May 2026

AASP

Alaska Aviation System Plan

Chitina Airport

Phase III

Chapter 5

Inventory & Needs Update

Alaska Aviation System Plan

Project No. CFAPT00484 | AIP 3-02-0000-031-2022 and 3-02-0000-033-2024

Commonly Used Acronyms

AASP	**Alaska Aviation System Plan**
AC	**Advisory Circular**
ACIP	**Airport Capital Improvement Program**
ACRP	**Airport Cooperative Research Program**
AIP	**Airport Improvement Program**
ALP	**Airport Layout Plan**
APEB	**Aviation Project Evaluation Board**
CIMP	**Capital Improvement and Maintenance Program**
DCRA	**Division of Community and Regional Affairs**
DOT&PF	**Department of Transportation and Public Facilities**
FAA	**Federal Aviation Administration**
IAP	**Instrument Approach Procedure**
M&O	**Maintenance and Operations**
N/A	**Not Applicable**
NOTAM	**Notice to Airmen**
NPIAS	**National Plan of Integrated Airport Systems**
OE/AAA	**Obstruction Evaluation / Airport Airspace Analysis**
PCI	**Pavement Condition Index**
PFAS	**per- and polyfluoroalkyl substances**
SEF	**State Equipment Fleet**
TAC	**Technical Advisory Committee**

Table of Contents

Figures

Tables

I. Introduction

Airport system planning is used to determine the type, extent, location, timing, and cost of the airport development needed to establish and maintain a viable system of airports that meet the current and future demands of the population. The Alaska Department of Transportation and Public Facilities (DOT&PF) uses the continuous aviation system planning process, which means that the elements of a system plan, as outlined in the Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-7, are continuously assessed, updated, and refined. The Alaska Aviation System Plan (AASP) began in 2008 and is developed in 5–6-year phases. This chapter focuses on how to manage system planning information to keep it current, the inventory update process during Phase III (2020–2026), and Airport Needs List methodology and refinement.

The AASP tracks information on Alaska's public-use airports (Figure 2), locations listed by the FAA in the National Plan of Integrated Airport Systems (NPIAS), and other non-NPIAS public-use facilities. Alaska contains the most NPIAS airports (only 3 other states list 100 or more) and the most non-NPIAS public-use airports of any state in the union. Maintaining accurate and current information is an enormous task, complicated by the fact that over half the airports have no airport manager on site. Development of the Needs List began in Phase I (2008–2013) of the AASP and continued through Phase II (2013–2019). Prior to this effort, no centralized system for tracking airport needs existed, creating inefficiencies and redundancies. The needs tracking process exists in parallel to the inventory process, which catalogs existing conditions and elements of the aviation system. These processes allow DOT&PF to efficiently identify areas of necessary improvement or repair, simplifying project prioritization and funding allocation. Much of this information is publicly available, with some information restricted to internal users with certain permissions, as needed.

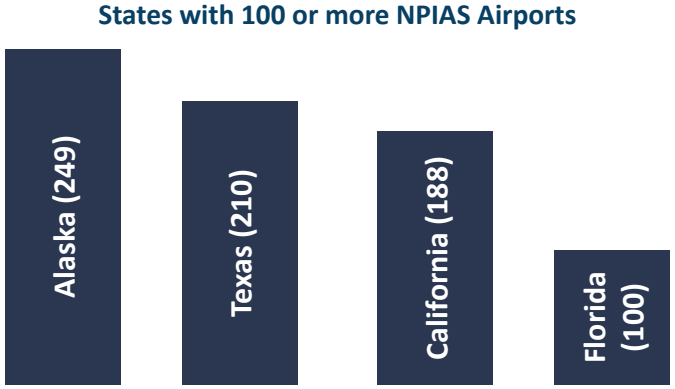


Figure 1. Alaska has more NPIAS airports than any other state.

Inventory and needs processes were updated during Phase III to be more proactive, with a focus on capital improvement projects and early identification of needs, in contrast to previous phases' effort to capture all types of requests. The following sections further define the inventory and needs processes and how they were updated during Phase III.

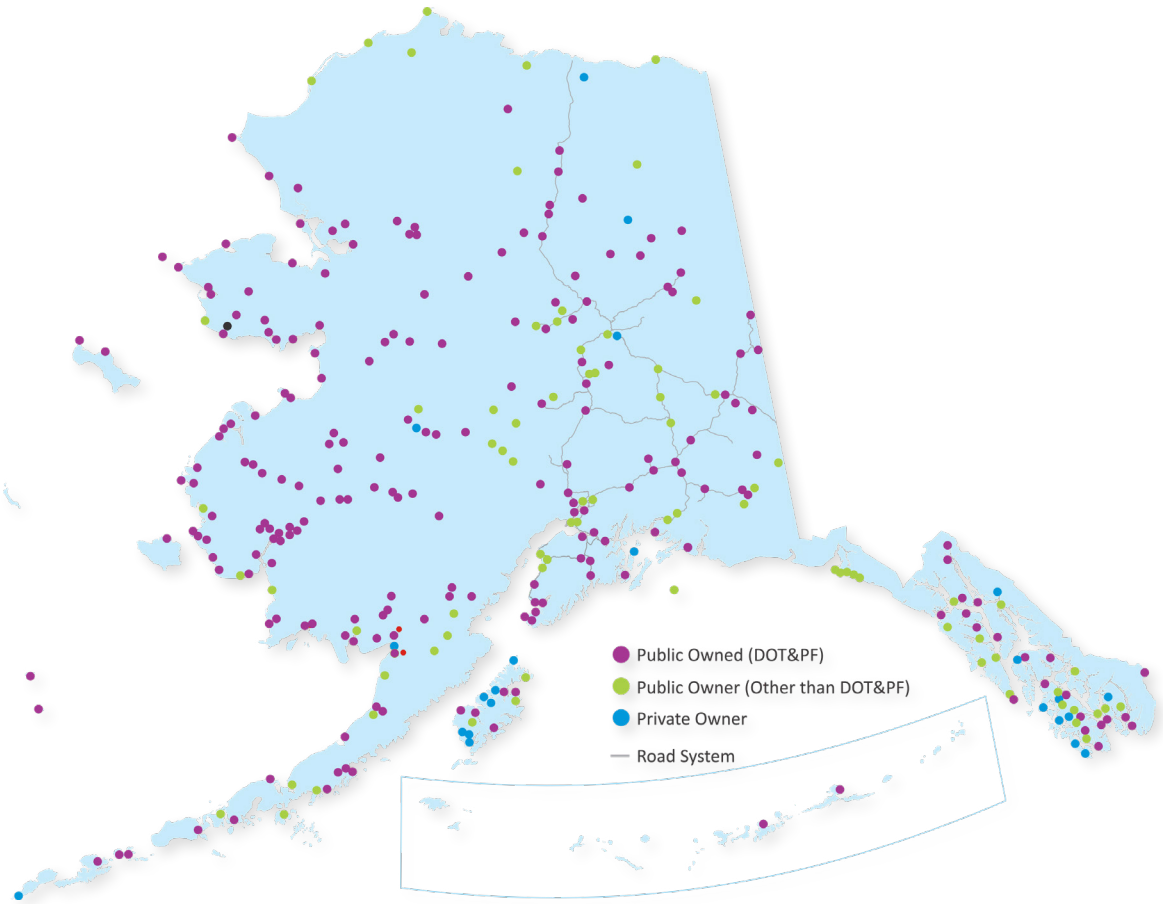


Figure 2. Public and private airports in Alaska.

II. Airport Inventory Update: Methodology

The AASP inventory is a repository of information about individual airports, such as runway data, operational expenses and revenue, grant information, and project information. This information is either automatically pulled from other sources, like the FAA 5010 Airport Master Record, or manually updated by DOT&PF planners. Maintaining this inventory ensures efficient management of the numerous, geographically dispersed facilities within the system and provides quick access to crucial information by airport for planning processes.

In each new phase of the AASP, the team evaluates which elements require updates to maintain the airport information as a viable tool. This evaluation was accomplished through regional planning meetings, surveys, and interviews, as well as research by staff to ensure information was accurate. The Regional FAA Airports office provides guidance and support through meetings and published guidance for best practices. The 2022 Airport Cooperative Research Program (ACRP) research report #244 Advancing the Practice of State Aviation System Planning[1] provided standards and examples. Figure 3 shows recommended groups of data for a system inventory based on the report and AC 150/5070-7. The updated inventory and need processes described in this chapter support the AASP in maintaining accurate information in each of the categories in Figure 3 and other data necessary for understanding "the performance and interaction of [the] entire aviation system."

Additionally, survey feedback indicated many responders saw this as an important task that ensures the longevity and use of the system. At the start of Phase III, a comprehensive survey was sent to a wide range of users, including DOT&PF staff, the FAA, aviation consultants, pilots, local airport sponsors, and other users of the aviation system (see Appendix 1 of *Chapter 2: Prior Phase Evaluation* for results). Respondents were asked to review a list of planned Phase III tasks and select up to three that would provide the most value to the respondent—the most frequently selected task was "Update the airport inventory database and update airport classifications if needed." The following sections describe how this process occurred during Phase III.

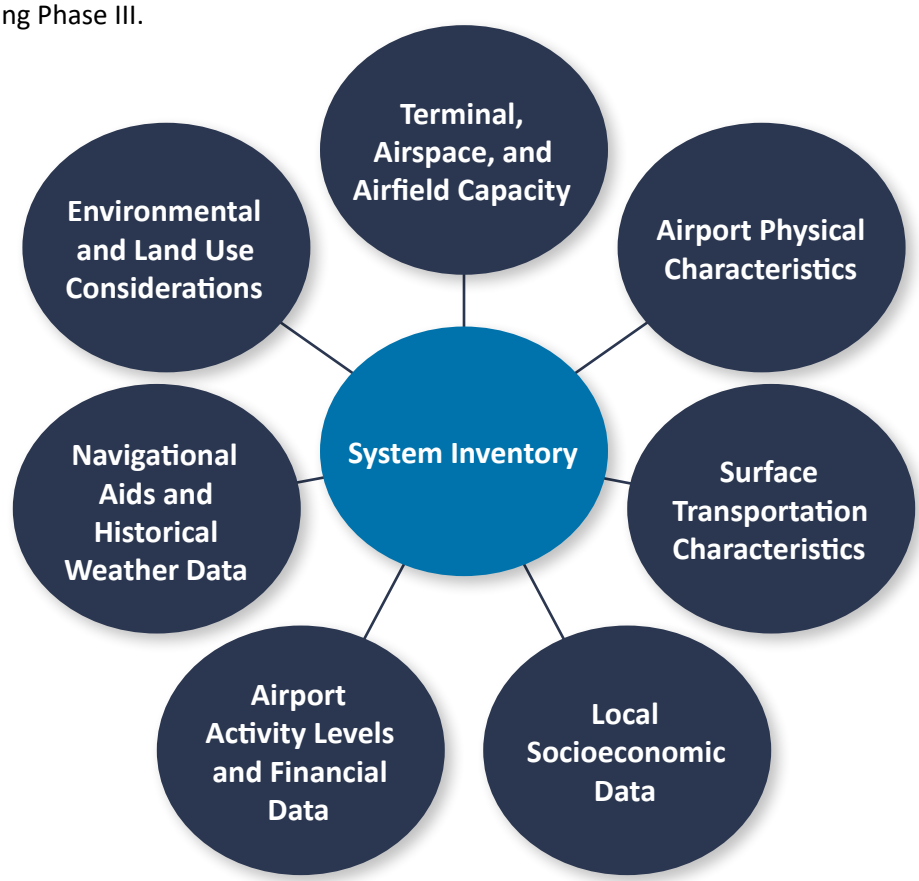


Figure 3. Recommended data for a system planning inventory (based on Advancing the Practice of State Aviation System Planning and AC 150/5070-7).

