

## CHAPTER ONE: SYSTEM GOALS AND MEASURES

### INTRODUCTION

The Idaho Transportation Department (ITD) Division of Aeronautics recognizes the significance of a proactive approach to ensuring aviation's role in the statewide transportation system. The Idaho Airport System Plan provides the Division of Aeronautics an opportunity to stay abreast of changes in the aviation industry and to determine how Idaho's airports should be positioned to respond to future needs and challenges.

Idaho's State Airport System Plan (IASP) provides input for federal planning documents. The Federal Aviation Administration's (FAA's) National Plan of Integrated Airport Systems (NPIAS) is updated every two years. The FAA provides money for eligible airport development from the Airport Improvement Program (AIP). Airports must be included in the NPIAS for their projects to be eligible for AIP funding. Recommendations from the Idaho Airport System Plan (IASP) will be included in the NPIAS.

The IASP serves as a blueprint for the development of Idaho's public airport system. It is a top down study whose recommendations must be implemented from the bottom up. While the analysis contained within the system plan is completed at a macro planning level, individual airport recommendations that flow from this study are important for guiding development at airports throughout Idaho. Major facility improvements that may be identified in this plan must be substantiated and incorporated into approved airport-specific master plans before they can be funded and implemented. In some instances, projects identified as part of the system planning process would also be subject to comprehensive environmental review and approval prior to implementation.

The IASP is the Idaho Transportation Department's comprehensive plan for linking statewide aviation facilities with those of the nation and the world. Idaho's system plan also works in concert with Idaho's Transportation Vision. The Transportation Vision examines all of the state's transportation needs and sets the direction for making improvements and investments in all modes of transportation. Idaho's Transportation Vision was adopted in 2004. The IASP follows a similar approach while providing a performance based analysis.

### PLAN COMPONENTS AND PROCESS

This project includes separate analyses focusing on several components of the state's aviation system and activity types. The three separate analyses that comprise this update to the IASP include the following:

**Idaho Airport System Plan** – provides a long-term outlook for the state's system of public-use airports and identifies a recommended development plan that strategically improves airport facilities and moves the system towards its established policies.

**Economic Impact Analysis** – determines the contributions that airports make to the local and state economy through the provision of aviation services. The study analysis

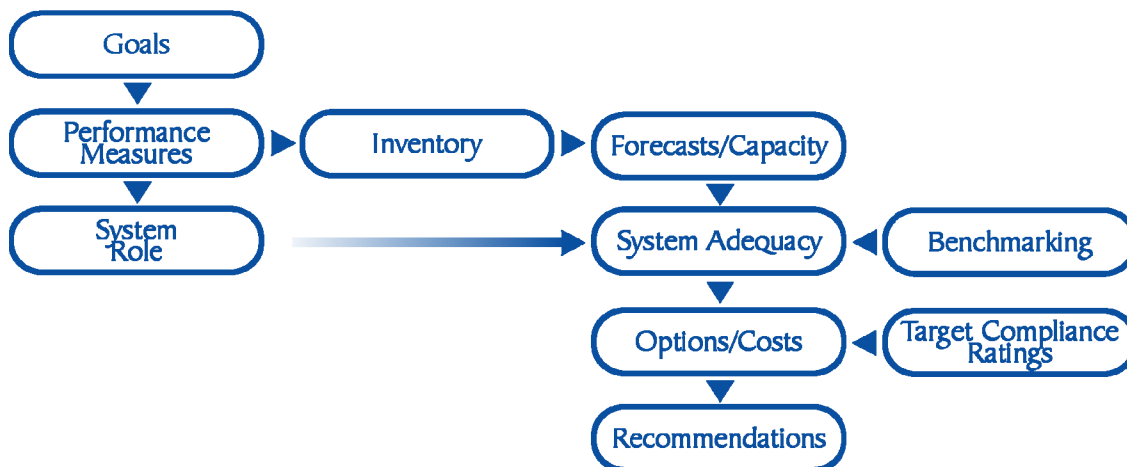
quantifies the economic benefits of each of Idaho’s study airports to show the importance of airports to the state’s economy.

*Compatible Land Use Guidelines* – developed to promote an understanding of compatible land use planning around airports, and provide assistance to local governments and land use planners who have an airport within their jurisdiction.

Each of these independent elements is documented separately and is considered an integral component of the overall system planning process.

