registry (i.e., basedaircraft.com)
- > Located at least 30 miles from the nearest NPIAS airport (including airports located in adjacent states)
- > Demonstrates an identifiable role in the national system (such as Basic, Local, Regional, or National)
- → Included in a state or territory aviation system plan with a role similar to the federal role, and recommended by the airport's state or territory aviation authority to be part of the NPIAS
- ✤ No significant airfield design standard deficiencies, compliance violations, or wetland or wildlife issues based on a review by the FAA

<sup>&</sup>lt;sup>2</sup> The *2019-2023 NPIAS* serves as the basis of reference in this study. However, as indicated in Chapter 3, *Airport Role Analysis*, Craigmont Municipal was officially removed from the NPIAS in December of 2018. Thus, while Craigmont Municipal is currently listed in the 2019 NPIAS report, it will be removed during the next NPIAS update. Craigmont Municipal has been evaluated as a General airport in the 2020 IASP Update.



The FAA has identified that "special justification" may be given to an existing GA airport in the following cases:

- Previously included in the NPIAS and meets current criteria
- ✤ Demonstrates benefits that exceed development costs
- ✤ Serves the needs of Native American communities
- → Supports isolated communities, recreation areas, or important national resources
- → Serves as an official airstop for U.S. mail service
- + Have a permanently assigned unit of Air National Guard or reserve component of the Armed Forces

An existing publicly owned, public-use heliport may be considered for inclusion if it is deemed to provide a significant contribution to public transportation and meets the following criteria:

- > Operated by a sponsor eligible to receive federal fund and meet obligations
- → Used by at least four based rotorcraft for at least two years prior to its request for inclusion
- → Experiences 400 annual instrument flight rule (IFR) operations
- → Included in the state airport system plan (such as the 2020 IASP Update)

A **proposed commercial service or GA** airport must meet the applicable eligibility criteria listed above and meet the following additional requirements:

- → Demonstrates how it will meet the operational activity required [for its proposed role] within the first five years of operations through a forecast validated by the FAA (The operational activity cannot be based on attracting demand from other airports, unless there is safety or standard deficiencies at these other airports.)
- Provides enhanced facilities that will accommodate the current aviation activity and improve functionality as well as provide room for future development based on imminent justified demand
- Shows a benefit-cost analysis rating of 1.0 or more (Information on when and how to conduct a benefitcost analysis is in FAA Order 5100.38, *Airport Improvement Program Handbook*, and FAA Airport Benefit-Cost Analysis Guidance.)
- Presents a detailed financial plan for the proposed airport to accomplish its construction and ongoing maintenance
- + Level of local support/consensus is adequate to achieve the development of the new airport

A proposed GA airport that does not meet all of these criteria may be considered for inclusion using a special justification as listed under the GA airport eligibility requirements above.

In addition to these specific eligibility requirements, FAA Order 5090.5 provides a number of considerations the FAA employs when reviewing NPIAS entry requests. These considerations pertain to the airport's level of financial self-reliance, the airport sponsor's ability and willingness to support the airport, current design standard deficiencies or other potential federal compliance issues (e.g., non-aeronautical activity on airport property), and the airport's role in meeting current and project future aviation demands. Additional details about these factors are available in Table 3.4 of FAA Order 5090.5.

#### **Primary Versus Nonprimary Airports**

NPIAS airports are grouped into two major categories: Primary and Nonprimary. Of the 3,321 current NPIAS airports in the U.S., only 380 are Primary.

#### Idaho's Primary Airports

Primary airports are public airports with scheduled air carrier service that generate 10,000 passenger enplanements or more per year. These airports are further sub-categorized as Large, Medium, Small, and Nonhub. The 2019-2023 NPIAS Report lists six Primary airports in Idaho comprised of one Small Hub and five Nonhub airports. Note that Pullman-Moscow Regional Airport is in Washington state; however, it is evaluated as part of the Idaho system of airports due to legislative mandate. Pullman-Moscow Regional is classified as a Primary Nonhub airport within the *2019-2023 NPIAS*. The inclusion of Pullman-Moscow Regional increases the total number of Primary airports in the Idaho system to seven (one Small Hub and six Nonhub).

**Table 7-2** defines each hub type and categorizes the total number of primary NPIAS airports in the state systembased on the 2019-2023 NPIAS.

		Number of Idaho
CATEGORIES	Percent of Total U.S. Passenger Enplanements	Airports
Large Hub	1% or more	0
Medium Hub	At least 0.25%, but less than 1%	0
Small Hub	At least 0.05%, but less than 0.25%	1
Nonhub	More than 10,000, but less than 0.05%	6
	Total	7

#### TABLE 7-2: IDAHO SYSTEM'S PRIMARY NPIAS AIRPORTS

Source: 2019-2023 NPIAS

#### **Nonprimary Airports**

Nonprimary airports are mainly used by GA aircraft. As identified in the *2019-2023 NPIAS*, there are 126 Nonprimary Commercial Service, 261 Relievers, and 2,554 GA airports in the U.S. Categories within the Nonprimary classification include:

- Commercial Service: Public airports receiving scheduled passenger service and between 2,500 and 9,999 passengers per year
- Reliever: Public or private airports designated by the Secretary of Transportation to relieve traffic congestion at nearby commercial service airports and provide improved GA access to the overall community
- → GA: Public-use airports that do not have scheduled air carrier service or have scheduled service with less than 2,500 annual enplanements

Thirty of Idaho's 37 NPIAS airports are designated as Nonprimary airports in the *2019-2023 NPIAS Report*.<sup>3</sup> None of Idaho's airports are classified in the latest NPIAS as Nonprimary Commercial Service airports. One airport classified as a Reliever (Caldwell Industrial) and 29 are classified as GA airports. **Table 7-3** summarizes the IASP Nonprimary NPIAS airports by category from the *2019-2023 NPIAS* with the removal of Craigmont Municipal.

NONPRIMARY CATEGORIES	Number of Idaho Airports
Commercial Service	0
Reliever	1
GA	29
Total	30

#### TABLE 7-3: IDAHO SYSTEM'S NONPRIMARY NPIAS AIRPORTS

Craigmont Municipal was removed from the NPIAS in December 2018. It has been categorized in the 2020 IASP Update as non-NPIAS (i.e., General) airport. Source: 2019-2023 NPIAS

<sup>&</sup>lt;sup>3</sup> As noted previously, Craigmont Municipal requested removal from the NPIAS and is being evaluated as a non-NPIAS facility in the 2020 IASP Update.



#### **General Aviation Airports: A National Asset**

To capture the diverse functions and economic contributions of GA airports, the FAA conducted two reviews of the network of GA facilities in the NPIAS. In 2012, the results were compiled into *General Aviation Airports: A National Asset* (known as ASSET 1). This report acknowledges the following five key aeronautical functions provided by the GA airport system:

- Emergency preparedness and response
- ✤ Critical community access for remote areas
- ✤ Commercial, industrial, and economic activity functions
- → Access to tourism and special events
- → Other aviation-specific functions, including corporate flights and flight instruction

Four new ASSET categories were introduced to provide policymakers with a better understanding of the vast and diverse nature of the GA system. The categories are primarily based on existing activity levels, number and type of based aircraft, and volume and types of flights. The ASSET categories also recognize NPIAS airports that are Unclassified, as they do not meet other criteria and have limited activity and number of based aircraft. If a GA airport is eligible for inclusion in the NPIAS, it is also classified within the appropriate ASSET category. ASSET categories are also assigned to Nonprimary Commercial Service and Reliever airports. The following defines the ASSET categories and list the inclusion criteria for Nonprimary airports:

#### National

National airports are in metropolitan areas near major business centers and support flying throughout the nation and world. These airports provide pilots with attractive alternatives to the busy Primary airports. National airports have very high levels of activity with many jets and multiengine propeller aircraft. Eligibility requirements for National airports are as follows:

- → 5,000+ instrument operations, 11+ based jets, 20+ international flights, or 500+ interstate departures; or
- + 10,000+ enplanements and at least one carrier enplanement by a large certified air carrier; or
- ✤ 500+ million pounds of landed cargo weight

#### Regional

Regional airports are in metropolitan areas and serve relatively large populations. These airports support regional economies with interstate and some long-distance flying and have high levels of activity including limited air carrier service. Regional airports have high levels of activity with some jets and multiengine propeller aircraft. Eligibility criteria for this category are:

- Metropolitan Statistical Area (metro or micro) and 10+ domestic flights over 500 miles, 1,000+ instrument operations, 1+ based jet or 100+ based aircraft; or
- The airport is in a metropolitan statistical area and meets the definition of a Nonprimary commercial service airport; or
- + Currently designated by the FAA as a Reliever with 90 or more validated based aircraft

#### Local

Local airports provide communities with access to local and regional markets. Local airports are located near larger population centers but not necessarily in metropolitan areas. They typically accommodate personal or business flying such as flight training and emergency services and can be associated with moderate levels of activity. The airport must be publicly owned and meet one of the following eligibility criteria:

- → 10+ instrument operations and 15+ based aircraft; or
- ✤ 2,500+ passenger enplanements



#### Basic

Basic airports fulfill the principal role of a community airport providing a means for private GA flying, linking the community with the NAS, and offering other unique contributions. In some instances, the airport is the only way to access the community and provides emergency response access such as emergency medical, firefighting, and/or mail delivery. Most of the flying at Basic airports is for business or personal reasons using propeller-driven aircraft. Eligibility criteria for this category are:

- > Publicly owned with 10+ based aircraft or 4+ based helicopters if a heliport; or
- → Publicly owned located 30+ miles from the nearest NPIAS airport; or
- → Owned or serving a Native American community
- Identified and used by the U.S. Forest Service, or U.S. Marshals, or U.S. Customs and Border Protection (designated, international, or landing rights), or U.S. Postal Service (air stops), or has Essential Air Service; or
- → New or replacement facility that has opened within the last 10 years; or
- → Fulfills a unique circumstance related to special aeronautical use

In addition to the four classifications, there were nearly 500 airports that the FAA could not classify in its first study in 2012. These airports were referred to as Unclassified based on the limited activity identified at the airports. Following the release of ASSET 1 in 2012, the FAA requested additional information from airport sponsors regarding the aeronautical functions supported by and sophistication of flying occurring at these Unclassified airports.<sup>4</sup>

Based in part on this subsequent investigation, the FAA released *ASSET 2: In-Depth Review of 497 Unclassified Airports* (known as ASSET 2) in 2014. This report further evaluated the Unclassified airports from ASSET 1 to review if these airports could be classified based on the additional data received. In ASSET 1 (2012), Idaho had six Unclassified airports:

- → Aberdeen Municipal (U36)
- ✤ Council Municipal (U82)
- → Craigmont Municipal (S89)
- → Kamiah Municipal (S73)
- ✤ Shoshone County (S83)
- → Preston (U10)

In ASSET 2 (2014), four of these six Idaho airports were re-classified as Basic and two remained Unclassified (Craigmont Municipal and Council Municipal). ASSET categories have continued to be reevaluated during subsequent biennial NPIAS updates. Key points include:

- → 2017-2021 NPIAS reclassified Council Municipal from Unclassified to Basic
- → 2019-2023 NPIAS reclassified Kamiah Municipal from Basic to Unclassified (as it was in 2012)
- Craigmont Municipal was reported in the 2017-2021 NPIAS as Unclassified (as it was in 2012 and 2014). The airport requested removal from the NPIAS in 2018; as such, it has been evaluated as a non-NPIAS airport in all pertinent analyses of the 2020 IASP Update

As a result, Kamiah Municipal is the only Unclassified airport reported in the *2019-2023 NPIAS*. The number of airports in each ASSET category in the 2017-2021 and 2019-2023 reports is shown in **Table 7-4**. Because of Craigmont Municipal's removal from the NPIAS, the total number of airports during each study year is different.

<sup>&</sup>lt;sup>4</sup> Ibid. p.3



TABLE 7 4. IBATTO ATTA ORTO ABSET CATEGORIES, 2017 ATD 2015 MIARS REPORTS								
	Number of Idaho	System Airports						
ASSET CATEGORY	2017-2021 NPIAS	2019-2023 NPIAS	2019 Idaho Airport Examples					
National	0	0	N/A					
Regional	3	3	Caldwell Industrial (EUL)					
Local	16	16	St. Maries Municipal (S72)					
Basic	11	10	Priest River Municipal (1S6)					
Unclassified	1	1	Kamiah Municipal (S73)					

#### TABLE 7-4: IDAHO AIRPORTS ASSET CATEGORIES, 2017 AND 2019 NPIAS REPORTS

Sources: 2017-2021 NPIAS; 2019-2023 NPIAS

#### **NPIAS and ASSET Future Evaluation**

The FAA's classification system of airports is important because NPIAS airports are deemed to be vital to the NAS and are eligible to receive federal AIP funding for certain project types. As part of the 2020 IASP Update, an evaluation of the NPIAS and non-NPIAS airports in the system was completed using the criteria described above for NPIAS and ASSET classifications. These evaluations utilized the most current data available (base year 2017 or 2018) as obtained during the airport inventory process or by using FAA or third-party sources. The analysis conducted for the 2019-2023 report primarily used 2016 data. The purpose of this evaluation is to determine if different NPIAS and/or ASSET classifications should be considered in conducting the future system needs evaluation.

It is important to note that any changes to the NPIAS must be closely coordinated with the airport and FAA. Furthermore, NPIAS airports that receive AIP funding are obligated to comply with 39 federal grant assurances. These obligations require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions. If obligations cannot be met through the life of the project, the airport sponsor must pay back the grant to the FAA. As such, grant assurances can be cumbersome for some small communities. The pros and cons of inclusion in the NPIAS should be carefully considered by airport sponsors prior to seeking a NPIAS designation.

#### **NPIAS Evaluation of Non-NPIAS Airports**

Of the 75 airports included in the IASP 2020 Update, 37 are included in the NPIAS, and the remaining 38 are non-NPIAS. All 38 of these non-NPIAS airports are publicly owned and open for public use. The 2020 IASP Update evaluated if the 38 non-NPIAS airports in Idaho achieve the updated primary criteria for inclusion in the NPIAS based on data collected during this study. This evaluation assumes that the airport is operated by a sponsor eligible to receive federal funds and meet obligations.<sup>5</sup> The results of this analysis by criterion are presented in **Table 7-5**.

<sup>&</sup>lt;sup>5</sup> Note that the 2019 FAA Order 5090.5 provides the criterion that an airport proposed for inclusion in the NPIAS cannot have any significant airfield design standard deficiencies, compliance violations, or wetland or wildlife issues based on a review by the FAA. This requirement has not been specifically evaluated by the 2020 IASP Update because conducting an airport-specific evaluation of design standard deficiencies is outside of the scope of system-level planning. An airport considering entry into the NPIAS should conduct a careful evaluation of their facilities to identify any potential issues and conduct the necessary improvements to achieve FAA compliance before submitting a proposal package to the FAA.



	TABLE 7-5: NPIAS ELIGIBILITY ANALYS	<u>SIS OF NO</u>	In the 2020	IRPORTS	30+ Miles
ASSOCIATED		FAA	IASP	10+ Based	from NPIAS
CITY	Airport	ID	Update	Aircraft	Airport
American Falls	American Falls	U01	√	$\checkmark$	
Bancroft	Bancroft Municipal	U51	✓		$\checkmark$
Big Creek	Big Creek	U60	$\checkmark$		$\checkmark$
Carey	Carey	U65	$\checkmark$		
Coeur D'Alene	Brooks SPB	S76	✓		
Coolin	Cavanaugh Bay	66S	✓		
Cottonwood	Cottonwood Municipal	S84	$\checkmark$		
Craigmont	Craigmont Municipal	S89	$\checkmark$		
Donnelly	Donald D. Coski Memorial	U84	$\checkmark$		
Downey	Downey/Hyde Memorial	U58	$\checkmark$		
Dubois	Dubois Municipal	U41	$\checkmark$		$\checkmark$
Emmett	Emmett Municipal	S78	$\checkmark$	$\checkmark$	
Fairfield	Camas County	U86	$\checkmark$		
Galena	Smiley Creek	U87	$\checkmark$		$\checkmark$
Garden Valley	Garden Valley	U88	$\checkmark$		
Glenns Ferry	Glenns Ferry Municipal	U89	$\checkmark$		
Hazelton	Hazelton Municipal	U94	$\checkmark$		
Howe	Howe	U97	$\checkmark$		
Kooskia	Kooskia Municipal	S82	$\checkmark$		
Leadore	Leadore	U00	$\checkmark$		$\checkmark$
Lewiston	Snake River SPB	78U	$\checkmark$		
Mackay	Mackay	U62	$\checkmark$		
Malad City	Malad City	MLD	✓		
Midvale	Lee Williams Memorial	0U9	$\checkmark$		
Mud Lake	Mud Lake/West Jefferson County	1U2	~	$\checkmark$	$\checkmark$
Murphy	Murphy	1U3	<b>√</b>		
Nezperce	Nezperce Municipal	0\$5	~		
Oakley	Oakley Municipal	1U6	<b>v</b>		
Parma	Parma	50S	<b>√</b>		
Payette	Payette Municipal	S75	<b>√</b>	✓	
Porthill	Eckhart International	1S1	✓		
Rigby	Rigby	U56	~	$\checkmark$	
Rockford	Rockford Municipal	2U4	<b>√</b>		
Soda Springs	Allen H Tigert	U78	~	1	✓
St. Anthony	Stanford Field	U12	✓	$\checkmark$	
Stanley	Stanley	207	<b>√</b>		✓ ✓
Stanley	Thomas Creek	2U8	✓		✓ ✓
Yellow Pine	Johnson Creek	3U2	$\checkmark$		$\checkmark$

Sources: 2019-2023 NPIAS Report; Airport Inventory and Data Survey Forms, 2019; ESRI ArcGIS, 2019; ITD Aeronautics, 2018



Based on the NPIAS eligibility criteria and current airport conditions, Mud Lake/West Jefferson County Airport meets all three criteria for potential inclusion in the NPIAS. The airport reported 11 based aircraft, is located 30+ miles from the nearest NPIAS airport (Howe), and is included in the 2020 IASP Update.

Additionally, FAA guidance prior to the current FAA Order 5090.5 noted that airports proposed for inclusion in the NPIAS must be located at least 20 miles or 30 minutes driving distance from the nearest NPIAS airport. The NPIAS/ASSET analyses of the 2020 IASP Update occurred before this updated guidance was released in September 2019. As such, Emmett Municipal has also been identified as eligible for inclusion in the NPIAS. The airport is located approximately 36 minutes from the nearest NPIAS airport (Caldwell Industrial), has 21 based aircraft, and is included in the 2020 IASP Update. The airport sponsor and ITD Aeronautics should thoroughly evaluate Emmett Municipal's ability to achieve all current and updated eligibility requirements should inclusion be desired in the future.

Both Mud Lake/West Jefferson County and Emmett Municipal airports would be assigned an ASSET category under the federal classification methodology. Based on current activity levels and type, Emmett Municipal would be Local and Mud Lake/West Jefferson County would be Basic. As noted previously, the future system analysis, including future performance targets, use this potential classification changes in analyzing future system needs.

#### NPIAS Airports Eligible for Reliever Status

Existing public-use airports requesting inclusion in the NPIAS as Reliever airport must meet all of the following screening requirements to be considered for this designation:

- → Operated by a sponsor eligible to receive federal funds and obligations
- Used by at least 100 based aircraft that have been validated by the FAA against the FAA Aircraft Registry (i.e., basedaircraft.com)
- Relieves a large- or medium-hub airport that is operating at 60 percent or more of its capacity (The number of existing Relievers already designated from the large- or medium- hub airport will be taken into account.)
- Demonstrates an identifiable role in the national system and submit information confirming its ability to fulfill that role (e.g., feasibility of developing facilities to accommodate jets, compatible land use, etc.)
- Included in a state system plan with a role similar to the federal role and recommended by the aviation authority to be part of the NPIAS
- ✤ No significant airfield design standard deficiencies, compliance violations, or wetland or wildlife issues based on a review by the FAA
- Privately-owned, public-use airports may be considered for inclusion in the NPIAS if the FAA determines it meets all of the criteria listed above, and the airport serves a critical role in the national system

Caldwell Industrial is the only airport in Idaho that currently serves in a Reliever role. Caldwell Industrial serves to relieve GA traffic congestion at the nearby Boise Air Terminal/Gowen Field. The 2020 IASP Update does not recommend any airports for a Reliever designation, as no other airports achieve the eligibility criteria defined above.

#### **ASSET Evaluation of Existing NPIAS Airports**

The FAA reviewed 2017 data during the formulation of the *2019-2023 NPIAS*. The 2020 IASP Update evaluated potential changes in ASSET categories to determine if any airports classification changes may be warranted based on current data as compiled during this study. This review indicated that two of Idaho's NPIAS GA airports experience enough activity levels to warrant potential recategorization during the next NPIAS update (2021-2025). These changes are shown in **Table 7-6**.



#### TABLE 7-6: ASSET CATEGORIZATION ANALYSIS OF EXISTING NPIAS AIRPORTS

			ASSET Category		
ASSOCIATED				Updated	
CITY	Airport	FAA ID	2019 NPIAS	Activity Data	
Buhl	Buhl Municipal	U03	Basic	Local	
Challis	Challis	LLJ	Basic	Local	

Sources: U.S. Census Bureau, 2019; 2019-2023 NPIAS; FAA Air Carrier Activity Information System, 2018; National Based Aircraft Inventory, 2018; National Flight Data Center, 2018; GCR, 2018; Traffic Flow Management System Counts (TFMSC), 2018; FAA Form 5100-108, 2018; ERSR ArcGIS, 2019; ITD Aeronautics, 2019

Data analyses indicate that Buhl Municipal could be moved from Basic to Local due to experiencing 10 or more instrument operations and having 15 or more based aircraft. 2018 TFMSC data indicates Buhl received 10 IFR operations and the airport manager reported 42 based aircraft in its Airport Inventory and Data Survey Form (2018). Similarly, Challis could be moved from Basic to Local due to meeting the same criteria listed above. 2018 TFMSC data indicates that Challis received 126 IFR operations and the airport manager reported 21 based aircraft during the inventory process.

A review of the criteria related to Unclassified airports was also undertaken. Kamiah Municipal is the only Unclassified airport in the *2019-2023 NPIAS*. Kamiah Municipal has oscillated between Unclassified and Basic over the past several iterations of the NPIAS. Based on an evaluation of current activity levels and type as obtained during the 2020 IASP Update, Kamiah Municipal meets the criteria of a Basic airport (11 based aircraft reported on its Airport Inventory and Data Survey Form). As such, the 2020 IASP Update has evaluated Kamiah Municipal as a Basic airport for both current system performance presented in *Chapter 5: System Adequacy* and the future performance presented in this chapter.

Craigmont Municipal is the only airport to have dropped in category due to its request that it be removed from the NPIAS. **Table 7-7** summarizes the recommended future classification changes identified during this analysis of NPIAS and non-NPIAS airports. These classifications are used during the develop of classification- and airport-specific future performance needs presented in the 2020 IASP Update.

			2020 IASP Update Classificatio	
ASSOCIATED CITY	Airport	FAA ID	Current	Future
Buhl	Buhl Municipal	UO3	Basic	Local
Challis	Challis	LLJ	Basic	Local
Emmett	Emmett Municipal	S78	Utility	Local
Kamiah	Kamiah Municipal	S73	Unclassified	Basic
Mud Lake	Mud Lake/West Jefferson County	1U2	Utility	Basic

#### TABLE 7-7: SUMMARY OF RECOMMENDED FUTURE CLASSIFICATION CHANGES

Sources: U.S. Census Bureau, 2019; 2019-2023 NPIAS; FAA Air Carrier Activity Information System, 2018; National Based Aircraft Inventory, 2018; National Flight Data Center, 2018; GCR, 2018; TFMSC, 2018; FAA Form 5100-108, 2018; ERSR ArcGIS, 2019; ITD Aeronautics, 2019; 2019-2023 NPIAS Report; Airport Inventory and Data Survey Forms, 2019

## **Review of Historical, Current, and Future Performance**

The following section of this chapter applies the insight garnered from the outside influences section and the classification updates identified in the NPIAS evaluation to analyze the system's ability to meet future demand. This analysis began by establishing performance targets for each PM in coordination with ITD Aeronautics and the PAC. These targets identify the percent of airports by classification that should achieve each measure to provide an airport system that safely and efficiently meets the needs of Idaho's residents, visitors, and businesses while supporting mobility, access, and economic vitality across the state over the next 20 years.



In addition to looking ahead to identify airport needs through the 2037 planning horizon, it is also important to consider how the system has evolved over time. If performance in a particular area has been continuously improving since last evaluated, then additional recommendations for ITD Aeronautics or airports may not be warranted. If performance has either stayed constant or decreased over time, a new approach or strategy may be necessary to shift this negative or neutral historical trend. As such, both the results of the current and 2010 (i.e., historic) performance assessments are presented with the future targets.

#### Key Difference Between the 2010 and 2020 Idaho Airport Systems

When reviewing the historical data presented throughout this chapter, it is important to consider several key differences between the 2010 IASP and the 2020 IASP Update which impact the ability to conduct an equitable comparison. In some cases, PMs have entirely changed, or evaluation criteria may have been modified. The 2020 IASP Update also added several new PMs that have not previously been evaluated. All changes are noted by PM.

More significantly, the 2020 IASP Update conducted a comprehensive evaluation of the state's classification methodology to determine its continued ability to accurately describe each airport's role at the state level and meet the needs of ITD Aeronautics. Based on this evaluation, the 2020 IASP Update developed a new, systematic process for classifying Idaho's airports. NPIAS airports are first classified based on their federal designation (i.e., NPIAS or ASSET). Non-NPIAS airports are then categorized based on quantitative data that indicates the typical type and volume of aviation activities occurring there. The revised system is objective, empowers ITD Aeronautics to conduct ongoing reviews, and aligns state and federal methodologies. It should be noted that ASSET classifications were developed by FAA in 2012, after the 2010 IASP was complete.

**Table 7-8** summarizes the number and percent of airports included in the 2010 and 2020 IASP Update classifications. Potential future classifications based on the NPIAS evaluation above are also provided; these future classifications are used for the future performance assessments provided in the remainder of this chapter.

TABLE 7-8: HISTORIC, CURRENT, AND FUTURE IASP AIRPORT CLASSIFICATIONS SUMMARY							
			2020 IASP Update				
2010 IASP – HISTORIC				CURRENT		FUTURE	
Role	No.	Percent	Classification	No.	Percent	No.	Percent
Commercial	7	9%	NPIAS				
Regional	17	23%	Primary	7	9%	7	9%
Community	18	24%	National	0	0%	0	0%
Local	16	21%	Regional	3	4%	3	4%
Basic	17	23%	Local	16	21%	19	25%
TOTAL	75	100%	Basic	10	13%	10	13%
			Unclassified	1	1%	0	0%
			Non-NPIAS				
			Utility	8	11%	6	8%
			General	23	31%	23	31%
			Backcountry	7	9%	7	9%
			TOTAL	75	100%	75	100%

ABLE 7-8: HISTORIC, CURRENT, AND FUTURE IASP AIRPORT CLASSIFICATIONS SUMMARY

Notes: Percent totals may not add due to rounding. As described, the 2020 IASP Update removed Elk City from the evaluation and added Thomas Creek. As a result, the total number of airports has remained the same. Craigmont Municipal was removed from the NPIAS in December 2018. It has been categorized here at a General airport. Sources: Wilbur Smith and Associates, 2009; Kimley-Horn, 2019

**Table 7-9** presents historic, current and future classifications by airport. Airports that may change classifications in the future are presented in bold blue.

IDAHO AIRPORT

#### TABLE 7-9: HISTORIC, CURRENT, AND FUTURE IASP CLASSIFICATIONS BY AIRPORT

<u></u>	ABEL 7-9. HISTORIC, CORRENT, AND	10101			
ASSOCIATED		FAA	2010 IASP -	2020 IAS	P Update
CITY	Airport	ID	HISTORIC	CURRENT	FUTURE
	СОММ	ERCIAL S	SERVICE		
Boise	Boise Air Terminal/Gowen Field	BOI	Commercial Service	Primary	Primary
Hailey	Friedman Memorial	SUN	<b>Commercial Service</b>	Primary	Primary
Idaho Falls	Idaho Falls Regional	IDA	<b>Commercial Service</b>	Primary	Primary
Lewiston	Lewiston – Nez Perce County	LWS	Commercial Service	Primary	Primary
Pocatello	Pocatello Regional	PIH	<b>Commercial Service</b>	Primary	Primary
Pullman	Pullman-Moscow Regional	PUW	<b>Commercial Service</b>	Primary	Primary
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Commercial Service	Primary	Primary
		GA			
Aberdeen	Aberdeen Municipal	U36	Local Recreational	Basic	Basic
American Falls	American Falls	U01	<b>Regional Business</b>	Utility	Utility
Arco	Arco-Butte County	AOC	Community Business	Basic	Basic
Bancroft	Bancroft Municipal	U51	Basic Service	General	General
Big Creek	Big Creek	U60	Local Recreational	Backcountry	Backcountry
Blackfoot	McCarley Field	U02	<b>Regional Business</b>	Local	Local
Bonners Ferry	Boundary County	65S	<b>Regional Business</b>	Local	Local
Buhl	Buhl Municipal	U03	Community Business	Basic	Local
Burley	Burley Municipal	BYI	<b>Community Business</b>	Local	Local
Caldwell	Caldwell Industrial	EUL	<b>Regional Business</b>	Regional	Regional
Carey	Carey	U65	Basic Service	General	General
Cascade	Cascade	U70	<b>Community Business</b>	Local	Local
Challis	Challis	LLJ	<b>Regional Business</b>	Basic	Local
Coeur D'Alene	Brooks SPB	S76	Basic Service	General	General
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Regional Business	Regional	Regional
Coolin	Cavanaugh Bay	66S	Local Recreational	Backcountry	Backcountry
Cottonwood	Cottonwood Municipal	S84	<b>Community Business</b>	General	General
Council	Council Municipal	U82	<b>Community Business</b>	Basic	Basic
Craigmont	Craigmont Municipal	S89	Local Recreational	General	General
Donnelly	Donald D. Coski Memorial	U84	Basic Service	Backcountry	Backcountry
Downey	Downey/Hyde Memorial	U58	<b>Community Business</b>	General	General
Driggs	Driggs-Reed Memorial	DIJ	<b>Regional Business</b>	Regional	Regional
Dubois	Dubois Municipal	U41	Basic Service	General	General
Emmett	Emmett Municipal	S78	Local Recreational	Utility	Local
Fairfield	Camas County	U86	Basic Service	General	General
Galena	Smiley Creek	U87	Local Recreational	Backcountry	Backcountry
Garden Valley	Garden Valley	U88	Local Recreational	General	General
Glenns Ferry	Glenns Ferry Municipal	U89	Basic Service	General	General
Gooding	Gooding Municipal	GNG	Regional Business	Local	Local
Grangeville	Idaho County	GIC	Regional Business	Local	Local
Hazelton	Hazelton Municipal	U94	Local Recreational	General	General
Homedale	Homedale Municipal	S66	Community Business	Basic	Basic



ASSOCIATED		FAA	2010 IASP -	2020 IAS	P Update
CITY	Airport	ID	HISTORIC	CURRENT	FUTURE
Howe	Howe	U97	Basic Service	General	General
Jerome	Jerome County	JER	Regional Business	Local	Local
Kamiah	Kamiah Municipal	S73	Local Recreational	Unclassified	Unclassified
Kellogg	Shoshone County	S83	Community Business	Basic	Basic
Kooskia	Kooskia Municipal	S82	Local Recreational	General	General
Leadore	Leadore	U00	Basic Service	General	General
Lewiston	Snake River SPB	78U	Basic Service	General	General
Mackay	Mackay	U62	Basic Service	General	General
Malad City	Malad City	MLD	Basic Service	Utility	Utility
McCall	McCall Municipal	MYL	<b>Regional Business</b>	Local	Local
Midvale	Lee Williams Memorial	0U9	Basic Service	General	General
Mountain Home	Mountain Home Municipal	U76	<b>Regional Business</b>	Local	Local
Mud Lake	Mud Lake/West Jefferson County	1U2	Basic Service	Utility	Basic
Murphy	Murphy	1U3	Basic Service	General	General
Nampa	Nampa Municipal	MAN	Regional Business	Local	Local
Nezperce	Nezperce Municipal	0S5	Community Business	General	General
Oakley	Oakley Municipal	1U6	Basic Service	General	General
Orofino	Orofino Municipal	S68	Community Business	Basic	Basic
Paris	Bear Lake County	1U7	Community Business	Basic	Basic
Parma	Parma	50S	Community Business	General	General
Payette	Payette Municipal	S75	Local Recreational	Utility	Utility
Porthill	Eckhart International	1S1	Local Recreational	Backcountry	Backcountry
Preston	Preston	U10	<b>Community Business</b>	Local	Local
Priest River	Priest River Municipal	1S6	Local Recreational	Basic	Basic
Rexburg	Rexburg-Madison County	RXE	<b>Regional Business</b>	Local	Local
Rigby	Rigby	U56	<b>Regional Business</b>	Utility	Utility
Rockford	Rockford Municipal	2U4	Local Recreational	General	General
Salmon	Lemhi County	SMN	Regional Business	Local	Local
Sandpoint	Sandpoint	SZT	Regional Business	Local	Local
Soda Springs	Allen H Tigert	U78	Community Business	Utility	Utility
St. Anthony	Stanford Field	U12	Community Business	Utility	Utility
St. Maries	St Maries Municipal	S72	Community Business	Local	Local
Stanley	Stanley	2U7	Local Recreational	General	General
Stanley	Thomas Creek	2U8	N/A	Backcountry	Backcountry
Weiser	Weiser Municipal	S87	Community Business	Local	Local
Yellow Pine	Johnson Creek	3U2	Local Recreational	Backcountry	Backcountry

Note: Airports indicated in **bold blue** have been indicated for a future role change. As noted previously, these airports are analyzed using their future roles in all subsequent analyses that pertain to future system performance targets and associated system needs. Sources: Wilbur Smith and Associates, 2009; Kimley-Horn, 2019

As a result of these variables, direct comparisons of system performance between 2010 and 2020 are generally inappropriate. Instead, historical comparisons indicate overall trends and broad areas of performance that have improved or declined over time. All PM-specific differences are presented by measure throughout this section.



#### **Goal: Facility Support**

The facility support goal addressed the infrastructure, facilities, and services that are recommended to support Idaho's diverse base of aviation users.

#### **Facility and Service Objectives**

Facility and service objectives provide guidelines to help airports optimally support the type of aviation activities that typically occur at their facilities. Airports that meet the specific facility and service objectives established for their classification are best equipped to fulfill the aviation market needs of their communities and regions and support their function in the statewide system. Accordingly, future performance targets have been established at 100 percent for all objectives. As discussed in *Chapter 3: Airport Role Analysis* and *Chapter 5: System Adequacy Analysis*, objectives are established by classification, and not all classifications are indicated to meet all objectives.

**Table 7-10** summarizes the historical, current, and future performance target for each component of Idaho's facility and service objectives. Note that the reclassification of airports since the 2010 IASP makes direct comparisons between the 2010 and 2020 systems difficult; facility and service objectives have also shifted between the two studies. The table below should be reviewed as an indication of general trends over time.

2010 IASP - Systemwide Perf	ormance	2020 IASP Update - Systemwide Performance				
Airport Component	HISTORIC	Airport Component	CURRENT	FUTURE		
Primary Runway Length (ft)	36%	Primary Runway Length (ft)	73%	100%		
Primary Runway Width (ft)	67%	Primary Runway Width (ft)	83%	100%		
Primary runway strength (lbs)	67%	Primary Runway Strength (lbs)	89%	100%		
Taxiway Type	88%	Taxiway Type	97%	100%		
Instrument Approach	72%	Instrument Approach	100%	100%		
Visual Aids	55%	Visual Aids	95%	100%		
Runway Lighting	80%	Runway Lighting	76%	100%		
Weather Reporting Facilities	42%	Weather Reporting Facilities	80%	100%		
Phone	52%	Cell Coverage	92%	100%		
		Wi-Fi	72%	100%		
Fixed Base Operator (FBO)	96%	FBO	100%	100%		
Maintenance	100%	Maintenance Services	100%	100%		
		Snow Removal Equipment	90%	100%		
AvGas/Jet A Fuel	61%	AvGas/Jet A Fuel	93%	100%		
Rental/Courtesy Car	67%	Rental/Courtesy Car	89%	100%		
Terminal	71%	Commercial Service Terminal	100%	100%		
		GA Terminal	86%	100%		
		Conference Room	100%	100%		
		Pilot's Lounge	83%	100%		
Restroom	64%	Public Restroom	67%	100%		
Hangar Storage	81%	Hangar Storage	55%	100%		
Apron Tie-down Spaces	57%	Apron Tie-down Spaces	49%	100%		
Auto Parking	48%	Auto Parking	97%	100%		
		Perimeter Fencing	80%	100%		

#### TABLE 7-10: FACILITY AND SERVICE OBJECTIVES - HISTORICAL, CURRENT, AND FUTURE PERFORMANCE\*

\* Note: Results reflect the percent of applicable airports that meet each facility and service objective. Some objectives are not applicable to all classifications. Statewide results have been adjusted here to show only those airports that are recommended to meet each objective to provide a more accurate indication of statewide performance. Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019



Airport-specific performance as well as a systemwide evaluation by PM are reported in **Appendix A.** Gaps by airport are used to identify future airports needs and associated cost estimates reported in *Chapter 9: Recommended System of Airports.* 

#### **Goal: Preservation**

The airport preservation goal is designed to ensure adequate investment into the Idaho airport system so that the quality and quantity of airport infrastructure are maintained over time. Since the 2010 IASP, systemwide performance in all PMs associated with this goal has improved.

#### Percent of Airports with Zoning for Height and Land Use Regulations

Land use compatibility practices are designed to promote the safety of aircraft, their passengers, and people and property on the ground, as well as mitigate the potential nuisance associated with overhead aircraft operations. Airport land use compatibility zoning is generally intended to ensure the land uses adjacent to or near airports are not excessively impacted by airport operations in terms of safety and noise. Land use incompatibility can lead to degraded airport operations, limited economic development opportunities, lost value of public investment, decline in transportation access, and increased safety risks. Height zoning prohibits height obstructions into navigable airspace as defined in 14 Code of Federal Regulations (CFR) Part 77, *Safe, Efficient Use, and Preservation of Navigable Airspace.* Although the FAA has established guidelines pertaining to land use compatibility and height restrictions, it is ultimately the responsibility of local governments and other jurisdictional authorities to implement and enforce airport compatible zoning for height and land use.

#### **Historic and Current Performance**

In 2010, the IASP included two PMs associated with airport compatible zoning:

- ✤ Percent of airports with compatible land use zoning adopted
- ✤ Percent of airports with height zoning

The 2020 IASP Update combined these two elements, and airports must have both to achieve the 2020 PM. Due to this change, a direct comparison between 2010 and 2020 cannot be made; however, the measures are interrelated and indicate significant improvement over time.<sup>6</sup> As shown in **Table 7-11**, performance has increased substantially statewide for both measures. In 2010, 28 percent of airports reported compatible land use zoning and 51 percent reported height zoning. Sixty percent of airports reported both types of zoning in the 2020 study. Airports in the largest classifications have seen the most significant improvements, reaching 100 percent for both Primary and Regional airports. Much of this improvement is likely due to the adoption of the *Idaho Land Use Guidelines* in 2016, as well as the passage of Senate Bill (SB) 1265 (effective July 1, 2014). SB 1265 amended Idaho Code Title 21, Chapter 5, Airport Zoning Act, and Title 67, Chapter 65, Local Land Use Planning to "require more proactive land use compatibility planning around the state's airports by city and county entities through the local comprehensive planning process."

While 0 percent of Idaho's Backcountry airports currently achieve this PM, these facilities are generally surrounded by publicly owned lands in rural or remote areas without associated zoning ordinances. Regardless, trees and other natural obstructions may penetrate surrounding airspace and should be accordingly managed for safe aircraft operations.

<sup>&</sup>lt;sup>6</sup> Note that the data used to assess the percent of airports achieving these PMs were collected from responses to the Airport Inventory and Data Survey Form and were not were not independently validated with the local governments responsible for zoning and development near the airports.



#### TABLE 7-11: HISTORIC AND CURRENT PERFORMANCE: AIRPORTS WITH ZONING FOR HEIGHT AND LAND USE

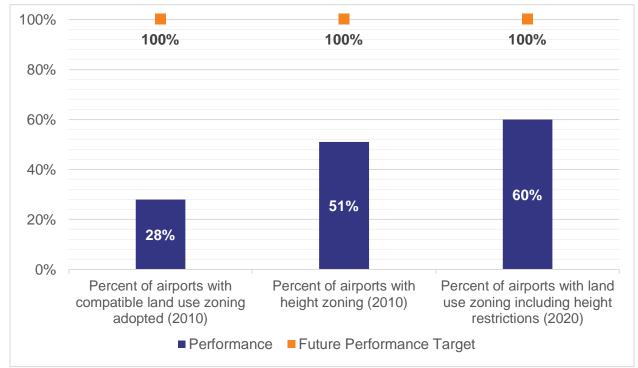
20	010 IASP - HISTORIC	2020 IASP Update - CURRENT		
	Airports with			Airports with
	Compatible Land	Airports with		Zoning for Height
ROLE	Use Zoning	Height Zoning	Classification	& Land Use Regs
Commercial Service	57%	100%	Primary	100%
Regional Business	65%	76%	Regional	100%
Community Business	17%	56%	Local	81%
Local Recreational	13%	25%	Basic	73%
Basic	6%	24%	Utility	50%
Statewide	28%	51%	General	43%
			Backcountry	0%
			Statewide	60%

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Future Performance**

Because airport compatible land use zoning and height restrictions are cornerstone elements of protecting airports from encroachment and safety, the future performance target has been established at 100 percent for all airport classifications. In 2010, airports with compatible land use zoning was considered an informational benchmark and a future target was not established. The 2010 performance target for airports with height zoning was established at 100 percent. In both cases, the 2010 IASP noted that additional study was warranted regarding zoning regulations around airports. Idaho Land Use Guidelines were also developed as part of the 2010 IASP to support land use and height zoning around airports. **Figure 7-4** illustrates the airport system's historic and current performance and future performance targets (as applicable) for this PM.

# FIGURE 7-4: HISTORIC, CURRENT, AND FUTURE PERFORMANCE: AIRPORTS WITH ZONING FOR HEIGHT AND LAND USE REGULATIONS



Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### Actions to Improve Performance

Table 7-12 details airports that are located within jurisdictions that do not have both land use and height zoning restrictions.

ASSOCIATED CITYAirportFAA IdentifierNo Zoning for Height and Land Use RegulationsLOCALEmmettEmmett Municipal\$78×McCallMcCall MunicipalMYL×PrestonPrestonU10×RexburgRexburg-Madison CountyRXE×AberdeenAberdeen MunicipalU36×ArcoArco-Butte CountyAOC×Mud LakeMud Lake/West Jefferson County1U2×ParisBear Lake County1U7×OTILITYMalad CityMLD×St. AnthonyStanford FieldU12×GENERALCottonwoodCottonwood MunicipalS84×CraigmontCraigmont MunicipalS89×Garden ValleyU88×HoweHoweU97×KooskiaKooskia MunicipalS82×LewistonSnake River SPB78U×MidvaleLee Williams Memorial0U9×MidvaleLee Williams Memorial0U9×MidvaleLee Williams Memorial0U9×MidvaleLee Williams MemorialU62×MidvaleLee Williams Memorial0U9×MackayMackayU62×MidvaleLee Williams MemorialU10×StanleyStanley2U7×Big CreekBig CreekU60×Cooli		FOR HEIGHT AND LAND USE R		
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PorthillEckhart International1S1*StanleyThomas Creek2U8*	Donnelly	Donald D. Coski Memorial	U84	×
Stanley Thomas Creek 2U8 *	Galena	Smiley Creek	U87	×
	Porthill	Eckhart International	1S1	×
Yellow PineJohnson Creek3U2*	Stanley	Thomas Creek	2U8	×
	Yellow Pine	Johnson Creek	3U2	×

TABLE 7-12: FUTURE NEEDS BY AIRPORT: AIRPORTS WITHOUT ZONING FOR HEIGHT AND LAND USE REGULATIONS

Source: Airport Inventory and Data Survey Forms, 2019



The FAA has established airport compatible land use guidelines that consider the unique safety and noise issues inherent to incompatible development within the vicinity of an airport. The Transportation Research Board's (TRB) Airport Cooperative Research Program (ACRP) *Report 27: Enhancing Airport Land Use Compatibility, Volume 1: Land Use Fundamentals and Implementation Resources* provides updated guidance (compared to FAA) to help protect airports from incompatible land uses that impair current and future airport and aircraft operations and safety. *Volume 2: Land Use Survey and Case Study Summaries* includes 15 case studies targeting a wide range of airports and land use issues covering a geographically diverse set of large commercial service, military, and GA airports.<sup>7</sup>

While airport land use compatibility guidelines are well established, the authority to codify into regulation and enforcement falls to the local level. An airport is faced with land use compatibility issues when development occurs in its vicinity that does not align with the best practices identified by the FAA and TRB, or when adjacent development simply leaves no space for the airport to expand. Airports and associated zoning authorities should continue to work together for appropriate zoning adjacent to and near airports as recommended in the *Idaho Airport Compatible Land Use Guidelines* and codified by SB 1265.

# Percent of Airports with Master Plans or Airport Layout Plans (ALPs) with Narrative (Within past 10 years)

A current master plan aligns airport improvement projects with existing and realistic aviation demands. Additionally, master plans and/or ALP updates with narrative help airports communicate aviation demands to policymakers, airport users, and the public. These documents allow airports to engage with the public by providing information on the airport's activities and can help to garner support on a broader scale. A community that understands and values its airport is more likely to participate in future planning efforts; generate fewer noise complaints; and offer its support in terms of controls, zoning, and other land use compatibility issues meant to protect the airport and its surroundings. Planning studies also offer the opportunity to thoroughly evaluate how a community's economic and demographic changes may impact future airport operations and associated needs.

#### **Historic and Current Performance**

The 2010 IASP separately reported airports' performance against the following two components of this PM:

- → Airports with master plans
- ✤ Airports with ALPs

The 2020 IASP Update reported this PM in terms of having either a master plan or an ALP. Additionally, the 2020 study considers the timeframe the document was created or last updated (within the last 10 years). This timeframe is important because airport improvement projects must be included on a current ALP to be eligible for federal and state funding. Planning documents should be updated regularly to ensure alignment with current and future needs. Ten years is an appropriate guideline; however, an airport may need to update its ALP more frequently as increased demand warrants, as conditions at the airport or within the community change, or as updates to federal or state planning and design standards require.

Because of these key differences, a direct comparison between 2010 and 2020 is not appropriate. Over 80 percent of NPIAS airports now have planning documents completed within the last 10 years, including 100 percent of Primary and Regional facilities. At the statewide level, 59 percent of all airports have a master plan or ALP completed within the past 10 years. In 2010, 41 percent of all airports reported having a master plan and 62 percent reported an ALP (as noted, the timeframe of that planning document was not considered in the historic assessment).**Table 7-13** summaries historic (2010) and current (2020) performance for this PM.

<sup>&</sup>lt;sup>7</sup> Both ACRP documents are available online at www.trb.org/Publications/Blurbs/163344.aspx (accessed July 2019).

#### TABLE 7-13: HISTORIC AND CURRENT PERFORMANCE: AIRPORTS WITH MASTER PLANS OR ALPS WITH NARRATIVE

2010	ASP - HISTORIC		2020 IASP Update - CURRENT					
Role	Airports with Master Plans	Airports with ALPs	Classification	Airports with Master Plans or ALPs with Narrative (within past 10 years)				
Commercial Service								
Commercial Service	100%	100%	Primary	100%				
Regional Business	82%	94%	Regional	100%				
<b>Community Business</b>	38%	83%	Local	88%				
Local Recreational	13%	38%	Basic	82%				
Basic	6%	18%	Utility	63%				
Statewide	41%	62%	General	26%				
			Backcountry	0%				
			Statewide	59%				

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Future Performance**

Master plans and ALPs with narrative both utilize similar processes to develop an assessment of airport-specific needs. These planning documents evaluate current aviation demands, forecast aviation activity through the planning horizon, and develop a list of recommended improvement projects. However, an ALP with narrative is more limited in scope. Further, the FAA and ITD Aeronautics requires a proposed project to be depicted on an airport's current ALP—not that it be included in a master plan. An up-to-date master plan and/or ALP also helps the FAA and ITD Aeronautics maintain a current and accurate statewide capital improvement program (SCIP). This helps Idaho and the FAA better understand constrained and unconstrained funding scenarios in the short- and mid-terms and strategically prioritize limited airport improvement funding.

Based on these considerations, both the 2010 IASP and 2020 IASP Update established classification-specific future performance targets that include an appropriate timeframe for completion. The performance target for each study year are as follows:

#### ✤ 2010 IASP

- 100 percent of Commercial Service and Regional Business airports should have an approved master plan and an ALP completed within the past 10 years
- 100 percent of Community Business and Local Recreational airports should have an approved master plan and an ALP completed within the past 15 years
- → 2020 IASP Update: All documents should be completed within the past 10 years
  - 100% of all Primary and Regional airports should have a master plan
  - 100% of all Local, Basic, and Utility airports should have an ALP with narrative
  - 100% of General airports eligible to receive Idaho Airport Aid Program (IAAP) funds should have an ALP with narrative
  - 0% of Backcountry airports should have an ALP with narrative

**Table 7-14** reports the historic and current future performance targets by airport classification. Ninety-onepercent of system airports in the 2020 IASP Update are recommended to have a current planning document. Thisis an increase from the targets set in the 2010 IASP.



2010 IASP – HISTORIC TARGETS		2020 IASP Update – FUTURE TARGETS		
	Airports with Master Plans		Airports with Master Plans or	
	or ALP Reports (within the		ALPs with Narrative (within	
Role	past 10 or 15 years)	Classification	the past 10 years)	
Commercial Service	100%	Primary	100%	
Regional Business	100%	Regional	100%	
<b>Community Business</b>	100%	Local	100%	
Local Recreational	100%	Basic	100%	
Basic	0%	Utility	100%	
Statewide	77%	General	100%	
		Backcountry	0%	
		Statewide	91%	

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Actions to Improve Performance**

**Table 7-15** indicates airports that do not currently have an appropriate planning document by classification. Note that airports that did not provide data for this analysis are included here for planning purposes; these airports are indicated as N/P. Airports that provided data but are beyond the 10-year planning horizon are indicated by either the year the document was last approved or with the X symbol (**×**) if it has never been completed. It should be noted the future target for Backcountry airports is set at zero percent, and therefore Backcountry airports are not included in the table.

## TABLE 7-15: FUTURE NEEDS BY AIRPORT WITH A MASTER PLAN OR ALP WITH NARRATIVE

BEYOND THE 10-YEAR THRESHOLD									
ASSOCIATED CITY	Airport	FAA ID	Master Plan	ALP					
	LOCAL								
Bonners Ferry	Boundary County	65S	N/P	1997					
Preston	Preston	U10	×	1998					
BASIC									
Council	Council Municipal	U82	1998	1998					
Kamiah	Kamiah Municipal	S73	×	×					
Mud Lake	Mud Lake/West Jefferson County	1U2	×	×					
UTILITY									
Malad City	Malad City	MLD	1980	×					
Soda Springs	Allen H Tigert	U78	1995	×					
	GENERAL								
Bancroft	Bancroft Municipal	U51	×	×					
Carey	Carey	U65	N/P	×					
Craigmont	Craigmont Municipal	S89	1990	×					
Coeur D'Alene	Brooks SPB	S76	×	×					
Cottonwood	Cottonwood Municipal	S84	×	×					
Downey	Downey/Hyde Memorial	U58	N/P	×					
Dubois	Dubois Municipal	U41	×	×					
Fairfield	Camas County	U86	×	N/P					
Howe	Howe	U97	×	×					
Kooskia	Kooskia Municipal	S82	N/P	N/P					



ASSOCIATED CITY	Airport	FAA ID	Master Plan	ALP
Leadore	Leadore	U00	×	×
Lewiston	Snake River SPB	78U	×	×
Mackay	Mackay	U62	1995	×
Midvale	Lee Williams Memorial	0U9	×	×
Nezperce	Nezperce Municipal	0S5	×	2004
Oakley	Oakley Municipal	1U6	×	×
Stanley	Stanley	2U7	×	×

Source: Airport Inventory and Data Survey Forms, 2019

As most airports utilize some form of grant funding to prepare master plans and ALP updates with narrative, completing these types of documents depends, in large part, on the state and FAA. Currently, planning documents can be funded using AIP dollars for NPIAS airports and IAAP funds for NPIAS and non-NPIAS airports. ITD Aeronautics can communicate the importance of current planning documents during annual state capital improvement plan (SCIP) development and could consider reflecting this need in its priority rating system. In addition, the FAA has funded the development of other types of planning documents for airports across the U.S. The FAA can work with airports to complete studies that evaluate the impact of changes to FAA guidelines and policies on elements such as taxiway geometry, runway incursion mitigation (RIM) issues, surveying standards, and wildlife, as well as significant changes to both commercial and GA activity. These types of evaluations encourage airports to stay current with existing and future needs, as well as the latest safety, security, and other standards established at the federal level.

#### Percent of Airports Meeting ITD Aeronautics Pavement Condition Index (PCI) Standards

An airport's PCI is the primary indicator of pavement condition. Rated on a scale from 0 to 100, with 0 being completely failed and 100 indicating perfection, PCI evaluations help airports and ITD Aeronautics prioritize pavement improvement needs by pavement area and systemwide.

#### **Historic and Current Performance**

The 2010 IASP benchmarked the percent of airports with a paved primary runway PCI of 81 or greater. The 2020 IASP Update revised this measure to evaluate PCI by type of aircraft movement area. Because of performance and safety issues, the PCI of runway and taxiway surfaces must be higher to support aircraft operations. Apron pavement can be lower due to the speed at which aircraft travel in these areas. Accordingly, ITD PCI standards establish the following indices by pavement and airport type:

- → Runway: 65 PCI for NPIAS, 50 PCI for non-NPIAS
- → Taxiway: 60 PCI for NPIAS, 45 for non-NPIAS
- → Apron: 50 for NPIAS, 40 for non-NPIAS

Due to the important distinctions between the 2010 and 2020 PMs, a statewide evaluation of performance over time cannot be made. With this said, 37 percent of airports with pavement (i.e., 'applicable') airports achieved the 2010 PM. Performance increased to 64 percent of applicable airports in the current study. These improvements can likely be attributed to ITD's pavement management program, which annually monitors pavement conditions at airports across the state. Maintenance projects are prioritized based on actual need, thus ensuring that all airports have equitable access to state funding and other programmatic support.

**Table 7-16** reports airport performance by classification in the 2010 and 2020 analyses. Note that the 2010 findings are based on information published in 2008, while 2020 results are based on a 2017 study year. Because conditions can change quickly due to Idaho's extreme weather, results must be interrupted as a snapshot in time instead of an indication of current conditions. Ongoing monitoring is required to ensure airports continue to achieve established targets.



#### TABLE 7-16: HISTORIC AND CURRENT PERFORMANCE: AIRPORTS MEETING ITD PCI STANDARDS

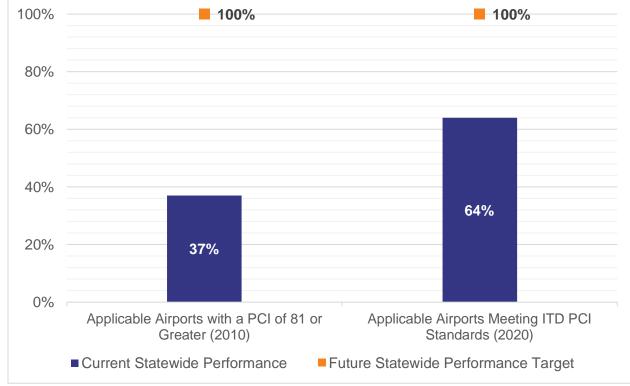
2010 IASP -	2010 IASP - HISTORIC		date - CURRENT
	Applicable		Applicable
	Airports with a PCI		Airports Meeting
Role	of 81 or Greater	Classification	ITD PCI Standards
Commercial Service	100%	Primary	86%
Regional Business	71%	Regional	100%
Community Business	78%	Local	63%
Local Recreational	13%	Basic	60%
Basic	12%	Utility	63%
Statewide	37%	General	45%
		Backcountry	N/A
		Statewide	64%

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Future Performance**

Because of PCI's role in ensuring the safe and efficient movement of aircraft, both the 2010 and 2020 IASPs indicate that 100 percent of airports with pavement should achieve the established performance target. Current and future performance targets are depicted in **Figure 7-5**. Note that a comparison of future targets between study years is inappropriate due to the vastly different PCI targets

#### FIGURE 7-5: FUTURE PERFORMANCE TARGETS: AIRPORTS MEETING ITD PCI STANDARDS



Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019



#### **Actions to Improve Performance**

**Table 7-13** details the airports that currently fall below the ITD PCI standards. The table shows the PCI rating by pavement area to identify the particular pavement that should be considered for a pavement improvement project. Note that a rating of N/A indicates that the airport does not have the particular pavement area. ITD Aeronautics' ongoing focus on pavement management through the Network Pavement Management System (NPMS) helps ensure pavement quality over time. By continuously monitoring pavement and prioritizing maintenance projects based on actual need, the program provides an efficient and effective process to support aviation in Idaho.



#### TABLE 7-17: NEEDS BY AIRPORT TO ACHIEVE PCI STANDARD BY PAVEMENT AREA

			Runway (65 fe			for NPIAS /		for NPIAS /
			50 for non		45 for no	n-NPIAS)	40 for no	
ASSOCIATED				Meets		Meets		Meets
CITY	Airport	FAA ID	PCI Rating	Standard?	PCI Rating	Standard?	PCI Rating	Standard?
			PRIMARY					· · ·
Pocatello	Pocatello Regional	PIH	RW 03-21: 99	$\checkmark$	52	×	65	$\checkmark$
			RW 17-35: 100					
			LOCAL (	(NPIAS)				
Burley	Burley Municipal	BYI	RW 02-20: 40	×	28	×	51	$\checkmark$
			RW 06-24: 45					
Cascade	Cascade	U70	87	$\checkmark$	79	$\checkmark$	48	×
McCall	McCall Municipal	MYL	79	$\checkmark$	54	×	63	$\checkmark$
Preston	Preston	U10	62	×	71	$\checkmark$	58	$\checkmark$
Rexburg	Rexburg-Madison County	RXE	59	×	61	$\checkmark$	73	$\checkmark$
Sandpoint	Sandpoint	SZT	53	×	59	×	61	$\checkmark$
			BASIC (	NPIAS)				
Aberdeen	Aberdeen Municipal	U36	43	×	47	×	76	$\checkmark$
Arco	Arco-Butte County	AOC	56	×	73	$\checkmark$	50	$\checkmark$
Council	Council Municipal	U82	49	×	60	×	48	×
Mud Lake	Mud Lake/West Jefferson County	1U2	57	×	44	×	53	×
Paris	Bear Lake County	1U7	RW 10-28: 50 RW 16-34: 62	×	89	$\checkmark$	56	$\checkmark$
			UTILITY (N	on-NPIAS)				
Malad City	Malad City	MLD	34	×	41	×	37	×
Payette	Payette Municipal	S75	94	$\checkmark$	51	$\checkmark$	36	×
Downey	Downey/Hyde Memorial	U58	54	$\checkmark$	7	×	N/A	N/A
Glenns Ferry	Glenns Ferry Municipal	U89	29	×	33	×	11	×
Hazelton	Hazelton Municipal	U94	71	$\checkmark$	43	×	39	×
Mackay	Mackay	U62	44	×	35	×	39	×
Murphy	Murphy	1U3	43	×	N/A	N/A	76	$\checkmark$

Source: 2017 Statewide NPMS Report



#### **Goal: Safety and Security**

Safety and security remain at the forefront of airport policy, planning, and design. In general, airport planning and design operate under the phrase "safety first" and is a crucial component to mitigating risks associated with aviation to people and property in the sky and on the ground. Ensuring the safety and security of all airport operations is a critical component of aviation planning at all levels. Airports included in the NPIAS are required to meet standards established by the FAA, while non-NPIAS airports are recommended to achieve those standards. FAA standards are established based on extensive research and reflect the highest standard for airport safety. PMs for this goal relate to different components fundamental to safety and security within the Idaho aviation system.

