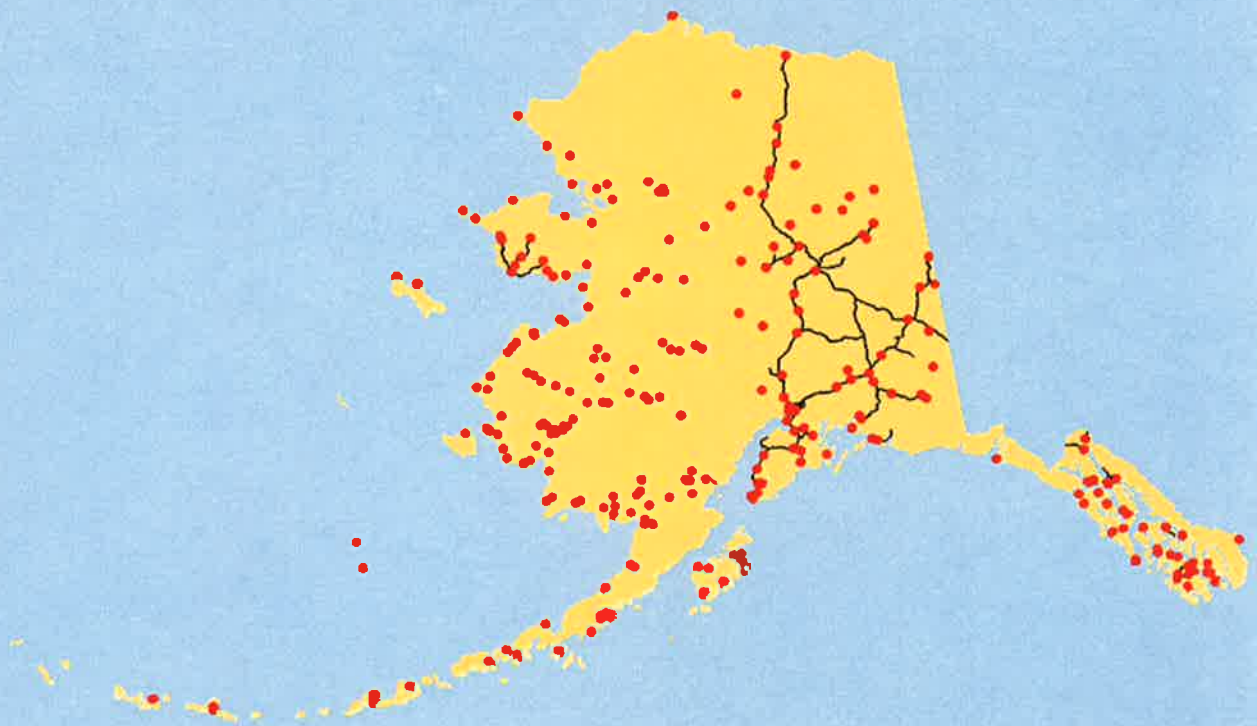


ALASKA

Aviation System Plan



Alaska Aviation System Plan
Phase 1, Stage 1
Executive Summary

January 2009



The Alaska Aviation System Plan is paid for by a grant from the Federal Aviation Administration, with matching funds from the State of Alaska Department of Transportation and Public Facilities. For more information on the Alaska Aviation System Plan, log onto www.AlaskaASP.com.



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1.0 INTRODUCTION

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) has launched an update to the Alaska Aviation System Plan (AASP). The AASP sets the vision for the Alaska aviation network by:

- Documenting the existing system with photos, maps, and data,
- Identifying airport improvements needed,
- Setting priorities for funding, and
- Proposing aviation policy.



The AASP is an integral part of an overall statewide transportation planning process as described in the Statewide Long-Range Transportation Policy Plan - Let's Get Moving 2030. That planning process, depicted in the following figure, is based on a state mandate defined in Alaska Statute 44.42.050. The Statewide Long-Range Transportation Plan sets overall state policy and direction for all of the modes of transportation. Regional transportation plans, metropolitan plans, and modal plans, such as the AASP, provide input and modal

