

“Alaska Cornerstone Plan”
A Strategic Plan for the Airport Improvement Program
Federal Aviation Administration (FAA)
Alaskan Region, Airports Division



ALASKAN REGION AIRPORTS DIVISION
MISSION

TO PROVIDE OUR CUSTOMERS WITH GUIDANCE
AND LEADERSHIP IN THE PLANNING,
DEVELOPMENT, AND OPERATION OF THE
AIRPORT SYSTEM IN ALASKA

ENABLE AIR TRANSPORTATION SERVICES TO BE
DELIVERED IN A SAFE AND EFFICIENT MANNER,
INCORPORATING COMMUNITY AND
ENVIRONMENTAL NEEDS

Executive Summary

The intent of this “Cornerstone Plan” is to function as both a short-range and long-range strategic planning tool for effective implementation of the Airport Improvement Program (AIP) within the Alaskan Region.

The AIP is authorized by Chapter 471 of Title 49 of the United States Code (U.S.C.). The “act” has been reauthorized many times through the years since the initial enactment in 1982. The highest aviation priority in the United States is the safe and secure operation of the national airport and airway system. The Federal Aviation Administration (FAA) furthers this policy within the AIP by giving the highest priority to those projects that enhance safety and security of the airport system.

The FAA’s national Airports Capital Improvement Plan (ACIP) provides the framework for distributing limited AIP funding in a manner that ensures the highest priority projects are being funded. The ACIP is a needs-based 3 to 5 year plan for airport development projects with emphasis on the following priorities:

1. The transportation of people, services, and goods is provided in a safe and secure environment.
2. Preserve and upgrade the existing airport system in order to allow for increased capacity as well as to ensure reliable and efficient use of existing capacity.
3. Improve the compatibility of airports with the surrounding communities
4. Provide sufficient access to an airport for the majority of the American public

The FAA prioritizes AIP-funded projects via the application of the National Priority System (NPS). The primary component and tool of the NPS is the National Priority Rating (NPR). The NPR is an equation-based scoring system with values that range between 0 and 100 with 100 generally being most consistent with agency goals. It should be noted that the NPR is intended to be used in conjunction with qualitative factors to select airport development projects. State and local priorities, airport growth, environmental considerations, and many other factors can contribute (supplement the NPR) when selecting projects to be funded with AIP funds.

Although there are a number of factors that establish priorities for AIP-funding, there are some fundamental objectives specific to the Alaskan Region that dictate the prioritization of AIP funding. Most of the priorities with the Alaskan Region are reflective of the Agency’s national goals and objectives; however, some priorities are unique to Alaska. This document highlights some primary Regional objectives that are referred to as “AIP Cornerstones.” These Cornerstones help focus the ACIP on priorities that are reflective of Alaska’s unique regional needs while maintaining consistency with FAA’s national priorities. It is these Cornerstones that frame the boundaries for developing the ACIP and prioritizing limited AIP funds within the Alaskan Region.

The Alaskan Region “AIP Cornerstones” are as follows:

Cornerstone Objective 1: Development of standard runway safety area (RSA) at all Part 139 certificated airports to the extent determined “practicable.”

Cornerstone Objective 2: Preserve pavement condition at existing commercial service airports.