#### Percent of Airports without Close-In Obstructions

Airports should strive to ensure all runway approaches are clear from obstructions to mitigate safety risks during unfavorable weather conditions. Close-in obstructions may be either manmade structures or natural features existing within 200 feet of the runway end. The FAA maintains records of close-in obstructions on each airport's FAA 5010 Master Record.

#### **Historic and Current Performance**

This PM analyzed the percent of airports with close-in obstructions within 200 feet of their primary runway thresholds. As shown in **Table 7-18**, the 2020 IASP Update reports that 57 percent of primary runways at Idaho's system airports are not affected by close-in obstructions.<sup>8</sup> This PM was not analyzed in the prior 2010 IASP.

2010 IASP - HISTORIC		2020 IASP Update - CURRENT	
	Airports without Close-in		Airports without Close-in
Role	Obstructions	Classification	Obstructions
Commercial Service	N/A	Primary	86%
Regional Business		Regional	100%
<b>Community Business</b>		Local	69%
Local Recreational		Basic	82%
Basic		Utility	25%
Statewide		General	39%
		Backcountry	43%
		Statewide	57%

TABLE 7-18: HISTORIC AND CURRENT PERFORMANCE: AIRPORTS WITHOUT CLOSE-IN OBSTRUCTIONS

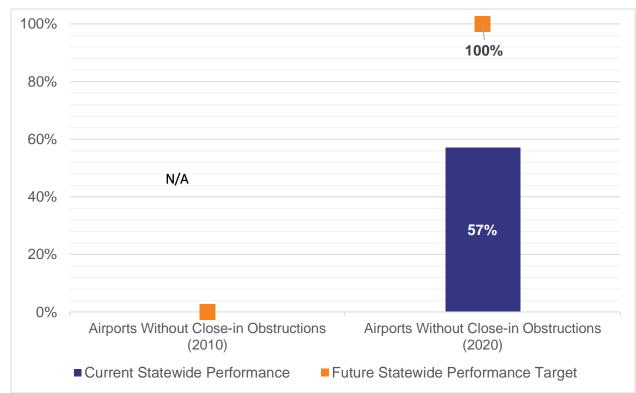
Sources: Airport Inventory and Data Survey Forms, 2019; FAA 5010 Master Records

#### **Future Performance**

Close-in obstructions can pose a major safety hazard to aircraft in the sky and property on the ground, especially in inclement weather conditions when visibility may be impacted. Accordingly, the 2020 IASP Update recommends that 100 percent of airports in the Idaho system achieve this measure. **Figure 7-6** depicts the historic and future performance targets for this PM.

<sup>&</sup>lt;sup>8</sup> Note that Pullman-Moscow Regional Airport's 5010 Master Record indicates that the airport does not have close-in obstructions; however, the airport manager did indicate obstructions in the Airport Inventory and Data Form. Additional investigation revealed that the airport's 2018/19 runway expansion and realignment project created temporary obstructions. This airport will achieve this PM when construction is complete. At that time, the percent of Primary airports that achieve this PM will rise to 100 percent and statewide performance will increase to 59 percent.





#### FIGURE 7-6: FUTURE PERFORMANCE TARGETS: AIRPORTS WITHOUT CLOSE-IN OBSTRUCTIONS

#### Sources: Airport Inventory and Data Survey Forms, 2019; FAA 5010 Master Records; Kimley-Horn, 2019

#### **Actions to Improve Performance**

**Table 7-19** lists Idaho's system airports that have an obstruction within 200 feet of a primary runway end as reported in each airport's 5010 Master Record or by the airport manager on the Airport Inventory and Data Survey Form. These airports should work with ITD Aeronautics and other pertinent stakeholders to mitigate or resolve these issues as soon as feasible to improve the safety of aircraft operations. Furthermore, although only primary runways were analyzed for system performance, airport sponsors should eliminate close-in obstructions affecting all runways.

ON THEIR PRIMARY RUNWAY ENDS						
ASSOCIATED CITY	Airport	FAA ID	Achieves PM			
	PRIMARY					
Pullman	Pullman-Moscow Regional*	PUW	×			
	LOCAL					
Blackfoot	McCarley Field	U02	×			
Burley	Burley Municipal	BYI	×			
Emmett	Emmett Municipal	S78	×			
Gooding	Gooding Municipal	GNG	×			
Preston	Preston	U10	×			
Rexburg	Rexburg-Madison County	RXE	×			
BASIC						
Aberdeen	Aberdeen Municipal	U36	×			

#### TABLE 7-19: NEEDS BY AIRPORT WITH CLOSE-IN OBSTRUCTIONS ON THEIR PRIMARY RUNWAY ENDS



ASSOCIATED		FAA	Achieves
CITY	Airport	ID	РМ
Homedale	Homedale Municipal	S66	×
Mud Lake	Mud Lake/West Jefferson County	1U2	×
	UTILITY		
American Falls	American Falls	U01	×
Malad City	Malad City	MLD	×
Rigby	Rigby	U56	×
Soda Springs	Allen H Tigert	U78	×
	GENERAL		
Cottonwood	Cottonwood Municipal	S84	×
Craigmont	Craigmont Municipal	S89	×
Downey	Downey/Hyde Memorial	U58	×
Dubois	Dubois Municipal	U41	×
Fairfield	Camas County	U86	×
Garden Valley	Garden Valley	U88	×
Glenns Ferry	Glenns Ferry Municipal	U89	×
Howe	Howe	U97	×
Kooskia	Kooskia Municipal	S82	×
Leadore	Leadore	U00	×
Mackay	Mackay	U62	×
Murphy	Murphy	1U3	×
Parma	Parma	50S	×
Stanley	Stanley	2U7	×
	BACKCOUNTRY		
Big Creek	Big Creek	U60	×
Coolin	Cavanaugh Bay	66S	×
Galena	Smiley Creek	U87	×
Yellow Pine	Johnson Creek	3U2	×

Note: As stated previously, obstructions at PUW are associated with an ongoing runway reconstruction project. This obstruction will be removed upon project completion and PUW will achieve this PM. Sources: Airport Inventory and Data Survey Forms, 2019; FAA 5010 Master Records; Kimley-Horn, 2019

As the first step in improving system performance, all airports that do not achieve this PM should evaluate the level of control possessed over the obstruction(s) affecting the facilities. An airport will generally have the ability to remove or mitigate the offending object(s) due to the proximity of these obstructions. If an airport does not have control, airport managers and owners/sponsors should work with the controlling entity to communicate safety concerns and appropriately mark and light the obstruction to the clearest extent possible. If removal or mitigation is not feasible, the airport should identify future opportunities to improve performance through property acquisition or relocating existing infrastructure.

Trees and other vegetation often comprise the majority of close-in runway obstructions at airports. This issue can be addressed through a vegetation management plan which details the procedures required to maintain vegetation. This includes the frequency of spraying and cutting and the parties responsible for conducting each process. Implementing a carefully developed vegetation management plan can be one of the most effective ways airports can improve safety for aircraft, pilots, and passengers.



Additionally, the 2010 IASP identified a Runway Approach Obstruction Study as a follow-on study need. This proposed study would evaluate runways without clear approaches and identify airport-specific strategies to remove or mitigate existing issues and prevent future issues. The study would also identify where obstructions cannot be resolved, and additional marking or lighting are warranted. The 2020 IASP Update recommends ITD Aeronautics consider the continued need for this study to maintain the highest levels of safety at Idaho's airports.

#### Percent of NPIAS Airports Meeting Current FAA Taxiway Design Standards

Improvements to federal standards regarding airfield geometric design have been made in recent years to increase the operational safety and efficiency of airport taxiways. In 2012, the FAA released revised taxiway design standards in Advisory Circular (AC) 150/5300-13A, Change 1, "Airport Design" (see Chapter 4: Taxiway and Taxiway Design) which outlined three primary issues concerning taxiway geometry:

- ✤ Direct runway access
- ✤ Three-node conflicts
- ✤ Wide expanse of pavement

Each of these concepts is intended to aid in the safe and efficient conveyance of aircraft between the runway and parking areas, reduce aircraft incursions, and maintain operational capacity in aircraft movement areas. This PM focuses on NPIAS airports because they are federally mandated to meet these standards as part of the AIP grant assurances. It is important to note that these types of taxiway improvement projects are generally completed in conjunction with other airside development and would accordingly be longer in term. Airports should assess taxiways' compliance with current standards so geometry issues can be identified and resolved as soon as feasible, particularly in cases where they represent a significant safety concern for pilots.

#### **Historic and Current Performance**

Based on a visual examination of taxiways using Google Earth, only three percent of Idaho's 37 NPIAS airports meet the FAA's most current taxiway design standards. It is important to note that the updated 2012 FAA AC represented a noteworthy change from previous standards, and it is assumed that airports did meet applicable standards when they were designed, however, this significant change has deeply impacted current performance according to the updated standards. This PM was not analyzed in the 2010 IASP; accordingly, change over time cannot be assessed. **Table 7-20** presents the percent of airports by classification and statewide that achieve current FAA taxiway design standards.

INFIAS AIRFORTS WEETING CORRENT FAA DESIGN STANDARDS			
2010 IASP – HISTORIC		2020 IASP Update - CURRENT	
	Airports Achieving	Airports Achievi	
	Current FAA Taxiway		<b>Current FAA Taxiway</b>
Role	Design Standards	Classification	Design Standards
Commercial Service	N/A	Primary	0%
Regional Business		Regional	0%
Community Business		Local	6%
Local Recreational		Basic	0%
Basic		Utility	N/A
Statewide		General	N/A
		Backcountry	N/A
		Statewide	3%

#### TABLE 7-20: HISTORIC AND CURRENT PERFORMANCE: NPIAS AIRPORTS MEETING CURRENT FAA DESIGN STANDARDS

Sources: FAA AC 150/5300-13A, Change 1; Google Earth Aerial Imagery, 2019; Kimley-Horn, 2019



#### **Future Performance**

Taxiway design standards are specifically intended to enhance airport safety, play an important role in airports functioning at optimal capacity, and are federally mandated for airports in the NPIAS. Accordingly, performance targets have been established at 100 percent for NPIAS airports. Additionally, the 2020 IASP Update recommends that 100 percent of Utility airports achieve this measure, for a statewide future performance of 60 percent. As described in *Chapter Five: Airport Roles Analysis*, the Utility classification was developed to provide the framework for airports' future inclusion in the NPIAS should they meet eligibility criteria and decide to pursue this designation. As such, Utility airports should carefully consider the FAA's taxiway design standards during future planning endeavors.

 Table 7-21 summarizes the 2020 IASP Update future performance target for the FAA taxiway design standard PM.

TABLE 7-21: FUTURE PERFORMANCE TARGETS: AIRPORTS MEETING CURRENT FAA DESIGN STANDARDS				
2010 IA	2010 IASP - HISTORIC		20 IASP Update - FUTURE	
	Airports Meeting Current	Airports Meeting Curren		
Role	FAA Design Standards	Classification	Design Standards	
Commercial Service	N/A	Primary	100%	
Regional Business		Regional	100%	
<b>Community Business</b>		Local	100%	
Local Recreational		Basic	100%	
Basic		Utility	100%	
Statewide		General	N/A	
		Backcountry	N/A	
		Statewide	60%	
Source: Kimley-Horn, 2019				

#### Actions to Improve Performance

**Table 7-22** displays the airports that do not meet the current taxiway design standards by type of deficiency. As shown, the overwhelming majority of airports do not achieve this measure because of a direct access to runway issue. If this deficiency was removed from the criteria, 92 percent of applicable airports would achieve this PM (41 of 45 airports identified to achieve this measure).

#### TABLE 7-22: NEEDS BY NPIAS AND UTILITY AIRPORTS TO MEET FAA TAXIWAY DESIGN STANDARDS

			Direct		Wide
ASSOCIATED		FAA	Access to	Three-Node	Expanse of
CITY	Airport	ID	Runway	Intersection	Pavement
	PRIM	ARY			
Boise	Boise Air Terminal/Gowen Field	BOI	×	$\checkmark$	$\checkmark$
Hailey	Friedman Memorial	SUN	×	$\checkmark$	$\checkmark$
Idaho Falls	Idaho Falls Regional	IDA	×	$\checkmark$	$\checkmark$
Lewiston	Lewiston-Nez Perce County	LWS	×	$\checkmark$	$\checkmark$
Pocatello	Pocatello Regional	PIH	×	$\checkmark$	$\checkmark$
Pullman	Pullman-Moscow Regional	PUW	×	$\checkmark$	$\checkmark$
Twin Falls	Joslin Field-Magic Valley Regional	TWF	×	$\checkmark$	$\checkmark$
	REGIO	NAL			
Caldwell	Caldwell Industrial	EUL	×	$\checkmark$	$\checkmark$
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	×	$\checkmark$	$\checkmark$
Driggs	Driggs-Reed Memorial	DIJ	×	$\checkmark$	$\checkmark$



		<b>FAA</b>	Direct	Three-Node	Wide
ASSOCIATED CITY	Airport	FAA ID	Access to Runway	Intersection	Expanse of Pavement
CITY	LOC		Kuliway	intersection	Pavement
Blackfoot	McCarley Field	U02	×	$\checkmark$	√
Bonners Ferry	Boundary County	655	×	$\checkmark$	$\checkmark$
Buhl	Buhl Municipal	U03	×	✓	✓
Burley	Burley Municipal	BYI	×	$\checkmark$	$\checkmark$
Cascade	Cascade	U70	×	$\checkmark$	$\checkmark$
Challis	Challis	LLJ	×	$\checkmark$	$\checkmark$
Emmett	Emmett Municipal	S78	×	$\checkmark$	✓
Gooding	Gooding Municipal	GNG	×	$\checkmark$	$\checkmark$
Grangeville	Idaho County	GIC	×	$\checkmark$	$\checkmark$
McCall	McCall Municipal	MYL	×	$\checkmark$	×
Mountain Home	Mountain Home Municipal	U76	×	$\checkmark$	$\checkmark$
Nampa	Nampa Municipal	MAN	×	$\checkmark$	$\checkmark$
Preston	Preston	U10	×	$\checkmark$	$\checkmark$
Rexburg	Rexburg-Madison County	RXE	×	$\checkmark$	$\checkmark$
Salmon	Lemhi County	SMN	×	$\checkmark$	$\checkmark$
Sandpoint	Sandpoint	SZT	×	$\checkmark$	$\checkmark$
St. Maries	St Maries Municipal	S72	×	$\checkmark$	$\checkmark$
Weiser	Weiser Municipal	S87	×	$\checkmark$	$\checkmark$
	BAS	IC			
Aberdeen	Aberdeen Municipal	U36	×	$\checkmark$	$\checkmark$
Arco	Arco-Butte County	AOC	×	$\checkmark$	$\checkmark$
Council	Council Municipal	U82	×	$\checkmark$	$\checkmark$
Homedale	Homedale Municipal	S66	×	$\checkmark$	×
Kamiah	Kamiah Municipal	S73	×	$\checkmark$	×
Kellogg	Shoshone County	S83	×	$\checkmark$	$\checkmark$
Mud Lake	Mud Lake/West Jefferson County	1U2	×	✓	$\checkmark$
Orofino	Orofino Municipal	S68	×	<b>√</b>	<b>√</b>
Paris	Bear Lake County	1U7	×	<ul> <li>✓</li> </ul>	$\checkmark$
Priest River	Priest River Municipal	1S6	×	$\checkmark$	~
	UTILI				
American Falls	American Falls	U01	×	<b>√</b>	<b>√</b>
Payette	Payette Municipal	S75	×	✓	$\checkmark$
Rigby	Rigby-Jefferson County	U56	×	<b>√</b>	✓
Soda Springs	Allen H Tigert	U78	×	✓	×
St. Anthony	Stanford Field	U12	×	$\checkmark$	$\checkmark$

Sources: FAA AC 150/5300-13A, Change 1; Google Earth Aerial Imagery, 2019; Kimley-Horn, 2019

To improve system performance of this PM, NPIAS airports should reflect the necessary proposed changes needed to meet the current FAA design criteria and address existing deficiencies in their next update of the airport's ALP. The FAA also recommends that any future projects that touch taxiways should address the taxiway deficiencies. While non-NPIAS airports are not federally- or state-mandated to meet the FAA's taxiway design standards, it is further recommended that all airports consider incorporating these standards into their airfield geometry as a best practice to enhance airfield safety and capacity.



# Percent of Population and Land Area within a 30-Minute Drive Time of an Airport Capable of Meeting Business User Needs (5,000-Foot Runway, Jet Fuel, Instrument Approach)

Airports capable of providing service to business/corporate aviation are important economic health indicators for local and regional economies. The availability of at least a 5,000-foot long runway, jet fuel, and at least one instrument approach procedure (IAP) are the minimum facilities considered to support business aircraft needs.

#### **Historic and Current Performance**

**Table 7-23** shows the percent of airports capable of meeting business user needs as reported in the 2010 IASP and 2020 IASP Update. Performance increased by two percent systemwide with the addition of Mountain Home Municipal Airport, which now offers jet fuel. Idaho's business use airports currently serve 71 percent of the state's population and five percent of its land area.<sup>9</sup>

TABLE 7-23. HISTORIC AND CORRENT PERFORMANCE.				
AIRPORTS CAPABLE OF MEETING BUSINESS USER NEEDS				
2010 IASP -	- HISTORIC	2020 IASP U	pdate - CURRENT	
	Airports Capable of		Airports Capable of	
	Meeting Business		Meeting Business	
Role	User Needs	Classification	User Needs	
Commercial Service	100%	Primary	100%	
Regional Business	53%	Regional	100%	
Community Business	0%	Local	44%	
Local Recreational	0%	Basic	0%	
Basic	0%	Utility	0%	
Statewide	21%	General	0%	
		Backcountry	0%	
		Statewide	23%	

### TABLE 7-23: HISTORIC AND CURRENT PERFORMANCE:

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Future Performance Targets**

Although the PM has not been modified since 2010, the 2020 IASP Update performance targets have been updated to reflect current airport classifications while continuing to provide access to the economic vitality benefits associated with corporate/business aviation to communities across the state. Accordingly, the 2020 IASP Update established that 100 percent of Primary and Regional airports should provide at least a 5,000-foot-long runway, Jet A fuel, and an IAP. It is also established that Local airports that currently achieve this measure should continue to do so in the future. Because 100 percent of these airports already achieve this measure, the percent of population and land area served remains the same at 71 percent and five percent, respectively.

The 2010 IASP established that 100 percent of Commercial Service, Regional Business, and Community Business airports should achieve this measure; this target generally aligned with the facility and service objectives established for these roles. If all airports in these role categories met these objectives in accordance with the 2010 IASP, performance for this benchmark would have been be 79 percent of Idaho's population and 11 percent of its area.

The small decrease in population and land area coverage between 2010 and 2020 is primarily due to the updated GIS methodologies used in the analysis, as well as the significantly different classification systems between study

<sup>&</sup>lt;sup>9</sup> The percent of population and land areas within a 30-minute drivetime of these facilities cannot be compared over time due to advancements in Geographic Information System (GIS) technology affecting the background methodologies used to calculate coverage. For further details, see *Chapter 5: System Adequacy*.

years. As such, performance targets between 2010 and 2020 cannot be equitably compared. Table 7-24 summarizes the historic and future performance targets for airports meeting business user needs.

AIRPORTS CAPABLE OF MEETING BUSINESS USER NEEDS				
2010 IASP - HISTORIC		2020 IASP Update - FUTURE		
	Airports Capable of Meeting Business	Meeting Busin		
Role	User Needs	Classification	User Needs	
Commercial Service	100%	Primary	100%	
Regional Business	100%	Regional	100%	
Community Business	100%	Local	44%	
Local Recreational	0%	Basic	0%	
Basic	0%	Utility	0%	
Statewide	56%	General	0%	
		Backcountry	0%	
		Statewide	23%	

# TABLE 7-24: HISTORIC AND FUTURE PERFORMANCE TARGETS:

Sources: Wilbur Smith and Associates, 2012 and Kimley-Horn, 2019

#### **Actions to Improve Performance**

As noted above, 100 percent of airports targeted to achieve this PM currently do so. As such, no further action is required to improve the ability of the Idaho airport system to meet business user needs.

#### Percent of Airports that Accommodate Aerial Application Services

Aerial application services or agricultural spraying are an indispensable function of the agricultural industry which contributes the largest proportion of Idaho's GSP. Specialized aircraft deliver a wide range of services required for healthy crop production; these aircraft can also be altered to support firefighting operations when necessary. As such, accommodating aerial application operations supports both the economic vitality of Idaho's communities while enhancing the safety and security of the state's residents, visitors, and businesses.

#### **Historic and Current Performance**

Table 7-25 shows the percent of airports that reported accommodating aerial application services at some frequency (i.e., daily, weekly, monthly, or occasionally) in 2010 and 2020. Systemwide, the percent of airports that support this aviation activity has risen by eight percent.

AIRPORTS THAT ACCOMMODATE AERIAL APPLICATION SERVICES			
2010 IASP - HISTORIC		2020 IASP Update - CURRENT	
	Airports that	Airports th	
	Accommodate		Accommodate
	Aerial Application		Aerial Application
Role	Services	Classification	Services
Commercial Service	29%	Primary	58%
Regional Business	59%	Regional	33%
<b>Community Business</b>	67%	Local	63%
Local Recreational	24%	Basic	54%
Basic	48%	Utility	76%
Statewide	47%	General	57%
		Backcountry	14%
		Statewide	55%

#### TABLE 7-25: HISTORIC AND CURRENT PERFORMANCE: AIRPORTS THAT ACCOMMODATE AERIAL APPLICATION SERVICES

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

#### **Future Performance Targets**

An airport that optimally supports aerial application services generally offers acceptable runway length, width, and strength (depending on the aircraft); adequate ramp space for parking aircraft; and fuel. However, aerial application activity is primarily driven by market demand, as the needs of local agricultural producers will drive airports to provide the necessary facilities and services. As a result, both the 2010 IASP and 2020 IASP Update indicate that airports that already accommodate aerial application services should continue to do so but ITD Aeronautics does not need to establish additional targets to ensure sufficient coverage across the state. **Table 7-26** reports the historic and future performance targets for the percent of airports that should accommodate aerial application services.

#### TABLE 7-26: HISTORIC AND FUTURE PERFORMANCE TARGETS: AIRPORTS THAT ACCOMMODATE AERIAL APPLICATION SERVICES

AIN ONTS THAT ACCOMMODATE ACMAE AIT EICATION SERVICES				
2010 IASP - HISTORIC		2020 IASP Update - FUTURE		
	Airports that	Airports that		
	Accommodate		Accommodate	
	Aerial Application		Aerial Application	
Role	Services	Classification	Services	
Commercial Service	Monitor	Primary	58%	
Regional Business		Regional	33%	
<b>Community Business</b>		Local	63%	
Local Recreational		Basic	54%	
Basic		Utility	76%	
Statewide		General	57%	
		Backcountry	14%	
		Statewide	55%	

Sources: Wilbur Smith and Associates, 2012; Kimley-Horn, 2019

**Actions to Improve Performance** 

As noted above, airports that accommodate aerial application services are primarily driven by market demands. Accordingly, no specific actions have been identified to improve performance for this measure.



### **Summary of Performance Measures**

**Figure 7-7** summarizes the current and future performance targets of Idaho's 75 system airports using the eight PMs established for the 2020 IASP Update.



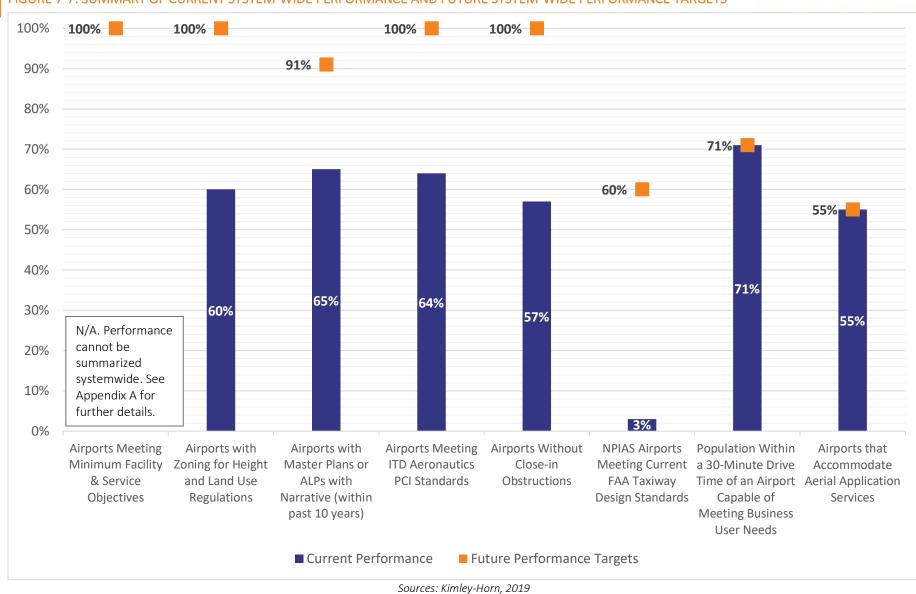


FIGURE 7-7: SUMMARY OF CURRENT SYSTEM-WIDE PERFORMANCE AND FUTURE SYSTEM-WIDE PERFORMANCE TARGETS

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### **Future System Performance Summary**

The development of Idaho's future airport system will be driven by both external drivers of aviation activity, as well as internal variables such as regulatory and technological issues affecting nearly every aspect of airport operations. By thoughtfully considering how these various factors may impact future airport needs, ITD Aeronautics and airports will be better prepared to meet the demands of tomorrow.

In particular, urban areas in the Treasure Valley are anticipated to experience the highest rates of growth in the state in terms of population and economic activity. Airports in this region may have facility and service needs that exceed their objectives catalyzed by changes to the type and volume of aviation activity that occur in conjunction with this growth. Airports, ITD Aeronautics, and the FAA Airports District Office (ADO) should work together to evaluate needs during airport-specific planning studies. Additionally, aviation and aerospace technologies are changing at breakneck speed—often faster than capital improvement plan cycles. Electric aircraft, for example, are anticipated to require shorter runways for take-off and an electric vehicle charging station may soon become more useful than offering Jet A and AvGas. If these projections come to fruition—which they most likely will—the criteria used to evaluate airports that meet business user needs would need to change, and airports' facility and service objectives would look very different. With electric GA aircraft already flying, these considerations may become highly relevant within the next five to 10 years. Electric long-haul commercial jets may become electrified by 2035—several years before the study horizon of the 2020 IASP Update. While the specific direction of these changes is difficult to project, staying current on technological innovations will become increasingly critical to ensure aviation demands are accommodated and infrastructure needs are met over time. They also underline that aviation planning documents represent a snapshot in time-regulations, aviation demands, socioeconomic conditions, and numerous other factors necessitate a process of ongoing evaluation to refine recommendations and improve performance at airport-specific and statewide levels.

With these and other considerations in mind, this chapter evaluated individual airport's performance against the classification-specific performance targets established by the 2020 IASP Update. These evaluations pinpointed areas where the system is performing well, as well as helped identify priority areas for improvement for policymakers, ITD Aeronautics, and individual airports. State and local decisionmakers can use this information to start making small changes today to align the system's evolution with how people and goods are projected to move into, out of, and within the state in the future. More immediately, the information presented in this chapter serves as a key input for the evaluation of systemwide needs and costs reported in the following chapters of the 2020 IASP Update. It also informs and guides the development of policy recommendations developed as the final deliverable of this study.



# CHAPTER EIGHT: SYSTEM COSTS AND ALTERNATIVE SCENARIOS

### Introduction

In concert with the findings of previous chapters, Chapter 8 presents the final system costs and investment needs identified by the 2020 Idaho Airport System Plan (IASP) Update. This chapter marries the existing conditions of Idaho's airport system with future performance targets to determine the financial costs associated with the projects and needs recommended throughout the 2020 IASP Update. Understanding financial needs compared to available funding will influence the strategies used to develop the system in accordance with the 2020 IASP Update goals. Findings in this chapter are centered around two integral parts. First, recommended project costs are presented to identify the total financial needs of the Idaho airport system. Second, future alternative development scenarios are explored as considerations in the execution of system recommendations.

Recommended project costs for the 2020 IASP Update build upon the findings of the system analyses presented in *Chapter 7: Future System Performance* and *Appendix A: Facility and Service Needs*. Project recommendations were identified by comparing existing conditions with future performance targets identified by the Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics) and the Project Advisory Committee (PAC). These projects address gaps in the current system in achieving performance measures (PMs) including facility and service objectives. To provide a comprehensive view of total investment costs through the 20-year planning horizon of the 2020 IASP Update, additional investment needs associated with lifecycle pavement recommendations, future aircraft storage recommendations, Idaho State Capital Improvement Plan (ISCIP) projects, and statewide study recommendations are included in the analysis.

As a result of formulating financial needs, a series of alternative development scenarios are presented to provide considerations for the ITD Aeronautics when implementing the system recommendations identified during the 2020 IASP Update. These alternative development scenarios illustrate how potential changes to the system's composition, funding priorities, and/or available funding resources may impact the development of the Idaho airport system at systemwide and airport-specific levels.

This chapter is organized in the following sections:

- ✤ 2020 IASP Update-related Project Costs
  - Facility and service objective project costs
  - PM recommendations costs
  - Future aircraft storage recommendations costs
  - Pavement lifecycle needs
  - Statewide study needs
  - Total 2020 IASP Update recommendations costs
- ✤ ISCIP Investment Needs
- → Replacement Airport Needs
- ✤ Total Idaho Investment Needs
- Alternative Development Scenarios
- ✤ Summary



It is important to note that project costs presented in this chapter provide a planning-level view of the total investment needs that may be required for the Idaho aviation system to optimally meet the requirements of all aviation users over the next 20 years. A project's inclusion in the 2020 IASP Update does not result in automatic allocation of local, state, or federal funding nor does it imply the approval of a specific project. Justification at the individual airport level is required to support funding requests in accordance with the appropriate channels. Additionally, estimated project costs do not include design and engineering nor ancillary costs that may be required to complete the project such as environmental assessments, surveying, etc. All project costs are shown in 2020 dollars and do not account for inflation over time. Individual projects and associated costs by airport can be found in the Airport Report Cards presented in *Appendix A: Future Facility and Service Needs*.<sup>1</sup>

### 2020 IASP Update-related Project Costs

The recommended project costs to improve Idaho's system of airports in relation to the goals and objectives established by the 2020 IASP Update are presented in this section. Planning-level per unit costs were developed based on 2020 Idaho material costs and industry knowledge and were tiered to reflect cost differences between types and sizes of airports and assets. This method for determining costs was applied to projects relating to facility and service objectives, PMs, and future aircraft storage needs. Projects were identified at airports that did not meet PMs and/or facility and service objectives as presented in *Chapter 7: Future System Performance* and *Appendix A* (respectively). Additionally, future aircraft storage needs were identified based on forecasts of aviation activity presented in *Chapter 4: Forecasts of Future Aviation Activity*. The pavement lifecycle needs were identified based on typical maintenance and rehabilitation projects to address Idaho's pavement conditions over the next 20 years.

Project costs in these sections are broken down by federal, state, and local funding eligibilities. Project costs eligible for federal funding under the FAA's Airport Improvement Program (AIP) were determined through review of FAA Order 5100.38D, Change 1, *Airport Improvement Program Handbook*. Under the AIP Handbook, federal shares of project costs are typically determined by airport size as classified by the National Plan of Integrated Airport Systems (NPIAS) and project type. States identified as having more than five percent of federal lands (unreserved public lands and nontaxable Indian lands) are considered public land states. Primary airports in public land states receive a higher percentage of federal funding based upon the public land share formula.<sup>2</sup>

Identified as a public land state, Idaho's federal share of costs based on this formula are compared to the "general" federal share (all NPIAS airports except those located in public land states) as shown in **Table 8-1**. It should be noted that, although Idaho receives a higher federal share of AIP funding through its designation as a public land state at some airports, the Idaho system is primarily composed of Nonprimary general aviation (GA) airports.

<sup>&</sup>lt;sup>1</sup> Note that several airports have completed improvement projects after the 2018 baseline study year of the 2020 IASP Update. Most notably, Pullman Moscow Regional Airport (PUW) undertook a major runway realignment program (completed in 2019) that included the reorientation, extension, widening, and strengthening of its primary runway; the addition of Precision PBN instrument approach procedures; the removal of a close-in obstruction; and a taxiway improvement in compliance with the FAA's current design standards. Because the 2020 IASP Update has reported airport needs as of 2018 throughout the previous chapters—including those at PUW and several other airports in the state—costs presented here are reflective of those needs. This further underlines the need to conduct airport-specific analyses when considering the project needs and costs presented in the 2020 IASP Update.

<sup>&</sup>lt;sup>2</sup> FAA guidance on public land state and federal shares of costs is provided in Order 5100.38D, Change 1, Chapter 4, Section 9 and Section 10.



TABLE 5 1: LEBERAL SHARE OF AIL FORDING BE AIR ORT CLASSIFICATION						
		Medium	Small or	Nonprimary GA		
FEDERAL SHARE FORMULA	Large Hub	Hub	Nonhub	and Reliever		
General Federal Share	75.00%	75.00%	90.00%	90.00%		
Idaho - Public Land State	83.51%	93.75%	93.75%	90.00%		
Difference in Federal Share	+8.51%	+18.75%	+3.75%	0.00%		

#### TABLE 8-1: FEDERAL SHARE OF AIP FUNDING BY AIRPORT CLASSIFICATION

Source: FAA Order 5100.38D, Change 1, AIP Handbook, 2019

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law which temporarily changed the federal share of project funding to 100 percent and eliminated state and local matches for all supplementary and discretionary grants for fiscal year (FY) 2020. Because this funding structure is temporary, the state and local funding shares in this analysis do not account for this piece of legislature. Funding shares in this analysis are determined per Idaho's public land state determinations as described in Table 8-1.

Project costs eligible for state funding under the Idaho Airport Aid Program (IAAP) were determined through airport funding criteria and project eligibility in accordance with IDAPA 39.04.04.<sup>3</sup> Local shares of projects are the remaining costs not covered under AIP and/or IAAP or projects that are ineligible for both programs and are intended to be covered by the airport sponsor. It is important to note that designation of project costs as eligible for federal and state funding does not result in an automatic award of funding through the AIP or IAAP. Airports seeking state and federal funding for projects will need to meet project justification criteria and other requirements per respective program guidelines. Additionally, there are typically more funding requests than available funding and as such, not all projects will receive funding.

#### **Facility and Service Objective Project Costs**

Facility and service objectives signify the minimum facilities and services airports should provide for their airport to achieve its role in the system. In meeting these objectives, airports can better support the type and frequency of aviation activities and users that typically rely on their facilities and optimize their roles. It is recommended that airports should meet all facility and service objectives for their specified role. Recommended facility and service objective projects are categorized as follows in the sections below:

- → Airside facility objectives
- ✤ Landside facility objectives
- ✤ Services objectives

**Table 8-2** through **Table 8-4** present the total estimated costs of projects within each of these categories. These tables include current system performance; future performance targets; and federal, state, and local funding eligibility/share by project type. Tables also include cross-references to tables in *Appendix A* that list the specific airports with a recommended facility or service objective project. Airport-specific performance by facility and service objective are also documented in the Airport Report Cards found at the end of *Appendix A*.

#### **Airside Facility Objectives**

Costs for recommended airside facility objectives are shown in **Table 8-2**. Total recommended project costs are estimated to amount to \$32.7 million. Project costs are organized by objective and referenced to the associated Appendix A table for individual airport projects. Airside facility objective costs by percent total share are presented in **Figure 8-1**. Runway lengthening project costs make up the largest portion of all airside facility objective costs at \$11.4 million. Runway strengthening costs follow at more than a quarter (\$8.9 million) of total airside facility objective needs, then runway width costs at 11 percent (\$3.6 million). All airports met their airside facility objectives for instrument approaches resulting in no financial needs for this category.

<sup>&</sup>lt;sup>3</sup> Additional information about state aviation funding in available in *Chapter 9: Policy Analysis and Investigate Recommendations*.

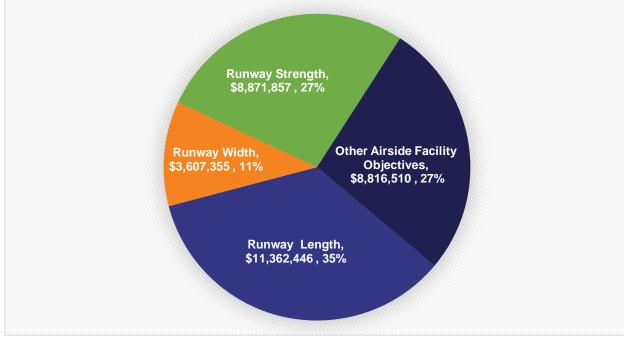


AIRSIDE FACILITY	Appendix A	Statewide Performance		Project Cost	Total Estimated		
OBJECTIVES	Reference	Current	Future Target	Federal	State	Local	Cost (\$)
Primary Runway Length (ft)	Table A.4	73%	100%	\$7,666,363	\$2,011,995	\$1,684,088	\$11,362,446
Primary Runway Width (ft)	Table A.5	83%	100%	\$377,834	\$2,038,648	\$1,190,873	\$3,607,355
Primary Runway Strength (lbs)	Table A.6	89%	100%	\$6,280,653	\$1,405,593	\$1,185,611	\$8,871,857
Taxiway Type	Table A.7	97%	100%	\$103,883	\$38,766	\$38,766	\$181,415
Instrument Approach	N/A	100%	100%	\$-	\$-	\$-	\$-
Visual Aids	Table A.8	95%	100%	\$2,848,125	\$131,938	\$127,938	\$3,108,000
Runway Lighting	Table A.9	76%	100%	\$162,356	\$85,470	\$69,270	\$317,095
Weather Reporting	Table A.10	80%	100%	\$4,500,000	\$372,500	\$337,500	\$5,210,000
			Total	\$21,939,212	\$6,084,910	\$4,634,046	\$32,658,168

#### TABLE 8-2: AIRSIDE FACILITY OBJECTIVES RECOMMENDED PROJECT COSTS

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

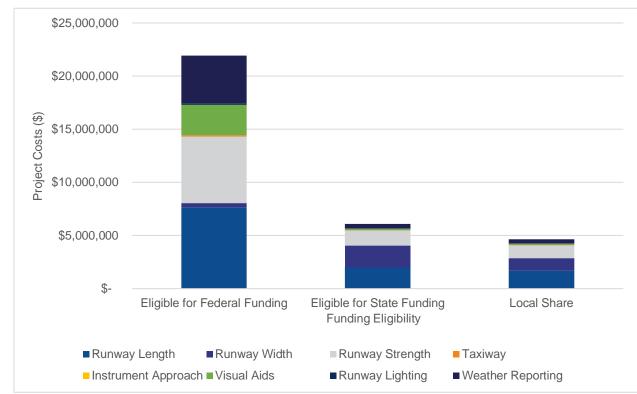
#### FIGURE 8-1: AIRSIDE FACILITY OBJECTIVES RECOMMENDED PROJECT COSTS COMPARISON



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



**Figure 8-2** shows the total airside facility project costs broken out by federal and state funding eligibility and local share of costs. Airside facilities are integral to safe and efficient aircraft operations as shown by the high proportion of costs eligible for federal and state funding to maintain and improve this critical infrastructure. Due to this, approximately 67 percent of project costs are eligible for AIP funds, 19 percent eligible for IAAP funds, and a remaining 14 percent would need to be covered at the local level assuming all criteria were met for the appropriate funding source including justification.



#### FIGURE 8-2: AIRSIDE FACILTY OBJECTIVES RECOMMENDED PROJECT COSTS BY FUNDING ELIGIBILITY

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

#### Landside Facility Objectives

**Table 8-3** presents the total recommended project costs for all landside facility objectives and references to the appropriate Appendix A tables detailing individual airport projects. Recommended projects are estimated to incur \$132.1 million in development needs over the 20-year planning horizon. Recommended project costs are organized by the largest contributing objectives as presented in **Figure 8.3**. Hangar storage needs are anticipated to comprise 80 percent of total landside facility costs objectives. Apron tie-down needs comprise the next-largest need at 14 percent of the total landside facility objective-related costs. Together, hangar storage and apron tie-down projects are necessary to accommodate current based and transient aircraft storage needs across the state.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> A second analysis detailing costs associated with future aircraft storage needs is presented in the "Future Aircraft Storage Recommendation Costs" section below.



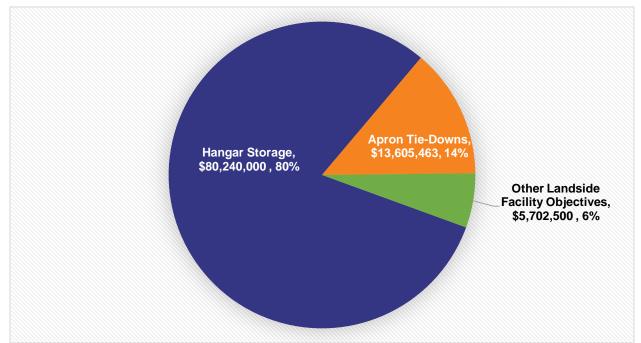
		Statewide Performance		Project Costs by Eligibility/Share (\$)			Total
LANDSIDE FACILITY	Appendix A		Future				Estimated
OBJECTIVE	Reference	Current	Target	Federal	State	Local	Cost (\$)
Commercial Service Terminal	Table A.11	100%	100%	\$ -	\$ -	\$ -	\$-
GA Terminal		86%	100%	\$1,350,000	\$75,000	\$75,000	\$1,500,000
Conference Room		100%	100%	\$-	\$-	\$-	\$-
Pilot's Lounge		83%	100%	\$363,750	\$18,125	\$18,125	\$400,000
Public Restroom		67%	100%	\$121,500	\$758,000	\$450,500	\$1,330,000
Hangar Storage		55%	100%	\$-	\$-	\$80,240,000	\$80,240,000
Apron Tie-down Spaces*		49%	100%	\$11,176,511	\$1,301,319	\$1,127,634	\$13,605,463
Full Perimeter Fencing		80%	100%	\$1,369,260	\$660,245	\$442,995	\$2,472,500
Auto Parking		97%	100%	\$-	\$-	\$-	\$-
Total				\$14,381,021	\$2,812,689	\$82,354,254	\$99,547,963

#### TABLE 8-3: LANDSIDE FACILITY OBJECTIVES RECOMMENDED PROJECT COSTS

\*Note: The methodology to calculate apron tie-downs is provided in Appendix A: Facility and Service Objectives. In general, the total combined cost for each airport's current (shown above) and future (shown in Table 8-8) apron tie-down needs were calculated. Costs were then allocated between the current and future scenarios based on the percent of total need. This provides a more realistic and comprehensive assessment of how airports would implement this type of project. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



FIGURE 8.3: LANDSIDE FACILITY OBJECTIVES RECOMMENDED PROJECT COSTS COMPARISON

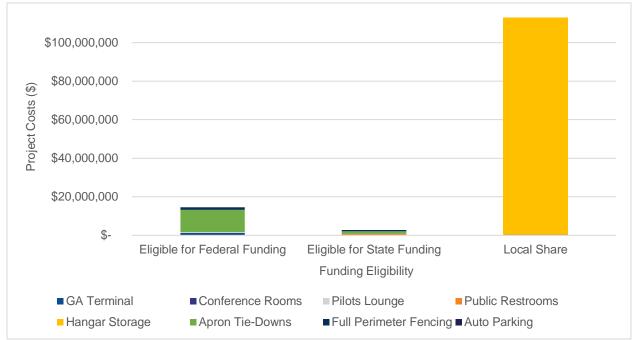


Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

**Figure 8-4** organizes the total landside facility project costs by funding eligibility. Due to the proportion of hangar storage costs, **Figure 8-5** showcases the remaining objectives and their funding eligibilities excluding hangar storage. It should be noted that while the construction of public restrooms is eligible for federal and state funding, costs for new utilities to be installed are ineligible for state funding. Hangar costs are typically not eligible for state or federal funding, which results in 87 percent of total landside facility costs being borne at the local level. Projects costs eligible for federal funding (GA terminal buildings, apron tie downs, pilots lounge, public restrooms, and full perimeter fencing) comprise 11 percent of costs eligible for AIP funds. The remaining costs from projects eligible for federal funding make up the two percent of IAAP share of costs.

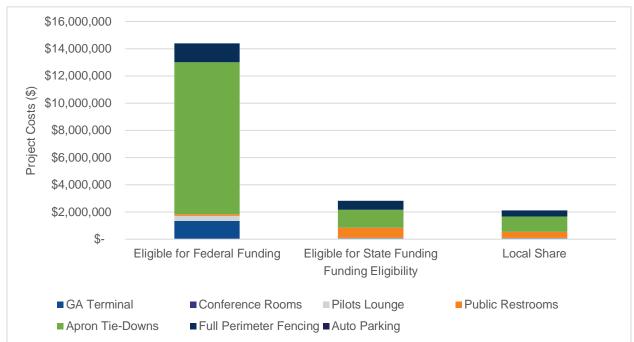


FIGURE 8-4: LANDSIDE FACILITY OBJECTIVES RECOMMENDED PROJECT COSTS BY FUNDING ELIGIBILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020





Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



#### **Service Objectives**

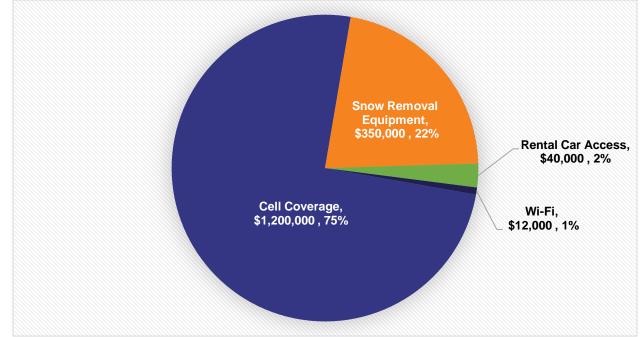
Project costs for service objectives and references to the appropriate Appendix A table for individual airport projects are shown in Table 8-4. It is important to note that although two airports are not meeting the 24/7AvGas and 24/7 Jet A fuel objectives, these projects relate specifically to the 24/7 availability of fuel and have no costs associated with implementing the project. Total recommended project costs are estimated at more than \$1.6 million. Figure 8-6 shows the project cost comparisons by service objectives. Providing cell coverage to users makes up three-quarters of the costs for this category, snow removal equipment (SRE) comprises 22 percent, and remaining objectives make up three percent.

	Appendix	Statewide Performance		Project Costs by Eligibility/Share (\$)			Total
SERVICE OBJECTIVES	A Reference	Current	Future Target	Federal	State	Local	Estimated Cost (\$)
Cell Coverage	Table A.12	92%	100%	\$-	\$-	\$1,200,000	\$1,200,000
Wi-Fi		72%	100%	\$-	\$-	\$12,000	\$12,000
Fixed Base Operator (FBO)		100%	100%	\$-	\$-	\$-	\$-
Maintenance Services		100%	100%	\$-	\$-	\$-	\$-
SRE		90%	100%	\$315,000	\$17,500	\$17,500	\$350,000
24/7 AvGas/Jet A Fuel*		93%	100%	\$-	\$-	\$-	\$-
Rental Car Access				\$-	\$-	\$40,000	\$40,000
			Total	\$315,000	\$17,500	\$1,269,500	\$1,602,000

#### TABLE 9.4. CEDVICE ODJECTIVES DECOMMENDED DROJECT COST

\*Note: While two airports have been identified to need 24/7 fuel to meet their objectives, this service cannot be provided through a specific project cost. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

#### FIGURE 8-6: SERVICES OBJECTIVE RECOMMENDED PROJECT COSTS COMPARISON

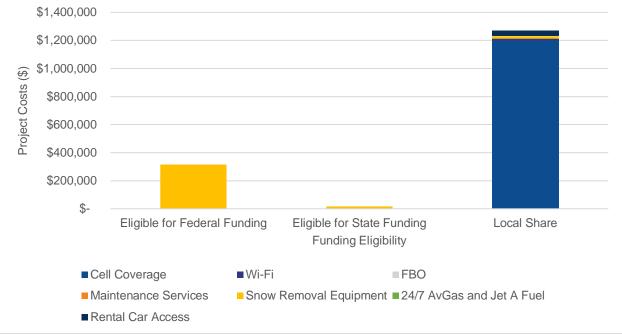


Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



Funding eligibility for project costs are shown in **Figure 8-7**. Due to project ineligibility for federal and state funding to provide additional user services such as cell coverage, Wi-Fi, and rental car access, the local share of costs for these objectives is high at 79 percent. SRE acquisitions are eligible for federal and state funding making up the remaining 20 percent of federal costs and one percent of IAAP costs.

#### FIGURE 8-7: SERVICES OBJECTIVE RECOMMENDED PROJECT COSTS BY FUNDING ELIGIBILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

#### **Total Facility and Service Objective Costs**

Project costs associated with all airports meeting their facility and service objectives are shown in **Table 8-5**. Anticipated costs for all facility and service objective projects are estimated at \$134 million. Figure 8-8 shows the total facility and service objective costs organized by objective category. Landside facility objectives comprise more than three-quarters of total costs primarily due to hangar storage projects. Figure 8-9 shows total project costs for facility and service objectives by funding eligibility. Due to the high proportion of hangar storage costs typically covered at the local level, roughly 75 percent of total facility and service objective project costs are only eligible for local funding. Twenty-two percent of total facility and service objective costs are eligible for federal funding, and six percent are eligible for state funding.

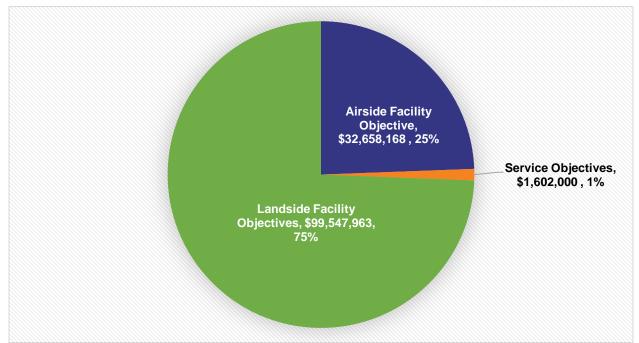
TABLE 8-5: TOTAL FACILITY AND SERVICE OBJECTIVE PROJECT COSTS								
	Project Co	<b>Total Estimated</b>						
RECOMMENDATION	Federal	State	Local	Cost (\$)				
Airside Facility Objectives	\$21,939,212	\$6,084,910	\$4,634,046	\$32,658,168				
Landside Facility Objectives	\$14,381,021	\$2,812,689	\$82,354,254	\$99,547,963				
Service Objectives	\$315,000	\$17,500	\$1,269,500	\$1,602,000				
Total	\$36,635,232	\$8,915,099	\$88,257,800	\$133,808,131				

#### TABLE 8-5: TOTAL FACILITY AND SERVICE OBJECTIVE PROJECT COSTS

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

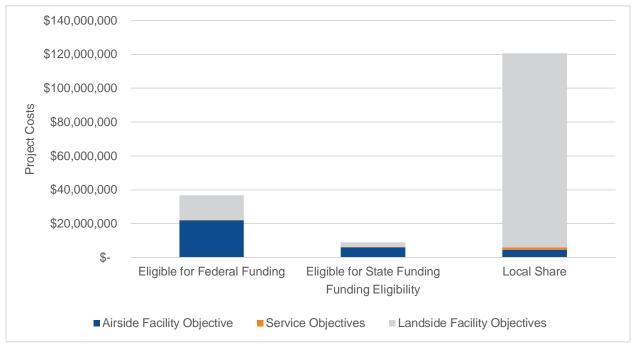


#### FIGURE 8-8: TOTAL FACILITY AND SERVICE OBJECTIVE PROJECT COSTS



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

#### FIGURE 8-9: TOTAL FACILITY AND SERVICE OBJECTIVE PROJECT COSTS BY FUNDING ELIGIBILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



# **Performance Measure Recommendations Costs**

PMs are defined as the actionable metrics used to evaluate the system's ability to achieve the 2020 IASP Update goals established in *Chapter 1: Study Design and Goals*. Project costs associated with the PMs and references to the appropriate Chapter 7 table for individual airport projects are displayed in **Table 8-6**. Project costs for the eight PMs are estimated at \$16.2 million and it should be noted that costs to meet the PM related to facility and service objectives were noted in the section above and were excluded here to avoid duplication. **Figure 8-10** shows a cost comparison between PM project types.

As shown, "NPIAS Airports Meeting Current FAA Taxiway Design Standards" comprise 90 percent of project costs at approximately \$14.5 million. Unless a significant safety issue exists, taxiway design standard deficiencies are generally addressed during other airside improvement projects and are not typically conducted as standalone projects. If taxiway design projects were removed from the total PM costs, the resulting totals for all airports to meet PMs would amount to \$1.7 million in project costs. Additionally, no costs are associated with "Airports with Zoning for Height and Land Use Regulations," as this measure is implemented via local policy change and enforcement and cannot be impacted by additional funding. The future performance target for airports that support business user needs and aerial application was established as "maintain existing." These activities are market-driven and must be championed at the local level should additional facilities and/or services be required. As such, no costs are associated with these PMs.

Funding eligibility by project type is summarized in **Figure 8-11.** Project costs associated with taxiway design deficiencies are eligible for AIP funding which results in the high composition of total PM costs eligible for federal funding. Approximately 85 percent of total PM project costs are eligible for AIP funds, eight percent are eligible for IAAP funds, and seven percent remain to be covered at the local level.



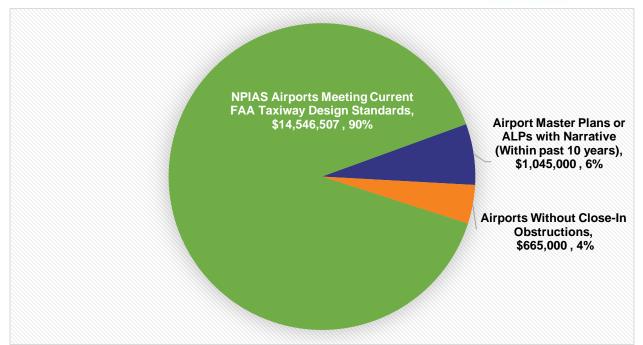
TABLE 8-6: PNI RECOMMENDED PROJECT COSTS								
	Chapter 7	Statewide Performance Project Costs by Eligibility/Share (\$)			Total			
PERFORMANCE MEASURES	Table Reference	Current	Future Target	Federal	State	Local	Estimated Cost (\$)	
Airports with Zoning for Height and Land Use Regulations <sup>1</sup>	Table 7.12	60%	100%	\$-	\$-	\$-	\$-	
Airports with Master Plans or Airport Layout Plans (ALPs) with Narrative (Within past 10 years)	Table 7.15	65%	91%	\$427,500	\$368,750	\$248,750	\$1,045,000	
Airports Meeting ITD Aeronautics Pavement Condition Index (PCI) Standards	Table 7.17	64%	100%		See <b>Pavement I</b>	Needs (below)		
Airports without Close-In Obstructions	Table 7.19	57%	100%	\$270,000	\$192,500	\$202,500	\$665,000	
NPIAS Airports Meeting Current FAA Taxiway Design Standards	Table 7.22	3%	100%	\$13,207,842	\$669,333	\$669,333	\$14,546,507	
Percent of Population and Land Area within a 30-Minute Drive Time of an Airport Capable of Meeting Business User Needs (5,000-Foot Runway, Jet Fuel, Instrument Approach) <sup>2</sup>	N/A	23%	23%	\$-	\$-	\$-	\$-	
Airports that Accommodate Aerial Application Services <sup>2</sup>	N/A	55%	55%	\$-	\$-	\$-	\$-	
Airports Should Achieve All Facility and Service Objectives Established by Classification	N/A	N/A	100%	See Facility and Service Objective Project Costs (above)				
			Total	\$13,905,342	\$1,230,583	\$1,120,583	\$16,256,507	

#### TABLE 8-6: PM RECOMMENDED PROJECT COSTS

Notes: (1) Costs are not associated with implementing height and land use zoning regulations, therefore total cost estimates for this PM are set at \$0. (2) The PM's existing performance meets the established future targets and additional costs are not needed. Sources: Kimley-Horn, 2019; J-U-B Engineers, 2020

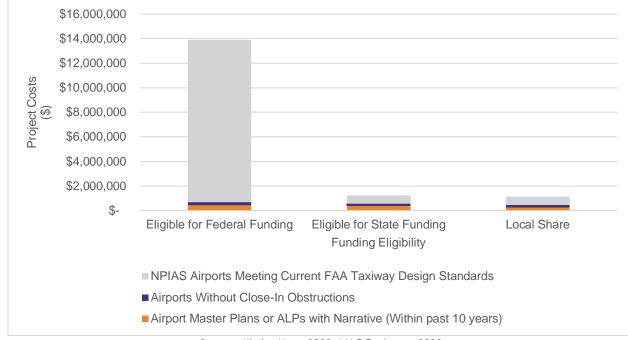


#### FIGURE 8-10: PERFORMANCE MEASURE RECOMMENDED PROJECT COSTS COMPARISON



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

#### FIGURE 8-11: PM RECOMMENDED PROJECT COSTS BY FUNDING ELIGIBILITY



*Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020* 



# **Future Aircraft Storage Recommendation Costs**

Future aircraft storage needs were determined from anticipated future growth in based and transient aircraft activity through the year 2037 per the analyses documented in *Chapter 4: Forecasts of Aviation Activity*. Recommended projects for future hangar spaces and apron tie-down needs are based upon the findings in *Appendix A: Future Facility and Service Needs*. Future aircraft storage reports the additional costs for these facilities after an airport meets its current aircraft storage needs.<sup>5</sup>

For example, an airport currently has 10 hangar spaces. Based on an analysis of the airport's current based and transient aircraft activity levels, the 2020 IASP Update identified that the airport needs 15 hangar spaces to meet its current landside facility objective (i.e., current hangar deficiency of five). Looking ahead to forecasted activity, the airport may need to provide 20 hangar spaces to accommodate projected growth in based aircraft and transient operations by 2037 (i.e., future hangar deficiency of five spaces in addition to its current deficiency of five spaces). Project costs to address the current five-space deficiency are reported in Landside Facility Objectives section above. Project costs to develop the additional five hangar spaces to accommodate forecasted (i.e., future) based and transient aircraft activities are detailed in this section.

**Table 8-7** shows recommended project costs for future hangar spaces by future airport role. The total recommended projects to develop future hangar spaces are estimated to be \$100.2 million. Basic, Utility, General, and Backcountry airports are excluded from the table as these airport roles do not have hangar storage targets based on their facility and service objectives. Figure 8-12 shows the costs of future hangar spaces by airport role for comparison. Primary airports comprise 83 percent of total future hangar costs as a result of substantial projected growth in based aircraft through 2037.

Hangars are defined as revenue-producing aeronautical support facilities not authorized for use of AIP funding unless the airport sponsor can certify all other airfield needs have been accommodated. Due to this factor, hangar storage projects are typically ineligible for federal funding. Under the IAAP program, aircraft hangars projects are not eligible for state funding leading to 100 percent of total hangar costs being met by local funding.

	Project Costs by Eligibility/Share (\$)				
FUTURE AIRPORT ROLE	Appendix A Reference	Federal	State	Local	Total Estimated Cost (\$)
Primary	Table A.13	\$-	\$-	\$82,953,560	\$82,953,560
Regional		\$-	\$-	\$10,937,216	\$10,937,216
Local		\$-	\$-	\$6,269,882	\$6,269,882
	Total	\$-	\$-	\$100,160,659	\$100,160,659

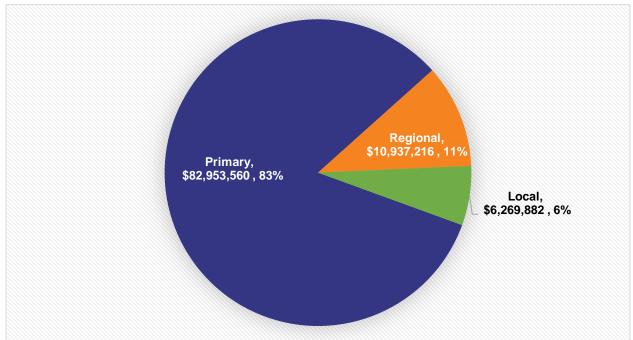
# TABLE 8-7: FUTURE HANGAR NEED COSTS BY ROLE

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

<sup>&</sup>lt;sup>5</sup> Current aircraft storage needs are encompassed in the facility and service objective costs presented in the section above.



