



National Plan of Integrated Airport Systems

Implications for the Alaska Aviation
System Plan

November 2024

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Abbreviations

AAM	Advanced Air Mobility
AASP	Alaska Aviation System Plan
AATF	Airport and Airway Trust Fund
ACIP	Airport Capital Improvement Plan or Airport Capital Improvement Program
ADO	Regional Airports Division and District Office
AIP	Airport Improvement Program
APEB	Aviation Project Evaluation Board
APP	FAA Office of Airport Planning and Programming
ARP	FAA Office of Airports
CAA	Civil Aeronautics Authority
CIP	Capital Improvement Plan
CIPDS	Capital Improvement Plan Data Sheet
DOT&PF	Alaska Department of Transportation and Public Facilities
FAA	Federal Aviation Administration
FAASI	FAA Alaska Aviation Safety Initiative
NAS	National Airspace System
NPIAS	National Plan of Integrated Airport Systems
NTSB	National Transportation Safety Board
PFC	Passenger Facility Charge
SWA	DOT&PF Division of Statewide Aviation



Introduction

This white paper aims to provide a high-level overview of the National Plan of Integrated Airport Systems (NPIAS), how it relates to the Alaska Aviation System Plan (AASP), and how both contribute to improvement projects at Alaska airports.

The regulations, policies, and processes applicable to the NPIAS and federal grants for airport planning and development projects are extensive, and their relationships are complex. This document is constructed to give the reader a broad understanding of the interrelated guidance and provide links to specific documents for in-depth research. Regulations and related guidance documents are continually updated; therefore, the reader should ensure that the reference documents are the most up-to-date versions.

The sections are arranged to build understanding and should be taken as a whole. *The History, Evolution, and Importance of the NPIAS & ACIP* explores the history and purpose of the NPIAS, how and why airports are included, and how the system evolves. *The Integration of AASP and NPIAS* provides context for how the AASP informs and is informed by the NPIAS, the need for airport classification systems, and the necessary differences in those systems. Finally, *AIP Funding* explains how the NPIAS and the AASP classifications and databases inform the Airport Improvement Program (AIP) funding process. This white paper will ultimately become an addendum to AASP Phase III Chapter 3, [Classifications and Performance Measures](#), but will also function as a stand-alone resource.

The History, Evolution, and Importance of the NPIAS & ACIP

Knowing how the NPIAS originated and evolved, how it is inextricably linked to Federal Aviation Administration (FAA) AIP funding, and how it changes with each Congressional Reauthorization, is relevant to understanding the NPIAS as a whole.

Brief History

The first federal aviation regulation was promulgated in 1926 with the Air Commerce Act; over the next 20 years, additional legislation and public works programs funded municipal and commercial airports as aviation struggled to find its place in the national transportation system, which was dominated by roads and rail at the time. World War II brought government funding to airports and brought attention to the need for a national airport system. The 1946 Federal Airport Act established the first peacetime program providing financial aid for airport development and the national airport system. The Act authorized the expenditure of \$520 million apportioned to the states over the following 7 years based on a published formula, and then stipulated that those funds could only be allocated to airports identified in the Civil Aeronautics Authority's (CAA's) National Airport Plan and would require matching funds from the local airport sponsor. The Act also required the CAA to survey the nation's airport needs and update the National Airport Plan to inform Congress of the estimated cost of airport development moving forward. The federal airport program evolved with each new administration and new Congressional regulation in the following decades. The Federal Aviation Agency replaced the CAA in 1958 with a mandate to provide for civil aviation safety. In 1966, Congress authorized the U.S. Department of Transportation (USDOT) to

implement comprehensive transportation policies and programs across all transportation modes. Under the USDOT, the Federal Aviation Agency became the Federal Aviation Administration (FAA), and accident investigations were transferred to the National Transportation Safety Board (NTSB).

The National Airport Plan also changed with new regulations and evolving technology. Now designated the [National Plan of Integrated Airport Systems \(NPIAS\)](#) and published every other year, the NPIAS is required to evaluate and classify airports critical to the national transportation system and contribute to a productive national economy. In 2019, the FAA issued new guidance for managing and maintaining the NPIAS and ACIP, replacing the two separate guidance documents with one—FAA Order 5090.5 [Formulation of the NPIAS and ACIP](#). The old orders were combined into one, but the plans are still two distinct products. The NPIAS is a public plan, published every 2 years, identifying airports that have a role in the National Airspace System (NAS) along with the amounts and types of eligible needs over a 5-year period, regardless of anticipated funding source or availability of funds. The ACIP is an annually produced, financially constrained **internal** plan covering a 3-year period. It is a “subset” of the NPIAS in that it guides assignment of limited AIP funding to projects included in the NPIAS [FAA, 2019a].