1 http://nap.nationalacademies.org/26843

Reviewing the Inventory and Data Sources

To begin the update process, the team reviewed the inventory and created a spreadsheet (Figure 4) detailing all the elements being tracked. In addition to cataloging the elements, the team had two objectives: identify reliable (FAA- or state-managed) databases to pull information from and identify gaps and inconsistencies in the inventory.

General	General	General	General	General	General	General	General	General
Base Information	General Informantion	Base Information	General Informantion	General Informantion	General Information	General Information	General Information	General Information
Auto Pull - No Action	Auto Pull - No Action	Auto Pull - No Action	DOT&PF Regional Boundary Map retrieved from https://dot.alaska.gov/stwddes/gis/	DOT&PF District Boundary Map retrieved from https://dot.alaska.gov/stwddes/gis/	5010 or managed by planners	5010 or Planners	Auto Pull - No Action	Classifications Chart https://internal.alaskaasp.com/FileStorage/FacilityPhotos/AKA585ClassificationsChart.pdf
Owner	**Airport**	**FAA Assoc City**	**State Region**	**District**	**5010-Facility Type**	**Facility Status**	**NPIAS Number**	**NPIAS Level of Service**

Figure 4. A portion of the inventory update template. Fewer than 20% of the inventory are updated through automatic data pulls; the rest require manual updates.

Once the elements were catalogued, they were designated as requiring automated (e.g., community information from the Alaska Division of Community and Regional Affairs [DCRA] Data Portal) or manual (e.g., Airport Layour Plan [ALP] approval date) updates. Automated updates are preferred, as they are more efficient and up-to-date, but not always possible. Each element was updated at this time, and existing automated updates were reviewed to ensure functionality. Automatically updated elements include:

- NPIAS
- Borough
- Communities
- Owner
- Airport
- FAA Associated City
- NPIAS Number
- DOT Facility
- Airport Use
- Last Airfield Grant
- Last Building Grant
- Last Equipment Grant
- Last Planning Grant

Identifying Process Improvements

The Technical Advisory Committee (TAC), consisting of planners from the three DOT&PF regional offices, reviewed the existing inventory and concluded that:

- Staff shortages and turnover, combined with heavy workloads, have limited the consistency of dataset updates.
- If the data provided is incorrect, the users lose trust in the system.
- Connecting to reliable data sources, such as the FAA 5010 database, ensures that the information provided by the AASP is the most current.
- Old data connections require updating, and new connections to reliable data sources have become available since the last inventory.
- Some data will continue to require manual updates; therefore, a process is required to ensure those updates happen. This process needs to be standardized and include quality control.

Developing New Processes and Elements

Phase III also aimed to expand the scope of the inventory to include other useful information. For example, expanding the Classifications and Performance Measures task, described in detail in *Chapter 3: Classifications & Performance Measures*, with the goal to make it more simplistic and less time intensive to keep up to date. In particular, the Performance Measures update emphasized the use of automatic data pulls, meaningful categorization and grouping, and

clear user interfaces.

Based on feedback from the TAC and with the performance measure framework in mind, the team added new subtabs under Facilities and created the standalone Environmental tab; *Chapter 7: System Planning Database Innovation* describes the changes to tabs and inventory items. The new information supports a proactive system and capital improvement planning by tracking facilities and existing conditions and by linking the database to external resources that don't require manual updates from DOT&PF staff. For example, the new Buildings/Equipment subtab under Facilities shows the model year and funding source for each piece of equipment at an airport. The new Environmental tab includes a Helpful Links section that directs to over 50 other databases and regulatory sites, and a Communities subtab was redesigned under Facilities with new connections to the DCRA Data Portal to ensure a robust, up-to-date set of community data is readily available for each facility, including multimodal transportation information, school, population, and Native community information.

Table 1. Facilities subtabs available in the internal database at the ends of Phase II and Phase III.

Phase II	Phase III
General	General
Runways/Helipads	Runways/Helipadsˆ
PCI Condition	PCI/Surface Conditionˆ
Services/Navcom	Buildings/Equipment⁺
Statistics	Services/Navcom
CIMP Inspection	Statisticsˆ
Needs	CIMP Inspection
Documents/Links	Land Occupancy/Leasing°⁺
Facility Photos	Needs
Contacts	Documents/Linksˆ
	Facility Photosˆ
	Performance Measuresˆ
	PFAS°⁺
	AIP Grants⁺
	NOTAMs⁺
	OE/AAA⁺
	Communitiesˆ
	Contactsˆ

°Access restricted to certain users
⁺New
ˆUpdated

Runways/Helipads

Phase III included an inventory of Instrument Approach Procedures (IAPs), and this subtab was updated to indicate whether each runway had a precision IAP (P), non-precision IAP (NP), or no IAP (N/A). IAPs improve safety by providing standardized methods for aircraft approaches; this is especially important in rural Alaska where difficult terrain, severe weather, and low visibility conditions are common. Tracking IAP information supports near- and long-term planning, as the presence or absence of an IAP can inform planners about the airport's capabilities. See the *Instrument Approach*

Procedures white paper for more information.[2]

PCI/Surface Condition

Previously, this subtab only provided current Pavement Condition Index (PCI) condition information. During Phase III, historical PCI reports were uploaded manually and information about other surface types was added. This information directly supports the Capital Improvement and Maintenance Program (CIMP) process and aligns with FAA AC 150/5070-7, which identifies airport physical characteristics as a foundational data element for system planning. In addition, the new surfacing reports provide a practical tool for analyzing and tracking pavement and gravel conditions across the system, strengthening both planning and capital programming decisions.

Buildings/Equipment

The data in the Buildings/Equipment subtab are manually updated from the Statewide Equipment Fleet (SEF) and statewide facilities database. This subtab and corresponding reports were created during Phase III to provide a centralized location for accessing these data and to provide more accurate information to the CIMP process.

Statistics

The Statistics subtab was updated to include FAA enplanement and T-100 data. A new Weather component was also created, which shows historical precipitation and snowfall through quarterly data at various locations. Additionally, the reports for annual revenue and operational expenses were updated during Phase III. "Airport financial data" and "historical weather data" are recommended data elements for aviation system planning, according to AC 150/5070-7.

Together, these datasets strengthen capital planning efforts by helping planners correlate activity levels, operational cost trends, and long-term weather patterns with infrastructure performance, lifecycle costs, and future needs.

Land Occupancy/Leasing

This subtab is available only to select DOT&PF Leasing staff and provides a listing of active and archived leasing agreements. Information in this subtab connects to the CIMP application to provide lease lot data while inspectors are in the field. "Land use considerations" are recommended data elements for aviation system planning, according to AC 150/5070-7. This new subtab improves data accuracy at the source. When inspectors can clearly identify lease lot lines and responsible parties in real time, field observations are tied to the correct tenant and parcel, reducing documentation errors and strengthening the reliability of land use data that informs future development, compliance reviews, and capital planning decisions out of the CIMP process.

Documents/Links

Several links were added to or updated in this subtab during Phase III, primarily to ensure the current ALP links were accurate and to provide easy access to DOT&PF's Nondiscrimination Policy Statement, Accessibility, and FAA Resources and DOT&PF Civil Rights pages.

Facility Photos

The Facility Photos subtab was reorganized to include folders, allowing users to select the category of photos they are looking for (e.g., Aerial View or a specific 5010 or CIMP inspection). A connection was added to the needs closeout process so that construction photos uploaded during closeout automatically appear under Facility Photos. Additionally, functionality was added to allow users to "favorite" photos; the favorited photos are then used when generating facility one-pagers. Documenting airport photos supports the FAA AC 150/5070-7 recommendation to track airport physical

2 https://www.alaskaasp.com/media/5950/2025-12-09_white_paper_iap_final.pdf

characteristics by providing a clear, visual record of facility conditions across the system. These images validate inspection data and allow planners to assess conditions remotely, which is critical for managing a large, geographically dispersed airport network.

Performance Measures

Individual airport report cards were updated early in Phase III, and regional report cards, like Figure 5, were created to provide a snapshot of performance measures. Facility data added through the inventory are used to update the performance measure report cards. Creating and tracking performance measures are required elements of system planning, according to AC 150/5070-7, Chapter 2: Airport Planning Process Philosophy.

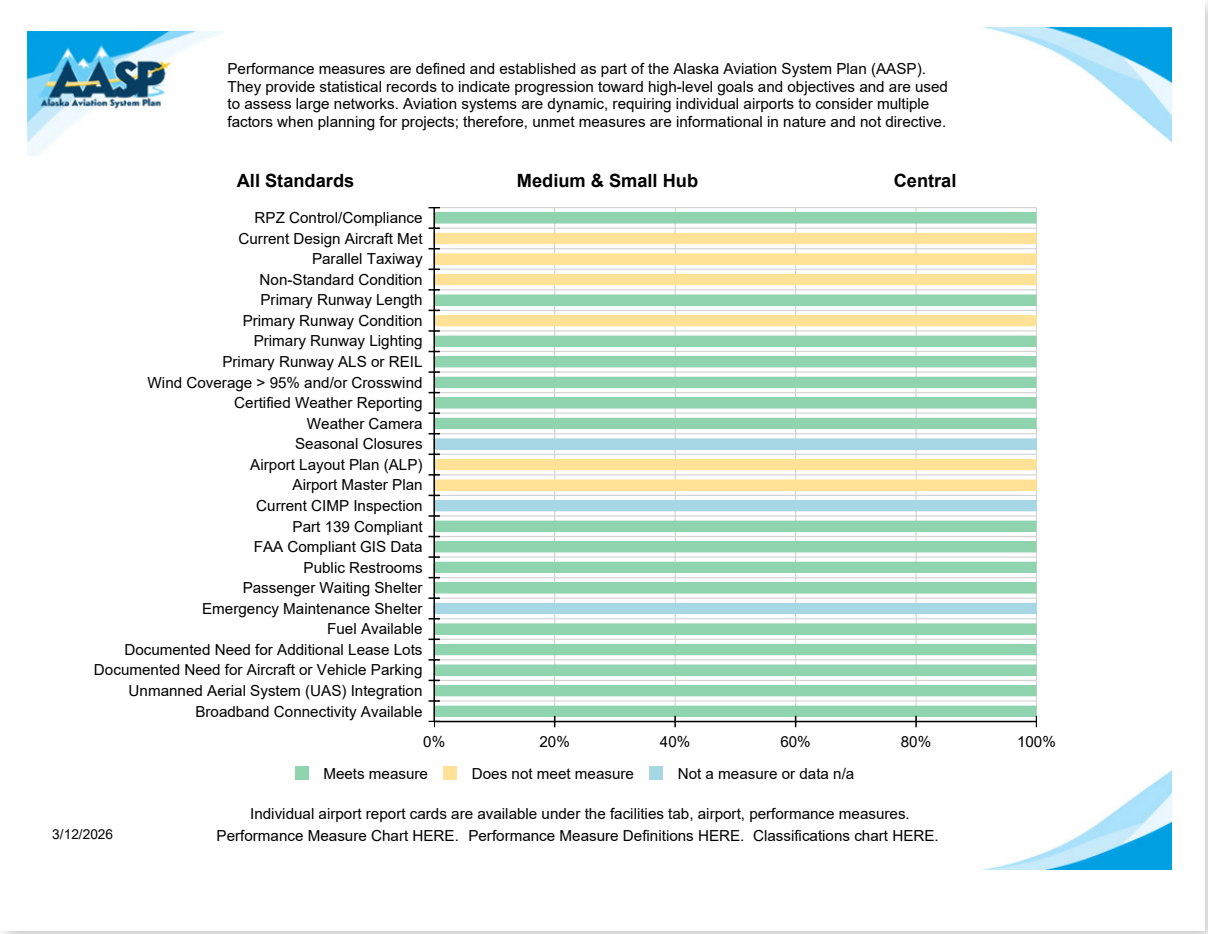


Figure 5. Central Region report card for medium and small hub airports.