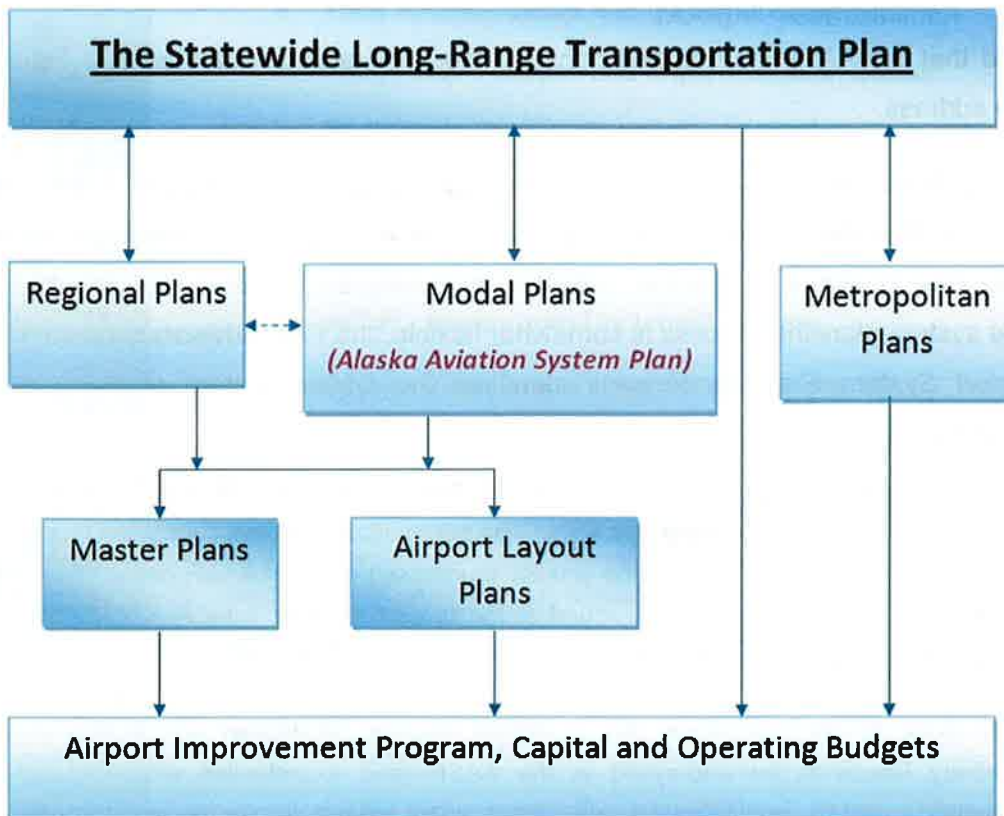


Figure 1: Statewide Long-Range Transportation Planning Process

policy direction into the Statewide Long-Range Plan, and are influenced by it. Airport master plans and airport layout plans define needs at individual airports and are the most detailed plans for a particular airport. Airport master plans are guided by the standards and policies in the AASP and also provide data and information for the AASP. Ultimately, all of these plans influence decisions made about aviation capital and operating budgets.

Previous AASPs were completed in 1986 and 1995. The Federal Aviation Administration (FAA)

requested that the AASP be updated because the 1995 plan is outdated and there are new issues to address.

The FAA defines aviation system planning as “developing for planning purposes, information and guidance to decide the extent, kind, location, and timing of airport development needed in a specific area to establish a viable, balanced and integrated system of public-use airports”. While the system planning process is somewhat flexible, the FAA Advisory Circular 150/5070-7 *The Airport System Planning Process* identifies the typical system planning process as depicted in Figure 2.

This document is a compilation of the Technical Memorandums and deliverables from Phase 1, Stage 1 of the Alaska Aviation System Plan. The information collected during this first phase and presented herein will be used as the project progresses in later AASP phases. Appendices referred to in this document can be found at the project website, www.AlaskaASP.com, which contains all of the work efforts to date.

The purpose of the first phase was to collect existing information and reports, to identify preliminary issues to be addressed in the AASP, and to establish which approaches to forecasting, inventory, web site, and public involvement are needed for the plan. The first phase also included a review of existing FAA programs addressing navigational aids (NAVAIDs) and use of airspace in Alaska.

FAA AC 150/5070-7 The Airport System Planning Process



Figure 2: Airport System Planning Process



2.0 DOCUMENT REVIEW

The first task of this initial phase was to collect, review, and categorize existing documents that might be important for the initial identification of issues and scoping of the AASP. A great many reports, studies, and publications have previously been produced which identify aviation issues throughout the State of Alaska. The Document Index created during this task is included as Appendix A, which can be found at www.AlaskaASP.com. The documents were grouped into categories (e.g., prior AASPs, regional aviation system plans, master plans, etc.), and the relevant issues and data contained in each document were briefly summarized. The Document Index will serve as a useful source of historical and current data and information as we complete the next phases of the AASP.