To fund the FAA and airport development, the Airport and Airway Development and Revenue Act of 1970 created the [Airport and Airway Trust Fund](#) (AATF). The revenues directed to the AATF are collected from aviation-related excise taxes on passengers, cargo, and fuel. The AATF funds several FAA programs—the most important one to this discussion is the FAA Grants-in-Aid for Airports, which currently provides more than \$3.18 billion annually to the FAA’s regular AIP. The Grants-in-Aid for Airports have been supplemented by more than \$400 million from the General Fund since fiscal year (FY) 18. Recently, the Bipartisan Infrastructure Law provided \$25 billion in supplemental funding, and the FY 23 Consolidated Appropriations Act added \$559 million. The FAA administers supplemental funding through the AIP, but the funding is derived from the General Fund, authorized by a specific public law, and not subject to existing AIP discretionary formulas or set-asides.

The FAA publishes several informative documents for those interested in more information: [A Brief History of the FAA](#), [Airport Improvement Program: 75 Years Old and Still Going Strong](#), and [Airport And Airway Trust Fund Fact Sheet](#) on its website.

Federal Funding Eligibility

The NPIAS is mandated by 49 USC § 47103, which requires the plan to include the kind and estimated cost of airport development necessary to provide “a safe, efficient, and integrated system of public-use airports” [FAA, 2022a]. The NPIAS classifies airports according to their activity and roles in the national system and acts as a record of the type and cost of all planned, unfunded, AIP-eligible needs in the near term (1-5 years). In order to be included in the near term, the need must meet FAA justification criteria.

The law requires the FAA to consult with public agencies and the aviation community when updating the airports and their designated roles in the NPIAS. The AASP, the Alaska Department of Transportation and Public Facilities (DOT&PF) Division of Statewide Aviation (SWA), and local sponsors provide input to the national plan, including recommendations on airports to be added or removed. An airport must be included in the NPIAS to be eligible for funding through the AIP. Airport roles and classifications are discussed in greater detail in *The Integration of the NPIAS and the AASP* section in this paper, but it is important to note that a select group of airports is listed in the NPAIS as General Aviation – Unclassified. These “unclassified” airports (there are currently 13 unclassified airports in Alaska) have strict AIP funding limitations.

Aside from everyday maintenance, nearly all airport improvement projects in Alaska depend on capital funding from the AIP, so all eligible airports need to be included in the NPIAS and as many improvement projects as possible need to meet the eligibility criteria for AIP funding.

Adding an Airport

Airports are added to the NPIAS based on qualitative and quantitative criteria detailed in FAA Order 5090.5 [FAA, 2019a]. All airports meeting the FAA definition of public commercial service must be included by default. Other airports are evaluated on factors such as the number of enplanements, based aircraft, type of ownership, the airport’s ability to meet FAA standards, and if the airport is at least 30 miles from the nearest NPIAS airport. The published criteria have exceptions using a “special justification”—for example, an isolated community or Native American. If the published criteria are met, the airport may be considered for inclusion, at which point the FAA approval is required. Proposed airports, also called “planning placeholders,” are eligible for inclusion based on forecasted activity, operations, or special justification. Alaska has the largest number of proposed airports listed in the plan partly because of remote communities with no current access and the ongoing need for airport relocations because of climate change. In some cases, a proposed airport is removed from the list because the planning process reveals issues, such as environmental or land ownership that the sponsor cannot resolve in the near term. If an approved new/replacement airport is potentially not going to be fully open within the 5-year near term, it could be removed from the NPIAS report for that publication cycle but that does not imply it is not approved for future funding.

PUBLIC OR PUBLIC-USE?

Public-use airports are used for public purposes but may be publicly or privately owned.

A public airport is used for public purposes, under the control of a public agency, *and* the landing/takeoff and surface maneuvering areas are publicly owned.



