

ALASKA

Aviation System Plan



The Continuous Aviation System Planning Process, 2008-2013

EXECUTIVE SUMMARY



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Transportation and
Public Facilities

STATEWIDE AVIATION

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From the Desk of
Steve D. Hatter, Deputy Commissioner of Aviation


I am pleased to present the "Alaska Aviation System Plan Executive Summary." The summary captures the highlights and key accomplishments of five years of continuous aviation system planning in the State of Alaska. The Alaska Aviation System Plan (AASP) has developed a significant body of work since the update began in 2008, all in support of the continued and improving safety and efficiency of our state's aviation system. As we pass the five-year milestone, it is worthwhile to showcase and evaluate the work accomplished thus far and look forward to future opportunities to use the AASP as a tool to further aviation goals.

The AASP is funded through a grant from the Federal Aviation Administration and provides additional resources to state aviation stakeholders as we work together to build and maintain a safe and efficient aviation system. The continuous planning approach that frames the AASP allows for the ongoing evaluation and development of strategies that meet the needs of our present operations while ensuring we are poised to address the needs, challenges, and opportunities of the future.

Wise stewardship of our existing system and thoughtful investment in future development are essential to sustaining the critical aviation infrastructure that, in many cases, is a lifeline to Alaska communities. The AASP provides priorities and guidance for the wise use of resources dedicated to the development, operation, and maintenance of the aviation system. I am committed to the continuation of effective planning and fiscal responsibility that guide the growth and development of our aviation system.

I encourage you to visit our web site (www.AlaskaASP.com) to review the full Alaska Aviation System Plan and the many valuable resources developed under this planning process in order to enhance understanding of and appreciation for the largest aviation system in the United States.

Sincerely,


Steve D. Hatter
Deputy Commissioner of Aviation

"Get Alaska Moving through service and infrastructure."

The mission of the Alaska Aviation System is:

To provide for the safe and efficient movement of people and goods and the delivery of state services through the development, maintenance, operations, and management of Alaska's airport system.

Five goals support this mission:

Safety

Develop, operate, and maintain an airport system that contributes to aviation safety.

Service

Develop, operate, and maintain a reliable aviation system with facilities scaled to meet system user needs.

Fiscal Responsibility

Develop, operate, and maintain airport facilities and services in a cost effective and sustainable way.

Communication

Provide opportunities for public involvement to ensure effective communications regarding aviation system needs, user needs, and airport development, maintenance, and operations.

Management

Effectively implement system plan policies and guidance for management, planning, design, maintenance, and operation of aviation facilities.

What is the Alaska Aviation System Plan?

The Alaska Aviation System Plan (AASP) documents the Department of Transportation and Public Facilities' (DOT&PF) ongoing planning efforts aimed at setting a long term vision for aviation in Alaska. The AASP also addresses Alaskan airports' more immediate needs and policy issues. It is an integral part of an overall statewide transportation planning process described in the Statewide Long Range Transportation Plan – *Let's Get Moving 2030*. The AASP documents the existing aviation system; forecasts future aviation activity; identifies goals, performance measures, and improvements; and proposes funding priorities, changes to aviation policy, and management practices. The AASP is intended to be a continuous planning process, an ongoing development of strategies to address changing needs, regulations, and funding levels. The system of airports includes public airports, heliports, and seaplane bases that serve local, regional, statewide, and sometimes international customers. This AASP update has been underway since 2008, The AASP process is expected to continue over the next 5 years and beyond.

Why do aviation system planning?

Aviation system planning is undertaken to ensure the aviation system is safe, efficient, and meets user and community needs, both now and in the future. The main purpose of aviation system planning is to determine the type, extent, location, timing, and cost of the airport development needed within the aviation system. In addition, the AASP provides current information about Alaska's airport system, addresses planning and policy issues, and helps the DOT&PF manage the overall airport system.

Why is the plan important?