The process to update the performance measures and report cards is detailed in *Chapter 3: Classifications & Performance Measures* and the Classifications & Performance Measures fact sheet[3].

PFAS

This subtab is available only to DOT&PF staff to support initial planning and design efforts. The subtab was funded through this contract, with all data collected through other projects and input by DOT&PF staff. Sharing environmental issues is important to planning processes because it advises how and where airport development can responsibly occur. “Environmental and land use considerations” are recommended data elements for aviation system planning, according to AC 150/5070-7.

3 https://www.alaskaasp.com/media/4144/aasp_airport_classifications___perf_measures_final.pdf

AIP Grants

This subtab displays a facility's grant summary statistics (see Figure 6) and allows users to export an Excel spreadsheet with information about all Airport Improvement Program (AIP) grants received by that facility dating back to 1982, when the program began.

Grant Summary Statistics

Total Grants:	11		
Total Number of Grant Work Codes:	12	Total Grants:	$4,617,130.00
Total Number of Open Grant Work Codes:	3	Total Open Grants:	$2,144,837.00
Total Number of Closed Grant Work Codes:	9	Total Closed Grants:	$2,472,293.00

Figure 6. AIP grant summary statistics for Adak (ADK).

The corresponding database-wide feature in the Reports tab allows users to access AIP data for all Alaska public-use airports, with options to filter by facility ownership (DOT&PF or Local Sponsor), federal fiscal year, and more. One main enhancement in this phase relates to a new rolled up summary report called the AIP Grant Summary, which provides ease of reporting by project, rather than individual work codes.

Easily accessing historical grant information by facility or region allows planners to quickly determine what infrastructure has already received federal investment, what funding categories were used, and when projects were closed out. This feature directly supports eligibility research for project initiation, improves data querying across funding types, and helps avoid duplication while identifying remaining eligible components. "Airport financial data" is identified in FAA AC 150/5070-7 as a recommended data element for aviation system planning, reinforcing the importance of maintaining accessible, systemwide grant history to inform future capital programming decisions.

NOTAMs

This subtab allows users to view active and past NOTAMs dating back to May 15, 2020. Reports can be filtered by issue date, commonly used NOTAM condition, status, and whether it is a military NOTAM. Historical NOTAMs provide planners with a documented record of recurring operational disruptions and outages, deficiencies, and seasonal constraints at an airport. Reviewing these trends helps identify underlying infrastructure issues, strengthen safety and eligibility justifications, and translate operational impacts into well-supported capital project scopes.

The FAA's NOTAM Archive Search also allows users to view historical NOTAMS, but the search function requires the user to input a specific date for a single location. The AASP NOTAM report allows users to search by date ranges, filter by specific NOTAM conditions and statuses, and generate reports for not just a single facility but also DOT&PF state regions and maintenance and operations (M&O) districts.

OE/AAA

This subtab connects directly to the FAA Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) web service to allow users to easily access obstruction and airspace information for planning and design purposes. Airspace capacity is a recommended data element for system planning, including the presence of natural or man-made obstructions. Linking the AASP to the OE/AAA database helps to integrate obstruction data into existing workflows for planners and engineers with minimal additional time or effort.

Communities

In the past, Communities was a primary tab, like Facilities or Reports, and much of the information was out of date and not very functional (see Figure 7). During Phase III it was moved under a Facilities' subtab and redesigned to better automate information from the DCRA Data Portal (see Figure 8). These updates allow users to view facility-specific information that is more up to date, including details about community demographics, schools and student counts, and connections to other modes of transportation, all useful when preparing APEB nominations. "Local socioeconomic data" and "surface transportation characteristics" are recommended data elements for aviation system planning, according to AC 150/5070-7. These data elements are useful when developing project recommendations and APEB nominations, as they help explain why improvements are necessary to support a community.

Figure 7. Phase II Communities tab (from Phase II Final Report).

Contacts

This new subtab provides easy access to contact information for airport staff (manually updated) and municipal and Tribal representatives (automatically updated from the DCRA Data Portal). This subtab displays on both the internal and external website and is available as an Excel output.

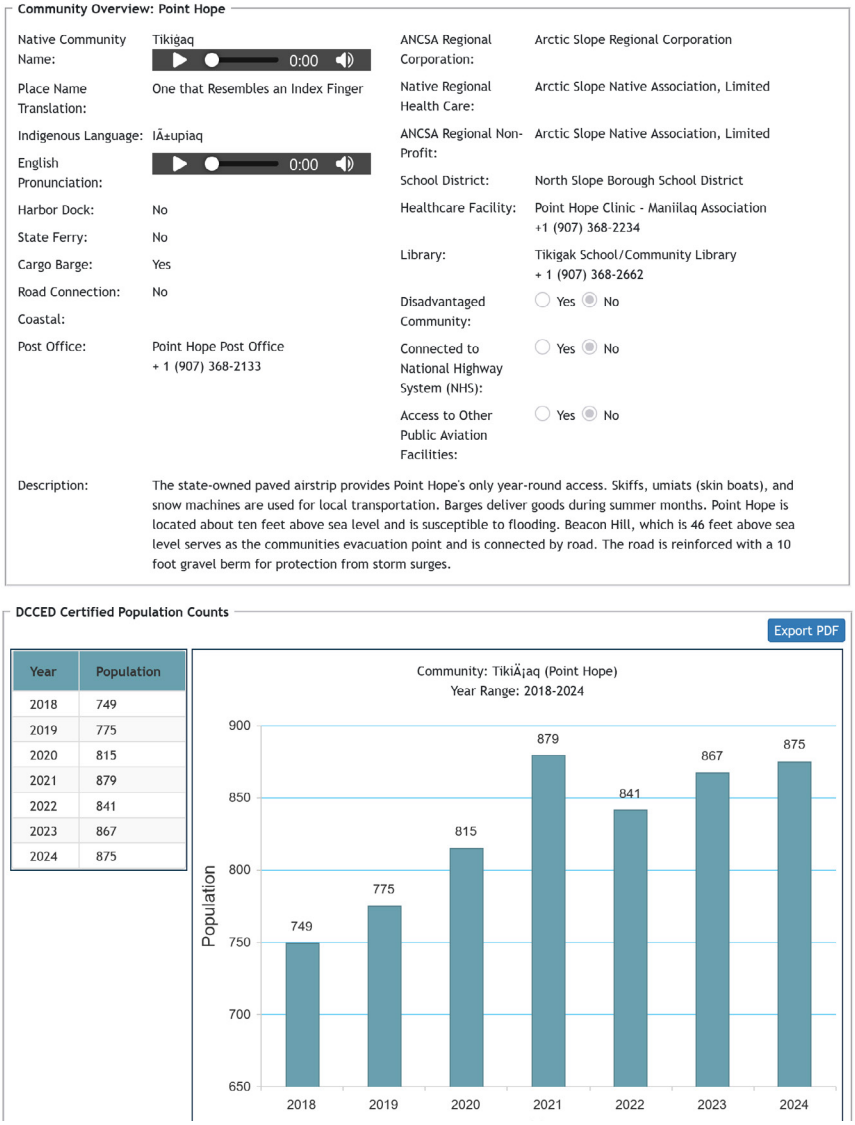


Figure 8. Portion of the Communities subtab for Point Hope (PHO).

Exportable Reports

Much of the information displayed on the website is also available through the Reports tab as exportable Excel or PDF files, supporting holistic tracking, metric development, and system-wide analysis across a large airport network. Most reports also include a variety of on-screen filters that allow exports by individual airport, M&O district, DOT&PF region, or by creating customized lists. This allows planners to easily access all relevant information they need for airport planning and development, and is far more comprehensive than in past plan phases. New and updated (marked with a ˆ) reports include:

Internal Reports	
Subtab	**Report**
ACIP [Airport Capital Improvement Program] *Access limited to specific users*	▶ ACIPˆ ▶ ACIP Project Details ▶ FAA Work Codes
AIP Grants	▶ AIP Grants
Airport Needs Directory	▶ Airport Needs Directoryˆ ▶ Airport Needs Directory Query
CIMP [Capital Improvement and Maintenance Program] Inspection	▶ CIMP Ratingsˆ ▶ CIMP Inspections by Date Query
NOTAMs	▶ NOTAMs
Performance Measures	▶ Individual Airport Scorecardsˆ ▶ Statewide Scorecards
Query Tool*	▶ Airports of interest ▶ Selected attributes ▶ Advanced query builder ▶ Data for all public use airports
Statistics	▶ Statistics Reportingˆ ▶ Weather Reporting
Planning	▶ APEB [Aviation Project Advisory Board] Nominationsˆ ▶ Obstruction Evaluation/Airport Airspace Analysis
Airport Assets	▶ Airport Summary Report ▶ PCI ▶ Building ▶ Equipment ▶ Runway Lighting ▶ Runway ▶ Approach Attributes
Contacts	▶ Airport Contacts ▶ Municipal/Tribal Contacts ▶ Staffed Airport Hours ▶ Air Carrier Information
Public-Facing Reports	
Airport CIP	▶ Standard Reports
Airport Needs Directory	▶ Airport Needs Directory
Airport Contacts	▶ Airport Contacts ▶ Staffed Airport Hours
Airport Assets	▶ Runway Details ▶ Approach Attributes
Airport Summary	▶ Airport Summary

Working Out the Kinks

New data links and elements require extensive testing and validation to ensure that information is populating for all applicable facilities in the AASP database. This effort involves iterative testing and quality control checks to account for variations in available data and system behavior. The process must be repeated each time a new element or data connection is introduced to ensure consistency, reliability, and system-wide integrity across the airport network.

McGrath Airport

III. Airport Needs List Update

System plans document airport development needs, evaluate alternatives, and guide long-term system development. Therefore, a major task of the AASP identifies needs: improvements, repairs or rehabilitations, or replacements of critical elements at an airport, such as airfield lighting, runway resurfacing, or replacing outdated equipment. Development of the Needs List began in Phase I and is continuously improved. Phase III resulted in a comprehensive online repository that enables staff to track facility needs from creation through project closeout while minimizing redundancy. The following sections outline the process for developing, updating, and maintaining the Needs List.

Understanding the Needs List

Needs are identified through inspections, public and leaseholder comments, planning studies, and DOT&PF staff who plan, operate, and maintain airports across the state. They are then recorded and tracked in the Needs List, an internal tool within the AASP website that includes reporting features, The public can view all current needs through the Needs Directory, a public-facing report[4]. DOT&PF staff use the internal Needs List to add or edit information, associate needs with a project planned for future and evaluated through the Department's APEB process, and mark needs as "closed" or addressed at project closeout. This centralized system reduces duplication, ensures needs are consistently tracked, streamlines project development for prioritization, and provides a start to finish record of the process for future planning and funding efforts. The Needs List itself does not guarantee project funding but is intended as a record of possible future work. AIP-eligible airfield and building improvements are eventually incorporated into defined project scopes, which advance through the Aviation Project Evaluation Board (APEB) evaluation process. Project scores determine their priority for funding allocation and integration into the statewide CIP; one factor among many in the overall prioritization process. Projects remain in the queue for inclusion in the Department's Airport Capital Improvement Program (ACIP) until a funding year is assigned. Capital maintenance and equipment needs are also funded through the ACIP, but outside the APEB process. The AIP project development process[5] and APEB project prioritization process[6] are both described in more detail in fact sheets on the AASP website. Figure 9 shows common pathways to funding.

