INTERIOR ALASKA
Transportation Plan

TECHNICAL MEMORANDUM 2

Aviation Transportation: Conditions, Issues, and Trends

January 2024

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FIGURES

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ACRONYMS

AAC	Aircraft Approach Category
AAM	Advanced Air Mobility
AASP	Alaska Aviation System Plan
AC	Advisory Circular
ACAIS	Air Carrier Activity Information System
ACIP	Airport Capital Improvement Program
ACMAC	Alaska Civil Military Aviation Council
ACUASI	Alaska Center for UAS Integration
ADF&G	Alaska Department of Fish and Game
ADG	Airplane Design Group
ADIP	Airport Data and Information Portal
AFSS	Automated Flight Service Station
AIP	Airport Improvement Program
AK	Alaska
AOPA	Aircraft Owners and Pilots Association
A-Paid	Aviation Paid Weather Observers
APEB	Aviation Project Evaluation Board
ARPA	American Rescue Plan Act
ARRA	American Recovery and Reinvestment Act of 2009
ARTCC	Air Route Traffic Control Center
ASOS	Automated Surface Observing Systems
AST	Alaska State Troopers
AWOS	Automated Weather Observing Systems
BIL	Bipartisan Infrastructure Law
BLM	US Bureau of Land Management
BLM AFS	Bureau of Land Management Alaska Fire Service
BTS	Bureau of Transportation Statistics
CAP	Civil Air Patrol
CARES	Coronavirus Aid, Relief, and Economic Security Act
CBP	U.S. Customs and Border Protection
CPE	Consultant's Preferred Estimate
CRRSAA	Coronavirus Response and Relief Supplemental Appropriations Act of 2021
CS	Commercial Service
DCRA	Division of Community and Regional Affairs
DNR	Department of Natural Resources
DOF	State of Alaska Department of Natural Resources Division of Forestry and Fire Protection
DOLWD	Department of Labor and Workforce Development
DOT&PF	Department of Transportation and Public Facilities
EAS	Essential Air Service
eSRS	Enhanced Special Reporting Service
FAA	Federal Aviation Administration

FAASI	FAA Alaska Aviation Safety Initiative
FAI	Fairbanks International Airport
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FSS	Flight Service Stations
GA	General Aviation
GPS	Global Positioning System
HIRL	High Intensity Runway Lights
IAP	Instrument Approach Procedures
IATP	Interior Alaska Transportation Plan
IFR	Instrument Flight Rules
IIJA	Infrastructure Investment and Jobs Act
ILS	Instrument Landing System
LRDR	Long-Range Discrimination Radar
LRTP	Long Range Transportation Plan
M&O	Maintenance and Operations
MEAs	Minimum En Route Altitudes
Medevac	Medical evacuation
MIRL	Medium Intensity Runway Lights
MOAs	Military Operating Areas
NAVAIDs	Navigational Aids
NDB	Non-Directional Beacon
NIFC	National Interagency Fire Center
NPI	Non-Precision Instrument
NPIAS	National Plan of Integrated Airport Systems
NPS	National Park Service
NWS	National Weather Service
PCE	Personal Consumption Expenditure
PCI	Pavement Condition Index
RAWS	Remote Automated Weather Stations
RDC	Runway Design Code
RNAV	Area Navigation
SAWRS	Supplementary Aviation Weather Reporting Station
SFS	Space Force Station
SREB	Snow Removal Equipment Building
SUA	Special Use Airspace
SUAIS	Special Use Airspace Information Service
TAF	Terminal Area Forecasts
TSA	Transportation Security Administration
UAF	University of Alaska Fairbanks
UAS	Unmanned Aircraft Systems
UAV	Unmanned Aerial Vehicles
USD	United States Dollars
USDOT	United States Department of Transportation

USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USPS	United States Postal Service
UTAPS	Upper Tanana Airport Planning Study
VFR	Visual Flight Rules
VOR	Very High-Frequency Omnidirectional Radio Range
VORTAC	Very High-Frequency Omnidirectional Radio Range Tactical Air Navigation
VWOS	Visual Weather Observation System

1.0 INTRODUCTION

The airports in the Interior Alaska Transportation Plan (IATP) area are essential components of this region's robust, multi-modal transportation system. Although many communities in the IATP area are accessible by road, this entire region is still geographically remote from major population centers and services, and huge swaths of land within the region remain roadless. The airports serve a wide range of important roles in this region, facilitating activity such as:

- Community access and support
- Wildland firefighting
- Tourism, hunting, and guiding
- Medevac operations
- Medical care support
- Border crossings
- Military operations and training
- Government services
- Access to national parks and conservation areas

Each airport in the plan area holds a distinct support role for its community or specific geographical setting. The IATP aviation system supports the air transportation corridors that connect this region with the rest of Alaska, with Canada and the contiguous United States, and with the rest of the globe.

1.1 Overview of Airports in IATP Area

There are 62 airports included in the IATP study area (Figure 1). These 62 airports are the public use facilities registered with the FAA. There are several military facilities, numerous registered private use facilities, and countless more unregistered airstrips in the IATP area, but consideration of such facilities falls outside the intent of this plan. It is important to note that many of the registered public use facilities serve as launching points to the uncounted backcountry landing strips, gravel bars, lakes, and rivers that provide people access to remote, roadless portions of the region.
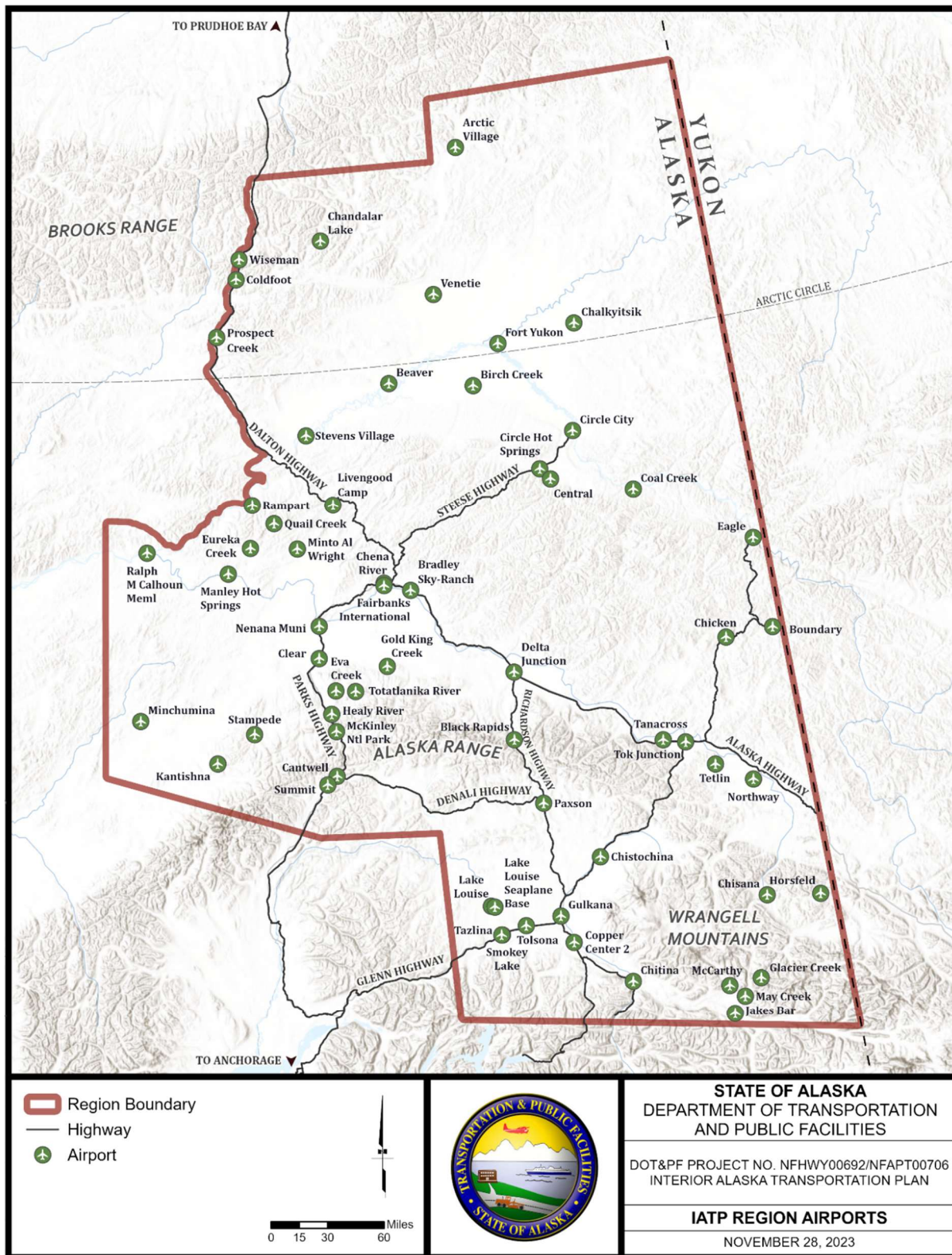
Figure 1. IATP Region Airports

The IATP airports are as diverse as the communities and locations they serve, ranging considerably by size, ownership, classification, and use. The majority (39) of the airports are owned by the Alaska Department of Transportation and Public Facilities (DOT&PF), while the remaining 23 are owned by a wide range of public and private entities. 40 of the airports are road accessible, and 22 are located in places off the contiguous road system. A summary of ownership and classification (according to the Alaska Aviation System Plan (AASP)) is shown in Table 1.

Table 1. Summary of IATP Airport Ownership & Classifications

IATP Airport Ownership	IATP AASP Airport Classifications
• 39 DOT&PF	• 1 Small Hub
• 4 Municipal/Local Government	• 1 Regional Hub
• 5 National Park Service (NPS)	• 6 Community Off-Road
• 3 Bureau of Land Management (BLM)	• 11 Community On-Road
• 2 Department of Natural Resources (DNR)	• 1 Local NPIAS High-Activity
• 1 Alaska Department of Fish & Game (ADF&G)	• 18 Local NPIAS Low-Activity
• 4 Private	• 6 Local Non-NPIAS
• 4 Public Domain	• 18 Unclassified Landing Strips
*NPS: National Park Service	BLM: Bureau of Land Management	DNR: Department of Natural Resources	ADF&G: Alaska Department of Fish & Game	NPIAS: FAA's National Plan of Integrated Airport Systems*	

1.2   Changes Since the 2010 IATP

The previous IATP was published in 2010. Since its publication, there have been several significant changes that are worth noting. Many of the changes will be discussed in greater detail in the *Existing Conditions* sections, but this summary of changed conditions puts the overall aviation analysis in better context.

1.2.1   Public Use Airports in the IATP Region

The 2010 IATP considered 68 airports in its area. Since that time, one facility has changed its status to "Private Use" and five of the airports have been decommissioned. Allen Army Airfield (aka Allen AAF or BIG) was previously registered as a Public Use facility. The military changed the status of Allen AAF to Private Use in 2013. Decommissioned facilities are ones that were previously registered with the Federal Aviation Administration (FAA) but have been removed from registration and no longer appear in aviation publications, charting, or the AASP database. The five decommissioned facilities are Clear Sky Lodge (CLF), Clearwater (Z86), Porcupine Creek (PCK), Road Commission NR 1 (0Z2), and Tok 2 (TKJ). These landing strips were previously registered privately owned or public domain facilities that have been removed from FAA's registered facilities list for various reasons, including unusable runway conditions, owner choice, or for reasons unknown. These five facilities are no longer considered part of the public aviation system and are not included in this IATP update.

1.2.2   Airport Classifications

Airport classifications have changed considerably since 2010. Airports are classified by both the FAA's National Plan of Integrated Airport Systems (NPIAS) and the DOT&PF's AASP. Both of these classification systems have been modified more than once since 2010, which has implications to how the IATP airports are considered for funding and development. A high-level comparison of the 2010 classifications versus current classifications is shown in Table 2. The implications of these classifications are discussed further in the *Existing Conditions* and *Issues and Needs* sections. However, one can see that both the NPIAS and AASP systems have expanded the number of different classifications, which provides more specific performance and development goals for airports within each classification.

Table 2. Comparison of 2010 & 2023 IATP Airport Classifications

2010 NPIAS Classifications	2023 NPIAS Classifications
• 1 Primary Commercial Service	• 1 Primary Commercial Service – Small Hub
• 2 Nonprimary Commercial Service	• 2 Nonprimary Commercial Service – Local
• 34 General Aviation	• 2 General Aviation – Local
• 31 non-NPIAS	• 25 General Aviation – Basic
	• 4 General Aviation – Unclassified
	• 28 non-NPIAS
2010 AASP Classifications	**2023 AASP Classifications**
• 4 Regional	• 1 Small Hub
• 18 Community	• 1 Regional Hub
• 46 Local	• 6 Community Off-Road
	• 11 Community On-Road
	• 1 Local NPIAS High-Activity
	• 18 Local NPIAS Low-Activity
	• 6 Local Non-NPIAS
	• 18 Landing Strips

1.2.3   FAA Automated Flight Service Stations

The FAA Flight Service, at one time divided the State into areas largely defined by river valleys, for the benefit of general aviation pilots. The 2010 IATP organized and presented airport information according to these FAA-designated areas, once published on the FAA's Automated Flight Service Station (AFSS) website. These geographical designations are no longer used by the FAA, and they cannot be found in any current FAA publication. The formerly FAA-designated areas identified as the Upper Yukon Valley, Tanana Valley, Copper River Basin, Susitna Valley, Kuskokwim Valley, and Koyukuk Valley will not be used or referenced in this IATP update, as the designations appear to be obsolete.

Flight Service Stations (FSS) are air traffic facilities that provide services to pilots such as pilot aeronautical and weather briefings, flight plan processing, en-route flight advisories, search and rescue services, and assistance to lost aircraft and aircraft in emergency situations. The FAA went through a national flight service station transition in the years just preceding the 2010 IATP, during which many flight service stations nationwide were closed and decommissioned, and the services and personnel were moved to a much smaller number of automated flight service stations (AFSS). Flight Service Stations have seen additional consolidation and modernization since then, and only three AFSS still remain in Alaska – in Fairbanks, Kenai, and Juneau.

1.2.4   Weather Reporting, Instrument Procedures, & Navigational Aids

In the 2010 IATP, 17 of the region's airports had weather reporting stations:

- Three Automated Weather Observing Systems (AWOS)
- Seven Automated Surface Observing Systems (ASOS)
- Six Aviation Paid Weather Observers (A-Paid)
- One Supplementary Aviation Weather Reporting Station (SAWRS)

There are currently only 13 airports with weather reporting stations in the IATP region. Although three additional AWOS units have been installed since 2010, the seven A-Paid and SAWRS weather reporting stations no longer exist, creating a net loss of four airports with weather reporting. The A-Paid program, previously supported with FAA funding, is almost entirely gone. The 2016 AASP *Aviation Weather Reporting in Alaska* white paper reports that, between 2011 and 2013, eighteen A-Paid observer sites were closed in the Interior and Southcentral portions of the state. Presently, there are no A-Paid positions listed in the IATP region.

When the 2010 IATP was published, only eight facilities in the area had weather cameras. The FAA Form 5010 Airport Master Records reflect that 23 facilities currently have weather cameras. These cameras provide advisory weather information to pilots and have become an invaluable tool in flight planning decision-making.

The 2010 IATP listed 14 airports as having Instrument Approach Procedures (IAPs) developed. There are currently 17 airports in the IATP region with published IAPs. Five airports have had IAPs developed since 2010 (Central, Eagle, Healy River, Manley Hot Springs, and Venetie). However, one airport (Stevens Village) no longer has a published IAP, and although Allen AAF has an IAP – which was counted in the 2010 IATP – it is no longer counted due to the facility's change to Private Use.

1.2.5 Major Airport Projects and Funding

The 2010 IATP recommended capital improvements totaling approximately $185 million in 2010 dollars. Since that time, only about $62.5 million in has been spent on airport improvements in the region, and much of the work recommended by the 2010 IATP remains unaccomplished (reference *Appendix 1*: Airport Improvements Recommended by 2010 IATP for details). Funding for the major work that has been accomplished has come from the Airport Improvement Program (AIP) and other special funding, such as the American Recovery and Reinvestment Act of 2009 (ARRA).

Major airport projects completed since the 2010 IATP evaluation was conducted include:

- Fort Yukon (FYU) – runway, taxiway, and apron improvements and Snow Removal Equipment Building (SREB) accomplished with a combination of AIP and ARRA funds
- Lake Louise (Z55) – reconstructed and reopened shortly after the 2010 IATP with AIP funding
- Livengood Camp (4AK) – major improvements, including runway extension from 1,425 ft to 3,000 ft sometime between 2012 and 2014, completed with State of Alaska Deferred Maintenance funding
- Manley Hot Springs (MLY) – full reconstruction in 2016/2017 with AIP funding
- Minto Al Wright (51Z) – reconstructed with a longer, wider, lighted runway shortly after the 2010 IATP with AIP funding
- Northway (ORT) – reconstruction was not a recommendation of the 2010 IATP, but the airport suffered major damage from the 2002 Denali Fault Earthquake, and Federal Emergency Management Agency (FEMA) funding was used to restore Northway to pre-earthquake conditions
- Stevens Village – new airport completed (was under construction at the time of the 2010 IATP)

The airport improvements recommended in the 2010 IATP are included *Appendix 1*: Airport Improvements Recommended by 2010 IATP, with remarks about which work has been accomplished since that time. A significant portion of the work recommended in 2010 is still needed and is recommended once again by this IATP update.

1.2.6 Unmanned Aircraft Systems (UAS)

The dawn of Unmanned Aircraft Systems (UAS) in Alaska lit upon the Interior region first. The growth of UAS research, use, and development has been nearly explosive, and the implications of this technology and its applications are not fully characterized due to its rapidly changing and expanding nature.

Alaska has one of six UAS test sites in the U.S., a program run by the Alaska Center for UAS Integration (ACUASI) from the University of Alaska Fairbanks (UAF). This program has been in existence since 2001, and it was selected by the FAA as one of the six test sites in the nation in December 2013. ACUASI is very active in the IATP region with testing and furthering UAS capabilities and opportunities in Alaska and integrating that into the National Airspace System as part of the FAA's Beyond program. The FAA has approved ACUASI as a Part 135 operator to test the process of getting these unmanned

systems through type certification, to figure out which procedures need to be refined or waived, and to test out use of the systems. ACUASI has worked to bring more industry into Alaska, as companies all over the world are actively seeking out places to test their systems.

There are plenty of personal, recreational UAS operating across the state, but there has been a surge in use for survey, remote sensing, and other significant commercial and agency applications. The DOT&PF has been working with other state departments, such as Alaska Department of Fish and Game (ADF&G), Department of Natural Resources (DNR), and Department of Public Safety, on the use and applications of UAS. The collective work of these agencies has realized many benefits that UAS provide in terms of safety, efficiencies, and cost savings. The DOT&PF's Division of Statewide Aviation has become the management agency for UAS owned by state agencies. This has given DOT&PF resources to maintain and manage the UAS and provides DOT&PF oversight of the UAS and their use. Per the Spring 2021 AASP newsletter, UAS are being tested at Alaska airports for applications such as airport and runway inspection.

The DOT&PF Division of Statewide Aviation reported in March of 2023 that Alaska had 3,241 registered remote pilots, compared with 9,428 manned aviation pilots. The number of registered remote pilots in May of 2021 (per ACUASI) was 1,400. In just two years, the number of registered remote pilots has more than doubled. The DOT&PF reports 9,095 registered unmanned aircraft, compared with 8,668 registered manned aircraft, in March of 2023. The registered number of unmanned aircraft now exceeds the number of registered manned aircraft in Alaska.

The implications of UAS technology and its applications are not fully understood or accounted for within the context of airport and aviation planning. Thus, it is important to recognize that this technology exists, that it is active and developing within the IATP area, and that it should be considered in plan recommendations.