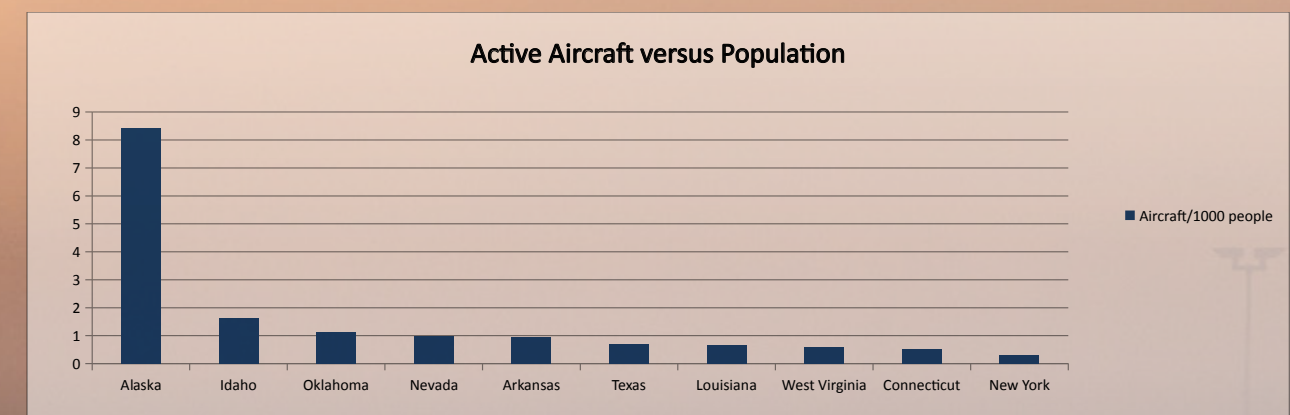
For most Alaska communities, aviation serves as the lifeline providing the vital link to everyday goods and services. Aviation is also a large economic contributor to Alaska's economy, supporting more than 47,000 jobs in the state. With airports serving such an important role, it is vital that the aviation system is safe, efficient, and prepared to meet Alaska's future aviation challenges.

How is the plan funded?

The Alaska Aviation System Plan is funded primarily through a grant from the Federal Aviation Administration's Airport Improvement Program. The balance is funded through the State of Alaska General Fund.

What is in the Executive Summary?

This executive summary captures the portfolio of work accomplished by the AASP between 2008 and 2013. Each system planning task is very briefly summarized on the following pages. Many tasks support multiple goals, however tasks are only identified under the goal they most strongly support. Highlights from a few especially significant work efforts are also spotlighted. The volume of work is difficult to summarize adequately in the space of a few pages, so we encourage the reader to view the full contents of the AASP reports, studies, and information systems on the website at www.AlaskaASP.com.

**The significance of aviation in Alaska**

- There are over 400 public airports in Alaska
- 82% of communities in Alaska are not connected by road
- 1 out of every 7 jobs in Alaska is attributed to aviation
- Aviation contributes \$3.5 billion to the state's economy
- On average, Alaska residents fly more than eight times as often as residents of other states



AASP Safety Task	Description
Airport Needs Inspection Pilot Project	Created a standardized airport assessment tool that identifies airport capital and maintenance needs, their priority, and their estimated cost.
Aeronautical Surveys & Instrument Flight Procedures Work Group	Prioritized airports that should be evaluated by FAA for improved flight procedures. Identified needs for aeronautical surveys to support approaches and advance airport development projects.

Project Spotlight: Airport Needs Inspection Pilot Project



The Airport Needs Inspection Pilot Project demonstrates the feasibility of a statewide systematic, trackable, comprehensive, updatable, and transparent process to assess, report, and store airport conditions and needs in a centralized location. The Airport Needs Inspection Pilot Project inspected 18 Airports across the three regions of the State of Alaska using a tablet application with GPS photo capabilities. The airport inspections were conducted using detailed inspection checklists covering

the areas of: Environmental, Gravel Surfacing, Buildings/Fencing, Pavement Markings, Pavement Preservation, Safety/Non-Movement Areas, Visual Aids, Resources, and Seaplane Bases. Inspection deficiencies were then used to identify projects or needs in a Capital Improvement and Maintenance Program (CIMP). The internal AASP website allows all data to be stored and accessed in a centralized location.