FIGURE 8-12: FUTURE HANGAR SPACES RECOMMENDED PROJECTS BY AIRPORT ROLE



Sources: Kimley-Horn 2020; J-U-B Engineers, 2020

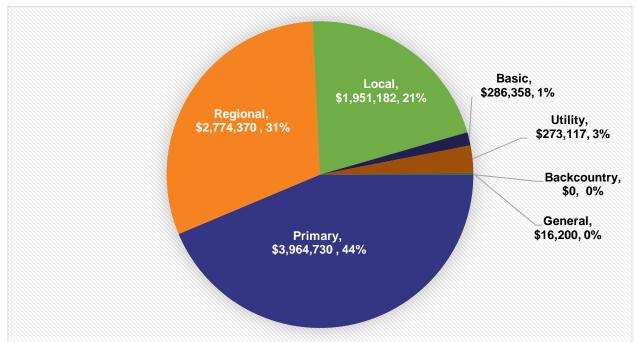
**Table 8-8** summarizes the recommended project costs to accommodate future apron tie-down needs. Future apron tie down costs are anticipated to amount to over \$9.0 million. Costs for recommended projects organized by airport role are shown **Figure 8-13**. Due to the anticipated growth at Primary and Regional airports, these roles account for 75 percent of total future apron tie-down costs. Future hangar storage needs for Backcountry airports are met by existing apron tie-down availability which results in \$0 project costs. **Figure 8-14** organizes costs by funding eligibility.

	TABLE 0 0. TOTORE	105201 00010						
		Project Co	Project Costs by Eligibility/Share (\$)					
FUTURE AIRPORT	Appendix A				<b>Total Estimated</b>			
ROLE	Reference	Federal	State	Local	Cost (\$)			
Primary	Table A.14	\$3,718,934	\$123,898	\$123,898	\$3,964,730			
Regional		\$2,496,933	\$138,719	\$138,719	\$2,774,370			
Local		\$1,750,304	\$100,439	\$ <b>100,439</b>	\$1,951,182			
Basic		\$257,722	\$14,318	\$14,318	\$286,358			
Utility		\$-	\$152,170	\$120,947	273,117			
General		\$-	\$9,625	\$6,575	\$16,200			
Backcountry		\$-	\$-	\$-	\$-			
	Total	\$8,221,893	\$539,168	\$504,896	\$9,265,957			

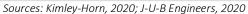
### TABLE 8-8: FUTURE APRON TIE-DOWN RECOMMENDED PROJECT COSTS

Note: Current storage needs are shown in in the facility and service objectives presented in the section above. The methodology to calculate apron tie-downs is provided in Appendix A: Facility and Service Objectives. In general, the total combined cost for each airport's current (shown in Table 8-3) and future (shown above) apron tie-down needs were calculated. Costs were then allocated between the current and future scenarios based on the percent of total need. This provides a more realistic and comprehensive assessment of how airports would implement this type of project. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

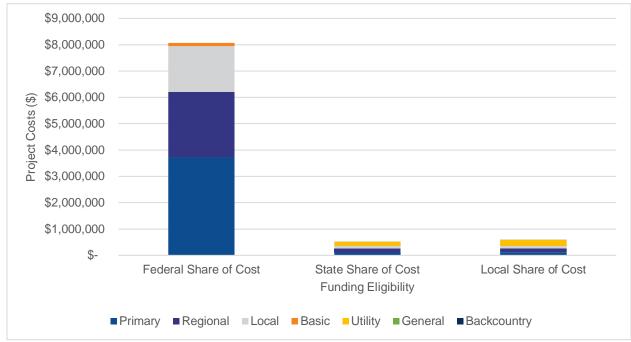




#### FIGURE 8-13: FUTURE APRON TIE-DOWN RECOMMENDED PROJECT COSTS BY AIRPORT ROLE



#### FIGURE 8-14: FUTURE APRON TIE-DOWN RECOMMENDED PROJECT COSTS BY FUNDING ELIGIBILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



# **Pavement Lifecycle Needs**

Major pavement maintenance projects generally require the most substantial capital investments at an airport. There are considerable differences in how pavement project costs were determined between the 2010 IASP and the 2020 IASP Update. The 2010 IASP pavement analysis provided project recommendations based upon a single "snapshot" of overall pavement conditions at one point in time. In comparison, the 2020 IASP Update utilizes a "lifecycle policy" to document all pavement maintenance and rehabilitation needs over the next 20 years. Due to this, the total estimated costs for pavement projects are succinctly different from the project cost recommendations of the 2010 IASP.

Under the lifecycle policy, all pavement and maintenance projects that typically occur over a 20-year period were identified for each airport. A combination of full-depth reconstruction and intervals of crack seal/slurry seal application (i.e., maintenance) were chosen as representative of the project needs most likely to arise throughout the pavement's lifecycle. A full-depth reconstruction is likely to occur once every 40 years based upon industry practices generally reflective of conditions found in Idaho. Due to the 2020 IASP Update spanning 20 years, costs reflect the completion of full-depth reconstruction for half of the pavement surfaces at an airport. It is important to note that full-depth reconstruction costs are intended to provide a planning-level view of potential projects and should be conducted based upon actual pavement needs as determined by airport-specific analyses rather than intervals of time. Conversely, applications of crack seal/slurry seal applications should occur after year three of initial application and then every seven years after that. Therefore, pavement maintenance costs reflect three separate applications of crack seal/slurry seal over the next 20 years. It is important to note cost estimates for pavement lifecycle needs use an average per-square-foot cost across all pavement areas regardless of pavement type to provide a planning-level review of costs. Pavement needs may vary dependent upon pavement type, thickness, conditions, and other factors.

**Table 8-9** presents the potential costs of pavement lifecycle projects typical to occur over the planning horizon. Pavement project costs are estimated at \$592.5 million over the next 20 years. **Figure 8-15** shows the total cost comparison between major full-depth reconstruction and pavement maintenance projects. Major pavement reconstruction projects are anticipated to compose 80 percent of all pavement-related costs over the next 20 years.



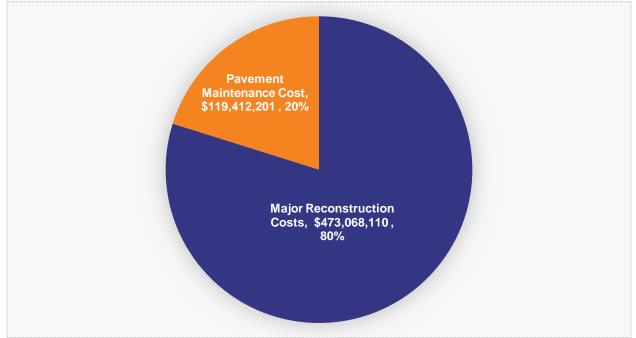
## TABLE 8-9: PAVEMENT LIFECYCLE NEEDS

		Crack Seal/Slurry	Project Costs by Eligibility/Share (\$)			
FUTURE AIRPORT ROLE	Full-Depth Reconstruction	Seal Application Costs	Federal	State	Local	Total Estimated Cost (\$)
Primary	\$328,671,087	\$68,803,350	\$372,015,088	\$12,729,674	\$12,729,674	\$397,474,437
Regional	\$43,394,970	\$11,852,064	\$49,722,330	\$2,762,352	\$2,762,352	\$55,247,033
Local	\$74,560,148	\$25,584,435	\$88,915,964	\$5,614,309	\$5,614,309	\$100,144,583
Basic	\$15,359,104	\$5,927,914	\$19,155,616	\$1,064,201	\$1,064,201	\$21,284,018
Utility	\$5,703,705	\$3,798,065	\$-	\$5,439,366	\$4,062,404	\$9,501,770
General	\$5,379,096	\$3,449,374	\$-	\$5,721,318	\$3,107,152	\$8,828,470
Backcountry	\$-	\$-	\$-	\$-	\$-	\$-
Total	\$473,068,110	\$119,412,201	\$529,808,998	\$33,331,220	\$29,340,092	\$592,480,311

Source: Kimley-Horn, 2020



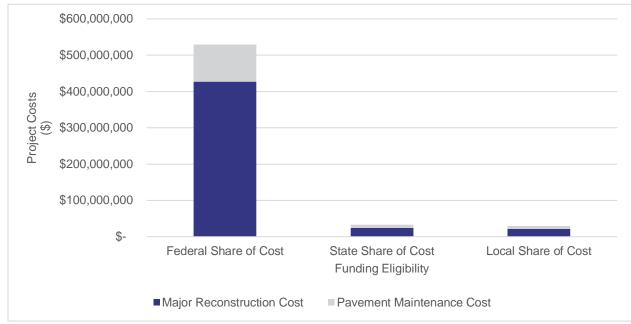
#### FIGURE 8-15: PAVEMENT LIFECYCLE NEEDS COMPARISON



Source: Kimley-Horn, 2020

Pavement lifecycle costs are organized by funding eligibility in **Figure 8-16**. Eighty-nine percent of pavement project costs are eligible for federal funds under AIP, six percent are eligible for state funds under the IAAP, and five percent remain for the local share of costs. Pavement rehabilitation and reconstruction projects for runways, taxiways, and aprons are eligible for AIP and IAAP funds. The costs to be covered at the local level are the remaining costs after federal and state shares have been funded.

#### FIGURE 8-16: PAVEMENT LIFECYCLE NEEDS BY FUNDING ELIGIBILITY



Source: Kimley-Horn, 2020



# **Statewide Study Needs**

In addition to the airport-specific projects discussed in the sections above, the 2020 IASP Update identified six statewide studies recommended to be undertaken by the ITD Aeronautics. These studies are designed to take a deep dive into issues affecting airports across the state and allow the ITD Aeronautics to maintain a policy of continuous improvement over time. The statewide study needs identified by this study are as follows, with more detailed descriptions provided below:

- ✤ Statewide Obstacle Study
- ✤ Regional Air Service Study
- ✤ Emerging Technology Study
- ✤ Online data management
- ✤ 2025 IASP Update
- → Airport Economic Impact Analysis (AEIA) Update

# **Study Overviews**

The following section provides an overview of the statewide study needs recommended as part of the 2020 IASP Update. Note additional policy-related recommendations are presented in *Chapter 9: Policy Analysis and Investigate Recommendations*.

# Statewide Obstacle Study

An airport approach is a glide slope meant to provide landing aircraft with clear airspace on approach to an airport. The 2020 IASP Update evaluated the percent of airports with clear approaches to their primary runway ends. Based on a high-level analysis using data provided by airport managers in the Airport Inventory and Data Survey Forms and FAA 5010 Master Records, it was determined that 43 percent of Idaho airports have close-in obstructions within 200 feet of their primary runway end. These close-in obstructions can present a serious threat to safe aircraft operations, particularly during operations conducted at night or during inclement weather conditions.

It is recommended that the ITD Aeronautics conduct a statewide obstruction study to identify and mitigate noncompliant runway ends. This would likely involve an analysis of available obstacle data provide through the FAA's Airport Data and Information Program (ADIP) and Instrument Flight Procedures Automation (IFPA) Program, as well as reviews of individual airport master plans (as available). To fill data gaps and verify information, airport site visits would likely be required. To assist in this process, the ITD Aeronautics could consider new, relatively lowcost technological solutions that identify and inventory airspace obstructions in real-time using a tablet computer. Once this inventory is complete, a plan to bring all approaches into compliance or mitigate those unable to be cleared should be developed. This information could also be used to inform decisions made during local master planning projects. This statewide study need is also tied to the PM, "Airports with Zoning for Height and Land Use Regulations." Airport with obstructions would need to work with local zoning authorities and landowners/managers to ensure all natural and manmade structures within the airport vicinity comply with state and federal (as applicable) height restrictions.

# **Regional Air Service Study**

Over the last two decades, Idaho has experienced a decline in air service to its smallest communities as carriers focus on higher density markets. Regional jet service has been restructured and reorganized as a result of the ongoing consolidation of airline services, "right-sizing" aircraft, and a move away from operating a high volume of flights in an attempt to gain market share in favor of network-wide efficiencies. These moves have generally led to increased airline profitability but left small- and mid-sized communities with limited or no access to scheduled passenger service. In one recent example, Horizon Air ceased operations at Lewiston-Nez Perce County Regional Airport, giving local residents few options to access "hub" airports such as Seattle-Tacoma International Airport.



In response to concerns regarding air access in Idaho, the state legislature convened an internal commission to investigate regional air service demands and identify strategies that could entice airlines to improve service level to small- and mid-sized communities. To further the work of this internal commission, the 2020 IASP Update recommends that the ITD Aeronautics conduct a Regional Air Service Study. Such a study would be useful to the state and individual communities to assess their abilities to sustain or improve current service levels and identify potential areas for enhancements. An Air Passenger Demand Study was previously conducted in 2003 (Wilbur Smith and Associates); however, this study is considerably out of date and must be comprehensively updated to align with current market conditions.

#### **Emerging Technology Study**

Since the previous IASP was conducted in 2010, aviation technologies have rapidly advanced. Recent technological advances have led to sustainable aviation fuel technologies, the rise in electric aircraft and associated Urban Air Mobility (UAM) applications, and advanced unmanned aerial systems (UAS). Furthermore, the implementation of the FAA's NextGen program continues as the agency seeks to modernize the National Airspace System (NAS), improve safety, and reduce congestion. Aircraft operating in controlled U.S. airspace must already be equipped an ADS-B Out transmitter (as of January 1, 2020), although compliance with this new federal regulation remains lagging.

Each of these technological advancements present an exciting new horizon for the aviation industry that brings a range of benefits to airports, pilots, passengers, industry, communities, and other stakeholders. Emerging technologies promise new investment and workforce development opportunities, a reduction in harmful emissions, improved mobility and access to aviation services, and more. As these advancements increasingly enter commercial deployment, transitional impacts are likely to arise that will need to be addressed by a number of stakeholders including potential users, state and federal regulators, policymakers, and airports, among others. To ensure the ITD Aeronautics stays current with the state of aviation technology and the airport system continues to meet all industry needs moving forward, the 2020 IASP Update recommends an Emerging Technology Study. This study would focus on the potential impacts of various emerging aviation technologies on the Idaho airport system and identify proactive planning approaches that will support evolving needs over time.

#### **Online Data Management**

Effective and streamlined data management is a core task in the management and planning of a state aviation system. As such, it is important that the ITD Aeronautics have the proper mechanism to input, organize, and monitor data relevant to statewide aviation management and coordination. Such a system could offer a range of benefits including simplified ISCIP development; grant award, distribution, and management processes; state and federal auditing; and overall project management. Furthermore, monitoring and updating data on a continual basis would all the agency to track individual and systemwide performance over time. Having up-to-date information aids data collection efforts required during future studies, including recommended AEIA and IASP updates.

Various types of software platforms are available in the market to assist in this process. Based on conversations with the ITD Aeronautics, the selected platform should have the ability to minimally handle the following elements or activities: facility data collection and maintenance; data collection including (but not limited to) operational activity, state and 5010 inspections, and PCI reporting; ISCIP development and management; IAAP funding, reimbursements, and payments; asset management; and an airport directory with contact information.

#### Conduct 2025 IASP Update

Continuous planning is as important as continuous data management to ensure the aviation system keeps abreast with current aviation trends at national and state levels, airport-specific needs, and federal regulatory requirements affecting NPIAS airports. This is a critical component of developing a viable and sustainable system of airports that meets the needs of aviation users over time. Additionally, continual planning ensures the work of



the 2020 IASP Update will continue to remain relevant and applicable to the ITD Division of Aeronautics' ongoing decision-making processes.

As such, the 2020 IASP Update recommends that the state conduct an IASP update at five to 10-year intervals. With the rapid pace of change affecting the aviation system today, the need for continuous planning has never been so acute. Not only are new aircraft types and technologies being introduced into the NAS, but fleet mixes, users, and service providers are constantly affecting the aviation environment. Updating the IASP every five years would allow the ITD Aeronautics to continuously monitor and respond to current trends and conditions affecting Idaho's aviation system, as well as anticipated future needs. Accordingly, the next IASP Update should be initiated in 2025 with planned completion in 2027.

#### **Conduct AEIA Update**

A current AEIA is one of the most important tools that an airport and state department of transportation has in showing the value of investing in airports. These studies show that airports contribute billions of dollars in total economic output, support thousands of workers, and generate tax revenues and fees that support state and local governments. In most cases, the economic benefits of airports far exceed investment into them. The 2020 IASP Update has shown that the IAAP awards less than \$900,000 to airports each year but these same airports contribute approximately \$4.7 billion in total economic output. Few other types of public assets can report such a significant net gain back to taxpayers. Further, AEIAs can highlight the many qualitative benefits of aviation facilities that cannot always be communicated in dollars and cents. In Idaho, airports support wildland aerial firefighting, emergency preparedness and response, medical flying, agricultural spraying, and non-aviation-related businesses in a variety of sectors. As the COVID-19 virus has shown, air cargo is also becoming an increasingly critical component of the U.S. supply chain, and that trend is anticipated to continuously grow through the forecast horizon.

To support continued investment into and support for Idaho's aviation assets, the 2020 IASP Update recommends that the ITD Division of Aeronautics conduct a concurrent AEIA with the recommended future IASP update. With rapid economic changes affect state, national, and global economies, it is important that Idaho understand how airports are impacting the economy. Further, this information can help airports maximize their business development potential and enhance airports' support of commerce and the state's overall economic vitality.

#### **Statewide Study Costs**

The costs associated with statewide study needs identified by the 2020 IASP Update are reported in **Table 8-10**. **Figure 8-17** depicts cost comparisons between each study. Figure 8-18 organizes total statewide study costs by funding eligibility. Roughly, 72 percent of total statewide studies costs are eligible for federal funding and 28 percent remains to be covered at the state level.

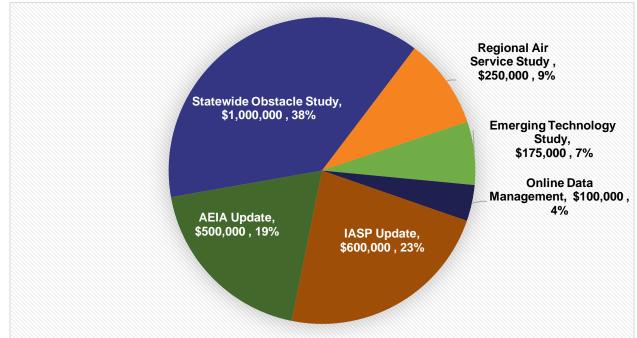
	Project Co Eligibility/S	Total Estimated	
RECOMMENDATION	Federal	State	Cost (\$)
Statewide Obstacle Study	\$900,000	\$100,000	\$1,000,000
Regional Air Service Study	\$-	\$250,000	\$250,000
Emerging Technology Study	\$-	\$175,000	\$175,000
Online data management	\$-	\$100,000	\$100,000
IASP Update	\$540,000	\$60,000	\$600,000
AEIA Update	\$450,000	\$50,000	\$500,000
Total	\$1,890,000	\$735,000	\$2,625,000

#### TABLE 8-10: 2020 IASP UPDATE STATEWIDE STUDIES COSTS

Sources: ITD Aeronautics, 2020; Kimley-Horn, 2020

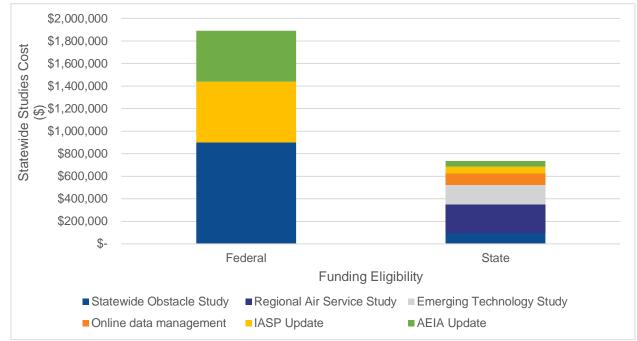


#### FIGURE 8-17: STATEWIDE STUDIES COST COMPARISON



Sources: ITD Aeronautics, 2020; Kimley-Horn, 2020

# FIGURE 8-18: STATEWIDE STUDIES COSTS BY FUNDING ELIGIBILITY



Sources: ITD Aeronautics, 2020; Kimley-Horn, 2020



# **Total 2020 IASP Update Recommendation Costs**

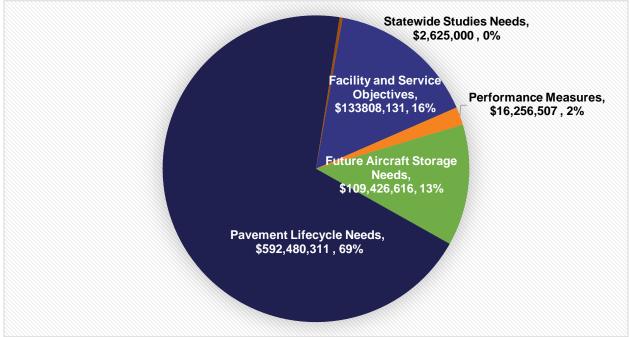
**Table 8-11** summarizes the total 2020 IASP Update project costs by recommendation category. Total project costs identified by the 2020 IASP Update are estimated at nearly \$854 million. A comparison of project costs by recommendation are shown in **Figure 8-19**. Projects related to major pavement reconstructions and pavement maintenance make up roughly two-thirds of costs. **Figure 8-20** compares these costs by funding eligibility. A majority of total 2020 IASP Update costs (69 percent) are eligible for AIP funds, five percent are eligible for IAAP funds, and 29 percent need to be funded at the local level.

TABLE 8-11. TOTAL 2020 TASP OPDATE RECOMMENDED PROJECT COSTS BY RECOMMENDATION								
	Project	Costs by Eligibility/Sh	are (\$)	Total Estimated				
RECOMMENDATION	Federal	State	Local	Cost (\$)				
Facility & Service Objectives	\$36,635,232	\$8,915,099	\$88,257,800	\$133,808,131				
PMs	\$13,905,342	\$1,230,583	\$1,120,583	\$16,256,507				
Future Aircraft Storage Needs	\$8,221,893	\$539,168	\$100,665,554	\$109,426,616				
Pavement Lifecycle Needs	\$529,808,998	\$33,331,220	\$29,340,092	\$592,480,311				
Statewide Studies Needs	\$1,890,000	\$735,000	\$-	\$2,625,000				
Total	\$590,461,465	\$44,751,070	\$219,384,029	\$854,596,565				

#### TABLE 8-11: TOTAL 2020 IASP UPDATE RECOMMENDED PROJECT COSTS BY RECOMMENDATION

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

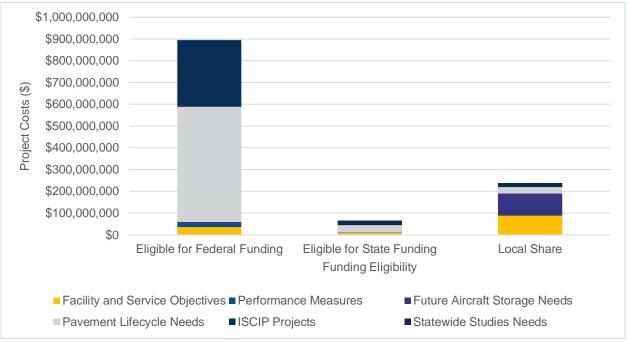
#### FIGURE 8-19: TOTAL 2020 IASP UPDATE RECOMMENDED PROJECT COSTS COMPARISON



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020



#### FIGURE 8-20: 2020 IASP UPDATE PROJECT COSTS BY FUNDING ELIGIBILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

# **ISCIP Investment Needs**

To gain a comprehensive view of statewide aviation system needs, this section includes projects identified in the ISCIP. The ITD Division of Aeronautics maintains a list of airports' project needs as documented by individual airport master plans and airport-specific capital improvement plans (CIPs). It should be noted that ISCIP projects documented in the 2020 IASP Update were identified starting with fiscal year 2020 (calendar year 2019), as it was deemed inappropriate to identify costs for projects that had already been completed. This is slightly different than the planning horizon of the 2020 IASP Update, which is based on calendar year 2017.

To define these costs, ISCIP projects were organized by project type; ISCIP project costs duplicative with 2020 IASP Update projects were removed to avoid double-counting. As shown in **Table 8-12**, total ISCIP projects through 2037 are estimated at almost \$345.8 million. **Figure 8-21** summarizes ISCIP costs by project category. Half of all applicable ISCIP project costs are related to runway projects amounting to almost \$174.0 million. ISCIP costs by airport role are shown in **Figure 8-22**. Local airport projects account for almost half all ISCIP project costs with \$164.5 million in estimated costs. For comparison purposes, it is important to note the ISCIP includes project categories such as heliport, ground access, and other that do not correlate with projects recommended by the 2020 IASP Update.

	TABLE 8-12: ISCIP PROJECT COSTS, FY 2020 - 2037							
	Project	Project Costs by Eligibility/Share (\$)						
<b>PROJECT TYPE</b>	Federal	State	Local	Cost (\$)				
Runway	\$59,313,139	\$3,076,584	\$2,833,787	\$173,966,441				
Taxiway	\$16,601,250	\$916,042	\$916,042	\$65,178,510				
Apron	\$31,172,633	\$2,662,301	\$2,309,323	\$36,144,257				
Land	\$16,800,540	\$983,613	\$983,613	\$18,867,767				

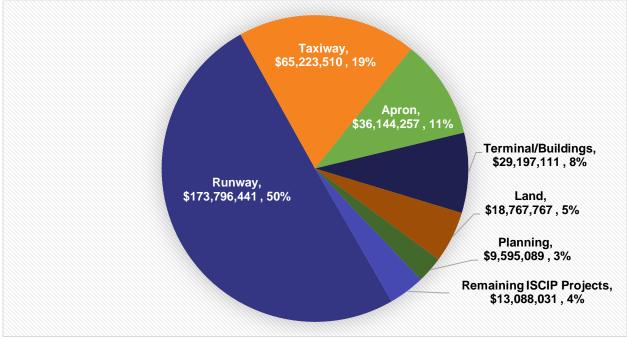
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	Project	Total Estimated		
<b>PROJECT TYPE</b>	Federal	State	Local	Cost (\$)
Building	\$9,806,400	\$501,189	\$456,189	\$10,503,778
Terminal	\$31,172,633	\$2,662,301	\$2,309,323	\$18,433,333
Planning	\$152,049,939	\$11,544,079	\$10,202,423	\$9,345,089
Equipment	\$7,209,833	\$691,936	\$516,936	\$8,748,704
Other	\$8,652,100	\$471,494	\$471,494	\$2,734,660
Heliport	\$1,012,500	\$101,250	\$83,250	\$1,197,000
Ground Access	\$649,000	\$21,833	\$21,833	\$692,667
Total	\$305,598,875	\$21,213,881	\$18,999,450	\$345,812,206

Source: ITD Aeronautics, 2019

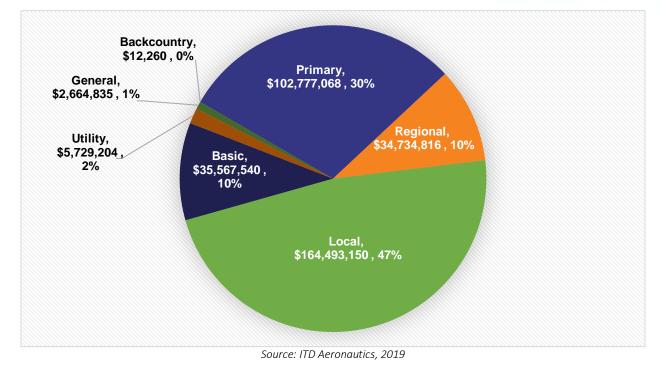
## FIGURE 8-21: ISCIP PROJECT COSTS BY PROJECT TYPE



Source: ITD Aeronautics, 2019



#### FIGURE 8-22: ISCIP PROJECT COSTS BY AIRPORT ROLE



# **Replacement Airport Needs**

Per the FAA, a replacement airport is often proposed to "replace an existing airport that is unable to meet long-term aviation demand in the community because the existing airport is constrained".<sup>6</sup> The following airports have been identified for potential replacement within the 20-year planning term of the 2020 IASP Update:

- ✤ Friedman Memorial Airport (SUN)
- ✤ Burley Municipal Airport (BYI)
- ✤ Rexburg-Madison County Airport (RXE)

As detailed below, these three airports are currently facing challenges that inhibit their ability to adequately serve existing and anticipated future airport users. These concerns have prompted investigations into the need to construct replacement airports.

# **Friedman Memorial Airport**

According to the Friedman Memorial Airport Master Plan Update (2017), analyses since 1976 have identified SUN's existing site as significantly limiting the airport's development potential. The airport's lack of acreage does not allow the airport to expand to meet demand. The airport is unable to meet FAA C-III design standards necessitated by increased operations conducted by larger commercial service aircraft. Additionally, the airport reports that it does not have available land to construct additional hangars to meet existing general aviation needs.

A feasibility study conducted in 2006 identified alternative airport sites that could be developed to address expansion needs. In 2008, the airport conducted another analysis during its economic impact study that evaluated the potential economic benefits of an alternative airport site. This assessment highlighted that an

<sup>&</sup>lt;sup>6</sup> For further guidance on replacement airport eligibility for AIP funds see FAA Order 5100.38D, Change 1: *Airport Improvement Program Handbook* Appendix F: New Airport Projects.



alternative site could bring new demand to the airport, supported by shifting growth patterns in surrounding communities. Based on the findings of the Master Plan Update and supported by forecast data in the 2020 IASP Update, SUN's facilities will be severely strained over the next 20 years due to increasing commercial service passenger activity, based aircraft, and limited development potential at its current site. As such, the Master Plan Update reports that a replacement airport for SUN should be developed in a phased approach by relocating to a larger site that accommodates FAA design geometries and expanded airside and landside facilities, as well as allows the airport to develop in response to future changes in demand.

# **Burley Municipal Airport**

Burley Municipal Airport is evaluating the feasibility of a replacement airport that would allow for longer runways while increasing the overall safety of pilots and passengers in the air and people and property on the ground. The current Burley Municipal supports agricultural spraying, fixed-wing medical flights, firefighting operations, recreational flying, and some business jet operations. However, both runways are slightly longer than 4,000 feet with numerous approach obstructions—prompting some airport users to choose alternative airports with the ability to safely accommodate larger and more sophisticated aircraft.<sup>7</sup>

In addition to needing additional runway length, the airport does not meet FAA standards for safety areas, obstacle free zones, and graded emergency areas which impacts its ability to receive FAA funding.<sup>8</sup> Additional development of current airport facilities are extremely limited due to the airport's location adjacent to the Snake River, U.S. Highway 30, Hiland Avenue, and encroaching land developments. The Burley Municipal Airport issued a Request for Qualifications in May 2020 for a Feasibility and Environmental Study on the preferred alternate site for a replacement airport. This alternative site would be selected to provide the space necessary for longer runways and additional development to safely accommodate existing and anticipated future aviation demand.

# **Rexburg-Madison County Airport**

Due to the position of the runway's ends in relation to the Teton River and Highway 33/Main Street (a four-lane highway), the Rexburg-Madison County Airport is constrained from further developing the runway to safely accommodate a fleet mix of larger and more demanding aircraft as projected by the airport's 2018 Master Plan Update. In recent years, a development boom has taken place in Rexburg, and it is now ranked the 10<sup>th</sup> most-populated city in the state.<sup>9</sup> Under an unconstrained growth scenario in which future airport development is not negatively impacted by current constraints, the airport is anticipated to see higher demand and more demanding aircraft activities over the next 20 years.

Due to current physical constraints, the airport cannot lengthen its runway to accommodate 100 percent of its current aircraft fleet mix, does not meet current FAA taxilane or taxiway separation standards, has penetrations to its runway object free zone (ROFA), and has incompatible land uses within a runway protection zone (RPZ). Development at the existing site is further constrained by the existence of floodplains, wetlands, and other environmental issues that prohibit the expansion or construction of additional facilities.<sup>10</sup> A replacement airport could address the airport's issues by offering more developable land to accommodate growth and allow the airport to benefit from new aviation markets that utilize more demanding aircraft.

# **Total Replacement Airport Costs**

All the airports in Idaho identified for potential replacement are included in the NPIAS. Construction of a replacement airport is eligible to receive federal funding under the AIP; however, the state's fiscal responsibility to build replacement airports is yet to be determined. To provide a high-level view of potential costs, federal

<sup>&</sup>lt;sup>7</sup> Welch, Laurie. Magicvalley.com. "Burley Tries Again to Replace Airport". February 2012.

<sup>&</sup>lt;sup>8</sup> Welch, Laurie. Magicvalley.com. "Public Gets First Glimpse of Burley Airport Plans". December 2017.

<sup>&</sup>lt;sup>9</sup> GDA Engineers, Rexburg-Madison County Airport (RXE) Master Plan. June 2018

<sup>&</sup>lt;sup>10</sup> City of Rexburg & Madison County. "Request for Replacement Airport: Rexburg-Madison County Airport (RXE) Rexburg, ID". September. 2016

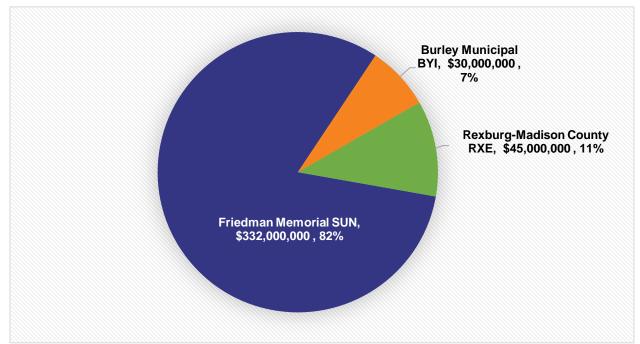
funding participation is estimated to be 75 percent for Friedman Memorial and 90 percent for Burley Municipal Airport and Rexburg-Madison County Airport, with a five percent state funding contribution for all three facilities. Remaining costs for replacement airports are allocated to local funding.

As shown in **Table 8-13**, the total planning-level estimate to replace the three Idaho airports is approximately \$407 million. These costs were obtained from existing sources as noted in the table sources. **Figure 8-23** organizes replacement airport costs by airport. Due to Friedman Memorial's size and role as a commercial service airport, a replacement airport with improvements to meet current and anticipated future facility needs results in approximately 82 percent of total replacement airport needs.

	TABLE 8-13: REPLACEMENT AIRPORT NEEDS									
		<b>FA</b> A	Project Cos	ts by Eligibility,	/Share (\$)	Total				
ASSOCIATED CITY	Airport	FAA ID	Federal	State	Local	Estimated Cost (\$)				
		CO	MMERCIAL SERV	/ICE						
Hailey	Friedman Memorial	SUN	\$249,000,000	\$16,600,000	\$66,400,000	\$332,000,000				
			GA							
Burley	Burley Municipal	BYI	\$27,000,000	\$1,500,000	\$1,500,000	\$30,000,000				
Rexburg	Rexburg-Madison County	REX	\$40,500,000	\$2,250,000	\$2,250,000	\$45,000,000				
		Total	\$316,500,000	\$20,350,000	\$70,150,000	\$407,000,000				

Sources: Friedman Memorial Airport Master Plan Update (Mead & Hunt), 2017; Rexburg-Madison County Airport 2018 Master Plan (T-O Engineers), 2018; T-O Engineers, 2020

#### FIGURE 8-23: REPLACEMENT AIRPORT NEEDS BY AIRPORT



Sources: Friedman Memorial Airport Master Plan Update (Mead & Hunt), 2017; Rexburg-Madison County Airport 2018 Master Plan (T-O Engineers), 2018; T-O Engineers, 2020

# **Total Idaho Investment Needs**

Total project costs combine 2020 IASP Update and non-duplicative ISCIP projects to quantify the total financial needs of the Idaho airport system. Generating the total system costs assists in gaining a broader understanding of financial needs and how to strategically prioritize limited funding.

# **Total System Costs**

The total costs of the system organized by recommendation type are shown in **Table 8-14**. Project costs identified for the system are estimated to be around \$1.6 billion with pavement project recommendations accounting for 37 percent of total system costs. **Figure 8-24** shows the total costs compared across all recommendation categories. **Figure 8-25** depicts the total system costs by funding eligibility. Approximately, 72 percent of total system costs are eligible for AIP funds, six percent are eligible for IAAP funds, and 22 percent remain for the local share.

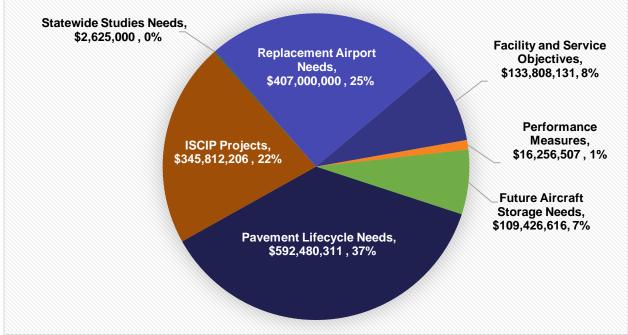
	Project Cost			
RECOMMENDATIONS BY SOURCE	Federal	State	Local	Total Estimated Cost (\$)
	2020 IASP Reco	mmendations		
Facility and Service Objectives	\$36,635,232	\$8,915,099	\$88,257,800	\$133,808,131
PMs	\$13,905,342	\$1,230,583	\$1,120,583	\$16,256,507
Future Aircraft Storage Needs	\$8,221,893	\$539,168	\$100,665,554	\$109,426,616
Pavement Lifecycle Needs	\$529,808,998	\$33,331,220	\$29,340,092	\$592,480,311
Statewide Studies Needs	\$1,890,000	\$735,000	\$-	\$2,625,000
2020 IASP Update Sub-total	\$590,461,465	\$44,751,070	\$219,384,029	\$854,596,565
	ISCIP Inve	stments		
ISCIP Project Needs	\$305,598,875	\$21,213,881	\$18,999,450	\$345,812,206
	Replacemei	nt Airports		
Replacement Airport Needs	\$316,500,000	\$20,350,000	\$70,150,000	\$407,000,000
	Total Idaho Aviatio	on System Need	S	
Total	\$1,212,560,340	\$83,314,952	\$308,533,479	\$1,607,408,771

# TABLE 8-14: TOTAL AVIATION SYSTEM NEEDS, 2017 - 2037

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019; Mead and Hunt, 2017; T-O Engineers, 2018; T-O Engineers, 2020

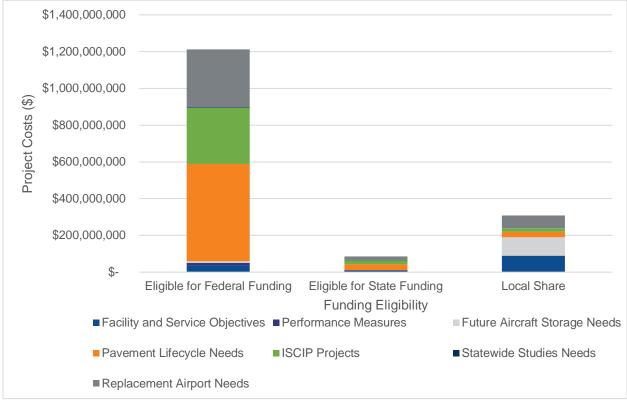


### FIGURE 8-24: TOTAL SYSTEM COSTS BY RECOMMENDATION



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

# FIGURE 8-25: TOTAL SYSTEM COSTS BY FUNDING ELIGIBILITY



. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019



# IASP Recommendation and ISCIP Investment Needs by Airport Role

Total costs by airport role are broken out by recommendation source in **Table 8-15**. Note that costs associated with statewide studies are not presented, as they are not specific to any one airport role. Replacement airport costs have also been excluded, as a replacement airport would supersede the need for individual projects separately identified for these facilities within the 2020 IASP Update and ISCIP projects. Their exclusion here avoids duplication and presents a more realistic assessment of needs by airport role. For reference, Friedman Memorial Airport is classified as Primary. Burley Municipal and Rexburg-Madison County airports are both classified as Local.

**Figure 8-26** depicts IASP and ISCIP system costs organized by future airport role. Although there are only seven Primary airports in Idaho's system, these airports comprise 57 percent of costs. Airport facilities, size, and increased aviation demand factor into the higher proportion of system project costs to improve and maintain Primary airports. Local airports make up nearly a quarter of system costs given that they have the highest ISCIP projects identified compared to other airport roles. All other airports make up 10 percent or less of total system costs. These figures are reported by potential future airport role as discussed in *Chapter 7*.

**Figure 8-27** through **Figure 8-33** summarize the system costs for each individual airport role. For nearly all airport roles, ISCIP projects and pavement lifecycle needs comprise the highest costs when compared to other recommendation categories, both in terms of percent and total dollars. The recommendation category accounting for the highest cost amongst Backcountry airports are those related to the facility and service objectives, as these airports do not have pavement lifecycle needs nor future aircraft storage needs identified in the 2020 IASP Update and only minimal ISCIP projects are reported.

When reviewing system needs, it is important to note that the proportion of federal, state, and local funding available to an airport is highly dependent on its role at the federal and state levels. NPIAS airports (Primary, Regional, Local, and Basic) are eligible for AIP, IAAP, and local funds, while non-NPIAS airports are only eligible to receive funding from the latter two sources. Non-NPIAS airports eligible for IAAP funding receive between 50 and 75 percent of eligible projects costs.



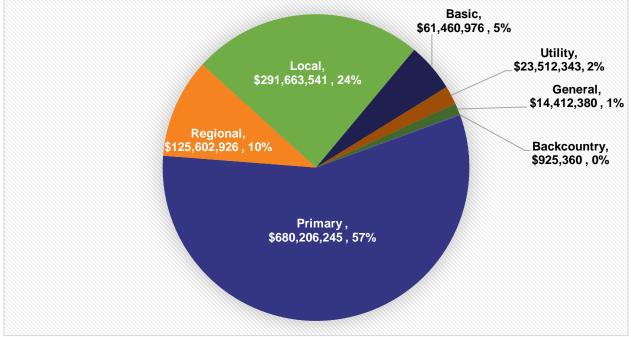
## TABLE 8-15: IASP AND ISCIP SYSTEM COSTS BY AIRPORT ROLE

	Facility and					
	Service		Future Aircraft	Pavement		<b>Total Estimated</b>
AIRPORT ROLE	Objectives	PMs	Storage Needs	Lifecycle Needs	ISCIP Projects	Cost (\$)
Primary	\$84,572,907	\$8,463,543	\$86,918,290	\$397,474,437	\$102,777,068	\$680,206,245
Regional	\$20,694,680	\$1,214,810	\$13,711,586	\$55,247,033	\$34,734,816	\$125,602,926
Local	\$14,980,270	\$3,991,141	\$8,221,064	\$100,144,583	\$164,326,483	\$291,663,541
Basic	\$2,636,047	\$1,687,013	\$286,358	\$21,284,018	\$35,567,540	\$61,460,976
Utility	\$7,868,252	\$140,000	\$273,117	\$9,501,770	\$5,729,204	\$23,512,343
General	\$2,182,875	\$720,000	\$16,200	\$8,828,470	\$2,664,835	\$14,412,380
Backcountry	\$873,100	\$40,000	\$-	\$-	\$12,260	\$925,360
Total	\$133,808,131	\$16,256,507	\$109,426,616	\$592,480,311	\$345,812,206	\$1,197,787,771

Note: Total system costs by airport role do not include statewide studies costs or replacement airport costs. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

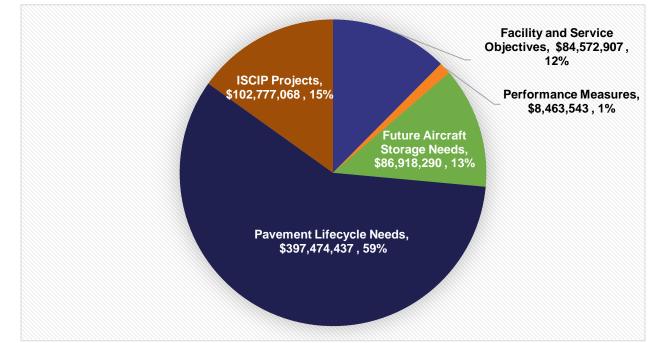


#### FIGURE 8-26: IASP AND ISCIP SYSTEM COSTS BY FUTURE AIRPORT ROLE



Note: Costs by airport role do not include statewide studies costs or replacement airport costs. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

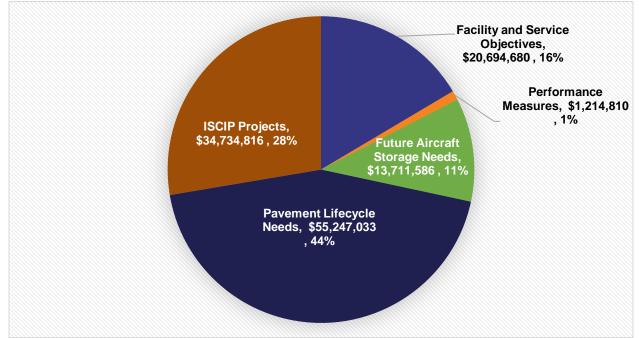
## FIGURE 8-27: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: PRIMARY



Note: Costs for Primary airports do not include a replacement airport cost for Friedman Memorial Airport. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

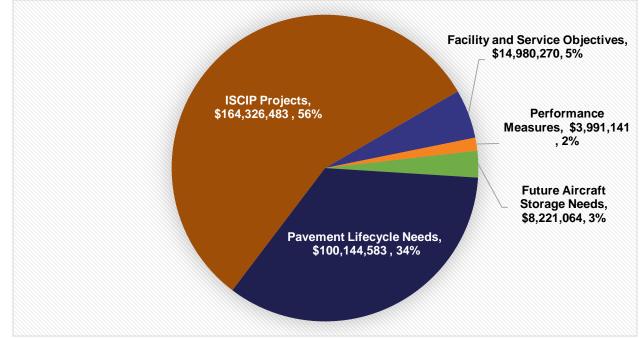


#### FIGURE 8-28: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: REGIONAL



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

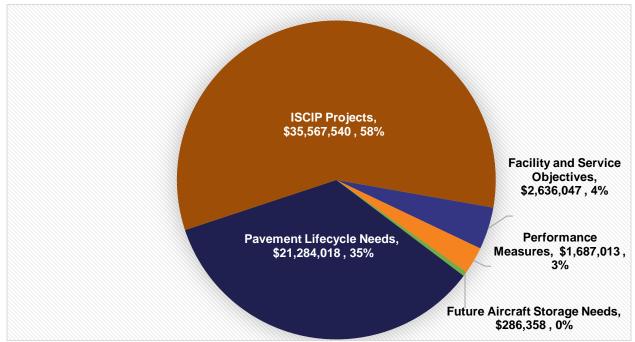
# FIGURE 8-29: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: LOCAL



Note: Costs for Local airports do not replacement airport costs for Burley Municipal or Rexburg-Madison County Airport. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

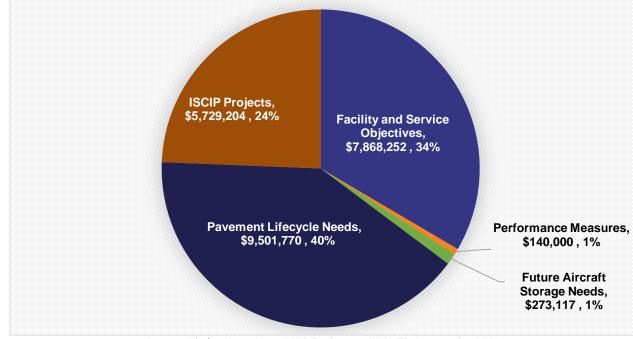


#### FIGURE 8-30: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: BASIC



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

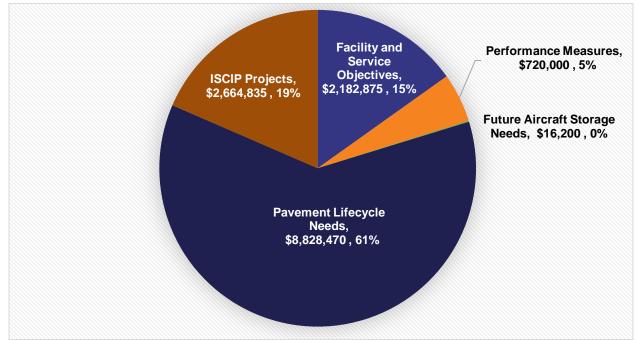
## FIGURE 8-31: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: UTILITY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

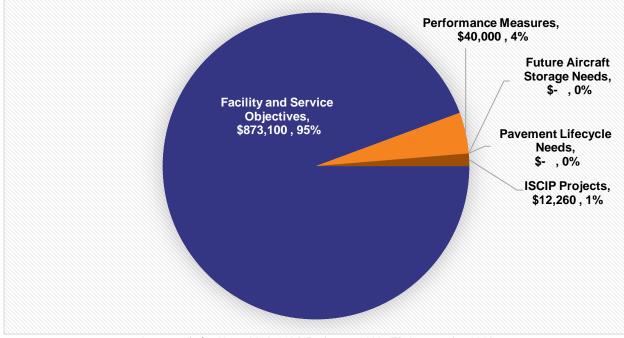


#### FIGURE 8-32: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: GENERAL



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

# FIGURE 8-33: PROJECT COST SUMMARY BY FUTURE AIRPORT ROLE: BACKCOUNTRY



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

# **Alternative Development Scenarios**

Alternative scenarios are presented in response to potential changes to the composition of the airport system, state and federal funding levels, and pavement needs that could influence the system's development through the next 20 years. Exploration of various alternative scenarios provides the ITD Division of Aeronautics with multiple lenses that can be used to view future development in an ever-changing environment.

Planning for alternative development scenarios allows for strategies and their potential implications to be considered and identified in the event that significant changes occur to the state's aviation system. One very recent case has been the impact of the spread of COVID-19 virus in 2020 which has had an unprecedented impact on the aviation industry. The U.S. government responded with a stimulus plan that includes \$32 billion in payroll assistance, \$29 billion in loans, and \$10 billion in grants to support NPIAS airports and air service. It is unknown at this time what the final fiscal impact of this stimulus package will amount to in the long run for the U.S. aviation industry. The situation surrounding COVID-19 is fluid and rapidly evolving, creating challenges in both dealing with the current situation and projecting recovery scenarios. As such, it is important to consider options that are available to the ITD Division of Aeronautics and impacts they may have to ensure the agency is adequately prepared to respond to changes over time.

The scenarios below evaluate increased and decreased funding and modifying the types of projects or levels of funding provided by the state. It is not intended for one scenario to be selected to cover funding shortfalls, but to review potential options that could be utilized in conjunction with each other or spur consideration of new strategies.

The scenarios below are based on the assumptions that the FAA and local sponsor provide their full share of the identified projects, which is different based on the airport role. To assist in evaluating the scenarios, the state's baseline costs by project type and airport role were calculated as shown in **Table 8-16**. It is important to note state costs for replacement airports are not included in this section as the state's fiscal responsibility for replacement airports are yet to be determined. Additionally, a replacement airport would negate the need for individual projects identified by the 2020 IASP Update and ISCIP; their exclusion here thus represents a more accurate picture of state investment needs.



TABLE 8-16: TOTAL STATE COSTS BY PROJECT TYPE AND AIRPORT ROLE							
	Facility and		Future		Pavement	Statewide	Total
	Service		Aircraft	ISCIP	Lifecycle	Study Needs	Estimated
<b>AIRPORT ROLE</b>	Objectives (\$)	PMs (\$)	Storage (\$)	Projects (\$)	Needs	(\$)	Cost (\$)
Primary	\$799,165	\$273,027	\$123,898	\$12,729,674	\$3,971,783	\$0	\$17,897,548
Regional	\$491,734	\$60,741	\$138,719	\$2,762,352	\$1,736,741	\$0	\$5,190,286
Local	\$1,360,635	\$307,464	\$100,439	\$5,614,309	\$8,416,615	\$0	\$15,799,462
Basic	\$131,802	\$84,351	\$14,318	\$1,064,201	\$1,778,377	\$0	\$3,073,049
Utility	\$4,618,632	\$70,000	\$152,170	\$5,439,366	\$3,492,622	\$0	\$13,772,790
General	\$1,494,081	\$435,000	\$9 <i>,</i> 625	\$5,721,318	\$1,811,613	\$0	\$9,471,637
Backcountry	\$19,050	\$0	\$0	\$0	\$6,130	\$0	\$25,180
Statewide	\$0	\$0	\$0	\$0	\$0	\$735,000	\$735,000
Total	\$8,915,099	\$1,230,583	\$539,169	\$33,331,220	\$21,213,881	\$735,000	\$65,964,952

Note: Total state costs do not include replacement airport costs as state fiscal responsibility is yet to be determined. Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics



# Scenario 1: Changes in Annual State Grant Aid Funds

Between 2015 and 2020, the IAAP received an average of \$842,540 a year from the State Aeronautics Fund to distribute as grant aid to airports. If this annual amount remained consistent for the next 20 years, the state would contribute a baseline amount of \$16.8 million to the IAAP by 2037. Based on projected costs identified in **Table 8-16**, there is an estimated \$49 million shortfall in the identified state investment needs over the 20-year period, or approximately \$2.5 million annually. At this baseline rate of funding, only 26 percent of the 2020 IASP Update's identified projects' state funding needs would be fulfilled. Options 1 and 2 below discuss potential increases and decreases to the baseline available funding to better understand the potential impacts on the investment need.

# **Option 1 - Increase in Annual Grant Aid Funds**

As discussed in *Chapter 9*, the overall State Aeronautics Fund grew from \$2.29 million in 2010 to \$3.61 million in 2019, an Average Annual Growth Rate (AAGR) of 5.187%. If the AAGR were applied to the annual IAAP contribution, it could provide approximately \$28.4 million to the system over the next 20 years. This is an increase of \$11.5 million, which would effectively reduce the funding shortfall to \$37.5 million. Option 2 - Decrease in Annual Grant Aid Funds

If the IAAP annual contribution decreased by even half a percentage each year, this would reduce the 20-year contribution to \$10.8 million, which would increase the funding shortfall to \$55.1 million. Figure 8-34 and Figure 8-35 display the decreased growth compared to an annualized project investment need and the baseline funding average. At this decreased rate of funding, only 16 percent of the 2020 IASP Update's identified projects' state funding needs could be fulfilled.

As stated above, COVID-19 has impacted worldwide aviation in a way that has not been seen in a very long time, if ever, at the time of this writing (May 2020). Globally, the number of scheduled flights is down 70 percent compared to this same week in May of last year. The situation is even worse in the U.S., with scheduled flights down by 74.5 percent. U.S. passenger airlines have idled nearly half the domestic fleet. Looking more broadly, the International Monetary Fund projects a three percent contraction in world Gross Domestic Product (GDP) in 2020—far worse than witnessed during the previous economic downturn of 2008-2009.

The State of Idaho is already forecasting a significant loss of statewide revenue which may impact the annual amount that can be provided as grant aid to airports. While there is no official estimate yet on the revenue impact from COVID-19, Idaho's Governor reported the state is already experiencing sharp drops in sales tax revenue. If sales tax revenue experiences the 10.5 percent decline seen in the Great Recession (2008 to 2009), it will create a shortfall of about \$57 million in sales tax revenue.

Through Executive Order 2020-05, all state agencies must cut one percent of their current budget, which would include the ITD Division of Aeronautics. If a one percent reduction was applied to the IAAP, it would reduce the 20-year state contribution to \$7.4 million, which would increase the funding shortfall to \$58.5 million. At this further decreased rate of funding, only 11 percent of the 2020 IASP Update's identified projects' state investment needs could be fulfilled.

**Figure 8-34** and **Figure 8-35** display the potential growth compared to an annualized project investment need and the baseline funding average. At this increased rate of funding, 43 percent of the 2020 IASP Update's identified projects' state funding needs could be fulfilled.

In consideration of the magnitude of the negative effects on airports and airlines by COVID-19, as well as the considerable uncertainty regarding recovery scenarios, the CARES Act was signed into law on March 27, 2020. This Act provides relief to airports in the form of \$10 billion in funds for the economic relief of eligible airports affected by COVID-19. The FAA is using these new funds to increase the federal share of AIP and supplemental



discretionary grants already planned for fiscal year 2020 to 100 percent.<sup>11</sup> Additional funds will also be distributed by various formulas to all airports that are part of the NPIAS. The Act also provides loan guarantees for air carriers and other eligible businesses, air carrier employee protections, small business relief, and federal excise tax relief for certain applicable air transportation taxes.

Programs such as the CARES Act will provide a small relief on the demand for state funding through reduced state matching fund requests as well as providing funding for projects that may not have otherwise been completed due to lack of local funding. The loan program will also provide another source of project funding for airports. The long-term effects of the CARES Act on aviation funding scenarios is unclear at this time.

# **Option 2 - Decrease in Annual Grant Aid Funds**

If the IAAP annual contribution decreased by even half a percentage each year, this would reduce the 20-year contribution to \$10.8 million, which would increase the funding shortfall to \$55.1 million. Figure 8-34 and Figure 8-35 display the decreased growth compared to an annualized project investment need and the baseline funding average. At this decreased rate of funding, only 16 percent of the 2020 IASP Update's identified projects' state funding needs could be fulfilled.

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<sup>&</sup>lt;sup>11</sup> www.faa.gov/airports/cares\_act/

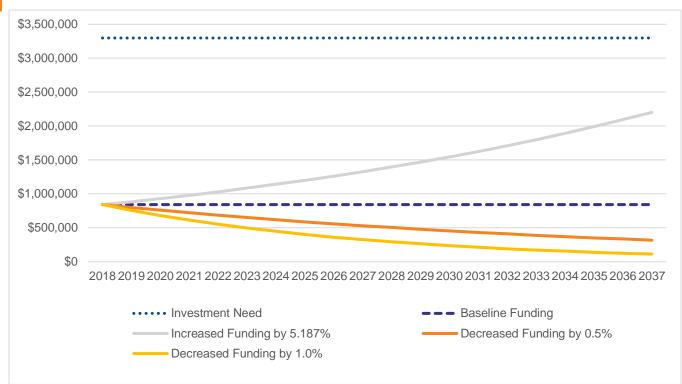
<sup>&</sup>lt;sup>12</sup> www.oag.com/coronavirus-airline-schedules-data (accessed May 5, 2020)

<sup>&</sup>lt;sup>13</sup> Airports Consultant Council (April 23, 2020). COVID-19: Aviation Impacts and Recovery Scenarios.

<sup>&</sup>lt;sup>14</sup> http://idahocfp.org/new/wp-content/uploads/2020/04/ICFP-COVID19-Revenue-Impact-April-2020-Final.pdf

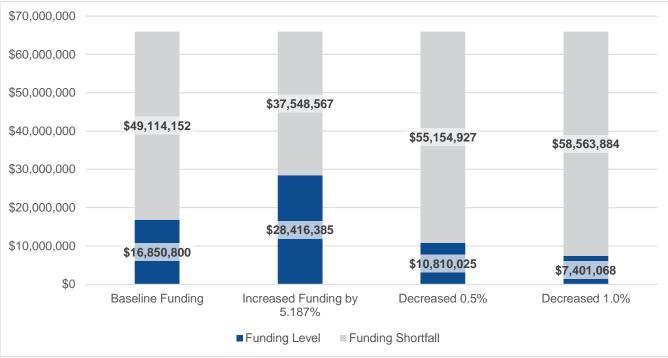


FIGURE 8-34: ANNUAL CURRENT, INCREASED, AND DECREASED FUNDING LEVELS TO INVESTMENT NEED COMPARISON



Source: Kimley-Horn, 2020

# FIGURE 8-35: 20-YEAR CURRENT, INCREASED, AND DECREASED FUNDING LEVELS TO INVESTMENT NEED COMPARISON



Source: Kimley-Horn, 2020

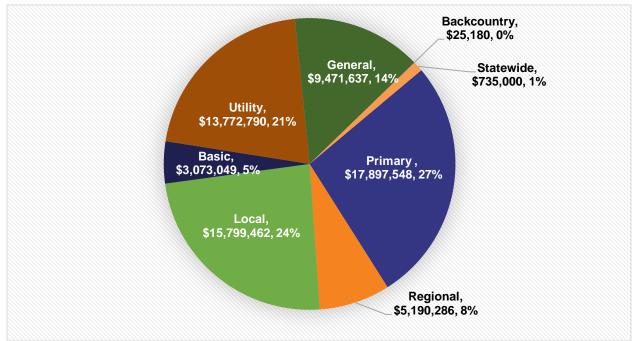


# Scenario 2: Funding Allocation by Airport Role

**Figure 8-36** displays the projected total state costs by airport role identified by the 2020 IASP Update. Primary airports have the largest share at 27 percent of total investment need, closely followed by Local at 24 percent and Utility at 21 percent. The remaining 28 percent is comprised of Regional, Basic, General, and Backcountry airports as well as statewide study needs.