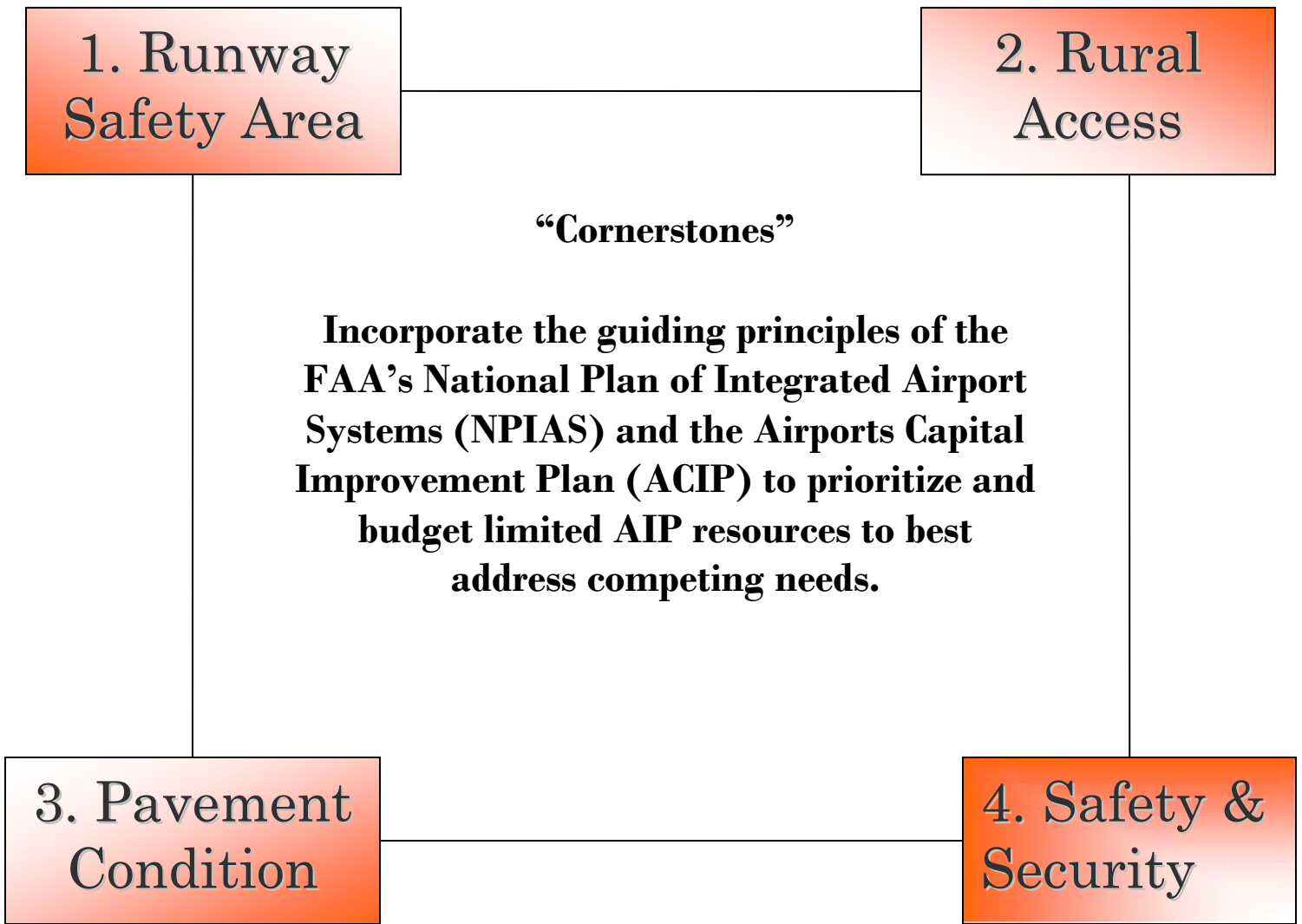
Cornerstone Objective 3: Provide safe and reliable aeronautical access for rural Alaska communities.

Cornerstone Objective 4: Promote safety-critical airport improvements

It is the intent of the ACIP process to ensure that AIP funds in the aggregate are used in a timely manner that contribute to the safety, security, capacity, and efficiency of both the Region’s and Nation’s system of airports.

It should be emphasized that this strategic plan and the information within is strictly for planning purposes only; in no way does it provide any financial commitment to any particular project or initiative. A financial commitment (i.e. AIP grant) can only be made after certain Congressional notification and administrative approvals are accomplished.

Alaskan Region “AIP Cornerstones”



Alaskan Region Airport System

The Alaskan Region airport system is comprised of a total of 687 airports. Of those, 257 airports are listed in the National Plan of Integrated Airports System (NPIAS) and are eligible for federal funding. These 257 airports are further divided into primary, commercial service and general aviation airports. Primary airports are large hub, medium hub, small hub or non-hub airports. In addition to the established NPIAS airports there are an additional 18 proposed new NPIAS airports. These new airports are proposed replacement airports that can not meet FAA design standards at the existing airport location.

Table 1 shows the number of NPIAS airports by service level:

Medium Hub Primary Airports	1
Small Hub Primary Airports	1
Non-Hub Primary Airports	26
Commercial Service Airports	64
General Aviation	165
TOTAL	257

Table 1: AAL NPIAS Airports

The Alaska geographic region encompasses a flight area of over 3 million square miles. The distance from east to west (approximately 2000 miles) is equivalent to flying coast to coast across the United States. Within this vast region, nearly 85% of the communities rely solely on air transportation for year round access for transportation, medical supplies, food, and mail. Aviation plays a critical role in these communities. Ted Stevens Anchorage International Airport also serves as crucial cargo link to international markets (one of the largest cargo handling airports in the nation).