2.0 EXISTING CONDITIONS

The 62 public use aviation facilities in the IATP region are a diverse collection of airports in terms of ownership, classification, use, and intramodality. The airports serve many purposes, providing primary access to communities off the road system, supporting tourism, recreation, and hunting, supporting wildland firefighting, providing alternative landing sites during inclement weather, and facilitating both emergency and routine medical transportation. The IATP region borders Canada, and facilities near the border serve as the customs clearance gateway for small aircraft entering Alaska. The type of aircraft operating in the IATP area also ranges widely, with small bush aircraft, commuter aircraft, military aircraft, helicopters, wildland firefighting support aircraft, UAS, passenger jets, and even wide-body jets traveling through this region's airspace and using its facilities.

2.1 IATP Airport Classifications & Roles

Figure 2 shows the 62 airports in the IATP region, designated by their current AASP classification (as classified in the May 2022 *AASP Classifications & Performance Measures* report). Table 3 lists the airports within each classification, for reference. When we consider the existing conditions and needs of the IATP airport system, grouping airports by AASP classification proves the most useful way of evaluating such a large and diverse set of facilities. The AASP considers the unique and important roles served by the state's widely diverse airports, providing a classification system more complementary to serving the needs of Alaska than the national classification system. A summary of the AASP and NPIAS airport classifications is provided in *Appendix 2*: AASP & NPIAS Classifications, and more detailed information can be found by referencing the May 2022 *AASP Classifications & Performance Measures* report and the *2023-2027 NPIAS Narrative*, both available online.
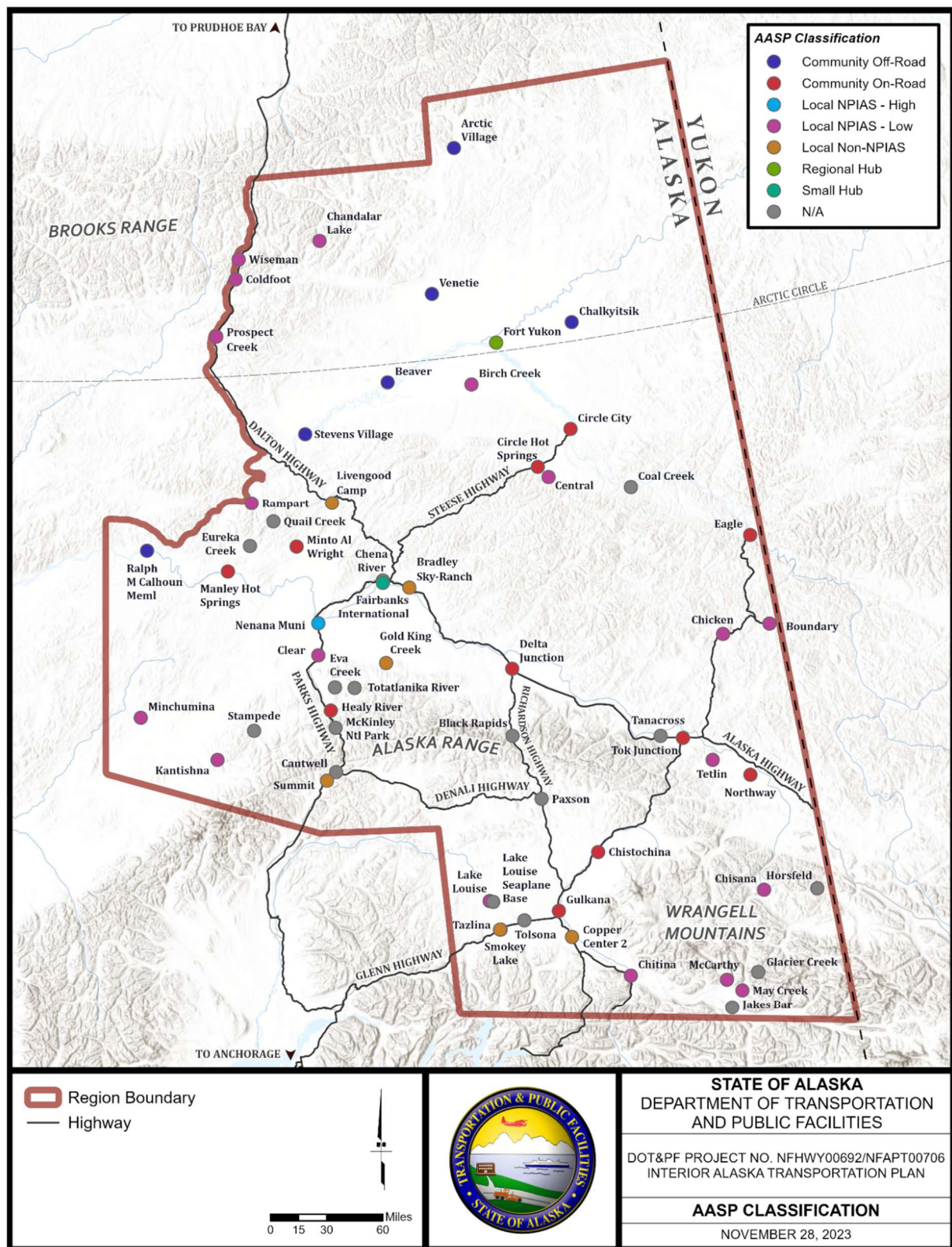
Figure 2. IATP Airports by AASP Classification

Table 3. Summary of IATP Airports by AASP Classification

AASP Classification	No.	IATP Airports	
Small Hub	1	Fairbanks International (FAI)	
Regional Hub	1	Fort Yukon (FYU)	
Community Off-Road	6	Arctic Village (ARC) Beaver (WBQ) Chalkyitsik (CIK)	Ralph M Calhoun Meml [Tanana] (TAL) Stevens Village (SVS) Venetie (VEE)
Community On-Road	11	Central (CEM) Chistochina (CZO) Circle City (CRC) Delta Junction (D66) Eagle (EAA) Gulkana (GKN)	Healy River (HRR) Manley Hot Springs (MLY) Minto Al Wright (51Z) Northway (ORT) Tok Junction (6K8)
Local NPIAS High-Activity	1	Nenana Muni (ENN)	
Local NPIAS Low-Activity	18	Birch Creek (Z91) Boundary (BYA) Chandalar Lake (WCR) Chicken (CKX) Chisana (CZN) Chitina (CXC) Circle Hot Springs (CHP) Clear (Z84) Coldfoot (CXF)	Kantishna (5Z5) Lake Louise (Z55) May Creek (MYK) McCarthy (15Z) Minchumina (MHM) Prospect Creek (PPC) Rampart (RMP) Tetlin (3T4) Wiseman (WSM)
Local Non-NPIAS	6	Bradley Sky-Ranch (95Z) Copper Center 2 (Z93) Gold King Creek (AK7)	Livengood Camp (4AK) Summit (UMM) Tazlina (Z14)
Landing Strips	18	Black Rapids (5BK) Cantwell (TTW) Chena River (2Z5) Coal Creek (L20) Eureka Creek (2Z2) Eva Creek (2Z3) Glacier Creek (KGZ) Horsfeld (4Z5) Jakes Bar (AK0)	Lake Louise Seaplane Base (13S) McKinley Ntl Park (INR) Paxson (PXK) Quail Creek (20K) Stampede (Z90) Tanacross (TSG) Tazlina/Smokey Lake (5AK) Tolsona Lake (58A) Totatlanika River (9AK)

Figure 3 shows all public use airports in Alaska by AASP classification. As shown, there are a wide variety of airport types in the IATP region, as opposed to the more homogeneous collection of airports across the rest of the state. With such a broad assortment of airports with varying sizes, roles, and community needs, this regional plan will intend to focus on the aviation system issues and needs of greatest regional importance, while noting individual airport characteristics.
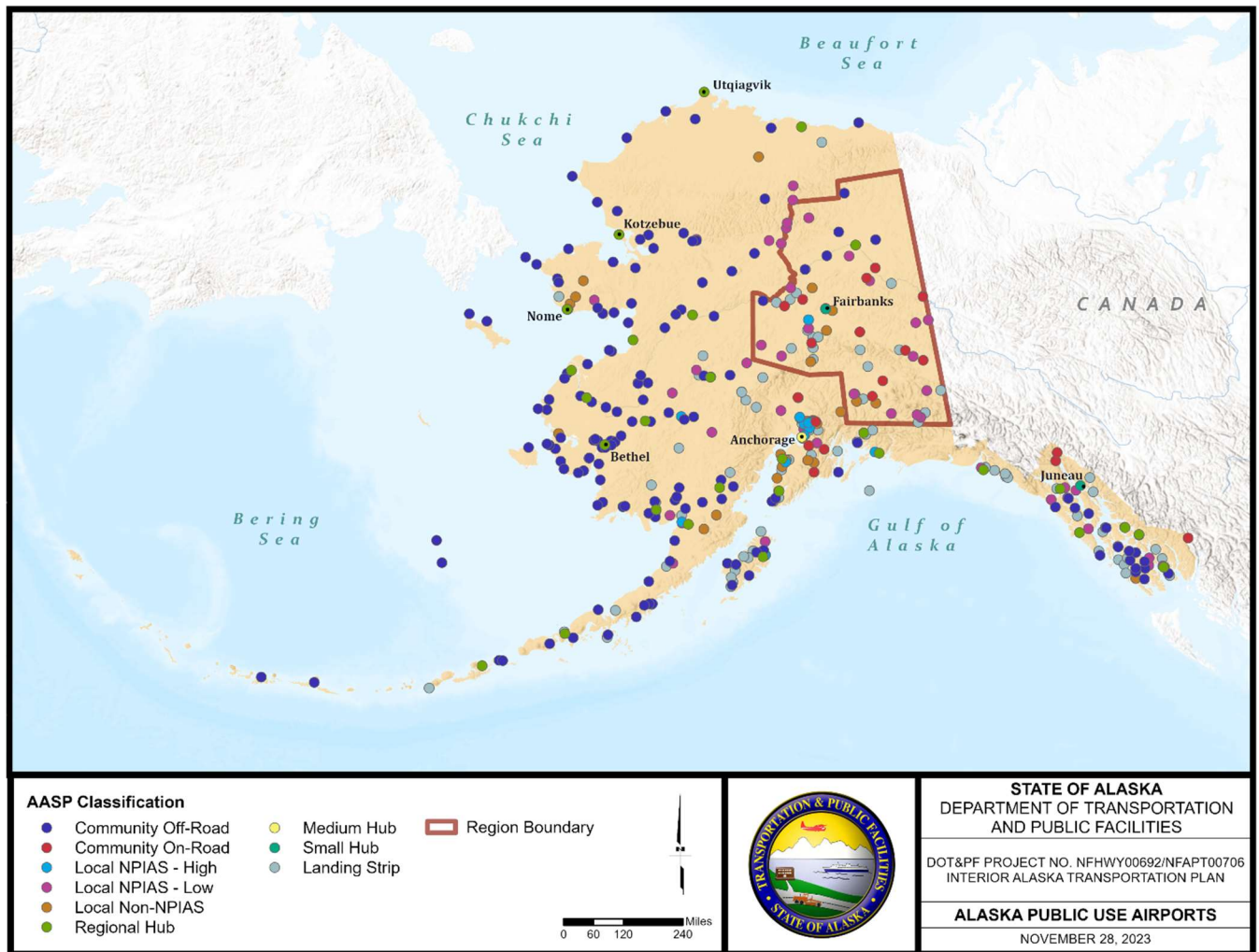
Figure 3. Alaska Public Use Airports by AASP Classification

2.2   IATP Airports by Ownership

Although this evaluation will largely consider the IATP airports by classification, there are other distinctions between the airports that may provide clarity on how this aviation system is used, managed, and operated. Airport ownership has a large role in determining how airports are operated, funded, and managed. Figure 4 shows the 62 airports in the IATP region, designated by ownership. Table 4 lists the airports owned by each ownership category. Most of the airports not owned by the DOT&PF or another local government are considered Landing Strips by the AASP. Commonly referred to as backcountry airports, these facilities often provide critical access to remote areas of the state, but there are no specific performance measures that guide their infrastructure needs.
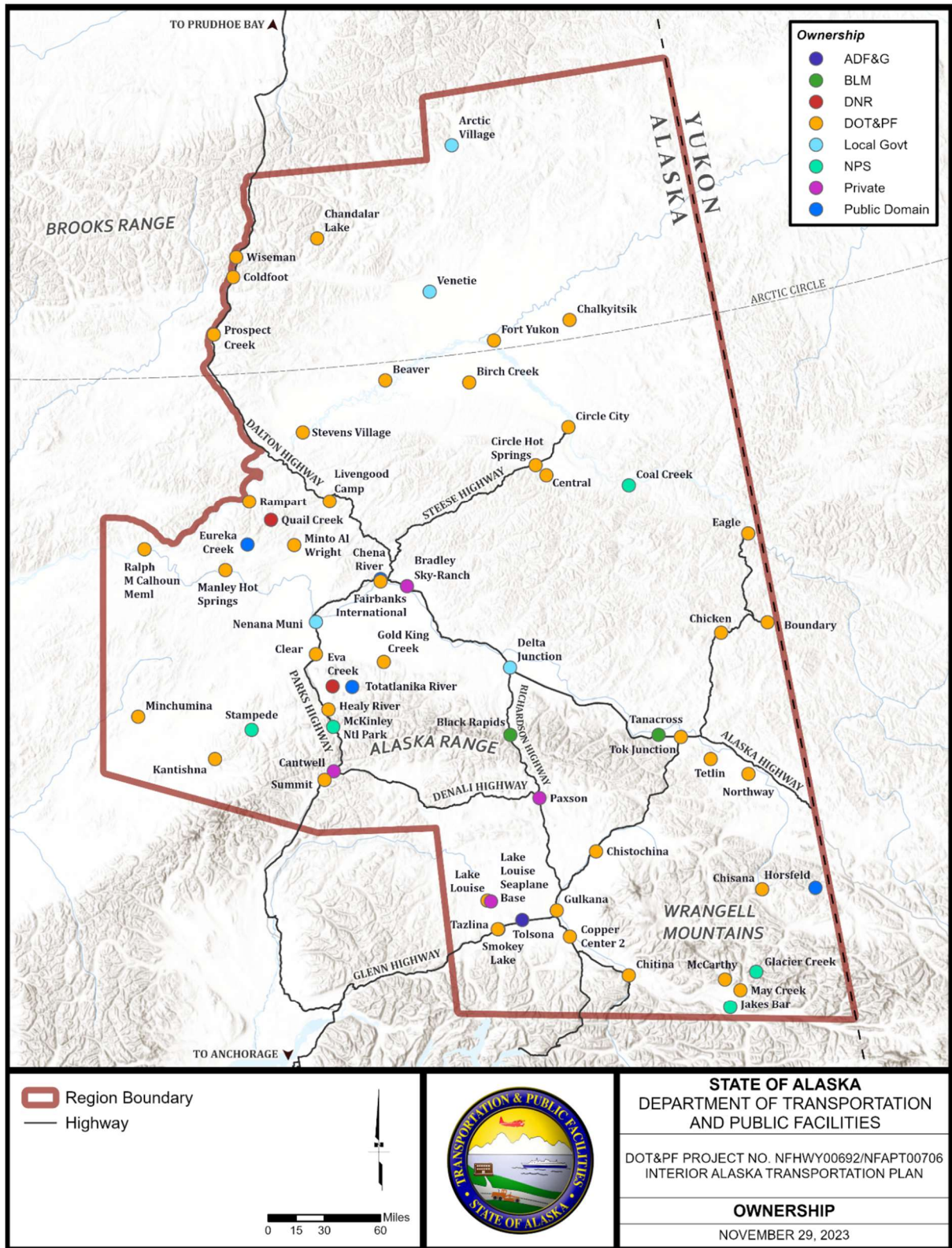
Figure 4. Airport Locations and Ownership.

Table 4. Summary of IATP Airports by Ownership

Ownership	No.	IATP Airports	
DOT&PF	39	Beaver (WBQ)	Healy River (HRR)
		Birch Creek (Z91)	Kantishna (5Z5)
		Boundary (BYA)	Lake Louise (Z55)
		Central (CEM)	Livengood Camp (4AK)
		Chalkyitsik (CIK)	Manley Hot Springs (MLY)
		Chandalar Lake (WCR)	May Creek (MYK)
		Chicken (CKX)	McCarthy (15Z)
		Chisana (CZN)	Minchumina (MHM)
		Chistochina (CZO)	Minto Al Wright (51Z)
		Chitina (CXC)	Northway (ORT)
		Circle City (CRC)	Prospect Creek (PPC)
		Circle Hot Springs (CHP)	Ralph M Calhoun Meml [Tanana] (TAL)
		Clear (Z84)	Rampart (RMP)
		Coldfoot (CXF)	Stevens Village (SVS)
		Copper Center 2 (Z93)	Summit (UMM)
		Eagle (EAA)	Tazlina (Z14)
		Fairbanks International (FAI)	Tetlin (3T4)
		Fort Yukon (FYU)	Tok Junction (6K8)
		Gold King Creek (AK7)	Wiseman (WSM)
		Gulkana (GKN)	
Local Government	4	Arctic Village (ARC)	Nenana Muni (ENN)
		Delta Junction (D66)	Venetie (VEE)
Federal Agency	8	Black Rapids (5BK) – BLM	McKinley Ntl Park (INR) – NPS
		Coal Creek (L20) – NPS	Paxson (PXK) – BLM
		Glacier Creek (KGZ) – NPS	Stampede (Z90) – NPS
		Jakes Bar (AK0) – NPS	Tanacross (TSG) – BLM
State Agency	3	Eva Creek (2Z3) – DNR	Tolsona Lake (58A) – ADF&G
		Quail Creek (20K) – DNR	
Private	4	Bradley Sky-Ranch (95Z)	Lake Louise Seaplane Base (13S)
		Cantwell (TTW)	Tazlina/Smokey Lake (5AK)
Public Domain	4	Chena River (2Z5)	Horsfeld (4Z5)
		Eureka Creek (2Z2)	Totatlanika River (9AK)

BLM: Bureau of Land Management | NPS: National Park Service | DNR: Department of Natural Resources | ADF&G: Alaska Department of Fish & Game

2.3   IATP Airports Comparison

The diversity of the airports in the IATP region can be difficult to describe in a narrative. *Appendix 3*: Summary of IATP Airports by Ownership, AASP Classification, On/Off Road Status, and Seaplane Base Status includes a summary of the IATP airports identifying ownership, AASP classification, on/off road status, and facilities that are exclusively seaplane bases.

DOT&PF owns airports across multiple classifications – 27 on the road system and 12 off the road system. The DOT&PF is tasked with operating a set of airports that offer a wide range in levels of service, with the airport users' expectations of safe, reliable facilities regardless of classification or location. The airports on the road system benefit in many ways, with greater access to maintenance, DOT&PF staff, materials sources, utilities, and other amenities that being connected by road enables. However, the on-road airports suffer when it comes to competing for funding against off-road airports statewide that provide the only year-round access to their communities. The airports off the road system in the IATP region generally have the reversed advantages/disadvantages – these airports do not enjoy the conveniences that road access provides, but they can be seen as more essential – and thus be more likely to receive project funding – since they provide the only reliable access to communities off the road system.

Local governments own four of the Community and Local NPIAS High-Activity facilities, two off the road system and two on the road system. Airports owned by local governments (called local sponsors, in aviation terms) have their own set of advantages and disadvantages. Local sponsors can often more specifically and intentionally identify the needs of their airports and create development plans. Some local sponsors are also very adept at pursuing funding to accomplish development goals. However, many smaller local governments lack the staffing and/or airport expertise to effectively own, operate, maintain, and develop airports; and negotiating the landscape of AIP funding, airport obligations, and other aviation-specific considerations can be an enormous undertaking.

Federal and state agencies (excluding DOT&PF) own 11 Landing Strips – five on the road system, six off the road system. One of the road system airports is a seaplane facility. The agencies that own these facilities are not in the aviation line of business, which is to say that their missions and purposes rarely, if ever, include the maintenance and operation of airports as mission-critical activities. These facilities are often minimally maintained, just enough to preserve access to remote areas for agency and public use purposes.

One Local Non-NPIAS facility and three Landing Strips (two of which are seaplane facilities) are privately owned. Very few private entities have the experience or financial ability to own and operate airports, and so those that do are uniquely positioned to provide a valuable service to the public aviation system.