Although the Needs List is an internal DOT&PF tool, the public Airport Needs Directory (Figure 10) is useful for other airport sponsors and community organizations interested in future airport improvements. The public-facing Directory is an exportable PDF and pulls current information for every export. Internal users can also download it as a Word or Excel file. The Directory is organized by airport, showing basic facility information, a CIMP inspection summary, and airport needs. The needs are placed into one of three categories:

- Airport Needs in Planned Projects: funding is planned, but not guaranteed
  - Includes anticipated funding source, status, and expected year
- Additional Identified Needs: need is documented and verified, but not yet in a project
  - Includes anticipated funding source, priority (short-, mid-, or long-term or N/A), and need origination
- Community Economic Development Needs: need important to the community but not eligible for typical DOT&PF or FAA funding sources
  - Includes need origination

Local airport sponsors or community organizations can use the Directory as supporting documentation when applying for other funding sources or conducting other planning studies. Because of their unique nature, Community and Economic Development needs do not include a cost estimate; federally eligible needs are assigned a planning level cost estimate when created. Community and Economic Development needs are discussed in greater detail later in this chapter and in the white paper *The Core of Aviation System Planning: The Airport Needs List*[7].

4 https://internal.alaskaasp.com/Reports/Reports.aspx

5 https://www.alaskaasp.com/media/4032/aasp_aip_project_process_fact_sheet_final_web.pdf

6 https://www.alaskaasp.com/media/4014/aasp_apeb_fact_sheet_final.pdf

7 https://www.alaskaasp.com/media/6251/airport_needs_white_paper_final.pdf

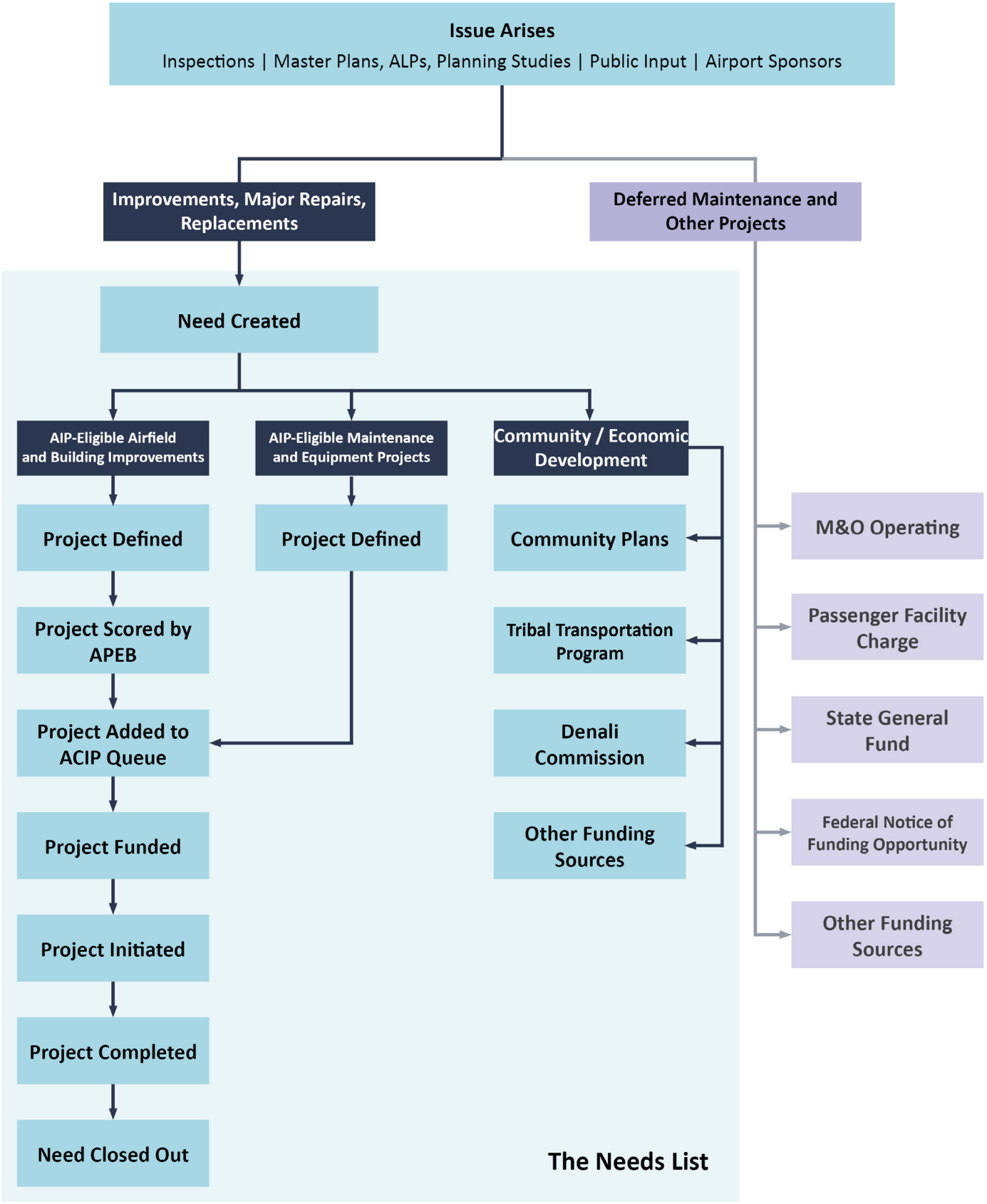


Figure 9. Process for identifying and addressing airport needs.

Owner:ALASKA DOT&PF CENTRAL REGION		
Borough/Census Area: Bethel Census Area	**AASP Classification:** Community Off-Road	**NPIAS Level of Service/Number:** Commercial Service - Nonprimary 02-0345
Population (2024): 716	Part 139 Certificated: No	Revenue (2025): $0
Enplanements (2024): 3,448	USPS Bypass Mail Hub: No	Expenditures (2025): $42,470
Road Access: None	Essential Air Service: No	PFAS Identified in Soil: N/A
Planner Name: Philana Miles	Planner Email: philana.miles@alaska.gov	

Airport Rating Summary from Last CIMP Inspection: (08/30/2021)				
A	**B**	**C**	**D**	**F**
			9	19

Airport Needs in Planned Projects*	Location	Funding	Status	Expected Year
Equipment: ST EQ SN: Acquire Snow Removal Equipment (Akiachak Grader)	38646	NPE	Programmed	2026
Equipment, Security, and Fencing: ST EQ SN : Acquire Snow Removal Equipment (Acquire Loader (Replace 38648))		NPE	Programmed	2028

* Several needs may be combined in one project. Funding is planned, not guaranteed.

Additional Identified Needs**	Funding	Priority	Need Origination
Airport Master Plan	AIP	Short	Inspection
Apply Dust Palliative	AIP	Short	Inspection
Minor Gravel Resurfacing	AIP	Short	Other
Rehabilitate Apron	AIP	Mid	Other
Rehabilitate Runway	AIP	Mid	Other
Rehabilitate Runway Lighting	AIP	Short	Inspection
Rehabilitate Taxiway	AIP	Mid	Other

** Additional Identified Needs are documented and verified but not yet included in a project.

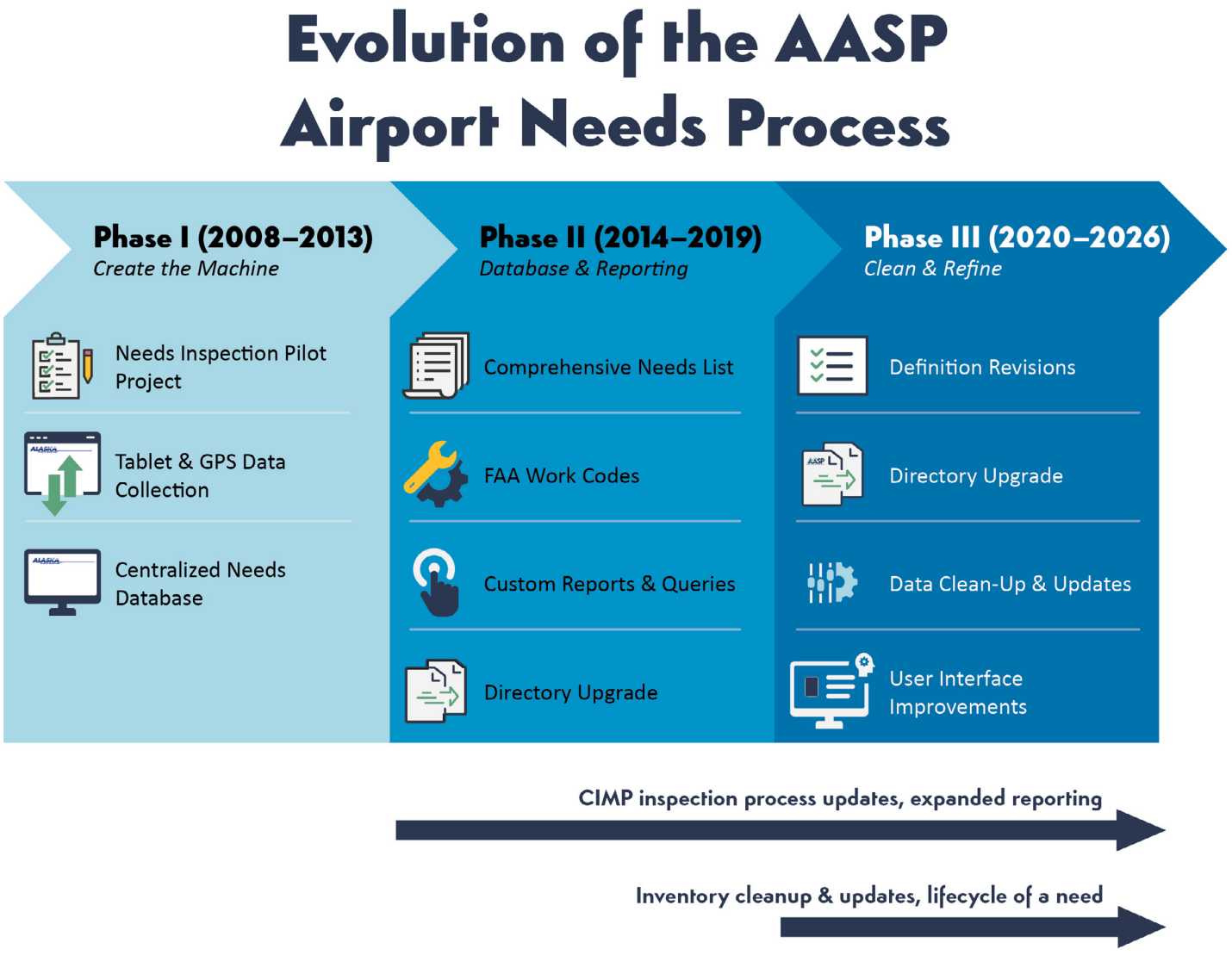
Community Economic Development Needs***	Need Origination
Construct Passenger Shelter	Community
Construct Toilet Facilities	Community
Construct Tie-Downs	Community

***Community Economic Development/Quality of Life needs make the airport more viable for reasons of economic development, community comfort (passenger shelter/restrooms) and may be accomplished through community funds combined with other sources such as Denali Commission, Tribal Transportation, or private sources. Each community solution to these needs will be unique; therefore, the funding source, estimated cost, and priority are not tracked.

Figure 10. Example page from the Airport Needs Directory.

Origin and Evolution of the Needs List

In early phases of the AASP, airport needs were tracked by individual planners and maintenance staff, often using sticky notes or at most a spreadsheet accessible to just one person. There was no official, centralized record, which led to missed opportunities, overlooked needs, and general inefficiency. The Needs List launched internally during Phase II, drawing on work from Phases I and II, including the Airport Needs Inspection Pilot Program and the Capital Improvement and Maintenance Program (CIMP) inspections. The Needs List continues to evolve alongside other improvements in the AASP, becoming a more reliable, systemwide tool for identifying and tracking airport needs. By 2018, the DOT&PF Airport Needs Directory was over 250 pages and contained extensive need lists for all DOT&PF owned airports; the current Needs Directory, after data consolidation, reviews, and updates throughout Phase III, is approximately 297 pages.