The Idaho Airport System Plan is being conducted in a series of separate, but related, steps. **Figure 1-1** depicts the process graphically.

**Figure 1-1: Idaho Airport System Plan Process**



Source: Wilbur Smith Associates  
Prepared: June 2008

As depicted in Figure 1-1, the findings of the system plan and its various components culminate in the development of system recommendations. These system recommendations could include both infrastructure development and policy-related recommendations for improving the ability of Idaho’s system of public-use airports to meet the current and future needs of the state’s citizens, businesses, visitors, and airport stakeholders.

The system planning components encompass the following tasks and are organized as follows:

- ✦ *Idaho Airport System Plan*
  - This chapter, Chapter One, *System Goals and Measures*
  - Chapter Two, *Inventory*
  - Chapter Three, *Airport Role Analysis*
  - Chapter Four, *Forecasts of Aviation Activity*
  - Chapter Five, *System Performance Analysis*
  - Chapter Six, *Recommended System of Airports*
  - Chapter Seven, *Policy Analysis & Investigation Recommendations*
  - Chapter Eight, *Implementation Plan*

- *Appendix A, Future Facility and Service Objective Compliance*
- *Appendix B, Idaho Airport Economic Impact Study*
- *Appendix C, Idaho Compatible Land Use Guidelines*

## PROJECT ADVISORY COMMITTEE

A Project Advisory Committee (PAC) has been assembled by the Division of Aeronautics to provide input and direction for the study. The PAC is comprised of volunteer members with a broad base of airport/aviation, economic, and land use knowledge and responsibilities. The PAC includes representatives from the following:

- ✈ Aeronautics Advisory Board
- ✈ Aircraft Owners and Pilots Association
- ✈ Airport Representatives
- ✈ Bonneville Metropolitan Planning Organization
- ✈ Federal Aviation Administration
- ✈ Idaho Airport Managers Association
- ✈ Idaho Aviation Association
- ✈ Idaho Department of Commerce
- ✈ Idaho Legislature Representatives
- ✈ Idaho Transportation Department
- ✈ National Business Aviation Association

This committee provides the Division of Aeronautics with outside input into the system planning process, and the PAC provides the Consultant Team with first-hand knowledge of the key factors impacting aviation demand and needs throughout the state.

## SYSTEM PRINCIPLES

Idaho recognizes the importance of a healthy airport system to statewide, regional, and local economic and transportation infrastructures. Planning for a safe, efficient, and effective collection of airports is integral to the aviation system planning process. The first step in the IASP is to identify goals for the aviation system that serves the State of Idaho.

The PAC met to discuss and identify goals and performance measures for the Idaho airport system at a workshop held in May 2008. At this workshop, the PAC provided input for refining measures for the airport system. The workshop yielded a foundation for establishing system principles and performance measures.

Using the Idaho Transportation Vision and input from the Division of Aeronautics and the PAC, six principles were identified and adopted for use in the current IASP update. Four of the principles come from the Idaho Transportation Vision and the remaining two principles have been identified as being important to the aviation community. These principles are as follows:

- ✈ Mobility for all users
- ✈ Compatibility with the environment
- ✈ Preservation of community assets

- ✧ Flexibility and responsiveness
- ✧ Provide a safe and secure system (new)
- ✧ Enhance the Idaho economy (new)

### System Performance Measures

The Idaho Transportation Vision as well as the IASP expands on the principles to develop attributes or performance measures that will help determine how the system is performing. System performance measures are the categories that are used in the IASP to evaluate the system's adequacy, deficiencies, or potential surpluses. The Vision's seven attributes have been translated to meet the needs of the IASP. For the IASP, the following performance measures are considered:

- ✧ Geographic Coverage
- ✧ Facility Support
- ✧ Preservation
- ✧ Transportation Support
- ✧ Safety & Security
- ✧ Economic Support

The following sections of this chapter discuss each of these six performance measures. The specific benchmarks used for each of the performance measure categories to evaluate the system's adequacies, deficiencies, and surpluses are also noted.

#### *Performance Measure: 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. 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. Inter-modal access is also an important consideration in the evaluation of the system's abilities to meet the access needs of the users.