Currently, the state funds individual projects up to a certain percentage of the project cost based on the airport's role. There are numerous methodologies that could be analyzed to reallocate funds amongst the 75 airports within the system by airport role. This scenario outlines a few potential methodologies that could be considered independently or in conjunction with one another.

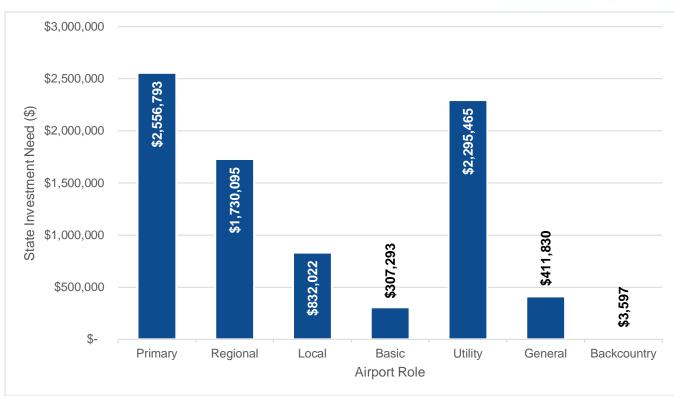
# FIGURE 8-36: TOTAL STATE COSTS BY AIRPORT ROLE



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2020

**Figure 8-37** displays the average state investment need by airport role identified by the 2020 IASP Update. This provides better context on the general investment need by the type of airport as there are different numbers of airports within each role. This allows for the ability to gain insights on the investment needs that could change how the funding is allocated within the program or policy decisions. For example, while Regional airports are only eight percent of the total investment need, the average cost per Regional airport is higher than Local, Basic, General, and Backcountry airports.





#### FIGURE 8-37: AVERAGE STATE INVESTMENT NEED BY AIRPORT ROLE

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2020

# **Option 1 - Percent of Need and Percent of Airports**

This option explores the impact of modifying the available funding to the airport roles if it was allocated based on the percent of investment need projected over the 20-year period or the percentage of airports in that role within the system. As shown in **Figure 8-38**, some airports have similar percentages and others have dramatic differences. For example, Primary airports account for nine percent of the total airports in the Idaho airport system but are 28 percent of the state's investment need—an 18 percent difference. Alternatively, Local airports account for 26 percent of the total airports in the Idaho airport system and 24 percent of the state's investment need—only a two percent difference.



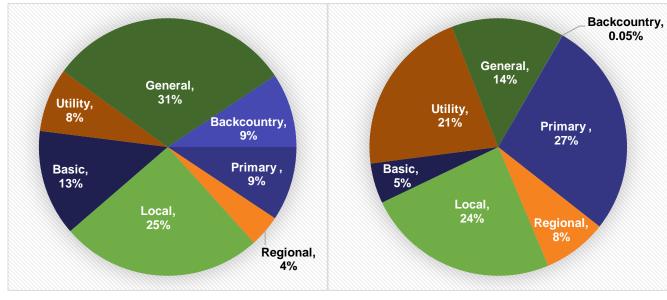


FIGURE 8-38: PERCENT OF INVESTMENT NEED TO NUMBER OF AIRPORTS COMPARISON

Percent of Airport System

Percent of Total Investment Need

Source: Kimley-Horn, 2020

These two percentages could be applied to the baseline available funding (\$16.8 million) to determine the amount of available funding for each airport role.

# Percentage of Airport System x Baseline Available Funding (\$16.8M) = Available Funding by Airport Role

In the case of Primary airports, nine percent (number of airports) of the total available funding equates to \$1.5 million. In a second equation:

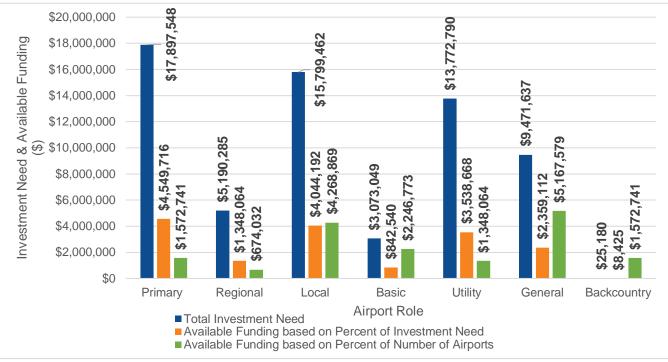
# Percentage of Total Investment Need x Baseline Available Funding (\$16.8M)

# = Available Funding by Airport Role

Again, looking at Primary airports, 28 percent (investment need) of total available funding equates to \$4.5 million. This \$3 million difference in funding levels (\$1.5 million as in the first equation versus \$4.5 million as in the second equation) could make a dramatic difference on what could be funded for the individual airports within that role. Similarly, General airports account for 31 percent of the airports within the system, but 14 percent of the state investment need. This would result in a funding allocation of \$5.1 million compared to \$2.3 million depending on the methodology used, a \$2.8 million difference. **Figure 8-39** compares the application of these two funding percentages to the total investment need for the 20-year period.



FIGURE 8-39: PERCENT OF TOTAL INVESTMENT NEED BY AIRPORT ROLE AND NUMBER OF AIRPORTS BY ROLE



Source: Kimley-Horn, 2020

If Primary airports were allocated \$4.5 million, it could fund 26 percent of the total state investment need for Primary airports over the 20-year period. This compares to being able to fund only 10 percent of the investment need if allocated \$1.5 million. As such, either funding methodology would ultimately fall short of the total investment need for Primary airports utilizing the baseline available funding (\$16.8 million). Alternatively, for Backcountry airports, utilizing the percent of airports methodology would allow the state to fully fund the state's share of projects. Similar to Primary airports, state funding for Regional, Local, Basic, Utility, and General airports would fall short of investment need.

# **Option 2 - Modify Current Allocations by Airport Role**

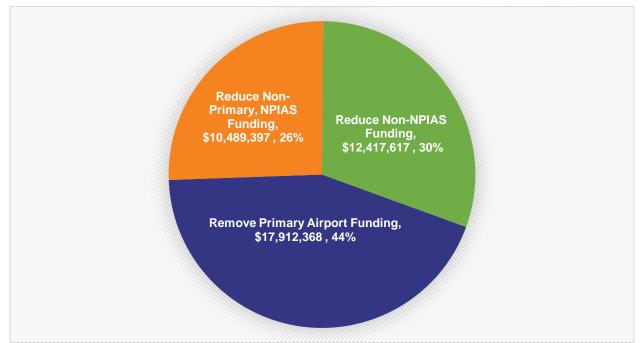
As noted in the IAAP Implementation Manual (draft dated February 2020), the state currently funds all project types at Primary airports at 3.125 percent, Nonprimary NPIAS (Regional, Local, and Basic) at 5 percent, and non-NPIAS at 50 to 75 percent.<sup>15</sup> The state could choose to modify these percentages.

In some states, commercial service airports (Primary airports) are not eligible for state grant matches for federally funded projects. If this method were applied to Idaho, it would reduce the state's share of system costs from \$65 million to \$47.9 million, a savings of almost \$18 million. If the state chose to fund Nonprimary NPIAS airports at three percent instead of five percent, this would reduce the state's share to \$55.4 million, a savings of \$10.4 million. If the state chose to fund all non-NPIAS airport projects at a maximum of 25 percent, the state's share would be \$53.5 million, a savings of \$12.4 million. **Figure 8-40** displays the amount of funds by airport role that could be saved by implementing these three approaches simultaneously. This would reduce the state's share to \$25.1 million but may put the projects or airports in jeopardy as the funding shortfall would need to be provided by the airport sponsors or the projects would be significantly delayed or not completed.

<sup>&</sup>lt;sup>15</sup> The percent of match varies based upon a formula indexed to the community's population. Small rural airports receive a greater match of the project costs than the larger, more populated communities.



FIGURE 8-40: POTENTIAL FUNDING SAVINGS THROUGH MODIFIED FUNDING ALLOCATIONS

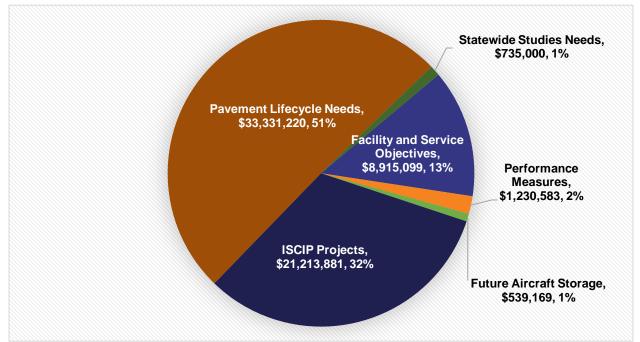


Source: Kimley-Horn, 2020

## Scenario 3: Funding by Project Type

**Figure 8-41** displays the cost and percentage of state costs by the project type. Pavement maintenance is the largest portion of the state's share of project costs at 50 percent and future aircraft storage the smallest at one percent.

## FIGURE 8-41: STATE COSTS BY PROJECT TYPE



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics

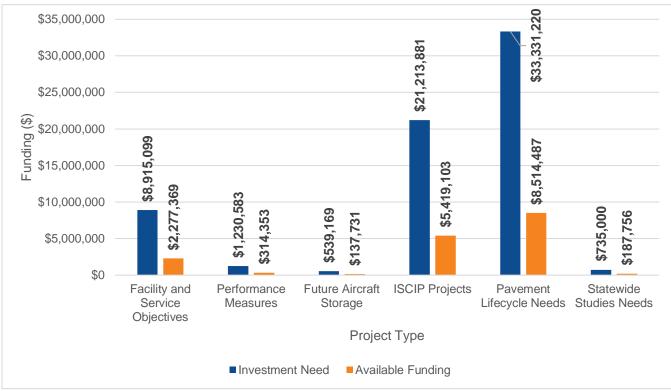


This scenario reviews how much of each type of project could be funded if those same percentages were applied to the baseline available funding of \$16.8 million. As shown in **Figure 8-42**, no one project type could be fully funded by this approach with the baseline available funding.

# Percent of Total Investment Need for Airport Role x Available Funding = Available Funding for Project Type

As an example of how this methodology may work, Facility and Service Objectives are 14 percent of the total state cost. Thus, under this scenario, \$2.3 million of the available state funding would be allocated to those types of projects. This would fund 26 percent of the estimated Facility and Service Objective costs. This \$2.3 million could be used to fund the runway lengthening projects, in which the state share was estimated at \$2 million.

## FIGURE 8-42: INVESTMENT NEED COMPARED TO FUNDING BASED ON PERCENT OF TOTAL COST



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2020

Additionally, this methodology could be applied as a first or second step in conjunction with the amount allocated by airport roles as discussed in Scenario 2: Funding Allocation by Airport Role. If it was determined that there was \$2.3 million available for facility and service objectives, it could then be allocated amongst the airports by role.

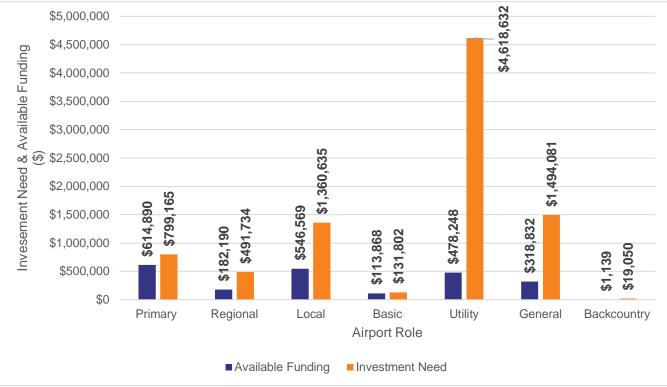
# Percent of Total Investment Need by Airport Role x Available Funding by Project Type =

## Available Funding for Airport Role for Project Type



**Figure 8-43** displays the funding available by airport role for facility and service objectives projects in this hypothetical scenario. Again, no one airport role could be fully funded with this approach. As an example, Local airports represent 24 percent of the total investment need. Applying 24 percent to the \$2.3 million allocated in this scenario would result in \$546,500 available to Local airports for facility and service objectives projects. Comparing to the investment need for Local airports for this project type of \$1.3 million, there would be a \$814,000 shortfall.

## FIGURE 8-43: HYPOTHETICAL AVAILABLE FUNDING FOR FACILITY AND SERVICE OBJECTIVES BY AIRPORT ROLE



Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020; ITD Aeronautics, 2019

As discussed previously, each scenario has numerous permutations based on the variables used. In this case, rather than calculating the amount available on the total investment needed by airport role, it could be calculated on the investment needed for specific project type by airport role. Using the example above, Local airports represent only 15 percent of the facility and service objectives projects which would equate to receiving only \$342,000, \$206,000 less than the above permutation that is based on 24 percent. Again, even using this permutation, no one airport role for this project type could be fully funded with this approach with the baseline available funding.

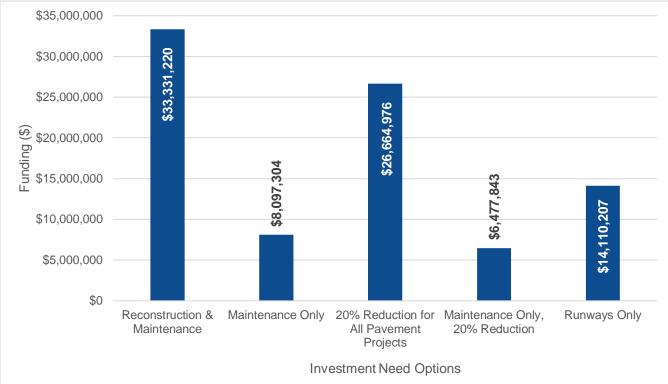
# Percent of Project Type Investment Need by Airport Role x Available Funding by Project Type = Available Funding for Airport Role for Project Type



## Scenario 4: Reduce Pavement Maintenance

As shown in **Figure 8-44**, it is estimated that pavement reconstruction and maintenance will cost \$33.3 million to the state over the 20-year period. This scenario allows for an infinite number of permutations that could be analyzed to reduce the state's investment need for pavement maintenance and reconstruction costs, each with their own set of implications and benefits to the individual airports and overall system. Any combination of reducing the funding contribution level by project type and/or airport role would result in more savings to the state. It should be noted that reducing the funding could put the pavement projects in jeopardy as the shortfall would likely need to be provided by the airport sponsor or the project would be significantly delayed or not completed. Also, delaying pavement maintenance generally results in higher costs as reconstruction may be necessary sooner than has been assumed because the preventative maintenance was not performed to extend the useful life of the pavement.

**Figure 8-44** compares the total investment need related to pavement lifecycle costs to the potential state investment need for potential scenarios to reduce the state's investment as described below.



# FIGURE 8-44: STATE INVESTMENT NEEDS FOR POTENTIAL REDUCED PAVEMENT MAINTENANCE AND RECONSTRUCTION OPTIONS

Sources: Kimley-Horn, 2020; J-U-B Engineers, 2020

## **Option 1 - Pavement Maintenance Only**

By completing only maintenance and no reconstruction projects, the state investment need would be reduced to \$8 million, reducing the estimated costs to the state by \$25.2 million. It should be noted that reducing the funding could put the pavement project in jeopardy as the shortfall would likely need to be provided by the airport sponsor or the project would be significantly delayed or not completed. While the baseline funding could fully fund the state's share of the pavement maintenance, it would consume 39 percent of the available state funding for a project type that is estimated at 32 percent of all investment needs.



## **Option 2 - Reduce State Contribution**

If the state decided to reduce its share of all pavement maintenance costs by 20 percent for each airport role, this scenario would reduce the state's investment need to \$26.6 million, a savings of \$6.6 million. If the state contributed only to maintenance at 80 percent of current funding levels (a 20 percent reduction), the state share would be \$6.4 million.

## **Option 3 - Types of Maintenance Projects**

Of the 83.8 million square feet of pavement in Idaho, 26.3 million is runway and 57.5 million is taxiway and apron. The state could theoretically choose to no longer fund to certain types of pavement area types such as aprons or taxiways (e.g., contribute only towards runways) or contribute only to NPIAS airports.

As shown in **Figure 8-44**, the state's investment need of the pavement maintenance of runways is \$14.1 million, or 42 percent of the state's share of the total pavement maintenance cost. If the state chose to fund only maintenance of runways, it would reduce the overall state investment need but would still not fulfill the funding shortfall. By allocating \$14.1 million of baseline available funding towards pavement maintenance it would leave only \$2.7 million for all other project types.

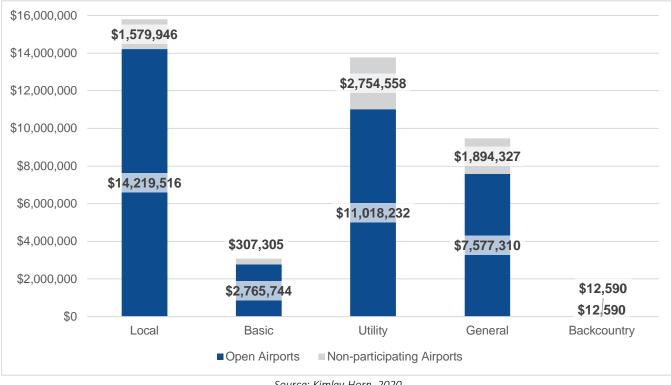
## **Scenario 5: Reduce Participation in State Funding Programs**

There are currently 75 public airports that participate in the IAAP. If the number of public-use airports able to participate in the state funding program were reduced, this would also reduce the state's costs. This scenario considers the potential impacts of excluding 12 airports across different roles as listed below. This single scenario would reduce the state's share to \$59.4 million, a savings of \$6.5 million to the state. Averages listed below are based on **Figure 8-37**.

- Reduction of 10 percent, or two, Local airports. With the average state funding cost for a Local airport of \$831,551, this would amount in a savings of \$1.58 million over the 20-year period.
- ✤ Reduction of 10 percent, or one, Basic airport. Based on the average state funding cost, this would amount in a savings of \$307,305 over the 20-year period.
- → Reduction of 20 percent, or one, Utility airport. Based on the average state funding cost, this would amount in a savings of \$2,295,465 over the 20-year period.
- → Reduction of 20 percent, or five, General airports. With the average state funding cost for a General airport of \$411,810, this would amount in a savings of \$1,894,417 over the 20-year period.
- → Reduction of 50 percent, or four, Backcountry airports. With the average state funding cost for a Backcountry airport of \$3,597, this would amount in a savings of \$12,590 over the 20-year period.



FIGURE 8-45: POTENTIAL FUNDING SAVINGS THROUGH REDUCING AIRPORTS' PARTICIPATION IN STATE FUNDING PROGRAMS



Source: Kimley-Horn, 2020

# System Costs and Alternative Scenarios Summary

This chapter represents one of the most significant outcomes of the 2020 IASP Update—revealing that aviation investment needs in the state far outweigh available funding. The details presented here provide a comprehensive assessment of the resources that would be required to optimize the system to meet all current and anticipated future demands. Because of the significant gap been investment need and available funding, the ITD Division of Aeronautics should consider updating its priority rating system to align with the reality of resource availability, focusing first on safety and security, then shifting to asset preservation and balancing supply and demand within the existing system. These efforts will depend upon the collaborative efforts between the broad aviation community inclusive of the ITD Aeronautics, airport administration; federal, state, and local policymakers; and other stakeholders.

The outcomes of the 2020 IASP Update and concurrent 2020 AEIA Update have also underlined that the benefits of aviation are significantly greater than investment into the system. Not only do Idaho airports support over 33,000 Idaho jobs, contribute \$1.3 billion in earnings, and \$4.9 billion in total economic impact, but aviation supports the quality of life, safety, security, and well-being of residents across the state. In general, aviation economic impact grows faster than system investment—meaning that investing in aviation is a smart and impactful use of taxpayer dollars. Figure 8-46 depicts Idaho airports' total economic impact versus annualized needs.

## FIGURE 8-46: IDAHO AIRPORTS ANNUAL INVESTMENT NEED VERSUS TOTAL ECONOMIC **IMPACT**



Sources: Kimley-Horn, 2020; InterVISTAS, 2020



In the following chapter, the 2020 IASP Update takes a more detailed look into available funding at the state level and offers actionable policy recommendations to implement the findings of this study. These recommendations build upon the information present here and identify key strategies to ensure Idaho's aviation system remains safe, viable, and sustainable through the 2037 planning horizon.



# CHAPTER NINE: POLICY ANALYSIS AND RECOMMENDATIONS

## Introduction

As the final element of the 2020 Idaho Aviation System Plan (IASP) Update, this chapter provides direction and guidance to the Idaho Transportation Department Division of Aeronautics (ITD Aeronautics) on prioritized recommendations for enhancing Idaho's airport system. As ITD Aeronautics' long-range planning document, this study serves a tool to guide informed decisions related to the planning, development, and funding of the state's aviation system. The statewide airport system is a key transportation and economic asset to Idaho, so it is essential that the preservation and improvement of the system continues over time. The policy recommendations developed as part of the 2020 IASP Update provide ITD Aeronautics with the framework to meet new challenges and evolving conditions that may affect the system over time.

The study has employed a strategic approach to identify and evaluate the current and future needs of the Idaho airport system over the next 20 years. The statewide and airport-specific recommendations provided in this chapter represent the culmination of those efforts and align with the aviation system goals identified and adopted at the beginning of the study. The study then documented the comprehensive data inventory process conducted as part of the study (Chapter 2: Inventory of System Conditions) and evaluated the functions of each airport in the broader system (Chapter 3: Airport Role Analysis). This data was then used to evaluate the current and potential future system's ability to optimally support aviation demand today and into the future (Chapter 5: System Adequacy Analysis and Chapter 7: Future System Performance). The 2020 IASP Update also analyzed various aviation- and non-aviation-related factors that may affect future aviation demands, development potential, and related needs (Chapter 4: Forecasts of Aviation Activity and Chapter 6: Supplemental System Context). Specific projects and associated costs for addressing airport-specific deficiencies were then identified and documented (Chapter 8: Project Costs and Implementation Plan). This chapter provides an overview of the significant results of these previous analyses and statewide policy recommendations to advance ITD Aeronautics' mission of providing the "highest quality, most efficient, and safest airport system for all users of aviation services". These recommendations align with the 2020 IASP Update's goals of geographic coverage; preservation; safety and security; and facility, transportation, and economic support.

It is important to note that the system plan was designed to ensure Idaho's ability to meet current and future aviation needs for all users. As such, the study established airport-specific facility and service objectives as well as statewide study needs and recommendations that collectively serve as a guide for the continual and sustainable development of Idaho's airport system. However, airport-specific master planning processes are required to implement individual airport planning, design, and environmental requirements. The recommendations of the 2020 IASP Update should be used as guidelines for airport and state development needs, but projects must be supported and justified based on local needs, priorities, capabilities, and decisions. Further, airport improvement projects must be shown on a current Airport Layout Plan (ALP) and be eligible and justified for funding if federal Airport Improvement Program (AIP) dollars are sought at airports included in the National Plan of Integrated Airport Systems (NPIAS).

Prior to offering recommendations to optimize the Idaho airport system, this chapter begins by first reviewing existing policies found in the Idaho Administrative Rules, the Idaho Code (or Code), and ITD's Administrative and Board Policies that pertain to aviation and ITD Aeronautics. In addition, this chapter reviews priority rating models used by other states' funding programs and identifies opportunities for ITD Aeronautics to enhance its own



program based on best practices and state-specific needs. In summary, this chapter offers policy recommendations based on the findings of the 2020 IASP Update and current needs of ITD Aeronautics.

Analyses in this chapter are presented in the following sections:

- ✤ Role and Mission for Aviation
- → Current Aviation Policies
- ✤ Recommended Policies for Consideration
- ✤ Aviation Funding and Priority Distribution
- ✤ Considerations for Modifications to the Existing Priority System

# **Role and Mission of Aviation**

The following section provides an overview of the existing state legislation, regulations, and policies that guide the work of ITD Aeronautics and the 75 publicly owned, public-use airports that comprise the Idaho aviation system.

## **Role of Aviation in Idaho**

Aviation in Idaho serves a diverse range of activities, supports numerous industries, and enhances the social and economic fabric of the state. These activities include scheduled and unscheduled commercial passenger service, wildland firefighting, transporting cargo, recreational flying (including to the backcountry), agricultural spraying, and more. Airports in Idaho, as well as the activities associated with the broader aviation- and aerospace-related industries, are governed by a multi-tiered system supported at the federal and state levels. At the federal level, the U.S Department of Transportation's (DOT) Federal Aviation Administration (FAA) oversees the development of airports included in the NPIAS, the National Airspace System (NAS), and aircraft ownership. While the FAA oversees those aspects of aviation, it is the responsibility of local government jurisdictions to oversee the land an airport sits on as it relates to environmental issues, land use compatibility, and access to airports. ITD Aeronautics provides guidance and support for NPIAS and non-NPIAS publicly owned, public-use airports in the state. Moreover, ITD Aeronautics participates in providing matching grants for federal funds for NPIAS airports, allocates state grant money to non-NPIAS facilities that do not receive federal funding, and works with all airports to coordinate overall needs.

The goals developed as part of the 2020 IASP Update are intended to improve safe and secure access to the NAS for residents, visitors, and businesses across Idaho; enhance the state's economic vitality; and preserve existing aviation infrastructure. As such, the goals of the 2020 IASP Update build on the vision of Idaho's *Long-Range Transportation Plan* known as IDAGO with the specific aviation goals as follows:

- → Geographic coverage
- ✤ Facility support
- ✤ Preservation
- ✤ Transportation support
- ✤ Safety and security
- ✤ Economic support

Each airport in Idaho serves a unique function in its surrounding community by way of business or economic development, agricultural support, promoting tourism, and so on. Yet, each airport exists as one part of a larger system. Together, Idaho's airports connect Idahoans to the intrastate, domestic, and global air transportation system while providing access for goods and visitors into Idaho. The goals and guiding visions of the Idaho transportation system are best attained through establishing and implementing effective policies for all modes, including aviation.



## **Aviation Mission for ITD Aeronautics**

Outside of the goals and guiding principles established for the 2020 IASP Update, ITD Aeronautics is guided by its own mission statement:

ITD Aeronautics serves to provide the highest quality, most effective, efficient, and safest airport system for all users of aviation services. To this end, the [agency] plans and implements essential programs, services, and projects to develop, encourage, and foster an exemplary system of airports to meet the current and future requirements of a growing and diverse Idaho aviation community.<sup>1</sup>

ITD Aeronautics' mission was considered throughout the development of the 2020 IASP Update as the system's performance was evaluated, and recommendations were developed.

## **Current Aviation Policies**

Current policies relating to ITD Aeronautics' responsibilities in furthering public interest and aeronautical progress while promoting the growth of aviation within Idaho are detailed in this section, with an overview of Idaho Administrative Rules, the Idaho Statutes, and ITD's Administrative and Board Policies.

## **Idaho Administrative Rules**

The Idaho Administrative Code contains the Idaho Administrative Procedures Act (IDAPA). These administrative rules are reviewed and approved by the Idaho legislature. **Table 9-1** summarizes the eight sections and multiple subsections included in the IDAPA relevant to ITD Aeronautics as provided in IDAPA Title 39 - Transportation. These rules deal with a myriad of issues including federal regulations, the Idaho Airport Aid Program (IAAP), through-the-fence operations, and operations at state airports.

SECTION*	TITLE 39 - TRANSPORTATION
39	.04.01 – REGULATIONS GOVERNING AERONAUTICS AND AVIATION
000	Legal Authority
001	Title and Scope
002	Incorporations by Reference
010	Definitions
	SUBCHAPTER A – RULES GOVERNING AIRCRAFT REGISTRATION
100	Aircraft to be Registered
101	Registration Period
102	Applications for Aircraft Registration
103	Fees
104	Registration to be Carried and Displayed
105	Transfer of Title or Interest in Aircraft
106	Exemptions
SUI	BCHAPTER B - RULES GOVERNING OPERATIONS AT STATE AIRPORTS
200	Special Operating Restrictions on Airports
201	Aircraft Parking, Loading, and Tiedown
202	Vehicles, Domestic Animals, Baggage, and Objects
203	Camping, Trash, and Refuse

TABLE 9-1: IDAHO ADMINISTRATIVE RULES (TITLE 39) PERTAINING TO ITD AERONAUTICS

<sup>1</sup> https://itd.idaho.gov/aero/

SECTION*	TITLE 39 - TRANSPORTATION
204	Aircraft Fueling, Agricultural Operations, and Hazardous Material
205	Commercial Operations
SUBCHA	PTER C - RULES GOVERNING COMMERCIAL AND THROUGH-THE- FENCE
	OPERATIONS AND HANGAR CONSTRUCTION AT STATE AIRPORTS
300	Application
301	Operational Agreement
302	Safety and Access
303 - 399	Reserved
	HAPTER D - RULES GOVERNING MARKING OF HAZARDS TO AIR FLIGHT
400	Requirements
401	Exceptions
	SUBCHAPTER E – RULES GOVERNING RESTRICTION
	OF FLIGHT IN DESIGNATED EMERGENCY AREAS
500	General
	SUBCHAPTER F – RULES GOVERNING AERIALSEARCH
600	AND RESCUE OF LOST AIRCRAFT AND AIRMEN Search Notification
601	Search Initiations
602	Organization
603	Resources
603	Procedure
	BCHAPTER G – RULES GOVERNING IDAHO AIRPORT AID PROGRAM
700	Project Allocation Priority Principles
700	Program Criteria and Limitations
701	
	Percentages of Cost
703	Granted Allocation Items
704	Airport Sponsor Eligibility
705	Applications for Aid
706	IAAP Implementation Method

\*Note: Subsections denoted as "Reserved" for future legislation have been removed from the table for brevity. Source: IDAPA 39 Administrative Rules, 2020

Rule 39.04.01 contains multiple subchapters and subsections to further detail the conduct identified by these rules. For example, , Subchapter D - Rules Governing Marking of Hazards to Air Flight, Subsection 400 - Requirements contains the following:

- 01. Hazardous Structures
- 02. Guyed Towers
- 03. Lines, Wires, and Cables
- 04. Spans Between Support Piers
- 05. Construction

- 06. Notice Submittal
- 07. Notice of Proposed Construction
- 08. Submittal of Notice
- 09. Intent



IDAPA 39.04.01, Subchapter D aims to promote general public safety and the safety of persons operating, using or traveling in aircraft by establishing requirements for marking of hazards to air flight through Idaho's airspace.<sup>2</sup> The list above provides insight into the level of detail included in the IDAPA for each rule section and subsection pertaining to ITD Aeronautics. It is important that the rules and associated subsections are detailed and comprehensive so that they can effectively guide aviation progress in the state. More information on IDAPA 39.04.01, Subchapter G – Rules Governing IAAP is included in **Aviation Funding and Priority Distribution** section of this chapter.

## **Idaho Statutes**

The current Idaho Statutes were updated during the 2019 Legislative Session. The Idaho Statutes include 74 titles designed to translate the public will into effective policy in matters regarding levying taxes, overseeing administration of state agencies, appropriating funds, and more. Title 21 - Aeronautics establishes requirements for the ITD Aeronautics' duties for development of aviation in the state. **Table 9-2** presents all titles and chapters relevant to aviation in Idaho. There are eight chapters and multiple sections for each. These statutes deal with a myriad of issues including funding, aircraft operation, taxation, duties of ITD Aeronautics, and airport zoning and regulation.

	TABLE 9-2: IDAHO STATUTES, TITLE 21 - AERONAUTICS
	TITLE 21 - AERONAUTICS
	CHAPTER 1. AERONAUTICS ADMINISTRATION
21-101	Definitions
21-102	Declaration of Purpose
21-104	Development of Aeronautics
21-105	Municipal Airports
21-106	State Airports
21-107	State Airways, Charts and Bulletins
21-108	Contracts — Law Governing
21-109	Exclusive Rights
21-110	Public Purpose of Activities
21-111	Rules, Regulations, Standards
21-112	Reckless Operation of Aircraft
21-112a	Operating Aircraft While Under the Influence of Alcohol, Drugs or Any Other
	Intoxicating Substances
21-112b	Test of Pilot for Alcohol Concentration
21-113	Federal Airman and Aircraft Certificates
21-114	Registration of Aircraft — Requisites
21-116	Investigations and Hearings
21-117	Federal-State Joint Hearings — Reciprocal Services — Accident Reporting
21-118	Use of State and Municipal Facilities and Services
21-119	Enforcement of Aeronautics Laws
21-120	Department Orders — Notice and Opportunity for Hearings — Judicial Review
21-121	Penalties — General and Special
21-122	Exchange of Violations Information
21-123	Separability
21-124	Uniform State Aeronautics Department Act
21-131	Aeronautical Administration Act Of 1970

## TABLE 9-2: IDAHO STATUTES, TITLE 21 - AERONAUTICS

<sup>2</sup> Idaho Airport Land Use Guidelines, Chapter 4, 2016



	TITLE 21 - AERONAUTICS
21-132	Declaration of Purpose
21-134	Idaho Aeronautics Advisory Board Created — Duties — Compensation
21-135	Composition of Advisory Board — Number — Appointment — Qualifications
21-136	Appointment of Members — Term — Vacancies
21-137	Certificates of Members — Oath — Political Affiliation — Bond
21-138	Members Serve at Pleasure of Governor
21-142	Powers and Duties of Board
21-146	Funds, Appropriations and Other Moneys for the Department of Aeronautics
	Transferred to Control of Idaho Transportation Board
21-147	Continuation of Existing Statutes — Effect
21-148	Continuation of Rights and Privileges of Present Employees — Effect
21-149	Conflicts with Other Laws
21-150	Violations — Penalty
	CHAPTER 2. STATE LAW FOR AERONAUTICS
21-201	Definition of Terms
21-202	Sovereignty in Space
21-203	Ownership of Space
21-204	Lawfulness of Flight
21-205	Damage on Land
21-206	Collision of Aircraft
21-207	Jurisdiction Over Crimes and Torts
21-208	Jurisdiction Over Contracts
21-209	Uniformity of Interpretation
21-210	Uniform State Law of Aeronautics
21-211	Proceeds of Licenses and Fines — State Aeronautics Fund
21-213	Restrictions on Use of Unmanned Aircraft Systems — Definition — Violation —
	Cause of Action and Damages
	CHAPTER 3. IDAHO AIR COMMERCE ACT OF 1929 — REPEALED
	CHAPTER 4. AIR NAVIGATION FACILITIES
21-401	Authority to Provide Facilities — Expense — Issuance of Bonds — Duties of
24 402	Commissioners and Councilmen — Restriction on Lease of Facilities
21-403	Counties and Municipalities May Share in Cost of Airports
21-404 21-405	Tax Levy Authorized
21-405	Cooperative Agreements for Division of Costs Funds to Carry Out Contracts
21-400	CHAPTER 5. AIRPORT ZONING ACT
21 501	Definitions
21-501	
21-502 21-509	Aviation Hazards Contrary to Public Interest Separability
21-509	Separability Short Title, The Airport Zoning Act
21-510	Short Title, The Airport Zoning Act State Land Adjacent to Public Airport — Notice of Intention to Sell or Lease
21-511	Authority to Sell or Lease
21-512	Declaration of Policy
	Definition of Terms
21-514	Definition of Terms



	TITLE 21 - AERONAUTICS
21-515	Marking of Hazards to Air Flight
21-515a	Hazards to Air Flight — Standards for Guyed Towers
21-516	Determination of Hazards
21-517	Procedure for Determination of Hazards
21-518	Judicial Review
21-519	Rules and Regulations
21-520	Violation of Act, Penalties, Injunction
	CHAPTER 6. STATE LANDS RESERVED FOR PUBLIC AIRPORTS
21-603	Twin Falls County — Description of Lands
21-604	Twin Falls County — Lease of Lands
21-605	Valley County — Description of Lands
21-606	Valley County — Lease of Lands
	CHAPTER 7. DAMAGES TO AIRCRAFT
21-701	Definitions
21-702	Stealing From, Interfering With, Or Destruction of Aircraft or Air Navigation
	Facilities
21-703	Penalty When Death Results
	CHAPTER 8. REGIONAL AIRPORTS
21-801	Purpose — Development of Regional Airports
21-802	Division into Regions
21-803	Appointment of Boards of Trustees
21-804	Degree of Financial Participation by Counties
21-805	Regional Airport Authority — Establishment by Election
21-805a	Annexation to Existing Authority — Election
21-805b	Withdrawal from Existing Authority — Election — Indebtedness
21.000	Apportionment — Trustee Representation
21-806	Election of Board of Trustees
21-807	Powers of Board Issuance of Bonds
21-808	
21-809 21-810	Bond Issue — Submission to Electors for Approval Records — Audits — Bonds
21-810	Purpose — Exemption from Taxation
21-811	Issuance of Revenue Bonds
21-812	Dissolution of Authority
21-014	Source: Idaho Statutes, Title 21, 2019

## Local Land Use Planning

Title 21, Chapter 5 — Airport Zoning Act pertains specifically to zoning as it relates to airspace and airport compatible land use. This chapter establishes state authority to prevent the development of aviation hazards that are contrary to public interest. An aviation hazard is defined as "any new or existing structure, object of natural growth, use of land, or modification thereto, which endangers the lives and property of users of an airport or of occupants of land in its vicinity and that reduces the size of the area available for landing, taking off and maneuvering of aircraft, or extends up into the airspace between airports to cause disastrous and needless loss of life and property". Title 21, Chapter 5 specifies that the Director of ITD does not have the authority to prevent or



remove land uses that may be deemed as an aviation hazard; therefore, the authority given to the Director of ITD is limited to the airspace.<sup>3</sup>

Airport planning and land use regulations also appear in the Idaho Statutes in Title 67 - State Government and State Affairs, Chapter 65 — Local Land Use Planning. Idaho Senate Bill (SB) 1265 amended parts of Idaho Code Title 21, Chapter 5 and Title 67, Chapter 65 (effective July 1, 2014). The legislation requires more proactive land use compatibility planning surrounding Idaho's airports through the local comprehensive planning process. SB 1265 promotes closer collaboration between local zoning authorities, local airport authorities, and ITD Aeronautics in the interest of flight and community safety.<sup>4</sup> Idaho Code 67-6508(q) (Section Q) is particularly important for airport compatible land use planning and zoning in Idaho. Section Q requires cities and counties to prepare a Public Airport Facilities section as part of their comprehensive plan to document:

- → Airport facilities location(s)
- Scope and type of airport operations (occurring at that/those facility[ies])
- → Existing and planned future airport development and infrastructure needs
- Economic impact to the community

To assist city and county planners fulfill the mandates of Section Q and prepare the Airport Facilities Section of their local comprehensive plans, the ITD Aeronautics developed *"Recommended Guidance for Cities and Counties to Prepare Section Q for Your Comprehensive Plan".* The document outlines each section to be included in the Public Airport Facilities section, including helpful language on different airport and aviation-related terminology. The guide provides guidance on 14 categories of information to be included in the Public Airport Facilities section, NPIAS airport service levels, 2020 IASP Update role, airport reference code (ARC), number and types of based aircraft, aircraft operations, and passengers, etc. Detailing these categories in Section Q is helpful to practitioners as they can use the document as a checklist to ensure that all important information is included in their Public Airport Facilities section of the comprehensive plan. Specific guidance is as follows:

- Identify airports as essential community facilities that must be considered by local government planning and zoning commissions. If any changes to a comprehensive plan are being considered, the airport manager must be informed.
- → Define airport roles including NPIAS and 2020 IASP Update roles.
- Describe the importance of the airport to the local community and to the transportation system as a whole. Information of multi-jurisdictional coordination, economic development, and compatible residential, commercial, and industrial land uses around the airport should be considered.
- → Analyze airport hazards and hazard areas to determine the types of airport hazard areas within the airport's jurisdiction and neighboring jurisdictions. Consider information on how to prevent the creation of airport hazards by regulating and restricting the height of structures and objects of natural growth around airports.
- Include an analysis that considers an airport's facility locations, the scope and type of airport operations, and future and planned airport development and infrastructure needs, including considerations of economic impact to the community.
- → Use the Idaho Airport Land Use Guidelines as the primary reference while writing the revised comprehensive plan section. Staff, consultants, and board members of the local airport should be included as essential members of the preparation team.

<sup>&</sup>lt;sup>3</sup> Idaho Airport Land Use Guidelines, Chapter 4. 2016

<sup>&</sup>lt;sup>4</sup> Idaho Airport Land Use Guidelines, Chapter 4. 2016



Each Public Airport Facilities section in a comprehensive plan should also include issues and action plan sections. Section Q provides a list of common issues that a planner may choose to select for inclusion, or they may develop their own issues. ITD Aeronautics indicates which of the issues provided in Section Q are recommended to be included in comprehensive plans. Recommended issues are as follows:

- → Importance of proactive protection of:
  - Public health, safety, and general welfare of both airport users and the communities around the airport. Public-use airports in the city/county should receive primary consideration, while planners should be cognizant of the impacts on private-use aviation.
  - Operations, orderly maintenance, and development of airports
- Planning and expansion of the airports should account for existing development, economic activity, and transportation infrastructure to integrate, complement, and augment them.
- → Compatible land use planning around the airports should be proactive and effective in its purpose while keeping in mind property owner's rights and concerns.
- Ordinances need to prevent the creation of airport hazards, such as obstructions and/or incompatible land uses.
- ✤ Protect local, state, and federal investments.
- ✤ Encourage economic growth and community benefits.

The items included in the action plan outline specific actions that each city/county should consider for their ordinance(s) and zoning regulation(s). There are 11 action items recommended by ITD Aeronautics for inclusion into the comprehensive plan. The following list is not comprehensive, but features some of the action plan items recommended by ITD Aeronautics:

- > Specify compatible and permitted land uses in zones around airports
- → Regulate and restrict the height of structures and objects of natural growth around airports
- → Prevent encroachment of incompatible development
- → Provide steps to evaluate and approve public and private airport construction

Section Q of Idaho Code 67-6508 is an important step towards supporting compatible land uses around airports. It provides practitioners an approachable and effective way to draft content in their comprehensive plans that outlines the importance of protecting land uses around airports, emphasizes the importance of airports in the multimodal transportation system, and underlines the many critical economic and quality of life provided to Idaho's communities.

## **Administrative and Board Policies**

The Aeronautics Advisory Board and ITD Aeronautics have established board and administrative policies in accordance with the authority provided by the specific Idaho Codes outlined above. Administrative and board policies are linked in that the board policy identifies the purpose of the policy, while the administrative policy portion is used for implementation. **Table 9-3** summarizes the board and administrative policies and details the state legal authority behind each policy.



## TABLE 9-3: SUMMARY OF ADMINISTRATIVE AND BOARD POLICIES

BOARD OR		
ADMINISATIVE POLICY	Brief Description	State Legal Authority
4008/5008 – Open Meeting Requirements	Provides direction to ITD Aeronautics and its advisory bodies of the open meeting requirements contained in the Idaho Code	Idaho Code 74-201, -202, -203, - 204, -206
4011/5011 – Idaho Transportation Investment Program (ITIP)	Aims to establish, maintain, and publish a five-year ITIP that follows all applicable state and federal regulations	Idaho Code 21-142 Idaho Code 40-310(4), -310(6), - 312(1), -312(2), -312(3), -707, - 708
4034/5034 – Charter or Rented Aircraft and Pilot's Requirement	Establishes rules and regulations for aircraft and pilots	Idaho Code 21-104, -114, -119
4035/5035 – Coordination with Aeronautics Advisory Board	Establishes the activities of the Aeronautics Advisory Board	Idaho Code 21-134, -135, 136, - 137, -138
4036/5036 – State Aircraft Operation	Establishes regulations for the use of state aircraft to ensure safety and efficiency	Idaho Code 21-142(13), -142(16)
4037/5037 – Aeronautical Activities	Establishes the operations and activities of ITD Aeronautics	Idaho Code 21-102, -104, -106, - 114, -119, -142, -502, -503
4064/5064 – Classification and Maintenance of State- Owned and/or Operation Airports	Establishes authority for the director to define the use of state-owned and/or operated airports and establish maintenance levels	Idaho Code 21-106
4065-5065 – Acquisition and Closure of State Airports	Assigns the Director responsibility to submit recommendations for acquisition or closure of state airports	Idaho Code 21-102, -104, -106, - 114, -119, -142
4066/5066 – Airport Caretakers	Gives authority to the Director to establish caretaker responsibilities for state-owned and/or operated airports	Idaho Code 21-142(13), -142(16)
4075/5075 – Assistance to Idaho Airports	Defines ITD's role in aeronautics in Idaho	Idaho Code 21-102, -104, -105, - 106, -132, -142

Source: ITD Board and Administrative Policies, 2020

To expand on Policy 4075/5075 from Table 3, ITD Aeronautics is responsible for advancing the public interest and aeronautical progress of the state and promoting the growth of aeronautics in accordance with the best interest of the citizens of Idaho. As such, ITD Aeronautics is committed to protect public airports as essential community facilities that provide safe transportation alternatives and contribute to the economy of the state.<sup>5</sup> The following section provides more detail about the duties and role of ITD Aeronautics in achieving the overarching objectives defined in Policy 4075/5075.

## **ITD Aeronautics Duties**

The following section discusses the duties and role of ITD Aeronautics in maintaining and developing Idaho's airport system. The duties detailed are pertinent to the development of the state's airport system as identified in the Idaho Code, Title 21 - Aeronautics Chapter 1 – Aeronautics Administration. Idaho Code 21-104 describes the following duties relating directly to the development of the state's airport system:

<sup>&</sup>lt;sup>5</sup> ITD, Board Policy 4075, 2014



The department shall have general supervision over aeronautics within this state. It is empowered and directed to encourage, foster, and assist in the development of aeronautics in this state and to encourage the establishment of airports and air navigation facilities. It shall cooperate with and assist the federal government, the municipalities of this state, and other persons in the development of aeronautics and shall seek to coordinate the aeronautical activities of these bodies and persons. Municipalities are authorized to cooperate with the department in the development of aeronautics and aeronautics facilities in this state.

To summarize, the core responsibilities outlined in Title 21 are as follows:

- Expand air service capabilities to meet the increased demands of air transportation for both commercial and GA
- Promote safety in aviation
- ✤ Support improvement of airports and air navigation facilities

To effectively and efficiently support the actions and responsibilities of ITD Aeronautics, the agency is divided into the following five operational units:

- ✤ Administration
- ✤ Safety/Education
- ✤ Flight Operations
- ✤ Airport Maintenance
- ✤ Airport Planning and Development

In addition to the responsibilities discussed above, ITD Aeronautics is responsible for maintaining the Network Pavement Management System, a Search and Rescue Program, and the distribution of state grant funds. This list is not all inclusive, and ITD Aeronautics is responsible for many more components of maintaining and preserving the state's aviation system.

**Table 9-4** uses the National Association of State Aviation Officials (NASAO) *State Aviation Funding and Organization Report FY 2019 to* compare ITD Aeronautics' duties with those performed by other state aeronautical organizations across the U.S. Note the same states identified in Table 9-4 also appear when comparing other state's funding distribution policies in the *Review of Other State Funding/Priority Systems* section. While all of the data sourced in Table 9-4 is from 2019, excluding North Carolina that did not have updated NASAO information since 2015, there were some data points not included in the NASAO report. In instances were data was not reported Table 4 shows "N/P" for not provided. Limited updates have also been included based on familiarity with various state departments of transportation. This comparison is provided for reference in evaluating Idaho's current duties and whether changes to these current duties appear appropriate given the results of the 2020 IASP Update findings.



#### TABLE 9-4: COMPARISON OF ITD AERONAUTICS DUTIES/PROGRAMS WITH OTHER U.S. STATES

					NC						
STATE DUTY	ID	СО	IL	MT	(2015)	OR	SC	ТХ	UT	WA	WY
Aeronautical chart		$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$			
Aircraft registration	$\checkmark$		$\checkmark$	$\checkmark$	N/P	$\checkmark$		N/P	$\checkmark$	$\checkmark$	
Airfield maintenance project funding	~	✓	✓		✓	✓	✓	✓	√	$\checkmark$	~
Airfield pavement management program	~		$\checkmark$	√	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	√	√	~
Airport directory	√	$\checkmark$		$\checkmark$							
Airport preservation program	V				$\checkmark$			$\checkmark$		$\checkmark$	
Air service assistance program					N/P	$\checkmark$		N/P			$\checkmark$
Aviation education	√	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	
Channeling state <sup>1</sup>			$\checkmark$						$\checkmark$		$\checkmark$
Formal scoring system to rank projects	~		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			✓	✓
License airports			$\checkmark$		N/P	$\checkmark$		N/P			
NAVAID project funding		$\checkmark$	√		$\checkmark$						
Number of full-time employees (2019)	28	8	45	17	30	14	18	70	47	15	35
Own and operate state aircraft	√		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Pilot registration			$\checkmark$	$\checkmark$	N/P			N/P			
Revenue generating project funding	~	$\checkmark$		√	N/P	$\checkmark$		√	✓	√	✓
Search and rescue program	√		$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$	
State assistance for Local share of AIP match funds	~	$\checkmark$	$\checkmark$	√	$\checkmark$	$\checkmark$	$\checkmark$		✓	√	✓
State funding (state grants)	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Airport loan program		$\checkmark$	$\checkmark$	$\checkmark$	N/P					$\checkmark$	$\checkmark$

Notes: <sup>1</sup>Small commercial service airports and general aviation (GA) airports not receiving primary entitlements are required to submit pre-applications for the AIP program to their state aviation/aeronautics divisions. Pre-applications are prioritized by the state and then submitted to the FAA. Some states act as "agents" for airport sponsors. Sources: NASAO State Aviation Funding and Organization Report FY 2019, Kimley-Horn, 2020



# **Recommended Policies for Consideration**

The previous section provided an overview of the various Idaho legislative statutes and agency-specific policies that guide ITD Aeronautics' administration of the state's airport system and specific responsibilities of the agency. Using these existing policies as a foundation, the following section provides airport-specific and statewide recommendations to either:

- → Refine these policies in alignment with ITD Aeronautics' and the state's current priorities
- → Provide new guidance based on the findings of the 2020 IASP Update

Working from the performance measures (PMs) established during the 2020 IASP Update, policies considerations were developed to ensure system airports fulfill the goals of the airport system plan. This section first looks at recommendations developed to address performance measure deficiencies (i.e., reach the future performance measure targets) presented in *Chapter 7: Future System Performance*. The 2020 IASP Update then turns to statewide (i.e., "big picture") recommendations that generally need to be implemented or addressed directly by ITD Aeronautics.

## **Performance Measure Recommendations**

The 2020 IASP Update goal categories first presented in *Chapter 1: System Goals and Performance Indicators* can be summarized as follows:

- Geographic Coverage: Providing adequate air access and mobility throughout the state is a keystone of aviation as a modal system. Accessibility can be measured in terms of drive times or percent of population that has access to various types of airports or the activities they support.
- Facility Support: An effective airport system must be sufficiently developed to support current aviation demands for multiple user types with the flexibility and responsiveness to meet evolving demands over time. Recommended minimum airside and landside facilities and services were developed for each Idaho airport classification as first reported in *Chapter 5: Airport Roles Analysis* and analyzed in *Chapter 7: Existing System Performance* (current system) and *Chapter 9: Future System Performance* (future system).
- Preservation: Significant investment has been made into airports across Idaho. Providing adequate resources to preserve those resources is critical for ensuring long-term viability. Adequate zoning and land use controls around airports ensures airport operations can continue without undue safety risks or nuisance issues for pilots, passengers, and nearby communities.
- Transportation Support: Connectivity with other modal systems allows people and goods to travel between the airport and their next destinations. Ground transportation options, such a roadway access, rail connections, courtesy and/or rental cars, and public transit (i.e., public bus), offer pilots and passengers the opportunity to leave airport property to conduct business or engage in leisure activities. Easy transportation access facilitates the movement of air cargo and can play a role in where pilots choose to base their aircraft. As such, transportation support is an important component of an airport's ability to contribute to local economies.
- Safety and Security: Providing a safe and secure airport system is of the utmost importance for pilots and passengers in the air and people and property on the ground. This goal category assessed airports' performance in terms of specific FAA guidance (for NPIAS airports) and ITD Aeronautics. The 2020 IASP Update recommends that all Idaho airports achieve all applicable PMs in this goal category to maintain the highest level of safety throughout the system.
- Economic Support: Airports have the potential to serve as economic engines for their communities by providing an entry point for out-of-state visitors; providing permanent jobs in administration, maintenance, and operations; and conducting capital improvement projects. Airports also host on-airport tenants and support activities such as agricultural spraying, air cargo, medical flying, and wildland



firefighting—which together employ thousands of Idaho residents and contribute to the economy in a variety of ways. As such, this goal category is designed to assess if airport facilities are adequately matched to the economic characteristics and markets that the airport serves.

The 2020 IASP Update established a series of actionable PMs and informational performance indicators (PIs) and additional analysis (AA) points to serve as the metrics by which the airport's performance against these goals could be assessed (see *Chapter 1*). Future recommendations have only been developed for PMs, as these metrics can be influenced by actions (i.e., additional funding or policies) undertaken by either ITD Aeronautics or airports. PIs are considered informational in nature and are not action driven.

**Table 9-5** summarizes the recommendations identified for the 2020 IASP Update's PMs. Note that Geographic Coverage and Transportation Support do not have any associated PMs and are thus excluded from the table. Facility Support was evaluated in terms of airports' abilities to achieve their classification-specific facility and service objectives. Airport-specific projects associated with achieving these objectives are identified in *Appendix A*; costs for these projects are presented in *Chapter 8*.

2020 IASP UPDATE PMs	Proposed Recommendations
	GOAL: FACILITY SUPPORT
Achieve All Facility and Service	<ul> <li>Projects identified on an airport-specific basis (see Appendix A)</li> </ul>
Objectives	<ul> <li>Implement policy to recommend FAA A-I design standards for all airports (NPIAS and non-NPIAS) in future planning, including future IASP update</li> </ul>
	GOAL: PRESERVATION
Airports with Zoning for Height and Land Use Regulations	<ul> <li>Continue to work with airports and city/county planners to implement the <i>Idaho Airport Compatible Land Use Guidelines</i></li> <li>Support the implementation of Idaho Code Section 67-6508(q), which requires cities/counties to include a separate Public Airport Facilities section in their comprehensive plans</li> </ul>
	<ul> <li>Include land use compatibility guidelines in scopes of work for small airport master plans/ALPs for non-NPIAS facilities</li> </ul>
Airports with Master Plans or ALPs with Narrative (Within past 10 years)	<ul> <li>Continue to fund master plans at all airports eligible for IAAP and work with all airport sponsors to encourage updating planning documents on a continuous basis</li> </ul>
	<ul> <li>Develop and adopt a formal program that groups multiple non-NPIAS airports together under one project to complete master plans with abridged and highly airport-specific final documentation</li> </ul>
Airports Meeting ITD Aeronautics Pavement	<ul> <li>Continue to monitor and prioritize pavement-related needs via the Network Pavement Management System (NPMS)</li> </ul>
Condition Index (PCI) Standards	<ul> <li>Develop an ITD Aeronautics program to support the design and construction of pavement maintenance projects at non-NPIAS airports as prioritized by NPMS</li> </ul>
	GOAL: SAFETY AND SECURITY
Airports Without Close-In Obstructions	<ul> <li>Increase consideration of clear approaches during airport-specific planning processes</li> </ul>
	<ul> <li>Prioritize IAAP funding for clearing approaches</li> <li>Complete a Runway Approach Study</li> </ul>

## TABLE 9-5: 2020 IASP UPDATE PM RECOMMENDATIONS



2020 IASP UPDATE PMs	Proposed Recommendations
NPIAS Airports Meeting Current FAA Taxiway Design Standards	<ul> <li>Review master plan scopes of work for inclusion of taxiway design evaluation to meet current FAA design standards</li> </ul>
	<ul> <li>Include airfield geometry evaluation in scopes of work for small airport master plans/ALPs</li> </ul>
	GOAL: ECONOMIC SUPPORT
Airport Capable of Meeting Business User Needs	Shift this PM to become an informational PI during the next IASP Update
Airports that Accommodate Aerial Application Services	Shift this PM to become an informational PI during the next IASP Update

Source: 2020 IASP Update

## 2020 Statewide Policy Recommendations

Based on the findings of this study, current state priorities, and anticipated future aviation demands, the eight statewide policy recommendations of the 2020 IASP Update are presented in **Table 9-6**.<sup>6</sup> These recommended policies align with the mission of ITD Aeronautics and the goal categories outlined above. Further, each of these recommendations work in concert with the agency's three core responsibilities as outlined in Idaho Code Title 21. For example, conducting a Regional Air Service Study would identify needs associated with expanding Idaho's air service capabilities. An Emerging Technology Study would promote safety in aviation and support improvements of airports and air navigation facilities. Improving and clarifying the state's priority rating system could help the system meet increased demands for commercial service and GA, promote aviation safety, and support improvements throughout the system. The table highlights the relationships between the 2020 IASP Update, the study's goal categories, and the core responsibilities of ITD Aeronautics. Statewide recommendations also align with the recommendations of the previous 2010 IASP as discussed in the following section.

<sup>&</sup>lt;sup>6</sup> Note all recommendations that have an associated cost to implement including the Regional Air Service Study, Emerging Technology Study, and expansion of online data management capabilities are further detailed in *Chapter 8*.



<u>TABLE 9-6: 2020 IASP L</u>	PDATE	STATEV	IDE REC		DATION					
								onautics		
	202	20 IASP	Update	Goal Ca	~			onsibilit	les	
2020 IASP UPDATE STATEWIDE RECOMMENDATIONS	Geographic Coverage	Facility Support	Preservation	Transportation Support	Safety and Security	Economic Support	Expand Air Service Capabilities	Promote Aviation Safety	Support Airport/ Air Navigation Facility	Other Policy Issues and Key Concerns
1. Conduct a Regional Air Service Study	✓			$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	Current state legislative priority
2. Conduct an Emerging Technology Study		~		✓		$\checkmark$	$\checkmark$	$\checkmark$		Potential for significant effects over the study horizon
<ol> <li>Expand/enhance online data management capabilities</li> </ol>		✓	✓			✓			✓	Government transparency, efficiency, and accountability
<ol> <li>Coordinate and maintain continuous airport system planning activities</li> </ol>	$\checkmark$	√	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Continued alignment with aviation needs
<ol> <li>Enhance aviation-related outreach efforts to policymakers and the public</li> </ol>		✓	$\checkmark$		✓	$\checkmark$	$\checkmark$	$\checkmark$		Ongoing aviation investment and safety
<ol><li>Promote the economic and social value of airports, both commercial service and GA</li></ol>	$\checkmark$	✓	$\checkmark$		√	$\checkmark$	$\checkmark$		$\checkmark$	Multi-modal connectivity promotion
<ol> <li>Provide guidance on through-the-fence operations at state-owned airports</li> </ol>					✓	✓		$\checkmark$		Airport economic vitality enhancement
<ol> <li>Evaluate ways to improve the priority system to provide for more accountability and reappraise the funding distribution process to allow for more flexibility as the need arises</li> </ol>		✓	✓	nu Horp 20		~		√	$\checkmark$	Government transparency, efficiency, equitable distribution of funding

## TABLE 9-6: 2020 IASP UPDATE STATEWIDE RECOMMENDATIONS AND RELATIONSHIP MATRIX

Source: Kimley-Horn, 2020



As part of the recommendation development process, the 2010 statewide recommendations were evaluated to determine if a policy need still exists. In some cases, policy recommendations were maintained in whole, while others were either modified or deleted. **Table 9-7** summarizes the 2010 statewide policy recommendations and depicts if they are recommended to be maintained, modified, or deleted as part of the 2020 IASP Update. Only two of the recommendations no longer reflect the current needs of the Idaho airport system and have been deleted. Three recommendations have been modified. Two have been maintained in their original form indicating that the topic is addressed through a process of continual improvement instead of a discrete end point.