Four Landing Strips (one of which is a seaplane facility) are in the public domain. The preservation of facilities such as this, that have no designated owner, is often important to provide safe landing areas in between more developed airports. Since no one owns these facilities, the underlying challenge with maintaining the facilities in a safe, operable condition is identifying a responsible entity.

2.4 Inventory

The inventory included in this chapter will focus on the components of the airports that are considered by performance measures – classification, condition, runway length, surface condition, runway lighting, weather reporting, navigational aids, and services and amenities. The inventory is presented by AASP classification of the airports. Source data is from the FAA's Airport Data Information Portal (ADIP) and the AASP online facilities database. Performance measure report cards for all of the ITAP facilities can be referenced in *Appendix 4*: AASP Performance Measure Report Cards.

2.4.1 Small Hub

Fairbanks International Airport (FAI) is the only Small Hub airport in the IATP region. The AASP definition of a Small Hub airport is an airport that has at least 0.05 percent, but less than 0.25 percent, of the total annual passenger boardings in the United States. Fairbanks International's slogan is *"Providing Interior Alaska's Gateway to the World,"* as this busy and geographically well-situated airport links the region to other parts of Alaska, other states, and international destinations.

Fairbanks International Airport (FAI) serves as both a regional hub and an international airport. FAI is the hub for commercial and general aviation activity in the IATP area and sees the second most passenger boardings in the state (after Ted Stevens Anchorage International). Most of the air carriers and air taxis serving the IATP area are based at FAI. FAI is a hub for carriers providing Essential Air Service (EAS) and Bypass Mail service to many outlying communities in the IATP region. The Alaska State Troopers (AST), U.S. Fish and Wildlife Service (USFWS), Department of National Resources (DNR) Division of Forestry and Fire Protection, and Civil Air Patrol (CAP) have aviation bases at FAI.

Fairbanks International is a major component of the IATP region's transportation system, but it will be considered separately from the other airports in this plan. FAI is managed, operated, and funded distinctly from any of the other IATP airports, and this airport has its own capital and development plan. Therefore, while FAI plays a key role in the IATP aviation system – and its role and influence will be considered – specific needs, projects, and development plans for FAI are determined by the airport's dedicated staff and planning efforts and not by this IATP update.

Table 5. IATP Small Hub Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Fairbanks International Airport	FAI	DOT&PF	Primary CS – Small Hub	11,800 x 150	Asphalt - G	HIRL	ILS & NPI
				4,510 x 75	Asphalt - G	MIRL	--
				2,900 x 75	Gravel	U	--
				5,400 x 100	Water	U	--

CS: Commercial Service | HIRL: High Intensity Runway Lights | MIRL: Medium Intensity Runway Lights | U: Unlighted | ILS: Precision Instrument Landing System | NPI: Non-Precision Instrument | Runway Surface Condition: G: Good, F: Fair, P: Poor

Table 6. IATP Small Hub Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Fairbanks International Airport	FAI	ASOS	X	ILS, VORTAC	N/A	Terminal, Restrooms, Fuel, Lease Lots, FBO

ASOS: Automated Surface Observing System | ILS: Instrument Landing System | VORTAC: Very High-Frequency Omnidirectional Radio Range Tactical Air Navigation with Distance Measuring Equipment

FAI has four (4) runways, allowing operations of a wide variety of aircraft. Its 11,800 ft paved runway accommodates wide-body cargo jets and passenger jets moving between Alaska, the continental U.S., and international destinations. The primary runway with the additional paved, gravel, and water runways support the region's robust commuter aircraft, bush aircraft, and floatplane traffic. The weather camera for FAI (sited at Esther Dome, northwest of the airport) has been installed in the time since the 2010 IATP was published. The weather camera at Esther Dome is a weather information resource for both FAI and the separately registered Chena River (2Z5) facility located in close proximity to FAI.

2.4.2   Regional Hub

Fort Yukon (FYU) is the IATP region's only airport currently classified as a Regional Hub. Regional Hubs, according to the AASP classification system, are airports that serve as the transportation and economic hub for more than one community. Regional airports generally accommodate larger aircraft, have instrument approaches, and have more landside facilities, infrastructure, and services than other smaller, public use airports. FYU is designated a Regional Hub because it is a USPS Bypass Mail hub, it serves a community with a health facility that serves two or more communities, and it is a designated fire tanker base. Existing conditions of several key airport features at FYU are presented in Table 7 and Table 8. A discussion of whether the existing conditions meet Regional Hub performance measures is included in the *Issues and Needs* section.

Table 7. IATP Regional Hub Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Fort Yukon	FYU	DOT&PF	Nonprimary CS - Local	5,000 x 100	Gravel - G	MIRL	NPI

CS: Commercial Service | MIRL: Medium Intensity Runway Lights | NPI: Non-Precision Instrument | Runway Surface Condition: G: Good, F: Fair, P: Poor

Table 8. IATP Regional Hub Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Fort Yukon	FYU	AWOS	YES	VORTAC	13	Passenger Shelter, Lease Lots

AWOS: Automated Weather Observing System | VORTAC: Very High-Frequency Omnidirectional Radio Range Tactical Air Navigation with Distance Measuring Equipment

Fort Yukon received funding through the American Recovery and Reinvestment Act (ARRA) of 2009 that supported a runway and apron rehabilitation and construction of a new SREB. FYU's runway length of 5,810 ft reported in the 2010 IATP included an 810 ft displaced threshold. The runway has since been reconfigured so that the length is 5,000 ft, and the runway safety areas meet FAA standards (i.e., there is no longer a displaced threshold, and the previous additional length is now part of the runway safety area). The weather camera at FYU has been installed in the time since the 2010 IATP was published.

2.4.3 Community Off-Road

There are six (6) Community Off-Road airports in the IATP region. Community airports generally fulfill the role of a small community's primary airport and serve basic needs such as passenger travel to regional hubs, mail service, local aviation related business, and emergency needs. This classification includes communities with a year-round population of at least 25 people and a public school. The Community classification is divided into two subcategories, On-Road and Off-Road. Off-Road airports are not connected to the National Highway System, and thus these off-road airports become the primary transportation mode supporting their communities.

The six (6) Community Off-Road airports in the IATP boundary all lie within the northern portion of the IATP area. Five of the six lie within the remote and roadless expanse between the Dalton Highway and the Canadian border. Four (4) of these airports are owned by the DOT&PF, and the other two are owned by the Native Village of Venetie Tribal Government. Existing conditions of key features for the IATP region's Community Off-Road airports are presented in Table 9 and Table 10.

Table 9. IATP Community Off-Road Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Arctic Village	ARC	Native Village of Venetie Tribal Govt	GA - Basic	4,500 x 75	Gravel - P	MIRL	NPI
Beaver	WBQ	DOT&PF	GA - Basic	3,934 x 75	Gravel - G	MIRL	NPI
Chalkyitsik	CIK	DOT&PF	GA - Basic	4,000 x 75	Gravel - F	MIRL	NPI
Ralph M Calhoun Meml [Tanana]	TAL	DOT&PF	GA - Basic	4,400 x 100	Gravel - G	MIRL	NPI
Stevens Village	SVS	DOT&PF	GA - Basic	4,000 x 75	Gravel - G	MIRL	--
Venetie	VEE	Native Village of Venetie Tribal Govt	GA - Basic	4,000 x 75	Gravel - G	MIRL	NPI

GA: General Aviation | MIRL: Medium Intensity Runway Lights | NPI: Non-Precision Instrument |
Runway Surface Condition: G: Good, F: Fair, P: Poor

Table 10. IATP Community Off-Road Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Arctic Village	ARC	AWOS	X	--	unknown	Passenger Shelter
Beaver	WBQ	--	X	--	34	Emergency Shelter, Broadband
Chalkyitsik	CIK	--	X	--	29	Emergency Shelter
Ralph M Calhoun Meml (Tanana)	TAL	ASOS	X	VOR	18	Restrooms, Emergency Shelter
Stevens Village	SVS	--	--	--	17	Emergency Shelter
Venetie	VEE	--	--	--	16 - 20	Passenger Shelter

AWOS: Automated Weather Observing System | ASOS: Automated Surface Observing System | VOR: Very High-Frequency Omnidirectional Radio Range

Air transportation is the only year-round mode of access to these off-road communities. The airports supporting these communities are all lighted, have runway lengths of approximately 4,000 ft or greater, and most have instrument approach procedures. The need for reliable year-round access to the communities during long periods of darkness and inclement weather means that these facilities often rank high in priority for funding and infrastructure improvements. Although runway infrastructure is generally suitable at these airports, weather reporting and NAVAIDs are lacking, the lighting systems are aged, and few services are available.

Arctic Village and Ralph M Calhoun Meml (Tanana) airports have had weather reporting and weather cameras since at least 2010. Beaver and Chalkyitsik have had weather cameras installed since 2010, but these two airports do not have other weather reporting systems available. Stevens Village and Venetie lack any weather reporting.

Stevens Village and Venetie were recently constructed new airports at the time the 2010 IATP was developed. Stevens Village was constructed new with 2001 and 2005 AIP grants, and Venetie was constructed new with a 2003 AIP grant. These two airports are now approaching 20 years old, and neither has seen any major funding/projects since. Arctic Village has also not had any improvements since a runway rehabilitation project nearly 20 years ago. Airports owned by local sponsors – like Venetie and Arctic Village – are often not considered in statewide airport planning/programming without local ownership being proactive in identifying needs and pursuing funding.

2.4.4   Community On-Road

There are eleven Community On-Road airports in the IATP Region. Like the Community Off-Road airports, the Community On-Road airports generally fulfill the role of a small community's primary airport and serve basic needs such as passenger travel to regional hubs, mail service, local aviation related business, and emergency needs. This classification includes communities with a year-round population of at least 25 people, a public school, and located more than one hour by road from an International, Regional Hub, or other Community class airport. Delta Junction (D66) is owned by the City of Delta Junction, and the other ten Community On-Road airports are owned by the DOT&PF. Existing conditions of key features for the IATP region's Community On-Road airports are presented in Table 11 and

Table 12.

Table 11. IATP Community On-Road Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Central	CEM	DOT&PF	GA - Basic	2,782 x 60	Gravel - P	MIRL	--
Chistochina	CZO	DOT&PF	--	2,060 x 60	Gravel - F	U	--
Circle City	CRC	DOT&PF	GA - Basic	2,979 x 60	Gravel - G	MIRL	--
Delta Junction	D66	City of Delta Junction	--	2,500 x 60	Gravel - G	U	--
Eagle	EAA	DOT&PF	GA - Basic	3,600 x 75	Gravel - G	MIRL	--
Gulkana	GKN	DOT&PF	GA – Local	5,001 x 100	Asphalt - G	MIRL	NPI
				2,300 x 60	Gravel - G	U	--
Healy River	HRR	DOT&PF	GA - Basic	2,910 x 60	Asphalt – G	MIRL	--
Manley Hot Springs	MLY	DOT&PF	GA - Basic	3,400 x 60	Gravel - G	MIRL	--
Minto Al Wright	51Z	DOT&PF	GA - Basic	3,400 x 75	Gravel - G	MIRL	--
Northway	ORT	DOT&PF	GA - Basic	5,100 x 100	Asphalt - G	MIRL	NPI
Tok Junction	6K8	DOT&PF	GA – Local	2,509 x 50	Asphalt - G	MIRL	NPI

GA: General Aviation | MIRL: Medium Intensity Runway Lights | U: Unlighted | NPI: Non-Precision Instrument | Runway Surface Condition: G: Good, F: Fair, P: Poor

Table 12. IATP Community On-Road Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Central	CEM	--	X	--	30	--
Chistochina	CZO	--	X	--	U	Broadband
Circle City	CRC	--	--	--	35	Fuel
Delta Junction	D66	--	X	--	U	--
Eagle	EAA	ASOS	X	--	38	Restrooms, Broadband
Gulkana	GKN	ASOS	X	VOR	38	Restrooms, Fuel, Broadband
Healy River	HRR	--	--	--	9	Fuel, Broadband
Manley Hot Springs	MLY	--	--	--	11	Restrooms
Minto Al Wright	51Z	--	X	--	16	--
Northway	ORT	ASOS	X	VORTAC, NDB	15	Restrooms, Broadband
Tok Junction	6K8	AWOS-3PT	X	--	35	Restrooms, Fuel, Broadband

AWOS-3PT: Automated Weather Observing System plus cloud/ceiling and thunderstorm/lightning data | ASOS: Automated Surface Observing System | VOR: Very High-Frequency Omnidirectional Radio Range| VORTAC: Very High-Frequency Omnidirectional Radio Range Tactical Air Navigation with Distance Measuring Equipment | NDB: Non-Directional Beacon | U: Unlighted

The IATP region's Community On-Road airports have a wide variation in runway size. The goal for Community class airports is a runway length of 3,300 ft or greater, and over half the Community On-Road Airports fail to meet this minimum, while two of the airports greatly exceed the minimum. The runway surfaces are generally in good condition, likely due to the ability of DOT&PF maintenance crews to access these airports and use local resources available on the road system to maintain the facilities. Most of the airports have runway edge lighting, but several of the lighting systems are very advanced in age. Amenities and services desirable for Community class airports are lacking overall.

Weather reporting is a noticeable void for the Community On-Road airports. Only four of the seven facilities have weather reporting. Central and Manley Hot Springs had A-Paid weather reporters in 2010, but that program has been discontinued, and these two airports currently have *less* weather information reported than they once did. Several airports have had weather cameras installed since 2010: Central, Chistochina, Delta Junction, Eagle, Gulkana, Minto Al Wright, and Tok Junction. There are very few NAVAIDs at the Community On-Road airports.

Two of the Community On-Road facilities in the IATP region are not included in the NPIAS – Chistochina and Delta Junction. Chistochina is a DOT&PF owned facility, and DOT&PF has no plans to have this facility included in the NPIAS. The City of Delta Junction owns the Delta Junction airport, and the City has interest in becoming part of the NPIAS so that they can be eligible for AIP funding.

2.4.5 Local NPIAS High-Activity

Local airports are considered general aviation airports and vary widely in size, purpose, and amenities. Local airports are divided into three sub-classifications: Local NPIAS High-Activity, Local NPIAS Low-Activity, and Local Non-NPIAS. There is only one Local NPIAS High-Activity airport in the IATP area. Nenana Muni (ENN) is owned by the City of Nenana. This facility is in the NPIAS, does not meet the criteria for other classifications, and has at least 20 based aircraft. Nenana Muni is currently updating its Airport Layout Plan and has development plans that include significant infrastructure and service improvements. Existing conditions of key airport features at Nenana are presented in

Table 13 and Table 14.

Table 13. IATP Local NPIAS High-Activity Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Nenana Muni	ENN	City of Nenana	GA - Basic	4,600 x 100	Asphalt - G	MIRL	NPI
				1,980 x 80	Turf - F	MIRL	--
				3,601 x 100	Water	U	--

GA: General Aviation | MIRL: Medium Intensity Runway Lights | U: Unlighted | NPI: Non-Precision Instrument | Runway Surface Condition: G: Good, F: Fair, P: Poor

Table 14. IATP Local NPIAS High-Activity Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Nenana Muni	ENN	ASOS	X	VORTAC	27	Fuel

ASOS: Automated Surface Observing System | VORTAC: Very High-Frequency Omnidirectional Radio Range Tactical Air Navigation with Distance Measuring Equipment

Since the 2010 IATP was published, Nenana has accomplished some fencing work, runway surface preservation, and the construction of a fuel farm. A weather camera at Nenana has been installed since 2010. Several improvement projects at Nenana are anticipated to be completed by FY25, including lighting upgrades and additional surface preservation work. The results of the Airport Layout Plan update underway are expected to identify major development plans for this facility, with a capital improvement plan outlining possible timeframes in which the work may be accomplished.

2.4.6 Local NPIAS Low-Activity

There are 18 Local NPIAS Low-Activity airports in the IATP area. Low-Activity airports do not qualify for other classifications, are in the NPIAS, and have fewer than 20 based aircraft. All of the Local NPIAS Low-Activity airports in the IATP region are owned by the DOT&PF. Existing conditions of key features for the IATP region's Local NPIAS Low-Activity airports are presented in Table 15 and Table 16.

Table 15. IATP Local NPIAS Low-Activity Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Birch Creek	Z91	DOT&PF	GA - Basic	4,000 x 75	Gravel - G	MIRL	--
Boundary	BYA	DOT&PF	GA - Unclassified	2,325 x 60	Gravel - G	U	--
Chandalar Lake	WCR	DOT&PF	GA - Basic	3,000 x 60	Gravel - G	U	--
Chicken	CKX	DOT&PF	GA - Basic	2,500 x 60	Gravel - G	U	--
Chisana	CZN	DOT&PF	GA - Basic	3,000 x 50	Turf - P	U	--
Chitina	CXC	DOT&PF	GA - Basic	2,850 x 75	Gravel - G	U	--
Circle Hot Springs	CHP	DOT&PF	GA - Unclassified	3,669 x 80	Gravel - G	U	--
Clear	Z84	DOT&PF	GA - Unclassified	3,997 x 100	Asphalt - G	MIRL	--
Coldfoot	CXF	DOT&PF	Nonprimary CS - Local	4,001 x 75	Gravel - G	MIRL	NPI
Kantishna	5Z5	DOT&PF	GA - Basic	1,887 x 45	Gravel - G	U	--
Lake Louise	Z55	DOT&PF	GA - Basic	2,900 x 60	Gravel - E	U	--
May Creek	MYK	DOT&PF	GA - Basic	2,700 x 100	Turf - G	U	--
McCarthy	15Z	DOT&PF	GA - Unclassified	3,501 x 60	Gravel - F	U	--
Minchumina	MHM	DOT&PF	GA - Basic	4,184 x 100	Gravel - G	MIRL	NPI
Prospect Creek	PPC	DOT&PF	--	4,968 x 150	Gravel - G	MIRL	--
Rampart	RMP	DOT&PF	GA - Basic	3,520 x 75	Gravel - G	MIRL	--
Tetlin	3T4	DOT&PF	GA - Basic	3,300 x 75	Gravel - G	MIRL	--
Wiseman	WSM	DOT&PF	--	2,000 x 30	Turf - P	U	--

GA: General Aviation | CS: Commercial Service | MIRL: Medium Intensity Runway Lights | U: Unlighted | NPI: Non-Precision Instrument |
Runway Surface Condition: E: Excellent, G: Good, F: Fair, P: Poor

Table 16. IATP Local NPIAS Low-Activity Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Birch Creek	Z91	--	--	--	28	--
Boundary	BYA	--	--	--	U	--
Chandalar Lake	WCR	--	--	NDB	U	--
Chicken	CKX	--	--	--	U	--
Chisana	CZN	--	--	--	U	--
Chitina	CXC	--	X	--	U	--
Circle Hot Springs	CHP	--	--	--	U	--
Clear	Z84	--	--	--	24	--
Coldfoot	CXF	AWOS-3PT	X	--	8	--
Kantishna	5Z5	--	--	--	U	--
Lake Louise	Z55	--	--	--	U	--
May Creek	MYK	--	--	--	U	--
McCarthy	15Z	--	--	--	U	--
Minchumina	MHM	AWOS	X	NDB	34	--
Prospect Creek	PPC	--	--	--	15	--
Rampart	RMP	--	--	--	22	--
Tetlin	3T4	--	--	--	19	--
Wiseman	WSM	--	--	--	U	--

AWOS: Automated Weather Observing System | AWOS-3PT: Automated Weather Observing System plus cloud/ceiling and thunderstorm/lightning data
NDB: Non-Directional Beacon| U: Unlighted

The runway surfaces of the IATP region's Local NPIAS Low-Activity airports are in good condition, overall. However, weather reporting and weather cameras are needed at these airports in order to meet performance measures, and very few of the airports have either. Only two of the airports have weather reporting systems, and only three have weather cameras. The weather cameras at Chitina and Coldfoot were installed in the time since the 2010 IATP was published. Although runway lighting systems are not specified as a performance measure for this airport classification, it is worth noting that few of these airports have runway edge lighting, and those that do are using aged lighting systems.

