

# ALASKA

## Aviation System Plan



The Continuous Aviation System Planning Process, 2016

# EXECUTIVE SUMMARY





THE STATE  
of ALASKA  
GOVERNOR BILL WALKER

## Department of Transportation and Public Facilities

STATEWIDE AVIATION

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From the desk of Deputy Commissioner Binder

Thank you for your interest in the Alaska Aviation System Plan (AASP). I am pleased to present the 2016 *Alaska Aviation System Plan Executive Summary*. This year's overview highlights key 2016 accomplishments and other work completed by the State of Alaska.

It comes as no surprise that the aviation system in Alaska supports a vital way of life for Alaskans. The system boasts 395 public use airports, with 278 land-based, 113 seaplane bases, and 4 heliports. In entirety, approximately 749 recorded landing areas, many that are privately owned, exist within state boundaries. These counts do not include the additional lakes, sand bars, and rivers that are used in the backcountry system.

The Alaska Department of Transportation and Public Facilities (DOT&PF), other airport sponsors, and the FAA have made great strides in developing and improving the airport system since statehood. Since the creation of the federal Airport Improvement Program (AIP) in 1982, Alaska has received over \$4.3 billion for airport development, construction, and planning. In 2016 alone, \$215 million was distributed by FAA Alaska Region to State and local airport sponsored airport projects.

Today, Alaska's aviation industry generates \$3.5 billion and more that 47,000 Alaskan jobs annually, accounting for approximately 10% of all the jobs in Alaska. There are 9,492 registered aircraft and 7,853 active pilots. Ted Stevens Anchorage International Airport is ranked #2 in North America for landed weight of cargo, #4 in the world for cargo throughput, and last year was ranked the second most efficient airport in the United States.

The FAA requires airports to strive for self-sustainability. While Alaska's international airports have accomplished this, opportunities to generate revenue in the rural airport system are limited and costs continue to rise. Though a challenge, the Department remains dedicated to ensuring these airports remain safe, meet the daily needs of travelers, and accommodates for constant advancing technology.

The AASP continues to provide an ongoing, updated perspective on the Alaska aviation system by documenting existing conditions and evaluating changes. The AASP plans for the system's future by measuring current performance, prioritizing needs, and setting standards for future development.

I invite you to visit our website at [www.AlaskaASP.com](http://www.AlaskaASP.com) to view our facility inventory information, current and past reports, and other information. Please feel free to contact us if you have questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "J.R.B. III".

John R. Binder III, C.M.  
Deputy Commissioner of Aviation

*"Keep Alaska Moving through service and infrastructure."*

## What is the Alaska Aviation System Plan?

The Alaska Aviation System Plan (AASP) is a multi-year planning study conducted by the State of Alaska Department of Transportation and Public Facilities (DOT&PF) with guidance and funding support by the Federal Aviation Administration (FAA). Alaska's system plan focuses on all airports within the state and identifies needs, sets priorities, proposes policy, and supports special studies that affect the system. Several key accomplishments since Phase II's start in 2013 are:

- Documented AASP efforts and the evolution of the Alaska Aviation System
- Revised performance measures for airports and created scorecards to track progress
- Created performance measures for seaplane bases
- Formulated a Strategic Plan and revised initiatives each year
- Updated the Facility Information Directory on the website ([www.AlaskaAsp.com](http://www.AlaskaAsp.com))
- Continued to build a centralized database of airport information and a means to track aviation needs across the system
- Improved the Capital Improvement and Maintenance Program (CIMP) inspection process and conducted 160 airport inspections
- Performed Pavement Classification Number (PCN) calculations for 22 paved airports in the system
- Prepared a Rural Aviation Rates and Fees Study
- Prioritized airports for aeronautical surveys and instrument approaches
- Documented backcountry airstrips and weather reporting stations throughout the state

This executive summary captures the essence of the work accomplished in 2016 and the work coming up in 2017-2018. To learn more about the AASP, or to view the project in more detail, we encourage you to visit the AASP website at [www.AlaskaASP.com](http://www.AlaskaASP.com).

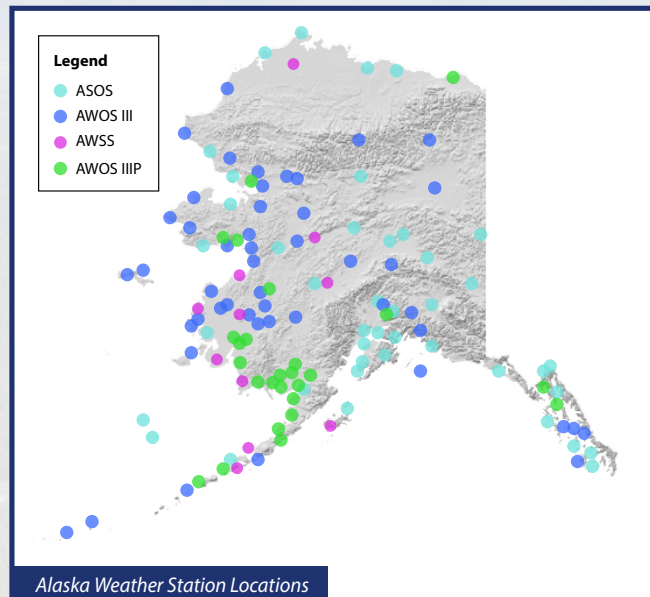
## DID YOU KNOW ALASKA HAS ?