3.0 FORECASTS

One objective of this phase was to determine what sort of forecasting would be most applicable to the AASP. Based on past experience, aviation forecasts in Alaska have not been particularly useful in helping determine future aviation needs. This is because many of Alaska's aviation needs are driven by design standards and maintenance issues rather than by forecast-driven capacity problems. The Forecasts, Data Sources, and Potential Economic Factors Technical Memorandum produced under this task (Appendix B, available at www.AlaskaASP.com) describes forecasting goals and potential data sources and economic factors that could influence future aviation activity. The



technical memorandum then describes three different forecast approach options, each with a varying level of detail and cost. Based on discussions with DOT&PF staff regarding the forecast approach options, the technical memorandum recommends an approach that will combine aspects of each of the three options, with these primary elements:

- Data collection from the latest sources,
- Update available master plan forecasts,
- Develop forecasts for airports without recent master plans or system plan forecasts based on the relationship between aviation activity and other variables, such as population,
- Prepare passenger, cargo, general aviation, military, and critical aircraft forecasts,
- Evaluate the impacts of key aviation trends, such as changes to the Essential Air Service program, on the forecasts (sensitivity tests), and
- Prepare in-depth case studies of up to three airports showing how a major economic development, such as the construction of a natural gas pipeline, could affect activity at each case-study airport.



The forecast approach that has been selected is also included in Appendix B.



4.0 ECONOMIC IMPACTS

The economic impact study will be used to help “tell the story” of aviation’s essential role in Alaska, using data and numbers to reinforce the concept of how important aviation is to the State. The purpose of the economic impact study will be to present information on the benefits and costs of airport improvements, as well as the importance of airports to communities, to aid in decision-making processes. Methodologies were evaluated, and, following discussions with DOT&PF and the Aviation Advisory Board (AAB), the following approach was recommended for the study of the economic impact of aviation in Alaska:

- Quantify and describe the economic effects of airports on the State of Alaska's economy,
- Conduct eighteen case studies of rural airports to describe the social impacts of airports on Alaska residents,
- Make a comparison of enplanements, pounds of cargo per capita, and similar metrics of the case study communities with remote communities of similar population size in the lower 48 states to demonstrate the greater importance of airports to Alaska communities, and
- Analyze the effect of longer runways on the cost of living in rural communities and economic development successes and failures following runway extensions.

The scope of work developed from this task for the Economic Impact Study can be found in Appendix C at www.AlaskaASP.com.

5.0 INITIAL OUTREACH AND ISSUES

During this phase, DOWL HKM completed initial outreach to stakeholders including the DOT&PF regions, FAA, air carriers, municipal airports, the consulting community, and others to help identify aviation issues for the AASP. Meetings with individuals and groups were held in conjunction with written surveys (included in Appendix D, available at www.AlaskaASP.com) to identify and assess critical issues that should be addressed. Written surveys were distributed to DOT&PF staff, local airport sponsors, FAA Alaskan Region Airports Division staff, aviation interest groups,

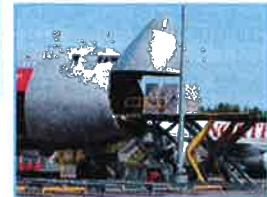


members of the aviation industry, and aviation consultants. Responses were compiled into a summary of issues identified. Appendix D, Initial Outreach and Issues, contains the following documents:

- 1986 and 1996 Alaska Aviation System Plan Issues & Implementation Status – issues identified in the 1986 AASP and the 1996 AASP Update and the implementation status of each issue, if known,
- Preliminary Issues Overview – An overview of issues compiled from AASP survey responses, meeting and conversation notes, and FAA's 2004 Survey Results,
- Aviation Advisory Board – Alaska Aviation System Plan Issues – issues identified by the Governor's Aviation Advisory Board at the May 30, 2008 meeting,
- Alaska Aviation System Plan Issues from Document Review – issues identified from documents collected during the Document Review task,
- AASP – Initial Issues from Survey Responses – issues identified through survey responses, categorized according to topic, and
- AASP – Issues from Meetings & Discussions with Interest Groups – issues identified through meetings and discussions, categorized according to topic.

A product of this initial issue identification effort was identifying those issues of sufficient complexity and significance to warrant study by AASP technical work groups. Five broad topics were selected for further discussion and consideration by work groups:

- Inventory,
- Website/ GIS,
- Maintenance and Operations,
- Postal Hubs, and
- Funding (capital and operating budgets).



Technical work groups were established and will meet during the later phases of the AASP to discuss these wide-ranging and complex issues. The work groups will be tasked with further defining the issues and determining how the system plan should address them. Other work groups may be established, as needed, during the course of the AASP.