## TABLE 9-7: SUMMARY OF 2010 IASP RECOMMENDATIONS

		Linkage to 2020 IASP
	2010 IASP STATEWIDE RECOMMENDATIONS	Update
1.	Promote the economic and social value of airports, both commercial service	Maintain
	and general aviation.	
2.	Consider expanding IDAPA 39.04.01(C), which provides guidance on through-	
	the-fence operations on state-owned airports, to non-NPIAS airports as well as	
	working with the FAA on possible beneficial through-the-fence operations at NPIAS airports.	
3.	Coordinate and maintain Continuous Airport System Planning activities.	
4.	Promote compatible land use near airports through use of and education related to the Idaho Airport Land Use Guidelines.	Modify
5.	Maintain adequate access to public-use commercial service and general aviation airports for all of Idaho.	
6.	Continue to promote the importance of backcountry airports to Idahoans quality of life and economic growth.	
7.	Support efforts to work internally with other ITD divisions and groups to promote aviation planning efforts.	
8.	Evaluate and seek changes to plans and facilities to respond to new technology and aircraft fleets to accommodate future air transportation system needs.	
9.	Improve remote communications and weather reporting capabilities in rural areas such as Northern and Central Idaho to fill voids in the state's system coverage.	
10.	Advocate for the promotion of environmentally friendly actions such as through the adoption and implementation of Storm Water Pollution Prevention (SWPP) Plans and Spill Prevention Control and Countermeasures (SPCC) Plans.	Delete
11.	Consider the creation of public law to register and license airports and heliports.	

Sources: Wilbur Smith Associates, 2009; Kimley-Horn, 2020

## **Policy Implementation**

The 2020 IASP Update recommendations aim to improve the system in a variety of ways and through a variety of strategies, as outlined in Table 5 and Table 6. Recommendations look at strategies for clearing close-in obstructions, continuing pavement maintenance efforts, conducting air service and emerging technology studies, and more. Each recommendation is important and can positively impact the performance of the Idaho system now and into the future. In order to set up a successful implementation strategy it is important to identify the responsible entities associated with these recommendations. **Table 9-8** shows the 2020 IASP Update PM recommendations and the entities responsible for their implementation, while **Table 9-9** shows the responsible entities for the 2020 IASP Update Statewide Recommendations.



TABLE 9-8: RESPONSIBLE ENTITIES FOR PROPOSED PERFORMANCE MEASURE RECOMMENDATIONS
--

PERFORMANCE	PERFORMANCE Responsible							
MEASURE	PM Proposed Recommendation	Entities						
GOAL: FACILITY SUPPORT								
Achieve All Facility and Service	<ul> <li>Projects identified on an airport-specific basis (see Appendix A)</li> </ul>	ITD Aeronautics						
Objectives	<ul> <li>Implement policy to recommend FAA A-I design standards for all airports (NPIAS and non-NPIAS)</li> </ul>	ITD Aeronautics						
Airports with Zoning for Height and Land Use Regulations	<ul> <li>Continue to work with airports and city/county planners to implement the <i>Idaho Airport Compatible Land Use Guidelines</i></li> </ul>	ITD Aeronautics, Regional Planning Organizations						
	<ul> <li>Support the implementation of Idaho Code Section 67- 6508(q), which requires cities/counties to include a separate Public Airport Facilities section in their comprehensive plans</li> </ul>	ITD Aeronautics, Regional Planning Organizations						
	<ul> <li>Include land use compatibility guidelines in scopes of work for small airport master plans/ALPs for non-NPIAS facilities</li> </ul>	Airports						
Airports with Master Plans or ALPs with Narrative (Within	<ul> <li>Continue to fund master plans at all airports eligible for IAAP and work with all airport sponsors to encourage updating planning documents on a continuous basis</li> </ul>	ITD Aeronautics						
past 10 years)	<ul> <li>Develop and adopt a formal program that groups multiple non-NPIAS airports together under one project to complete master plans with abridged and highly airport-specific final documentation</li> </ul>	ITD Aeronautics						
Airports Meeting ITD Aeronautics	<ul> <li>Continue to monitor and prioritize pavement-related needs via the Network Pavement Management System (NPMS)</li> </ul>	Airports, ITD Aeronautics						
Pavement Condition Index (PCI) Standards	<ul> <li>Develop an ITD Aeronautics program to support the design and construction of pavement maintenance projects at non- NPIAS airports as prioritized by NPMS</li> </ul>	ITD Aeronautics						
	GOAL: SAFETY AND SECURITY							
Airports Without Close-In	<ul> <li>Increase consideration of clear approaches during airport- specific planning processes</li> </ul>	Airports						
Obstructions	<ul> <li>Prioritize IAAP funding for clearing approaches</li> </ul>	ITD Aeronautics						
	<ul> <li>Complete a Runway Approach Study</li> </ul>	Airports, ITD Aeronautics						
NPIAS Airports Meeting Current	<ul> <li>Review master plan scopes of work for inclusion of taxiway design evaluation to meet current FAA design standards</li> </ul>	ITD Aeronautics						
FAA Taxiway Design Standards	<ul> <li>Include airfield geometry evaluation in scopes of work for small airport master plans/ALPs</li> </ul>	Airports						
	GOAL: ECONOMIC SUPPORT							
Airport Capable of Meeting Business User Needs	<ul> <li>Shift this PM to become an informational PI during the next IASP Update</li> </ul>	ITD Aeronautics – no action						



PERFORMANCE		Responsible		
MEASURE	PM Proposed Recommendation	Entities		
Airports that	<ul> <li>Shift this PM to become an informational PI during the next</li> </ul>	ITD Aeronautics –		
Accommodate Aerial	IASP Update	no action		
Application Services				

Source: Kimley-Horn, 2020

#### TABLE 9-9: RESPONSIBLE ENTITIES FOR PROPOSED STATEWIDE RECOMMENDATIONS

2020 IASP UPDATE STATEWIDE RECOMMENDATION	<b>Responsible Entity</b>
Conduct a Regional Air Service Study	ITD Aeronautics
Conduct an Emerging Technology Study	ITD Aeronautics
Expand/enhance online data management capabilities	ITD Aeronautics
Coordinate and maintain continuous airport system planning activities	ITD Aeronautics
Enhance aviation-related outreach efforts to policymakers and the public	ITD Aeronautics
Promote the economic and social value of airports, both commercial service and GA	ITD Aeronautics, Airports
Provide guidance on through-the-fence operations at state-owned airports	ITD Aeronautics
Evaluate ways to improve the priority system to provide for more accountability and reappraise the funding distribution process to allow for more flexibility as the need arises	ITD Aeronautics

Source: Kimley-Horn, 2020

As the tables show a significant portion of the recommendations are aimed at ITD Aeronautics as they have the authority to alter policies, and prioritization guidelines, develop additional studies and allocate funding towards certain recommended projects and improvements. In addition, ITD Aeronautics will play a role in the recommendations related to raising public awareness, educating the public on the value of local airports, and continue building relationships with planning authorities and airport sponsors. However, there are a few recommendations that are aimed towards airport sponsors who have the responsibility of developing their Master Plans or other on-airport specific recommendations. Regional and local planning authorities can contribute to successful implementation of a few of these recommendations as well, particularly those pertaining to land use compatibility.

# **Aviation Funding and Priority Distribution**

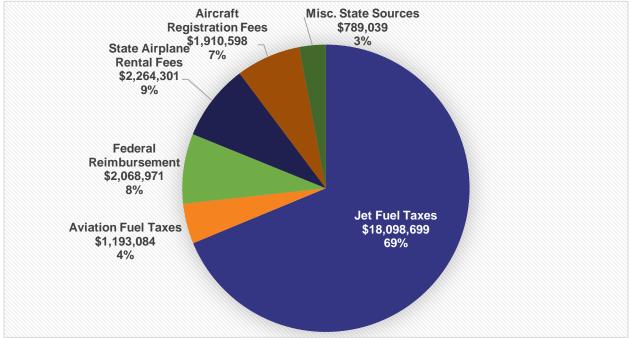
The development of Idaho's airports is supported by the State Aeronautics Fund. The fund is derived from aircraft fuel taxes, aircraft registrations, pilot registrations, sale of aeronautical charts and directories, federal reimbursements, and other miscellaneous sources. The State Aeronautics Fund is a dedicated funding source, which means that the aviation-related monies that go into the fund must be used to fund aviation. Between 2010 and 2019, the State Aeronautics Fund contributed over \$26.32 million dollars to Idaho aviation.

Many different aviation activity revenue streams contribute to the State Aeronautics Fund. **Figure 9-1** shows the total State Aeronautics Fund by revenue streams between 2010 and 2019. Jet fuel aviation taxes contributed over two-thirds of state aviation funding between 2010 and 2019 at \$18.1 million. State airplane rental, federal reimbursement (including 5010 inspection fees in 2010 and 2011), and aircraft registration fees have each contributed between seven and nine percent of the total annual fund. Aviation (i.e., AvGas) fuel taxes and other miscellaneous sources combined comprise the remaining seven percent. The miscellaneous state fund includes the following sources:



- ✤ Airman registration fees
- ✤ Reproduction and copying fees
- ✤ Sale of other equipment
- ✤ Interest income
- ✤ Courtesy car rental fees
- ✤ Miscellaneous fee revenue
- → 5010 safety inspection data (2012-2019)
- ✤ ACE Academy fees
- ✤ Donations

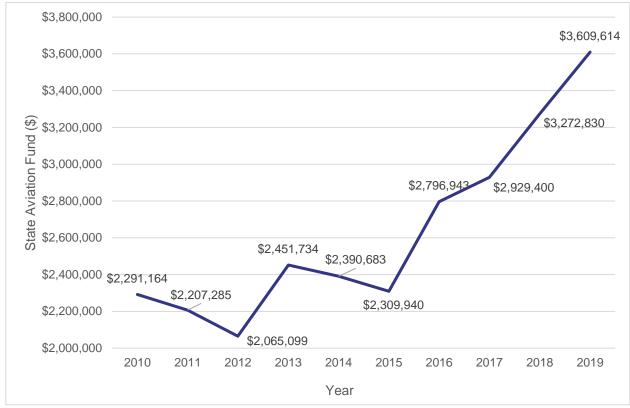
## FIGURE 9-1: TOTAL STATE AERONAUTICS FUND BY SOURCE, 2010 – 2019



Source: State Aeronautics Fund Report, Kimley-Horn 2020

As shown in **Figure 9-2**, the State Aeronautics Fund experienced a steady pattern of growth between 2010 and 2019, with an overall increase of over \$1.0 million made available to spend on state aviation projects. The fund grew from \$2.29 million in 2010 to \$3.61 million in 2019. The fund experienced a minor dip between 2010 and 2012 with a decrease of about \$300,000. The fund grew almost \$500,000 the following year and experienced steady growth through 2019.

FIGURE 9-2: STATE AERONAUTICS FUND, 2010 - 2019



Sources: State Aeronautics Fund Report, 2019; Kimley-Horn 2020

The State's Aeronautics Fund distributes grant aid to airports via the IAAP. Airports submit projects to ITD Aeronautics and the Idaho Transportation Board (ITB) for consideration for funding from the IAAP. Between 2015 and 2020, the IAAP received an average of \$842,540 a year from the State Aeronautics Fund. **Table 9-10** shows how the IAAP funds were distributed between Primary, GA – NPIAS, and GA – Non-NPIAS airports over six years. As shown, GA – NPIAS airports received the most amount of funding, while Primary airports received the least. However, Primary airports were not eligible for IAAP funding before 2018, and their figures are based on a six-year average with the understanding that zero dollars were awarded for three of the six years.

AIRPORT TYPE AND YEAR AVERAGES	Average Funds Awarded	Number of Grant Recipients (Airports)	Percent of Airports By Classification Receiving Funds <sup>2</sup>	
Primary (2015 - 2020) <sup>1</sup>	\$58,880	7	100%	
GA – NPIAS (2015-2020)	\$497,361	19	61%	
GA – Non-NPIAS (2015-2020)	\$238 176	5	16%	

## TABLE 9-10: IAAP GRANT HISTORIES, 2015-2020

Notes: <sup>1</sup>IAAP funds were not distributed to Primary service airports between 2015-2017; however, the average still accounts for six years.<sup>2</sup>Total airports within roles are averaged over five-year (3-year) time periods and rounded before calculating percentage of airports receiving funding. Source: ITD IAAP History 2015-2020

Eligibility requirements and other rules governing the IAAP are described in IDAPA 39.04.01(G). IAAP awards are only distributed to public entities that own or lease and operate a public use landing facility. Awards can consist of grants, small projects, and maintenance and safety supplies. Grants are reserved for scheduled projects, while small project awards are distributed for unscheduled or emergency projects. Both grant and small project awards



are available to municipal entities such as a city, county, airport authority, political subdivision, or public corporation. The entity responsible for the airport is referred to as the airport sponsor. IAAP awards cannot be distributed to facilities operated by divisions of the state of Idaho or the federal government. Maintenance and safety supplies funded through IAAP are available to all public entities that own or lease and operate a public use landing facility. IAAP funding is designed to assist local governments with matching federal funds or for airport improvements that are not eligible for federal assistance.

IAAP distribution guidelines are designed to provide the greatest and best utilization of available program funds. The aim of the program is to further the responsible development of the statewide system of airports and create a fair distribution of aviation tax money. IDAPA 39.04.01 has the following policy requirements:

- **Master plan:** An airport sponsor should have a master plan or ALP on file for eligibility.
- Percentages of cost: Airport sponsors must provide local matching funds based on adjusted service population levels.
- Face-value contributions: Labor and equipment contributions by the airport sponsor may be approved at face value in force-account financial evaluation as matching funds
- → Public funds protection: The ITB may request proof of ownership or lease of all land associated with the project and require the airport be zoned to prevent incompatible land uses.
- + Applications for aid: Airport sponsors must complete the appropriate application for their projects.
- Projects other than allocation plan: All projects other than the annual allocation plan will be individually considered and acted upon at a regular meeting of the ITB.
- → Granted allocation items: IAAP grants can be awarded for projects related to airport planning, land acquisition, reconstruction/construction of runways/taxiways, removal of obstructions and acquisition of runway projection zones (RPZs), air navigation facilities, erection of security fencing, and other capital improvements approved by the ITB.

## Idaho's Existing Priority System

Airport projects funded with state/local dollars are prioritized by ITD Aeronautics with final approval by the ITB. The priority rating system uses six principles identified in the IDAPA 39.04.01(G). The six priority principles are as follows:

- 1. Aircraft operations safety: Support projects involving the safety of aircraft operations
- 2. Prior public investments: Support projects designed to protect prior public investments
- 3. Federal funds: Assure maximum use and benefit of available federal funds
- 4. Aircraft landing projects: Support projects at existing aircraft landing facilities where need is demonstrated
- 5. **Preservation and acquisition:** Support initiatives to preserve and acquire existing aircraft landing facilities in danger of being lost
- 6. Aircraft landing development: Develop new, additional aircraft landing facilities in areas of greatest need:
  - a. Large geographical area with no air accessibility
  - b. Additional new sites in urban areas were landing sites are rapidly becoming non-existent
  - c. Recreational area development where land availability is becoming difficult to obtain

It is important to note that points or weights are not associated with these principles. The principles are used by ITD Aeronautics and the ITB for the "discretionary allocation of airport development funds". Future considerations for enhancing Idaho's existing priority system are provided at the end of this section.



## **Review of Other State Funding/Priority Systems**

This section reviews and compares other states' priority rating systems to aid in the evaluation of Idaho's current priority system. This evaluation is designed to identify opportunities to enhance Idaho's programmatic considerations to better align with the state's policy priorities, either now or in the future. The state departments of transportation that appear in this review are also featured in the state program responsibility comparison shown in Table 4. While a variety exists in the types of state aviation funding programs, the programs have some similarities. Most states in the comparative analysis rely on a priority rating system that assigns scores to projects based on several overarching variables:

- → An airport's state or federal roles or the type and/or frequency activities support
- ✤ Relationship with specific systemwide goals or objectives
- Type of facility/operational component targeted (e.g., airside vs. landside, pavement vs. obstruction approach)

While priority rating systems may differ among states, a clearly defined priority rating system can provide an effective tool for determining state funding allocations. All but two states in this analysis indicated a relationship between the statewide aviation system plan and the eligibility of projects and selection of grant recipients. In some cases, airports must be included in the state's system plan to be eligible for funding (e.g., Colorado). In other cases, the roles defined in the system plan carry over to state funding programs and can impact prioritization (e.g., Oregon). Like Idaho, many of the programs discussed in this section receive their funding from aviation-related taxes and fees, such as aviation fuel taxes and aircraft registration fees. Despite the differences amongst these states, each funding program has the same mission: To most effectively allocate available funding to airports in a way that supports current and future activity levels and maintains airports that play a key role within the state transportation network. **Table 9-11** summarizes the high-level findings from the review of each state's priority rating system. Following the table are brief, yet more detailed, summaries of each state's funding and priority systems.



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					TROLL	9-11. SUIVIIVIART UP				OT LIVIO		
STATE	Name of Program or Fund	Point Syste m	Airport Role/ Size	Inclusion of Private Airports	Airport Activity Levels (based aircraft/ops/ enplanements)	Mechanism to Elevate Priority for Smaller Airports	Sponsor Responsibility/ Land Use Protection Tools	Economic Development	Air Cargo Support	Funding Available for Revenue-producing Projects (fuel, hangars, etc.): Loans or Grants	Aligns with System Plan or State Goals/Objectives	Other Funding Remarks
ID	IAAP	Yes	No	No	No	Yes	No	No	No	No	Yes	See detailed discussion above
CO	Colorado Discretionary Aviation Grant Program (CDAG)	No	No	No	No	No	No	Yes	No	Yes	Yes	Must have a complete and updated operational and financial profile section in the online application
IL	State/Local Airport Improvement Plan (AIP)	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Obstruction removal and planning projects are not eligible for state-only funding. FAA State Block Grant Program (SBGP) participant
MT	Airport Loan and Grant Program	No	No	No	No	No	No	Yes	No	Yes	No	Wide range of eligible projects; Board members vote on projects to receive awards
NC	State Airport Aid Program	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes (Airport Development Plan)	The State Airport Aid Program funds three different subprograms. FAA SBGP participant
OR	Aviation System Action Program	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Airport sponsor must be registered with the Oregon Secretary of State's Corporation Division to be eligible
SC	State Aid Grant	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Other relevant priority rating factors include whether or not a project received federal funding, and the property tax on aircraft
ТΧ	Aviation Capital Improvement Program (CIP)	No	No	Yes	No	No	No	No	No	No	Yes	FAA SBGP participant
UT	Aeronautics Restricted Account	No	No	No	No	No	No	No	No	No	No	None
WA	Airport Aid Program Grant	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Funding comes from aviation fuel fee, along with aircraft excise tax and registration fee
WY	Wyoming Airport Aviation Capital Improvement Program (WACIP)	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	Provides grants to airports to support scheduled commercial service

## TABLE 9-11: SUMMARY OF PEER STATE'S FUNDING PROGRAMS AND PRIORITY SYSTEMS

Sources: FAA NPIAS Report 2019-2023; ITD Aeronautics, 2019; Colorado Department of Transportation (CDOT) Division of Aeronautics, 2019; Illinois Department of Transportation 2020; North Carolina Department of Transportation's (NCDOT) Division of Aviation, 2019; Oregon Department of Aviation (ODA), 2019; South Carolina Aeronautics Commission, 2019; Texas Department of Transportation (TxDOT) Aviation Division, 2019; Utah State Legislature, 2020; Washington State Department of Aviation (WSDOT), 2019; Wyoming Department of Transportation Aeronautics Divisions (WYDOT Aeronautics) 2019; Kimley-Horn, 2020



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The following sections look at the comparison states in more detail, with particular focus on each's state's model for prioritizing and allocating state aviation funding.

## Colorado

The CDAG Program provides aviation funding produced by the aviation fuel tax and other revenue streams to support publicly owned and open to the public airports in the Colorado system. Funds allocated to airports are not done so based on an airport's level of activity nor their assigned airport role, and projects are not funded based on a formal point system. Funds can be distributed to individual airports through grants and statewide aviation system initiatives. Project prioritization follows the FAA National Priority Rating (NPR) system. Funding can be awarded to a variety of different aviation improvement projects, including some types of revenue-generating or economic development projects. Projects will only receive grant funding if they align with the recent system plan. Airport sponsors must complete the grant application in its entirety and provide an up-to-date operational and financial profile section in its online profile to be eligible to receive funding.

## Illinois

Illinois' State/Local AIP provides state funding for capital improvements and development to publicly owned, public-use airports. The airport must be identified in the Illinois Airport System Plan (IASP), in compliance with FAA standards, and the projects must be identified in the ALP. The State/Local Program allocates a higher percentage of funds to GA airports at 90 percent state assistance, while Primary airports receive 75 percent state assistance. The State/Local Program prioritizes projects that address safety and performance, although funding is also available for revenue-generating and economic development projects. Pavement rehabilitations must demonstrate a visual need or have a low PCI rating. Projects are prioritized using a ranking system, where projects are ranked from one to five to indicate the activity or use of the airport. A score of one is awarded to Primary airports, while a score of five is awarded to airports with less than 20 based aircraft and less than 8,000 itinerant operations. Projects are then assessed based on description and justification. The State/Local Program has been designed to disperse funding to projects and airports that receive limited federal funding. Therefore, the State/Local Program does not allocate funding for obstruction removal projects and planning projects. Moreover, the priority system was designed to fund projects that would not be optimal candidates for federal funds or ineligible for federal funds based on the NPR system. In addition to the State/Local AIP, Illinois also participates in the State Block Grant Program, which means that the state has the authority to distribute federal funds to Illinois airports according to their own methodology. Federal funds distributed by Illinois Department of Transportation (IDOT) are awarded to NPIAS airports other than primary airports.

## Montana

The Montana Department of Transportation's Aeronautics Division Airport Loan and Grant program provides grants and low-interest loans to airports across Montana. Airports must be publicly owned and open to the public. Funding can be used for airport and aviation-related improvement projects. The Airport Loan and Grant Program is funded primarily by aviation fuel tax revenues. Once all applications are received, the Aeronautics Board gets three weeks to review the applications. The Board then hosts a meeting open to the public where projects are discussed and voted on to decide which projects will be offered funding, if it will be in the form of a grant or a loan, and the amount of the award. Airport Loan and Grant Program funds can be used for the state match for AIP funded projects, but airports not eligible for AIP funding (I.e., non-NPIAS) airports are also eligible to apply for the grant or loan funding as well. Non-NPIAS airports are eligible to receive 100 percent of project costs from the state (i.e., a local match is not required).

## **North Carolina**

NCDOT's State Airport Aid program provides funds for Safety/Regulatory/Operations (SRO) projects, capital improvement projects, and various statewide project-specific programs. The State Airport Aid program receives funding from two sources established by NCDOT. Projects related to capital improvements, particularly projects considered Strategic Transportation Investments (STI), are funded through the NCDOT Highway Trust Fund. SRO



projects and other statewide programs (safety preservation, automated weather observing system [AWOS], and others) are funded through the NCDOT Highway Fund. Only NPIAS airports are eligible to receive funding through the State Airport Aid program. In addition to the state specific funding programs that NCDOT provides to airports, they also participate in the State Block Grant Program (SBGP). The SBGP gives NCDOT the opportunity to distribute FAA funding to their NPIAS airports as they see fit. SBGP funding can be awarded to nonprimary commercial service, reliever, and GA airports as identified in the NPIAS.

The three different programs and priority rating systems under NCDOT State Airport Aid Program are described below.

## Safety/Regulatory/Operations Projects

Projects eligible to receive SRO funding must meet the NC Airport Development Plan (ADP) system objectives for the airport's designated classification. Projects applying for SRO funding are evaluated using the state's priority rating system. The priority rating system uses a numbered list of project types that match the airport development categories listed in the ADP. For example, runway approach projects receive a score of 100, while runway safety area projects receive a score of 200. Revenue-generating projects are eligible under this system; however, they are listed under a much lower priority, and receive scores in the thousands.

## **Capital Improvement Project Funding/STI Projects**

Projects eligible to receive STI funding are designed to expand the airport to increase capacity or alleviate congestion. It is intended that funded STI projects will exceed the system objective or requirements for the airport's role as identified in the ADP. STI projects are also evaluated using a detailed scoring system, and airport STI projects compete with other transportation mode's STI projects. STI projects are scored based on the "Strategic Mobility Formula" which evaluates projects using a data-driven scoring process accompanied by a qualitative component derived from local input. Airports applying for STI funding are separated into three funding categories based on their size and contribution to the system. Airports are categorized as "statewide mobility," "regional impacts," or "division needs" airports. Statewide mobility airports receive the highest percentage of funding, but receive no points from local inputs, while the Regional Impact and Division Need airports receive 50 percent of their scores from the data scores and 50 percent from local planning organizations.

## **Statewide Programs Funding**

Statewide Programs Funding goes to several special programs determined by NCDOT Division of Aviation; these programs include:

- ✤ Airport Safety Preservation Program
- ✤ Wildlife Hazard Management Program
- → AWOS Program

Publicly owned, public-use airports may apply for project funding if they have a project that pertains to one of these sub-programs. The state provides 100 percent of the funding for most projects deemed eligible under these programs and no local match is required.

## Oregon

The State of Oregon established the ASAP in 2015 which allocates funding from aviation fuel tax revenues to three separate programs that support aviation development in the state. Those programs are described below.

## **Critical Oregon Airport Relief (COAR)**

The COAR grant program is funded by the ASAP, which receives funding from aviation tax revenues. COAR is designed to assist Oregon airports with the match requirements for FAA AIP grants, provide grant awards for emergency preparedness and infrastructure improvements, and support aviation-related economic development projects. COAR can provide grants for public or privately-owned airports as long as they are open for public use.

Grants under this program do not exceed \$150,000. The Oregon Aviation Plan designated airport roles that determine the grant matching requirements. A scoring system is in place and completed by the review staff using a questionnaire. The system ranks projects according to the degree they meet standards related to economic development, intermodal connectivity, and transportation efficiency, as well as whether the project reduces transportation costs or improves access to jobs.

O AIRPOR

If a NPIAS airport is applying for COAR funds, it must have an ALP completed within the last 10 years and meet all FAA standards and grant assurances. Airport sponsors must indicate the type of National Environmental Policy Act (NEPA) action that is applicable to and required for their project, and they must also indicate whether that action is complete. If a project requires an Environmental Impact Statement, it must be completed before a project can receive funding as the project will not be deemed "construction ready". Grant applicants must demonstrate that their project has received all local jurisdictional permits, including building, zoning, planning, utility, facilities, etc. The project must also have considered any environmental clearances and other federal, state and/or local requirements.

## State Owned Airports Reserve (SOAR)

SOAR receives 25 percent of the total funds under the ASAP program. The ASAP program was established to address safety improvements recommended by the State Aviation Board or by local community airports and to address infrastructure projects at public airports. Most of the approved projects are not eligible for federal grants and state-owned airports are eligible to receive SOAR funds. All projects are presented to the State Aviation Board who review and approve of funding for selected projects. SOAR projects are planned on a two-year cycle.

## Rural Oregon Aviation Relief (ROAR)

ROAR projects receive 25 percent of total ASAP funding. ROAR funds are distributed to assist commercial air service development in rural Oregon. The maximum amount awarded per applicant under the ROAR program is \$500,000. Note this program is currently on-hold.

## **South Carolina**

The South Carolina State Aid Grant provides FAA matching grants at 5 percent, state/local (75 percent/25 percent) funding for maintenance projects (pavement, electrical, vegetation management), and funds for capital projects at a 60 percent state and 40 percent local distribution. Fifty-two GA airports and two commercial service airports are eligible for State Aid Grant funding; the four small-hub airports are ineligible. The ranking system in place to prioritize projects is based on four scoring categories:

- → Category I Project Justification
- ✤ Category II Airport Classification and Demand
- → Category III Sponsor Responsibility
- → Category IV Other Relevant Factors

These categories allow for prioritization of projects related to safety and security, as well as elevate airports that experience more demand and activity, including air cargo. In addition, Category III looks at how well an airport sponsor maintains, adheres to, and implements recommended initiatives including compatible land use zoning and minimum standards related to airport security and maintenance. While economic development projects are eligible as included as a project type in Category I, they are not as prioritized to the same extent as safety and security or the preservation/rehabilitation of existing facilities.

## Texas

Texas is a SBGP participant and therefore is responsible for allocating FAA AIP to their system of FAA other than primary airports. Texas develops a three-year CIP that outlines GA airport development needs based on FAA funding levels and the Texas Aviation Facilities Department Program. TxDOT's CIP includes all Texas Airport



System Plan (TASP) airports. The CIP uses assumed funding levels from the AIP Non-primary Entitlement Funds, federal discretionary funding, and Texas Aviation Facilities Development to develop their development plan.

Airport needs and proposed projects are categorized by the objectives they address, such as enhancing safety, preserving existing facilities, responding to present needs, and providing for anticipated needs. A significant portion of funds distributed through the TxDOT CIP goes towards projects that improve safety and preservation of system airports. The remaining percent of funds, approximately 15 percent, is awarded to projects that enhance the system through facility improvements such as longer runways, expanded parking aprons, new or rehabilitated terminal buildings, and so on. Projects are ranked on a priority system based on the following priority categories:

- ✤ Safety
- ✤ Preservation
- ✤ Standards
- ✤ Upgrade
- → Capacity
- New access
- New capacity

The CIP is developed for a three-year period and provides flexibility to account for the variety of technical changes that become necessary throughout development projects. Most projects funded through the CIP require a 10 percent local match; however, some projects, such as terminal building projects, require a greater local match.

In addition to participating in the SBGP, TxDOT manages the Routine Aviation Maintenance Program (RAMP) which allocates a \$50,000 match for each airport per fiscal year to help fund landside and airside projects. Airport sponsors are not required to undergo a formal application process, but they need to submit a project description and cost estimates to the Aviation Division in order to initiate the grant.

#### Utah

UDOT's Division of Aeronautics established an Aeronautics Restricted Account within the DOT's Transportation Fund that can be allocated to publicly owned and open to the public airports in the state. The Aeronautics Restricted Account receives funding through the tax of aviation fuel, aircraft registration fees, and other aviationrelated revenue streams. This account can be used to fund a variety of aviation improvement projects, and other Division of Aeronautics operations as determined necessary by the department. According to Utah Code Title 72-2-126 "the department shall allocate funds to the separate accounts of individual airports as required under Section 5-13-402," which indicates that airports receive funding based on the aviation fuel sales within the fiscal year.

# Washington

WSDOT's Airport Aid Grant Program is associated with the State Capital Improvement Program (SCIP). The SCIP is developed to identify federal and state resources and determine prioritization and timing of aviation-related projects. Major project categories that receive grants from this program are pavement, safety, maintenance, security, or planning projects. Funding for the program comes from aviation-related taxes and fees, such as aviation fuel tax and registration fees. Publicly- and privately-owned, public-use airports included in the Washington Aviation System Plan (WASP) are eligible for grant funding. Airport sponsors must also own or lease the airport long term and follow all applicable laws, and ordinances, as well as demonstrate that their airport is protected from incompatible development by being included in the local comprehensive plan and/or zoning regulations (or be actively working towards inclusion). Projects must be shown on the airport's ALP. NPIAS airports must first demonstrate that they have pursued federal funding through the FAA before they are eligible for an Airport Aid Program Grant. Slightly more than half of grant funds are reserved for NPIAS GA airports with less than 20 based aircraft and non-NPIAS airports. The remaining 45 percent is distributed to all airports.



Projects are scored using a priority model. Projects are broken down into the following project types: pavement projects; safety projects; or maintenance, security and planning projects. Once categorized, projects receive scores based on what facility or improvement the project is addressing. For example, obstruction removal projects receive more points than approach aid or weather reporting projects within the "safety" category. There is a final scoring category that looks at special considerations and can give additional points to projects that may correct a deficiency in the system; promote economic development; serve a vital community need; or is included in the local comprehensive plan, ready to proceed, and has completed environmental documentation.

# Wyoming

The Wyoming Aviation Capital improvement Program (WACIP) provides state-level funding to assist in the development of airports included in the state's aviation system plan. Projects related to planning, improvement, equipment, and maintenance projects are eligible to receive a WACIP reward. WYDOT selects projects to be included in the WACIP, while the Wyoming Aeronautics Commission is the approving authority. Projects are selected through the Wyoming Priority Rating Model (PRM). Projects are scored using a variety of categories. Points are assigned based on project type, with safety projects receiving the higher scores in this category, and airport enhancement or planning projects receiving the lowest scores. Projects are also assigned points based on the type of airport facility identified in the project. Airside primary runways or taxiways are rewarded the most points, while landside projects score the lowest in this category. Projects are also evaluated based on the type of federal funding they are receiving and the type of impact the project will have on the system. Projects are evaluated against the following criteria:

- ✤ Achieving or maintaining a WySASP state goal
  - Provide a safe and secure integrated aviation system
  - Maintain an aviation system to support current and future demand while optimizing public and private investment
  - Provide accessible, cost-effective, and reliable transportation options
  - Promote an aviation system that is environmentally responsible
  - Promote educational activities and raise public awareness of the aviation system and its value
  - Sustain and provide a system of commercial service airports that provides convenient and reliable access to the NAS at a competitive price
- ✤ Achieving or maintaining a WySASP local goal
- → Achieving or maintaining a Wyoming Aeronautics Commission priority

The activity levels at the airport, how urgent the project is, and how well the airport sponsor implements land use protections are considered as well. Commercial service airports and airports that experience high activity levels receive higher points in their category.

# Considerations for Modifications to the Existing Idaho Priority System

Based on a review of Idaho's existing policy, evaluation of other states' funding distribution processes, and discussions with the ITD Aeronautics, the 2020 IASP Update has developed several recommendations to enhance Idaho's priority system. Considerations identified in the 2010 IASP were also reviewed to assess their continued applicability to current needs. Fundamentally, these recommendations are designed to provide additional transparency to the state's funding allocations, promote objective and clear funding procedures, and facilitate the ITD Aeronautics' ability to fulfill its three core responsibilities. These responsibilities are expanding GA and commercial service capabilities, promoting airport safety, and supporting improvements for airports and air navigation facilities. Airports/airport sponsors and local officials should clearly understand ITD Aeronautics'



process for awarding grant funding and, to the greatest extent feasible, have the ability to maximize their own abilities to receive grants by aligning requests with state and federal (i.e., FAA) priorities, as applicable.

# **Project Definitions**

ITD Aeronautics should publish a clear set of definitions for the priority principles identified in IDAPA 39.04.01(G). These definitions should include specific lists of eligible and ineligible projects for each project category (e.g., aircraft operations safety, prior public investments, preservation and acquisition, etc.), as well as broader verbiage that indicates the overall purpose and objective of the principle. In this way, the airport sponsor can confirm the eligibility of a project prior to completing the IAAP grant application. Project-specific eligibility lists and clearly defined language offer specific guidance to airport sponsors as well as flexibility should atypical needs arise. This effort should help elevate critical projects, clarify state priorities, and reduce ambiguity while reducing the amount of time spent evaluating if a specific project is eligible for funding and answering project-specific questions from airports.

Data collection and tracking would also be enhanced, as project requests could be more accurately and objectively categorized from year-to-year. Over time, the agency could evaluate the types of needs most commonly reported by airports to ensure the priority rating system continues to address current airport needs.

# **Reappraisal of Funding Distribution**

The 2020 IASP Update recommends that the ITD Aeronautics closely review its funding distribution process. While several different methods are possible—as made evident during the comparison of states above—this study recommends ITD Aeronautics adopt an approach in which the agency first allocates a specific percentage of total available funds by airport classification. Funds could then be allocated by project type within each classification.

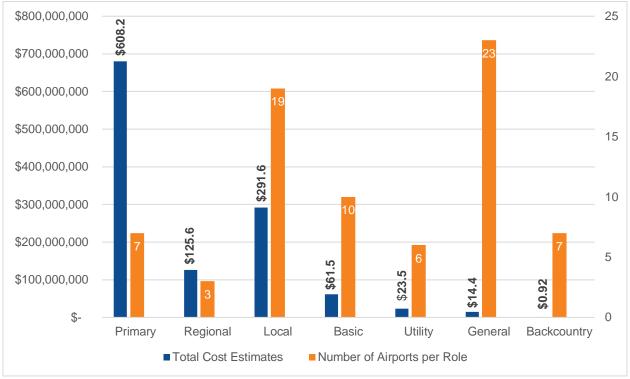
Idaho has a diverse mix of airports eligible to receive state funding, ranging from Primary commercial service facilities to remote, non-NPIAS GA airports providing access into the remote backcountry. All types of airports have needs critical to support their functions within the system. Such needs are very different in type and level of support required. ITD Aeronautics should have a methodology that recognizes the important regional and statewide functions of all airports and gives all airports the opportunity to access some level of state funding to address needs for the preservation and long-term viability of their assets.

Classification-specific funding allocations could be annually updated based on the balance of the State Aeronautics Fund, state legislative priorities, and other considerations, such as revised FAA design standards (which can inequitably affect different types/classifications of airports). As documented in *Chapter 8: System Costs and Alternative Scenarios*, airport needs in Idaho total just under \$1.2 billion dollars<sup>7</sup>. While nearly all airports in the system have one or more project-specific need, needs are not distributed evenly across classifications. **Figure 9-3** shows the needs for each airport role and the number of airports in each role and **Figure 9-4** shows the percentage of costs allocated to each airport role.

<sup>&</sup>lt;sup>7</sup> The estimate of \$1.2 billion does not include the cost of Statewide Studies Needs or Replacement Airport Needs that is discussed further in *Chapter 8. System Costs and Alternative Scenarios*.

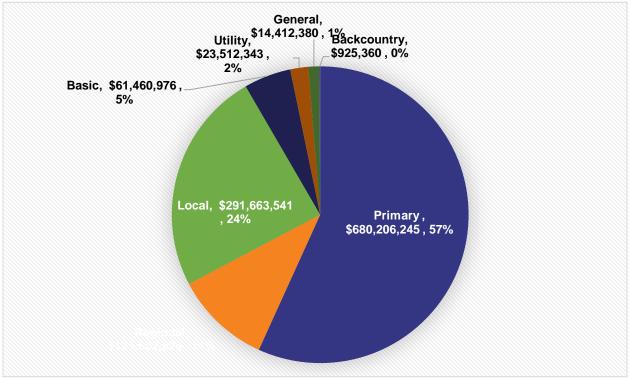


#### FIGURE 9-3: FUNDING NEEDS BY AIRPORT ROLE



Source: J-U-B Engineers 2020, Kimley-Horn, 2020

# FIGURE 9-4: PERCENT OF NEEDS BY AIRPORT ROLE



Source: J-U-B Engineers 2020, Kimley-Horn, 2020



Primary airports account for 57 percent of total airport need, while Regional airports account for 11 percent of total need. Local airport account for 24 percent of total needs. Non-NPIAS facilities compose 48 percent of the future Idaho system but account for just over four percent of total need. Backcountry airports, which have limited facility and service objectives and access to AIP funds, show the least need, at less than one percent of total statewide project needs identified in the 2020 IASP Update.

ITD Aeronautics could consider this breakdown when allocating funding between classifications. While Primary airports would receive more funding than other classifications, these airports support the greatest percent of operations in Idaho. Further, jet fuel tax revenues comprise the majority of revenue into the State Aeronautics Fund. Smaller and non-NPIAS GA facilities, with limited or no access to federal funds, show far less need but state investment is important for maintenance and/or capacity-enhancing projects. In most cases, these airports cannot successfully compete for funding against NPIAS airports when funding is awarded principally by project type or activity levels. As such, this proposed methodology provides a set-aside to provide for small airport needs while recognizing the greater needs at busier and/or more sophisticated facilities.

As the second step, ITD Aeronautics would need to rank priority project categories and/or types in alignment with the IDAPA 39.04.01 principles. To maximize available federal dollars, this system could consider applying the federal National Priority System (NPS), as in Illinois, Colorado, and several other states. In general, projects that are more consistent with FAA goals and objectives receive a higher score, and the priority rating equation is annually reviewed to keep pace with current needs and priorities. The agency could also consider aligning its priority rating system with the goals and PMs identified during the 2020 IASP Update, which have received the input of the PAC and airports across the state. Land use compatibility may also be considered (as in Washington, where airports must be included in the local comprehensive plan or actively working towards inclusion to receive state support).

# **Develop and Adopt a Grants Manual**

Building off the previous two considerations, grant policies and procedures must be documented in a grants manual that has been formally approved and adopted by the ITB. An adopted manual would be an important tool and ally for the ITD Aeronautics to more effectively manage the IAAP and communicate requirements to airports and sponsors. During manual development, the agency should seek the input of aviation stakeholders across the state including the Idaho Aeronautics Advisory Board and Idaho Airport Managers Association (IAMA) as all the interests and needs of all parties should be recognized and incorporated, as appropriate. A grants manual would afford ITD Aeronautics with the opportunity to implement a more structured program with better defined eligibility and policy guidelines while making the agency more accountable for its funding decisions.

# **Long-term Viability**

ITD Aeronautics should consider a "fundamental" eligibility checklist to incorporate into the priority system to address critical issues associated with the long-term protection of the airport and the state's investment. This checklist could also take the form of state grant assurances similar in structure as the FAA's federal grant assurances of the AIP. The checklist should include compliance with the Section Q land use compatibility requirements, as well as assurances that all airports will update its activity and facility data with the ITD Aeronautics through the life of the project. This latter recommendation would be further supported by "expanded data management capability" recommendations of the 2020 IASP Update.

# **Policy Analysis and Recommendations Summary**

The policies and considerations identified in the 2020 IASP Update offer a strategic outline for ITD Aeronautics' in its ongoing efforts to enhance the aviation's system's ability to meet the state's transportation needs, advance the eight goals of the study, and further its mission of supporting aviation for all users and activities. This collection of recommendations represents the culmination of multiple, detailed analyses that looked at system



performance from a multitude of perspectives. Further, ongoing input was sought throughout the study from ITD Aeronautics as well as the PAC, which represented airports, airport sponsors, multimodal specialists, and aviation professionals from across the state. The 2020 IASP Update's goals and recommendations aid in ensuring that Idaho's airports remain an integral part of the state's overall transportation network and economic vitality. It provides actionable steps for the state, FAA, and individual airports to collectively plan and develop for the future of aviation across the state.

Over the next 20 years, the aviation system will likely undergo massive shifts driven by population changes, periods of economic growth and contraction, technological evolutions, and global forces that we can hardly predict. As this report goes to publication, aviation at a global scale is confronting the challenges brought by COVID-19, which, at the time of this writing in April 2020 has reduced passenger traffic by approximately 90 percent. Airports and airlines are struggling to cope with operational levels not seen since 1950, and industry leaders are projecting a three- to five-year return to 2019 activity levels. Despite these unprecedented challenges, bright spots do exist. Airports, airlines, and other stakeholders with the flexibility, nimbleness, and initiative to adapt to changing conditions will be best positioned to benefit in the long-term. While passenger enplanements are down, there is some growth in air cargo with a global explosion in e-commerce; in fact, supply chains are struggling to keep pace. New recreational pilots may enter the market as the cost of fuel (and therefore flying) drops precipitously. The risks associated with the long-projected pilot shortage may be mitigated as long as student pilots continue to train and matriculate through the recovery period.

While COVID-19 has shifted aviation projections, it has only strengthened the need to plan for the unexpected, consider alternative scenarios, and prepare for a future that may look very different than today—each of which is a critical element of system resiliency. While many things about the future of aviation are currently unknown, it is certain that aviation will continue to play a critical role in Idaho's multimodal transportation network. Safety, access and mobility, economic support, preservation of existing assets, and other goals continue to apply to the Idaho aviation system. The analyses and recommendations of the 2020 IASP Update will strengthen ITD Aeronautics' position as the advocate and champion of aviation in Idaho as the state soars into the next 20 years.



# APPENDIX A: FUTURE FACILITY AND SERVICE NEEDS

# Introduction

As discussed in *Chapter 1: System Goal and Performance Measures*, as well as *Chapter 7: Future System Performance*, the Facility Support goal of the 2020 Idaho Aviation System Plan (IASP) Update is defined by 100 percent of airports in the Idaho airport system meeting all facility and service objectives established by classification. These objectives serve as recommended standards to help airports most effectively support the type and frequency of operations that typically occur at peer airports within their classifications. Specific facility and service needs at each airport depend on the role that the airport plays in the broader Idaho aviation system, with more extensive facilities needed at airports that serve larger, more sophisticated aircraft and/or more diverse aviation activities. Objectives are not intended to define requirements or mandates for airports. Instead, objectives outline the minimum desired thresholds for facility development and provision of aviation services that each airport should strive to achieve to optimally fulfill its role within the system.<sup>1</sup>

Mirroring the Performance Measure (PM) analyses of Chapter 7, this appendix evaluates airports' abilities to meet the facility and service objectives for their potential future roles in the Idaho airport system. By assessing future roles, the 2020 IASP Update can more accurately recognize needs over the 20-year planning horizon and identify potential funding sources for airport improvement projects. Airports included in the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) are eligible to receive funding through the Airport Improvement Program (AIP). Both NPIAS and non-NPIAS Idaho system airports can receive funding through the Idaho Airport Aid Program (IAAP), and local funding provided by the airport sponsor, associated jurisdictions, and other potential stakeholders. A summary of the anticipated future airport classifications of the Idaho airport system is provided below, with further details available in Chapter 7.

In addition to evaluating needs based on future airport classifications, the 2020 IASP Update assessed airports' potential aircraft storage needs based on forecasted activity levels as presented in *Chapter 4: Forecasts of Aviation Activity*. The final section of the appendix includes airport report cards which summarize each airport's performance in terms of its ability to achieve the facility and service objectives for its specific classification. Accordingly, the future facility and service needs assessment of the 2020 IASP Update is presented as follows:

- ✤ Summary of Future Airport Classifications and Objectives
- ✤ Airside Facility Needs
- ✤ Landside Facility Needs
- ✤ Service Needs
- ✤ Forecasted Storage Needs
- ✤ Airport Report Cards

The analyses presented in this appendix are based on airports' responses provided in the 2020 IASP Update Airport Inventory and Data Form, as well as information obtained from the FAA and the Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics). It should be noted that although an airport may not meet all of its future objectives, this does not necessarily indicate an immediate need for improvements or other

<sup>&</sup>lt;sup>1</sup> Chapter 3: Airport Roles Analysis provides additional information about the facility and service objectives established during the 2020 IASP Update, as well as details about the federal (i.e., FAA) and state-level methodologies used to classify airports in the Idaho system. At the state level, Idaho airports are first delineated in terms of their inclusion in the NPIAS, with state-level classifications mirroring those at the federal level. Non-NPIAS airports are then classified in terms of number and type of operations and based aircraft, and other indicators of aviation activity.



development action. Airport-specific needs should be identified through an examination of the ability of existing facilities and services to accommodate the current and anticipated future needs of their specific users and as determined in consultation with ITD Aeronautics and the FAA, as applicable.

# **Summary of Future Airport Classifications and Objectives**

As noted in the introduction above, this appendix reports the performance of each airport in terms of its ability to meet the facility and service objectives for its future role in the system. The 2020 IASP Update evaluated potential changes to the classifications of airports currently included in the NPIAS and associated ASSET classifications as reported in the *2019-2023 NPIAS*. Additionally, non-NPIAS airports were evaluated for their ability to meet current NPIAS eligibility requirements provided in FAA Order 5090.5, *Formulation of the NPIAS and Airport Capital Improvement Plan* (ACIP).<sup>2</sup> This process identified two non-NPIAS airports that may be eligible for inclusion in the NPIAS (Emmett Municipal and Mud Lake/West Jefferson County), as well as three airports that may be eligible for a classification change based on current activity levels and other criteria (Buhl Municipal, Challis, and Kamiah Municipal). These airports are listed in **Table A-1** Additional information about the NPIAS evaluation is presented in Chapter 7.

TADLL	A 1. SOMMANT OF FOTENTIALFOR			2
			2020 IASP Update	Classification
ASSOCIATED CITY	Airport	FAA ID	CURRENT	FUTURE
Buhl	Buhl Municipal	UO3	Basic	Local
Challis	Challis	LLJ	Basic	Local
Emmett	Emmett Municipal	S78	Utility	Local
Kamiah	Kamiah Municipal	S73	Unclassified	Basic
Mud Lake	Mud Lake/West Jefferson County	1U2	Utility	Basic

# TABLE A-1: SUMMARY OF POTENTIAL FUTURE CLASSIFICATION CHANGES

Sources: U.S. Census Bureau, 2019; 2019-2023 NPIAS; FAA Air Carrier Activity Information System, 2018; National Based Aircraft Inventory, 2018; National Flight Data Center, 2018; GCR, 2018; Traffic Flow Management System Counts (TFMSC), 2018; FAA Form 5100-108, 2018; ESRI ArcGIS, 2019; ITD Aeronautics, 2019; 2019-2023 NPIAS Report; Airport Inventory and Data Survey Forms, 2019

Additionally, Craigmont Municipal Airport was removed from the NPIAS in December 2018 and is evaluated as a Basic airport in the 2020 IASP Update. Accordingly, and as shown in **Table A-2**, the current Idaho airport system is composed of 37 NPIAS and 38 non-NPIAS airports, while the future system is composed of 39 NPIAS and 36 non-NPIAS facilities. Airports indicated for a potential future classification change are presented in bold blue.

	2: CURRENT AND FUTURE IASP UPDATE C	LASSIFICA								
ASSOCIATED			2020 IASP Update							
CITY	Airport	FAA ID	CURRENT	FUTURE						
COMMERCIAL SERVICE										
Boise	Boise Air Terminal/Gowen Field	BOI	Primary	Primary						
Hailey	Friedman Memorial	SUN	Primary	Primary						
Idaho Falls	Idaho Falls Regional	IDA	Primary	Primary						
Lewiston	Lewiston-Nez Perce County	LWS	Primary	Primary						
Pocatello	Pocatello Regional	PIH	Primary	Primary						
Pullman	Pullman-Moscow Regional	PUW	Primary	Primary						
Twin Falls	Joslin Field-Magic Valley Regional	TWF	Primary	Primary						

# TABLE A-2: CURRENT AND FUTURE IASP UPDATE CLASSIFICATIONS BY AIRPOR

<sup>2</sup> FAA (September 3, 2019). *Formulation of the NPIAS and the ACIP*. Available online at https://www.faa.gov/regulations\_policies/ orders\_notices/index.cfm/go/document.current/documentNumber/5090.5 (accessed December 2019)



ASSOCIATED			2020 145	P Update	
CITY	Airport	FAA ID	CURRENT	FUTURE	
	GA				
Aberdeen	Aberdeen Municipal	U36	Basic	Basic	
American Falls	American Falls	U01	Utility	Utility	
Arco	Arco-Butte County	AOC	Basic	Basic	
Bancroft	Bancroft Municipal	U51	General	General	
Big Creek	Big Creek	U60	Backcountry	Backcountry	
Blackfoot	McCarley Field	U02	Local	Local	
Bonners Ferry	Boundary County	65S	Local	Local	
Buhl	Buhl Municipal	U03	Basic	Local	
Burley	Burley Municipal	BYI	Local	Local	
Caldwell	Caldwell Industrial	EUL	Regional	Regional	
Carey	Carey	U65	General	General	
Cascade	Cascade	U70	Local	Local	
Challis	Challis	LIJ	Basic	Local	
Coeur D'Alene	Brooks Seaplane Base (SPB)	S76	General	General	
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	Regional	Regional	
Coolin	Cavanaugh Bay	66S	Backcountry	Backcountry	
Cottonwood	Cottonwood Municipal	S84	General	General	
Council	Council Municipal	U82	Basic	Basic	
Craigmont	Craigmont Municipal	S89	General	General	
Donnelly	Donald D. Coski Memorial	U84	Backcountry	Backcountry	
Downey	Downey/Hyde Memorial	U58	General	General	
Driggs	Driggs-Reed Memorial	DIJ	Regional	Regional	
Dubois	Dubois Municipal	U41	General	General	
Emmett	Emmett Municipal	S78	Utility	Local	
Fairfield	Camas County	U86	General	General	
Galena	Smiley Creek	U87	Backcountry	Backcountry	
Garden Valley	Garden Valley	U88	General	General	
Glenns Ferry	Glenns Ferry Municipal	U89	General	General	
Gooding	Gooding Municipal	GNG	Local	Local	
Grangeville	Idaho County	GIC	Local	Local	
Hazelton	Hazelton Municipal	U94	General	General	
Homedale	Homedale Municipal	S66	Basic	Basic	
Howe	Howe	U97	General	General	
Jerome	Jerome County	JER	Local	Local	
Kamiah	Kamiah Municipal	S73	Unclassified	Basic	
Kellogg	Shoshone County	S83	Basic	Basic	
Kooskia	Kooskia Municipal	S82	General	General	
Leadore	Leadore	U00	General	General	



CITYAirportFAA IDCURRENTFUTURELewistonSnake River SPB78UGeneralGeneralMackayU62GeneralGeneralMalad CityMalad CityMLDUtilityUtilityMcCallMcCall MunicipalMYLLocalLocalMidvaleLee Williams Memorial0U9GeneralGeneralMountain HomeMountain Home MunicipalU76LocalLocalMud LakeMud Lake/West Jefferson County1U2UtilityBasicMurphyMurphy1U3GeneralGeneralNampaNampa MunicipalMANLocalLocalNampaNampa MunicipalMANLocalLocalOrofinoOrofino MunicipalS68BasicBasicPartisBear Lake County1U7BasicBasicPayettePayette MunicipalS75UtilityUtilityPorthillEckhart International1S1BackcountyBackcountyPrestonPayette MunicipalS75UtilityUtilityPortist RiverPrestonU10LocalLocalRigbyRexburg-Madison CountyRXELocalLocalRigbyReckofrd MunicipalS74UcalLocalRigbyRigbyU56UtilityUtilityRockfordSandpointS74LocalLocalRigbyRigbyU56UtilityUtilitySalmonLemhi CountySMN <t< th=""><th>ASSOCIATED</th><th></th><th></th><th>2020 IAS</th><th>P Update</th></t<>	ASSOCIATED			2020 IAS	P Update	
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PorthillEckhart International1S1BackcountryBackcountryPrestonU10LocalLocalLocalPriest RiverPriest River Municipal1S6BasicBasicRexburgRexburg-Madison CountyRXELocalLocalRigbyU56UtilityUtilityRockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSadpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonySt Maries MunicipalS72LocalLocalStanleyQUStanley2U7GeneralGeneralStanleyWeiser MunicipalS87LocalLocalDescrWeiser MunicipalS87LocalLocal	Parma	Parma	50S	General	General	
PrestonU10LocalLocalPriest RiverPriest River Municipal1S6BasicBasicRexburgRexburg-Madison CountyRXELocalLocalRigbyU56UtilityUtilityRockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU12UtilityUtilitySt. AnthonySt Maries MunicipalS72LocalLocalStanleyQStanley2U7GeneralGeneralStanleyMeiserZU8BackcountryBackcountry	Payette	Payette Municipal	S75	Utility	Utility	
Priest RiverPriest River Municipal1S6BasicBasicRexburgRexburg-Madison CountyRXELocalLocalRigbyU56UtilityUtilityRockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU12UtilityUtilitySt. AnthonySt Maries MunicipalS72LocalLocalStanleyOtherational StanleySURSURBackcountryWeiserWeiser MunicipalS87LocalLocal	Porthill	Eckhart International	1S1	Backcountry	Backcountry	
RexburgRexburg-Madison CountyRXELocalLocalRigbyU56UtilityUtilityRockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonySt Maries MunicipalS72LocalLocalStanleySt Maries MunicipalS72LocalLocalStanleyMeiser MunicipalS87BackcountryBackcountryWeiserStanleyS87LocalLocal	Preston	Preston	U10	Local	Local	
RigbyRigbyU56UtilityUtilityRockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonySt Maries MunicipalS72LocalLocalSt. MariesSt Maries MunicipalS72LocalLocalStanleyQU7GeneralGeneralStanleyStanleyS87LocalLocal	Priest River	Priest River Municipal	1S6	Basic	Basic	
RockfordRockford Municipal2U4GeneralGeneralSalmonLemhi CountySMNLocalLocalSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonyStanford FieldU12UtilityUtilitySt. MariesSt Maries MunicipalS72LocalLocalStanleyQU7GeneralGeneralGeneralStanleyMeiser MunicipalS87LocalLocal	Rexburg	Rexburg-Madison County	RXE	Local	Local	
SalmonLemhi CountySMNLocalLocalSandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonyStanford FieldU12UtilityUtilitySt. MariesSt Maries MunicipalS72LocalLocalStanleyStanley2U7GeneralGeneralStanleyMeiser MunicipalS87LocalLocal	Rigby	Rigby	U56	Utility	Utility	
SandpointSandpointSZTLocalLocalSoda SpringsAllen H TigertU78UtilityUtilitySt. AnthonyStanford FieldU12UtilityUtilitySt. MariesSt Maries MunicipalS72LocalLocalStanleyQU7GeneralGeneralGeneralStanleyThomas Creek2U8BackcountryBackcountryWeiserWeiser MunicipalS87LocalLocal	Rockford	Rockford Municipal	2U4	General	General	
Soda SpringsAllen H TigertU78UtilityUtilitySt. AnthonyStanford FieldU12UtilityUtilitySt. MariesSt Maries MunicipalS72LocalLocalStanleyStanley2U7GeneralGeneralStanleyThomas Creek2U8BackcountryBackcountryWeiserWeiser MunicipalS87LocalLocal	Salmon	Lemhi County	SMN	Local	Local	
St. AnthonyStanford FieldU12UtilitySt. MariesSt Maries MunicipalS72LocalLocalStanley2U7GeneralGeneralStanley2U8BackcountryBackcountryWeiserWeiser MunicipalS87LocalLocal	Sandpoint	Sandpoint	SZT	Local	Local	
St. MariesSt Maries MunicipalS72LocalStanley2U7GeneralGeneralStanley2U8BackcountryBackcountryWeiserWeiser MunicipalS87Local	Soda Springs	Allen H Tigert	U78	Utility	Utility	
Stanley2U7GeneralGeneralStanleyThomas Creek2U8BackcountryBackcountryWeiserWeiser MunicipalS87LocalLocal	St. Anthony	Stanford Field	U12	Utility	Utility	
StanleyThomas Creek2U8BackcountryBackcountryWeiserWeiser MunicipalS87LocalLocal	St. Maries	St Maries Municipal	S72	Local	Local	
Weiser         Weiser Municipal         S87         Local         Local	Stanley	Stanley	2U7	General	General	
	Stanley	Thomas Creek	2U8	Backcountry	Backcountry	
Yellow PineJohnson Creek3U2BackcountryBackcountry	Weiser	Weiser Municipal	S87	Local	Local	
	Yellow Pine	Johnson Creek	3U2	Backcountry	Backcountry	

Note: Airports indicated in bold blue have been indicated for a future role change. As noted previously, these airports are analyzed using their future roles in all subsequent analyses that pertain to future system performance targets and associated system needs. Source: Kimley-Horn, 2019



# **Summary of Facility and Service Objectives**

Airports' performance in meeting each facility and service objective are presented in the following sections. Airports that have been identified as potentially needing an airside facility need are listed by objective (see **Table A-4** through **Table A-10**), while airport-specific landside facility and service objective needs are summarized at the end of each section (see **Table A-11** and **Table A-12**, respectively). This is because landside facility needs are generally indicated by a yes/no (i.e., meets/does not meet) analysis; airside facility needs are generally more complex and based on airport-specific requirements. Additionally, airport-specific evaluations associated with landside and airside objectives are presented in the report cards at the end of the appendix.

The performance of airport classifications denoted with a "Not Applicable" (N/A) do not have a minimum requirement for that objective. Airport classifications indicated to maintain their existing facilities or services into the future are marked as "Maintain Existing"; these facilities are considered to achieve the objective because no improvements are necessary. The facility and service objectives of the 2020 IASP Update by airport classification are outlined in **Table A-3**.