2.4.7   Local Non-NPIAS

There are six Local Non-NPIAS airports in the IATP area. Local Non-NPIAS airports are facilities that are not in the NPIAS and are thus ineligible for federal grant funding. However, they are still owned and operated by various entities (five by DOT&PF, one by a private owner) and serve specific local roles that distinguish them from being considered landing strips, backcountry facilities, or unclassified facilities Existing conditions of key features for the IATP region's Local Non-NPIAS airports are presented in Table 17 and Table 18.

Table 17. IATP Local Non-NPIAS Airports – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Bradley Sky-Ranch	95Z	Private	--	4,100 x 60	Gravel – F	U	--
Copper Center 2	Z93	DOT&PF	--	2,200 x 55	Gravel – F	U	--
Gold King Creek	AK7	DOT&PF	--	2,558 x 17	Gravel – F	U	--
Livengood Camp	4AK	DOT&PF	--	3,000 x 50	Gravel – G	U	--
Summit	UMM	DOT&PF	--	3,814 x 80	Gravel – G	U	--
Tazlina	Z14	DOT&PF	--	1,200 x 40	Gravel – G	U	--

Runway Surface Condition: E: Excellent, G: Good, Fair: F, P: Poor | U: Unlighted

Table 18. IATP Local Non-NPIAS Airports – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Bradley Sky-Ranch	95Z	--	--	--	U	--
Copper Center 2	Z93	--	--	--	U	--
Gold King Creek	AK7	--	--	--	U	--
Livengood Camp	4AK	--	X	--	U	--
Summit	UMM	--	X	--	U	--
Tazlina	Z14	--	--	--	U	--

U: Unlighted

There are only two performance measures defined by the AASP for Local Non-NPIAS facilities, and they amount to expecting these airports to remain open year-round, with runway surfaces maintained in a state of good condition. These facilities generally do not have – and are not expected to have – instrument approaches, weather reporting, NAVAIDs, lighting systems, or other services and amenities. Summit has had a weather camera since at least 2010, and Livengood Camp's weather camera has been installed since then.

Bradley Sky-Ranch is a unique airport in the aviation system and in this classification. While the five other similarly classified airports are remote gravel strips that serve as little more than safe places to land, Bradley Sky-Ranch is located within the city of North Pole, has a significant number of based aircraft, and supports robust activity. Unresolved ownership issues have prevented this facility from completing a Master Plan, and it has not been included in the NPIAS to date.

2.4.8   Landing Strips

The May 2022 AASP Classifications & Performance Measures report identifies a new class of airports to include all other NPIAS, FAA-recognized facilities in Alaska. This new classification assigns the title of Landing Strips to facilities across the state that do not qualify for other classifications but are registered with the FAA and appear in maps and charting publications. There are 18 Landing Strips in the IATP area. These facilities are owned by various federal agencies, state agencies, or private owners, or they reside in the public domain (i.e., lack a registered owner). Four of the facilities are exclusively seaplane (floatplane) facilities. The AASP recognizes the important role that seaplane bases fulfill in Alaska, and they are considered further by the AASP Seaplane Facilities Plan to define specific needs and performance measures for these unique facilities. Existing conditions of key features for the IATP region's Landing Strips are presented in Table 19 and Table 20.

Table 19. IATP Landing Strips – Runway Characteristics

Name	ID	Owner	NPIAS	Rwy Size (ft)	Rwy Sfc & Condition	Lights	Instrument Approach
Black Rapids	5BK	BLM	--	2,250 x 400	Turf - F	U	--
Cantwell	TTW	Private	--	2,080 x 30	Turf - F	U	--
Chena River	2Z5	Public Domain	--	3,000 x 300	Water	U	--
Coal Creek	L20	NPS	--	3,900 x 80	Gravel - P	U	--
Eureka Creek	2Z2	Unknown	--	1,500 x 35	Dirt	U	--
Eva Creek	2Z3	DNR	--	950 x 40	Gravel - P	U	--
Glacier Creek	KGZ	NPS	--	1,400 x 15	Gravel - P	U	--
Horsfeld	4Z5	Public Domain	--	900 x 12	Dirt - P	U	--
Jakes Bar	AK0	NPS	--	1,000 x 25	Gravel - P	U	--
Lake Louise Seaplane Base	13S	Private	--	5,000 x 4,000	Water	U	--
McKinley Ntl Park	INR	NPS	--	3,000 x 68	Gravel - G	U	--
Paxson	PXK	Private	--	1,900 x 12	Turf - F	U	--
Quail Creek	20K	DNR	--	1,650 x 30	Turf - P	U	--
Stampede	Z90	NPS	--	1,960 x 40	Turf - G	U	--
Tanacross	TSG	BLM	--	4,963 x 150	Asphalt - P	U	--
Tazlina/Smokey Lake	5AK	Private	--	2,200 x 600	Water	U	--
Tolsona Lake	58A	ADF&G	--	4,000 x 1,500	Water	U	--
Totatlanika River	9AK	Public Domain	--	780 x 30	Gravel - P	U	--

BLM: U.S. Bureau of Land Management| NPS: National Park Service | DNR: Alaska Department of Natural Resources | ADF&G: Alaska Department of Fish & Game | Runway Surface Condition: E: Excellent, G: Good, F: Fair, P: Poor | U: Unlighted

Table 20. IATP Landing Strips – Weather, NAVAIDs, & Services

Name	ID	Weather Reporting	Weather Camera	Navigational Aids	Age of Lighting	Other Services
Black Rapids	5BK	--	X	--	U	
Cantwell	TTW	--	--	--	U	
Chena River	2Z5	--	--	--	U	
Coal Creek	L20	--	--	--	U	
Eureka Creek	2Z2	--	--	--	U	
Eva Creek	2Z3	--	--	--	U	
Glacier Creek	KGZ	--	--	--	U	
Horsfeld	4Z5	--	--	--	U	
Jakes Bar	AK0	--	--	--	U	
Lake Louise Seaplane Base	13S	--	--	--	U	
McKinley Ntl Park	INR	AWOS-3P	X	--	U	
Paxson	PXK	--	X	--	U	
Quail Creek	20K	--	--	--	U	
Stampede	Z90	--	--	--	U	
Tanacross	TSG	--	--	--	U	
Tazlina/Smokey Lake	5AK	--	--	--	U	
Tolsona Lake	58A	--	--	--	U	
Totatlanika River	9AK	--	--	--	U	

AWOS-3P: Automated Weather Observing System plus cloud/ceiling data | U: Unlighted

The agencies that own these Landing Strips – if owned by any entity at all – typically do not actively operate or maintain their facilities. The runway surfaces are in generally poor condition, and there are no services, amenities, or support features at most Landing Strips. McKinley (INR) is an exception, as this facility supports tourism within Denali National Park, and it has a runway surface in good condition, weather reporting, and a weather camera. Paxson also has a weather camera, installed in the time since the 2010 IATP was published.

A primary reason these facilities remain registered is that they are important to pilots. These facilities provide access to the large expanses of remote Alaska, and many are used as emergency landing locations or safe landing sites in remote regions, where there may be no other suitable landing area. There is interest from the aviation community in getting weather reporting at some of these airports, but for the most part, these facilities are identified as places that the aviation community does not want to see deteriorate to unusable conditions.

2.4.9 Military

There are three military airfields in the IATP region, but these facilities are not available for public use and are not included in the IATP inventory or planning work. Military aviation activity plays a huge role in the IATP region, and some of the weather information and navigational infrastructure based at these facilities supports civilian aviation, but military airports themselves fall outside of the planning purposes of this evaluation. They are included here for awareness purposes, as the presence of these military airfields, the military airspace in the area, and military activity influence many of the public use facilities in the IATP region.

The three (3) military airfields in the region are Allen Army Airfield (Allen AAF, or BIG) at Fort Greely near Delta Junction, Ladd Army Airfield (FBK) at Fort Wainwright in Fairbanks, and Eielson Air Force Base (EIL) just southeast of Fairbanks/North Pole. Allen AAF was, at one time, open for public use, with restrictions, but that status was changed in 2013. Allen AAF has an ASOS and NAVAIDs that benefit pilots using the nearby Delta Junction airport (three miles north).

2.5 Current & Base Year Activity

Aviation activity established for the base year of 2022 is presented in *Tables 21-25*. The statistics presented in the tables were derived as part of the aviation forecasting exercise, and more detailed information can be referenced in the *Aviation Forecasts* chapter. Base year activity consists of the following categories and information sources:

- Based aircraft – Based aircraft counts were derived from the FAA's National Based Aircraft Inventory. If not reported through this source, then data is from the FAA's Form 5010 data, published in the FAA's Airport Data and Information Portal (ADIP). If any airport has a recent or concurrent airport layout plan or master plan, that data has been used under the assumption that it is more current and accurate than other sources.

- Operations – Total operations (air carrier, air taxi, general aviation, and military) are derived from the FAA's Terminal Area Forecasts (TAF) or through Form 5010 data published in the ADIP. A breakdown of the different types of operations can be found in the Aviation Forecasts chapter.

- Enplaned Passengers – Enplaned passengers are presented as a representative passenger activity level from each facility. Data is from the USDOT Bureau of Transportation T-100 Domestic Market data. For the IATP facilities, enplaned passengers are generally roughly equal to deplaned passengers, so while either data set is representative of current activity, enplanements are more typically reported in airport planning exercises.

- Deplaned Freight & Mail – Deplaned freight and mail statistics are presented, as opposed to enplaned statistics, because the deplaned volumes are more representative of the activity at each facility. Very few of the facilities have significant volumes of mail or freight that is boarded onto aircraft from the facility and destinated for another location. Most of the facilities in the IATP region are recipients of sizeable volumes of mail and freight that support the local community and economy. The volume of inbound freight and mail is a more telling statistic than the volume of outbound freight and mail. Data is from the USDOT Bureau of Transportation T-100 Domestic Market data.

Table 21. IATP Hub Airports – Base Year Activity

Name	ID	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
SMALL HUB						
Fairbanks International	FAI	569	112,256	510,137	17,977,506	408,345
REGIONAL HUB						
Fort Yukon	FYU	0	8,377	4,728	1,008,028	627,027
HUB TOTALS		**569**	**120,633**	**514,865**	**18,985,534**	**1,035,372**

Table 22. IATP Community Airports – Base Year Activity

Name	ID	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
COMMUNITY OFF-ROAD						
Arctic Village	ARC	0	1,650	1,548	568,137	214,390
Beaver	WBQ	0	500	924	188,958	19,558
Chalkyitsik	CIK	0	650	558	183,658	60,837
Ralph M Calhoun Meml	TAL	0	3,100	1,820	240,638	143,256
Stevens Village	SVS	0	750	212	35,280	1,192
Venetie	VEE	0	1,900	1,392	633,971	294,045
COMMUNITY ON-ROAD						
Central	CEM	2	4,000	37	9,772	19,527
Chistochina	CZO	1	1,600	No data	No data	No data
Circle City	CRC	0	1,110	269	33,818	16,636
Delta Junction	D66	16	4,070	44	1,448	0
Eagle	EAA	1	2,400	650	119,037	105,591
Gulkana	GKN	12	5,122	420	2,861	1,470
Healy River	HRR	10	1,300	1,431	16,781	2,537
Manley Hot Springs	MLY	5	1,700	76	14,196	24,232
Minto Al Wright	51Z	0	1,000	138	13,169	22,047
Northway	ORT	0	15,800	No data	No data	No data
Tok Junction	6K8	33	2,700	404	19,037	955
COMMUNITY TOTALS		**80**	**49,352**	**9,923**	**2,080,761**	**926,273**

Table 23. IATP Local Airports – Base Year Activity

Name	ID	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
LOCAL NPIAS – HIGH ACTIVITY						
Nenana Muni	ENN	13	6,000	0	11,826	153
LOCAL NPIAS – LOW ACTIVITY						
Birch Creek	Z91	0	500	205	90,556	8,387
Boundary	BYA	0	250	No data	No data	No data
Chandalar Lake	WCR	0	300	45	10,667	0
Chicken	CKX	0	475	34	3,354	11,270
Chisana	CZN	0	150	85	37,640	4,098
Chitina	CXC	1	1,750	No data	No data	No data
Circle Hot Springs	CHP	4	3,600	No data	No data	No data
Clear	Z84	1	100	No data	No data	No data
Coldfoot	CXF	3	1,000	5,212	4,675	0
Kantishna	5Z5	0	1,200	0	0	0
Lake Louise	Z55	0	300	No data	No data	No data
May Creek	MYK	0	350	34	411	6,750
McCarthy	15Z	0	1,400	176	6,094	53,264
Minchumina	MHM	2	1,140	202	162,093	26,206
Prospect Creek	PPC	0	498	831	4,775	0
Rampart	RMP	0	300	490	109,485	13,654
Tetlin	3T4	0	112	No data	No data	No data
Wiseman	WSM	0	270	No data	No data	No data
LOCAL NON-NPIAS						
Bradley Sky-Ranch	95Z	46	120	No data	No data	No data
Copper Center 2	Z93	7	1,200	3	0	0
Gold King Creek	AK7	1	50	No data	No data	No data
Livengood Camp	4AK	0	100	No data	No data	No data
Summit	UMM	0	1,054	No data	No data	No data
Tazlina	Z14	1	200	No data	No data	No data
LOCAL TOTALS		79	22,419	7,317	441,576	123,782

Table 24. IATP Landing Strips – Base Year Activity

Name	ID	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
LANDING STRIPS						
Black Rapids	5BK	0	110	No data	No data	No data
Cantwell	TTW	3	2,350	No data	No data	No data
Chena River	2Z5	6	24	No data	No data	No data
Coal Creek	L20	0	200	No data	No data	No data
Eureka Creek	2Z2	0	0	No data	No data	No data
Eva Creek	2Z3	0	0	No data	No data	No data
Glacier Creek	KGZ	0	60	No data	No data	No data
Horsfeld	4Z5	0	0	No data	No data	No data
Jakes Bar	AK0	0	100	No data	No data	No data
Lake Louise SPB	13S	2	1,100	No data	No data	No data
McKinley Ntl Park	INR	7	3,200	No data	No data	No data
Paxson	PXK	0	0	No data	No data	No data
Quail Creek	20K	0	80	No data	No data	No data
Stampede	Z90	0	30	No data	No data	No data
Tanacross	TSG	0	800	No data	No data	No data
Tazlina/Smokey Lake	5AK	2	500	No data	No data	No data
Tolsona Lake	58A	2	300	No data	No data	No data
Totatlanika River	9AK	0	0	No data	No data	No data
LANDING STRIP TOTALS		22	8,854	No data	No data	No data

Table 25 summarizes activity by AASP classification and presents the percentage of total IATP region activity attributed to each class. Fairbanks International (FAI) is a dominating airport in the statistics, accounting for 76 percent of the total based aircraft, 56 percent of total operations, 96 percent of enplaned passengers, and 84 percent of deplaned freight. FAI accounts for only 20 percent of the deplaned mail, as most mail delivery to Fairbanks is via the road system. The single Regional Hub (Fort Yukon) accounts for four percent of total operations, one percent of total enplaned passengers, five percent of deplaned freight, and 30 percent of deplaned mail (Fort Yukon is a USPS Bypass Mail hub). Fort Yukon has no based aircraft. The 17 Community airports account for 11 percent of based aircraft, 25 percent of total operations, two percent of enplaned passengers, 10 percent of deplaned freight, and 44 percent of deplaned mail. The 25 Local airports account for 10 percent of based aircraft, 11 percent of total operations, one percent of enplaned passengers, two percent of deplaned freight, and six percent of deplaned mail. The Landing Strips have data reported for based aircraft and operations only and account for three percent of the region's based aircraft and four percent of total operations.

Table 25. Summary of Base Year Activity and Percentages of Total by AASP Classification

AASP Classification	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
Small Hub (FAI)	569	112,256	510,137	17,977,506	408,345
Regional Hub	0	8,377	4,728	1,008,028	627,027
Community	80	49,352	9,923	2,080,761	926,273
Local	79	22,419	7,317	441,576	123,782
Landing Strips	22	8,854	0	0	0
TOTALS	750	201,258	532,105	21,507,871	2,085,427
Percent of Total	Based Aircraft	Operations	Enplaned Passengers	Deplaned Freight	Deplaned Mail
Small Hub (FAI)	76%	56%	96%	84%	20%
Regional Hub	0%	4%	1%	5%	30%
Community	11%	25%	2%	10%	44%
Local	10%	11%	1%	2%	6%
Landing Strips	3%	4%	0%	0%	0%

2.6 Airspace

2.6.1 General Airspace

Fairbanks International Airport and the three military airfields have air traffic control towers, but the vast majority of flight in the region uses the AFSS in Fairbanks. Northway has a seasonal FSS, open May through September annually. Anchorage Air Route Traffic Control Center (Anchorage ARTCC) has control responsibility for airspace across the entire state of Alaska, for aircraft flying at high altitude within controlled airspace, principally during the en-route phase of flight.

2.6.2 Military Airspace

The IATP region is heavily used by the military, and the airspace is used extensively for military flight training. The remote, sparsely populated nature of the region makes it especially suitable for military exercises, as noise impacts to people are limited. Much of the IATP area is covered by special use airspace (SUA), military operating areas (MOAs), and restricted airspace (Figure 5).

Both the MOAs and restricted airspace areas are used frequently and require civilian pilots to have a high level of awareness about their presence and use. The military's MOA informational brochure for Alaska describes MOAs as "VFR see and avoid" airspace. VFR flight through MOAs is not restricted, although extreme caution is advised due to the high speed and dynamic nature of military flying. Emergency aircraft, medical evacuation (medevac) flights, and firefighting aircraft retain priority over military training. The MOAs are not always in use; they are used for defined periods during which major flying exercises are conducted. Usage times and durations are published in advance for public reference. Restricted airspace does prohibit civilian air traffic, and while these areas cover much less territory than the MOAs, there are a few of them in the IATP region.

Alaska has a dedicated service that civilian pilots can access to get current information about military airspace and operations. The Special Use Airspace Information Service (SUAIS) is a 24-hour service operated by the military that provides civilian pilots with information regarding military flight operations in certain MOAs and restricted airspace within central Alaska. SUAIS provides information on military flight activity in the interior Alaska MOA and Restricted Area complex, artillery firing, known helicopter operations, and military UAS operations. This service enables pilots to plan their flights through and around the SUA.
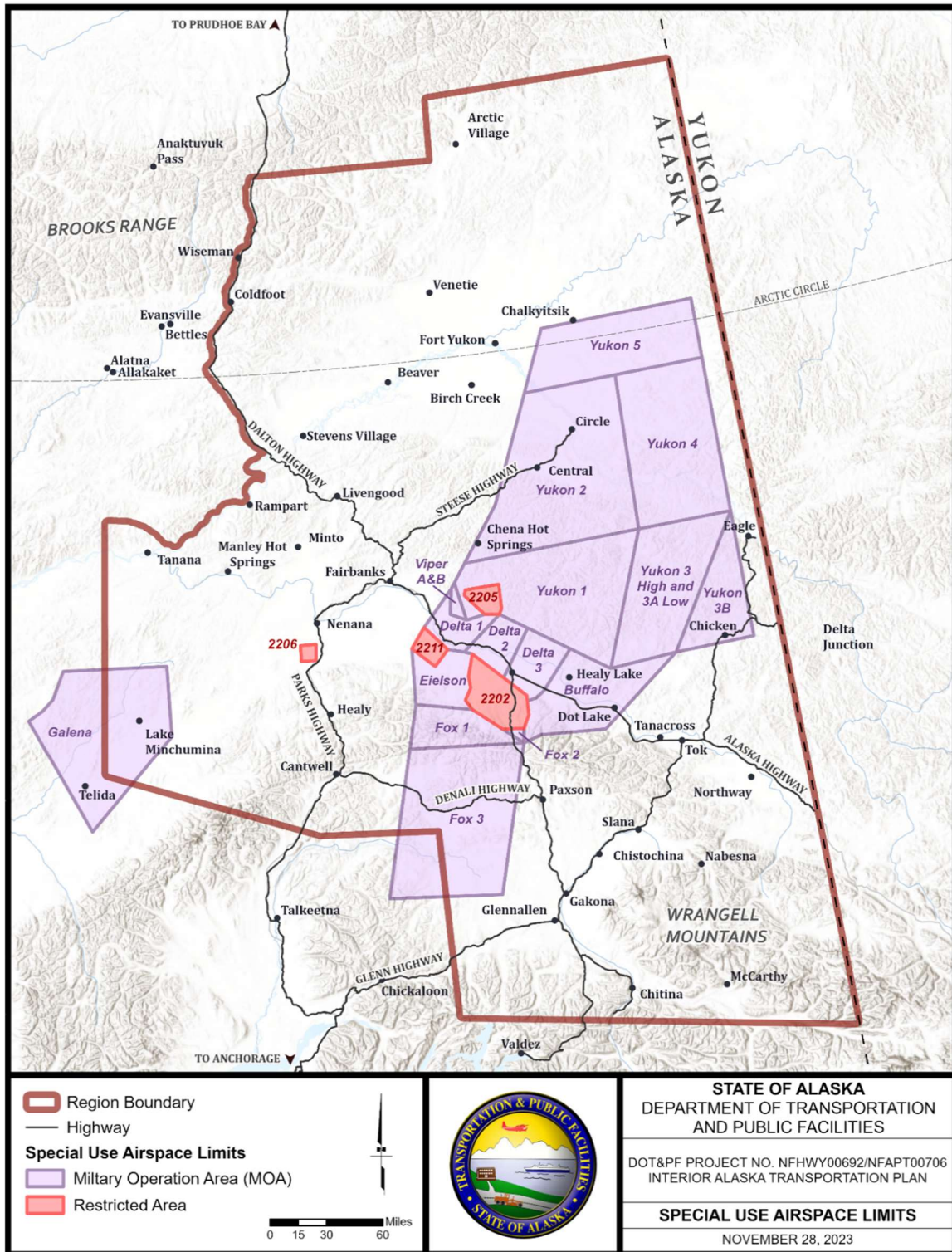
Figure 5. Existing Military Operations Areas in Alaska. Adapted from: J-BER Special Use Airspace Map
Note: This figure is for general awareness of Military Operations Areas only, not for navigation.