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

- ✧ Percent of population and area within 90 minutes of a commercial service airport with multiple airlines or 60 minutes of a commercial service airport with a single airline
- ✧ Percent of population and area within 30 minutes of a NPIAS airport
- ✧ Percent of population and area within 30 minutes of any airport
- ✧ Percent of population and area within 30 minutes of an Idaho Airstrip Network (IAN) airport

### *Performance Measure: Facility Support*

Another goal of Idaho's state airport system plan is to provide facility support to meet 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. Runway lengths and instrument approach characteristics at Idaho's airports are used to evaluate the performance of the system. Study airports having longer runways and a precision approach offer the highest degree of accessibility and flexibility. Airports with a non-precision approach provide a higher degree of accessibility from the air than do airports served by only a visual approach.

The specific benchmarks used to evaluate facility support include:

- ✦ Percent of population and area within 30 minutes of an airport with an instrument approach
- ✦ Percent of population and area within 30 minutes of an airport with on-site weather reporting
- ✦ Percent of airports meeting minimum facility objectives

### *Performance Measure: Preservation*

The ability to provide a network of airports that is supported by surrounding land use that is compatible with each airport, its operation, and its development needs is an important goal of the IASP. Planning for future airport development and protecting public investment in airports, which are considered community assets, is also important. Without proper planning, airports in Idaho may be restricted from accommodating demand and fulfilling their designated role in the airport system. Proactive planning provides one mechanism to protect airports from encroachment by activities or land uses that are incompatible with their day-to-day operations.

Specific benchmarks used to evaluate how well the aviation system is performing relative to the preservation performance measure include:

- ✦ Percent of airports with an overall pavement condition index (PCI) of 81 or greater
- ✦ Percent of airports with Master Plans or Airport Layout Plans (ALP)
- ✦ Percent of airports with compatible land use zoning adopted
- ✦ Percent of airports that have a spill prevention control and countermeasures (SPCC) program
- ✦ Percent of airports that have a storm water pollution prevention plan (SWPPP)

### *Performance Measure: Transportation Support*

Whether an airport provides access to 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. The ability of airports to promote inter-modal connectivity is vital for many users of the state transportation system and communities in Idaho.

Benchmarks used in the IASP to evaluate the system for its ability to adequately support transportation are:

- ✈ Percent of airports providing access to remote communities
- ✈ Percent of airports with a courtesy car and/or rental car available
- ✈ Percent of airports with public transportation available
- ✈ Percent of airports with on-demand air taxi flights serving IAN Airports

### *Performance Measure: 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. But airports alone do not always spur economic growth and diversification. In addition to adequate airport facilities, market areas must possess other characteristics that make them candidates for the retention and attraction of various economic activities such as agriculture, energy, and tourism.

Development at airports that serve market areas characterized by economic factors considered by this performance measure have a higher potential for economic return from ITD investment. This performance measure also enables ITD to determine if airport facilities at each system airport are adequately matched to the economic characteristics of the market area that the airport serves.

Benchmarks used in the IASP to evaluate the system for its ability to adequately support the state's economy are:

- ✈ Percent of population within 30 minutes of an airport capable of meeting business user needs (5,000' runway, jet fuel, precision approach)
- ✈ Percent of employment within 30 minutes of an airport
- ✈ Percent of airports capable of meeting Very Light Jet (VLJ) aircraft needs
- ✈ Percent of Businesses with the propensity to use aviation within a 30-minute drive of a system airport
- ✈ Percent of airports that accommodate aerial application services
- ✈ Airports accommodating Instrument Flight Rules (IFR) operations from outside Idaho
- ✈ Percent of airports with air cargo/freight activities
- ✈ Recreational areas served by "Portal" Airports

### *Performance Measure: Safety & Security*

The intention of this performance measure is to provide a safe and secure system of airports and to identify the number of study airports that meet specific FAA and ITD objectives related to safety and security. Proactive planning and the ability to provide a secure facility are factors evaluated for this measure.

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

- ✈ Percent of airports with height zoning
- ✈ Percent of airports controlling all runway end Runway Protection Zones (RPZs)
- ✈ Percent of airports that support life flight activities
- ✈ Percent of airports that have written General Aviation (GA) Airport Security Procedures
- ✈ Percent of airports that support fire fighting

## **NEXT STEPS**

In subsequent chapters of the IASP, these performance measures and their associated benchmarks are used to provide a report card for Idaho's airport system. This report card reflects system performance and reveals current system adequacies, deficiencies, and surpluses. As later portions of the IASP analyses are undertaken, the results of the system evaluation are used to formulate system recommendations.