#### TABLE A-3: FACILITY AND SERVICE OBJECTIVES BY AIRPORT CLASSIFICATION

			NPIAS				Non-NPIAS	
OBJETIVE CATEGORY	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
AIRSIDE FACILITIES								
Runway Length	Future runway length from ALP/MP	Future runway length from ALP/MP	To accommodate 100 percent of small aircraft fleet	To accommodate 95 percent of small aircraft fleet	Maintain existing	To accommodate 95 percent of small aircraft fleet	Maintain existing	Maintain existing
Runway Width	100 feet	75 feet	75 feet	60 feet	Maintain existing	60 feet <sup>3</sup>	50 feet <sup>4</sup>	Maintain existing
Runway Strength	Single-wheel landing gear (60,000 pounds)	Single-wheel landing gear (30,000 pounds)	Single-wheel landing gear (12,500 pounds)	Single-wheel landing gear (12,500 pounds)	Maintain existing	Single-wheel landing gear (12,500 pounds)	Maintain existing	Maintain existing
Taxiway	Full Parallel	Full or Partial Parallel	Partial Parallel, Connectors, or Turnarounds	Turnarounds	Maintain existing	Partial Parallel or Turnarounds	Maintain existing	Maintain existing
Instrument Approach	Precision or PBN	PBN	PBN	Visual, PBN desired	Visual	Visual	Visual	Visual
Visual Aids	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs/VASIs, ALS (as appropriate based on ALS)	Rotating Beacon, Lighted Wind Cone, REILs, PAPIs/VASIs, ALS as required	Rotating Beacon, Wind Cone, REILs, PAPIs/VASIs	Rotating Beacon, Wind Cone	Rotating Beacon as required, Wind Cone	Rotating Beacon as required, Wind Cone	Wind Cone	Wind Cone
Runway Lighting	MIRL, HIRL desired	MIRL, HIRL as required	MIRL	LIRL	Reflectors, LIRL desired	Reflectors, LIRL desired	Reflectors	None

<sup>&</sup>lt;sup>3</sup> A 60-foot runway width reflects the FAA design standard for Aircraft Approach Category B and below (Advisory Circular [AC] 150/5300-13A Change 1, Airport Design). While Utility airports are not in the NPIAS, this classification has been designed to prepare airports for inclusion should they meet eligibility criteria and decide to pursue NPIAS designation in the future. Additional information about the Utility classification is available in Chapter 3.

<sup>&</sup>lt;sup>4</sup>A 50-foot runway width approximates the desired width as described in the ITD Aeronautics Desk Manual, Chapter 201 in accordance with the "Idaho VFR Airport Design Dimensional Standards" checklist.



			NPIAS				Non-NPIAS	
OBJETIVE CATEGORY	Primary	National	Regional	Local	Basic	Utility	General	Backcountry
Weather Reporting	ATCT, On-site ASOS or AWOS	On-site ASOS or AWOS	On-site ASOS or AWOS as required	On-site ASOS or AWOS as required	None	Unicom and Dual Barometers	None	None
LANDSIDE FACILITIES	Terminal (Commercial Service and GA Facility(ies]) with Public Restrooms, Conference Rooms, and Pilots Lounge; Hangar Storage for 80% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie-Downs) for 20% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking	GA Terminal with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie-Downs) for 40% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking	GA Terminal/ Facilities with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft; Apron (Tie- Downs) for 40% of Based Aircraft and 50% of Transient Aircraft; Partial Perimeter Fencing; Auto Parking	GA Facility with Public Restrooms and Pilots Lounge; Hangar Storage for 50% of Based Aircraft; Apron (Tie- Downs) for 50% of Based Aircraft and 50% of Transient Aircraft; Partial Perimeter Fencing; Auto Parking	Public Restroom; Apron (Tie-Downs) for 100% of Based Aircraft and 50% of Transient Aircraft; Full Perimeter Fencing; Auto Parking	Public Restrooms or Portable Toilets; Apron (Tie- Downs) for 100% of Based Aircraft and 25% of Transient Aircraft; Full Perimeter Fencing	Public Restrooms or Portable Toilets; Apron (Tie- Downs) for 100% of Based Aircraft and 25% of Transient Aircraft of Maximum Daily Totals	Public Restrooms or Portable Toilets; Apron (Tie- Down) for At Least One Aircraft and up to 25% of Maximum Daily Totals
SERVICES	Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas, 24/7 Jet A Fuel, Rental Car Access	Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas and Jet A Fuel, Rental Car Access	Cell Coverage, Wi-Fi, SRE, AvGas and Jet A as needed, Courtesy/ Loaner Car	Cell Coverage, Wi-Fi, AvGas, Courtesy/Loaner Car	Cell Coverage	Cell Coverage, Courtesy/ Loaner Car	Cell Coverage	Cell Coverage

Acronyms: ALP = Airport Layout Plan, MP = master plan, PBN = performance based navigation, REIL = runway end identifier lights, PAPIs = precision approach path indicator lights, VASIs = visual approach slope indicators, ALS = approach light systems, HIRL = high intensity runway lighting, MIRL = medium intensity runway lighting, LIRL = low intensity runway lighting, ATCT = air traffic control tower, ASOS = automated surface observing system, AWOS = automated weather observing system, FBO = fixed base operator, SRE = snow removal equipment.

Note: Objectives have been established for National airports. However, the Idaho airport system does not have any airports in the National classification at this time. Source: Kimley-Horn, 2019

# SYSTEM PLAN UPDATE

# **Airside Facility Needs**

The objectives in this section specifically pertain to airside facilities supporting aircraft operations. This includes runways, taxiways, apron areas, and facilities that provide guidance and other information to pilots prior to and during flight operations. This section is comprised of the following objectives:

- ✤ Runway length
- ✤ Runway width
- ✤ Runway strength
- ✤ Taxiway
- ✤ Instrument approach
- ✤ Visual aids
- ✤ Runway lighting
- → Weather reporting

# **Runway Length**

Runway length is a critical airside component, as it, in part, drives the type(s) of aircraft that can safely and efficiently operate at an airport. More demanding aircraft generally require longer runway lengths due to required take-off and landing distances. Runway length objectives for each airport classification are as follows:

- Primary airports meet this objective if the existing primary runway length achieves the proposed future/ultimate length of the runway as indicated in the airport's ALP or MP.
- → Target objectives for Regional, Local, and Utility airports are determined through calculations derived from the runway length curve tables for small aircraft found in FAA AC 150/5325-4B (these tables are anticipated to be carried forward in draft AC 150/5325-4C intended to replace 4B). Regional airports should have runway lengths that can accommodate 100 percent of their small aircraft fleet, whereas Local and Utility runways should accommodate 95 percent of their small aircraft fleet.
- → Basic, General, and Backcountry airports are indicated to maintain their existing runway lengths.

**Figure A-1** summarizes the results of the system's performance in meeting the runway length facility objective by each airport classification. Statewide, 20 percent of airports meet their designated runway length objective, 27 percent do not, and 53 percent are required to maintain their existing runway length. Seventy-one percent of Primary airports met their minimum runway length objective determined by their MP or ALP. Regional airports whose primary runway accommodates 100 percent of their small aircraft fleet is at 67 percent. Half of all Local airports in the system currently meet this objective and zero percent of Utility airports currently have runway lengths that accommodate 95 of their small aircraft fleet. Note that Mud Lake/West Jefferson County does not meet its current objective as a Utility airport (95 percent of small aircraft fleet). However, the airport would meet its future objective as a Basic airport (maintain existing).



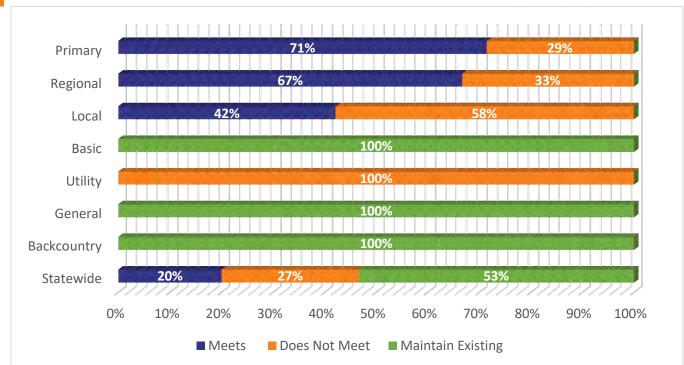


FIGURE A-1: PERCENT OF AIRPORTS MEETING RUNWAY LENGTH OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; FAA AC 150/5325-4B; Airport-specific MPs/ALPs; Kimley-Horn, 2019

Table A-4 presents the runway length improvement projects identified by the 2020 IASP Update based on the runway length objectives.

TABLE A-4: FUTURE NEEDS BY AIRPORT: PRIMARY RUNWAY LENGTH IMPROVEMENTS													
			Pri	mary Runway	y Length Deta	nils							
					Objective	RW							
				RW	RW	Length							
ASSOCIATED		FAA		Length	Length	Need							
CITY	Airport	ID	RW	(feet)	(feet)	(feet)							
PRIMARY													
Pullman*	Pullman-Moscow Regional	PUW	06/24	6,730	8,000	+1,270							
REGIONAL													
Driggs	Driggs-Reed Memorial	DIJ	04/22	7,300	7,350	+50							
		LOC	4L										
Blackfoot	McCarley Field	U02	01/19	4,311	5,500	+1,189							
Buhl	Buhl Municipal	U03	09/27	3,898	4,800	+902							
Burley	Burley Municipal	BYI	02/20	4,092	5,200	+1,108							
Cascade	Cascade	U70	12/30	4,300	5,600	+1,300							
Challis	Challis	LLJ	17/35	4,600	6100	+1,024							
Emmett	Emmett Municipal	S78	10/28	3,307	4,050	+743							
Gooding	Gooding Municipal	GNG	07/25	4,745	5,000	+255							
Jerome	Jerome County	JER	09/27	5,000	5,250	+250							
Preston	Preston	U10	03/21	3,457	5,800	+2,343							

IDAHO AIRPORT

			Pri	mary Runway	y Length Deta	iils
ASSOCIATED CITY	Airport	FAA ID	RW	RW Length (feet)	Objective RW Length (feet)	RW Length Need (feet)
Rexburg	Rexburg-Madison County	RXE	17/35	4,204	5,750	+1,546
St. Maries	St Maries Municipal	S72	10/28	3,354	3,850	+496
		UTILI	TY			
American Falls	American Falls	U01	03/21	4,900	5,550	+650
Malad City	Malad City	MLD	16/34	4,950	5,700	+750
Payette	Payette Municipal	S75	13/31	3,000	3,950	+950
Rigby	Rigby	U56	01/19	3,727	5,850	+2,123
Soda Springs	Allen H Tigert	U78	16/34	3,500	6,950	+3,450
St. Anthony	Stanford Field	U12	04/22	4,500	5,900	+1,400

\*Note: Since the time of data collection, Pullman-Moscow Regional Airport (PUW) completed a major runway realignment and improvement to bring the length of its primary runway to 7,100 feet. This project also shifted the runway orientation to 23/05. Because the 2020 IASP Update is based on 2018 data, the need is provided here for reporting continuity, but improvement projects are no longer required at PUW. Sources: Airport Inventory and Data Survey Forms, 2019; FAA AC 150/5325-4B; Airport-specific MPs/ALPs; Kimley-Horn,

2019

# **Runway Width**

As part of runway design, runway width relates to the determination of the types of aircraft that can safely operate at an airport. The provision of adequate runway width is tied to aircraft approach speeds. More demanding or high-performance aircraft require a wider runway specification than less-demanding aircraft that approach the runway at slower speeds and generally shorter wingspans. Primary and Regional airports are considered to meet the objective if they have a primary runway width of at least 100 feet and 75 feet, respectively. Local and Utility airports should have a primary runway width of at least 60 feet. The 60-foot-wide design standard is derived from FAA AC 150/5300-13A *Airport Design, Change 1* to accommodate an Aircraft Approach Category (AAC) of B and lower. Utility airports are not in the NPIAS currently but have been recommended to meet this runway width design standard in preparation for potential future inclusion upon meeting eligibility requirements. To meet the facility objective, General airports should have a primary runway width of at least 50 feet as per the "Idaho VFR Airport Design Dimensional Standards" checklist found in the *ITD Aeronautics Desk Manual*, Chapter 201. Basic and Backcountry airports are recommended to maintain their existing runway widths.

The performance of the system in meeting runway width objectives by airport classification are shown in **Figure A-2.** Statewide, more than half (60 percent) of the system airports meet their runway width objective, 17 percent do not meet their objective, and 23 percent are indicated to maintain their existing runway widths. All Primary and Regional airports meet their runway width objectives. Almost all (89 percent) of Local airports have a primary runway width of at least 60 feet, whereas only 17 percent of Utility airports meet this objective. Seventy-four percent of General airports meet their runway width objective of 50 feet.



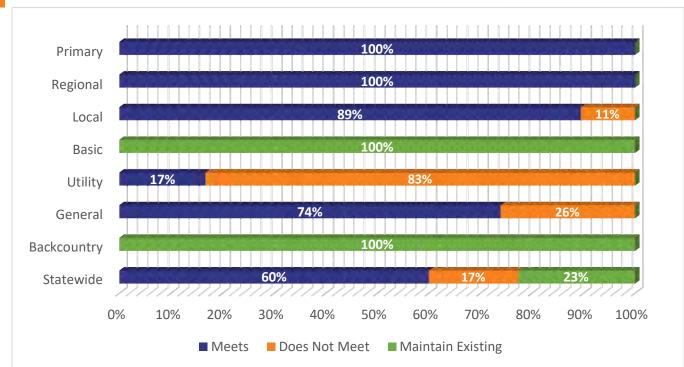


FIGURE A-2: PERCENT OF AIRPORTS MEETING RUNWAY WIDTH OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; FAA AC 150/5300-13A Airport Design, Change 1; Kimley-Horn, 2019

**Table A-5** presents the runway width improvement projects identified by the 2020 IASP Update based onclassification-specific objectives.

	A-5: FUTURE NEEDS BT AIRF				PROVEIVIEINI	2						
			F	Runway Width	n Details (fee	t)						
ASSOCIATED		FAA			Objective	RW Width						
CITY	Airport	ID	RW	RW Width	RW Width	Need						
LOCAL												
Emmett	Emmett Municipal	S78	10/28	55	60	+5						
Preston	Preston	U10	03/21	50	60	+10						
UTILITY												
American Falls	American Falls	U01	03/21	50	60	+10						
Payette	Payette Municipal	S75	13/31	50	60	+10						
Rigby	Rigby	U56	01/19	50	60	+10						
Soda Springs	Allen H Tigert	U78	16/34	50	60	+10						
St. Anthony	Stanford Field	U12	04/22	50	60	+10						
		GENE	RAL									
Bancroft	Bancroft Municipal	U51	07/25	30	50	+20						
Fairfield	Camas County	U86	08/26	40	50	+10						
Howe	Howe	U97	13/31	25	50	+25						
Murphy	Murphy	1U3	12/30	45	50	+5						
Nezperce	Nezperce Municipal	0S5	15/33	30	50	+20						
Oakley	Oakley Municipal	1U6	17/35	40	50	+10						

#### TABLE A-5: FUTURE NEEDS BY AIRPORT: PRIMARY RUNWAY WIDTH IMPROVEMENTS

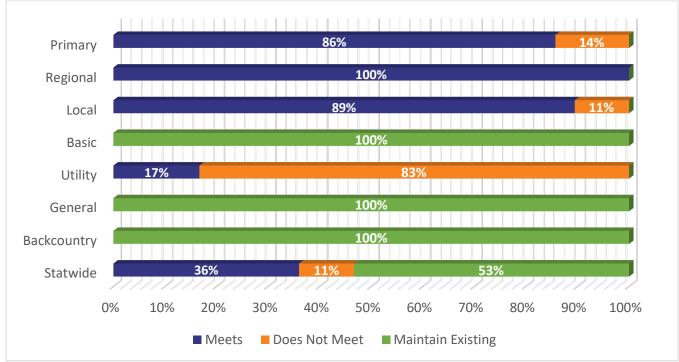
Sources: Airport Inventory and Data Survey Forms, 2019; FAA AC 150/5300-13A Airport Design, Change 1; Kimley-Horn, 2019



# **Runway Strength**

Maintaining the conditions of a runway's pavement generally incurs some of the highest capital costs to airports due to the frequent wear and tear caused by aviation activity. The strength of the runway helps prolong its usable life and reduce excessive wear through the indication of the runway's load-carrying capacity. Runway strength therefore aids in determining the aircraft types able to operate on the runway based on their landing weight. This facility objective utilizes the weight per single-wheel landing gear for all airport classifications. The runway strength objective for Primary airports is to have a primary runway strength of at least 60,000 pounds. Regional, Local, and Utility airport classifications are considered to meet the objective if they have a primary runway strength of at least 12,500 pounds. Note that accommodations for dual wheel and other land gear configurations may be appropriate at airports that support large aircraft; however, such an analysis was not conducted as part of this study.

**Figure A-3** depicts the system performance and performance by classification of 2020 IASP Update airports meeting their runway strength objective. Statewide, 36 percent of airports meet the runway strength objective and 11 percent do not. Fifty-three percent of statewide airports should maintain their existing runway strengths. For Primary airports, 89 percent have a runway strength that is at least 60,000 pounds per single-wheel landing gear. One hundred percent of Regional and 89 percent of Local meet the runway strength objective of at least 12,500 pounds per single-wheel landing gear; 17 percent of Utility airports achieve this objective. All Basic, General, and Backcountry airports are designated to maintain their existing runway strengths.



#### FIGURE A-3: PERCENT OF AIRPORTS MEETING RUNWAY STRENGTH OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

**Table A-6** presents the runway strength improvement needs identified by the 2020 IASP Update. Note that runway strengths were unavailable for four airports in the analysis. As a result, these airports have been identified for an improvement project.

			Primary Runway Strength Details									
				RW	Objective RW	RW Strength						
ASSOCIATED		FAA		Strength	Strength	Need						
CITY	Airport	ID	RW	(pounds)	(pounds)	(pounds)						
PRIMARY												
Pullman*	Pullman-Moscow Regional	PUW	06/24	57,000	60,000	-3,000						
LOCAL												
Emmett	Emmett Municipal	S78	10/28	8,000	12,500	-4,500						
Preston	Preston	U10	03/21	12,000	12,500	-500						
		UTILI	TY									
American Falls	American Falls	U01	03/21	N/P	12,500	-12,500						
Malad City	Malad City	MLD	16/34	N/P	12,500	-12,500						
Payette	Payette Municipal	S75	13/31	8,000	12,500	-4,500						
Soda Springs	Allen H Tigert	U78	16/34	12,000	12,500	-500						
St. Anthony*	Stanford Field	U12	04/22	N/P	12,500	-12,500						

#### TABLE A-6: FUTURE NEEDS BY AIRPORT: PRIMARY RUNWAY STRENGTH IMPROVEMENTS

\*Note: Since the time of data collection, Stanford Field (U12) and Pullman-Moscow Regional Airport (PUW) completed runway strengthening projects. Because the 2020 IASP Update is based on 2018 data, the need is provided here for reporting continuity, but improvement projects are no longer required at these facilities. Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Taxiway**

Taxiways facilitate the efficient movement of aircraft on and off runways, transitions to aprons or aircraft parking areas, and the operational safety and efficiency of a runway. The availability and type of taxiway influence the number of hourly aircraft arrivals and departures that can occur on the runway, which ultimately affects the yearly annual service volume or capacity of an airport. This facility objective recommends the type of taxiway the airport's primary runway should have to support typical aviation activity by classification. Primary airports should have a full parallel taxiway for their primary runway. Regional airports are recommended to have one of the three options, including a partial parallel, connectors, or turnarounds. To meet the objective, Utility airports should have a partial parallel or a turnaround present for their primary runway. Basic, General, and Backcountry airports are indicated to maintain their existing taxiway types.

The performance of the system by airport classification in meeting the taxiway objective is summarized in **Figure A-4.** Forty-three percent of statewide airports meet the objective, four percent do not, and 53 percent are designated as maintain existing. All Primary and Regional airports meet the taxiway objective set for their classifications. Almost all (89 percent) of Local airports have at least a turnaround taxiway present. Three-quarters (75 percent) of Utility airports meet their objective by having either a partial parallel or turnaround taxiway. Accordingly, one Local and one Utility airports have been identified for a taxiway improvement project.

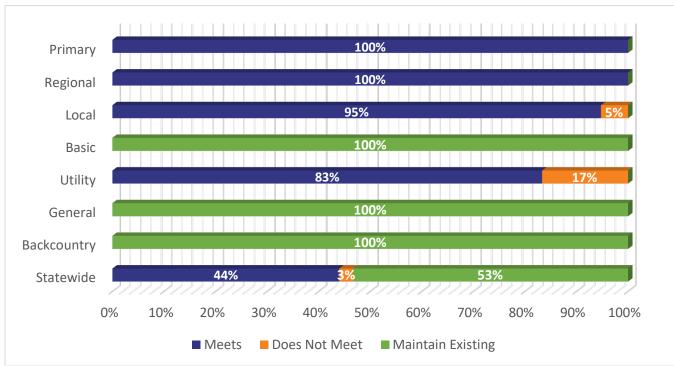


FIGURE A-4: PERCENT OF AIRPORTS MEETING TAXIWAY OBJECTIVE BY CLASSIFICATION

Table A-7 presents the taxiway improvement needs by airport as identified by the 2020 IASP Update.

	TABLE A-7. FUTUR	E NEEDS	DI AIRPURT TAA	IVVAT IIVIPROVEIVIEIVIS							
			٦	axiway Details							
		FAA	Existing								
ASSOCIATED CITY	Airport	ID	Taxiway Type	Taxiway Need							
LOCAL											
Preston	Preston	U10	Connector	Turnarounds							
		UTI	LITY								
Soda Springs	Allen H Tigert	U78	Connector	Partial Parallel / Turnarounds							
	Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019										

# TABLE A-7: FUTURE NEEDS BY AIRPORT: TAXIWAY IMPROVEMENTS

# **Instrument Approach**

Implementation of instrument approaches provides informational cues to facilitate the safe navigation of aircraft during less than ideal meteorological conditions. The type of instrument approach differs for each airport classification and approaches are distinguished as precision, performance-based navigation (PBN), or visual approach. Per the facility objectives, Primary airports should have a precision approach or a PBN at a minimum. Having a PBN is the instrument approach objective for Regional airports and is desired at Local airports whose minimum requirements are a visual approach. Basic, Utility, General, and Backcountry airports meet the objective if they have a visual approach.

**Figure A-5** summarizes the performance of the 2020 IASP Update airports for this facility objective. Per the results, all airports statewide meet their classification's objective for instrument approach types.

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



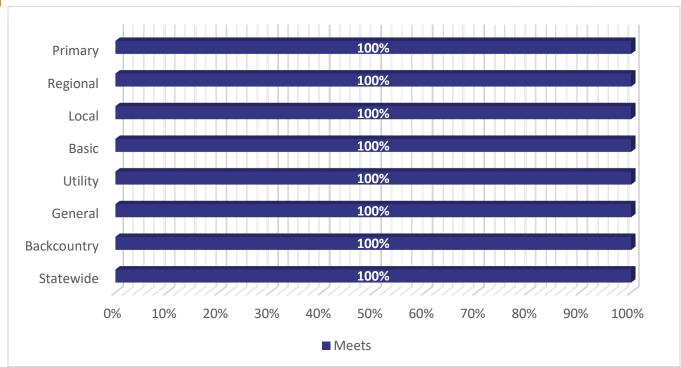


FIGURE A-5: PERCENT OF AIRPORTS MEETING INSTRUMENT APPROACH OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Visual Aids**

Visual aids are critical to the movement of aircraft on the ground, departing, and landing at airports. Larger, busier airports may utilize many different visual aids as part of a complex system while small, rural airports may have a single visual aid dependent on the needs of the airport. For this objective, Primary airports are considered meeting the objective if they currently have all six of the following visual aids: rotating beacon, lighted wind cone, REILs, PAPIs or VASIs, and ALS. Note that REILs are not installed in conjunction with Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) or ALS with Sequenced Flashing Lights (ALSF-2) (two specific types of ALS). Accordingly, the REILs objective would not apply to airports with MALSR or ALSF-2. To meet the objective, Regional airport needs are similar to Primary airports with the exception that they do not need an ALS. Local airports should have a rotating beacon and wind cone. Basic and Utility airports should have a wind cone to meet their objective. Airports meeting the visual aids objective are summarized in **Figure A-6**.

Per the results of the inventory, 95 percent of statewide airports meet the visual aids objective for their classification. Just less than three-quarters (71 percent) of Primary airports currently have all six of the specified visual aids and 67 percent have all five visual aids needed to meet the objective. All Local, Basic, Utility, and Backcountry airports have adequate visual aids. Ninety-six percent of General airports have a wind cone present. This equals two Primary, one Regional, and one General airport that has been identified for a visual aid improvement project.



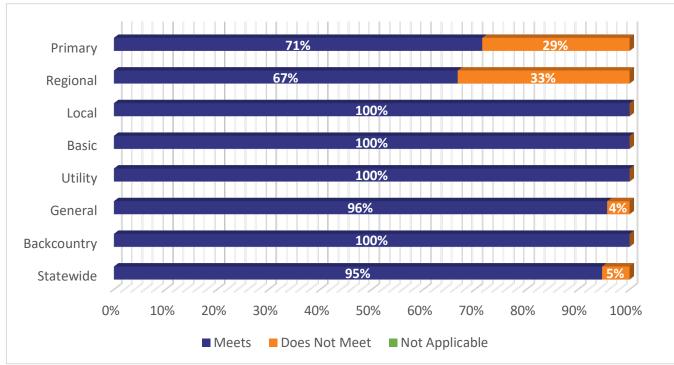


FIGURE A-6: PERCENT OF AIRPORTS MEETING VISUAL AIDS OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

 Table A-8 presents the visual aid needs by airport identified by the 2020 IASP Update.



#### TABLE A-8: FUTURE NEEDS BY AIRPORT: VISUAL AIDS

				Instrument Approach Details											
ASSOCIATED			Bea	ating acon		d Cone	C	ed Wind one		REIL		'GSI		ALS	Visual Aid
CITY	Airport	FAA ID	Existing	Objective	Existing	Objective	Existing	Objective	Existing	Objective	Existing	Objective	Existing	Objective	Need
PRIMARY															
Hailey	Friedman Memorial	SUN	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	REIL, ALS
Pullman	Pullman-Moscow Regional	PUW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	ALS
						REGI	ONAL								
Caldwell	Caldwell Industrial	EUL	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	REIL
						GEN	IERAL								
Lewiston	Snake River SPB	78U	No	No	No	Yes	No	No	No	No	No	No	No	No	Wind Cone

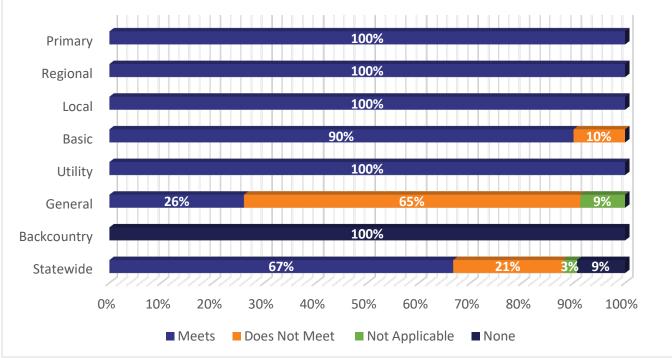
Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



# **Runway Lighting**

Runway edge lighting provides a visual outline of the runway, allowing pilots to locate and navigate towards the runway in nighttime and/or low visibility conditions. Runway lights are defined according to the system's brightness and intensity: LIRL, MIRL, and HIRL. Some airports utilize reflectors to indicate the edges of the runway if the implementation of runway lights does not fit their needs. To meet this objective, Primary and Regional airports should have MIRL implemented, with HIRL being desired at Primary airports. LIRL is the objective for Local airports and is desired over reflectors at Basic and Utility. General airports are considered meeting the objective if they have reflectors present. Backcountry airports do not have a runway lighting objective established.

Results of the statewide airports meeting the runway lighting objective are shown in **Figure A-7**. Statewide, 67 percent of airports meet this objective and 21 percent do not. All Primary, Regional, Local, and Utility airports meet their respective runway lighting objectives. Ninety percent of Basic airports have reflectors or LIRL present at their airports. For General airports, 26 percent meet the objective and 65 percent did not. Runway lighting for Snake River SPB (78U) Brooks SPB (S76) do not apply to these airports and therefore comprise the nine percent of General airports to which the objective is not applicable.



#### FIGURE A-7: PERCENT OF AIRPORTS MEETING RUNWAY LIGHTING OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

Table A-9 presents the runway lighting needs identified by the 2020 IASP Update.

TABLE A-9: FUTURE NEEDS BY AIRPORT: RUNWAY LIC	GHTING
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			Runway Lighting Details		
ASSOCIATED		FAA	Existing Runway		
CITY	Airport	ID	Lighting	Runway Lighting Need	
BASIC					
Homedale	Homedale Municipal	S66	None	Reflectors / LIRL as Desired	
	GENERAL				
Bancroft	Bancroft Municipal	U51	None	Reflectors	
Carey	Carey	U65	None	Reflectors	
Dubois	Dubois Municipal	U41	None	Reflectors	
Fairfield	Camas County	U86	None	Reflectors	
Garden Valley	Garden Valley	U88	None	Reflectors	
Hazelton	Hazelton Municipal	U94	None	Reflectors	
Howe	Howe	U97	None	Reflectors	
Kooskia	Kooskia Municipal	S82	None	Reflectors	
Mackay	Mackay	U62	None	Reflectors	
Midvale	Lee Williams Memorial	0U9	None	Reflectors	
Murphy	Murphy	1U3	None	Reflectors	
Nezperce	Nezperce Municipal	0S5	None	Reflectors	
Oakley	Oakley Municipal	1U6	None	Reflectors	
Rockford	Rockford Municipal	2U4	None	Reflectors	
Stanley	Stanley	2U7	None	Reflectors	

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# Weather Reporting

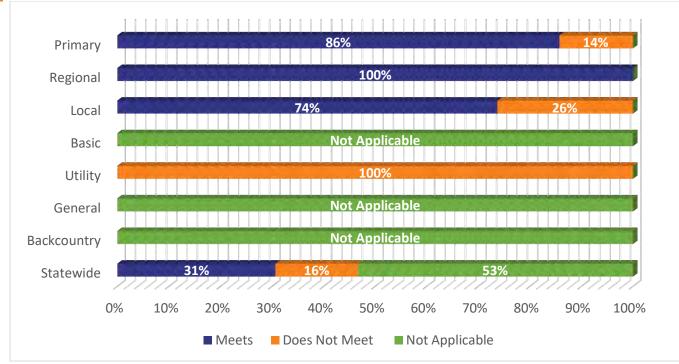
Weather conditions such as lowered cloud ceiling heights, fog, rain, snow, wind speeds, etc. can negatively impact aviation activity. Weather reporting systems monitor and communicate meteorological conditions affecting airports on a real-time basis to pilots navigating within the airport's airspace and, most importantly, during touchdown. The weather reporting objective for Primary, Regional, and Local airports is to have on-site AWOS or ASOS. Primary airports are additionally indicated to have an ATCT. To meet their weather reporting objective, a UNICOM station and dual barometers must be present at Utility airports. Basic, General, and Backcountry airports are not identified to have a weather reporting system.

**Figure A-8** summarizes the airports by classification that meet their established facility objective for weather reporting. Thirty-one percent of airports statewide meet this objective, while 16 percent did not; this objective is not applicable to 53 percent of airports. Eighty-six percent of Primary airports have a weather reporting system and thus meet their objective. It is important to note that the only Primary airport that does not meet this objective is Pullman-Moscow Regional Airport, which is indicated for an ATCT.<sup>5</sup> All Regional airports and 74

<sup>&</sup>lt;sup>5</sup> An ATCT is an optimal condition at all Primary airports. However, the FAA has established a specific cost-benefit ratio that airports must achieve to receive federal funding. This requirement can be challenging for some small commercial service airports. Remote tower technologies are currently being studied by the FAA, and pilot projects are underway at several airports in the U.S. These systems rely on a series of remotely-monitored cameras to provide air traffic control services. Remote towers have significantly lower infrastructure costs and may soon become a viable alternative for airport in lieu of a traditional, on-site ATCT.



percent of Local airports have adequate weather reporting systems. No Utility airports have both a UNICOM and dual barometers present and thus none meet their respective objectives.



#### FIGURE A-8: PERCENT OF AIRPORTS MEETING WEATHER REPORTING OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# Table A-10 presents the weather reporting needs identified by the 2020 IASP Update.

#### TABLE A-10: FUTURE NEEDS BY AIRPORT: WEATHER REPORTING

			Weather Reporting Details			
ASSOCIATED		FAA	Existing Weather			
CITY	Airport	ID	Reporting	Weathering Reporting Need		
PRIMARY						
Pullman	Pullman-Moscow Regional	PUW	ASOS/AWOS	ATCT		
LOCAL						
Blackfoot	McCarley Field	U02	None	ASOS/AWOS (as required)		
Buhl	Buhl Municipal	U03	None	ASOS/AWOS (as required)		
Emmett	Emmett Municipal	S78	None	ASOS/AWOS (as required)		
Mountain Home	Mountain Home Municipal	U76	None	ASOS/AWOS (as required)		
Weiser	Weiser Municipal	S87	None	ASOS/AWOS (as required)		
UTILITY						
American Falls	American Falls	U01	Unicom Available/ No Barometers	Dual Barometers		
Malad City	Malad City	MLD	No	Unicom and Dual Barometers		
Payette	Payette Municipal	S75	No	Unicom and Dual Barometers		
Rigby	Rigby	U56	No	Unicom and Dual Barometers		



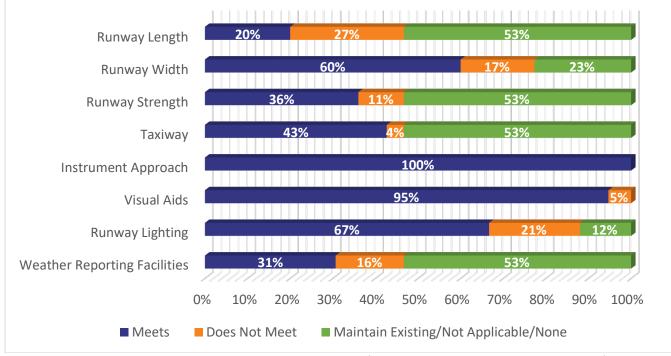
			Weather Reporting Details	
ASSOCIATED		FAA	Existing Weather	
CITY	Airport	ID	Reporting	Weathering Reporting Need
Soda Springs	Allen H Tigert	U78	Unicom Available/ No Barometers	Dual Barometers
St. Anthony	Stanford Field	U12	No	Unicom and Dual Barometers

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### **Airside Facilities Summary**

The airside facilities supporting aircraft operations relate to an airport's runways, taxiways, and the visual systems which inform pilots during approach, touchdown, and takeoff. **Figure A-9** shows the system-wide airport performance for each objective. Visual aids and instrument approach categories have over 90 percent of airports meeting the objective. For runway lighting and runway width, over half of all airports meet the objectives at 67 percent and 57 percent, respectively. The remaining categories, runway length, taxiway, and weather reporting, have at least a 20 percent or greater percentage of airports meeting the objective.

#### FIGURE A-9: PERCENT OF SYSTEM-WIDE AIRPORTS MEETING AIRSIDE FACILITIES OBJECTIVES



Sources: Airport Inventory and Data Survey Forms, 2019; FAA AC 150/5300-13A Airport Design, Change 1, FAA AC 150/5325-4B; Airport-specific MPs/ALPs; Kimley-Horn, 2019

# Landside Facility Needs

The provision of landside facilities can influence the type and amount of airport users utilizing the airport. Certain landside facilities specifically relate to the number of aircraft that can be accommodated in terms of based or transient aircraft storage at the airport. Other objectives pertain specifically to facilities serving pilot and passenger needs. Landside facility objectives included in this section are as follows:

- ✤ Commercial service terminal
- ✤ General aviation (GA) terminal

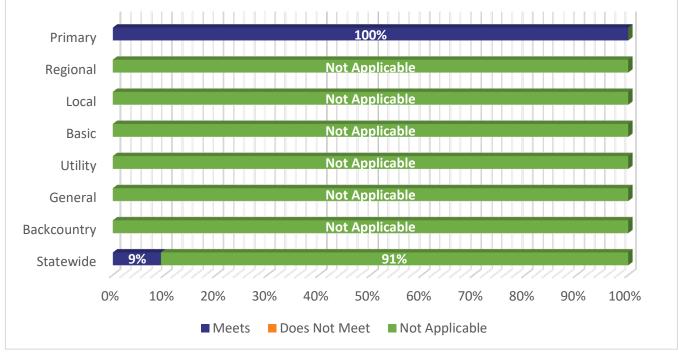


- Conference room
- ✤ Pilots lounge
- → Hangar storage
- → Perimeter fencing
- ✤ Auto parking

All airport-specific future landside facility needs are presented in a combined table (**Table A-11**) at the end of this section.

# **Commercial Service Terminal**

Commercial service terminals serve as an integral component of facilitating commercial service operations as passengers wait for and arrive from their flights. Commercial service terminals and the variety and type of associated services provided are dependent upon the needs of the specific airport in terms of operators, intensity of aviation activity, type of users, and other variables. To meet the objective, the seven Primary airports that provide scheduled air transport should have a commercial service terminal building with a conference room. This objective is not applicable to any other airport classification. Due to this, nine percent of statewide airports meet the objective and 91 percent are "Not Applicable". Per Figure A-10, all Primary airports in the Idaho system have a commercial service terminal and therefore meet this objective. It is important that airports monitor their terminal's continued ability to meet the needs of pilots, passengers, and on-airport staff as aviation demands change over time. A right-sized and effectively configured space reduces congestion; improves passenger traffic flow between check-in areas, security screen areas, gates, baggage carousels, ground transportation access points, and other areas; and reduces stress that can be associated with travel. Space may need to be added or reconfigured for passenger waiting, security holding, concessions, and other areas as passenger demands shift. Additionally, comfortable and accessible passenger areas may promote spending at food, beverage, and retail establishments, potentially providing additional revenue streams to the airport. Terminal studies can be conducted during MP development or updates or other planning efforts.



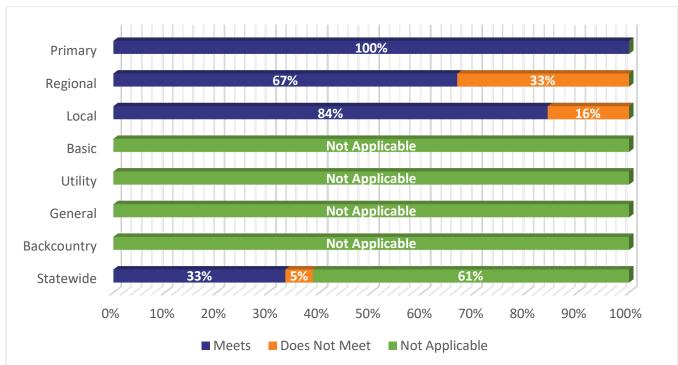
# FIGURE A-10: PERCENT OF AIRPORTS MEETING COMMERCIAL SERVICE TERMINAL OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



# **GA Terminal**

GA terminals can be present at both commercial service and GA airports, providing amenities to GA pilots and passengers alike. Similar to commercial service terminals, the services and size of a GA terminal varies due to a number of different factors unique to each airport. An airport is considered meeting this objective if it has an existing GA terminal. This objective applies to Primary, Regional, and Local airports which comprise 39 percent of the future airport system. Other airport classifications are not indicated to meet this objective. **Figure A-11** depicts airport's performance in terms of meeting the GA terminal objective. Statewide, 33 percent of airports have an existing GA terminal, whereas five percent do not. All Primary airports, 67 percent of Regional, and 88 percent of Local airports meet the objective. Airport-specific GA terminal needs depend on the type and volume of pilots and passengers utilizing the facility, as well as the frequency of operations. Airports should carefully consider existing and anticipated future activity levels when planning new or renovating existing GA terminal facilities during planning processes.



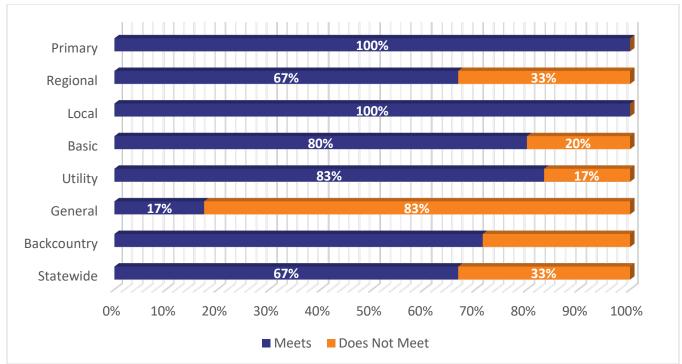
#### FIGURE A-11: PERCENT OF AIRPORTS MEETING GA TERMINAL OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Public Restrooms**

The basic provision of public restrooms is essential in any regularly-used facility that accommodates people. The availability of restroom facilities may be dependent on the current infrastructure, funding, and needs of the airport. Smaller GA airports where funds may be limited or support minimal aviation activity may not necessarily have the means to provide restrooms for their users in terms of initial construction costs, ongoing maintenance needs, or both. This objective is applicable to all airport classifications. Primary, Regional, Local, and Basic airports should provide public restrooms to meet the target objective. Utility, General, and Backcountry should provide either public restroom facilities or portable toilets. **Figure A-12** summarizes the statewide and airport classification-specific performance for this objective. More than half (67 percent) of statewide airports provide public restrooms. All Primary and Local airports meet this objective. More than half of all Regional, Basic, Utility, and Backcountry airports offer public restrooms at 67 percent, 82 percent, 88 percent, and 71 percent

respectively. General airports have the least number of airports that provide these facilities with only 17 percent meeting the objective.



#### FIGURE A-12: PERCENT OF AIRPORTS MEETING PUBLIC RESTROOM OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Pilot's Lounge**

A pilot's lounge offers respite to aircraft operators before and after their flights, as well as a quiet area to conduct flight planning activities. Pilots' lounges vary in amenities and can include private restrooms, accommodations such as recliners and televisions, flight planning areas, and vending machines. Airport-specific amenities are dependent upon local needs and funding availability. An airport should have an existing pilot's lounge to meet this facility objective. The pilot's lounge objective applies to the 39 percent of airports in Idaho that compose the future Primary, Regional, and Local classifications. As shown in **Figure A-13**, 32 percent of airports system-wide have an existing pilot's lounge. The percent of Primary, Regional, and Local airports that have a pilot's lounge are 86 percent, 67 percent, and 84 percent, respectively.



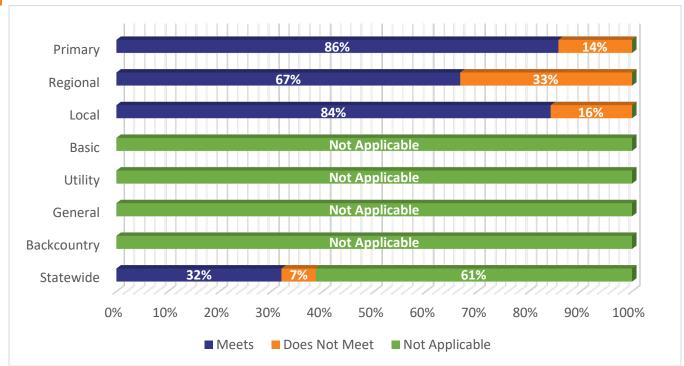


FIGURE A-13: PERCENT OF AIRPORTS MEETING PILOT'S LOUNGE OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# Hangar Storage (Existing)

As a landside facility, airport hangar storage provides aircraft operators a secure and covered place to store their aircraft either on a long-term or temporary basis. Providing adequate hangar storage to accommodate an airport's unique mix of based and transient aircraft is an integral component of an airport's function. The amount of hangar storage necessary at each facility is influenced by factors such as the type and frequency of aircraft operations, climate, and the typical types of aviation-related activities that the airport supports. This evaluation considers hangar storage requirements based on existing based and transient aircraft storage needs. A subsequent analysis presented after the service objectives examines future aircraft storage needs to accommodate forecast activity levels as presented in *Chapter 4: Forecasts of Aviation Activity.* 

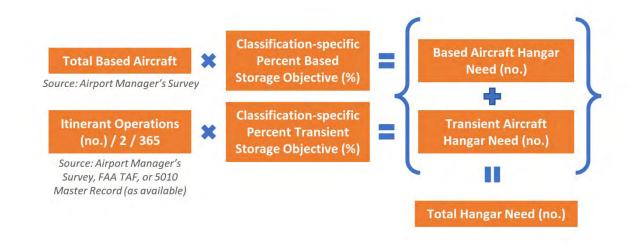
Hangar storage objectives apply to Primary, Regional, and Local airports; different objectives are established for each classification. Primary airports should have sufficient existing hangar storage to accommodate 80 percent of based aircraft and 25 percent of transient aircraft. Regional airports meet the objective if they have adequate hangar storage to house 60 percent of based and 25 percent of transient aircraft. Local airports should have enough hangar storage to meet the needs of at least 50 percent of based aircraft.

**Figure A-14** presents the process used to calculate hangar storage needs by airport. First, the hangar availability data provided in the Airport Managers was multiplied by the percent based aircraft hangar storage objective identified by the 2020 IASP Update. To estimate transient storage needs, total annual transient operations (as calculated based on activity levels presented in the Airport Managers Survey, FAA TAF, or 5010 Airport Master Record, as available) were divided by two (as two operations represent an aircraft takeoff and landing) then divided by 365 to determine the average number of daily transient operations. Note this does not account for seasonal operations but does provide a general indication of need throughout the year. This figure was then multiplied by the classification-specific percent transient storage objective to determine the total storage needs for transient aircraft. Total storage needs as calculated for based and transient aircraft were then summed to



determine the total hangar need by airport. Need was then subtracted from existing capacity as reported in the Airport Managers Survey to identify storage gaps or surpluses by airport. This same method was employed to calculated apron tie-down storage needs as presented in the following section.

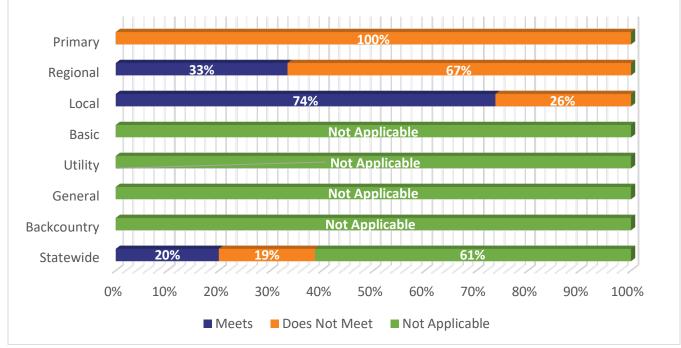
# FIGURE A-14: METHODOLOGY TO CALCULATE EXISTING STORAGE NEEDS BY AIRPORT



#### Source: Kimley-Horn, 2019

Statewide and classification-specific performances for hangar storage are shown in **Figure A-15**. Twenty percent of applicable statewide airports have adequate hangar storage. None of the seven Primary airports report having adequate hangar storage per their classification's facility objective. Thirty-three percent of Regional and 74 percent of Local airports have adequate hangar storage to meet their hangar storage objectives.





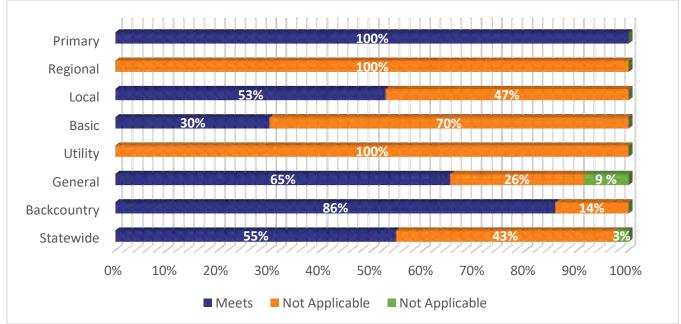
Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Apron Tie-Downs (Existing)**

Similar to hangar storage, apron tie-downs offer an alternative method for securing aircraft and are a convenient option for transient aircraft that may stay for short periods of time or overnight. Apron tie-downs are oftentimes used in conjunction with covered hangar storage but can also be utilized as the sole means of aircraft storage at some airports. The use and number of apron tie-downs varies between airports based on different considerations such as climate, available apron space, available hangar storage facilities, and airport manager preference, among other factors. This objective applies to all airport classifications, and the guidelines to meet the objective differ for each: <sup>6</sup>

- → Primary: 20 percent of based and 50 percent of transient aircraft
- → Regional: 40 percent of based and 50 percent of transient aircraft
- → Local: 50 percent of based and 50 percent of transient aircraft
- → Basic: 100 percent of based and 50 percent of transient aircraft
- → Utility and General: 100 percent of based and 25 percent of transient aircraft
- Backcountry: At least one aircraft and up to 25 percent of the maximum daily total number of transient aircraft

**Figure A-16** summarizes the percent of airports that meet this objective by classification. Statewide, 55 percent of airports have adequate tie-down space, 41 percent do not, and three percent comprise airports that this objective does not apply to. All Primary airports and 53 percent of Local airports provide sufficient apron tie-downs for their classifications. None of the Regional airports are achieving their apron-tie down objective. Thirty percent of Basic and zero percent of Utility airports have adequate apron tie-down to meet their objectives. More than half of the General and Backcountry airports meet the objective at 65 percent and 86 percent, respectively.



#### FIGURE A-16: PERCENT OF AIRPORTS MEETING APRON TIE-DOWNS OBJECTIVE BY CLASSIFICATION

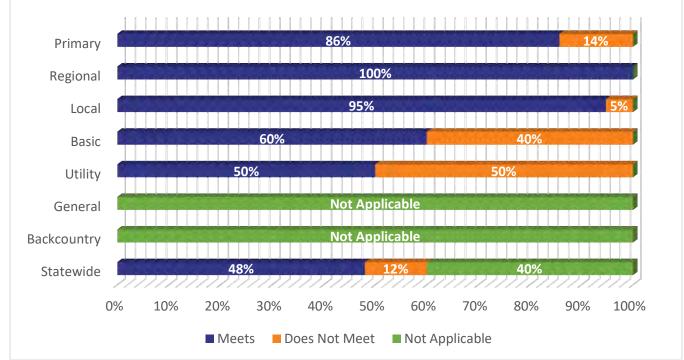
Note: This objective is not applicable to Brooks SPB and Snake River SPB, as these facilities do not have apron space. Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

<sup>&</sup>lt;sup>6</sup> While applicable to all classifications, this objective does not apply to seaplane bases (SPBs). Nine percent of General airports composing three percent of statewide airports are SPBs (Brooks SPB [S76] and Snake River SPB [78U]).



# **Perimeter Fencing**

Airports are able to install a number of different types of perimeter fencing to secure airport property from trespassing and/or deter wildlife from wandering onto the premises. Securing an airport's perimeter can mitigate the occurrence of wildlife strikes; unauthorized persons from entering onto airside facilities; and undue risks to aircraft, aviation-related equipment, airport property, and people. Perimeter fencing objectives are applicable to all airport classifications except for General and Backcountry airports. Primary, Basic, and Utility airports should have full perimeter fencing to meet the objective. Regional and Local airports are able to have partial perimeter fencing per the objectives for their classification. These applicable classifications make up for 60 percent of the statewide airports. As shown in **Figure A-17**, 48 percent of applicable statewide airports have adequate fencing for their classification and 12 percent do not meet the objective. More than three-quarters of Primary, Regional, and Local airports have adequate fencing around their airports at 86 percent, 100 percent, and 95 percent, respectively. Sixty percent of Basic airports and 50 percent of Utility airports have full perimeter fencing and meet this landside facility objective.



#### FIGURE A-17: PERCENT OF AIRPORTS MEETING PERIMETER FENCING OBJECTIVE BY CLASSIFICATION

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

# **Auto Parking**

As part of the multimodal transportation system in Idaho, it is important for airports to facilitate the connection from car to air travel through the provision of adequate auto parking facilities for airport users. Having auto parking available at airports increases access to airport facilities and services to pilots, passengers, on-airport employees, and other members of the public. Auto parking objectives apply to Primary, Regional, Local, and Basic airports that compose almost half (51 percent) of statewide airports. In order to meet the objective, these airports should have existing auto parking facilities available. **Figure A-18** depicts the statewide and airport classification-specific performance in providing auto parking. All Primary, Regional, and Local airport achieve this objective; only 10 percent of Basic airports (one facility) currently provides auto parking.



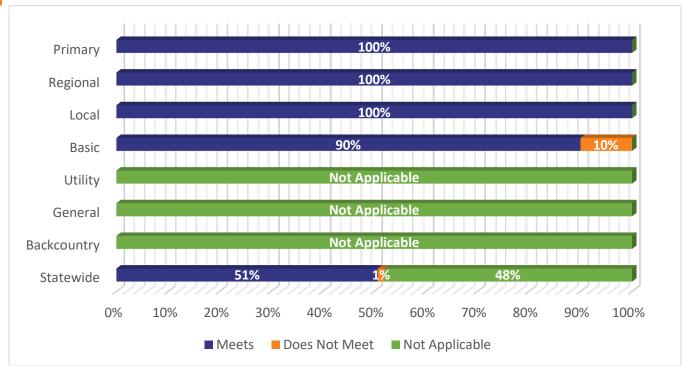


FIGURE A-18: PERCENT OF AIRPORTS MEETING AUTO PARKING OBJECTIVE BY CLASSIFICATION

# Landside Facilities Objective Summary

The 2020 IASP Update established landside facility objectives pertaining to commercial service and GA terminals (including public restrooms, conference rooms, and a pilot's lounge), hangar storage, apron tie-downs, perimeter fencing, and automobile parking. Hangar storage at airports is evaluated in terms of having enough storage to fulfill the needs of based and transient based aircraft. Similar to hangar storage, the provision of apron tie-downs is considered adequate if it meets the needs of a classification-specific percentage of the based and transient fleet. Airports are generally considered to meet perimeter fencing objectives if they have an existing full or partial perimeter fence. The provision of automobile parking is a standard under the landside facility objective for all NPIAS airport classifications.

**Figure A-19** reports the percent of airports by classification that meet all landside facility needs. System-wide, 29 percent of airports achieve all landside facility objectives, with the highest level of performance achieved by Backcountry (86 percent). This is attributable, in part, to the fact that Backcountry airports generally require limited landside facilities to meet the needs of airport users; as such, only apron tie-downs and restroom availability are applicable to this classification.

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



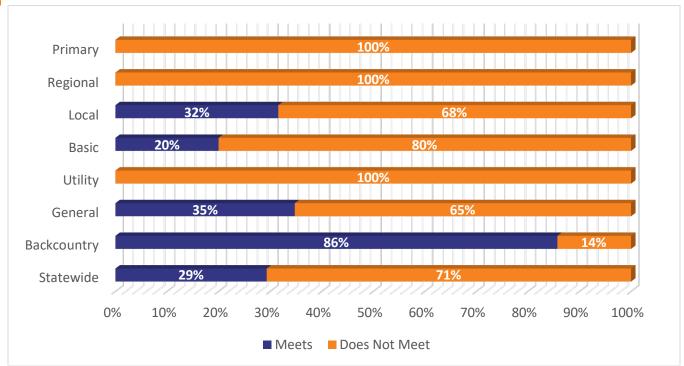


FIGURE A-19: PERCENT OF AIRPORTS MEETING LANDSIDE FACILITIES OBJECTIVE BY CLASSIFICATION

**Figure A-20** shows the system-wide performance by landside facility objective. Ninety-seven percent of applicable airports achieve the auto parking objective (51 percent statewide), followed by 86 percent of airports indicated to have a GA terminal (33 percent statewide), 80 percent of applicable airports identified for perimeter fencing (48 percent statewide), and 67 percent of airports identified for a public restroom (67 percent of airports statewide, as all airports should meet this objective). Airports have the greatest need for apron tie-downs, with only 58 percent of applicable airports achieving this objective (56 percent statewide). Hangars are also a significant need, with 55 percent of applicable airports providing adequate storage for based and transient aircraft (21 percent statewide).

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



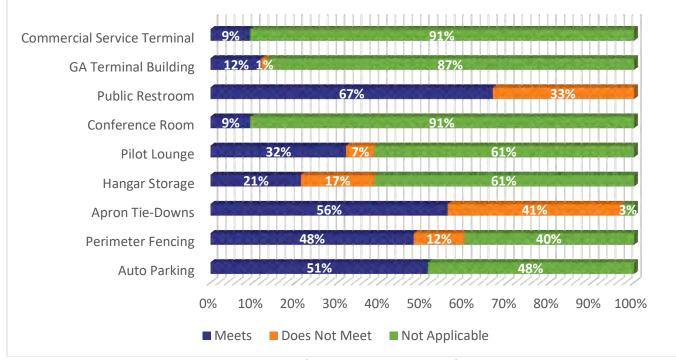


FIGURE A-20: PERCENT OF SYSTEM-WIDE AIRPORTS MEETING LANDSIDE FACILITIES OBJECTIVES

Sources: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

Table A-11 summarizes all landside facility improvement needs by airport as identified by the 2020 IASP Update.Note that the commercial service terminal and conference room facility objectives are excluded from the table.This objective is only applicable to the seven Primary airports in the Idaho system, all of which already achieve themeasure. These needs serve as the basis for the landside facility improvement costs presented in *future chapters*.



#### TABLE A-11: LANDSIDE FACILITY OBJECTIVE NEEDS BY AIRPORT

			Landside Facility Needs by Airport								
ASSOCIATED CITY	A incort	FAA ID	GA		Pilots	Hangar	Hangar	Apron Tie-		Perimeter	Auto
	Airport	FAAID		Restrooms PRIMARY	Lounge	Storage	Need (#)	Downs	Need (#)	Fencing	Parking
Boise	Boise Air Terminal/Gowen Field	BOI				×	86				
Hailey	Friedman Memorial	SUN			×	×	108				
Idaho Falls	Idaho Falls Regional	IDA				×	51				
Lewiston		LWS				×	77				
Pocatello	Lewiston-Nez Perce County					~ ×					
	Pocatello Regional	PIH					25				
Pullman	Pullman-Moscow Regional	PUW				×	33			×	
Twin Falls	Joslin Field-Magic Valley Regional	TWF				×	32				
			R	EGIONAL							
Caldwell	Caldwell Industrial	EUL						×	154		
Coeur D'Alene	Coeur D'Alene - Pappy	COE	×	×	×						
	Boyington Field										
Driggs	Driggs-Reed Memorial	DIJ				×	39	×	44		
				Local							
Bonners Ferry	Boundary County	65S				×	4	×	12		
Buhl	Buhl Municipal	U03						×	9		
Burley	Burley Municipal	BYI									
Cascade	Cascade	U70			×						
Challis	Challis	LLJ				×	2				
Emmett	Emmett Municipal	S78	×			×	2	×	1		
Gooding	Gooding Municipal	GNG				×	5	×	25		
Grangeville	Idaho County	GIC								×	
Jerome	Jerome Municipal	JER									
McCall	McCall Municipal	MYL	×		×						
Nampa	Nampa Municipal	MAN						×	101		
Preston	Preston	U10						×	4		



			Landside Facility Needs by Airport								
ASSOCIATED CITY	Airport	FAA ID	GA	Restrooms	Pilots	Hangar	Hangar Need (#)	Apron Tie- Downs	Tie-Down Need (#)	Perimeter	Auto Parking
Rexburg	Rexburg-Madison County	RXE		Restrooms	Lounge	Storage	Need (#)	Lowns ×	Need (#) 20	Fencing	Parking
Salmon	Lemhi County	SMN									
Sandpoint	Sandpoint	SZT						×	9		
St. Maries	St Maries Municipal	S72			×						
Weiser	Weiser Municipal	S87				×	6	×	7		
				BASIC							
Aberdeen	Aberdeen Municipal	U36	N/A	×				×	12		
Council	Council Municipal	U82						×	5		
Homedale	Homedale Municipal	S66		×				×	10	×	
Kamiah	Kamiah Municipal	S73								×	×
Kellogg	Shoshone County	S83						×	8		
Mud Lake	Mud Lake/West Jefferson County	1U2						×	5	*	
Orofino	Orofino Municipal	S68						×	5	×	
Priest River	Priest River Municipal	1S6						×	10		
				UTILITY							
American Falls	American Falls	U01	N/A					×	30	×	N/A
Malad City	Malad City	MLD						×	6		
Payette	Payette Municipal	S75						×	7	×	
Rigby	Rigby	U56						×	39		
Soda Springs	Allen H Tigert	U78						×	1	×	
St. Anthony	Stanford Field	U12		×				×	24		
			(	GENERAL							
Carey	Carey	U65	N/A	×				×	4	N//	Д
Craigmont	Craigmont Municipal	S89		×				×	2		
Dubois	Dubois Municipal	U41		×				×	1		
Fairfield	Camas County	U86		×							



			Landside Facility Needs by Airport								
ASSOCIATED			GA		Pilots	Hangar	Hangar			Perimeter	Auto
CITY	Airport	FAA ID	Terminal	Restrooms	Lounge	Storage	Need (#)	Downs	Need (#)	Fencing	Parking
Glenns Ferry	Glenns Ferry Municipal	U89		×							
Hazelton	Hazelton Municipal	U94		×				×	8		
Howe	Howe	U97		×				×	2		
Kooskia	Kooskia Municipal	S82		×							
Leadore	Leadore	U00		×				×	1		
Mackay	Mackay	U62		×							
Murphy	Murphy	1U3		×							
Nezperce	Nezperce Municipal	0S5		×							
Oakley	Oakley Municipal	1U6		×							
Parma	Parma	50S		×							
Rockford	Rockford Municipal	2U4		×							
BACKCOUNTRY											
Donnelly	Donald D. Coski Memorial	U84	N/A	×				×	1	N//	4
Source: Airport Inventory and Data Survey Forms, 2019: Kimley-Horn, 2019											

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

### **Service Needs**

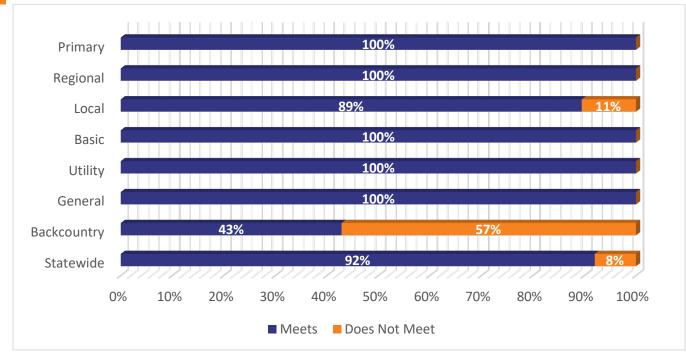
The number and types of services available at an airport improves the quality of the airport users' experience. Objectives in this section range from telecommunications, which promote user-friendliness and safety, to the availability of rental cars to increase access to local areas. The service objectives examined in the following sections include:

- ✤ Cell phone coverage
- ✤ Wi-Fi coverage
- → FBO
- ✤ Fuel availability
- ✤ Rental car or courtesy/loaner car
- → SRE
- ✤ Maintenance services

All airport-specific future service objective needs are presented in Table A-12 at the end of this section.