Cornerstone Objective 1: Development of Standard Runway Safety Areas at all Part 139 Certificated Airports

Runway safety area (RSA) is a safety standard enhancement provided to protect an aircraft in the event of an undershoot, overrun, or veer off the runway; and it provides greater accessibility for firefighting and rescue equipment during such incidents. Airport Sponsors are mandated to address RSAs at all runways at certificated airports and bring them up to standards to the extent practicable by 2015. Unlike other design standards, runway safety area cannot be modified.

With an average National Priority Rating (NPR) of 95 (combined with Congressional interest) the establishment of standard RSAs at Part 139 commercial service airports is one of the top priorities for the FAA. With this in mind, the Alaskan Region’s ACIP will continually be built upon a priority of RSAs at Part 139 airports.

In FY 2010 approximately \$44 million of AIP funding was invested in RSAs, and in FY 2011 approximately \$32.7 million was invested in RSAs.

The Alaskan Region reasonably estimates a future budgetary range of 22% - 24% of the annual AIP dedicated strictly for RSA improvements.

Noteworthy planned RSA projects are as follows:

Location	Runway	Planned Funding Year	Planned Completion Year
Dillingham	1/19	2012	2013
Unalaska	12/30	2012	2014
Juneau	8/26	2012	2012
Kotzebue	9/27	2012	2013
Kodiak	18/36	2013	2014
Kodiak	7/25 (phase 1)	2013	2014
Nome	3/21	2013	2014
Nome	10/28 (phase 1)	2013	2015
Kodiak	7/25 (phase 2)	2014	2014
Nome	10/28 (phase 2)	2014	2015

Cornerstone Objective 2: Preserve Pavement Condition at all Commercial Service Airports

Preserving the existing pavement within the Alaska airport system is directly in line with the FAA’s national goal of “preserving the existing airport system.” Approximately 20% of the Alaska airports eligible for AIP funding are paved. The remaining are either gravel surfaced or seaplane facilities. Typically, these paved airports are located in the larger communities or along the road systems within the state. Extreme variations in temperatures in some northern Alaska locations (-50F to 85F) present challenges for maintaining and preserving pavement.

Pavement capital improvements include runway, taxiway or apron construction, reconstruction, rehabilitation, strengthening, and seal coats. These improvements are normally funded under individual airport projects identified in the ACIP. Airport pavement preservation not only includes life-cycle pavement maintenance management for long term sustainability; but it also includes addressing failed pavement via rehabilitation projects.

With an average NPR rating of 71 (primary commercial service airports) runway rehabilitations will be an ongoing priority within the Alaska Region’s ACIP.

In FY 2010 approximately \$44.8 million of AIP funding was invested in airport pavement, and in FY 2011 approximately \$79.3 million was invested.

The Alaskan Region reasonably estimates a future budgetary planning range of 25% - 27% of the annual AIP for the airport pavement condition objective.

Noteworthy planned “pavement” projects are as follows:

Location	Facility	Planned Funding Year	Planned Completion Year
Unalaska	Runway	2012	2013
Deadhorse	Apron	2012	2013
Merrill Field	Taxiway	2012	2013
Point Hope	Runway	2012	2013
Bethel	Apron	2012	2013
Anchorage Int’l	Taxiway	2013	2014
Merrill Field	Taxiway	2013	2014
Ketchikan	Taxiway	2013	2014
Haines	Taxiway	2013	2014
King Salmon	Runway	2014	2015
Nome	Runway	2014	2015

Anchorage Int'l	Apron	2014	2015
Cold Bay	Taxiway	2014	2015
Kenai	Taxiway	2014	2015

Cornerstone Objective 3: Provide Safe and Reliable Aeronautical Access for Rural Alaska Communities.

One of the guiding principles of the National Plan of Integrated Airport Systems (NPIAS) is, “The airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically not more than 20 miles to the nearest NPIAS airport. This guiding principle carries even more emphasis within the State of Alaska. Aviation is frequently characterized as the “backbone” or “life-blood” of rural Alaska communities. Aviation is frequently the only means of reliable transportation for people, goods, and essential services for these communities. Unfortunately many rural airports do not meet FAA standards. Many are too short/narrow, unlit and are poorly aligned with the prevailing wind direction. Providing a safe airport that provides reliable year-round access will remain a priority for the FAA both in the short term and the long term.

In FY 2010 approximately \$84.6 million of AIP funding was invested in the rural access objective, and in FY 2011 approximately \$24.8 million was invested.