2.7 Existing Routes

The route structure in the IATP area (Figure 6) looks markedly different than route structures in the rest of Alaska. The IATP area includes the medium hub of Fairbanks International and a single regional hub (Fort Yukon). Comparatively, DOT&PF's Southeast Transportation Plan area has six regional hub airports and the small hub of Juneau International Airport; DOT&PF's Northwest Transportation Plan area has six regional hub airports; DOT&PF's Southwest Transportation Plan area has six regional hub airports; and DOT&PF's Yukon-Kuskokwim Transportation Plan area has five regional hub airports. The hub-spoke route structure is common across most of the state and within these other planning areas, a structure in which each regional hub provides primary air service to multiple outlying communities by air carriers based out of the hub airports.

The IATP region is dominated by activity originating out of Fairbanks International, with other routes appearing less obvious. Most communities in the IATP region receive air service from the Fairbanks International hub. However, there are a handful of other airports that serve as origin points for routes, most notably Fort Yukon, Gulkana, and Tok.
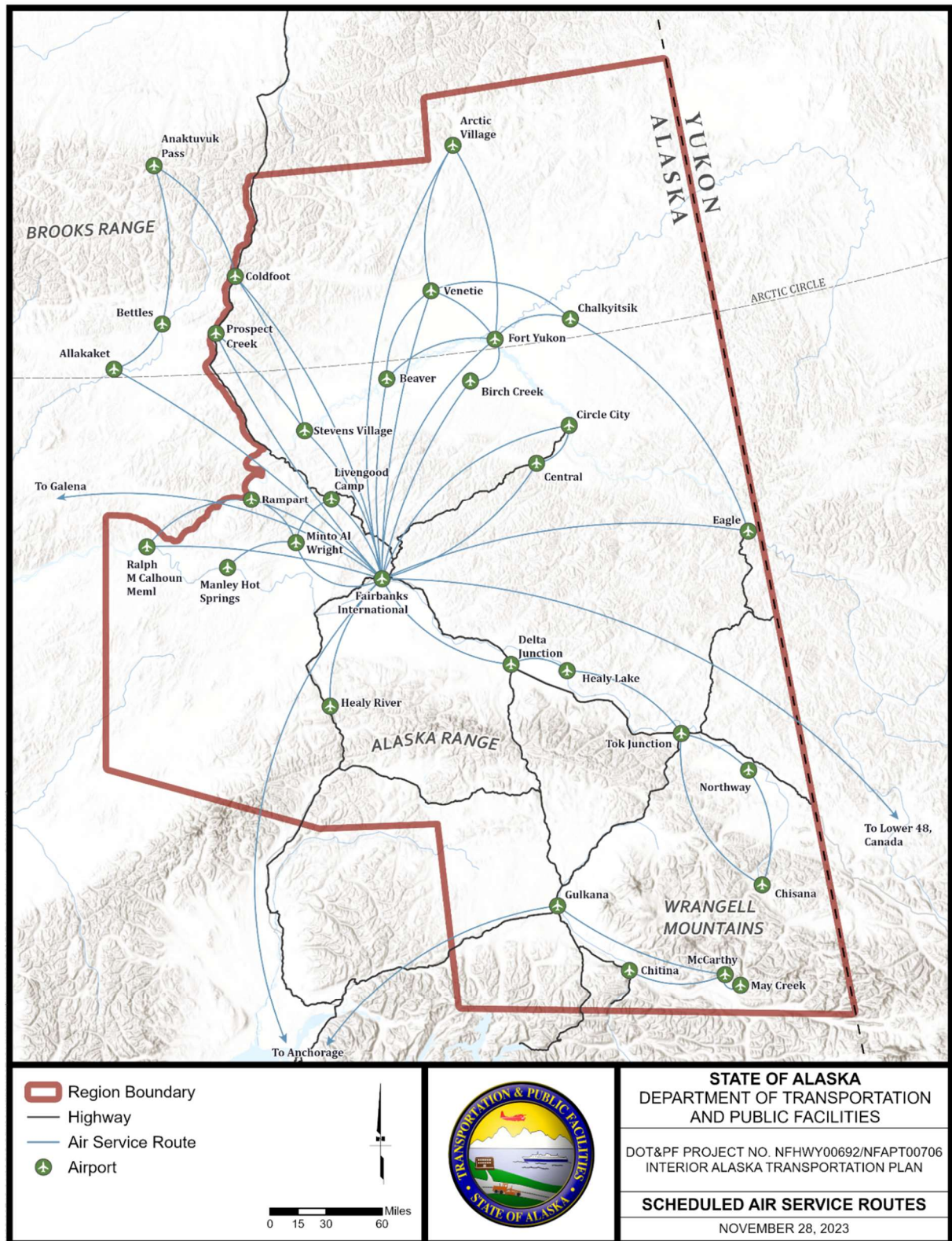
Figure 6. Scheduled Air Service Route Map

2.8 Intermodal Connection Points

Figure 7 shows the airports in the IATP region distinguished by whether they are on-road or off-road. The AASP defines "off-road" as meaning that the airport lacks year-round access to the National Highway System. Of the 62 airports, 40 are on-road, and 22 are off-road.
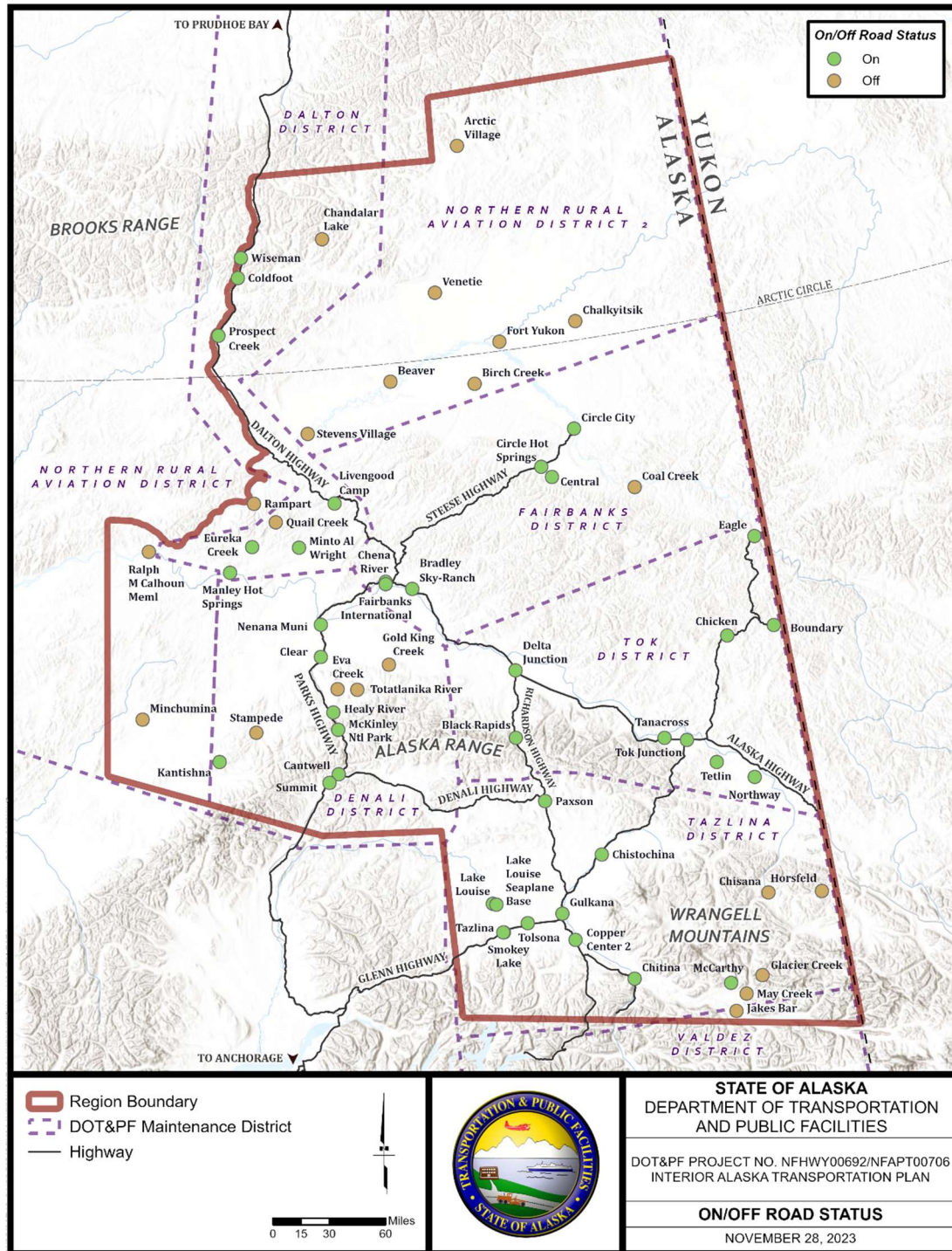
Figure 7. IATP Airports by On/Off Road Status

The off-road airports provide the only year-round mode of access to their communities. These facilities are vital to the safety, survivability, and quality of life of these communities. The several off-road airports not located near a community are critical landing spaces and access points to remote, roadless regions.

The 40 on-road airports are part of the intermodal transportation network. Communities, businesses, and agencies are able to use a combination of roads and airports to conduct business, send and receive supplies, transport people and goods, and deliver services. Several airports in the IATP region are popular as "jumping off" points. People reach the airport by road, then fly out to remote areas from there.

The availability of more than one access mode has been beneficial during various weather events and natural disasters. When one mode has become temporarily unusable, the other mode has maintained access to communities. When flooding impacts road access, the airports may be left unimpacted. When wildland fires cause roads to be shut down, airports on either side of the fire still connect communities and agencies responding to the fire. When weather events prevent safe flight, the road system enables people or goods to complete their travel. In one instance of an unexpected weather event that caused numerous aircraft to land in between their origin and intended destination, the road system became a vital backup mode. In October 2022, approximately 17 commuter aircraft were diverted to Nenana Airport from Fairbanks International due to unpredicted heavy freezing fog in the Tanana Valley. One of the flights was a medevac, and the patient was able to be transported to the intended medical facility by connecting with ground transport from Nenana. Other passengers were able to catch ground transportation to reach their intended destinations before weather lifted.

Since the IATP region, like most of Alaska, does not have extensive road network redundancy with various alternative surface routes available to travelers, the availability of both roads and airports is important for preventing communities in this region from becoming isolated when one mode becomes unusable.

2.9   Aircraft Fleet Operating in IATP Region

Although the IATP region accommodates aircraft of nearly all types and sizes – wide body cargo jets, military jets and helicopters, commuter aircraft, small recreational aircraft, aircraft on tundra tires and floats, and more – there are clear workhorses. The bulk of the transportation of people and goods by air is accomplished with a fairly steady fleet of aircraft that meet the needs of this region. Some of the most common air carrier aircraft serving the region include:

- Cessna 206 and 207 Stationairs
- Cessna 185 Skywagons
- Cessna 208 Caravans
- Beechcraft King Air 200s
- Piper PA-18 Super Cubs
- Piper PA-31 Navajos
- De Havilland Beavers

Table 26 identifies air carriers currently operating in the IATP region, the airports at which they are based, their fleet, and notes about what types of service they provide.

Table 26. Air Carriers Currently Operating in the IATP Region

Carrier	Base	Fleet	Remarks
40-Mile Air	Tok	(5) **Cessna C206 Stationairs** (1) **Cessna C207 Stationair** (1) Cessna 185 Skywagon (6) **Piper PA-18 Super Cubs** (1) Piper PA-31 Navajo (2) Robinson R44 Raven helicopters	Scheduled service from Tok to Healy Lake, Delta, Fairbanks, Chisana, Northway, and Chicken. Charter service available.
Copper Valley Air Service	Gulkana Airport, Glennallen	(1) Cessna 180 Skywagon (1) Cessna 172 Skyhawk (2) **Cessna 206 Stationairs** (1) Piper PA-12 Super Cruiser (1) De Havilland DHC-2 Beaver	Scheduled service to McCarthy and May Creek. Partners with Reeve for service out of Anchorage. Charter service available.
Coyote Air	Coldfoot	(2) **De Havilland Beavers** (1) Cessna 185 (1) Cessna 206 Stationair on floats	Charter service out of Coldfoot in the summer.
Ellis Air Taxi	Gulkana Airport, Glennallen	**Cessna C206 Stationair** **Cessna 185** **Piper Super Cub** Piper Twin Engine Howard DGA-15P	Scheduled service to McCarthy, May Creek, and Kennicott. Charter service available.
Everts / Tatonduk Flying Service	Fairbanks	(4) **Cessna 208 Caravans** (3) Pilatus PC-12s (4) McDonnell Douglas DC-6As (1) Curtiss C-46 (6) MD-80s (3) Cessna 408 SkyCouriers (first one delivered in October 2023)	Doing business as Everts Air. Scheduled and charter passenger services out of Fairbanks with Pilatus PC-12 or Cessna Grand Caravan. Fairbanks to Arctic Village, Eagle, Fort Yukon, and Venetie. Scheduled freight service out of ANC for 10 major hubs (none in IATP area) and charter/flag stop services to anywhere they can land.
Guardian Flight	Fairbanks	Learjet 45 **Beechcraft King Air 200** Beechcraft King Air C90B Cessna 204 Caravan Pilatus PC-12 Airbus H130 Airbus AS350B3e	Medevac operations throughout the region.
LifeMed Alaska	Fairbanks	Learjet 31 Learjet 35 Learjet 45 **Beechcraft King Air 200**	Fixed-wing medevac operations throughout the region.
Maritime Helicopters	Fairbanks & Deadhorse (seasonal)	(8) Bell BHT 206 L4 Long Rangers (7) Bell BHT 407s (2) Air Bus Euro BO-105s	Helicopter charters.
Reeve Air Alaska	Anchorage	**Piper PA-31 (Navajo)/T-1020**	Scheduled service from Anchorage to GKN 2x/week. Partners with Copper Valley Air Service. Charter service available.
Tok Air Service	Tok	(3) **Piper PA-18 Super Cubs** (1) **Cessna 185 Skywagon**	Charter service available.

Carrier	Base	Fleet	Remarks
Warbelow's Air Ventures	Fairbanks	(15) **Piper PA-31 Navajo/T-1020s**	Scheduled passenger service to Beaver, Central, Circle, Manley Hot Springs, Minto, Rampart, and Stevens Village. Charter and freight services available.
Wrangell Mountain Air	McCarthy	(1) **Cessna 185 Skywagon** (1) Cessna 172 Skyhawk (3) **Cessna 206 Stationairs** (1) **De Havilland DHC-2 Beaver**	Scheduled daily service between McCarthy and Chitina. Charter service available.
Wright Air Service	Fairbanks	(4) Helio H-250/295/395s (2) **Cessna C206 Stationairs** (2) **Piper PA-31 (Navajo)/T-1020s** (18) **Cessna 208 Caravans** (1) Beechcraft Bonanza A36	Service to Arctic Village, Chalkyitsik, Coldfoot, Fort Yukon, Venetie, Birch Creek, and Minchumina. Charter service available.

Aircraft in bold text are aircraft performing the majority of reported scheduled carrier operations (BTS T-100 statistics). Fleet & service information sourced from carrier web pages, BTS T-100 data, and the Part 135 Aircraft Registry.

For the sake of documenting changes since the 2010 IATP, several carriers operating at that time no longer operate in the IATP region. These carriers include:

- Arctic Circle Air Service: Acquired by the parent company of Frontier Alaska in October 2009 and merged into the Era Alaska/Frontier Alaska operation.

- Era Aviation: Bought out by The Frontier Alaska Group in February 2009 along with Frontier Flying Service and Hageland Aviation. The three carriers operated under the marketing name of Era Alaska/Frontier Alaska, which subsequently changed the marketing name of all the airlines to Ravn Alaska/Ravn Connect brands. Ravn has since gone bankrupt and been revived as Northern Pacific, but it no longer serves the IATP region.

- Larry's Flying Service: Indicated as "Permanently Closed" in a web search.

- Ravn Alaska: Ravn has been revived from bankruptcy, doing business as Northern Pacific. The route map and web page show no service to the IATP region.

- Tanana Air Service: A January 14, 2022 *Alaska Business* online article reports that Grant Aviation merged with Tanana Air Service and Shannon's Air Taxi. Grant does not appear to provide service in the IATP region.

2.10 AIP Funding History

The IATP region has seen few major airport construction projects and a smaller share of the statewide federal AIP funding in the years since the 2010 IATP was published. Table 27 summarizes the historical and recent AIP funding in the IATP region compared to AIP funding statewide. The data is for Nonprimary facilities only, due to the difference in how Primary airports are funded through the AIP and how that skews the totals. The numbers in the table show that, since FY09, the IATP region nonprimary airports have received *less than half* the share of total nonprimary funding than they received prior to FY09.

Table 27. AIP Investment in IATP Airports (Nonprimary Facilities Only)

	2007-2011 NPIAS	2023-2027 NPIAS
Alaska Nonprimary Airports in NPIAS	234	226
IATP Nonprimary Airports in NPIAS	36	33
Percent of Alaska Nonprimary Airports in IATP Region	15%	15%
	FY82-FY08	**FY09-FY22**
Total AIP Grants - all Nonprimary Alaska Airports	$1.18 billion	$1.50 billion
Total AIP Grants at IATP Nonprimary Airports	$124.5 million	$65.2 million
Percent of AIP Grant Total for IATP Nonprimary Airports	10.5%	4.3%

Note: "AIP Investment" includes other special funding, such as American Recovery and Reinvestment Act (ARRA), Coronavirus Aid, Relief, and Economic Security Act (CARES Act), and American Rescue Plan Act (ARPA) funding

At the time the 2010 IATP was developed:

- Approximately 15 percent of NPIAS nonprimary facilities were within the IATP region (the 2007-2011 NPIAS lists 234 nonprimary airports in Alaska, 36 of which are within the IATP region).

- The IATP region nonprimary airports received approximately 10.5 percent of total AIP grant funding during the FY82-FY08 period (approximately $1.18 billion for all AK nonprimary airports, roughly $125 million of which was awarded to IATP nonprimary airports).

- Thus, 15 percent of the state's nonprimary airports received about 10.5 percent of the nonprimary funding during this time period.

Since the 2010 IATP, the percentage of total grant funding awarded to IATP nonprimary airports (FY09-FY22) has dropped considerably.