#### **Cell Phone Coverage**

The use of personal cell phones has become increasingly commonplace and most often serves as the primary mode of communication for many individuals. Adequate cell coverage ensures that those lines of communication are always accessible by airport users including pilots, passengers, and on-airport employees and the public to make calls during emergencies, arrange accommodations, receive information for flight planning purposes, etc. Cell coverage is considered an essential service and should be provided at all airports statewide regardless of classification. As shown in **Figure A-21**, 92 percent of Idaho's system airports provide cell coverage, including 100 percent of Primary, Regional, Basic, Utility, and General airports. Backcountry airports have the most significant need, with only 43 percent of airports achieving this objective, followed by Local airports with 89 percent of airports providing this essential service.



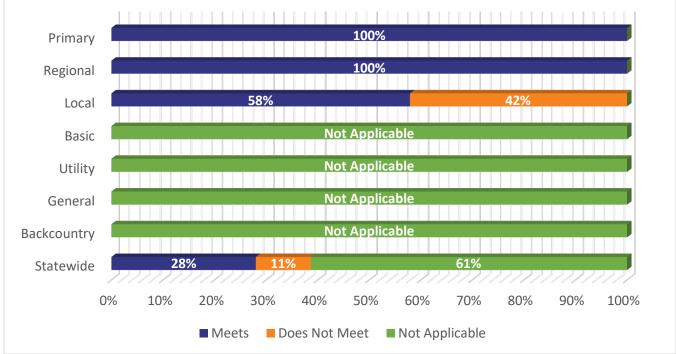
#### FIGURE A-21: PERCENT OF AIRPORTS MEETING CELL PHONE COVERAGE OBJECTIVE BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



#### Wi-Fi Coverage

For similar reasons to the cell coverage objective, wi-fi coverage has increasingly become a critical resource for pilots and passengers to conduct flight planning, access online resources, receive flight updates, and communicate across platforms when necessary. Primary, Regional, and Local airports are the only classifications to which this objective applies; airports meet this objective if they provide wi-fi coverage. **Figure A-22** summarizes the performance of airports that have wi-fi coverage. Of the applicable (i.e., Primary, Regional, and Local) airports, 28 percent meet the objective and 11 percent do not. One hundred percent of Primary and Regional airports and more than half (58 percent) of Local airports offer wi-fi at their facilities.



#### FIGURE A-22: PERCENT OF AIRPORTS MEETING WI-FI OBJECTIVE BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### FBO

The potential services that FBOs deliver at airports range from the sale of fuel to restaurant facilities, parking services, flight crew lounges, and everything in between. The type and combination of services provided by an FBO is influenced by user- and airport-specific demands and other market-driven considerations that make each airport one-of-a-kind in terms of its FBO offerings. This objective is only applicable to the seven airports that compose the Primary classification. In order to meet the objective, these airports must have an FBO present. Per the results of the analysis displayed in **Figure A-23**, all Primary airports, which comprise nine percent of systemwide airports, currently have an FBO. It should be noted that although the FBO objective is not applicable to other categories due to business reasons, FBO services, whether provided by the airport sponsor or a private business, are still desirable at many airports but are not financially viable at all airports.

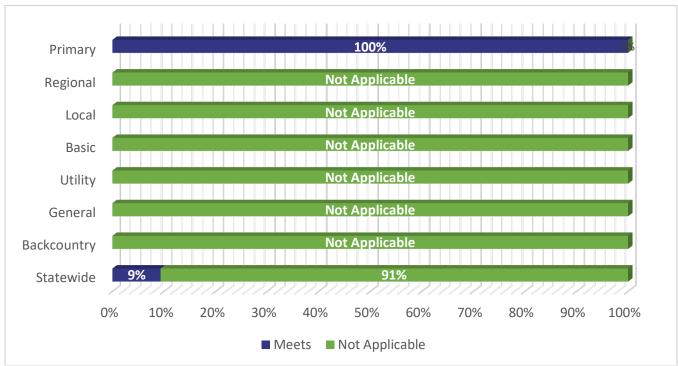


FIGURE A-23: PERCENT OF AIRPORTS MEETING FBO OBJECTIVE BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### **Maintenance Services**

On-site aircraft and airport maintenance service can provide an expansive range of support critical for the safe and efficient operation of aircraft, as well as facilitate the movement of goods and people through an airport. These services can include inspection of aircraft, regular servicing, and repair of aircraft components vital to safely executing aviation operations. Other on-site maintenance services focus specifically on maintaining airport facilities and equipment to ensure airport operations remain uninterrupted. The services provided in this sphere may include managing facilities such as runway lighting, baggage claim/handling equipment, SRE, and other components integral to conducting airport activity, depending on the airport. The seven Primary airports are the focus of this objective; they must provide aircraft or airport maintenance services in order to meet their target. Per **Figure A-24**, all Primary airports currently provide some form of maintenance services.



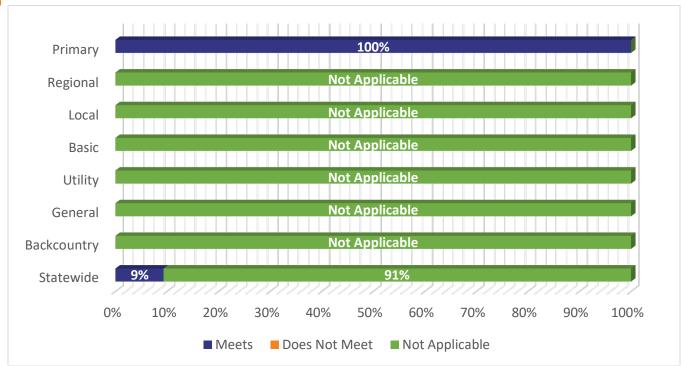


FIGURE A-24: PERCENT OF AIRPORTS MEETING MAINTENANCE OBJECTIVE BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### **Fuel Availability**

Airports that provide 24/7 access to fuel increase safety, convenience, and mobility for pilots in reaching their destinations, especially during long-distance and/or cross-country flights. Accessible fueling services are imperative during situations when emergency refueling is required and offer pilots a convenient means of filling up outside of normal operating hours or when FBO services are unavailable. Airports that provide fuel services that are not accessible 24/7 are equally critical to aviation activity around the state, as a majority of aircraft operations take place within a 12-hour operating window generally between dawn and dusk. Broadly, the availability of fuel improves overall access to the state.

Primary, Regional, and Local airports have designated fuel service objectives. Primary airports should have both 24/7 AvGas and Jet A fuel available. Regional airports are considered meeting the objective if they provide AvGas fuel and provide Jet A fuel on an "as needed" basis. Local airports only need to provide AvGas to adequately meet the fuel service objective. **Figure A-25** shows the percent of airports by classification meeting their fuel objectives. Thirty-six percent of applicable statewide airports provide the fuel services specified for their classification. For Primary airports, 71 percent provide both 24/7 AvGas and Jet A fuel on-site to their users. All Regional and Local airports adequately serve their users by providing the necessary fuel types per their classifications' objectives.



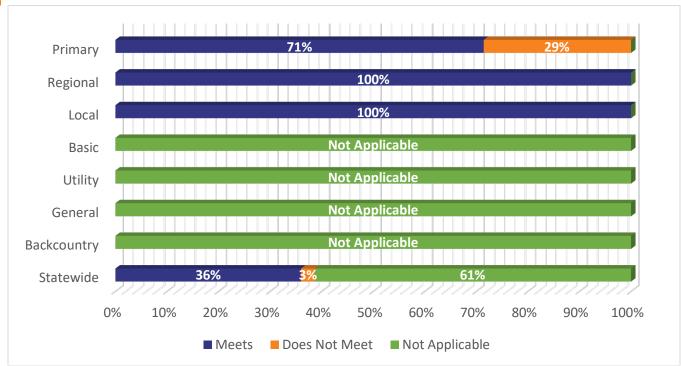


FIGURE A-25: PERCENT OF AIRPORTS MEETING FUEL OBJECTIVES BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### SRE

SRE allows for the clearing of snow, slush, ice, or other winter debris that can negatively impact aviation operations during winter conditions. SRE allows operations to continue during these less-than-ideal flying conditions, especially in situations where airports must safely receive aircraft in the event of an emergency landing. This objective applies to the 13 percent of statewide airports that compose the Primary and Regional classifications. Airports meet this service objective if they have currently have SRE available. Per **Figure A-26**, 12 percent of airports statewide have SRE available, leaving one percent of applicable airports without. All Primary airports report currently having SRE at their facilities and more than half (67 percent) of Regional airports have SRE present.

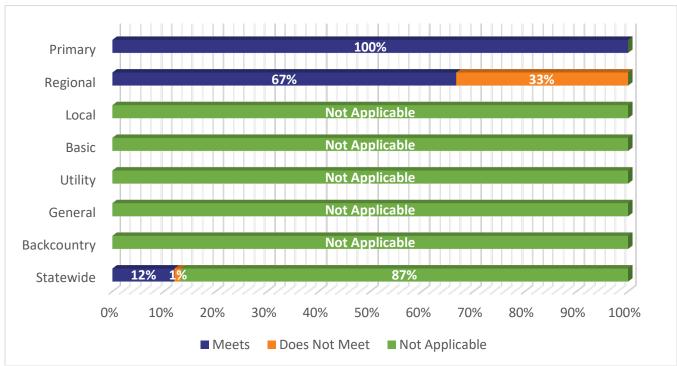


FIGURE A-26: PERCENT OF AIRPORTS MEETING SRE OBJECTIVE BY CLASSIFICATION

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

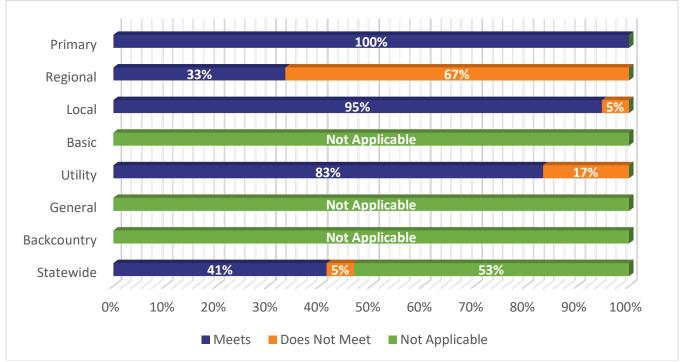
#### **Rental Car or Courtesy/Loaner Car**

As previously stated, airports contribute to the state's multimodal transportation through the connection of people that travel by aircraft that then connect into the state's larger transportation network. Airports that offer services such as rental cars or courtesy/loaner cars further connect people to other areas of Idaho allowing them to conduct business, partake in leisure and recreation activities, and contribute to a robust economy.

This objective is applicable to Primary, Regional, Local, and Utility airports that make up 45 percent of all statewide airports. To meet the objective, Primary airports should offer rental car services. Providing courtesy/loaner cars is the target objective for Regional, Local, and Utility airports. **Figure A-27** summarizes the system performance and the performance by airport classification in providing these services. Forty-one percent of applicable statewide airports provide adequate car rental or courtesy/loaner car services specific to their classifications. All Primary airports have rental car access available for their airport users and therefore, meet their service objectives. For Regional, Local, and Utility airports, 33 percent, 95 percent, and 83 percent of airport provide courtesy/loaner cars, respectively.







Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

#### **Service Objective Summary**

Airports offer a variety of different services that uniquely serve the needs of their specific airport users. Requirements to meet this objective are based upon the minimum services that should exist at airports to fit user needs and may include the availability of cellular phone and wi-fi coverage, an FBO, maintenance services, SRE, Jet A and/or AvGas, and rental and/or courtesy cars/loaner cars. In general, minimum service objectives increase for airports within higher classifications.

**Figure A-28** depicts the performance of each airport classification in providing the minimums to meet their service objective. Seventy-five percent of statewide airports meet all of their designated service objectives. Forty-three percent of Primary airports provide all of the minimum services. Currently, there are no Regional nor Utility airports that adequately supply all minimum services to meet their objectives. For Local airports, 32 percent have cell coverage, wi-fi, and AvGas. One hundred percent of Basic and General airports meet their minimum service objective of cell phone coverage; 43 percent of Backcountry airports achieve this same objective.



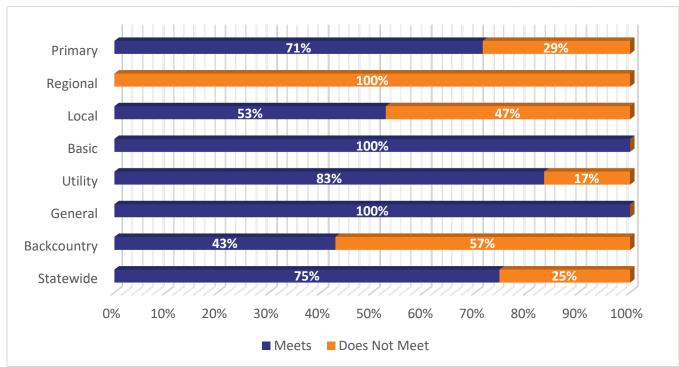
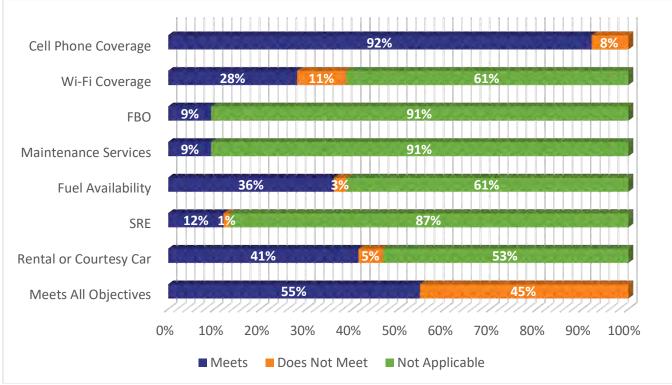


FIGURE A-28: PERCENT OF AIRPORTS MEETING SERVICE OBJECTIVES BY CLASSIFICATION

**Figure A-29** shows the system-wide performance for each service objective. One hundred percent of applicable airports achieve the service objectives for an FBO and maintenance services (nine percent each for total statewide), followed by 93 percent of applicable airports for fuel availability, 90 percent for SRE, and 89 percent for rental or courtesy car.

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019



#### FIGURE A-29: PERCENT OF AIRPORT MEETING SERVICE OBJECTIVES BY OBJECTIVE

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

**Table A-12** presents the airports by classification identified for a service objective improvement as part of the 2020 IASP Update. Note that no airports are deficient in terms of an FBO or maintenance service; thus, these objectives have been excluded from the table.

	TABLE A-12. SERVICE C	DJLCTIVL	NELDS DI							
			Service Needs by Airport							
ASSOCIATED			Cell				Rental/ Courtesy			
CITY	Airport	FAA ID	Coverage	Wi-Fi	Fuel	SRE	Car			
	Р	RIMARY								
Boise	Boise Air Terminal/Gowen Field	BOI			×					
Lewiston	Lewiston-Nez Perce County	LWS			×					
	RI	EGIONAL				·				
Caldwell	Caldwell Industrial	EUL				×				
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE					×			
Driggs	Driggs-Reed Memorial	DIJ					×			
		LOCAL								
Challis	Challis	LLJ	×	×						
Emmett	Emmett Municipal	S78	×	×						
Gooding	Gooding Municipal	GNG		×						
Jerome	Jerome County	JER								

#### TABLE A-12: SERVICE OBJECTIVE NEEDS BY AIRPORT



			Service Needs by Airport							
ASSOCIATED CITY	Airport	FAA ID	Cell Coverage	Wi-Fi	Fuel	SRE	Rental/ Courtesy Car			
McCall	McCall Municipal	MYL					×			
Preston	Preston	U10		×						
Rexburg	Rexburg-Madison County	RXE		×						
Salmon	Lemhi County	SMN		×						
St. Maries	St Maries Municipal	S72		×						
Weiser	Weiser Municipal	S87		×						
		UTILITY								
St. Anthony	Stanford Field	U12					×			
	BAC	KCOUNTR	Y							
Big Creek	Big Creek	U60	×							
Galena	Smiley Creek	U87	×							
Stanley	Thomas Creek	2U8	×							
Yellow Pine	Johnson Creek	3U2	×							
	Source: Airport Inventory and Da			inclose Llaws	2010					

Source: Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

### **Forecasted Storage Needs**

In addition to evaluating airports' facility needs in terms of current aviation activity levels, the 2020 IASP Update also analyzed aircraft storage needs based on projected activity levels through the 20-year study horizon. Using the based aircraft and operations forecasts presented in *Chapter 4: Forecasts of Aviation Activity*, this analysis shows a growing need for hangar storage and apron tie-down capacity needs over time.

**Table A-15** at the end of this section provides the number of based and transient aircraft for the current and future scenario analyses presented below. Note that the following analyses assume the same percent of transient operations in the current timeframe (based on 2017 data) and future forecast (2037) scenarios. Because transient operations are impacted by numerous aviation and non-aviation-related conditions, future transient traffic may be different when compared to the baseline (2017) conditions evaluated as part of the 2020 IASP Update. The number of current based aircraft was obtained from the Airport Inventory and Data Survey Forms. Details about forecasted activity, including based aircraft and operations, are presented in Chapter 4.

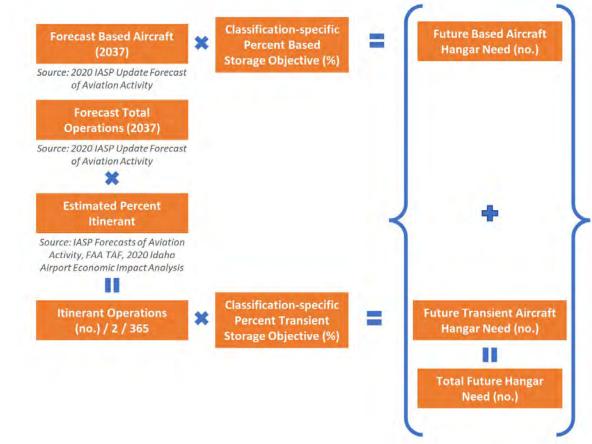
#### Hangar Storage (Future)

As discussed previously, the 2020 IASP Update established specific hangar facility objectives for each Idaho airport classification based on existing aviation activity levels. The method to determine future hangar storage needs is presented in **Figure A-30**. Forecast based aircraft were presented in *Chapter 4: Forecasts of Aviation Activity*. This 20-year based aircraft forecast need underwent the same process as described in **Figure A-14** for existing hangar storage needs. To determine future transient aircraft, the analysis first identified forecast future operations as presented in Chapter 4. For GA airport, total operations were then multiplied by the percent of transient operations as reported by airport managers in the associated survey effort for the 2020 Idaho Airport Economic Impact Analysis Update (this assumes the same level of future itinerant operations as existing). For commercial service airport, calculated operations by type as presented in the FAA TAF was used (additional information available in Chapter 4). These calculated provided the total number of itinerant operations. The number of itinerant operations was then multiplied by classification-specific transient storage objectives to determine the transient aircraft hangar storage need. Together, the future based and future transient aircraft storage needs compose the total future hangar storage need by airport. Future storage needs were subtracted from existing



capacity to identify gaps or surplus by airport. This same process was used to determine future apron tie-down needs by airport.

#### FIGURE A-30: METHODOLOGY TO CALCULATE FUTURE STORAGE NEEDS BY AIRPORT

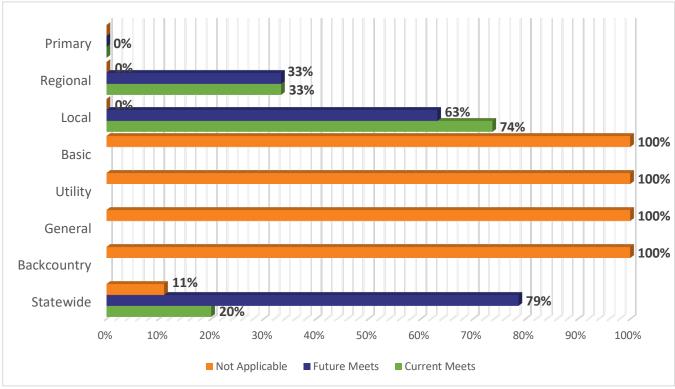


Source: Kimley-Horn, 2019

In both the current (2017) and future (2037) scenarios, none of the seven Primary airports in Idaho provide adequate hangar storage for based and transient aircraft. Thirty-three percent of Regional airports currently meet this objective based on current activity levels, and the capacity at two Regional airports will not be able to support future levels. Two Local airports will not be able to provide adequate storage capacity in the future to reduce the percent of airports that achieve this measure from 74 percent (existing) to 63 percent (future). At the statewide level, the percent of airports with adequate hangar storage decreased from 20 to 19 percent over the 20-year timeframe based on the forecasts of future activity. Note that Basic, Utility, General, and Backcountry airports are not indicated to have hangar storage for based or transient aircraft. The percent of airports that achieve the hangar storage facility objective under current and future conditions is shown in **Figure A-31**.



# FIGURE A-31: PERCENT OF AIRPORT WITH ADEQUATE HANGAR STORAGE CAPACITY IN CURRENT (2017) AND FUTURE (2037) SCENARIOS



Sources: FAA Terminal Area Forecast (TAF), February 22, 2019; Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

The airports that may need additional hangar storage capacity based on current, future, or both scenarios are listed in **Table A-13**. A negative number indicates a potential hangar deficiency.

TABLE A-13: CORRENT AND FOTORE HANGAR NEEDS BY AIRPORT									
			Hangar Storage Deviation (units)						
ASSOCIATED			Current						
CITY	Airport	FAA ID	(2017)	Future (2037)					
	PRIMARY								
Boise	Boise Air Terminal/Gowen Field	BOI	-86	-195					
Hailey	Friedman Memorial	SUN	-27	-78					
Idaho Falls	Idaho Falls Regional	IDA	-51	-105					
Lewiston	Lewiston-Nez Perce County	LWS	-23	-68					
Pocatello	Pocatello Regional	PIH	-25	-43					
Pullman	Pullman-Moscow Regional	PUW	-33	-54					
Twin Falls	Joslin Field-Magic Valley Regional	TWF	-32	-73					
	REGIONAL								
Caldwell	Caldwell Industrial	EUL	0	-60					
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	-37	-89					
Driggs	Driggs-Reed Memorial	DIJ	-39	10					

#### TABLE A-13: CURRENT AND FUTURE HANGAR NEEDS BY AIRPORT



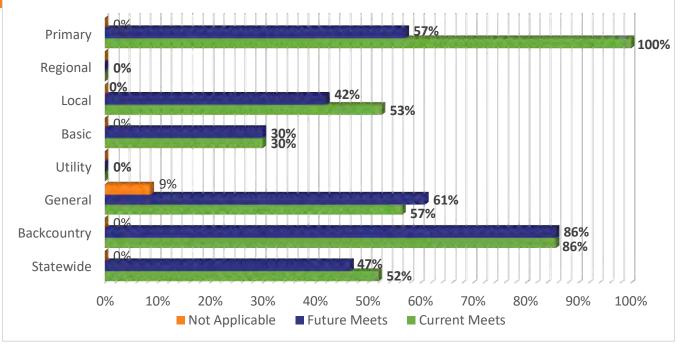
				ge Deviation its)
ASSOCIATED			Current	
CITY	Airport	FAA ID	(2017)	Future (2037)
	LOCAL			
Bonners Ferry	Boundary County	65S	-4	-12
Challis	Challis	LLJ	-2	-3
Emmett	Emmett Municipal	S78	-2	-3
Gooding	Gooding Municipal	GNG	-5	-13
Grangeville	Idaho County	GIC	0	-2
Rexburg	Rexburg-Madison County	RXE	7	-2
Weiser	Weiser Municipal	S87	-6	-10

Sources: FAA TAF, February 22, 2019; Airport Inventory and Data Survey Forms, 2019: Kimley-Horn, 2019

#### **Apron Tie-Downs (Future)**

As discussed in the apron tie-down section above, the 2020 IASP Update established apron tie-down objectives for each classification of Idaho's airport system based on the typical level of based and transient aircraft activity that typically occurs at peer facilities. As shown in **Figure A-32**, the percent of airports with adequate tie-down capacity drops from 52 percent to 47 percent over the 20-year timeframe. Reductions are witnessed across all classifications, as all airports are anticipated to experience an uptick in aviation activity by 2037. Primary airports will experience the most severe decrease, dropping from 100 percent of airports that currently have sufficient apron tie-downs to 57 percent in the future. No Regional airports achieve the apron tie-down objective under the future scenario and zero percent of Utility airports achieve the apron tie-down objective under that future scenarios.

# FIGURE A-32: PERCENT OF AIRPORT WITH ADEQUATE APRON TIE-DOWN STORAGE IN CURRENT (2017) AND FUTURE (2037) SCENARIOS



Sources: FAA TAF, February 22, 2019; Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

The airports that may need additional apron tie-down capacity based in current, future, or both scenarios are listed in **Table A-14**. A negative number indicates a potential tie-down deficiency.

<u>TADLE A-14. CC</u>	JRRENT AND FUTURE APRON TIE-DOWN NE		Tie-Down Dev	
ASSOCIATED CITY	Airport	FAA ID	Current (2017)	Future (2037)
	PRIMARY			
Boise	Boise Air Terminal/Gowen Field	BOI	40	-49
Hailey	Friedman Memorial	SUN	19	-8
Idaho Falls	Idaho Falls Regional	IDA	9	-15
	REGIONAL			
Caldwell	Caldwell Industrial	EUL	-154	-199
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	-58	-104
Driggs	Driggs-Reed Memorial	DIJ	-44	-16
	LOCAL			
Bonners Ferry	Boundary County	65S	-12	-22
Buhl	Buhl Municipal	U03	-9	-16
Emmett	Emmett Municipal	S78	-1	-3
Gooding	Gooding Municipal	GNG	-25	-34
Grangeville	Idaho County	GIC	4	-1
Nampa	Nampa Municipal	MAN	-101	-139
Preston	Preston	U10	-4	-5
Rexburg	Rexburg-Madison County	RXE	-20	-29
Sandpoint	Sandpoint	SZT	-9	-19
St. Maries	St Maries Municipal	S72	0	-2
Weiser	Weiser Municipal	S87	-7	-12
	BASIC			
Aberdeen	Aberdeen Municipal	U36	-12	-17
Council	Council Municipal	U82	-5	-7
Homedale	Homedale Municipal	S66	-10	-13
Kellogg	Shoshone County	S83	-8	-11
Mud Lake	Mud Lake/West Jefferson County	1U2	-5	-8
Orofino	Orofino Municipal	S68	-5	-7
Priest River	Priest River Municipal	1S6	-10	-13
	UTILITY			
American Falls	American Falls	U01	-30	-39
Malad City	Malad City	MLD	-6	-8
Payette	Payette Municipal	S75	-7	-11
Rigby	Rigby	U56	-39	-49
Soda Springs	Allen H Tigert	U78	-1	-2
St. Anthony	Stanford Field	U12	-24	-29

#### TABLE A-14: CURRENT AND FUTURE APRON TIE-DOWN NEEDS BY FUTURE AIRPORT CLASSIFICATION



			Tie-Down Dev	viation (units)				
ASSOCIATED CITY	Airport	FAA ID	Current (2017)	Future (2037)				
	GENERAL							
Carey	Carey	U65	-4	-5				
Craigmont	Craigmont Municipal	S89	-2	-3				
Dubois	Dubois Municipal	U41	-1	-2				
Hazelton	Hazelton Municipal	U94	-8	-10				
Howe	Howe	U97	-2	-3				
Kooskia	Kooskia Municipal	S82	0	-1				
Leadore	Leadore	U00	-1	-1				
BACKCOUNTRY								
Donnelly	Donald D. Coski Memorial	U84	-1	-1				
Sources:	EAA TAE Eebruary 22, 2019: Airport Inventory and Da	ta Survey Fe	ma 2010: Kimlou Horn	2010				

Sources: FAA TAF, February 22, 2019; Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

**Table A-15** provides additional details about the two analyses presented above, including current (2017) storage capacity of Idaho's system airports, storage needs based on forecasted activity (i.e., 2037 based aircraft and transient aircraft), and the current and projected deviation between existing capacity and current/projected future needs. As noted above, a negative number in the "deviation" columns indicates a potential storage gap.

The project costs associated with all airport-specific needs identified in this appendix are presented in *Chapter 8: System Costs and Alternative Scenarios*. The methodology to calculate costs associated with both current and future apron tie needs assumes the following:

- Primary and Regional airports require an asphalt expansion to accommodate any additional apron tiedowns.
- Local, Basic, and Utility airports with a total apron tie-down need (i.e., current plus future) of four or more spaces require an asphalt expansion to accommodate additional tie-downs. In these cases, the study estimated the total cost of all apron tie-down needs, then allocated costs between the current and future scenarios based on percent of total need. This provides a more realistic and comprehensive assessment of how airports would implement this type of project.
- → The estimated pavement area per tie-down includes consideration for taxilane access to the tie-down.
- Pavement expansions are only required at airports with an existing paved apron. The IASP Update assumes that no General or Backcountry airports have an existing paved parking area; as such a pavement expansion project would not be required at these facilities. There is also a cost difference between tie-down costs at airports that have a paved parking area and airports that do not, since the type of tie-downs used on pavement and turf are different.



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	TABLE A-15: CURRENT (2017) AND PROJECTED FUTURE (2037) AIRCRAFT STORAGE CAPACITY															
			Current			Activity		Activity	Hangar		Apron Ti		Hangar	_	Apron Tie	
			Capacit			17)	(20		Obje	ctive	Objec	ctive	Devia	ition	Deviat	lion
ASSOCIATED	Alian ant	FAA	Hangar	Apron	Based	Transient	Based	Transient	2017	2027	2017	2027	2017	2027	2017	2027
CITY	Airport	ID	Storage	Tie-Down	Aircraft	Fleet	Aircraft MARY	Fleet	2017	2037	2017	2037	2017	2037	2017	2037
Boise	Boise Air Terminal/Gowen Field	BOI	140	120	266	54	358	195	226	335	80	169	-86	-195	40	-49
Hailey	Friedman Memorial	SUN	102	57	157	13	211	45	129	180	38	65	-27	-78	19	-8
Idaho Falls	Idaho Falls Regional	IDA	90	52	171	18	230	42	141	195	43	67	-51	-105	9	-15
Lewiston	Lewiston-Nez Perce County	LWS	98	64	145	19	195	37	121	166	39	58	-23	-68	25	6
Pocatello	Pocatello Regional	PIH	17	64	48	13	65	31	42	59	16	28	-25	-43	48	36
Pullman	Pullman-Moscow Regional	PUW	29	40	65	41	94	33	62	84	34	35	-33	-54	6	5
Twin Falls	Joslin Field-Magic Valley Regional	TWF	69	103	123	11	166	38	101	142	30	52	-32	-73	73	51
						REG	IONAL									
Caldwell	Caldwell Industrial	EUL	274	53	457	48	558	57	274	335	207	251	0	-60	-154	-199
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE	114	70	252	55	339	76	151	203	128	174	-37	-89	-58	-104
Driggs	Driggs-Reed Memorial	DIJ	85	40	206	3	126	12	124	75	84	56	-39	10	-44	-16
						LC	DCAL									
Blackfoot	McCarley Field	U02	52	43	59	6	69	6	30	35	33	38	23	17	10	5
Bonners Ferry	Boundary County	65S	33	33	73	17	89	21	37	45	45	55	-4	-12	-12	-22
Buhl	Buhl Municipal	U03	30	14	42	4	49	11	21	25	23	30	9	5	-9	-16
Burley	Burley Municipal	BYI	50	54	51	30	62	37	26	31	41	50	25	19	13	4
Cascade	Cascade	U70	36	23	26	2	30	6	13	15	14	18	23	21	9	5
Challis	Challis	LLJ	9	37	21	12	25	18	11	12	17	21	-2	-3	20	16
Emmett	Emmett Municipal	S78	9	14	21	8	25	9	11	12	15	17	-2	-3	-1	-3
Gooding	Gooding Municipal	GNG	34	16	77	5	94	6	39	47	41	50	-5	-13	-25	-34
Grangeville	Idaho County	GIC	9	20	18	14	22	20	9	11	16	21	0	-2	4	-1
Jerome	Jerome County	JER	39	40	45	4	55	24	23	27	25	39	17	12	15	1
McCall	McCall Municipal	MYL	82	121	91	18	111	28	46	56	55	69	37	26	66	52
Mountain Home	Mountain Home Municipal	U76	20	25	27	8	33	12	14	16	18	22	7	4	7	3
Nampa	Nampa Municipal	MAN	296	73	312	37	381	44	156	190	174	212	140	106	-101	-139
Preston	Preston	U10	27	8	17	7	19	7	9	9	12	13	19	18	-4	-5
Rexburg	Rexburg-Madison County	RXE	58	36	102	9	120	10	51	60	56	65	7	-2	-20	-29
Salmon	Lemhi County	SMN	35	62	40	10	49	20	20	24	25	34	15	11	37	28
Sandpoint	Sandpoint	SZT	86	40	71	27	87	32	36	43	49	59	51	43	-9	-19
St. Maries	St Maries Municipal	S72	60	14	26	2	30	1	13	15	14	16	47	45	0	-2
Weiser	Weiser Municipal	S87	13	14	38	3	45	6	19	23	21	25	-6	-10	-7	-12
A la and a an	Alexade en Manieire d	1126	0	4	10		ASIC	10	NI / A		10	21		NI / A	10	17
Aberdeen	Aberdeen Municipal	U36	9	4	13	6	16	10	N/A	N/A	16	21	N/A	N/A	-12	-17
Arco	Arco-Butte County	AOC	9	24	9	8	11	10	N/A	N/A	13	16	N/A	N/A	11	8
Council	Council Municipal	U82	14	8	11	4	13	4	N/A	N/A	13	15	N/A	N/A	-5	-7
Homedale	Homedale Municipal	S66	20	9	15	8	18	8	N/A	N/A	19 12	21	N/A	N/A	-10	-13
Kamiah	Kamiah Municipal Shoshone County	S73	15 14	15	11	1	9	1	N/A N/A	N/A		10	N/A	N/A	3	5 -11
Kellogg		S83		6	10	8	12	10		N/A	14	17	N/A	N/A	-8 E	
Mud Lake	Mud Lake/West Jefferson County	1U2	4	6	11	0	13	3	N/A	N/A	11	14	N/A	N/A	-5	-8 -7
Orofino	Orofino Municipal	S68	11	8	12	3	14	3	N/A	N/A	13	15	N/A	N/A	-5	-/

SYSTEM PLAN UPDATE & AIRPORT ECONOMIC IMPACT ANALYSIS UPDATE

				Storage y (2017)		t Activity 017)		Activity )37)		Hangar Storage Objective		e-Down ctive	Hangar S Devia		Apron Tie Deviat	
ASSOCIATED		FAA	Hangar	Apron	Based	Transient	Based	Transient								
CITY	Airport	ID	Storage	Tie-Down	Aircraft	Fleet	Aircraft	Fleet	2017	2037	2017	2037	2017	2037	2017	2037
Paris	Bear Lake County	107	6	11	6	3	7	3	N/A	N/A	7	9	N/A	N/A	4	2
Priest River	Priest River Municipal	1S6	13	7	15		18	4	N/A	N/A	17	20	N/A	N/A	-10	-13
							ILITY									
American Falls	American Falls	U01	35	8	36		44	12	N/A	N/A	38	47	N/A	N/A	-30	-38
Malad City	Malad City	MLD	5	4	9	6	11	6	N/A	N/A	10	12	N/A	N/A	-6	-8
Payette	Payette Municipal	S75	18	16	22		26	5	N/A	N/A	23	27	N/A	N/A	-7	-11
Rigby	Rigby	U56	60	12	51	2	60	3	N/A	N/A	51	61	N/A	N/A	-39	-49
Soda Springs	Allen H Tigert	U78	24	6	6	5	7	5	N/A	N/A	7	8	N/A	N/A	-1	-2
St. Anthony	Stanford Field	U12	28	7	30	4	35	4	N/A	N/A	31	36	N/A	N/A	-24	-29
						GEN	NERAL									
Bancroft	Bancroft Municipal	U51	3	1	0	2	0	2	N/A	N/A	1	1	N/A	N/A	0	0
Carey	Carey	U65	2	4	7	2	8	2	N/A	N/A	8	9	N/A	N/A	-4	-5
Coeur D'Alene	Brooks SPB	S76	0	0	2	1	2	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cottonwood	Cottonwood Municipal	S84	8	7	4	3	5	4	N/A	N/A	5	6	N/A	N/A	2	1
Craigmont	Craigmont Municipal	S89	2	0	2	0	2	1	N/A	N/A	2	3	N/A	N/A	-2	-3
Downey	Downey/Hyde Memorial	U58	3	4	2	1	2	1	N/A	N/A	2	3	N/A	N/A	2	1
Dubois	Dubois Municipal	U41	0	0	1	1	1	2	N/A	N/A	1	2	N/A	N/A	-1	-2
Fairfield	Camas County	U86	4	5	4	2	5	2	N/A	N/A	5	5	N/A	N/A	0	0
Garden Valley	Garden Valley	U88	0	18	5	3	6	3	N/A	N/A	6	7	N/A	N/A	12	11
Glenns Ferry	Glenns Ferry Municipal	U89	5	14	5	2	6	2	N/A	N/A	6	6	N/A	N/A	8	8
Hazelton	Hazelton Municipal	U94	3	0	8	0	9	1	N/A	N/A	8	10	N/A	N/A	-8	-10
Howe	Howe	U97	1	2	3	4	4	5	N/A	N/A	4	5	N/A	N/A	-2	-3
Kooskia	Kooskia Municipal	S82	4	4	4	1	5	1	N/A	N/A	4	5	N/A	N/A	0	-1
Leadore	Leadore	U00	1	0	1	0	1	0	N/A	N/A	1	1	N/A	N/A	-1	-1
Lewiston	Snake River SPB	78U	0	0	0		0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mackay	Mackay	U62	2	7	2		2	3	N/A	N/A	3	3	N/A	N/A	4	4
Midvale	Lee Williams Memorial	0U9	2	6	2	0	2	0	, N/A	, N/A	2	2	N/A	, N/A	4	4
Murphy	Murphy	1U3	0	4	0	3	0	3	N/A	N/A	1	1	N/A	N/A	3	3
Nezperce	Nezperce Municipal	0S5	3	5	3	1	4	2	, N/A	, N/A	3	4	, N/A	, N/A	2	1
Oakley	Oakley Municipal	1U6	4		0	2	0	2	, N/A	N/A	0	0	N/A	N/A	0	0
Parma	Parma	50S	4	9	3	5	4	5	N/A	N/A	4	5	N/A	N/A	5	4
Rockford	Rockford Municipal	204	1		3		4	2	N/A	N/A	3	4	N/A	N/A	6	5
Stanley	Stanley	207	1	18	4	1	5	2	N/A	N/A	4	6	N/A	N/A	14	12
	o tamey	207	-	10			OUNTRY	L	.,,,,		•	J			± 1	
Big Creek	Big Creek	U60	0	12	0		0	4	N/A	N/A	1	1	N/A	N/A	11	11
Coolin	Cavanaugh Bay	665	1		0		0	5	N/A	N/A	1	1	N/A	N/A	13	13
Donnelly	Donald D. Coski Memorial	U84	0	0	0		0	5	N/A	N/A	1	1	N/A	N/A	-1	-1
Galena	Smiley Creek	U87	0		0		0	2	N/A	N/A	2	2	N/A	N/A	13	13
Porthill	Eckhart International	1S1	1	6	0		0	7	N/A	N/A	1	1	N/A	N/A	5	5
Stanley	Thomas Creek	208	1		0		0	3	N/A	N/A	0	1	N/A	N/A	5	4
Yellow Pine	Johnson Creek	3U2	0	20	0		0	0	N/A	N/A	2	2	N/A	N/A	18	18
Tellow Pille	JUILISUI CLEEK	302	0	20	0	/	0	U	N/A	IN/A	Z	۷	IN/A	N/A	10	10

Note: Hangar storage and apron tie-downs are not applicable to Brooks SPB and Snake River SPB, as these facilities do not have apron space. Sources: FAA Terminal Area Forecast (TAF), February 22, 2019; Airport Inventory and Data Survey Forms, 2019; Kimley-Horn, 2019

IDAHO AIRPORT DE CONOMIC IMPACT ANALYSIS LIPDATE



### **Airport Report Cards**

The following airport report cards provide a snapshot of each individual airport's performance in meeting their respective facility and service objectives. Airports are organized first by airport role, then alphabetically by associated city. **Table A-16** may be used as a point of reference to locate the desired airport report card (organized by future airport role). Individual airport report cards display each airport's respective facility and service objective, the airport's current conditions, and whether the airport is meeting its facility and service objectives. Airports with an objective indicated as "maintain existing" are considered to achieve the objective based on their existing conditions and therefore are indicated as "Yes" under the "Meets 2020 Objective?" column.

ASSOCIATED	AST OF DATE AIM ONTO DEPOTORE CLASS	
CITY	Airport	FAA ID
	PRIMARY	
Boise	Boise Air Terminal/Gowen Field	BOI
Hailey	Friedman Memorial	SUN
Idaho Falls	Idaho Falls Regional	IDA
Lewiston	Lewiston-Nez Perce County	LWS
Pocatello	Pocatello Regional	PIH
Pullman	Pullman-Moscow Regional	PUW
Twin Falls	Joslin Field-Magic Valley Regional	TWF
	REGIONAL	
Caldwell	Caldwell Industrial	EUL
Coeur D'Alene	Coeur D'Alene - Pappy Boyington Field	COE
Driggs	Driggs-Reed Memorial	DIJ
	LOCAL	
Blackfoot	McCarley Field	U02
Bonners Ferry	Boundary County	65S
Buhl	Buhl Municipal	U03
Burley	Burley Municipal	BYI
Cascade	Cascade	U70
Challis	Challis	LLJ
Emmett	Emmett Municipal	S78
Gooding	Gooding Municipal	GNG
Grangeville	Idaho County	GIC
Jerome	Jerome County	JER
McCall	McCall Municipal	MYL
Mountain Home	Mountain Home Municipal	U76
Nampa	Nampa Municipal	MAN
Preston	Preston	U10
Rexburg	Rexburg-Madison County	RXE
Salmon	Lemhi County	SMN

#### TABLE A-16: 2020 IASP UPDATE AIRPORTS BY FUTURE CLASSIFICATION



ASSOCIATED		
CITY	Airport	FAA ID
Sandpoint	Sandpoint	SZT
St. Maries	St Maries Municipal	S72
Weiser	Weiser Municipal	S87
	BASIC	
Aberdeen	Aberdeen Municipal	U36
Arco	Arco-Butte County	AOC
Council	Council Municipal	U82
Homedale	Homedale Municipal	S66
Kamiah	Kamiah Municipal	S73
Kellogg	Shoshone County	S83
Mud Lake	Mud Lake/West Jefferson County	1U2
Orofino	Orofino Municipal	S68
Paris	Bear Lake County	1U7
Priest River	Priest River Municipal	1S6
	UTILITY	
American Falls	American Falls	U01
Malad City	Malad City	MLD
Payette	Payette Municipal	S75
Rigby	Rigby	U56
Soda Springs	Allen H Tigert	U78
St. Anthony	Stanford Field	U12
	GENERAL	
Bancroft	Bancroft Municipal	U51
Carey	Carey	U65
Coeur D'Alene	Brooks SPB	S76
Cottonwood	Cottonwood Municipal	S84
Craigmont	Craigmont Municipal	S89
Downey	Downey/Hyde Memorial	U58
Dubois	Dubois Municipal	U41
Fairfield	Camas County	U86
Garden Valley	Garden Valley	U88
Glenns Ferry	Glenns Ferry Municipal	U89
Hazelton	Hazelton Municipal	U94
Howe	Howe	U97
Kooskia	Kooskia Municipal	S82
Leadore	Leadore	U00
Lewiston	Snake River SPB	78U
Mackay	Mackay	U62
Midvale	Lee Williams Memorial	0U9



ASSOCIATED	••••••	
CITY	Airport	FAA ID
Murphy	Murphy	1U3
Nezperce	Nezperce Municipal	0S5
Oakley	Oakley Municipal	1U6
Parma	Parma	50S
Rockford	Rockford Municipal	2U4
Stanley	Stanley	2U7
	BACKCOUNTRY	
Big Creek	Big Creek	U60
Coolin	Cavanaugh Bay	66S
Donnelly	Donald D. Coski Memorial	U84
Galena	Smiley Creek	U87
Porthill	Eckhart International	1S1
Stanley	Thomas Creek	2U8
Yellow Pine	Johnson Creek	3U2
	6	

Source: Kimley-Horn, 2019



### **Boise Air Terminal/Gowen Field**

Associated City: Boise FAA Identifier: BOI 2020 IASP Classification: Primary

Objective Category	Primary Airport C	Objectiv <u>es</u>	Current Performance	Meets 2020 Objective?
		IRSIDE FACILITIE	S	
Primary Runway Length	Future Runway Length (10,900 fe		10,000 feet	No
Primary Runway Width	100 feet		150 feet	Yes
Primary Runway Strength	Single-Landing Gear (6	0,000 pounds)	120,000 pounds	Yes
Primary Taxiway	Full Parallel		Full Parallel	Yes
nstrument Approach	Precision or	PBN	Precision	Yes
/isual Aids	Rotating Beacon, Light PAPIs/VASIs, ALS, REIL based on A	s (as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, ALS, REILs	Yes
Runway Lighting	MIRL, HIRL Desired		HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, ASOS	Yes
	LA	NDSIDE FACILITI	ES	
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	226 spaces	140 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	80 spaces	120 spaces	Yes
Perimeter Fencing	Full Perime	eter	Full Perimeter	Yes
Auto Parking	Present On-	-site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Vi-Fi	Yes		Yes	Yes
ixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
uel	24/7 AvGas, 24/7	Jet A Fuel	24/7 AvGas, Jet A Fuel	No
Rental/Courtesy Car Access	Rental Ca	ar	Rental Car	Yes
	FOREC	CAST STORAGE N	IEEDS	
	PROJE			SOURCE
Add additional 109 hangar s	paces due to 20-year fore	cast activity		Forecast
Add additional 49 apron tie-				Forecast

### **Friedman Memorial**

Associated City: Hailey FAA Identifier: SUN 2020 IASP Classification: Primary

Objective Category	Primary Airport O	bjectives	Current Performance	Meets 2020 Objective?
		RSIDE FACILITIE	S	
Primary Runway Length	Future Runway Length (7,550 feet		7,550 feet	Yes
Primary Runway Width	100 feet		100 feet	Yes
Primary Runway Strength	Single-Landing Gear (60	),000 pounds)	65,000 pounds	Yes
Primary Taxiway	Full Paralle	el	Full Parallel	Yes
nstrument Approach	Precision or F	PBN	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Lighte PAPIs/VASIs, ALS, REILs based on Al	(as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs	No
Runway Lighting	MIRL, HIRL De	sired	HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, AWOS	Yes
	LAN	IDSIDE FACILITI	ES	
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		No	No
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	129 spaces	102 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	38 spaces	57 spaces	Yes
Perimeter Fencing	Full Perimet	ter	Full Perimeter	Yes
Auto Parking	Present On-s	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7	let A Fuel	24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Rental Ca	r	Rental/Courtesy Car	Yes
	FOREC	AST STORAGE N	IEEDS	
	PROJEC			SOURCE
Add additional 51 hangar sp	0.11-2010			Forecast
	owns due to 20-year forec			Forecast



### **Idaho Falls Regional**

Associated City: Idaho Falls FAA Identifier: IDA 2020 IASP Classification: Primary

Objective Category	Primary Airport C	Objectives	Current Performance	Meets 2020 Objective?
	A	<b>IRSIDE FACILITIES</b>		
Primary Runway Length	Future Runway Length (9,002 fee		9,002 feet	Yes
Primary Runway Width	100 feet		150 feet	Yes
Primary Runway Strength	Single-Landing Gear (6	0,000 pounds)	140,000 pounds	Yes
Primary Taxiway	Full Parall	el	Full Parallel	Yes
Instrument Approach	Precision or	PBN	Precision	Yes
Visual Aids	Rotating Beacon, Light PAPIs/VASIs, ALS, REIL based on A	s (as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, ALS, REILs	Yes
Runway Lighting	MIRL, HIRL Desired		HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, ASOS	Yes
	LA	NDSIDE FACILITIE	S	
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	141 spaces	90 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	43 spaces	52 spaces	Yes
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
and the second sec		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7	Jet A Fuel	24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Rental Ca	ar	Rental/Courtesy Car	Yes
	FOREC	AST STORAGE N	EEDS	
	PROJE	СТ		SOURCE
Add additional 54 hangar spa	ices due to 20-year forecast	t activity		Forecast
	lowns due to 20-year forec			Forecast



### Lewiston - Nez Perce County

Associated City: Lewiston FAA Identifier: LWS 2020 IASP Classification: Primary

Objective Category	Primary Airport (	Objectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	Future Runway Length (6,511 fee		6,511 feet	Yes
Primary Runway Width	100 feet		150 feet	Yes
Primary Runway Strength	Single-Landing Gear (6	0,000 pounds)	150,000 pounds	Yes
Primary Taxiway	Full Paral	el	Full Parallel	Yes
Instrument Approach	Precision or	PBN	Precision	Yes
Visual Aids	Rotating Beacon, Light PAPIs/VASIs, ALS, REIL based on A	s (as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, VASIs, ALS, REILs,	Yes
Runway Lighting	MIRL, HIRL D	esired	HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, ASOS	Yes
	LAN	DSIDE FACILITIES		
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes			Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	121 spaces	98 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	39 spaces	64 spaces	Yes
Perimeter Fencing	Full Perime	eter	Full Perimeter	Yes
Auto Parking	Present On-	-site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	Yes	2	Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7	Jet A Fuel	24/7 AvGas, Jet A Fuel	No
Rental/Courtesy Car Access	Rental Ca	ar	Rental Car	Yes
	FORECA	ST STORAGE NEE	DS	
	PROJEC	T		SOURCE
Add additional 45 hangar spa	aces due to 20-year forecas	st activity		Forecast
Existing apron tie-downs acc				Forecast

### **Pocatello Regional**

Associated City: Lewiston FAA Identifier: PIH 2020 IASP Classification: Primary

Objective Category	Primary Airport C	bjectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	Future Runway Length from ALP/MP 9,060 feet (9,056 feet) 9,060 feet			Yes
Primary Runway Width	100 feet	Service and	150 feet	Yes
Primary Runway Strength	Single-Landing Gear (6	0,000 pounds)	100,000 pounds	Yes
Primary Taxiway	Full Parall	el	Full Parallel	Yes
Instrument Approach	Precision or	PBN	Precision	Yes
Visual Aids	Rotating Beacon, Light PAPIs/VASIs, ALS, REILs based on A	(as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, ALS, REILs	Yes
Runway Lighting	MIRL, HIRL Desired		HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, ASOS	Yes
	LAN	DSIDE FACILITIES	5	
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	42 spaces	17 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	16 spaces	64 spaces	Yes
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7	Jet A Fuel	24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Rental Ca	r	Rental/Courtesy Car	Yes
	FORECA	ST STORAGE NE	FDS	
	PROJE			SOURCE
Add additional 18 hangar spa				Forecast
	ommodate 20-year forecas			Forecast



### **Pullman-Moscow Regional**

Associated City: Pullman FAA Identifier: PUW 2020 IASP Classification: Primary

Objective Category	Primary Airport C	)bjectiv <u>es</u>	Current Performance	Meets 2020 Objective?
		IDE FACILITIES		
Primary Runway Length	Future Runway Length (8,000 fee	from ALP/MP	6,730 feet	No
Primary Runway Width	100 feet		100 feet	Yes
Primary Runway Strength	Single-Landing Gear (6	0,000 pounds)	57,000 pounds	No
Primary Taxiway	Full Parall	el	Full Parallel	Yes
nstrument Approach	Precision or PBN		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Light PAPIs/VASIs, ALS, REILs based on A	s (as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, ALS, REILs	Yes
Runway Lighting	MIRL, HIRL Desired		HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		On-Site ASOS or AWOS	No
	LAND	SIDE FACILITIES		
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	62 spaces	29 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	34 spaces	40 spaces	Yes
Perimeter Fencing	Full Perime	ter	Partial Perimeter	No
Auto Parking	Present On-	site	Yes	Yes
	3	SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Ni-Fi	Yes		Yes	Yes
ixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7	Jet A Fuel	24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Rental Ca	ır	Rental Car	Yes
	FORECAS	T STORAGE NEE	DS	
A subscription of the Designation of the	PROJEC			SOURCE
Add additional 21 hangar spa				Forecast
Existing apron tie-downs acco				Forecast

Note: Since the time of data collection in 2018, Pullman-Moscow Regional Airport completed a major runway realignment and improvement project. This included the reorientation of its primary runway to 25/06, revised runway dimensions to 7,100 feet by 150 feet, the additional of a Precision PBN, and other improvements. Because the 2020 IASP Update is based on 2018 data, needs based on the facilities the airport provided at that time are included here and reported in *Chapter 8: System Costs and Alterative Scenarios* for continuity with the data year of this study.