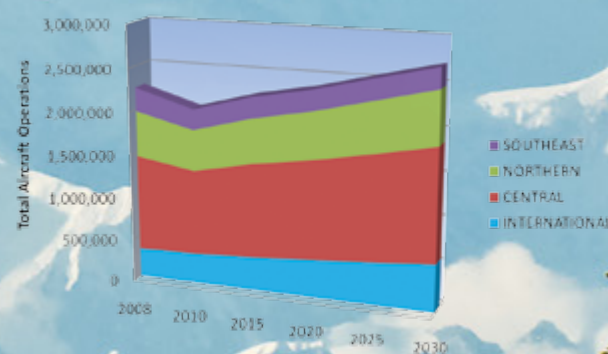
AASP Service Task	Description
Essential Air Service	Examined potential impacts of changes to the Essential Air Service program in Alaska.
Forecasts	Forecasted the future activity and fleet mix at Alaskan airports over the next 20+ years.
Classifications	Classified airports based on their relative role in the Alaska aviation system. Set Safety & Service goals for classifications.
Economic Impact Study & Economic Contribution Reports	Determined the economic impacts and contributions of aviation in the State of Alaska – to the entire state and in representative individual communities.
Yukon-Kuskokwim Roads versus Airports	Examined baseline costs to construct and maintain a new airport system versus a road system in the Yukon-Kuskokwim region of Alaska.

Project Spotlight: Operations and Cargo Forecasts

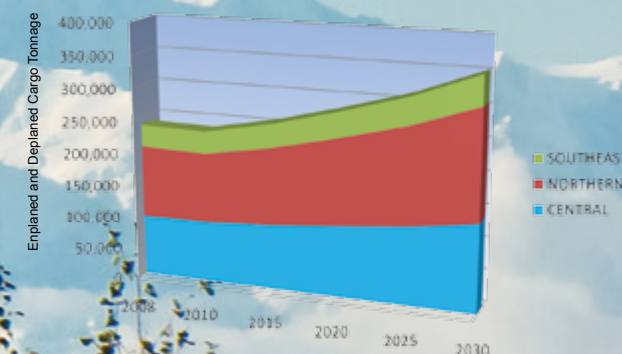
AASP forecasts, completed in 2008, estimate an annual average increase in aircraft operations statewide of just under 0.6% with a 2.3% increase per year at the two international airports, a 0.7% growth rate in Central and Northern Region airports, and a decline of 0.6% per year

at Southeast Region airports. Cargo tonnage is forecast to grow by 5.5% per year statewide, or 1.8% per year excluding the international airports. Cargo forecasts include a 1.9% increase in Northern Region, a 1.7% growth in Central Region, and a 1.4% increase in Southeast Region.