- The IATP region still has roughly 15 percent of the state's nonprimary airports (33 of the 226 listed in the 2023-2027 NPIAS).

- The percentage of AIP grant funding awarded to these facilities has dropped to approximately 4.3 percent of the total during the FY09-FY22 period (approximately $65 million of $1.5 billion awarded to all nonprimary facilities).

- Thus, 15 percent of the state's nonprimary airports received about 4.3 percent of the nonprimary funding during the FY09-FY22 time period following the data reported in the 2010 IATP.

- In the FY09-FY22 period, the IATP region nonprimary airports received *less than half* the share of total nonprimary funding than they received prior to FY09.

In very recent years, there has been a boost in federal funding with combined funding from the AIP, the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA), the American Rescue Plan Act (ARPA) of 2021, and the Bipartisan Infrastructure Law (BIL) enacted as the Infrastructure Investment and Jobs Act (IIJA) of 2021. This has not, however, translated to a windfall of capital funding, as much of the special funding has been allocated to operational expenses, and inflation has significantly diminished the impacts of funding intended for capital investments.

The $49 million in CARES funding was allocated to operational expenses, with $11 million specifically designated for deferred maintenance projects. CRRSAA provided around $26.5 million in funding for rural airports, allocated specifically to primary airports and restricted to operational costs. The DOT&PF received approximately $35 million through ARPA funding, which was also restricted to operational costs. The 2023-2027 NPIAS narrative indicated the majority of airports nationwide elected to use most of the funds provided through the CARES Act, CRRSAA, and ARPA to offset operating costs and/or debt service rather than for new capital investment.

The IIJA is the only special funding that is expected to provide a boost to capital investments at airports. The IIJA is anticipated to add approximately $50 million per year to the Rural Airport System over the five-year period that began in 2022 (the BIL was signed in late 2021). While this extra funding will be of some help in meeting more needs than typical AIP funding levels support, inflation has greatly reduced the impact that this funding will have. Due to inflation and the

competition to get contractors to bid, recent construction bids have been coming in 50-70 percent (sometimes more) higher than engineer's estimates. The "extra" funding is thus anticipated to primarily cover inflated costs of construction, not fund double the usual number of projects.

Additionally, the amount of AIP entitlement funding that an airport receives annually has remained static for many years while the costs for all improvements have increased significantly. Entitlement funding is $150,000 per year for most general aviation airports or $1 million for general aviation airports with greater than 10,000 passenger boardings and certificated air carrier service. A static level of funding means that far less work is able to be accomplished each year as the costs rise.

2.11 Operational Costs

The cost to operate and maintain rural airports in the IATP region has more than doubled over the costs presented in the 2010 IATP. Table 28 shows the most recent five-year average for annual operational expenses compared against the 2010 data. The table also includes the most recent five-year annual average revenue. The most recent annual operational expenses and revenue are sourced from the AASP internal website statistics. The expenses include maintenance and operations costs such as personnel, utilities, and fuel for equipment, runway lights, and some buildings. Data is available for DOT&PF airports only.

The five-year average annual cost to maintain the DOT&PF-owned airports in the IATP region is 2.3 times what it was 16 years ago (data from FY18-FY22 vs FY02-FY06). The cost to maintain the airports is nearly ten times the revenue generated by these airports. Only a small number of the airports have tenants and activity that generates an appreciable amount of revenue. Eight of the 38 facilities listed in the table generate 91 percent of the total revenue. These eight facilities are Gulkana, Healy River, Tok, Coldfoot, Eagle, Fort Yukon, McCarthy, and Northway. As can be seen in Table 28, these airports account for most of the revenue due to the number of leases/permits at each and, additionally, due to fuel sales and concessions. Some of the other airports have a small number of paid leases/permits (1-2), but over half the DOT&PF airports in the IATP region have zero paid leases/permits.

Table 28. Operational Costs & Revenue of DOT&PF-Owned IATP Airports

Airports	5-Year Average Operational Cost (FY02-FY06) Table 0-52 2010 IATP	5-Year Average Operational Cost (FY18-FY22) AASP website	5-Year Average Annual Revenue (FY18-FY22) AASP website	Number of Paid Leases and Permits
PAVED AIRPORTS				
Clear	$23,997	$9,760	$1,659	1
Gulkana	$78,545	$128,645	$27,702	9
Healy River	$9,795	$7,244	$23,914	13
Tok	$33,062	$25,910	$19,360	12
SUBTOTAL - PAVED	**$145,399**	**$171,559**	**$72,635**	
UNPAVED AIRPORTS				
Beaver	$32,902	$62,741	$2,354	1
Birch Creek	$24,250	$105,555	$646	1
Boundary	$2,731	$62	$0	0
Central	$18,896	$33,423	$100	0
Chalkyitsik	$28,299	$96,017	$0	0
Chandalar Lake	$934	$389	$1,061	0
Chicken	$15,298	$22,661	$150	0
Chisana	$0	$0	$0	0
Chistochina	$143	$0	$0	0
Chitina	$6,706	$32,197	$2,793	2
Circle City	$21,894	$52,266	$200	0
Circle Hot Springs	$15,277	$419	$232	0
Coldfoot	$55,396	$240,800	$24,593	6
Copper Center 2	$2,010	$263	$0	0
Eagle	$41,338	$52,530	$11,246	3
Fort Yukon	$64,112	$89,233	$23,574	5
Gold King Creek	$0	$20	$0	0
Kantishna	$0	$0	$0	0
Lake Louise	$0	$0	$90	0
Livengood Camp	$545	$8,753	$1,095	1
Manley Hot Springs	$5,524	$120,509	$30	0
May Creek	$0	$0	$0	0
McCarthy	$14,367	$24,740	$11,627	4
Minchumina	$41,156	$84,754	$2,418	2
Minto	$2,245	$34,439	$0	0
Northway	$31,643	$72,736	$8,341	5
Prospect Creek	$151	$0	$0	1
Rampart	$46,836	$104,240	$100	1
Stevens Village	$30,570	$91,371	$50	0
Summit	$1,003	$641	$100	0
Tanana	$65,712	$117,574	$2,587	1
Tazlina	$0	$0	$0	0
Tetlin	$9,348	$42,284	$0	0
Wiseman	$548	$300		0
SUBTOTAL – UNPAVED	**$579,842**	**$1,490,897**	**$93,387**	
TOTAL	**$725,233**	**$1,662,476**	**$166,022**	

2.12 Security

Security systems and security plans are not critical needs for most of the airports in the IATP region. Other than Fairbanks International, none of the airports in this region are subject to the Transportation Security Administration (TSA) requirements imposed on larger, busier airports. In Alaska, airports that serve a scheduled passenger airline operating aircraft with 61 or more seats are required to have a complete TSA approved Airport Security Program. The airports in the state that meet this criterion are designated as FAA Part 139 and TSA Category I, II, or III airports, and none of the IATP airports (other than FAI, which is a TSA Category II) are designated as such.

Nearly all the public use airports in the IATP region are considered general aviation airports by the TSA. The TSA issues guidance and recommendations for airport security at general aviation facilities, but these are best practices rather than requirements. The guidance in TSA's June 2021 *Security Guidelines for General Aviation Airport Operators and Users* advises a risk-based approach to determining security threats and planning security enhancements. The risk is relatively low at the IATP region's rural airports, but access control, security signage, and security awareness education are worth considering at all airports.

The greatest security concerns at the IATP airports may be people, vehicles, and wildlife inappropriately using/occupying runways and apron areas, creating safety and vandalism issues. At airports where this is a common problem, fencing, access control, and signage should be considered to deter unauthorized use of airport facilities. Only five of the IATP area airports have airport perimeter fencing, and the only facility with full perimeter fencing is FAI. Four other facilities have partial perimeter fencing (Fort Yukon, Nenana Muni, Northway, and Tok Junction), but the unfenced areas still allow wildlife and unauthorized users access to the airport. 5010 Airport Master Record inspection reports include remarks such as, "Airport is unsecure, caution for wildlife, pedestrians, vehicles, and ATV traffic on airport," and "Moose, caribou, bears, wolves, and/or migratory waterfowl in the vicinity" at nearly every one of the airports in the IATP area.

3.0 AVIATION FORECASTS & CRITICAL AIRCRAFT

3.1 Introduction

This chapter presents a forecast of air traffic for the IATP region for target year 2040 using base year data from 2022. Regional aviation forecasts are intended to help define airports' roles within the system, prioritize airport development, and determine Runway Design Codes (RDC). The RDC is based on the Aircraft Approach Category (AAC), Airplane Design Group (ADG), and the visibility minimum needed to determine certain airfield design standards that apply. These air traffic forecasts were developed using the accepted aviation industry standard of historical trend analysis with smoothing, as influenced by relevant national, regional, and local factors. The forecasts are consistent with guidance provided in FAA's AC 150/5070-7 *The Airport System Planning Process*, FAA's AC 150/5070-6B *Airport Master Plans*, and the FAA Office of Aviation Policy and Plan's *Forecasting Aviation Activity by Airport*.

The forecasts include projections for operations, enplanements, mail and cargo, and based aircraft, as well as a discussion of future critical aircraft for the region's airports.

3.2 IATP Area in Forecasting Context

The IATP region has less of a hub-spoke air route structure than most other regions of Alaska. The only airports classified by the AASP as hubs within this region are Fairbanks International Airport (FAI) (Small Hub) and Fort Yukon (Regional Hub). As can be seen in the route structure map in Figure 8, most activity originates out of FAI. Forecasts for FAI are not included within this effort, but FAI's key role as an activity hub is considered regarding impacts to other facilities within the region.
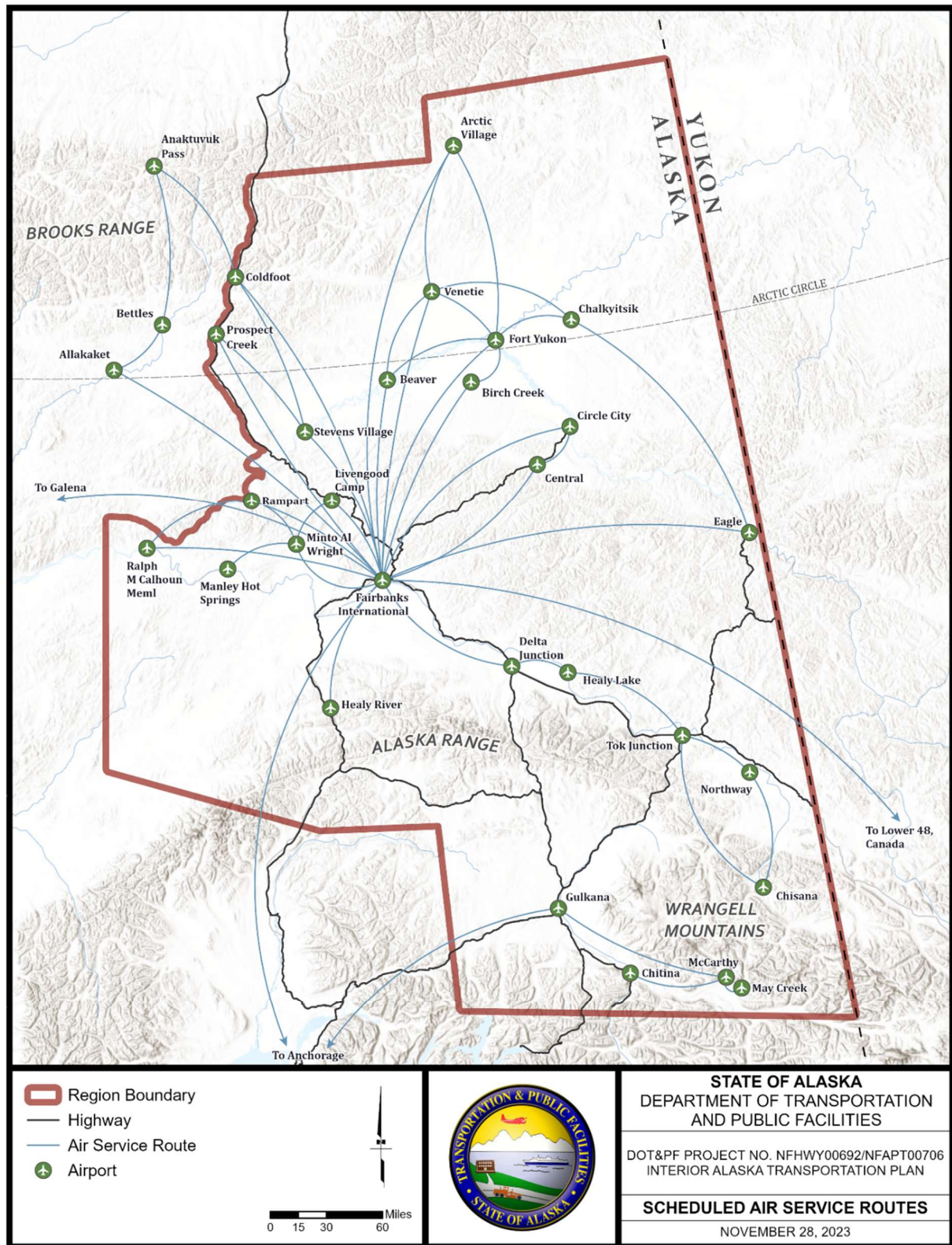
Figure 8. Scheduled Air Service Routes

3.3 Data Sources

Data available for airports in the IATP region vary greatly – some airports have data reported through most of the official sources, while many have FAA's Form 5010 Airport Master Record as the only source of activity data. Much of the data is user-reported, so its reliability is only as good as the consistency and accuracy of the reporting carrier, and some years/facilities have unreported or misreported statistics. Information sources referenced for these forecasts are described in Table 29, with remarks included about the availability and limitations of the data for this region.

Table 29. Information Sources, Availability, & Limitations for IATP Aviation Forecasts

Information Source	Availability & Limitations
FAA's Terminal Area Forecast (TAF): The TAF is a detailed FAA forecast planning database produced each year covering airports in the NPIAS and includes passenger enplanements, itinerant aircraft operations, local aircraft operations, total operations, total instrument operations, and based aircraft. Data in this report is from the 2022 TAF.	34 of the 62 IATP facilities are NPIAS facilities and have data reported in the TAF. The 28 non-NPIAS facilities in the IATP region do not have any data available through this source. The TAF count only includes passengers on scheduled air carriers reporting into the system and often misses enplanements by air taxi companies.
Bureau of Transportation Statistics (BTS) T-100 Domestic Segment & Market (U.S. Carriers): The Air Carrier Statistics database, also known as the T-100 data bank, contains domestic and international airline market and segment data. Certificated U.S. air carriers are required to report monthly air carrier traffic information using Form T-100. The data are collected by the Office of Airline Information, Bureau of Transportation Statistics. The data includes statistics used in calculating enplanements/deplanements, enplaned/deplaned cargo, enplaned/deplaned mail, operations, and aircraft type. This database is frequently used by the aviation industry, the press, and the legislature to produce reports and analyses on air traffic patterns, carrier market shares, as well as passenger, freight, and mail cargo flown within the aviation mode.	Data is only reported for 34 of the IATP facilities. Data relies on accuracy and consistency of carrier reporting, and some data is not reported or misreported (e.g., attributed to the wrong airport). All years but the most recent (2022) are available through the AASP internal website statistics. However, due to carriers often using the wrong three-letter Airport ID to designate activity, not all the data is captured by the AASP, and use of the data through either the AASP or the original T-100 reports requires careful analysis.
Airport Data and Information Portal (ADIP): The FAA's ADIP is a data repository of airport and aeronautical data. This repository includes airport data collected from the FAA's 5010 Airport Safety Inspection program, FAA-published approach plates, and presents airport map imagery. Airport 5010 inspections collect data on airport facilities, services, activities, and obstructions intruding into the airport's critical safety areas.	Most of Alaska's public use, non-certificated airports get inspected and have airport data updated once every three years, on average. The 5010 Airport Safety Inspection program is contracted to a single party who visits each facility once during every three-year cycle. Data on operations is typically an educated guess, due to most facilities being entirely unmanned, no traffic counting systems in place, and many users not required to report their activity. Even with these limitations, the 5010 data is the only data set that includes all the IATP facilities.
National Based Aircraft Inventory Program: A data repository recording all based aircraft at Nonprimary NPIAS airports. These airports are required to submit their based aircraft to the program's website to be validated with the FAA's Aircraft Registration database. Specific details on the based aircraft at each airport is limited to authorized personnel (i.e., airport managers, sponsors). However, summary reports of the total based aircraft at each airport are made publicly available on the program's website.	Data is only available for the Nonprimary NPIAS facilities in the IATP region. Data often matches what is reported on Form 5010, but not always. Data for the Primary airport (FAI) is from the ADIP, since Primary airports are not included in the National Based Aircraft Inventory. The National Based Aircraft Inventory only reports current based aircraft. Historical based aircraft counts are included in the TAF.
Alaska Aviation System Plan (AASP) Forecasts (2011): Activity trends and critical aircraft through forecast year 2030, presented by borough/census area and by airport.	All IATP airports are included. Forecasting activity is for the 2008-2030 period and is now more than 10 years old. Some borough and census area boundaries have changed since 2011.

Information Source	Availability & Limitations
2010 Interior Alaska Transportation Plan (IATP) Aviation Forecasts: Developed for the 2010-2030 period for the IATP Region.	The IATP update studies the same region defined in the 2010 IATP. Forecasts for the 2010 plan generally correlated aviation activity growth with population growth.
DOT&PF's AASP Website & Database: The AASP public website is the repository for past and existing system plan documents and public data. The AASP internal website (accessible by those with a registered account) is the portal for aviation data and reporting for Alaska, including airport facilities, needs, capital projects and inspection data, facility documents, photos and sketches, basic airport information, activity, and operational statistics, and more.	Data referenced and used for these forecasts include current and ultimate Classifications & Performance Measures, the 2011 Forecasts, AAC and ADG designations, and BTS historical statistics.
Upper Tanana Airport Planning Study (UTAPS) Blended Forecast (2023): Forecasts for Tok Junction and Tanacross Airports for the 2019-2045 period.	Forecast area includes most of the populations of the Southeast Fairbanks and Copper River Census Areas, which are also wholly or partially within the IATP region boundary. Forecast factors are applicable to larger regions, but the activity forecasts are very specific to these two airports (Tok Junction and Tanacross). Although the UTAPS study considered two additional airports (Northway and Gulkana), forecasts for these airports were not included in the final UTAPS report. An ALP update for Gulkana is being prepared separately from the UTAPS report, and the ALP narrative includes forecasts for Gulkana.
Gulkana Airport Layout Plan Aviation Forecasts (2023): Forecasts for Gulkana Airport for the 2019-2045 period.	Aviation forecasts in the draft ALP update narrative will be used for Gulkana in the IATP aviation activity forecasts. Factors influencing the forecasts and critical aircraft determination are relevant to other airports within the region, as well.
Nenana Municipal Airport Forecasts (2022): Activity trends and critical aircraft for the 2021-2031 period for the Nenana Airport (ENN).	Aviation forecasts for ENN were approved by the FAA and will be used for this facility in the IATP aviation activity forecasts. Factors influencing the forecasts and critical aircraft determination are relevant to other airports within the region, as well.
FAI Master Plan (December 2014): Activity trends. and critical aircraft for the 2010-2030 period for FAI.	Air taxi, general aviation, and critical aircraft trends from these forecasts influence activity at other airports served out of Fairbank International.
Northwest Alaska Transportation Plan (NWATP) Update 2022 – Northwest Alaska Air Traffic Forecasts: Aviation activity forecasts for the 2018-2040 period.	Primarily a reference for fleet mix and critical aircraft considerations. Many of the forecast factors and aviation activity characteristics of the Northwest Alaska Region are distinct from the IATP Region.
Airport Master Plans: Master Plans for individual facilities typically include forecasts approved by the FAA and are useful for creating more specific and accurate regional forecasts.	Only a small number of airports in the IATP region have had Master Plans completed, and other than the concurrent studies for Nenana, Gulkana, and the UTAPS airports, Master Plans for airports in this region are more than 20 years old. No Master Plans, other than FAI's 2014 Master Plan, were used in support of these IATP regional forecasts.
National Park Service Visitor Use Statistics: (STATS - Welcome to Visitor Use Statistics (nps.gov)) Annual recreation visitors from when each park began reporting to the last calendar year.	An indicator of tourism trends for the National Parks and Preserves within the IATP Region boundary.