Phase III Updates

During Phase III, Needs List refinement removed duplicate needs (needs created using slightly different naming conventions, but referred to the same thing), updated cost estimates, and focused on capital improvement projects and proactive identification of needs. Past iterations captured routine maintenance and minor items that are more effectively addressed through other processes. Phase III improvements enable consistent tracking of needs over time, from identification to close-out and in one centralized system, ensuring the AASP is able to effectively "determine the type, extent, location, timing, and cost of the airport development needed" across the system (AC 150/5070-7 Change 1). The Needs Directory informs policy, resource allocation, and strategic decision-making for airport infrastructure, regional development, land use, environmental compliance, and long-term statewide connectivity.

Establishing the Baseline and Priorities

The team completed a holistic review of documented needs, the needs tracking process, and the processes linked to the Needs List (e.g., CIMP inspections and APEB nominations and evaluations). This review identified that many needs were duplicated, cost estimates were out of date or missing, and a system was needed to close out needs that have been addressed.

The TAC held several meetings to discuss the vision for how needs integrate within the overall airport development process. To strengthen the accuracy, usability, and long-term value of the Airport Needs List, the AASP team focused on several key improvements:

- Eliminate duplicate needs.
- Segregate needs into categories.
- Focus on needs funded through the capital improvement process.
- Recognize the importance of tracking community needs that are outside federal eligibility or outside DOT&PF maintenance, but that could qualify for other programs from other private or government agencies.
- Update planning-level cost estimates for federally eligible needs.
- Standardize the process for tracking and naming needs.
- Separate the Needs Directory by region, M&O district, and airport to facilitate easier public viewing.
- Develop a process to ensure that completed needs are captured within the process.
- Make the data more accessible and publicly available.

Removing Duplicate, Completed, and Outdated Needs

The update began by reviewing the existing Needs List for each airport to remove unnecessary items (see Figure 10 for a snippet of the spreadsheet used to review Akiachak Airport's needs). Duplicate needs (e.g., "runway rehab" and "runway rehabilitation" listed under the same airport) were combined; routine maintenance and completed needs were deleted; and outdated needs were updated or removed. This process required careful review by the AASP team and regional planners to ensure necessary information stayed intact. When this process was complete, over 600 needs were deleted from the statewide list, making the information far more digestible and accurate.

Airport	Phase III Update Status	Comments/Questions for Reviewers	DOT&PF Review Comments Add Comments Here!
AKIACHAK	Delete	Delete, duplicate created in 2021 CIMP	
AKIACHAK	Delete	Delete, AWOS is already in project	
AKIACHAK	*Disregard*	*This need has been associated in an existing project and therefore is disregarded.*	
AKIACHAK	*Disregard*	*This need has been associated in an existing project and therefore is disregarded.*	
AKIACHAK	Updated/validated	From ALP ultimate. Extend runway 3,000' to 5,000'.	
AKIACHAK	Updated/validated	DOT JLW states modify to ALP Update and list as a performance measure, when appliable. This need is not currently associated with a project, unless it was attached to M&O's project (in which case it should be detached).	Modify to ALP Update and list as a performance measure, when appliable. This need is not currently associated with a project, unless it was attached to M&O's project (in which case it should be detached).

Figure 11. Needs validation spreadsheet for Akiachak Airport.

AKHIOK ('AKK)

Runways: 04/22 - 3,120 **Surface:** GRAVEL-G **Lighting:**

Classification: Community Off-Road **CY15 Enplanements:** 1,243.00 **Borough:** Kodiak Island Borough
Air Carrier Hub: No **Medical Facility:** No **FY15 Revenue:** $0.00
USPS Hub: Yes **School Facility:** **FY15 Ops Cost:** $19,937.06
Part 139 Cert: No **On/Off Road:** Off **Last CIMP Inspection Date:** 10/10/2016
Last Major Improvement: **Hours of Operation:** UNATNDD
Airfield Manager: BRUCE MCNEIL, 907-487-4952

NEEDS:

Acquire 21 acres of property to control expanded airspace
Brush Cutting
Construct 180' Runway Extension
Construct and relocate new apron to provide offsets for non-precision approaches
Construct New Segmented Circle and Wind Cone
Construct Passenger Shelter
Construct supplemental wind cone
Construct taxiway B
Construct Toilet Facilities
Demolish existing SREB
Grade Runway 4/22
Grade safety Areas
Improve runway to accommodate additional use
Install MIRL Runway Lighting
Install Perimeter Fence
Install taxiway edge lighting
Install VGSI (PAPI)
Loader
Lower access road profile to mitigate airspace obstructions
Obliterate part of access road
Rehabilitate/resurface access road
REIL, and navigation lighting aids
Relocate AWSS
Relocate part of access road
Relocate taxiway and apron
Remove OFA/OFZ penetrations
Replace Cones
Replace existing apron
Replace Segmented Circle
Replace/Relocate new 2-bay SREB
Runway, taxiway, and apron pavement rehabilitation
SREB Cleanup

Figure 12. Example of a duplicated need from the January 2018 Airport Needs Directory

Standardizing Needs

After cleaning up the List, the team updated the need entry webpage, refining the process and interface to improve clarity and data quality. Updates included automating FAA work code naming conventions, adding a Common Name field to improve readability in queries and reports, and introducing new Location Type and Location fields so planners can identify the specific airport component involved, which better aligns need entry with the CIMP inspection process. Figure 13 shows the Create Need form at the end of Phase II and Phase III.

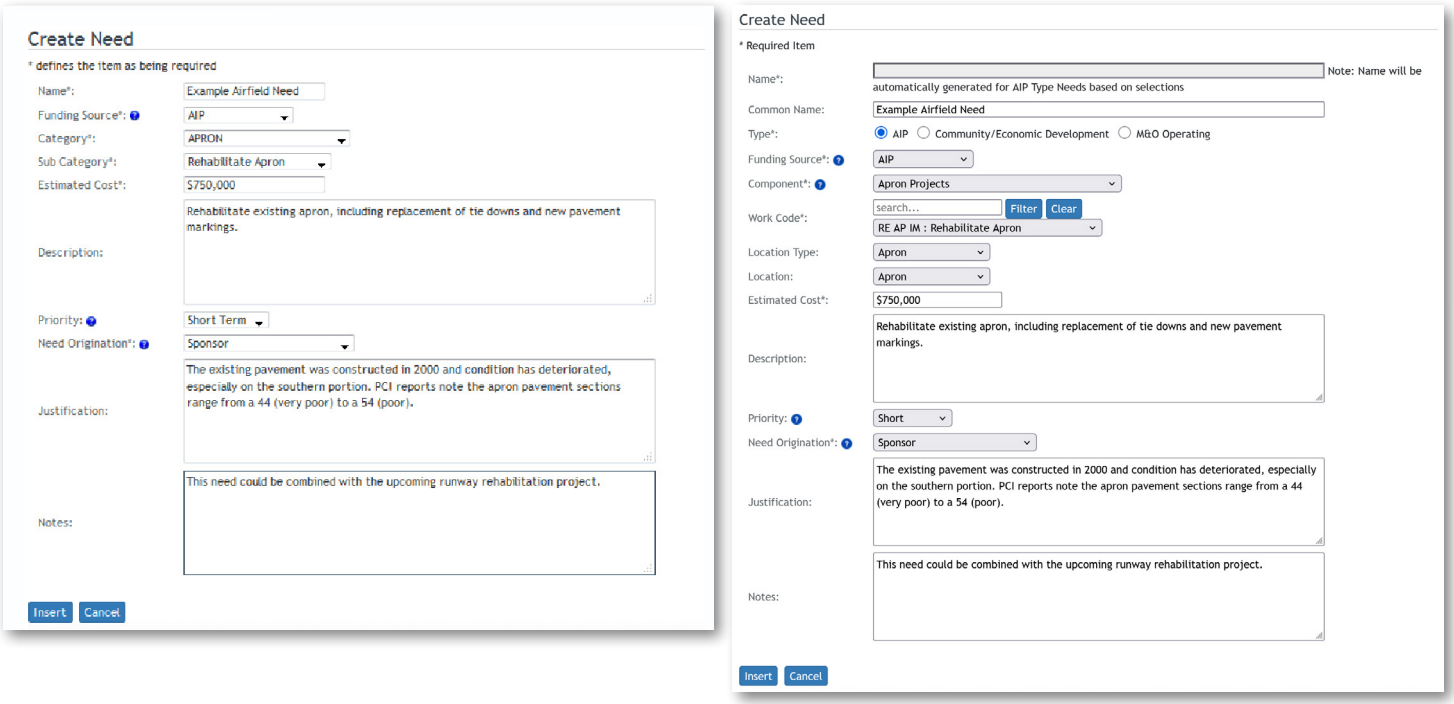


Figure 13. The Phase II (left) and Phase III (right) Create Need form.

Inputs also require planners to identify the type of need they are creating (AIP, Community/Economic Development, and M&O Operating), which ensures the need is properly categorized in the Needs List and Needs Directory, and advises how it travels through the project development process as funding opportunities occur.

Because this data collection predominantly focuses on federally eligible work, FAA work codes were added so planners could assign a work code when creating or updating a need. Including it in the need's name ensures project funding aligns with federal requirements and supports development of CIP datasheets, i.e. forms that are used to program projects within the overall ACIP. This also prohibits duplicates because planners can quickly see the work code in the name of an existing need. The form provides a dropdown list of work code options based on the Component selection; alternatively, planners can export an Excel spreadsheet with information about each work code, filtered by purpose, component, or type.

The FAA uses **work codes** to prioritize projects in the ACIP. Work codes are a sequence of three 2-character codes that correspond to the project purpose, component, and type. Each of the 2-character codes has an associated point value to determine the project's national priority rating (NPR).

For example, the need "Acquire Snow Removal Equipment (Akiachak Grader)" has the work code ST EQ SN.

ST: standards

EQ: equipment

SN: snow

Updated status descriptions better identify the stage of a need within a project within the overall funding process, allowing for easy querying and clear information in the Needs Directory. Table 2 shows the status options and their descriptions.

Table 2. Need Status and Description

Need Status	Description
Draft Need	Deficiency identified through inspection, public comment, etc. and is awaiting review from a planner.
Need Created	Deficiency documented and associated with a new or existing need.
Verified Need	Need has been corroborated by a CIMP inspection.
In Project	Need is included in a project.
Programmed	Need is included in a project programmed in the ACIP.
Obligated	Need is included in a funded project.
Closed Out	Need addressed and closeout completed.