6.0 PUBLIC INVOLVEMENT

Public outreach throughout the AASP process is focused on the following broad efforts:

- Educating the public about Alaska's aviation system and issues,
- Identifying aviation issues, project goals, and objectives,
- Providing avenues for input on technical analysis, alternatives, and recommendations, and
- Obtaining and documenting public comments, concerns and ideas, and communicating them to project decision-makers.



The Public Involvement Plan (Appendix E at www.AlaskaASP.com) describes the public involvement approach for the project. It identifies the variety of outreach methods to be used and the stakeholder groups that need to be involved in this effort. The approach is a combination of targeted outreach to key stakeholder groups as well as broad outreach to the general public. The Plan's targeted outreach is to involve key aviation interests through surveys, meetings with stakeholder groups, advisory committees, and work groups. The Plan's broad outreach to the public is through a website and survey, use of media, public meetings, and piggybacking on other meetings being conducted by DOT&PF or others.

An initial project mailing list is included in Appendix F at www.AlaskaASP.com. The list will continue to be updated with additional interest groups and individuals as the project progresses and outreach broadens.

As part of the Public Involvement task, it was necessary to establish how input will be given and who will make decisions. Since there are so many affected interests, even within DOT&PF, it was important to define the flow of information and to make sure that decisions and direction can be provided in a timely manner so the project can move ahead on a reliable schedule. The decision-making structure is shown in Appendix G at www.AlaskaASP.com. It demonstrates who will make decisions and how input will be obtained from advisory committees and work groups during the targeted outreach efforts. The table detailing memberships includes the specific organizations and members who comprise each group in the decision-making process.

7.0 INVENTORY AND DATABASE FRAMEWORK

An inventory is critical for purposes of collecting and analyzing information that will help to assess the condition and performance of Alaska's aviation system. The bulk of this effort was focused on reviewing types of classifications, performance measures, and databases used for other studies in Alaska and other states. The Inventory, Database, Classifications, and Performance Measures Framework Technical Memorandum (Appendix H at www.AlaskaASP.com) presents the results of this effort. It proposes that an Inventory Work Group be formed at the beginning of the next phase to help sort out which classifications and performance measures should be used and what data should be collected in the inventory. The Inventory Work Group will use the information collected for the technical memorandum in making recommendations for classifications, performance measures, and inventory. The selected scope of work developed from this task for later Inventory Database Preparation efforts is also included in Appendix H.



8.0 WEBSITE

A Website/GIS Work Group met in the early stages of this first phase to discuss goals for a project web site that would ultimately develop into a new-and-improved DOT&PF aviation website. The site would be accessible to the public as well as login options for DOT&PF and FAA staff to access more detailed information for airport planning and record-keeping purposes. As a result of the Work Group efforts, an initial site was launched in September 2008. The website actively serves as a forum for the public to be informed about project status, notifies them of upcoming events and meetings, and invites them to participate in the public-involvement program. Updates will be posted as the AASP project progresses. This site will continue to provide the latest project information to the public and expand with capabilities and functions for the public, DOT&PF, and the FAA. The full Website/GIS Technical Memorandum produced from this phase and the selected scope of work developed for this task under NTP 2 are included in Appendix I, available on the website at www.AlaskaASP.com.

9.0 AIRSPACE AND NAVAIDS

The AASP includes an overview of FAA airspace/NAVAID programs because:

- FAA NAVAIDs and services are crucial to the aviation system in Alaska,
- Rapid changes to airspace/NAVAIDs, communications, and operating procedures have occurred due to technology changes,
- Increased awareness and education is needed on activities of the FAA and other agencies, and
- Consolidation of up-to-date information will aid in decision-making and aviation safety.

The purpose of the Overview of National and State Programs Regarding Airspace/NAVAIDs Technologies in Alaska Technical Memorandum is to summarize goals of the various technologies and programs, discuss how they relate to each other, and identify their implementation schedules. Another purpose of the memorandum is to discuss policy and implementation issues of the FAA and DOT&PF and provide recommendations for further study.

Consultant team members for the AASP attended meetings of various aviation groups in Alaska, and several meetings with Alaska FAA and DOT&PF staff. During the DOT&PF and FAA review of this technical memorandum, it became apparent that the topic is far more complex than originally envisioned. The FAA advised that more input by a more diverse mix of FAA employees will be needed. Therefore, the technical memorandum has been left in draft form until this group can meet.