Information Source	Availability & Limitations
Mining & Resource Development: News media, mineral development company websites, and Native corporation websites were referenced for mining activity in the IATP region.	Information is subjective, no statistics or trends available.
Air Carrier Input: Carrier input was referenced from several recent aviation studies conducted in this region and in neighboring regions. A small amount of carrier input was provided in support of this IATP update.	Air carrier and airport user input from the 2023 UTAPS, 2020 NWATP, and 2021 FAA Alaska Aviation Safety Initiative (FAASI) were used in support of these forecasts. These other studies have all taken place within the past three to five years, and the carrier input is considered current and applicable to the IATP region. Despite outreach efforts, this study received very limited engagement from air carriers contacted for this IATP update. There is a perceived "survey fatigue" due to the multitude of State and FAA surveys conducted over the past several years covering this area.
Alaska Department of Commerce, Community, and Economic Development Division of Community and Regional Affairs: Historical population demographics are available for communities through the DCRA database at DCRA Community Database (arcgis.com)	Not all airports are co-located with a community – many of the facilities are in remote locations with no nearby population. Demographics were considered primarily by census/borough totals and trends. Per the scope, "Contributing factors will be directly correlated to the regional socio-economic and demographic forecast summary information developed within Chapter 3." However, project scheduling precluded the availability of this information at the time the aviation forecasts were developed.
Alaska Department of Labor and Workforce Development (DOLWD), Research and Analysis Section: Population and Census data, Labor Market Information, Projections, and other economic data for Alaska is available through this division, available at Research and Analysis Department of Labor (alaska.gov)	Population projections available by U.S. Census Bureau. Employment statistics are available for the DOLWD-defined Interior Region, which includes a large portion of the IATP area.

3.4   Base Year (2022) Estimates

The forecasts include projections for operations, enplanements, cargo, based aircraft, and critical aircraft. Base year estimates for activity in each of these categories are included in this section. Table 30 includes a description of how base year activity was determined for each category.

Table 30. Forecast Data Categories & How Statistics Were Derived

Data Category	How Statistics (Base Year Data & Trends) Were Derived
Operations	Base year (2022) operations are derived from data recorded on FAA's Form 5010 and reported through the ADIP for most facilities and from the TAF for Fairbanks Intl (FAI) and Fort Yukon (FYU). The Form 5010 data reported through the ADIP matches base year TAF data for all facilities reported through the TAF data, except for FAI and FYU. The TAF does not report data for all facilities in the IATP, which is why Form 5010 data available through the ADIP was used to capture information for a greater number of facilities. TAF data was analyzed primarily to determine historical trends (historical data is not available through the ADIP) and to compare this plan's aviation forecasts with the FAA's forecasts.
Enplanements	Enplaned passengers are presented as the representative passenger activity statistic for each facility. Base year enplanement data is from the USDOT Bureau of Transportation T-100 Domestic Market data. For the IATP facilities, enplaned passengers are generally roughly equal to deplaned passengers, so while either data set is representative of passenger activity, enplanements are more typically reported in airport planning exercises. Historical enplanement trends were analyzed in the BTS data, and TAF enplanement data were analyzed for forecast trends.
Deplaned Freight & Mail	Deplaned freight and mail statistics are presented, as opposed to enplaned statistics, because the deplaned volumes are more representative of the activity at each facility. Very few of the facilities have significant volumes of mail or freight that is boarded onto aircraft from the facility and destined for another location. Most of the facilities in the IATP region are recipients of sizeable volumes of mail and freight that support the local community and economy. The volumes of inbound freight and mail are more telling statistics than the volumes of outbound freight and mail. Base year data and historical trends are derived from the USDOT Bureau of Transportation T-100 Domestic Market data.
Based Aircraft	The primary source for based aircraft data is the FAA's National Based Aircraft Inventory. For facilities not reported through this source, data from FAA's Form 5010 – reported through the ADIP – is used. For airports with recent or concurrent studies, it is assumed that based aircraft counts were more thoroughly and accurately obtained, and data from these studies are used, where available. Based aircraft trends were analyzed in TAF data.
Critical Aircraft	Current critical aircraft were determined through existing Airport Layout Plans, current carrier fleet mix and use in the region, and aircraft type reported through BTS data. Future critical aircraft were largely determined by input from the carriers on planned fleet mix changes and from airport layout plans' ultimate design aircraft.

Although previous sections have presented airport information by AASP Classification, the forecasts will present information by borough/census area. The factors influencing aviation activity are more correlated to trends in demographics, economics, and developments tracked by borough/census area, which in the IATP region are often a factor of which sections of roadway the communities and airports lie on and which attractions, state and national parks, or economic development areas are in the vicinity. For example, a major tourist attraction or mine development in one part of the region may impact aviation activity at airports of all classifications and service levels in the vicinity but have no impact on airports distant from that attraction/development. Table 31 presents base year activity estimates by airport within each borough/census area and totaled for each borough/census area. Figure 9 shows the IATP region with the borough/census area boundaries and airports within the IATP area.

Table 31. IATP Airports – Base Year Airport Activity Estimates by Airport and by Borough/Census Area

Name	ID	Total Operations	Enplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)	Based Aircraft
COPPER RIVER CENSUS AREA						
Chisana	CZN	150	85	37,640	4,098	0
Chistochina	CZO	1,600	No data	No data	No data	1
Chitina	CXC	1,750	No data	No data	No data	1
Copper Center 2	Z93	1,200	3	0	0	7
Glacier Creek	KGZ	60	No data	No data	No data	0
Gulkana	GKN	5,122	420	2,861	1,470	12
Jakes Bar	AK0	100	No data	No data	No data	0
May Creek	MYK	350	34	411	6,750	0
McCarthy	15Z	1,400	176	6,094	53,264	0
Paxson	PXK	-	No data	No data	No data	0
Tazlina	Z14	200	No data	No data	No data	1
Tazlina/Smokey Lake	5AK	500	No data	No data	No data	2
Tolsona Lake	58A	300	No data	No data	No data	2
COPPER RIVER CENSUS AREA TOTALS		**12,732**	**718**	**47,006**	**65,582**	**26**
DENALI BOROUGH						
Cantwell	TTW	2,350	No data	No data	No data	3
Clear	Z84	100	No data	No data	No data	1
Eva Creek	2Z3	-	No data	No data	No data	0
Gold King Creek	AK7	50	No data	No data	No data	1
Healy River	HRR	1,300	1,431	16,781	2,537	10
Kantishna	5Z5	1,200	0	0	0	0
McKinley Ntl Park	INR	3,200	No data	No data	No data	7
Stampede	Z90	30	No data	No data	No data	0
Totatlanika River	9AK	-	No data	No data	No data	0
DENALI BOROUGH TOTALS		**8,230**	**1,431**	**16,781**	**2,537**	**22**
FAIRBANKS NORTH STAR BOROUGH						
Bradley Sky-Ranch	95Z	120	No data	No data	No data	46
Chena River	2Z5	24	No data	No data	No data	6
Fairbanks International	FAI	112,256	510,137	17,977,506	408,345	569
FAIRBANKS NORTH STAR BOROUGH TOTALS		**112,400**	**510,137**	**17,977,506**	**408,345**	**621**
MATANUSKA-SUSITNA BOROUGH						
Lake Louise	Z55	300	No data	No data	No data	0
Lake Louise Seaplane Base	13S	1,100	No data	No data	No data	2
Summit	UMM	1,054	No data	No data	No data	0
MATANUSKA-SUSITNA BOROUGH TOTALS		**2,454**	**0**	**0**	**0**	**2**

| SOUTHEAST FAIRBANKS CENSUS AREA						
Black Rapids	5BK	110	No data	No data	No data	0
Boundary	BYA	250	No data	No data	No data	0
Chicken	CKX	475	**34**	**3,354**	**11,270**	0
Delta Junction	D66	4,070	**44**	**1,4488**	**0**	16
Eagle	EAA	2,400	**650**	**119,037**	105,591	1
Horsfeld	4Z5	0	No data	No data	No data	0
Northway	ORT	15,800	No data	No data	No data	0
Tanacross	TSG	800	**0**	**0**	**0**	0
Tetlin	3T4	112	No data	No data	No data	0
Tok Junction	6K8	2,700	**404**	**19,037**	**955**	33
SOUTHEAST FAIRBANKS CENSUS AREA TOTALS		**26,717**	**1,132**	**142,876**	**117,816**	**50**
YUKON-KOYUKUK CENSUS AREA						
Arctic Village	ARC	1,650	1,548	568,137	214,390	0
Beaver	WBQ	500	924	188,958	19,558	0
Birch Creek	Z91	500	205	90,556	8,387	0
Central	CEM	4,000	37	9,772	19,527	2
Chalkyitsik	CIK	650	558	183,658	60,837	0
Chandalar Lake	WCR	300	45	10,667	0	0
Circle City	CRC	1,110	269	33,818	16,636	0
Circle Hot Springs	CHP	3,600	No data	No data	No data	4
Coal Creek	L20	200	No data	No data	No data	0
Coldfoot	CXF	1,000	5,212	4,675	0	3
Eureka Creek	2Z2	0	No data	No data	No data	0
Fort Yukon	FYU	8,377	4,728	1,008,028	627,027	0
Livengood Camp	4AK	100	No data	No data	No data	0
Manley Hot Springs	MLY	1,700	76	14,196	24,232	5
Minchumina	MHM	1,140	202	162,093	26,206	2
Minto Al Wright	51Z	1,000	138	13,169	22,047	0
Nenana Muni	ENN	6,000	0	11,826	153	13
Prospect Creek	PPC	498	831	4,775	0	0
Quail Creek	20K	80	No data	No data	No data	0
Ralph M Calhoun Meml	TAL	3,100	1,820	240,638	143,256	0
Rampart	RMP	300	490	109,485	13,654	0
Stevens Village	SVS	750	212	35,280	1,192	0
Venetie	VEE	1,900	1,392	633,971	294,045	0
Wiseman	WSM	270	No data	No data	No data	0
YUKON-KOYUKUK CENSUS AREA TOTALS		**38,725**	**18,687**	**3,323,702**	**1,491,147**	**29**
IATP REGION TOTALS		**201,258**	**532,105**	**21,507,871**	**2,085,427**	**750**
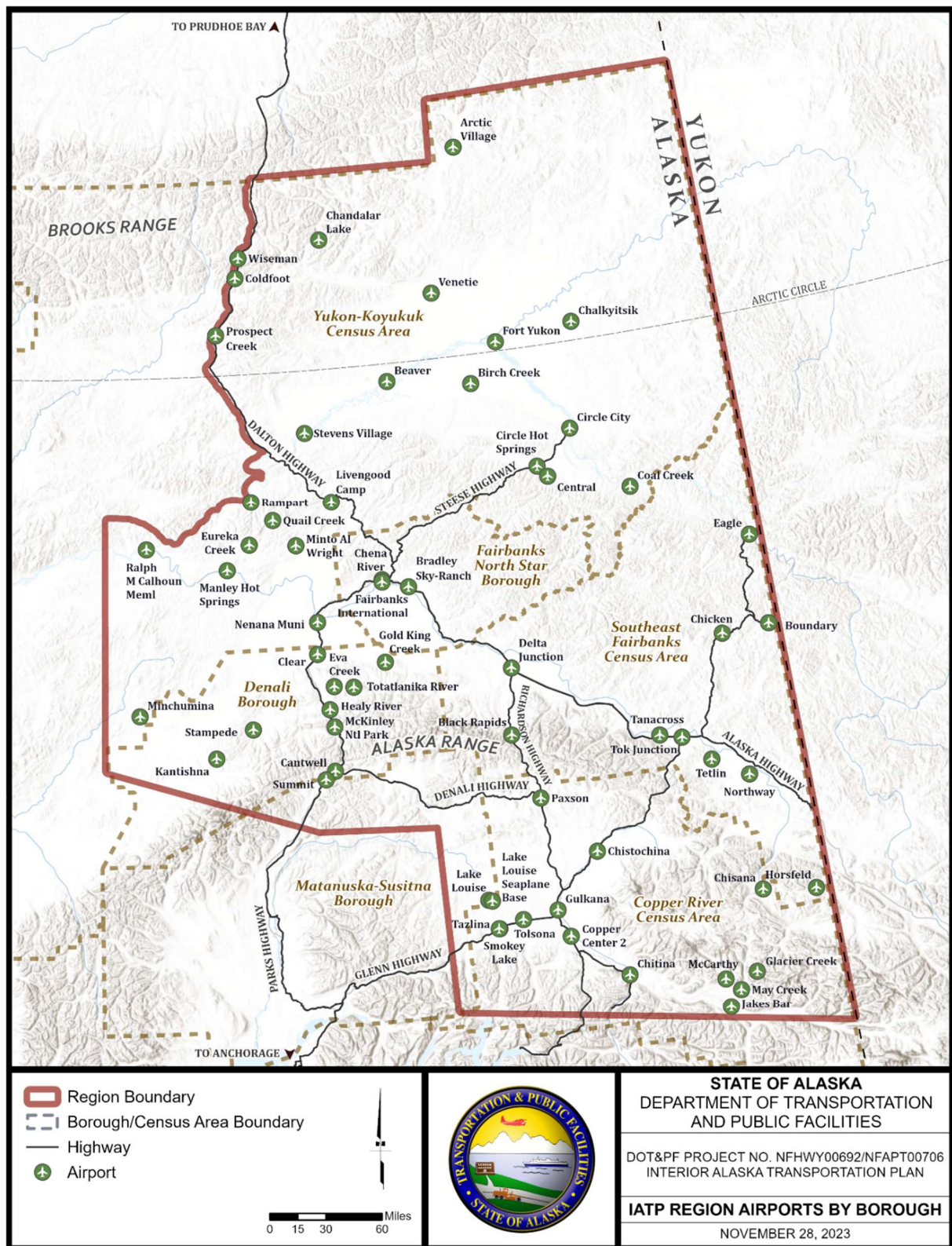
Figure 9. IATP Region Airports by Borough/Census Area

Table 32 summarizes operations by type for IATP airports within each borough/census area. Air taxi and general aviation (GA) operations dominate this region. Air carrier operations are only reported for Fairbanks International (FAI) and Gulkana (GKN). Otherwise, air taxis transport the bulk of passengers and goods by air. The Yukon-Koyukuk Census Area has a significantly higher number of air taxi operations than most other sub-areas, primarily because this region has the most communities and holds the six Community Off-Road airports that rely entirely on aviation for delivery of people and goods. Military operations are primarily concentrated in the areas that hold military bases with very little military activity reported for most sub-areas.

Table 32. Base Year Operations Summarized by Borough/Census Area

Borough/ Census Area	Air Carrier Ops	Air Taxi Ops	GA Itinerant Ops	Military Ops	GA Local Ops	Total Ops
Copper River Census Area	996	2,570	5,285	155	3,726	12,732
Denali Borough	0	2,720	3,910	500	1,100	8,230
Fairbanks North Star Borough[1]	10,721	21,922	33,448	4,118	30,963	112,400[1]
Matanuska-Susitna Borough	0	500	950	4	1,000	2,454
Southeast Fairbanks Census Area	0	6,247	10,820	350	9,300	26,717
Yukon-Koyukuk Census Area	26	20,389	8,050	310	9,950	38,725
IATP REGION TOTALS	**11,743**	**54,348**	**62,463**	**5,437**	**56,039**	**201,258[1]**

[1]*Fairbanks International (FAI) lies within the Fairbanks North Star Borough, and FAI's operations data is sourced from the TAF, which also reports 11,228 overflights for FAI and which are included in the Total Operations*

Table 33 summarizes enplaned and deplaned passengers, freight, and mail for IATP airports within each borough/census area. Fairbanks International dominates the passenger, freight, and mail statistics, but the Yukon-Koyukuk Census Area has significant volumes, especially as compared to other borough/census areas, due to the number of communities in this area and many of them being off-road.

Table 33. Base Year Passengers, Freight, & Mail Summarized by Borough/Census Area

Borough/ Census Area	Enplaned Passengers	Enplaned Freight (lbs)	Enplaned Mail (lbs)	Deplaned Passengers	Deplaned Freight (lbs)	Deplaned Mail (lbs)
Copper River Census Area	718	12,871	61,587	732	47,006	65,582
Denali Borough	1,431	6,660	378	1,445	16,781	2,537
Fairbanks North Star Borough[1]	510,137	14,334,698	5,265,493	514,559	17,977,506	408,345
Matanuska-Susitna Borough	0	0	0	0	0	0
Southeast Fairbanks Census Area	1,132	61,987	19,649	1,055	142,876	117,816
Yukon-Koyukuk Census Area	18,687	244,523	192,003	20,065	3,323,702	1,491,147
IATP REGION TOTALS	**532,105**	**14,660,739**	**5,539,110**	**537,856**	**21,507,871**	**2,085,427**

Based aircraft are presented previously in Table 31. The majority of the based aircraft are concentrated at just a few airports. Over half of the IATP region airports have zero based aircraft. Another quarter have five or less. 97 percent of the region's total 750 based aircraft (726 of 750) are based at one of just 10 airports, and Fairbanks International has 569 of those (76 percent of the total).

3.5 Base Year Critical Aircraft

The bulk of the transportation of people and goods by air is accomplished with a fairly steady fleet of aircraft that meet the needs of this region. Some of the most common air carrier aircraft (and their AAC-ADG) serving the region include:

- Cessna 206 and 207 Stationairs (A-I)
- Cessna 185 Skywagons (A-I)
- Cessna 208 Caravans (A-II)
- Beechcraft King Air 200s (B-II)

- Piper PA-18 Super Cubs (A-I)
- Piper PA-31 Navajos (A/B-I)
- De Havilland Beavers (A-I)

Table 34 identifies air carriers currently operating in the IATP region, the airports at which they are based, their fleet, and notes about what types of service they provide.

Table 34. Air Carriers Currently Operating in the IATP Region

Carrier	Base	Fleet	Remarks
40-Mile Air	Tok	(5) **Cessna C206 Stationairs** (1) **Cessna C207 Stationair** (1) Cessna 185 Skywagon (6) **Piper PA-18 Super Cubs** (1) Piper PA-31 Navajo (2) Robinson R44 Raven helicopters	Scheduled service from Tok to Healy Lake, Delta, Fairbanks, Chisana, Northway, and Chicken. Charter service available.
Copper Valley Air Service	Gulkana Airport, Glennallen	(1) Cessna 180 Skywagon (1) Cessna 172 Skyhawk (2) **Cessna 206 Stationairs** (1) Piper PA-12 Super Cruiser (1) De Havilland DHC-2 Beaver	Scheduled service to McCarthy and May Creek. Partners with Reeve for service out of Anchorage. Charter service available.
Coyote Air	Coldfoot	(2) **De Havilland Beavers** (1) Cessna 185 (1) Cessna 206 Stationair on floats	Charter service out of Coldfoot in the summer.
Ellis Air Taxi	Gulkana Airport, Glennallen	**Cessna C206 Stationair** **Cessna 185** **Piper Super Cub** Piper Twin Engine Howard DGA-15P	Scheduled service to McCarthy, May Creek, and Kennicott. Charter service available.
Everts / Tatonduk Flying Service	Fairbanks	(4) **Cessna 208 Caravans** (3) Pilatus PC-12s (4) McDonnell Douglas DC-6As (1) Curtiss C-46 (6) MD-80s (3) Cessna 408 SkyCouriers (first one delivered in October 2023)	Doing business as Everts Air. Scheduled and charter passenger services out of Fairbanks with Pilatus PC-12 or Cessna Grand Caravan. Fairbanks to Arctic Village, Eagle, Fort Yukon, and Venetie. Scheduled freight service out of ANC for 10 major hubs (none in IATP area) and charter/flag stop services to anywhere they can land.
Guardian Flight	Fairbanks	Learjet 45 **Beechcraft King Air 200** Beechcraft King Air C90B Cessna 204 Caravan Pilatus PC-12 Airbus H130 Airbus AS350B3e	Medevac operations throughout the region.
LifeMed Alaska	Fairbanks	Learjet 31 Learjet 35	Fixed-wing medevac operations throughout the region.