Total Operations Forecast including International Airports



Total Tonnage Forecast without International Airports



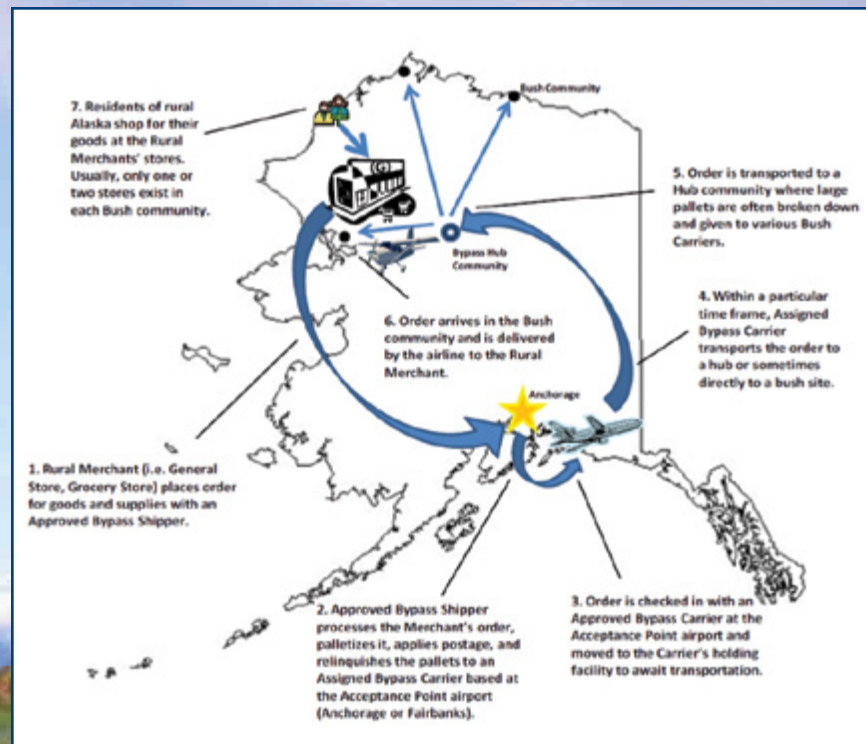
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There are 10,554 active pilots, 10,926 registered aircraft and 2,427,971 square miles of airspace in Alaska.

Alaska transports 39 times more air freight per person than other states.

Project Spotlight: Alaska Bypass Mail: Preparing for Change

The Alaska Bypass Mail Report describes the current Alaska Bypass Mail (BPM) Program and the estimated effect of potential program changes on stakeholders including the State of Alaska, air carriers, shippers, and Alaska's communities. The purpose of the report is to understand BPM so that, in the event of changes to the program, the State of Alaska will be prepared to adapt and make sound policy decisions for the state's residents and transportation assets. BPM is a program administered by the United States Postal Service (USPS) which connects more than 100 isolated rural Alaska communities to the rest of the world through the USPS' mandate of universal service at a universal price. Providing universal service at a universal price comes at a cost; the USPS loses approximately \$70 million per year on the program, while moving approximately 90 to 100 million pounds of bypass mail. At the same time, BPM provides rural Alaskans with access to fresh food and basic supplies which they otherwise could not afford to access if they had to pay higher air freight prices. The BPM program is a critical part of rural Alaska's economic and social ecosystems while providing jobs and economic activity in the Railbelt corridor.



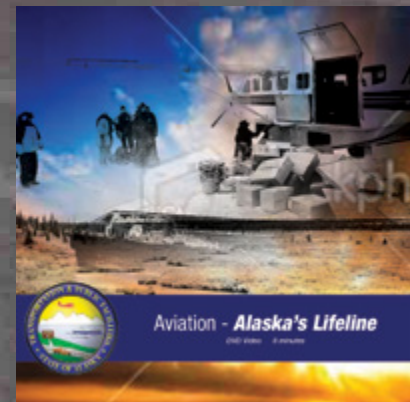
Source: Alaska Bypass: Beyond Its Original Purpose, OIG USPS 2008

AASP Communication Task	Description
Issues Identification	Solicited stakeholder input and identified issues for the AASP to address.
Website	Provided both a public website (Facility Information Directory, documents, and airport information) and an internal website (Capital Improvement & Maintenance Program, Inspections) for sharing information on the AASP and the aviation system.
Communication Videos	Produced two short videos which communicated the importance of aviation as Alaska's lifeline and the costs of building airports within Alaska.

"Rural America is so different from this. In rural America, you have roads. You have access to services. You can get in your car and you can drive to a store, even if it takes a few hours. There's simply not that option here."
 - Julie Jones, Akiachak Airport Project Engineer



For residents of Alaska, this is their taxi cab, school bus, mass transit, freight hauler and ambulance.