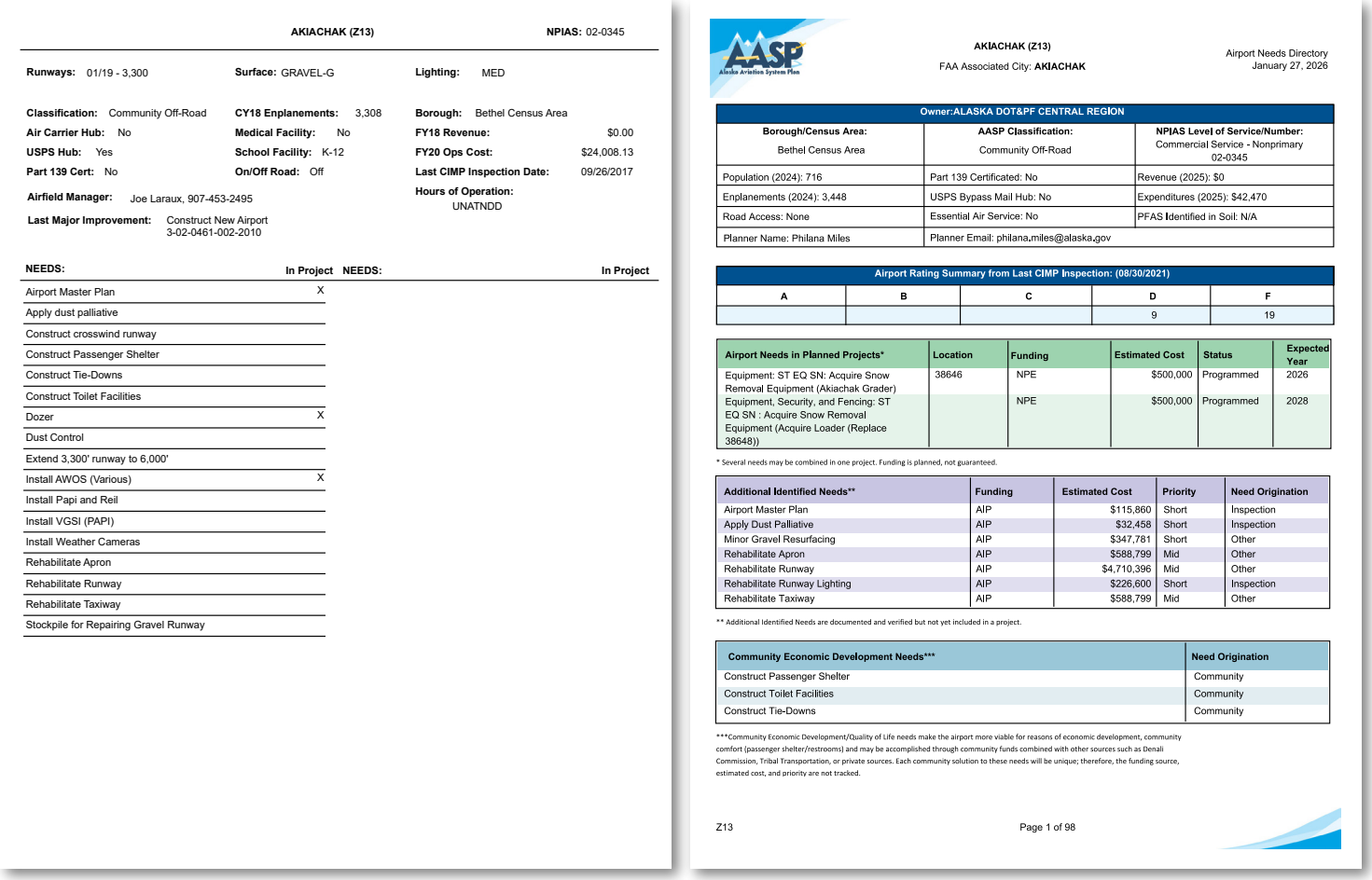
Defining Community and Economic Development Needs

Meetings with the TAC included discussions of ineligible needs and whether they remain on the Needs List. Ultimately the TAC determined that many of the needs under discussion, such as public restrooms, FAA-managed navigational aids, passenger waiting facilities, vehicle parking lots, and lease lot development, were important community and economic development needs that should be tracked for each location. These needs are not addressed by DOT&PF funding and will have unique, community-driven solutions to fund; therefore, the TAC recommended not tracking the funding source or cost estimate. Therefore, the Needs Directory only shows the need and its origination.

Anaktuvik Pass Airport

Improving the Needs Directory

The original Needs Directory (previously called the Needs Book) was a plain document listing all the needs created for a facility; it was generated and posted online once a year. While functional and a large improvement from the unorganized attempt to capture this before going digital, the team recognized it could be more user friendly, easier to manage, a great deal shorter in length, and provide greater transparency. The updated Directory is more visually interesting, organizes needs into useful categories, and provides more detail, such as the funding source and how it originated. Figure 14 compares the Phase II and Phase III Needs Directories.



AKIACHAK (Z13) **NPIAS:** 02-0345

Runways: 01/19 - 3,300 **Surface:** GRAVEL-G **Lighting:** MED

Classification: Community Off-Road **CY18 Enplanements:** 3,308 **Borough:** Bethel Census Area
Air Carrier Hub: No **Medical Facility:** No **FY18 Revenue:** $0.00
USPS Hub: Yes **School Facility:** K-12 **FY20 Ops Cost:** $24,008.13
Part 139 Cert: No **On/Off Road:** Off **Last CIMP Inspection Date:** 09/26/2017
Airfield Manager: Joe Laraux, 907-453-2495 **Hours of Operation:** UNATNDD
Last Major Improvement: Construct New Airport 3-02-0461-002-2010

NEEDS:	In Project
Airport Master Plan	X
Apply dust palliative	
Construct crosswind runway	
Construct Passenger Shelter	
Construct Tie-Downs	
Construct Toilet Facilities	
Dozer	X
Dust Control	
Extend 3,300' runway to 6,000'	
Install AWOS (Various)	X
Install Papi and Reil	
Install VGSI (PAPI)	
Install Weather Cameras	
Rehabilitate Apron	
Rehabilitate Runway	
Rehabilitate Taxiway	
Stockpile for Repairing Gravel Runway	

AKIACHAK (Z13)
FAA Associated City: **AKIACHAK**

Airport Needs Directory
January 27, 2026

Owner:ALASKA DOT&PF CENTRAL REGION		
Borough/Census Area: Bethel Census Area	**AASP Classification:** Community Off-Road	**NPIAS Level of Service/Number:** Commercial Service - Nonprimary 02-0345
Population (2024): 716	Part 139 Certificated: No	Revenue (2025): $0
Enplanements (2024): 3,448	USPS Bypass Mail Hub: No	Expenditures (2025): $42,470
Road Access: None	Essential Air Service: No	PFAS Identified in Soil: N/A
Planner Name: Philana Miles	Planner Email: philana.miles@alaska.gov	

Airport Rating Summary from Last CIMP Inspection: (08/30/2021)

A	B	C	D	F
			9	19

Airport Needs in Planned Projects*	Location	Funding	Estimated Cost	Status	Expected Year
Equipment: ST EQ SN: Acquire Snow Removal Equipment (Akiachak Grader)	38646	NPE	$500,000	Programmed	2026
Equipment, Security, and Fencing: ST EQ SN : Acquire Snow Removal Equipment (Acquire Loader (Replace 38648))		NPE	$500,000	Programmed	2028

* Several needs may be combined in one project. Funding is planned, not guaranteed.

Additional Identified Needs**	Funding	Estimated Cost	Priority	Need Origination
Airport Master Plan	AIP	$115,860	Short	Inspection
Apply Dust Palliative	AIP	$32,458	Short	Inspection
Minor Gravel Resurfacing	AIP	$347,781	Short	Other
Rehabilitate Apron	AIP	$588,799	Mid	Other
Rehabilitate Runway	AIP	$4,710,396	Mid	Other
Rehabilitate Runway Lighting	AIP	$226,600	Short	Inspection
Rehabilitate Taxiway	AIP	$588,799	Mid	Other

** Additional Identified Needs are documented and verified but not yet included in a project.

Community Economic Development Needs***	Need Origination
Construct Passenger Shelter	Community
Construct Toilet Facilities	Community
Construct Tie-Downs	Community

***Community Economic Development/Quality of Life needs make the airport more viable for reasons of economic development, community comfort (passenger shelter/restrooms) and may be accomplished through community funds combined with other sources such as Denali Commission, Tribal Transportation, or private sources. Each community solution to these needs will be unique; therefore, the funding source, estimated cost, and priority are not tracked.

Z13 Page 1 of 98

Figure 14. Comparison of Phase II and Phase III Need Directories.

The Directory includes a list of acronyms and definitions and a key to understanding the document to maximize accessibility for users. Public users can generate a PDF by selecting “Airport Needs Directory” within the Reports tab, adjusting the filters as needed, and clicking “Export.” See Appendix A for the full Needs Directory as of MONTH DAY, 2026.

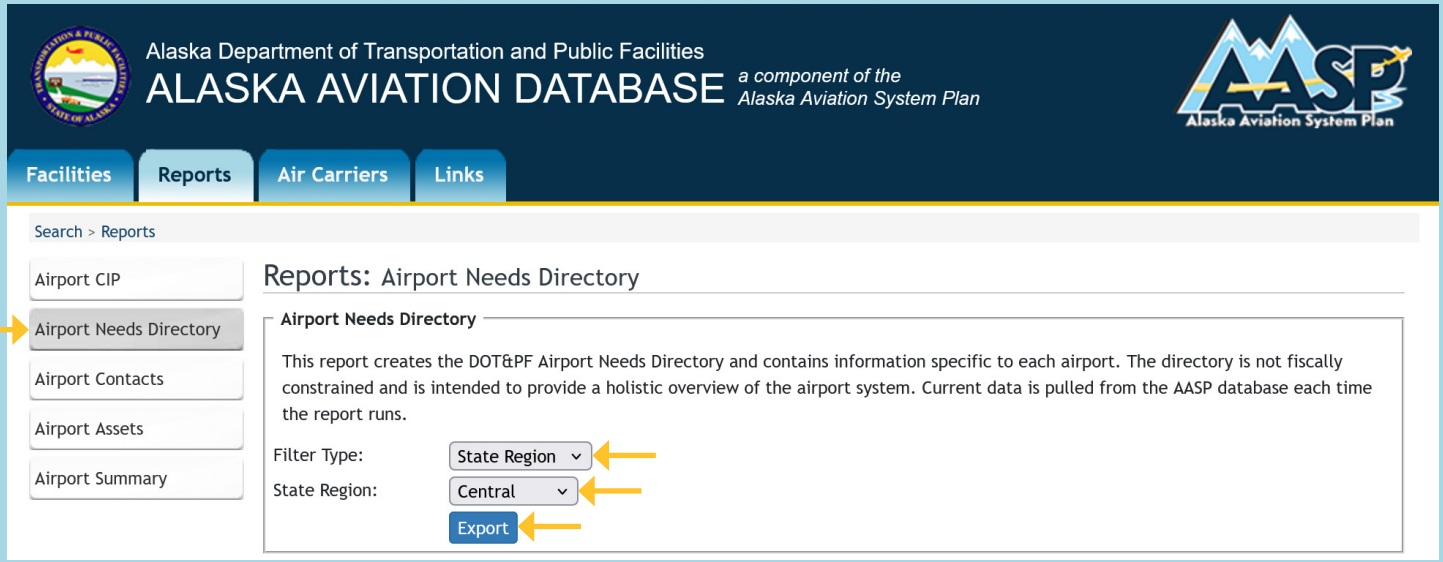
Internal users have the option to export the Directory as a PDF, Word document, or Excel file from the “Airport Needs Directory” subtab of the Reports tab. Internal users can also query the Directory from the website, creating an Excel file that has been more finely tailored to the user’s needs.

The Airport Needs Directory pulls the latest information from the AASP website each time it is downloaded, so the information is current. The sample page below shows how an individual airport is presented and how the needs are segregated into categories. The date at the top indicates when the information was pulled from the database.