Withdrawing an Airport

The FAA continually monitors activity levels at NPIAS airports to update their classification. In most cases, if an airport's activity drops to "unclassified" levels, it will usually remain in the NPIAS until activity increases and it can be reclassified. However, if an airport becomes unclassified and is within 30 miles of another NPIAS airport, or the airport sponsor cannot or is unwilling to accept new grant assurance obligations, the FAA may remove the airport from the NPIAS. Alaska has an unusually large number of small remote airstrips and seaplane floats that have seen a decline in local population and usage or have been replaced by a new or upgraded facility. The AASP tracks the NPIAS classification of all Alaska airports, and Appendix A provides a recap of airports that have been withdrawn or added to the Alaska list over the past 20 years. A removal request requires coordination between the sponsor, the state aeronautical agency, the FAA Regional Airports Division and District Office (ADO), and the FAA Office of Airport Planning and Programming (APP) to assess the airport and determine whether it should be removed. The DOT&PF SWA collaborates annually with the Alaska Region FAA to review and assess airports that fall below the standard threshold for inclusion.

Airport Capital Improvement Program (ACIP)

The ACIP is a financial planning tool, whereas the NPIAS is an unconstrained characterization of all unfunded needs, the ACIP is a budget-constrained 3-year plan based on project priority, anticipated funding year, and projected funding levels. The ACIP is not releasable outside of FAA as it is pre-decisional in nature. Not all projects listed in the ACIP will be funded by AIP grants; the national needs list exceeds the available funding. Projects listed in the ACIP meet the requirements for both AIP and the [Passenger Facility Charge](#) (PFC) program, as well as other financial assistance programs administered by the FAA.

The FAA gathers information on project needs and costs in collaboration with airport sponsors. The initial request for federal financial assistance is submitted to the FAA Alaskan Regional Airports Division Office in the form of a sponsor Capital Improvement Plan (CIP) with supporting Capital Improvement Program Data Sheet (CIPDS) forms. Completing the CIP Data Sheet Form is one step in the process and is preceded by collaborating and planning with the regional FAA specialist assigned to the airport. The CIPDS provides cost estimates, project scope, project justification, requested funding year, and the estimated federal grant-eligible share. Projects and project costs are tracked in the FAA database and change as new information becomes available. The annual ACIP, a subset of the NPIAS report, is a financially constrained snapshot of eligible and justified projects in this FAA database that are being considered for funding with the next 3 fiscal years. The ACIP allocates funding based on planning ceilings for each funding type using guidance established in statute, policy, and assumed funding levels. The ACIP is a plan and does not guarantee or commit federal funding.

Those new to airport planning, project development, and AIP funding quickly recognize that a lot of acronyms are used, and many are similar or even the same. For example, most airports have a Capital Improvement Plan (CIP), usually resulting from a public Airport Master Planning process. At the DOT&PF, the database of airport capital improvement projects is titled the Airport Capital Improvement Program (ACIP), which differentiates it from the surface transportation funding plan titled the State Transportation Improvement Program (STIP). Knowing that the federal ACIP receives project information from the DOT&PF and local sponsor airports and determines AIP-eligible costs is important. Still, the federal ACIP is not the same as the state ACIP, which is a DOT&PF-generated prioritization that determines the project funding year. The plans share the same acronym but have fundamental differences; the Alaska DOT&PF ACIP constantly changes in response to updated project information that may not yet be included in the federal ACIP and responds to changing priorities and emerging needs as they occur. Both plans are fiscally constrained, and funding is not guaranteed.

ACIP OR ALASKA DOT&PF ACIP

The federal ACIP is maintained by the FAA and lists projects at NPIAS airports eligible for AIP grant funding.

The AASP maintains a list of projects at DOT&PF owned airports that qualify for AIP funding. Both use the acronym ACIP.

The Alaska ACIP lists only the DOT&PF-owned airport projects and does not include local sponsor airports or the Alaska International Airport System projects. The FAA Regional Office works closely with all airport sponsors to ensure qualifying projects are included in the NPIAS ACIP, which is updated annually and includes all qualifying Alaska airport projects.

All airports included in the NPIAS must follow a specific process to receive AIP funding for capital improvement needs. The process, eligibility, and requirements for compliance are documented in the [Airport Improvement Program Handbook](#) (FAA Order 5100.38D, Change 1 [FAA, 2019b]).

Reauthorization

The practice of FAA reauthorization originated in 1970 when the Airport and Airway Revenue Act created the AATF. The authority to collect taxes and disperse funding must be reauthorized in a legislative act that allows the opportunity to include additional legislative changes. Each new reauthorization is set for a specific period, historically between 2 and 5 years. This creates a regular opportunity to revisit funding allocations, create mandates, respond to recent events, and address emerging technologies. Legislators can include language addressing a wide range of issues and are not limited to aviation regulation. For example, the FAA Reauthorization Act of 2018 included a section addressing protections for sports medicine professionals. Understanding the process and the wide breadth of the legislation helps explain why the FAA Reauthorization Act of 2024 required four short-term extensions to keep the lights on at the FAA before final passage. The new Act is a whopping 410 pages long and includes provisions requiring updates to the AIP Handbook, changing the sponsor match for grants, and increasing collaboration between the FAA and DOT&PF to benefit development at rural airports. Continual communication with the regional FAA office is imperative for airport sponsors to understand the changes brought by each new reauthorization bill, maximize grant opportunities, and meet compliance requirements