Project Spotlight: Aviation – Alaska's Lifeline Video
 Aviation provides a vital link to everyday goods and services in rural Alaska. Alaska's vast size, harsh terrain, extreme climate and large percentage of federally protected land make airports not just the logical mode of transportation but often the only mode of transportation serving the rural population. In terms of investment in rural access, there is simply no near term possibility of achieving a fully connective road system due to both land ownership constraints and extreme cost. The population of rural Alaska is primarily Native Alaskan. The remote, starkly beautiful land that we refer to as "rural Alaska" is simply "home" to the people who have inhabited the state for thousands of years. While subsistence living (the customary and traditional use of wild and natural resources) still plays a major role in the lives of Alaska's rural residents; many basic, everyday needs must be met by delivery of goods and services.



- Communities on Road System
- Communities with no Road Access

Aviation provides that vital link for access to necessities such as food, mail, healthcare, education, and travel. There is no road network connecting villages to each other or to the contiguous highway system enjoyed by the continental United States. The isolated villages dotting Alaska's landscape are all connected to each other and to the rest of the world by their airports.

The cost of building a remote Alaska airport with a 3,300 foot gravel runway is equivalent to the average construction cost of one mile of four lane interstate highway.

AASP Fiscal Responsibility Task	Description
Economic Impacts of Runway Extensions	Analyzed the economic effects of longer runways on rural Alaskan communities.
Postal Hub Work Group	Identified airport and airline infrastructure and services required for new postal hubs, and encouraged the USPS to consider that information in future postal hub designations.
Bypass Mail	Examined potential changes to the Bypass Mail Program and the impacts to air carriers, airport owners, and Alaskans.

Since 1982 the FAA Airport Improvement Program (AIP) has provided over \$3.5 billion for airport construction, development and planning in Alaska.

AASP Management Task	Description
Aviation Functions within DOT&PF	Assessed and documented the role and performance of DOT&PF, as the state's lead agency for aviation.
M&O Work Group	Identified and quantified the primary factors causing challenges and increases in the cost of maintaining and operating Alaska's airports. Quantified deferred maintenance needs.
Inventory	Created and updated a facility information directory with airport statistics and information for the public on the AASP website.
Performance Measures	Identified performance measures so that DOT&PF can evaluate its progress in planning, developing, maintaining and operating its airport system.

What's Next for the Alaska Aviation System Plan?

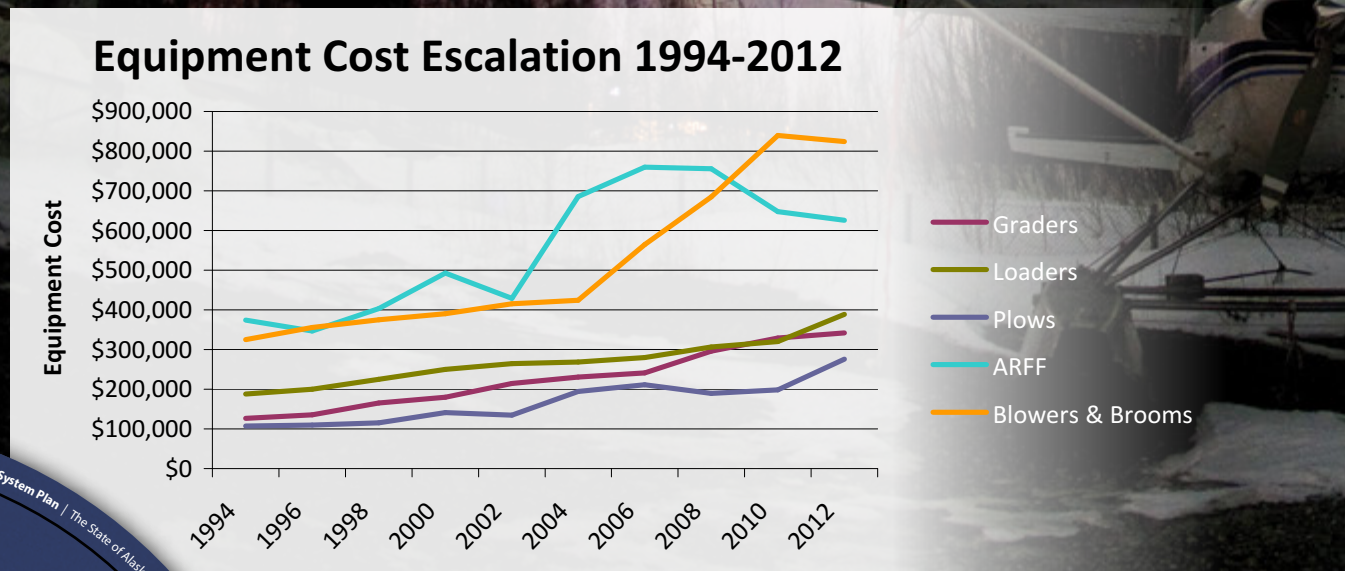
An effective aviation system plan is characterized by a continuous planning element. Continuous planning considers reappraisal, monitoring, continuing coordination, and special studies to maintain, enhance, and update certain key elements of the airport system plan. The future of the AASP involves all of these continuous planning efforts. Beginning in mid-2013, the AASP will launch into a phase heavy on