The Alaskan Region reasonably estimates a future budgetary planning range of 20% - 22% of the annual AIP that would be invested in the rural access objective.

Noteworthy planned projects are as follows:

Location	Work Description	Planned Funding Year	Planned Completion Year
Tununak	Construct new airport (ph. 1)	2012	2014
Kaktovik	Construct new airport (ph. 1)	2012	2015
Tununak (ph. 2)	Construct new airport (ph. 2)	2013	2014
Golovin	Widen runway	2013	2014
Koliganak	Rehabilitate and extend runway	2013	2014
Kaktovik	Construct new airport (ph. 2)	2013	2015
Hooper Bay	Construct Runway	2014	2016
Kwigillingok	Extend Runway	2014	2015
Angoon	Construct new airport	2014	2016
Pilot Station	Construct new airport	2014	2016

Cornerstone Objective 4: Promote Safety-Critical Airport Improvements

Aviation safety is the highest calling and primary mission of the FAA. Requirements as the result of a Part 139 safety inspection or a runway safety action team (RSAT) review can often highlight areas that could enhance the safety of operations at the airport. 5010 inspections can also identify airport improvements that are necessary for safe aviation operations. It goes without saying that projects that are critical to airport safety shall remain a primary “cornerstone” within the FAA’s ACIP.

In FY 2010 approximately \$44 million of AIP funding was invested in safety-critical airport improvements, and in FY 2011 approximately \$35 million was invested.

The Alaskan Region reasonably estimates a budgetary planning range of 25% - 27% of the annual AIP for safety-critical airport improvements.

Noteworthy planned projects are as follows:

Location	Safety Initiative	Planned Funding Year	Planned Completion Year
Merrill Field	RSAT (ph. 1)	2012	2013
Fairbanks	ARFF bldg improvements (ph.1)	2012	2013
Fairbanks	ARFF bldg improvements (ph.2)	2013	2013
Merrill Field	RSAT (ph.2)	2013	2013
Cold Bay	Expand ARFF bldg	2014	2015
Fairbanks	RSAT	2014	2015

Timely Development and Efficient Investment of Federal AIP Funding

The successful implementation of the AIP program is dependent upon using public funds in an efficient and time-effective manner. It is the FAA's goal to obligate federal grant funds on projects as soon as the funds are made available; and, furthermore, that the projects can be expedited (minimizing the amount of idle time for the grant funds).

One of the primary means of achieving timely capital development projects is having a reliable airport Capital Improvement Plan (CIP). Every year on July 1 the FAA validates an airport sponsor's CIP, and makes a determination on those projects that can confidently be funded in the next fiscal year. It is important that airport sponsors submit their CIP's (based upon airport master/system plans, joint planning conferences, pavement condition surveys, Part 139 inspections, land use inspections, et. al.). A reliable CIP should be based upon priorities but also upon a project's capability of proceeding. The following "best practice" deadlines should be considered as the Airport's CIP is developed and submitted to the FAA.

- **October 1** - environmental document complete and submitted to the FAA for all projects anticipating funding within the federal fiscal year. All necessary prerequisite airport planning activities (and approvals) completed.
- **October 1** - "CIP Data Sheet(s)" submitted to the FAA for those projects anticipating federal funding within the fiscal year
- **January 1** - all project land acquisition and right-of-way actions complete
- **April 1** - construction projects with summer work ready to bid
- **May 1** - declaration on the use of passenger entitlement funds
- **July 1** - construction projects with winter work ready to bid

If a project cannot meet all of the "milestone" deadlines, serious consideration should be given to delaying the project until the next federal fiscal year. The CIP should be structured such that near-term projects can reasonably meet these deadlines.

Providing grants based upon construction bids is another means of promoting timely development and efficient funds investment. Not only does this practice help minimize the delay between the granting of funds and the start of construction, but it further minimizes potential ambiguity of the necessary grant funds needed to implement the project.

Concluding Discussion

It deserves to be reemphasized that the NPR rating alone cannot account for other qualitative factors that may affect the importance of an individual airport development project. Furthermore, it is quite possible that a project could have an inherent high priority without fitting neatly inside a “cornerstone objective.” There should, however, remain a general overall consistency of project prioritizations that meet the FAA’s ACIP policy and the direction outlined within this strategic plan. The use of Airport Sponsor prioritization schedules (CIPs) and State Prioritization systems can greatly aid the development of the FAA’s ACIP, but they must still remain consistent with the FAA’s national priority system.