The draft technical memorandum makes the following recommendations as the means for progressing with this issue:

- Form a working group with much wider representation from the FAA and other key agencies in order to prepare a more comprehensive summary of airspace/NAVAIDs programs,
- Create an information-exchange mechanism between FAA leaders and key team members of the AASP,
- Coordinate airport improvements made by the DOT&PF or local airport owners with the improvements made by the FAA and other agencies to the airspace/NAVAID structure,
- Make airspace/NAVAID information more accessible and easy to understand, and
- Study additional ways to enhance safety and usability for both Capstone- and non-Capstone-equipped VFR aircraft.



10.0 CONCLUSION

Upcoming phases of the AASP will continue to build upon the foundation set in this phase of the project. A significant amount of information has been collected that will guide the in-depth studies and analyses to be undertaken as the AASP moves ahead. Interim reports, like this one, will be issued and posted on www.AlaskaASP.com at major milestones every 8 to 12 months. Ultimately the primary findings of the interim reports will be consolidated into a final AASP report. Ongoing system planning activities will continue several years after the issuance of the final AASP report under a continuing aviation system planning process.

APPENDICES

Documents and Technical Memoranda are listed below and can be found at www.AlaskaASP.com



Appendix A: Document Index

- AASP Document Index – April 24, 2008



Appendix B: Forecast Documentation

- Forecasts, Data Sources, and Potential Economic Factors Technical Memorandum
- Proposed Scope of Work - Forecasting



Appendix C: Economic Impacts Documentation

- Economic Impact Study Statement of Services - from AASP NTP 3



Appendix D: Initial Outreach and Issues

- AASP Initial Issues Survey - written form
- 1986 AASP - Issues and Implementation Status
- 1996 AASP - Issues and Implementation Status
- Preliminary Issues Overview - compiled from AASP Survey responses, meeting and conversation notes, and FAA's 2004 Survey results
- Aviation Advisory Board - AASP Issues, May 30, 2008
- AASP - Issues from Document Review
- AASP - Initial Issues from Survey Responses
- AASP - Issues from Meetings and Discussions with Interest Groups



Appendix E: Public Involvement Plan



Appendix F: AASP 2008 Mailing List



Appendix G: Decision Making Structure

- AASP Advice and Decision-Making Roles and Responsibilities
- AASP Advice and Decision-Making Roles, Responsibilities, and Membership



Appendix H: Inventory and Database Documentation

- Inventory, Database, Classifications, and Performance Measures Framework Technical Memorandum
- Inventory Database Preparation Statement of Services - from AASP NTP 3



Appendix I: Website Documentation

- Website Alternatives and Recommendations Technical Memorandum
- Website Statement of Services - from AASP NTP 2



Appendix J: Airspace and NAVAIDs Documentation

- Overview of National and State Programs Regarding Airspace/NAVAIDs Technologies in Alaska Draft Technical Memorandum

All Appendices are available at www.AlaskaASP.com



Please visit the project website (www.AlaskaASP.com) for full information, to take part in a survey, and to find updates as the project progresses.

ALASKA
Aviation System Plan

Home Schedule Meetings Documents Contacts Comments Did You Know?

What is the Alaska Aviation System Plan?

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) statewide aviation is launching an Alaska Aviation System Plan (AASP). The AASP sets the vision for the Alaska aviation network by addressing Alaska's aviation infrastructure and policy needs. The plan will:

- Identify airport improvements needed
- Set priorities for funding
- Propose aviation policy
- Document the existing system with photos, maps, and data

Why is an AASP needed?

Aviation is a critical component of Alaska's transportation system. Whether we live in Anchorage or the smallest community at the tip of the Aleutians, air service is the lifeline that connects all Alaskans to other communities in the state, to the Lower 48, and to the world. Alaska needs a sensible and adaptable statewide aviation system plan that recognizes Alaska's dependence on aviation, unique operating environment, lack of basic infrastructure, financial constraints, and regional diversity. The Alaska Aviation System Plan is a key component of the DOT&PF's Statewide Transportation Plan. You can view this plan at the following link: [Statewide Transportation Plan](#)

Did You Know?
Anchorage is within nine hours by air to about 95 percent of the industrialized world.

[Click here for the AASP Business Survey](#)

Aviation Links

- www.alaska.faa.gov/fai/airports.htm
FAA Alaska Airports
- www.dot.alaska.gov/airport-portal.shtml
Alaska DOT & PF
- www.faa.gov
Federal Aviation Administration Headquarters
Washington D.C.
- www.faa.gov/about/.../ffs/alaskan/
Federal Aviation Administration Alaska AFSS

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