strategic planning and implementation of plan goals, objectives, and recommendations. The plan will continue to include inter-agency and public coordination, special studies to address pertinent issues, development of the web-based information systems and tools, and periodic assessment of plan goals and performance measures.

In the months and years ahead, please look forward to the following anticipated continuous system planning activities:

AASP Anticipated Future Task	Description
Strategic Planning	A strategic plan will build on the mission, goals, objectives, performance measures, and other supporting materials developed by the AASP. A strategic plan will engage those with responsibilities for management of the aviation system to define a strategy, or direction, for the aviation system and to outline the resources and timeframes needed to pursue the strategy and achieve measurable success. This strategic planning will launch the implementation phase of the AASP.
Website Development & Updates	Both the public and internal websites will be continuously developed and improved to meet the wide range of user needs. The AASP website (in both its internal and public forms) is anticipated to evolve to be the most current and comprehensive source of information for system users and planners.
Airspace Coordination Work Group	There is need and support for an ongoing airspace coordination work group to address and make forward strides on topics including certified weather reporting, weather cameras, obstruction identification and removal, aircraft avionics equipage, continued development of improved instrument flight approach procedures, and unmanned aircraft systems.
Airport Needs versus Funding	The Needs Inspection Pilot Project is anticipated to be deployed more widely with the ultimate goal of developing Capital and Maintenance Improvement Plans for all system airports, thereby creating a total system needs list to aid in effective and efficient project planning, programming, and funding.
Assessment of AASP Work Accomplished 2008-2013	Periodic reevaluation of the effectiveness and success of earlier system planning work in relation to existing conditions in the local airport system is vital to the relevance and effective implementation of the plan. AASP elements that should be reevaluated include the issues identified, goals, objectives, performance measures, airport classifications, inventory elements, forecasts, economic studies, and certain work group activities.
Land Use Compliance Special Studies &/or Work Group	Land use compliance – and planning for compliance – is an increasingly critical component of airport planning. This broad topic holds some of the largest challenges and opportunities facing Alaska's aviation system.
Inventory & Performance Measures Updates	Maintaining a current inventory is vital to the meaningful periodic measurement of performance. Initial performance measures will be updated to assess progress of the aviation system in meeting its goals and objectives, and the performance measures themselves will be reevaluated for their relevance and success in measuring the health of the aviation system.

For the majority of equipment the trend has shown an increase in cost of 11%-15% per year, over the last 18 years. The increase from 2002 to 2009 in Aircraft Rescue and Firefighting (ARFF) equipment and blowers and brooms is due to the need for larger equipment to meet more stringent requirements.



Alaska has over 700 registered airports spread over 663,267 square miles.

The AASP is an ongoing planning effort to set a long term vision for aviation in Alaska.



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