### Joslin Field-Magic Valley Regional

Associated City: Twin Falls FAA Identifier: TWF 2020 IASP Classification: Primary

Objective Category	Primary Airport O	bjectives	Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITI	ES	
Primary Runway Length Future Runway Length from ALP/MP 8,703 feet (8,700 feet)				
Primary Runway Width	100 feet		150 feet	Yes
Primary Runway Strength	Single-Landing Gear (60,000 pounds)		75,000 pounds	Yes
Primary Taxiway	Full Paralle	el	Full Parallel	Yes
Instrument Approach	Precision or F	PBN	Precision	Yes
Visual Aids	Rotating Beacon, Lighte PAPIs/VASIs, ALS, REILs based on AL	(as applicable	Rotating Beacon, Lighted Wind Cone, PAPIs, VASIs, ALS, REILs,	Yes
Runway Lighting	MIRL, HIRL Desired		HIRL	Yes
Weather Reporting	ATCT / ASOS or AWOS		ATCT, ASOS	Yes
	LAN	NDSIDE FACILIT	IES	
Commercial Terminal	Yes		Yes	Yes
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	Yes		Yes	Yes
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 80% of Based Aircraft and 25% of Transient	101 spaces	69 spaces	No
Apron Tie-Down Space	20% of Based Aircraft and 50% of Transient	30 spaces	103 spaces	Yes
Perimeter Fencing	Full Perimet	er	Full Perimeter	Yes
Auto Parking	Present On-s	ite	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	Yes		Yes	Yes
Maintenance Services	Yes		Yes	Yes
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas, 24/7 J	et A Fuel	24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Rental Car		Rental/Courtesy Car	Yes
	FOREC	AST STORAGE	NEEDS	
	PROJE			SOURCE
Add additional 41 hangar spa	aces due to 20-year forec	ast activity		Forecast
Existing apron tie-downs acc				Forecast



## **Caldwell Industrial**

Associated City: Caldwell FAA Identifier: EUL 2020 IASP Classification: Regional

Objective Category	Regional Airport (	Objectives	Current Performance	Meets 2020 Objective?
	A	IRSIDE FACILITIE	S	
Primary Runway Length	To Accommodate 10 Aircraft Fleet (4,6		5,500 feet	Yes
Primary Runway Width	75 feet		100 feet	Yes
Primary Runway Strength	Single-Landing Gear (1	2,500 pounds)	72,000 pounds	Yes
Primary Taxiway	Partial Parallel, Con Turnaroun		Full Parallel	Yes
Instrument Approach	PBN		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Win PAPIs/VAS	and the second	Rotating Beacon, Lighted Wind Cone, PAPIs	No
Runway Lighting	MIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		AWOS	N/A
	LA	NDSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 60% of Based Aircraft	274 spaces	274 spaces	Yes
Apron Tie-Down Space	40% of Based Aircraft and 50% of Transient	207 spaces	53 spaces	No
Perimeter Fencing	Partial Perim	eter	Partial Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
	the second s	SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	Yes		No	No
Fuel	24/7 AvGas (As Needed), Jet A Fuel (As Needed)		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loan	er Car	Rental/Courtesy Car	Yes
	FORE	CAST STORAGE N	IEEDS	
	PROJE			SOURCE
Add additional 60 hangar spa				Forecast
	lowns due to 20-year for			Forecast



### Coeur D'Alene - Pappy Boyington Field

Associated City: Coeur d'Alene FAA Identifier: COE 2020 IASP Classification: Regional

Objective Category	Regional Airport	Objectives	Current Performance	Meets 2020 Objective?
		RSIDE FACILITIES		
Primary Runway Length	To Accommodate 100% Fleet (4,450	of Small Aircraft	7,400 feet	Yes
Primary Runway Width	75 feet		100 feet	Yes
Primary Runway Strength	Single-Landing Gear (1		57,000 pounds	Yes
Primary Taxiway	Partial Parallel, Col Turnaroui	nnectors, or	Full Parallel	Yes
nstrument Approach	PBN		Precision	Yes
Visual Aids	Rotating Beacon, Wir PAPIs/VA		Rotating Beacon, Lighted Wind Cone, REILs, PAPIs, ALS	Yes
Runway Lighting	MIRL		HIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		AWOS	N/A
	LAN	NDSIDE FACILITIE	S	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		No	No
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		No	No
Hangar Storage	Storage for 60% of Based Aircraft	151 spaces	114 spaces	No
Apron Tie-Down Space	40% of Based Aircraft and 50% of Transient	128 spaces	70 spaces	No
Perimeter Fencing	Partial Perin	neter	Partial Perimeter	Yes
Auto Parking	Present On	-site	Yes	Yes
		SERVICES	2 2 2	
Cell Phone Coverage	Yes		Yes	Yes
Vi-Fi	Yes		Yes	Yes
ixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
now Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas (As Needed), Jet A Fuel (As Needed)		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loa	ner Car	Rental Car	No
	FOREC	AST STORAGE NE	EDS	
	PROJE	СТ		SOURCE
Add additional 98 hangar spa	ices due to 20-year foreca	ast activity		Forecast
	-downs due to 20-year fo			Forecast



### **Driggs-Reed Memorial**

Associated City: Driggs FAA Identifier: DIJ 2020 IASP Classification: Regional

Objective Category	Regional Airport	Objectives	Current Performance	Meets 2020 Objective?
		RSIDE FACILITIES		
Primary Runway Length	To Accommodate 100% Fleet (7,350		7,300 feet	No
Primary Runway Width	75 feet		100 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		20,000 pounds	Yes
Primary Taxiway	Partial Parallel, Cor Turnarour		Full Parallel	Yes
Instrument Approach	PBN		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Win PAPIs/VA		Rotating Beacon, Lighted Wind Cone, REILs, PAPIs	Yes
Runway Lighting	MIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		AWOS	N/A
	LAI	NDSIDE FACILITIE	S	1000
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes	-	Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 60% of Based Aircraft	124 spaces	85 spaces	No
Apron Tie-Down Space	40% of Based Aircraft and 50% of Transient	84 spaces	40 spaces	No
Perimeter Fencing	Partial Perin	neter	Full Perimeter	Yes
Auto Parking	Present On-	-site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	Yes		Yes	Yes
Fuel	24/7 AvGas (As Needed), Jet A Fuel (As Needed)		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental Car	No
	FOREC	AST STORAGE N	EDS	
	PROJE			SOURCE
Meeting 2020 objective for h	110.00		ecasted activity	Forecast
	pron tie-downs accommo			Forecast



### **McCarley Field**

Associated City: Blackfoot FAA Identifier: U02 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?
	AIRS	SIDE FACILITIES		
Primary Runway Length	To Accommodate 100% of Small Aircraft Fleet (5,500 feet)		4,311 feet	No
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		12,500 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desired		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wind Cone		Rotating Beacon, Lighted Wind Cone, PAPIs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		No	N/A
	LAND	SIDE FACILITIE	S	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	30 spaces	52 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	33 spaces	43 spaces	Yes
Perimeter Fencing	Partial Perimeter		Full Perimeter	Yes
Auto Parking	Present On-site		Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECAS	ST STORAGE N	EEDS	and the second s
PROJECT				SOURCE
Existing hangar spaces accommodate 20-year forecast activity				Forecast
Existing apron tie-downs accommodate 20-year forecast activity				Forecast



#### **Boundary County**

Associated City: Bonners Ferry FAA Identifier: 65S 2020 IASP Classification: Local

Objective Category	Local Airport Objec	tives	Current Performance	Meets 2020 Objective?	
		IDE FACILIT	IES		
Primary Runway Length     To Accommodate 100% of Small Aircraft Fleet (3,900 feet)     4,002 feet					
Primary Runway Width	60 feet		75 feet	Yes	
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		25,000 pounds	Yes	
Primary Taxiway	Turnarounds		Full Parallel	Yes	
Instrument Approach	Visual, PBN Desir	ed	Non-Precision, PBN	Yes	
Visual Aids	Rotating Beacon, Win	d Cone	Rotating Beacon, Lighted Wind Cone, PAPIs	Yes	
Runway Lighting	LIRL		MIRL	Yes	
Weather Reporting	On-site ASOS or AWOS (As Required		AWOS	N/A	
the second s	LAND	SIDE FACILI	TIES		
Commercial Terminal	N/A	No	N/A		
General Aviation Terminal	Yes		Yes	Yes	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		Yes	N/A	
Pilots Lounge	Yes		Yes	Yes	
Hangar Storage	Storage for 50% of Based Aircraft	37 spaces	33 spaces	No	
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	45 spaces	33 spaces	No	
Perimeter Fencing	Partial Perimete	er	Partial Perimeter	Yes	
Auto Parking	Present On-site	2	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	Yes		Yes	Yes	
Fixed Base Operator	N/A		Yes	N/A	
Maintenance Services	N/A		Yes	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes	
Rental/Courtesy Car Acces	Courtesy/Loaner	Yes			
	FORECAS	T STORAGE	NEEDS		
PROJECT					
	aces due to 20-year foreca			Forecast	
Add additional 10 apron tie	e-downs due to 20-year for	ecast activit	y	Forecast	



# **Buhl Municipal**

Associated City: Buhl FAA Identifier: U03 2020 IASP Classification: Local (Future Role)

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
		AIRSIDE FACILI	TIES	
Primary Runway Length To Accommodate 100% of Small Aircraft Fleet (4,800 feet) 3,898 feet				
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		12,500 pounds	Yes
Primary Taxiway	Turnaroun	ds	Full Parallel	Yes
Instrument Approach	Visual, PBN De	esired	Visual	Yes
Visual Aids	Rotating Beacon, V	Vind Cone	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		No	N/A
		LANDSIDE FACIL	ITIES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	21 spaces	30 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	44 spaces	14 spaces	No
Perimeter Fencing	Partial Perim	eter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental/Courtesy Car	Yes
	FOF	RECAST STORAG	E NEEDS	
PROJECT				
Existing hangar spaces acco	ommodate 20-year foreca	st activity		Forecast
Add additional 7 apron tie-				Forecast



## **Burley Municipal**

Associated City: Burley FAA Identifier: BYI 2020 IASP Classification: Local

Objective Category	Local Airport Obje	ctives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIE	S	
Primary Runway Length	To Accommodate 1009 Aircraft Fleet (5,200		4,092 feet	No
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,5	600 pounds)	43,000 pounds	Yes
Primary Taxiway	Turnarounds		Partial Parallel	Yes
nstrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, VASIs, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	s Required)	ASOS	N/A
	LAND	SIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	26 spaces	50 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	41 spaces	54 spaces	Yes
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes
Auto Parking	Present On-sit	e	Yes	Yes
la su a su		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		AvGas, Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car Courtesy Car			Yes
	FORECAS	T STORAGE N	IEEDS	1.0.1.2
	PROJECT			SOURCE
	nmodate 20-year forecast ac			Forecast
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast



#### Cascade

Associated City: Cascade FAA Identifier: U70 2020 IASP Classification: Local

Objective Category	Local Airport Object	ctives	Current Performance	Meets 2020 Objective?
		IDE FACILITIE	S	
Primary Runway Length	To Accommodate 100% Aircraft Fleet (5,600		4,300 feet	No
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,5	00 pounds)	12,500 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desi	red	Visual	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	s Required)	No	N/A
	LAND	SIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes	· · · · · · · · · · · · · · · · · · ·	No	No
Hangar Storage	Storage for 50% of Based Aircraft	13 spaces	36 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	14 spaces	23 spaces	Yes
Perimeter Fencing	Partial Perimet	er	Partial Perimeter	Yes
Auto Parking	Present On-sit	e	Yes	Yes
the second second		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		AvGas, Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECAS	T STORAGE N	NEEDS	
	PROJECT	0	4	SOURCE
Existing hangar spaces accommodate 20-year forecast activity				
	ommodate 20-year forecast			Forecast Forecast



## **Challis**

Associated City: Challis FAA Identifier: LLJ 2020 IASP Classification: Local (Future Role)

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
		AIRSIDE FACILI	TIES	
Primary Runway Length To Accommodate 100% of Small Aircraft Fleet (6,100 feet) 4,600 feet				
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gear (12	2,500 pounds)	30,000 pounds	Yes
Primary Taxiway	Turnarounds		Partial Parallel	Yes
Instrument Approach	Visual, PBN De	esired	Visual	Yes
Visual Aids	Rotating Beacon, Wind Cone		Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		ASOS	N/A
	l.	ANDSIDE FACII	ITIES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	11 spaces	9 spaces	No
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	27 spaces	37 spaces	Yes
Perimeter Fencing	Partial Perim	eter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	N/A
	FOR	ECAST STORAG	E NEEDS	
PROJECT				
Add additional 1 hangar space due to 20-year forecast activity				
Existing apron tie-downs ac				Forecast Forecast



## **Emmett Municipal**

Associated City: Emmett FAA Identifier: S78 2020 IASP Classification: Local (Future Role)

Objective Category	Utility Airport O	bjectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	3,307 feet	No		
Primary Runway Width	60 feet		55 feet	No
Primary Runway Strength	Single-Landing Gear (1	2,500 pounds)	8,000 pounds	No
Primary Taxiway	Turnaroun	ds	Partial Parallel	Yes
nstrument Approach	Visual, PBN De	esired	Visual	Yes
Visual Aids	Rotating Beacon, V	Wind Cone	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS	i (As Required)	No	N/A
	LAN	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		No	No
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	11 spaces	9 spaces	No
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	23 spaces	14 spaces	No
Perimeter Fencing	Partial Perim	leter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
A		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECA	ST STORAGE NE	EDS	
	PROJECT			SOURCE
Add additional 1 hangar space	ce due to 20-year forecast	activity		Forecast
Add additional 2 apron tie-d	owns due to 20-year forec	ast activity		Forecast



## **Gooding Municipal**

Associated City: Gooding FAA Identifier: GNG 2020 IASP Classification: Local

Objective Category	Local Airport Obje	ctives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIE	S	
Primary Runway Length	To Accommodate 1009 Aircraft Fleet (5,000		4,745 feet	No
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		30,000 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	As Required)	AWOS	N/A
	LAND	SIDE FACILITI	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes			Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	39 spaces	34 spaces	No
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	41 spaces	16 spaces	No
Perimeter Fencing	Partial Perimet	er	Partial Perimeter	Yes
Auto Parking	Present On-sit	е	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECAS	T STORAGE	NEEDS	
PROJECT				
Add additional 8 hangar spa	ces due to 20-year forecast	activity		Forecast
	lowns due to 20-year foreca			Forecast

#### **Idaho County**

Associated City: Grangeville FAA Identifier: GIC 2020 IASP Classification: Local

Objective Category	Local Airport Obje	ctives	Current Performance	Meets 2020 Objective?
	AIRS	SIDE FACILITIE	S	
Primary Runway Length	To Accommodate 100% of Fleet (4,500 fee		5,100 feet	Yes
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,5	500 pounds)	75,000 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
nstrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	As Required)	AWOS	N/A
	LAND	SIDE FACILIT	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	9 spaces	9 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	16 spaces	20 spaces	Yes
Perimeter Fencing	Partial Perimet	er	No	No
Auto Parking	Present On-sit	e	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner	Car	Rental/Courtesy Car	Yes
	FORECAS	ST STORAGE	NEEDS	
	PROJECT			SOURCE
Existing hangar spaces acco	mmodate 20-year forecast a	ctivity		Forecast
	own due to 20-year forecast			Forecast



#### Jerome County

Associated City: Jerome FAA Identifier: JER 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?	
	AIRS	SIDE FACILITIE	S		
Primary Runway Length     To Accommodate 100% of Small Aircraft Fleet (5,250 feet)     5,000 feet       Primary Runway Width     60 feet     75 feet					
Primary Runway Width	60 feet		75 feet	Yes	
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		20,000 pounds	Yes	
Primary Taxiway	Turnarounds		Full Parallel	Yes	
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes	
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs	Yes	
Runway Lighting	LIRL		MIRL	Yes	
Weather Reporting	On-site ASOS or AWOS (As Required)		ASOS	N/A	
	LAND	SIDE FACILITI	ES		
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	Yes		Yes	Yes	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		Yes	N/A	
Pilots Lounge	Yes		Yes	Yes	
Hangar Storage	Storage for 50% of Based Aircraft	23 spaces	39 spaces	Yes	
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	25 spaces	40 spaces	Yes	
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes	
Auto Parking	Present On-sit	e	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	Yes		Yes	Yes	
Fixed Base Operator	N/A		Yes	N/A	
Maintenance Services	N/A		Yes	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes	
Rental/Courtesy Car Access	Courtesy/Loaner	Car	Courtesy Car	Yes	
	FORECAS	ST STORAGE N	IEEDS		
	PROJECT			SOURCE	
Existing hangar spaces acco	mmodate 20-year forecast a	ctivity		Forecast	
Existing apron tie-downs ac	commodate 20-year forecas	t activity		Forecast	



# McCall Municipal

Associated City: McCall FAA Identifier: MYL 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?	
	AIRS	SIDE FACILITI	ES		
Primary Runway Length     To Accommodate 100% of Small Aircraft Fleet (5,900 feet)     6,108 feet       Primary Runway Width     60 feet     75 feet					
Primary Runway Width	60 feet		75 feet	Yes	
Primary Runway Strength	Single-Landing Gear (12,5	500 pounds)	86,500 pounds	Yes	
Primary Taxiway	Turnarounds		Full Parallel	Yes	
nstrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes	
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs, VASIs, REILs	Yes	
Runway Lighting	LIRL		MIRL	Yes	
Weather Reporting	On-site ASOS or AWOS (A	s Required)	ASOS	N/A	
	LAND	SIDE FACILIT	IES		
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	Yes		No	No	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		Yes	N/A	
Pilots Lounge	Yes		No	No	
Hangar Storage	Storage for 50% of Based Aircraft	46 spaces	82 spaces	Yes	
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	55 spaces	121 spaces	Yes	
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes	
Auto Parking	Present On-sit	e	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	Yes		Yes	Yes	
Fixed Base Operator	N/A		Yes	N/A	
Maintenance Services	N/A		Yes	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
Fuel	AvGas		24/7 AvGas, Jet A Fuel	Yes	
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental Car	No	
	FORECAS	ST STORAGE I	NEEDS		
PROJECT					
Existing hangar spaces acco	mmodate 20-year forecast a			SOURCE Forecast	
0 0 1	commodate 20-year forecas			Forecast	

#### **Mountain Home Municipal**

Associated City: Mountain Home FAA Identifier: U76 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?	
		IDE FACILITIE	S		
Primary Runway Length         To Accommodate 100% of Small Aircraft Fleet (4,600 feet)         5,000 feet           Primary Runway Width         60 feet         75 feet					
Primary Runway Width	60 feet		75 feet	Yes	
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		42,000 pounds	Yes	
Primary Taxiway	Turnarounds	p = 1	Full Parallel	Yes	
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes	
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs, REILs	Yes	
Runway Lighting	LIRL		MIRL	Yes	
Weather Reporting	On-site ASOS or AWOS (A	s Required)	No	N/A	
	LAND	SIDE FACILIT	IES		
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	Yes		YeS	Yes	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		Yes	N/A	
Pilots Lounge	Yes		Yes	Yes	
Hangar Storage	Storage for 50% of Based Aircraft	14 spaces	20 spaces	Yes	
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	18 spaces	25 spaces	Yes	
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes	
Auto Parking	Present On-sit	e	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	Yes		Yes	Yes	
Fixed Base Operator	N/A		Yes	N/A	
Maintenance Services	N/A		Yes	N/A	
Snow Removal Equipment	N/A		No	N/A	
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes	
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental/Courtesy Car	Yes	
	FORECAS	T STORAGE	NEEDS		
PROJECT					
Existing hangar spaces acco	mmodate 20-year forecast a	ctivity		Forecast	
	commodate 20-year forecas			Forecast	



## Nampa Municipal

Associated City: Nampa FAA Identifier: MAN 2020 IASP Classification: Local

Objective Category	Local Airport Obje	ctives	Current Performance	Meets 2020 Objective?	
	AIR	SIDE FACILITIE	S		
Primary Runway Length     To Accommodate 100% of Small Aircraft Fleet (4,900 feet)     5,000 feet       Primary Runway Width     60 feet     75 feet					
Primary Runway Width	60 feet		75 feet	Yes	
Primary Runway Strength	Single-Landing Gear (12,5	600 pounds)	26,000 pounds	Yes	
Primary Taxiway	Turnarounds		Full Parallel	Yes	
nstrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes	
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs	Yes	
Runway Lighting	LIRL		MIRL	Yes	
Weather Reporting	On-site ASOS or AWOS (A	s Required)	AWOS	N/A	
	LAND	SIDE FACILIT	IES		
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	Yes		Yes	Yes	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		No	N/A	
Pilots Lounge	Yes		Yes	Yes	
Hangar Storage	Storage for 50% of Based Aircraft	156 spaces	296 spaces	Yes	
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	174 spaces	73 spaces	No	
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes	
Auto Parking	Present On-sit	e	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	Yes		Yes	Yes	
Fixed Base Operator	N/A		Yes	N/A	
Maintenance Services	N/A		Yes	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes	
Rental/Courtesy Car Access	Courtesy/Loaner	Car	Rental/Courtesy Car	Yes	
1	FORECA	ST STORAGE	NEEDS		
PROJECT					
Existing hangar spaces accommodate 20-year forecast activity					
	-downs due to 20-year fore			Forecast Forecast	



#### Preston

Associated City: Preston FAA Identifier: U10 2020 IASP Classification: Local

	Carlos and	and some	Comment and and	Meets 2020
Objective Category	Local Airport Obje		Current Performance	Objective?
	a de la dela del de la dela del de la dela de	SIDE FACILITIE	S	
Primary Runway Length	To Accommodate 100% of Fleet (5,800 fe		4,900 feet	No
Primary Runway Width	60 feet		50 feet	No
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		12,000 pounds	No
Primary Taxiway	Turnarounds	5	Connectors	No
nstrument Approach	Visual, PBN Des	ired	Visual	Yes
Visual Aids	Rotating Beacon, Wi	nd Cone	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	LIRL		LIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		No	N/A
	LANI	DSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	9 spaces	27 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	12 spaces	8 spaces	No
Perimeter Fencing	Partial Perimet	ter	Partial Perimeter	Yes
Auto Parking	Present On-sit	te	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		No	N/A
Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECA	ST STORAGE N	EEDS	
	PROJEC			SOURCE
Existing hangar spaces accor	mmodate 20-year forecast a	ctivity		Forecast
Add additional 1 apron tie-d	lown due to 20-year forecast	activity		Forecast

#### **Rexburg-Madison County**

Associated City: Rexburg FAA Identifier: RXE 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITI	ES	
Primary Runway Length	To Accommodate 100% of Fleet (5,750 fee		4,204 feet	No
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,	500 pounds)	30,000 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wi	nd Cone	Rotating Beacon, Lighted Wind Cone, VASIs, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		ASOS	N/A
	LAN	DSIDE FACILIT	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		No	No
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	51 spaces	58 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	56 spaces	36 spaces	No
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes
Auto Parking	Present On-sit	e	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECA	ST STORAGE	NEEDS	Lancia
	PROJEC	Ţ		SOURCE
Add additional 2 hangar spa	aces due to 20-year forecast	activity		Forecast
Add additional 9 apron tie-	downs due to 20-year foreca	st activity		Forecast



## Lemhi County

Associated City: Salmon FAA Identifier: SMN 2020 IASP Classification: Local

Objective Category	Local Airport Object	ctives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITI	ES	
Primary Runway Length	To Accommodate 100% Aircraft Fleet (5,200		5,510 feet	Yes
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,5	00 pounds)	12,500 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	s Required)	AWOS	N/A
	LAN	DSIDE FACILIT	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	20 spaces	35 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	25 spaces	62 spaces	Yes
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes
Auto Parking	Present On-site	e	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		No	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner	Car	Courtesy Car	Yes
	FORECA	ST STORAGE	NEEDS	
PROJECT				
Existing hangar spaces acco	mmodate 20-year forecast a	activity		SOURCE Forecast
	commodate 20-year forecas			Forecast



## <u>Sandpoint</u>

Associated City: Sandpoint FAA Identifier: SZT 2020 IASP Classification: Local

Objective Category	Local Airport Object	ctives	Current Performance	Meets 2020 Objective?
		IDE FACILITIE	S	
Primary Runway Length	To Accommodate 1009 Aircraft Fleet (3,800		5,501 feet	Yes
Primary Runway Width	60 feet		75 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,5	500 pounds)	40,000 pounds	Yes
Primary Taxiway	Turnarounds		Full Parallel	Yes
Instrument Approach	Visual, PBN Desi	red	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wir	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (A	s Required)	AWOS	N/A
	LAND	SIDE FACILIT	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	36 spaces	86 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	49 spaces	40 spaces	No
Perimeter Fencing	Partial Perimet	er	Full Perimeter	Yes
Auto Parking	Present On-sit	е	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		Yes	Yes
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas, 24/7 Jet A Fuel	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental/Courtesy Car	Yes
	FORECAS	T STORAGE I	NEEDS	
	PROJECT			SOURCE
Existing hangar spaces accor				Forecast
Add additional 10 apron tie-	downs due to 20-year forec	ast activity		Forecast

#### **St Maries Municipal**

Associated City: St. Maries FAA Identifier: S72 2020 IASP Classification: Local

Objective Category	Local Airport Obje	ectives	Current Performance	Meets 2020 Objective?
		SIDE FACILITIE	S	
Primary Runway Length	To Accommodate 100% of Fleet (3,850 fe		3,354 feet	No
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,	500 pounds)	12,500 pounds	Yes
Primary Taxiway	Turnarounds	5	Partial Parallel	Yes
nstrument Approach	Visual, PBN Des	ired	Visual	Yes
Visual Aids	Rotating Beacon, Wi	nd Cone	Rotating Beacon, Lighted Wind Cone, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (As Required)		No	N/A
	LANI	DSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes		Yes	Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	Yes		No	No
Hangar Storage	Storage for 50% of Based Aircraft	13 spaces	60 spaces	Yes
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	14 spaces	14 spaces	Yes
Perimeter Fencing	Partial Perimet	ter	Partial Perimeter	Yes
Auto Parking	Present On-sit	te	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
ixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		No	N/A
Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECA	ST STORAGE N	EEDS	
	PROJEC			SOURCE
Existing hangar spaces acco	mmodate 20-year forecast a			Forecast
	lowns due to 20-year forecas			Forecast



## Weiser Municipal

Associated City: Weiser FAA Identifier: S87 2020 IASP Classification: Local

Objective Category	Local Airport Objectives		Current Performance	Meets 2020 Objective?
		SIDE FACILITIE	S	
Primary Runway Length	To Accommodate 100% of Fleet (3,950 fe		4,000 feet	Yes
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gear (12,500 pounds)		12,500 pounds	Yes
Primary Taxiway	Turnarounds	5	Full Parallel	Yes
nstrument Approach	Visual, PBN Des	ired	Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon, Wi	nd Cone	Rotating Beacon, Lighted Wind Cone, PAPIs, REILs	Yes
Runway Lighting	LIRL		MIRL	Yes
Weather Reporting	On-site ASOS or AWOS (/	As Required)	No	N/A
	LANI	DSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	Yes			Yes
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	Yes		Yes	Yes
Hangar Storage	Storage for 50% of Based Aircraft	19 spaces	13 spaces	No
Apron Tie-Down Space	50% of Based Aircraft and 50% of Transient	21 spaces	14 spaces	No
Perimeter Fencing	Partial Perimet	ter	Full Perimeter	Yes
Auto Parking	Present On-sit	te	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	Yes		No	No
ixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	AvGas		24/7 AvGas	Yes
Rental/Courtesy Car Access	Courtesy/Loaner Car		Courtesy Car	Yes
	FORECA	ST STORAGE N	EEDS	
	PROJEC	Т		SOURCE
Add additional 4 hangar spa	ces due to 20-year forecast a	activity		Forecast
Add additional 5 apron tie-c	lowns due to 20-year forecas	st activity		Forecast

#### Aberdeen Municipal

Associated City: Aberdeen FAA Identifier: U36 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	Alf	RSIDE FACILITIE	S	
Primary Runway Length	Maintain Exis	sting	3,690 feet	Yes
Primary Runway Width	Maintain Exis	sting	50 feet	Yes
Primary Runway Strength	Maintain Exis	sting	N/A	Yes
Primary Taxiway	Maintain Exis	sting	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL Desired		MIRL	Yes
Weather Reporting	N/A		No	N/A
	LAN	DSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		9 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	16 spaces	4 spaces	No
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
	(	SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FOREC	AST STORAGE N	EEDS	-
	PROJEC			SOURCE
Forecast hangar storage need	ds not applicable			Forecast
Add additional 5 apron tie-do		st activity		Forecast



#### **Arco-Butte County**

Associated City: Arco FAA Identifier: AOC 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITIE	S	
Primary Runway Length	Maintain Exi	sting	6,610 feet	Yes
Primary Runway Width	Maintain Exi	sting	75 feet	Yes
Primary Runway Strength	Maintain Exi	sting	30,000 pounds	Yes
Primary Taxiway	Maintain Exi	sting	Full Parallel	Yes
Instrument Approach	Visual		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone, PAPIs, REILs	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	N/A	No	N/A	
	LAN	IDSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		Yes	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		9 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	13 spaces	24 spaces	Yes
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-		Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes	- Service -	Yes	Yes
Wi-Fi	N/A		Yes	N/A
ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FOREC	AST STORAGE N	EEDS	and the second
PROJECT				
Forecast hangar storage need	ds not applicable			Forecast
Existing apron tie-downs accord		tactivity		Forecast



# **Council Municipal**

Associated City: Council FAA Identifier: U82 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?	
	All	RSIDE FACILITIE	S		
Primary Runway Length	Maintain Exis	sting	3,600 feet	Yes	
Primary Runway Width	Maintain Exis	sting	60 feet	Yes	
Primary Runway Strength	Maintain Exis	sting	12,500 pounds	Yes	
Primary Taxiway	Maintain Existing		Turnarounds	Yes	
nstrument Approach	Visual		Visual	Yes	
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone	Yes	
Runway Lighting	Reflectors, LIRL Desired		MIRL	Yes	
Weather Reporting	N/A		No	N/A	
	LAN	IDSIDE FACILITI	ES		
Commercial Terminal N/A No					
General Aviation Terminal	N/A		No	N/A	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		No	N/A	
Pilots Lounge	N/A		No	N/A	
Hangar Storage	N/A		14 spaces	N/A	
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	13 spaces	8 spaces	No	
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes	
Auto Parking	Present On-	site	Yes	Yes	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Ni-Fi	N/A		No	N/A	
ixed Base Operator	N/A		No	N/A	
Maintenance Services	N/A		No	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
uel	N/A		24/7 AvGas	N/A	
Rental/Courtesy Car Access	N/A		No	N/A	
	FOREC	AST STORAGE N	EEDS		
PROJECT					
orecast hangar storage need	ls not applicable			Forecast	
Add additional 2 apron tie-do		st activity		Forecast	

#### **Homedale Municipal**

Associated City: Homedale FAA Identifier: S66 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITIES		
Primary Runway Length	2,901 feet	Yes		
Primary Runway Width	Maintain Exis	sting	50 feet	Yes
Primary Runway Strength	Maintain Existing		6,000 pounds	Yes
Primary Taxiway	Maintain Exis	sting	No	Yes
nstrument Approach	Visual		Visual	Yes
/isual Aids	Rotating Beacon (As Re Cone	equired), Wind	Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL	Desired	No	No
Weather Reporting	N/A		No	N/A
	LAN	IDSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		20 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	19 spaces	9 spaces	No
Perimeter Fencing	Full Perime	ter	Partial Perimeter	No
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Vi-Fi	N/A	_	No	N/A
ixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
uel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FOREC	AST STORAGE NEE	DS	
PROJECT				
orecast hangar storage need	ds not applicable			Forecast
Add additional 3 apron tie-do		st activity		Forecast

## Kamiah Municipal

Associated City: Kamiah FAA Identifier: S73 2020 IASP Classification: Basic

Objective Category	Basic Airport Obj	ectives	Current Performance	Meets 2020 Objective?
	A	IRSIDE FACILITI	ES	
Primary Runway Length	Maintain Exist	ing	3,000 feet	Yes
Primary Runway Width	Maintain Exist	ting	90 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL D	esired	LIRL	Yes
Weather Reporting	N/A		No	N/A
	LA	NDSIDE FACILIT	IES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		15 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	12 spaces	15 spaces	Yes
Perimeter Fencing	Full Perimet	er	No	No
Auto Parking	Present On-s	ite	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORE	CAST STORAGE	NEEDS	
		SOURCE		
Forecast hangar storage nee		Forecast		
Existing apron tie-downs acc		ast activity		Forecast



## **Shoshone County**

Associated City: Kellogg FAA Identifier: S83 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITIE	5	
Primary Runway Length	Maintain Exis	sting	5,316 feet	Yes
Primary Runway Width	Maintain Exis	sting	75 feet	Yes
Primary Runway Strength	Maintain Exis	sting	14,000 pounds	Yes
Primary Taxiway	Maintain Exis	sting	Turnarounds	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL Desired		MIRL	Yes
Weather Reporting	N/A		No	N/A
	LAN	IDSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		Yes	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		14 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	14 spaces	6 spaces	No
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FOREC/	AST STORAGE N	EEDS	
PROJECT				
Forecast hangar storage needs not applicable				
Add additional 3 apron tie-do		st activity		Forecast



#### Mud Lake/West Jefferson County

Associated City: Mud Lake FAA Identifier: 1U2 2020 IASP Classification: Basic (Future Role)

Objective Category	Utility Airport Objectives		Current Performance	Meets 2020 Objective?
objective category		IRSIDE FACIL	ENVIRONMENT CONTRACTOR ACTIVITY	
Primary Runway Length	Maintain Exist	ing	3,300 feet	Yes
Primary Runway Width	60 feet		40 feet	No
Primary Runway Strength	Maintain Existing		12,500 pounds	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	No
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Wind Cone		Rotating Beacon, Lighted Wind Cone, TRIL	Yes
Runway Lighting	Reflectors, LIRL D	esired	Non-Standard LIRL and Reflectors	Yes
Weather Reporting	N/A		No	N/A
	LA	NDSIDE FAC	LITIES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		4 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	11 spaces	6 spaces	No
Perimeter Fencing	Full Perimete	er	No	No
Auto Parking	Present On-si	ite	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		AvGas, Jet A Fuel	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORE	CAST STORA	GE NEEDS	
PROJECT				
Forecast hangar storage nee				Forecast
Add additional 3 apron tie-de	owns due to 20-year fore	cast activity		Forecast



## **Orofino Municipal**

Associated City: Orofino FAA Identifier: S68 2020 IASP Classification: Basic

Objective Category	Basic Airport Objectives		Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITIES		
Primary Runway Length	Maintain Exis	sting	2,500 feet	Yes
Primary Runway Width	Maintain Exis	sting	60 feet	Yes
Primary Runway Strength	Maintain Exis	sting	17,000 pounds	Yes
Primary Taxiway	Maintain Exis	sting	Full Parallel	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	N/A		No	N/A
	LAN	DSIDE FACILITIES	£	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		Yes	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		11 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	13 spaces	8 spaces	No
Perimeter Fencing	Full Perime	ter	Partial Perimeter	No
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	N/A		Rental/Courtesy Car	N/A
	FOREC	AST STORAGE NEE	DS	
	PROJEC			SOURCE
Forecast hangar storage need	A. OVE 199 (1			Forecast
	owns due to 20-year foreca	st activity		Forecast



#### **Bear Lake County**

Associated City: Paris FAA Identifier: 1U7 2020 IASP Classification: Basic

Objective Category	Basic Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	Alf	RSIDE FACILITIE	5	
Primary Runway Length	Maintain Exis	sting	5,728 feet	Yes
Primary Runway Width	Maintain Exis		75 feet	Yes
Primary Runway Strength	Maintain Exis	sting	14,000 pounds	Yes
Primary Taxiway	Maintain Exis	sting	Partial Parallel	Yes
nstrument Approach	Visual		Non-Precision, PBN	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone, PAPIs	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	N/A		AWOS	N/A
	LAN	DSIDE FACILITI	ES	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		6 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	7 spaces	11 spaces	Yes
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
0		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
ixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	N/A Courtesy Car		N/A	
	FOREC	AST STORAGE N	EEDS	
PROJECT				
Forecast hangar storage nee	ds not applicable			Forecast
Existing apron tie-downs accord		t activity		Forecast

Note: Since the time of data collection in 2018, Bear Lake County Airport completed several airport improvement projects including a runway strengthening project (30,000 pounds single-wheel), the addition of a Precision PBN instrument approach procedure, and REILs Because the 2020 IASP Update is based on 2018 data, needs based on the facilities the airport provided at that time are included here and reported in *Chapter 8: System Costs and Alterative Scenarios* for continuity with the data year of this study.

## **Priest River Municipal**

Associated City: Priest River FAA Identifier: 1S6 2020 IASP Classification: Basic

Objective Category	Basic Airport Objectives		Current Performance	Meets 2020 Objective?
	All	RSIDE FACILITIES		
Primary Runway Length	Maintain Exis	sting	2,950 feet	Yes
Primary Runway Width	Maintain Existing		48 feet	Yes
Primary Runway Strength	Maintain Exis	sting	12,500 pounds	Yes
Primary Taxiway	Maintain Exis	sting	Turnarounds	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL	Desired	LIRL	Yes
Weather Reporting	N/A		No	N/A
	LAN	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		13 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 50% of Transient	17 spaces	7 spaces	No
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	Present On-	site	Yes	Yes
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A	-	Yes	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FOREC/	AST STORAGE NEE	DS	
PROJECT				
Forecast hangar storage need	ds not applicable			Forecast
Add additional 3 apron tie-do		st activity		Forecast



## **American Falls**

Associated City: American Falls FAA Identifier: U01 2020 IASP Classification: Utility

Objective Category	Utility Airport Ol	bjectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length To Accommodate 95% of Small Aircraft 4,900 feet 4,900 feet				No
Primary Runway Width	60 feet		50 feet	No
Primary Runway Strength	Single-Landing Gea	ar (12,500)	N/P	No
Primary Taxiway	Partial Parallel or Tu	urnarounds	Partial Parallel	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone, TRIL	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	Unicom and Dual Barometers		Unicom Available/No Barometers	No
	LANI	DSIDE FACILITIES	1	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		Yes	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		35 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	38 spaces	8 spaces	No
Perimeter Fencing	Full Perime	ter	Partial Perimeter	No
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	Courtesy/Loan	er Car	Courtesy Car	N/A
	FORECA	ST STORAGE NE	EDS	
PROJECT				
Forecast hangar storage ne	eds not applicable			Forecast
Add additional 8 apron tie-	downs due to 20-year fore	cast activity		Forecast



## Malad City

Associated City: Malad FAA Identifier: MLD 2020 IASP Classification: Utility

Objective Category	Utility Airport O	bjectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	To Accommodate 95% o Fleet (5,70		4,950 feet	No
Primary Runway Width	60 feet		60 feet	Yes
Primary Runway Strength	Single-Landing Gea	ar (12,500)	N/P	No
Primary Taxiway	Partial Parallel or Tu	urnarounds	Partial Parallel	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	Unicom and Dual B	arometers	No	No
	LANI	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A	·	5 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	10 spaces	4 spaces	No
Perimeter Fencing	Full Perime	ter	Full Perimeter	Yes
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A	1	No	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	Courtesy/Loan	er Car	Courtesy Car	N/A
	FORECA	ST STORAGE NE	EDS	
PROJECT				
Forecast hangar storage needs not applicable				
Add additional 2 apron tie-c	lowns due to 20-year fore	cast activity		Forecast

## **Payette Municipal**

Associated City: Payette FAA Identifier: S75 2020 IASP Classification: Utility

Objective Category	Utility Airport O	bjectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	To Accommodate 95% o Fleet (3,95		3,000 feet	No
Primary Runway Width	60 feet		50 feet	No
Primary Runway Strength	Single-Landing Gea	ar (12,500)	8,000 pounds	No
Primary Taxiway	Partial Parallel or T	urnarounds	Full Parallel	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL	Desired	LIRL	Yes
Weather Reporting	Unicom and Dual Barometers		No	No
8	LANI	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		Yes	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		18 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	23 spaces	16 spaces	No
Perimeter Fencing	Full Perime	ter	No	No
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	Courtesy/Loaner Car Courtesy Car		N/A	
	FORECA	ST STORAGE NE	EDS	
PROJECT				
Forecast hangar storage nee	eds not applicable			Forecast
Add additional 4 apron tie-c	downs due to 20-year fore	cast activity		Forecast



## <u>Rigby</u>

Associated City: Rigby FAA Identifier: U56 2020 IASP Classification: Utility

Objective Category	Utility Airport O	biectives	Current Performance	Meets 2020 Objective?
enjeenie eniegerj		SIDE FACILITIES		
And a family of the	To Accommodate 95%	of Small Aircraft		12
Primary Runway Length	Fleet (5,85	50)	3,727 feet	No
Primary Runway Width	60 feet		50 feet	No
Primary Runway Strength	Single-Landing Gear (12,500)		12,500 pounds	Yes
Primary Taxiway	Partial Parallel or T	urnarounds	Partial Parallel	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As R Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone, REILs	Yes
Runway Lighting	Reflectors, LIRL	Desired	MIRL	Yes
Weather Reporting	Unicom and Dual Barometers		No	No
	LAN	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		Yes	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		60 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	51 spaces	12 spaces	No
Perimeter Fencing	Full Perime	eter	Full Perimeter	Yes
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A	1	Yes	N/A
Maintenance Services	N/A		Yes	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	Courtesy/Loaner Car		Rental/Courtesy Car	N/A
	FORECA	ST STORAGE NE	EDS	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				Forecast
Add additional 9 apron tie-d		cast activity		Forecast



## Allen H Tigert

Associated City: Soda Springs FAA Identifier: U78 2020 IASP Classification: Utility

Objective Category	Utility Airport Ol	ojectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	To Accommodate 95% o Fleet (6,95		3,500 feet	No
Primary Runway Width	60 feet		50 feet	No
Primary Runway Strength	Single-Landing Gea	r (12,500)	12,000 pounds	No
Primary Taxiway	Partial Parallel or Tu	urnarounds	Connector	No
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Re Cone	equired), Wind	Rotating Beacon, Lighted Wind Cone, TRIL	Yes
Runway Lighting	Reflectors, LIRL	Desired	LIRL	Yes
Weather Reporting	Unicom and Dual Barometers		Unicom Available/No Barometers	No
8	LANI	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		24 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	7 spaces	6 spaces	No
Perimeter Fencing	Full Perime	ter	No	No
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A	E	No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	Courtesy/Loaner Car Courtesy Car		N/A	
· · · · · · · · · · · · · · · · · · ·	FORECA	ST STORAGE NE	EDS	
PROJECT				
Forecast hangar storage nee	eds not applicable			Forecast
Add additional 1 apron tie-c	down due to 20-year foreca	ast activity		Forecast



## **Stanford Field**

Associated City: St. Anthony FAA Identifier: U12 2020 IASP Classification: Utility

Objective Category	Utility Airport Obj	ectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES	5	
Primary Runway Length	To Accommodate 95 Aircraft Fleet (5		4,500 feet	No
Primary Runway Width	60 feet	()	50 feet	No
Primary Runway Strength	Single-Landing Gear	(12,500)	N/P	No
Primary Taxiway	Partial Parallel or Tu	rnarounds	Connector/ Turnaround	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Rotating Beacon (As Rec Cone	quired), Wind	Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors, LIRL D	esired	MIRL	Yes
Weather Reporting	Unicom and Dual Barometers		No	No
	1.01 12 12	SIDE FACILITIE	S	
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		28 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient	31 spaces	7 spaces	No
Perimeter Fencing	Full Perimete	er	Full Perimeter	Yes
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes	1	Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		Yes	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas, 24/7 Jet A Fuel	N/A
Rental/Courtesy Car Access	Courtesy/Loaner Car No		No	N/A
	FORECAS	T STORAGE N	EEDS	
PROJECT				
Forecast hangar storage needs not applicable				
	lowns due to 20-year fore	ecast activity		Forecast Forecast

## **Bancroft Municipal**

Associated City: Bancroft FAA Identifier: U51 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,280 feet	Yes
Primary Runway Width	50 feet		30 feet	No
Primary Runway Strength	Maintain Existing		N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		3 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	1 space	1 space	Yes
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
	PROJECT			SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
Existing apron tie-downs acc		activity		Forecast



#### Carey

Associated City: Carey FAA Identifier: U65 2020 IASP Classification: General

Objective Category	General Airport Ot	jectives	Current Performance	Meets 2020 Objective?
		IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,650 feet	Yes
Primary Runway Width	50 feet		170 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A	L 11	2 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	8 spaces	4 spaces	No
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
	PROJECT			SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
	own due to 20-year forecast	activity		Forecast



# **Brooks SPB**

Associated City: Coeur d'Alene FAA Identifier: S76 2020 IASP Classification: General

Objective Category	General Airport C	Objectives	Current Performance	Meets 2020 Objective?
	Alf	SIDE FACILITIES		
Primary Runway Length	Maintain Exi	sting	15,000 feet	Yes
Primary Runway Width	50 feet		2,000 feet	Yes
Primary Runway Strength	Maintain Exi	sting	N/A	Yes
Primary Taxiway	Maintain Exi	sting	N/A	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cor	ne	Lighted Wind Cone	Yes
Runway Lighting	Reflector	S	N/A	N/A
Weather Reporting	N/A	N/A		N/A
	LAN	DSIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A	1	No	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	Not Applicable	0 spaces	N/A
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		24/7 AvGas	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FOREC/	AST STORAGE NEED	S	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				
Forecast apron tie-down sto	rage needs not applicable			Forecast

#### **Craigmont Municipal**

Associated City: Craigmont FAA Identifier: S89 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,800 feet	Yes
Primary Runway Width	50 feet		50 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors		MIRL	Yes
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A	i	2 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	2 spaces	0 spaces	No
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
Add additional 1 apron tie-d	own due to 20-year forecast	activity		Forecast

#### **Downey/Hyde Memorial**

Associated City: Downey FAA Identifier: U58 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,550 feet	Yes
Primary Runway Width	50 feet		50 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Turnarounds	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors		LIRL	Yes
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		-
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		3 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	2 spaces	4 spaces	Yes
Perimeter Fencing	N/A		Full Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				
Forecast hangar storage nee	ds not applicable			Forecast
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast



# **Dubois Municipal**

Associated City: Dubois FAA Identifier: U41 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	4,600 feet	Yes
Primary Runway Width	50 feet		100 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	1 spaces	0 spaces	No
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				
Add additional 1 apron tie-do		activity		Forecast



#### **Camas County**

Associated City: Fairfield FAA Identifier: U86 2020 IASP Classification: General

Objective Category	General Airport Ol	ojectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,950 feet	Yes
Primary Runway Width	50 feet		40 feet	No
Primary Runway Strength	Maintain Existing		N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		4 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	5 spaces	5 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast



# **Garden Valley**

Associated City: Garden Valley FAA Identifier: U88 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,850 feet	Yes
Primary Runway Width	50 feet		125 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A	N/A		N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		Yes	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	6 spaces	18 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		Yes	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				
Existing apron tie-downs acc		activity		Forecast

#### **Glenns Ferry Municipal**

Associated City: Glenns Ferry FAA Identifier: U89 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
		IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,050 feet	Yes
Primary Runway Width	50 feet		60 feet	Yes
Primary Runway Strength	Maintain Exist	ing	8,000 pounds	Yes
Primary Taxiway	Maintain Existing		Partial Parallel	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Rotating Beacon, Lighted Wind Cone	Yes
Runway Lighting	Reflectors		MIRL	Yes
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A	I	5 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	6 spaces	14 spaces	Yes
Perimeter Fencing	N/A		Full Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	in the second
PROJECT				SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast

#### **Hazelton Municipal**

Associated City: Hazelton FAA Identifier: U94 2020 IASP Classification: General

Objective Category	General Airport Ob	ojectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,800 feet	Yes
Primary Runway Width	50 feet		90 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		3 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	8 spaces	0 spaces	No
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
Add additional 2 apron tie-de	owns due to 20-year forecas	t activity		Forecast



#### Howe

Associated City: Howe FAA Identifier: U97 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,800 feet	Yes
Primary Runway Width	50 feet		25 feet	No
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A	1	1 space	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	4 spaces	2 spaces	No
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage nee				Forecast
Add additional 1 apron tie-d	own due to 20-year forecast	activity		Forecast



#### Kooskia Municipal

Associated City: Kooskia FAA Identifier: S82 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	1,900 feet	Yes
Primary Runway Width	50 feet		100 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Turnarounds	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		4 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	4 spaces	4 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage needs not applicable				
Add additional 1 apron tie-de	own due to 20-year forecast	activity		Forecast



#### **Leadore**

Associated City: Leadore FAA Identifier: U00 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,500 feet	Yes
Primary Runway Width	50 feet		140 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		Non-Standard	Yes
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		1 space	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	1 space	0 spaces	No
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				SOURCE
Forecast hangar storage nee	ds not applicable			Forecast
	pron tie-downs accommoda	tes 20-year fore	casted activity	Forecast



# Snake River SPB

Associated City: Lewiston FAA Identifier: 78U 2020 IASP Classification: General

Objective Category	General Airport C	Objectives	Current Performance	Meets 2020 Objective?
	AIR	SIDE FACILITIES		
Primary Runway Length	Maintain Exi	sting	3,000 feet	Yes
Primary Runway Width	50 feet		150 feet	Yes
Primary Runway Strength	Maintain Exi	sting	N/A	Yes
Primary Taxiway	Maintain Exi	sting	N/A	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cor	ne	N/A	No
Runway Lighting	Reflector	S	N/A	N/A
Weather Reporting	N/A		No	N/A
	LANI	DSIDE FACILITIES		and the second
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A	1	0 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	Not Applicable	0 spaces	N/A
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
-ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECA	ST STORAGE NEEDS		
PROJECT				
Forecast hangar storage needs not applicable				
Forecast apron tie-down stor				Forecast



# Mackay

Associated City: Mackay FAA Identifier: U62 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	DE FACILITIES		
Primary Runway Length	Maintain Exist	ing	4,389 feet	Yes
Primary Runway Width	50 feet		60 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Turnarounds	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LANDS	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		2 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	3 spaces	7 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORECAS	T STORAGE NEED	S	
PROJECT				
Forecast hangar storage needs not applicable				
	ommodate 20-year forecast a	activity		Forecast

#### Lee Williams Memorial

Associated City: Midvale FAA Identifier: 0U9 2020 IASP Classification: General

Objective Category	General Airport Ob	ojectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ting	2,800 feet	Yes
Primary Runway Width	50 feet		60 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connector	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		2 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	2 spaces	6 spaces	Yes
Perimeter Fencing	N/A		Full Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEED	)S	
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acco	ommodate 20-year forecast a	activity		Forecast



# Murphy

Associated City: Murphy FAA Identifier: 1U3 2020 IASP Classification: General

Objective Category	General Airport Objectives		Current Performance	Meets 2020 Objective?
	AIRSI	DE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,500 feet	Yes
Primary Runway Width	50 feet		45 feet	No
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LANDS	DE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	1 space	4 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAST	STORAGE NEEL	DS	
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acco		ctivity		Forecast

#### **Nezperce Municipal**

Associated City: Nezperce FAA Identifier: 0S5 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRSI	DE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,400 feet	Yes
Primary Runway Width	50 feet		30 feet	No
Primary Runway Strength	Maintain Exist	ing	12,500 pounds	Yes
Primary Taxiway	Maintain Exist	ing	Connectors	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LANDS	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		3 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	3 spaces	5 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEED	S .	
PROJECT				
Forecast hangar storage need	ls not applicable	-		Forecast
Existing apron tie-downs acco		activity		Forecast



# **Oakley Municipal**

Associated City: Oakley FAA Identifier: 1U6 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,795 feet	Yes
Primary Runway Width	50 feet		40 feet	No
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone	<u> </u>	Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		4 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	0 spaces	0 spaces	Yes
Perimeter Fencing	N/A		Full Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
		T STORAGE NEEL	DS	SOURCE
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast



#### <u>Parma</u>

Associated City: Parma FAA Identifier: 50S 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,700 feet	Yes
Primary Runway Width	50 feet		50 feet	Yes
Primary Runway Strength	Maintain Existing		12,500 pounds	Yes
Primary Taxiway	Maintain Exist	ing	Partial Parallel	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		LIRL	Yes
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		4 spaces	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	4 spaces	9 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEED	)S	
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acco		activity		Forecast



# **Rockford Municipal**

Associated City: Rockford FAA Identifier: 2U4 2020 IASP Classification: General

Objective Category	General Airport Ob	ojectives	Current Performance	Meets 2020 Objective?
	AIRSI	DE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,800 feet	Yes
Primary Runway Width	50 feet		50 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	Connector	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A		No	N/A
	LANDS	DE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		1 space	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	3 spaces	9 spaces	Yes
Perimeter Fencing	N/A		Full Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		Yes	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEED	S	
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acco		ctivity		Forecast



# **Stanley**

Associated City: Stanley FAA Identifier: 2U7 2020 IASP Classification: General

Objective Category	General Airport Ob	jectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	4,300 feet	Yes
Primary Runway Width	50 feet		150 feet	Yes
Primary Runway Strength	Maintain Existing		N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Lighted Wind Cone	Yes
Runway Lighting	Reflectors		No	No
Weather Reporting	N/A	N/A		N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A	1	1 space	N/A
Apron Tie-Down Space	100% of Based Aircraft and 25% of Transient Maximum Daily Totals	4 spaces	18 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEE	DS	
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs acc	ommodate 20-year forecast	activity		Forecast



# **Big Creek**

Associated City: Big Creek FAA Identifier: U60 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport	Objectives	Current Performance	Meets 2020 Objective?
	AIRS	DE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,550 feet	Yes
Primary Runway Width	Maintain Exist	Maintain Existing		Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
Instrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Wind Cone	Yes
Runway Lighting	N/A		No	N/A
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	1 spaces	12 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		No	No
Wi-Fi	N/A		No	N/A
Fixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	ST STORAGE NEE	DS	and the second second
PROJECT				
Forecast hangar storage needs not applicable				
Existing apron tie-downs ac	commodate 20-year forecast	activity		Forecast



#### Cavanaugh Bay

Associated City: Coolin FAA Identifier: 66S 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport	Objectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	3,100 feet	Yes
Primary Runway Width	Maintain Exist	ing	120 feet	Yes
Primary Runway Strength	Maintain Existing		N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Wind Cone	Yes
Runway Lighting	N/A		No	N/A
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A			N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		1 space	N/A
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	1 spaces	14 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Wi-Fi	N/A		No	N/A
ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORECAS	T STORAGE NEE	DS	1
PROJECT				
Forecast hangar storage needs not applicable				
	commodate 20-year forecast	activity		Forecast



#### Donald D. Coski Memorial

Associated City: Donnelly FAA Identifier: U84 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport (	Objectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	2,500 feet	Yes
Primary Runway Width	Maintain Exist	ing	125 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
nstrument Approach	Visual		Visual	Yes
/isual Aids	Wind Cone		Wind Cone	Yes
Runway Lighting	N/A		No	N/A
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		No	No
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
langar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	1 space	O spaces	No
Perimeter Fencing	N/A		No	N/A
Auto Parking	N/A		Yes	N/A
	3	SERVICES		
Cell Phone Coverage	Yes		Yes	Yes
Vi-Fi	N/A		No	N/A
ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		No	N/A
	FORECAS	T STORAGE NEEL	DS	the second second second
PROJECT				
orecast hangar storage nee	ds not applicable			Forecast
	ommodates 20-year forecaste	ed activity		Forecast



# **Smiley Creek**

Associated City: Galena FAA Identifier: U87 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport (	Objectives	Current Performance	Meets 2020 Objective?
	AIRS	IDE FACILITIES		
Primary Runway Length	Maintain Exist	ing	4,900 feet	Yes
Primary Runway Width	Maintain Existing		150 feet	Yes
Primary Runway Strength	Maintain Exist	ing	N/A	Yes
Primary Taxiway	Maintain Exist	ing	No	Yes
nstrument Approach	Visual		Visual	Yes
Visual Aids	Wind Cone		Wind Cone	Yes
Runway Lighting	N/A		No	N/A
Weather Reporting	N/A		No	N/A
	LAND	SIDE FACILITIES		
Commercial Terminal	N/A		No	N/A
General Aviation Terminal	N/A		No	N/A
Public Restrooms	Yes		Yes	Yes
Conference Rooms	N/A		No	N/A
Pilots Lounge	N/A		No	N/A
Hangar Storage	N/A		0 spaces	N/A
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	2 spaces	15 spaces	Yes
Perimeter Fencing	N/A		Partial Perimeter	N/A
Auto Parking	N/A		Yes	N/A
		SERVICES		
Cell Phone Coverage	Yes		No	No
Wi-Fi	N/A		Yes	N/A
ixed Base Operator	N/A		No	N/A
Maintenance Services	N/A		No	N/A
Snow Removal Equipment	N/A		No	N/A
24/7 AvGas and Jet A Fuel	N/A		No	N/A
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A
	FORECAS	T STORAGE NEED	DS	
PROJECT				
Forecast hangar storage needs not applicable				
	ommodate 20-year forecast a	ctivity		Forecast



#### **Eckhart International**

Associated City: Porthill FAA Identifier: 1S1 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport (	Objectives	Current Performance	Meets 2020 Objective?	
	AIRSI	DE FACILITIES			
Primary Runway Length	Maintain Exist	ing	3,650 feet	Yes	
Primary Runway Width	Maintain Exist	ing	175 feet	Yes	
Primary Runway Strength	Maintain Exist	ing	N/A	Yes	
Primary Taxiway	Maintain Exist	ing	No	Yes	
nstrument Approach	Visual		Visual	Yes	
Visual Aids	Wind Cone		Wind Cone	Yes	
Runway Lighting	N/A		No	N/A	
Weather Reporting	N/A		No	N/A	
	LANDS	DE FACILITIES			
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	N/A		No	N/A	
Public Restrooms	Yes		No	No	
Conference Rooms	N/A		No	N/A	
Pilots Lounge	N/A		No	N/A	
Hangar Storage	N/A		1 space	N/A	
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	1 space	6 spaces	Yes	
Perimeter Fencing	N/A		No	N/A	
Auto Parking	N/A		Yes	N/A	
		SERVICES			
Cell Phone Coverage	Yes		Yes	Yes	
Wi-Fi	N/A		No	N/A	
Fixed Base Operator	N/A		No	N/A	
Maintenance Services	N/A		No	N/A	
Snow Removal Equipment	N/A		No	N/A	
24/7 AvGas and Jet A Fuel	N/A		No	N/A	
Rental/Courtesy Car Access	N/A		No	N/A	
	FORECAS	T STORAGE NEEL	DS		
and the second second	SOURCE				
Forecast hangar storage needs not applicable					
Existing apron tie-downs acc		Forecast			



# **Thomas Creek**

Associated City: Stanley FAA Identifier: 2U8 2020 IASP Classification: Backcountry

Objective Category	Backcountry Airport (	Objectives	Current Performance	Meets 2020 Objective?	
	AIRSI	DE FACILITIES			
Primary Runway Length	Maintain Exist	ing	2,100 feet	Yes	
Primary Runway Width	Maintain Exist	ing	75 feet	Yes	
Primary Runway Strength	Maintain Exist	ing	N/A	Yes	
Primary Taxiway	Maintain Exist	ing	No	Yes	
Instrument Approach	Visual		Visual	Yes	
Visual Aids	Wind Cone		Wind Cone	Yes	
Runway Lighting	N/A		No	N/A	
Weather Reporting	N/A		No	N/A	
	LANDS	SIDE FACILITIES			
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	N/A		No	N/A	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		No	N/A	
Pilots Lounge	N/A		No	N/A	
Hangar Storage	N/A		1 space	N/A	
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	0 space	5 spaces	Yes	
Perimeter Fencing	N/A		No	N/A	
Auto Parking	N/A		Yes	N/A	
		SERVICES			
Cell Phone Coverage	Yes		No	No	
Wi-Fi	N/A		No	N/A	
Fixed Base Operator	N/A		No	N/A	
Maintenance Services	N/A		No	N/A	
Snow Removal Equipment	N/A		Yes	N/A	
24/7 AvGas and Jet A Fuel	N/A		No	N/A	
Rental/Courtesy Car Access	N/A		No	N/A	
	FORECAS	T STORAGE NEED	S		
PROJECT					
Forecast hangar storage needs not applicable					
Existing apron tie-downs accommodate 20-year forecast activity					



# Johnson Creek

Associated City: Yellow Pine FAA Identifier: 3U2 2020 IASP Classification: Backcountry

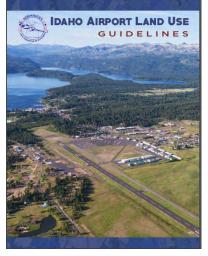
Objective Category	Backcountry Airport Objectives		Current Performance	Meets 2020 Objective?	
	AIRSI	DE FACILITIES			
Primary Runway Length	Maintain Exist	ing	3,400 feet	Yes	
Primary Runway Width	Maintain Exist	ing	150 feet	Yes	
Primary Runway Strength	Maintain Exist	ing	N/A	Yes	
Primary Taxiway	Maintain Exist	ing	No	Yes	
Instrument Approach	Visual		Visual	Yes	
Visual Aids	Wind Cone		Wind Cone	Yes	
Runway Lighting	N/A		No	N/A	
Weather Reporting	N/A		No	N/A	
	LANDS	IDE FACILITIES			
Commercial Terminal	N/A		No	N/A	
General Aviation Terminal	N/A		No	N/A	
Public Restrooms	Yes		Yes	Yes	
Conference Rooms	N/A		No	N/A	
Pilots Lounge	N/A		Yes	N/A	
Hangar Storage	N/A		0 spaces	N/A	
Apron Tie-Down Space	At least one aircraft and up to 25% of Maximum Daily Totals	2 spaces	20 spaces	Yes	
Perimeter Fencing	N/A		Partial Perimeter	N/A	
Auto Parking	N/A		Yes	N/A	
	S	ERVICES			
Cell Phone Coverage	Yes		No	No	
Wi-Fi	N/A		Yes	N/A	
Fixed Base Operator	N/A		No	N/A	
Maintenance Services	N/A		No	N/A	
Snow Removal Equipment	N/A		No	N/A	
24/7 AvGas and Jet A Fuel	N/A		No	N/A	
Rental/Courtesy Car Access	N/A		Courtesy Car	N/A	
	FORECAST	STORAGE NEED	S		
PROJECT					
Forecast hangar storage needs not applicable					
Existing apron tie-downs accommodate 20-year forecast activity					



# **APPENDIX B: LAND USE GUIDELINES**

As part of the 2010 Idaho Aviation System Plan (IASP), the Idaho Transportation Department (ITD) Division of Aeronautics (ITD Aeronautics) developed the *Idaho Airport Land Use Guidelines* (Land Use Guidelines or Guidelines). These guidelines were published to help airports, airport owners/sponsors, local planning and zoning officials, policymakers, and the general public understand land use compatibility and height restrictions, as well as their affiliated state and federal statutory obligations. ITD Aeronautics subsequently updated the Guidelines in 2016.<sup>1</sup>

The Land Use Guidelines provide information about best practices associated with developing and implementing effective compatible land use measures around airports and within communities. ITD Aeronautics also established minimum zoning ordinance standards that must be met by a local political subdivision or agency. These standards address specific land uses (e.g., residential development, industrial land uses that cause



emissions, landfills, etc.), height controls, noise impacts, lighting, wildlife attractants, obstruction marking and lighting, and other elements of land use compatibility planning. Appendix B of the Guidelines provides a model zoning ordinance for Idaho cities and towns to consider when developing and implementing their own zoning ordinances.

Additionally, Idaho Senate Bill (SB) 1265 (effective July 1, 2014) amended Idaho Code Title 21, Chapter 5, Airport Zoning Act, and Title 67, Chapter 65, Local Land Use Planning, to require more proactive land use compatibility planning through the local comprehensive planning process. As further discussed in 2020 IASP Update *Chapter 6: Supplemental System Context*, Idaho Code Section 67-6508 (q) requires cities and counties to prepare a Public Airport Facilities section of their local comprehensive plans. The Public Airport Facilities section should outline details for the financing, protection, maintenance, operation, and long-term growth and development of the airport.

To provide guidelines for cities and counties in the preparation of the Public Airport Facilities section of their comprehensive plans, ITD Aeronautics developed a further addition to the Land Use Guidelines known as the Draft Guide for Comprehensive Plan – Section Q – Airports (dated October 18, 2018).

The Land Use Guidelines and *Draft Guide for Comprehensive Plan – Section Q – Airports* are both available for download via the links below.

#### Key Guidance Documents Available Online

Idaho Airport Compatible Guidelines https://itd.idaho.gov/wp-content/Aero/Publications/LandUse\_Guidelines.pdf

**Draft Guide for Comprehensive Plan – Section Q – Airports** http://idahoapa.org/wp-content/uploads/2018/12/ITD-Assistance-with-Section-Q-of-Comp-Plan.pdf

<sup>1</sup> T-O Engineers, Inc. (July 2016). Idaho Airport Land Use Guidelines. Available online at

https://itd.idaho.gov/wp-content/Aero/Publications/LandUse\_Guidelines.pdf (accessed December 2019).





To read the complete technical reports for the 2020 Idaho Airport System Plan and 2020 Idaho Airport Economic Impact Analysis Update, please visit:

www.itd.idaho.gov/aero/

# **Kimley**»Horn

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