- 7,853 active pilots
- 9,492 registered aircraft
- 749 recorded landing areas
- 9 airports with air traffic control towers
- The most seaplane bases in the country
- The largest seaplane base in the world (Lake Hood in Anchorage)
- 6.7 passenger enplanements per Alaska resident (compared to 2.6 enplanements per resident nationwide)



## On-Site Weather Reporting

Compared to the continental U.S., Alaska's network of approved weather reporting stations available to pilots is relatively sparse. Alaska currently has approximately 160 approved weather observation stations, which come in three forms: the Automated Surface Observing System (ASOS), Automated Weather Sensor Systems (AWSS), and multiple variations of the Automated Weather Observing System (AWOS). To replicate the density of weather reporting stations in the continental U.S., Alaska would need approximately two hundred additional stations throughout the State.



The goal of the AASP Weather Working Group is to help increase the number of aviation weather stations throughout Alaska. The Working Group began in 2015 and has coordinated throughout 2016, partnering with the National Weather Service and the Federal Aviation Administration (FAA). Multiple accomplishments were achieved in 2016:

- Revised the weather reporting station inventory, identifying 21 airports with existing instrument approaches but no on-site weather station
- Created a prioritization equation to assist in the selection of airports for a weather station when funding becomes available (National Plan of Integrated Airport Systems (NPIAS) Level of Service + Enplanements + AASP Classification + Distance from a Certified Weather Station)
- Sought public comment through industry groups regarding pilot and air carrier priorities for new weather stations
- Researched additional funding opportunities for weather stations

The Working Group will conclude in early 2017 after soliciting additional feedback from pilots and air carriers. The Working Group will use recommendations derived from the prioritization equation and industry feedback to fill the gaps in Alaska's aviation weather reporting network. A brochure detailing the results and a summary will be available in 2017.



## Backcountry Airstrips

Alaska's diverse aviation system boasts a multitude of airstrips that range from very small in size to a busy international airport. The AASP recognizes the importance of all types of airports within the system and created the Backcountry Airstrip Working Group in 2015 to define such airstrips, develop a location inventory, and address possible preservation needs. The group aims to identify backcountry airstrips for emergency and recreational uses as a method to guide future preservation decisions that enhance safety and economic vitality of the aviation system. The Working Group defined backcountry airstrips as:

*Improved public use aircraft landing areas generally located in remote areas without onsite management. These airstrips may be available year around or seasonally and usually support activities such as remote residential, recreational, or industrial use. They also provide important access for land and resource managers from public or private entities. They are located on both public and private lands, and range from airstrips with little or no maintenance to more developed airstrips with some regular maintenance and amenities*

This definition allowed for the creation of an inventory of backcountry airstrips across the state. In early 2017, additional feedback from pilots and air carriers will be solicited to refine the inventory.



Clear Sky Lodge Airport



# Capital Improvement & Maintenance Program

## Purpose & Need

The purpose of Capital Improvement and Maintenance Program (CIMP) inspections is to identify and document the overall condition of the airport system in a consistent and defensible manner. Inspections document both capital and maintenance needs through this systematic process. A customized inspection application designed for Microsoft Surface Pro tablets is used to integrate the inspection results, photos, and data into the internal AASP website.

## Program Facts

- To date 160 CIMP inspections have been completed across the State of Alaska, including 54 inspections in 2016.
  - Central Region – 49 airports
  - Northern Region – 67 airports
  - Southcoast Region – 40 airports
  - Local Sponsor – 4 airports
- Over 30 DOT&PF staff members and 12 airport managers have participated in inspections.
- Each question gives the inspector a rating option of A through F. Most have corresponding example photos to ensure all inspectors rate consistently. Each D or an F rating requires the creation of a need during post inspection processing.



## Changes

The CIMP inspection process continued to evolve with new features throughout 2016.

- Creation of a step-by-step user manual, allowing inspectors to better understand how to conduct an inspection and perform post inspection work;
- Inspectors have the ability to upload photos taken by a camera into the inspection once it has been synced to the internal AASP website.

## Efficiencies

The CIMP inspection process is saving DOT&PF time and money by creating efficiencies within the department. By efficiently documenting needs in a digital format DOT&PF can analyze common maintenance issues, easily track conditions over time, and be efficient with both time and money. Better knowledge of existing needs contributes to fewer required trips and quicker repairs. Inspection information also assists in the completion of regional projects that address items such as brush cutting and surface maintenance.

Initially this program was intended to document the needs of Alaska's airports in a more effective and transparent manner. However, throughout the development process other departments have realized one of the key efficiencies of the process is to improve communication between departments. This enhanced communication process has proven to be extremely cost effective in many ways.



## Needs Directory

The AASP has created a Needs Directory that details needs at each DOT&PF owned airport. The CIMP inspection needs and other needs identified by the community, DOT&PF staff, and planning studies are all stored in the internal AASP website and feed the Needs Directory. DOT&PF staff can run the Needs Directory report at any time and it always includes the most up-to-date information. This internal AASP feature saves staff time and money and ensures all needs, whether capital or maintenance, are stored in a common location and reduces duplications. To request a copy of the Needs Directory, contact a regional planner at <http://dot.alaska.gov/stwdplng/cip/stip/assets/dotplanners.pdf>.

## 2016 Strategic Planning Initiatives

### State/Federal Policy Initiative

**Target:**

Impact to rural airports of federal and state policy decisions and communicate to decision makers.

### Rural Community Engagement

**Target:**

Implement rural airport safety and security outreach program.

### System Resource Alignment

**Target:**

Standards for resource allocation leveling.

### Standards for Unattended Airports

**Target:**

Define operations and maintenance standards for unattended airports.



For more information contact:  
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## What is Next in 2017?

- Continual improvements to the CIMP program and additional inspections across the state
- CIMP inspection and website training for DOT&PF staff and local sponsor airports
- List of weather station priorities
- Internal website expansion to improve the digital prioritization of DOT&PF airport projects
- Additional Strategic Planning projects

### Acknowledgements

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Photo credits: DOT&PF, DOWL, Dave Wilson