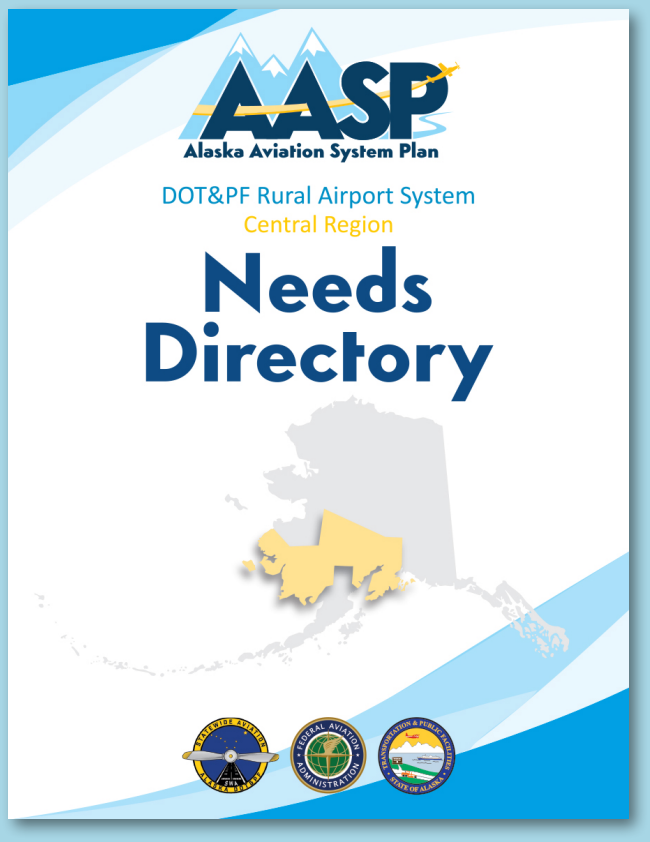
To Export the Needs Directory

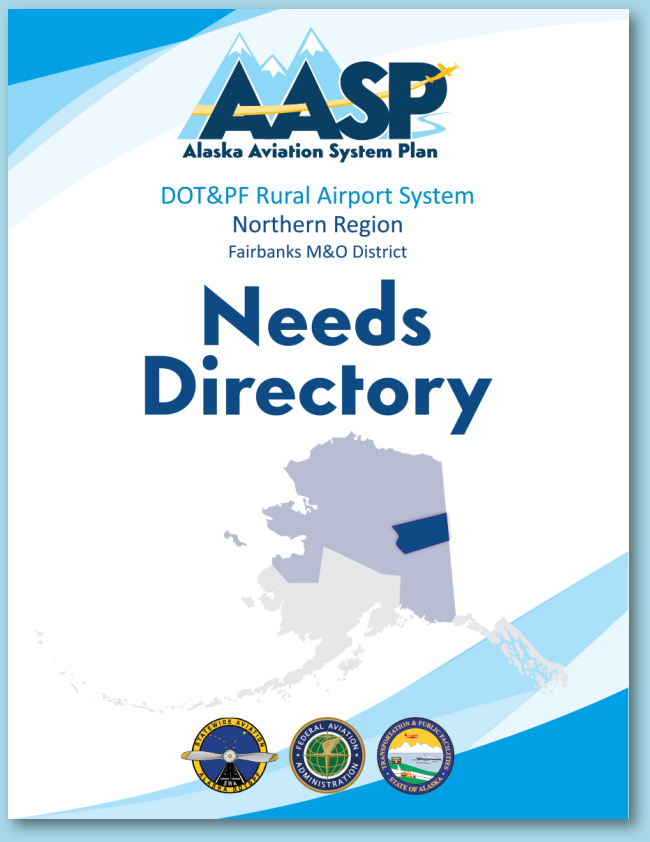
Go to the Reports tab on www.alaskaasp.com

Go to the Airport Needs Directory subtab, set the filters, and click export.



The exported Directory will show the relevant DOT&PF region or M&O district on the cover.





DOT&PF Airport Capital Improvement Program (ACIP) and CIP Datasheets

Once details are defined and the need created, the need then routes through a project as it proceeds toward funding and completion. Throughout these next steps it remains on the Needs List as an active component included within a project, at which point the needs and project receive additional review and cost estimating by engineering staff.

Detailed cost estimating occurs as project scopes are defined and move through the process, and the FAA's CIP datasheet form is used when programming a project into the Department's Airport Capital Improvement Program (ACIP), as it awaits funding obligation. A CIP datasheet is the FAA's standardized project summary form that airport sponsors use to describe and justify a proposed development or planning project, and FAA uses them to evaluate eligibility, priority, and alignment with AIP goals and then program them into the funding plan. The digital form on the AASP was designed to mimic the form DOT&PF currently uses (see Figure 15) and capture that data within the system.

This phase of the AASP created a secondary tab under the internal ACIP tab to allow for better digital tracking and querying of CIP datasheets as they move through the process (see Figure 6). *Chapter 7: System Planning Database Innovation* details the many updates made to the website to improve the digital ACIP process and create customizable reports to support planners, engineers, and other staff working various parts of the process.

CIP DATASHEET

Airport Name: Chevak — Grant Year: FFY 2024

LOCID: VAK — Date Submitted: Jan 2024

CIP Work Code				
Purpose	Component	Type	Project Description	Cost in Dollars ($)
RE	RW	IM	Rehabilitate Runway	$8,479,000
SA	RW	SF	Improve Runway Safety Area	$9,134,000
RC	RW	LI	Reconstruct Runway Lighting	$1,817,000
RE	TW	IM	Rehabilitate Taxiway	$695,000
RC	TW	LI	Reconstruct Taxiway Lighting	$332,000
RE	AP	IM	Rehabilitate Apron	$2,229,000
RE	AR	IM	Rehabilitate Access Road	$1,156,000
RC	EQ	VI	Reconstruct Airport Beacon	$274,000
SP	OT	IN	Install Miscellaneous NAVAIDs	$4,429,000
ST	BD	SN	Rehabilitate Snow Removal Equipment Buildings	$1,332,000
			Total Cost:	**$29,877,000**
			Sponsor Share:	**$1,867,313**
			Federal Share:	**$28,009,687**

Project Description and Justification:

This project proposes to rehabilitate the runway, taxiway, apron, and airport access road with crushed aggregate surface course and a dust palliative. The runway will be re-graded to meet line-of-sight requirements and the RSA will be widened and lengthened to meet ADG II standards. The airfield lighting system, segmented circle, primary and supplemental cones will be reconstructed. The existing rotating beacon, currently installed on the roof of the snow removal equipment building (SREB), will be replaced with a new rotating beacon on a tip-down pole. The FAA PAPI and REILs will be relocated due to the rehabilitation. The snow removal equipment buildings will also be rehabilitated.

The existing operational surfaces on the airfield are in a deteriorated condition with uneven surface grades which cause ponding of storm water and snow melt. An area of high ground along the runway centerline causes an obstruction to line-of-sight that does not meet FAA standards. Additionally, the runway safety area (RSA) is sized for Airplane Design Group (ADG) I, but an increase of operations by larger aircraft has caused the critical aircraft for this airport to be upgraded to ADG II. The runway and taxiway lighting are beyond their useful service life and are in need of replacement. Expected benefits from this project will include improved safety, improved surface grades and surface drainage, and extension of the service life of the existing infrastructure. Correction of the line-of-sight obstruction and widening of the RSA will bring the runway into compliance with FAA design standards. The two single bay snow removal equipment buildings on steel skids need to be rehabilitated to extend the service life. The buildings need to be reset to grade due to embankment settlement, doors need to be replaced due to severe weathering, and various improvements needed due to corrosion.

Figure 15. FAA CIP Data Sheet (CE Form 5100-146).

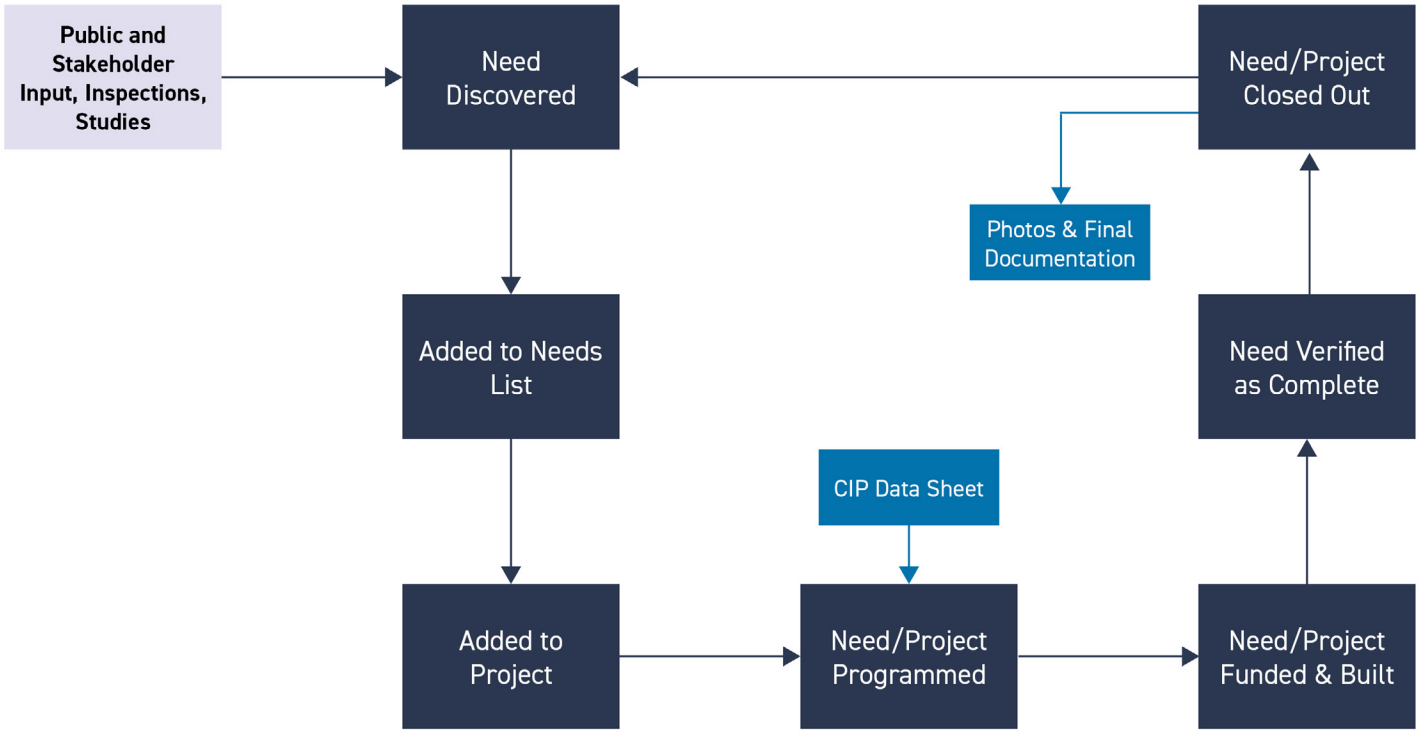


Figure 16. The needs cycle.

Keeping the Data Current – Closing the Loop

One of the most significant Phase III improvements to the holistic needs tracking system was the creation of the "Close the Loop" process. It marked the completion of the cycle, tracking a need from initial input, through planning, design, and construction, to capturing completion of the work. Before adding this last piece, no way existed to mark a need as addressed and not staying "in progress" forever. The team mapped the lifecycle of a need and project to pinpoint moments where automated clean-up could occur. At project closeout, the system flags the associated needs as addressed and corresponding staff verify work was completed, ensuring they're removed from the Directory and the loop stays tight, accurately reflecting the changes. This process involves completing a form on the internal AASP website to identify which needs were addressed in a project, edit or create new needs, record the date of the final inspection and as-builts, and upload pictures of the completed project or equipment. When a need is complete and the corresponding project closed out, it is removed from the current Needs List but recorded within the database for future reference through the internally accessible Closed Project Summary report. This creates an opportunity to highlight the effort required to move projects through development and quantify that work over time to support future planning.

However, the project development process is not always linear along a standard path. This can occur for a few reasons; the most common is lack of funds, but it could also occur because of unforeseen environmental issues, unavailability of components, or materials issues. As a result, a project's need may not be addressed within a standard timeframe, or the scope may change during the life of the project. A fully automated process might miss these changes during project delivery, so manual oversight ensures data is correctly depicted.

After careful consideration and deliberation, the team concluded the solution is a combination of communication, automated reminders, and a hands-on review of final closeout documents. The Figure 17 depicts the life cycle of a need within the AASP, the responsibility of the aviation planners, and the automated reminders and closing of needs that could be accomplished with programming.