The key takeaways concerning the 2024 reauthorization are:

- ▶ Reauthorization has the power to change FAA priorities, create new programs, and allocate resources.
- ▶ FAA guidance for all programs is constantly evolving.
- ▶ Funding requirements and opportunities change and must be closely monitored.
- ▶ Active involvement by the airport sponsor, either directly with the Congressional Delegation or through industry organizations, can result in positive change.
- ▶ Project funding and timelines are subject to authorization and must remain nimble.
- ▶ Additional funding and emphasis on Advanced Air Mobility (AAM), electrification, uncrewed aircraft, vertiports, and drone security.
- ▶ Renewed commitment, detailed benchmarks, and funding to the FAA Alaska Aviation Safety Initiative (FAASI) plan and updated the program name to the Don Young Alaska Aviation Safety Initiative.

The Integration of the NPIAS and the AASP

The AASP is an ongoing planning process that documents the roles of individual airports within the Alaska transportation system, tracks current conditions and needs, and identifies future development necessary to prioritize projects that will sustain and improve the system. The DOT&PF manages the AASP and owns and operates 237 of the more than 394 public-use airports across the state.

The NPIAS identifies important public-use airports and classifies them according to their activity and roles in the national airport system. The DOT&PF SWA maintains the relevant information the FAA needs through the AASP and works closely with the FAA to ensure Alaska airports are correctly categorized in the NPIAS. After the NPIAS is published, DOT&PF updates the AASP to reflect any changes to the federal classification of Alaska airports.

Airport Classification

Understanding each airport's role within a system is key to system planning. To that end, the NPIAS and the AASP each identify airports based on role/function, based aircraft, and the volume of passengers and freight. The two plans use different classifications systems, as they each require different levels of granularity. The NPIAS must account for a wide range of airport types across the entire nation, so its categories are broad and generally applicable. The AASP only includes airports within Alaska and considers factors that are important to the Alaska transportation system, such as whether an airport is connected to the contiguous road system, serves a U.S. Coast Guard station, or is a designated U.S. Postal Service mail hub. The AASP Technical Advisory Committee reviews airport classifications approximately every 5 years and updates roles and definitions as needed. These Alaska-specific classifications provide planners and others with a better understanding of how each airport fits within the system, helps inform investment decisions, and aids multimodal and interregional transportation planning. AASP classifications include medium and small hubs, regional hubs, community class, local class (NPIAS high activity, NPIAS low activity, or non-NPIAS), and landing strips.



In the NPIAS, all public airports with scheduled service and more than 2,500 passenger boardings per year are considered commercial service airports. Large hub, medium hub, small hub, and nonhub commercial service airports are all *primary* airports, whereas nonprimary commercial service airports and all reliever and general aviation airports are considered *nonprimary*. These categories were assessed and redefined in 2012 as part of the FAA study and report entitled *General Aviation Airports: A National Asset* [FAA, 2012]. This report developed quantitative criteria to categorize the roles general aviation airports play in the national system. The report found that 2,455 out of 2,952 general aviation airports met the criteria for one of the four categories: national, regional, local, and basic. The remaining 497 were listed as unclassified. The FAA AIP policy on airports falling into the unclassified category provides minimal funding opportunities. A second evaluation in 2014 under *ASSET 2* resulted in almost half of the unclassified airports moving into one of the four ASSET categories [FAA, 2014]. The remaining unclassified category airports continue to be scrutinized, and some have been removed from the NPIAS altogether.

An airport's categorization determines the amount of AIP entitlement funding it can receive, and which projects are eligible—for example, some repair projects are eligible for funding at nonhub primary and nonprimary airports but not at large, medium, or small hub airports. Figure 1 shows the categories of public-use airports within the NPIAS. More details on how NPIAS categories impact funding eligibility can be found in [FAA Order 5090.5](#) and the [AIP Handbook](#).

Public-Use Airports				
Public Airports			Privately Owned Airports	
Commercial Service	Reliever	General Aviation	Reliever	General Aviation
Large Hub	National	National	National	National
Medium Hub	Regional	Regional	Regional	Regional
Small Hub	Local	Local	Local	Local
Nonhub	Basic	Basic	Basic	Basic
Nonprimary Commercial Service	Unclassified	Unclassified	Unclassified	Unclassified

■ Primary
■ Nonprimary

Figure 1. Categories of Public-Use Airports in the NPIAS.