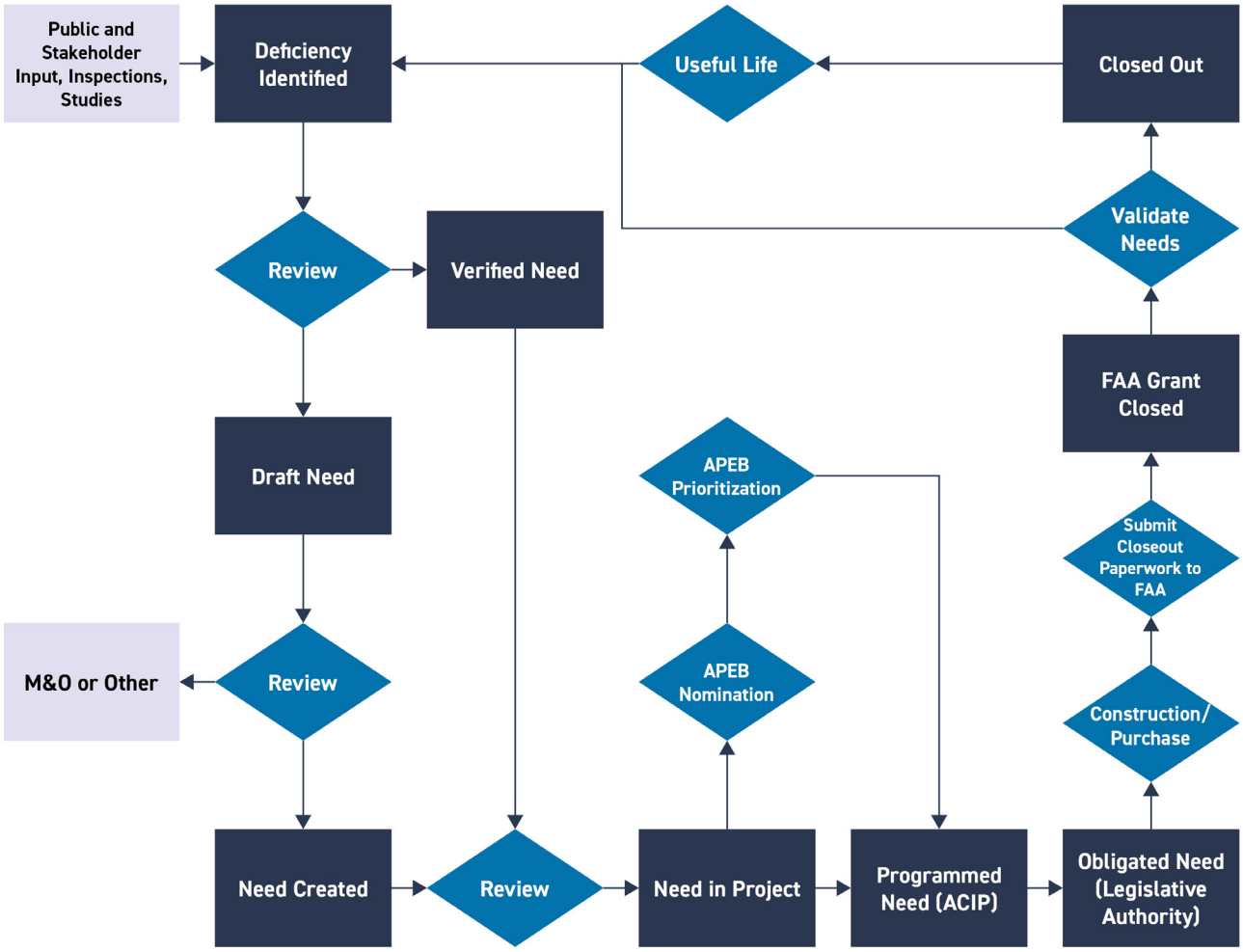
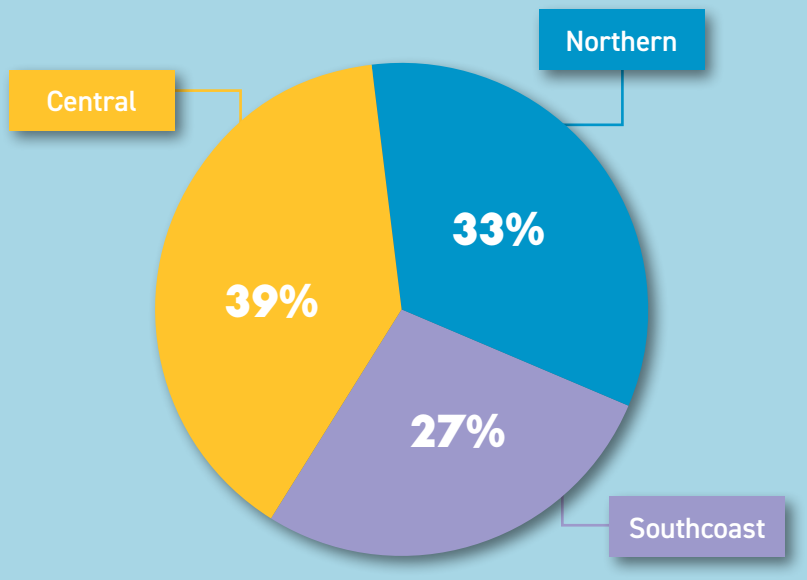


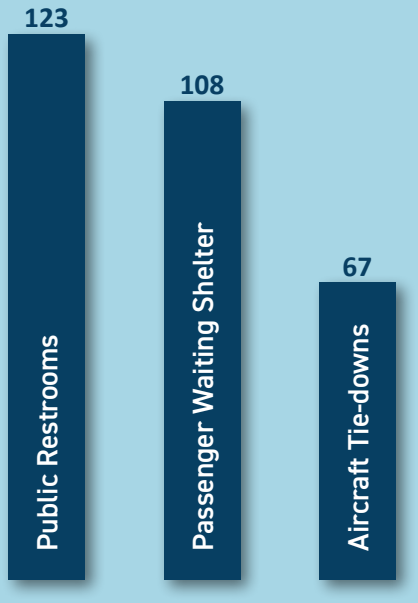
Figure 17. Phase III refined the needs workflow and added steps to Close the Loop.

This program assists with reminder emails, and along with the internal dashboard enables planners and others to track projects for airports for which they are responsible. While these improvements expedite and streamline the process, confirming accuracy still rests with the aviation planners for each airport. Maintaining the Needs List is an iterative process that will be improved upon as requirements and technology change; future phases will likely require additional inventory updates and holistic reviews to improve system assessments and future reporting needs.

Current Needs in Each Region



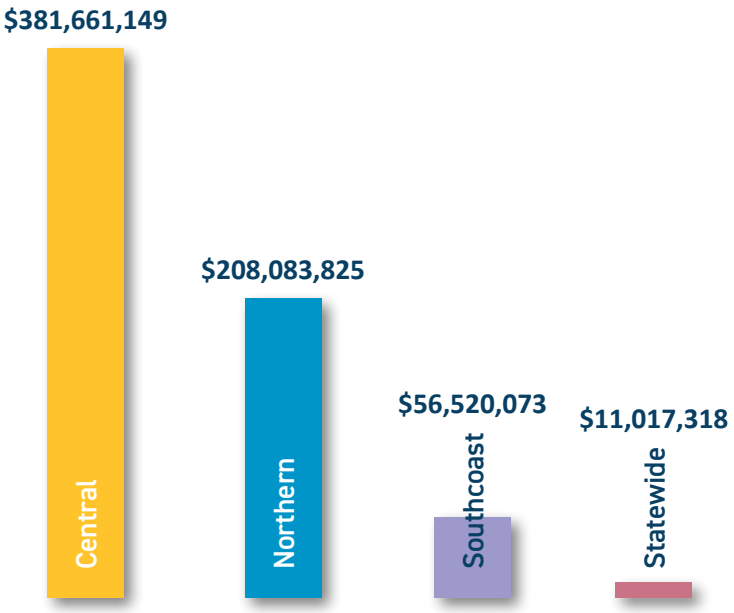
Top 3 Community and Economic Development Needs



Based on the Airport Needs Directory as of May 2026, excluding Closed and Pending Closeout needs.

Project Pending Closeout in Each Region

As projects are closed out, their associated needs are marked "Closed" and drop off the Needs List.



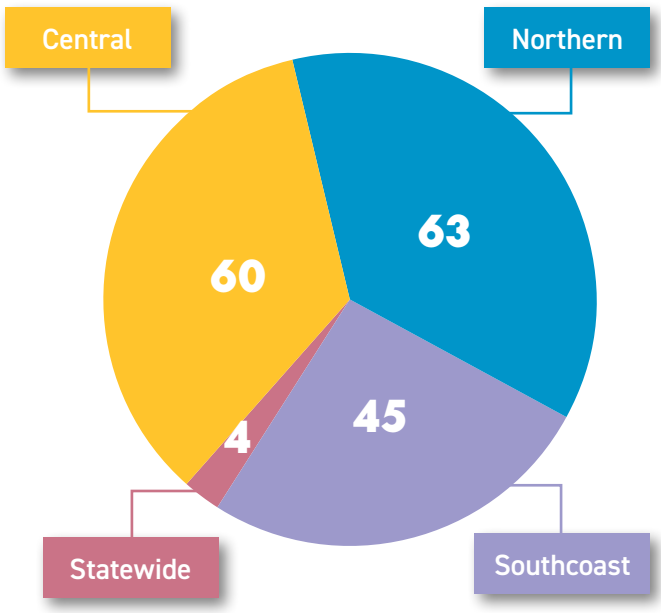


Figure 18. Snapshot of needs and projects at the end of Phase III.

IV. Observations and Recommendations

The AASP database contains a substantial inventory of facility, community, environmental, and operational information, though many people who would benefit from accessing this information are unaware it is available. This was evident in responses to the End of Phase III survey, wherein many respondents requested datasets and tools that already exist on the AASP website. Some DOT&PF staff even indicated they were unaware of the AASP website altogether. Targeted outreach, especially within DOT&PF, would help ensure the information maintained through the airport inventory and needs list are used by all potential users.

Some of the dataset requests were for items not already on the website, however, and future inventory updates should consider which requests would be beneficial to include, such as:

- Operational counts and reporting options for critical aircraft determination
- Letters of Correction
- Route maps
- Air carrier complaints

The Airport Needs List underwent significant changes during Phase III and will continue to evolve as users identify areas for refinement. During Phase IV, the AASP team should ensure all Needs List and Needs Directory materials are using the most up-to-date language and information (for example, the "Key to Understanding Individual Airport Needs Report" requires updating) and conduct regular check-ins with CIMP inspectors and planners to ensure all systems are interacting smoothly, help users understand how to most effectively utilize the database, and identify opportunities for improvement.

Additionally, the team should conduct outreach to local sponsor airports, municipalities, and Tribes to ensure non-DOT&PF users understand what the Needs Directory is and how it is maintained. A comment in the End of Phase III Survey stated directly, "I like the idea of the needs list, but I don't trust any of the information in it," indicating there is a need for public education to explain the reliability and accuracy improvements that have been made.

Tok Junction Airport

V. Conclusion

Maintaining accurate airport inventory and needs are critical components of ensuring a safe and reliable airport system. Phase III of the AASP made great strides in leveraging technology to assist in keeping the information updated and relevant, but hands on inspections, review, and verification will continue to play a critical role in managing the system. The inventory update and improved Needs List support the primary purpose of system planning—determining the "type, extent, location, timing, and cost of the airport development needed" in the system—by accurately tracking existing conditions, needed improvements, and ongoing programming and projects and building in steps to ensure documentation is uploaded, all in one central location.

Alaska Aviation System Plan

Prepared for:

With a grant from:

The preparation of this document was supported in part with financial assistance through the Airport Improvement Program from the Federal Aviation Administration AIP Grant Numbers 3-02-0000-031-2022 and 3-02-0000-033-2024 as provided under Title 49 USC § 47104. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

Prepared for:
State of Alaska
Department of Transportation and Public Facilities
Division of Statewide Aviation
4111 Aviation Avenue
Anchorage, Alaska 99502

Prepared by:
RESPEC Company, LLC
2700 Gambell St., Suite 500
Anchorage, Alaska 99503

In association with:
B2Gnow
Marshall Arts Design

For more information contact:
statewideaviation@alaska.gov
or visit the AASP website at
www.alaskaasp.com

Photo credits:
Dave Wilson
Brett Coblentz