Updating the AASP

The AASP tracks and updates the following information, including NPIAS classifications for all Alaska airports, and needs to be updated in a timely manner in response to changes to the NPIAS.

- ▶ NPIAS classifications for all Alaska airports
- ▶ NPIAS categories and track any airports that have been added/removed



- Classification maps and charts in AASP Phase III, Chapter 3

Appendix A documents changes to the classification of Alaska airports in the NPIAS over the past 20 years.

The Airport Improvement Program

The AIP is a source of federal grant funding that is only available to airports in the NPIAS. NPIAS airports must submit their planned, unfunded, AIP-eligible projects to the FAA for inclusion in the NPIAS so that the FAA can understand the development needs of the national aviation system. Project funds are assigned based on the established codes and scoring detailed in the AIP Handbook and documented on the CIP Data Sheets submitted to FAA by the airport sponsor. The final funding assignment is done through an internal FAA process based on project priority, funding type, project type, anticipated funding availability, and published policy. Projects are then added to the national ACIP, which informs the prioritization of projects for AIP funding distribution.

The process for allocating projects in the NPIAS begins with planning at the airport and regional system levels, including planning documents such as airport master plans, airport layout plans, and system plans. These efforts are part of the airport development planning process, through which airport sponsors engage the public and identify near, medium-, and long-term projects in CIPs.

The AIP provides two main types of airport funding: apportioned and discretionary funds. Apportioned funds, known as entitlements, are calculated based on formulas defined in the AIP Handbook. The remaining AIP funds are distributed to the discretionary fund, which allocates funding to specific project types. A portion of discretionary funds are set aside for airport noise and environmental projects, the Military Airport Program (MAP), Capacity, Safety, Security, and Reliever airport projects. The formulas detailed in the NPIAS ACIP Order 5090.5 allocate the remaining discretionary funds.

For the State of Alaska DOT&PF-owned airports in the Rural Airport system, entitlement funds are calculated based on the airports included in the NPIAS and are combined with discretionary funds to create a “pool” of funding that can be used at NPIAS airports in DOT&PF rural airport system¹. As a result, if any one airport is removed from the NPIAS, or the NPIAS category is changed, less funding is available for the entire rural airport system. For example, the current entitlement formula allocates a base entitlement of \$1 million*(as long as AIP is funded at \$3.2B or greater) per year to airports with at least 10,000 enplanements. In contrast, at airports with fewer than 10,000 enplanements the entitlement falls to \$150,000.

The DOT&PF works closely with the FAA to implement this funding strategy, which enables large capital projects that would otherwise be impossible to fund given the small population size of many of Alaska’s remote airports. Funding projects at these rural airports is expensive yet critical because more than 80 percent of Alaska communities are not connected to the road system and rely heavily on their airports to access basic needs and medical services.

¹ The rural airport system includes all Alaska airports except Fairbanks International Airport, Ted Stevens Anchorage International Airport, and Lake Hood Seaplane Base, which make up the Alaska International Airport System.

AIP-eligible projects at DOT&PF-owned NPIAS airports follow the clearly defined steps in the AIP Handbook to identify needs and prioritize projects. Details on how projects in the DOT&PF Rural Airport system are evaluated and developed can be found in two publications: [Project Development Process](#) [DOT&PF, 2022a] and [Aviation Project Evaluation Board \(APEB\)](#) [DOT&PF, 2022b].

The DOT&PF owns and operates 223 NPIAS airports, 220 of which compose the Rural Airport System. Statewide Aviation division works with the local FAA office to allocate funding in the pool system [FAA, 2022]. The Alaska International Airport System is also part of the DOT&PF but is separate from the rural pool system and works directly with the FAA on their AIP funding priorities, as do the 26 local sponsor airports. All airports in Alaska have access to the information and planning tools provided by the AASP.

Conclusion

Aviation system planning is a complex process that connects all levels of planning and provides open communication with the widely dispersed public. The AASP integrates the information about DOT&PF and local sponsor airports into one easily accessible database that can effectively inform the NPIAS, ensure airport information is kept up to date, and provide crucial information to airports and the consultants that assist in project development. The NPIAS classifies airports in the national system and identifies airports eligible to receive AIP planning and project funding. These interconnected activities facilitate project development and funding to keep airports in Alaska safe, operational, and connected.



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