		Learjet 45 **Beechcraft King Air 200**	
Maritime Helicopters	Fairbanks & Deadhorse (seasonal)	(8) Bell BHT 206 L4 Long Rangers (7) Bell BHT 407s (2) Air Bus Euro BO-105s	Helicopter charters.
Reeve Air Alaska	Anchorage	**Piper PA-31 (Navajo)/T-1020**	Scheduled service from Anchorage to GKN 2x/week. Partners with Copper Valley Air Service. Charter service available.
Tok Air Service	Tok	(3) **Piper PA-18 Super Cubs** (1) **Cessna 185 Skywagon**	Charter service available.
Warbelow's Air Ventures	Fairbanks	(15) **Piper PA-31 Navajo/T-1020s**	Scheduled passenger service to Beaver, Central, Circle, Manley Hot Springs, Minto, Rampart, and Stevens Village. Charter and freight services available.
Wrangell Mountain Air	McCarthy	(1) **Cessna 185 Skywagon** (1) Cessna 172 Skyhawk (3) **Cessna 206 Stationairs** (1) **De Havilland DHC-2 Beaver**	Scheduled daily service between McCarthy and Chitina. Charter service available.
Wright Air Service	Fairbanks	(4) Helio H-250/295/395s (2) **Cessna C206 Stationairs** (2) **Piper PA-31 (Navajo)/T-1020s** (18) **Cessna 208 Caravans** (1) Beechcraft Bonanza A36	Service to Arctic Village, Chalkyitsik, Coldfoot, Fort Yukon, Venetie, Birch Creek, and Minchumina. Charter service available.

Aircraft in bold text are aircraft performing the majority of reported scheduled carrier operations (BTS T-100 statistics). Fleet & service information sourced from carrier web pages, BTS T-100 data, and the Part 135 Aircraft Registry.

The following were the most common aircraft types (with their AAC-ADG), which were used for general aviation (e.g., transportation, recreation, and hunting), in the IATP region from 2012 to 2022:

- Cessna 172 (A-I)
- De Havilland Beaver (A-I)
- Piper PA-23 (A-I).

3.6   Historical Activity Trends & Previous Forecasts

Historical aviation activity trends are presented in the following sections, by borough/census area. Data available through the TAF and BTS provide trends for enplanements, cargo, mail, and based aircraft to consider in the development of forecasts.

The following definitions will help to differentiate types of air traffic as reported by FAA and U.S. Department of Transportation (USDOT) Air Carrier Activity Information System (ACAIS).

- Air Carrier – An airline certified under FAR Part 121. If offering scheduled service, must have nine or more seats. If offering on-demand services, must have 30 or more seats.
- Air Taxi - An airline providing on-demand service certified under FAR Part 121 (if more than 30 seats) or FAR Part 135 (if fewer than 30 seats).
- General Aviation - All civil aviation operations other than scheduled air carrier services and non-scheduled on-demand services.
- Enplanements - Passengers boarding a commercial air carrier or commuter aircraft at the subject airport.
- Operations – The number of takeoffs and landings at the subject airport. Each flight generally accounts for two operations (one takeoff and one landing).

3.6.1 Historical Operations Trends

Historical operations data and forecast operations are included in the TAF. Only seven of the airports with operations data reported in the TAF show historical changes over the 2011-2022 time period. Most airports show data that has remained static since 2011. The sparsity of information does not provide much useful in the way of forecasting. Airports reporting any historical change through the TAF are:

- Arctic Village – Air taxi operations increased to 1500 from 1452, and GA operations decreased to 150 from 175 in 2017
- Beaver – Air taxi operations increased to 500 from 200, and GA operations decreased from 600 to zero in 2017
- Birch Creek – GA operations decreased from 350 to zero in 2017
- Clear – Military operations decreased from 500 to zero, and GA operations decreased from 1500 to 100 in 2019
- Fairbanks International – Air carrier and air taxi operations showed decreasing trends; GA and military operations remained roughly static
- Rampart – Air taxi operations increased to 300 from 250, and GA operations decreased to zero in 2014
- Tetlin – Air carrier operations increased from zero to 112 in 2015

3.6.2 Historical Enplanement Trends

Historical enplanement trends for the years 2011-2022 are presented in Table 35. Data trends were analyzed over the complete 12-year period, as well as for the period prior to COVID's devastating impacts on aviation activity (2011-2019) and the period following the most drastic changes of 2020 (the rebound period of 2020-2022).

Table 35. Historical Enplanement Trends by Borough/Census Area, 2011-2022

Borough/Census Area Enplanements	2011	2019	2020	2022	Avg Annual % Change 2011-2022	Avg Annual % Change 2011-2019	Avg Annual % Change 2020-2022
Copper River Census Area	319	84	311	718	+7.6%	+15.4%	+51.6%
Denali Borough	5	147	166	1,431	+67.2%	+52.5%	+193.0%
Fairbanks North Star Borough	438,188	562,420	233,484	510,137	+1.4%	+3.2%	+47.8%
Matanuska-Susitna Borough	0	0	0	0	0%	0%	0%
Southeast Fairbanks Census Area	656	869	657	1,132	+5.1%	+3.6%	+31.3%
Yukon-Koyukuk Census Area	23,150	23,174	8,397	18,687	-2.0%	0%	+48.5%
IATP REGION TOTALS	**462,318**	**586,694**	**243,015**	**532,105**	**+1.3%**	**+3.0%**	**+47.9%**

Enplanement data for years 2011-2021 were sourced from the AASP internal website, which reports ACAIS enplanement statistics. Enplanement data for 2022 were sourced from BTS T-100 Market statistics, since the AASP does not yet report the ACAIS enplanement statistics for 2022. The only airport reporting data in the Denali Borough is Healy River, and it is likely that some of the enplanements reported for this facility should be attributed to Healy Lake. The Matanuska-Susitna Borough airports in the IATP region have no enplanement data reported for the 2011-2022 time period.

Historical enplanement trends show variation across the IATP region. Prior to the pandemic, enplanements were increasing at 1.3 percent annually for the entire region, but the Yukon-Koyukuk Census Area had been experiencing an average 2.0 percent decline in annual enplanements, while other boroughs/census areas saw anything between 1.4 percent and 67.2 percent annual growth. Passenger volumes declined precipitously in 2020, but the rebound has been swift. Most areas are on track to recover to pre-pandemic passenger volumes in the near term. The Yukon-Koyukuk Census Area appears to be in a continued trend of decreasing enplanements from 2011 statistics, overall.

3.6.3 Historical Air Cargo Volume Trends

Historical air cargo volume trends are presented in Table 36 for the years 2013-2022. The data are deplaned cargo statistics, sourced from the AASP internal facilities database, and 2013 is the earliest reporting year for this data. Deplaned cargo volumes are orders of magnitude larger than enplaned cargo volumes at most of the IATP region's airports, so this indicator is generally more representative of cargo activity in the region. The data trends were analyzed over the complete 10-year reporting period, as well as for the period prior to COVID's devastating impacts on aviation activity (2013-2019) and the period following the most drastic changes of 2020 (the rebound period of 2020-2022).

Table 36. Historical Air Cargo Trends by Borough/Census Area, 2013-2022

Borough/Census Area Deplaned Cargo Volumes (pounds)	2013	2019	2020	2022	Avg Annual % Change 2013-2022	Avg Annual % Change 2013-2019	Avg Annual % Change 2020-2022
Copper River Census Area	63,699	29,524	27,526	47,006	-3.3%	-12.0%	+30.7%
Denali Borough	4,875	16,385	28,026	16,781	14.7%	22.4%	-22.6%
Fairbanks North Star Borough	9,627,038	8,473,434	4,630,913	17,977,506	+7.2%	-2.1%	+97.0%
Matanuska-Susitna Borough	No data	No data	No data	No data	No data	No data	No data
Southeast Fairbanks Census Area	89,054	104,564	87,862	142,876	+5.4%	+2.7%	+27.5%
Yukon-Koyukuk Census Area	2,957,342	2,323,590	1,394,214	3,323,702	+1.3%	-3.9%	+54.4%
IATP REGION TOTALS	**12,742,008**	**10,947,497**	**6,168,541**	**21,507,871**	**+6.0%**	**-2.5%**	**+86.7%**

Cargo volume data for years 2013-2021 were sourced from the AASP internal website, which reports BTS T-100 Market statistics in their entirety for each year. Cargo volume data for 2022 were sourced directly from the BTS T-100 Market statistics, since the AASP data pull lags for the most recent year's reported data, thus under-reports 2022 volumes. There are no cargo volume data reported for IATP airports in the Denali Borough or the Matanuska-Susitna Borough for the 2013-2022 time period.

Historical air cargo volumes were showing generally decreasing trends for most of the IATP region prior to the pandemic, with the exception of the Southeast Fairbanks Census Area and Denali Borough (which is likely over-reported since Healy Lake data gets incorrectly attributed to Healy River). Many of the airports in the IATP region are on the road system, so it is likely that cargo was being delivered by less expensive ground-based methods, and the demand for cargo may have decreased due to fuel and shipping prices. However, the pandemic resulted in a surge nationwide of goods delivered through freight and mail, and the total air cargo volume for the region has nearly doubled from the pre-pandemic level.

3.6.4 Historical Mail Volume Trends

Historical mail volume trends are presented in Table 37 for the years 2013-2022. The data are deplaned mail statistics, sourced from the AASP internal facilities database, and 2013 is the earliest reporting year for this data. Deplaned mail volumes are orders of magnitude larger than enplaned mail volumes at most of the IATP region's airports, so this indicator is generally more representative of mail volume activity in the region. The data trends were analyzed over the complete 10-year reporting period, as well as for the period prior to COVID's devastating impacts on aviation activity (2013-2019) and the period following the most drastic changes of 2020 (the rebound period of 2020-2022).

Table 37. Historical Mail Volume Trends by Borough/Census Area, 2013-2022

Borough/Census Area Deplaned Mail Volumes (pounds)	2013	2019	2020	2022	Avg Annual % Change 2013-2022	Avg Annual % Change 2013-2019	Avg Annual % Change 2020-2022
Copper River Census Area	39,100	40,187	40,660	65,582	+5.9%	+0.5%	+27.0%
Denali Borough	401	840	1,373	2,537	+22.7%	+13.1%	+35.9%
Fairbanks North Star Borough	531,663	544,773	174,372	408,345	-2.9%	+0.4%	+53.0%
Matanuska-Susitna Borough	No data	No data	No data	No data	No data	No data	No data
Southeast Fairbanks Census Area	166,718	130,770	92,354	117,816	-3.8%	-4.0%	+13.0%
Yukon-Koyukuk Census Area	1,572,324	1,250,898	824,573	1,491,147	-0.6%	-3.7%	+34.5%
IATP REGION TOTALS	**2,310,206**	**1,967,468**	**1,133,332**	**2,085,427**	**-1.1%**	**-2.6%**	**+35.7%**
Mail volume data for years 2013-2021 were sourced from the AASP internal website, which reports BTS T-100 Market statistics in their entirety for each year. Mail volume data for 2022 were sourced directly from the BTS T-100 Market statistics, since the AASP data pull lags for the most recent year's reported data, thus under-reports 2022 volumes. There are no mail volume data reported for IATP airports in the Denali Borough or the Matanuska-Susitna Borough for the 2013-2022 time period.							

Historical mail volume trends vary considerably across the region, both pre-pandemic and post-pandemic. Deplaned mail has generally been in decline across the IATP area, but each borough/census area has experienced different rates of growth or decline. All areas have seen a rebound of mail volume since 2020, with half the boroughs/census areas seeing higher than pre-pandemic mail volumes and half seeing less. Overall, the region appears to be experiencing a historical decline of air mail.

3.6.5 Historical Based Aircraft Trends

The TAF includes historical based aircraft counts and a forecast of future based aircraft counts. Data included for IATP region airports indicates that most airports with any based aircraft in the 2011-2040 period have had historical decreases or no changes in based aircraft counts and show no changes in future based aircraft counts (Table 38). The only airports with historical increases are Fairbanks International, Gulkana, and Healy River. Fairbanks International dominates based aircraft statistics. Including Fairbanks International's counts, the number of based aircraft in the region increased 38 percent from 2011 to 2022 and is forecast to increase five percent by 2040. Excluding Fairbanks International's counts, the number of based aircraft decreased by six percent from 2011 to 2022, and the 2022 counts are projected to remain static out to 2040.

Table 38. Historical & Forecasted Based Aircraft Trends from the TAF, 2011-2040

Airport	Airport ID	Based Aircraft 2011	Based Aircraft 2022	Based Aircraft 2040	Historical % Change 2011-2022	Forecast % Change 2022-2040
Arctic Village	ARC	0	0	0	0%	0%
Beaver	WBQ	0	0	0	0%	0%
Birch Creek	Z91	0	0	0	0%	0%
Boundary	BYA	0	0	0	0%	0%
Central	CEM	3	2	2	-33%	0%
Chalkyitsik	CIK	0	0	0	0%	0%
Chandalar Lake	WCR	0	0	0	0%	0%
Chicken	CKX	0	0	0	0%	0%
Chisana	CZN	0	0	0	0%	0%
Chitina	CXC	2	1	1	-50%	0%
Circle City	CRC	1	0	0	-100%	0%
Circle Hot Springs	CHP	0	4	4	--	0%
Clear	Z84	3	1	1	-67%	0%
Coldfoot	CXF	3	3	3	0%	0%
Eagle	EAA	1	1	1	0%	0%
Fairbanks International	FAI	382	571	607	49%	6%
Fort Yukon	FYU	0	0	0	0%	0%
Gulkana	GKN	13	21	21	62%	0%
Healy River	HRR	7	10	10	43%	0%
Kantishna	5Z5	3	0	0	-100%	0%
Lake Louise	Z55	0	0	0	0%	0%
Manley Hot Springs	MLY	7	5	5	-29%	0%
May Creek	MYK	0	0	0	0%	0%
McCarthy	15Z	0	0	0	0%	0%
Minchumina	MHM	2	2	2	0%	0%
Minto Al Wright	51Z	0	0	0	0%	0%
Nenana Muni	ENN	15	13	13	-13%	0%
Northway	ORT	0	0	0	0%	0%
Ralph M Calhoun Meml	TAL	0	0	0	0%	0%
Rampart	RMP	0	0	0	0%	0%
Stevens Village	SVS	0	0	0	0%	0%
Tetlin	3T4	0	0	0	0%	0%
Tok Junction	6K8	39	31	31	-21%	0%
Venetie	VEE	1	0	0	-100%	0%
Total		**482**	**665**	**701**	**38%**	**5%**
Total Excluding FAI		**100**	**94**	**94**	**-6%**	**0%**

3.6.6   Terminal Area Forecast (TAF)

The FAA's Terminal Area Forecast (TAF) includes enplanement data for 34 of the IATP region's airports. The TAF projects that total enplanements in the IATP region will grow at an annual average rate of 2.3 percent over the 2022-2040 forecast period, with a sharp increase in activity in the very near term (to 2024), leveling off to an annual average increase of 2.2 percent over the long term (2025-2040) (Table 39). TAF enplanement data only captures the number of passengers on scheduled air carriers reporting into the system, often missing enplanements by air taxi companies and often not matching the enplanements reported through other sources such as the BTS, but the parameters of the data remain the same over time, allowing trend analysis.

Table 39. Terminal Area Forecast for IATP Region 2022-2040 – All 34 Reporting Airports

Terminal Area Forecasts Year	Enplanements[1]	Year-Over-Year % Change
2022	520,730	+27.4% (from 2021)
2023	520,733	0%
2024	558,397	+7.2%
2025	574,049	+2.8%
2026	586,334	+2.1%
2027	599,038	+2.2%
2028	612,583	+2.3%
2029	625,887	+2.2%
2030	639,510	+2.2%
2031	652,594	+2.0%
2032	665,930	+2.0%
2033	679,626	+2.1%
2034	693,497	+2.0%
2035	708,263	+2.1%
2036	723,309	+2.1%
2037	738,754	+2.1%
2038	754,695	+2.2%
2039	771,075	+2.2%
2040	788,412	+2.2%
Annual Average Percent Change 2022-2040		+2.3%

[1] *Enplanements are the total of all types of enplanements reported for each year for all IATP airports with data included in the TAF*

Fairbanks International (FAI) dominates the enplanement statistics, and without including FAI in the totals, the forecast for all other airports in the region shows considerably less growth. The TAF projects that total enplanements for airports in the IATP region, excluding FAI, will grow at an annual average rate of 0.5 percent over the 2022-2040 forecast period (Table). There is no sharp increase in activity forecast for the very near term for these airports, with nearly all rebound activity following the pandemic accounted for in the 2020-2022 TAF period.

Table 40. Terminal Area Forecast for IATP Region 2022-2040 – Excluding Fairbanks International

Terminal Area Forecasts Year	Enplanements[1]	Year-Over-Year % Change
2022	20,230	+45.3% (from 2021)
2023	20,330	+0.5%
2024	20,430	+0.5%
2025	20,534	+0.5%
2026	20,638	+0.5%
2027	20,742	+0.5%
2028	20,848	+0.5%
2029	20,954	+0.5%
2030	21,063	+0.5%
2031	21,173	+0.5%
2032	21,283	+0.5%
2033	21,395	+0.5%
2034	21,509	+0.5%
2035	21,623	+0.5%
2036	21,738	+0.5%
2037	21,853	+0.5%
2038	21,969	+0.5%
2039	22,091	+0.5%
2040	22,213	+0.5%
Annual Average % Change 2022-2040		**+0.5%**

[1] *Enplanements are the total of all types of enplanements reported for each year for all IATP airports with data included in the TAF, excluding Fairbanks International*

Examining the TAF data by airports grouped within each borough/census area reveals that not all boroughs/census areas are expected to see even the 0.5 percent growth rate in enplanements (Table 41). The Copper River Census Area, Denali Borough, Matanuska-Susitna Borough, and Southeast Fairbanks Census Area airports are forecast to have zero growth over the 2022-2040 period. The Fairbanks North Star Borough is forecast to have an average annual increase of 2.3 percent in enplanements, but this figure is based entirely on Fairbanks International statistics. Airports in the Yukon-Kuskokwim Census Area are forecast to have an average annual increase of 0.4 percent in enplanements. It must be noted that the TAF tends to project future activity at the same level as the most recent activity reported in the Airport Master Record Form 5010 for small airports lacking control towers or master plans.

Table 41. Terminal Area Forecast Year-Over-Year Average Annual Growth Rates by Borough/Census Area

Borough/Census Area	2022 Total Enplanements	2040 Total Enplanements	Average Annual Change
Copper River Census Area	709	709	0%
Denali Borough	1,462	1,462	0%
Fairbanks North Star Borough	500,500	766,199	+2.3%
Matanuska-Susitna Borough	0	0	0%
Southeast Fairbanks Census Area	583	583	0%
Yukon-Koyukuk Census Area	17,476	19,459	+0.4%

With very few exceptions, the TAF does not project changes in operations over the forecast period. The only facilities that have any forecast changes are Fairbanks International and Fort Yukon. Fairbanks International's operations are projected to grow by 75.3 percent for air carrier operations, 47.9 percent for air taxi operations, and roughly 15 percent for total GA operations over the 2022-2040 period. Fort Yukon's air taxi operations are projected to grow 9.8 percent over the 2022-2040 period (average annual increase of 0.5 percent).

Other than for Fairbanks International, the TAF shows no change in based aircraft counts at any of the IATP airports over the 2022-2040 forecast period. The TAF projecting zero growth in based aircraft is typical for most general aviation airports across the country, not just Alaskan airports. This is a significant reason that other factors than the TAF are considered in Alaska's rural airport forecast, and it is common to provide explanation for why study forecasts differ from the TAF.

3.6.7 Other Aviation Plan Forecasts

Aviation activity forecasts prepared for specific airports within the region or prepared for the broader region/state can provide data that supports the development of regional forecasts. The previous IATP developed forecasts for the region in 2010, and the Alaska Aviation System Plan developed forecasts for the entire state in 2011. Individual airports with their own FAA-approved forecasts include Fairbanks International, Tok Junction, Tanacross, and Nenana Municipal Airport.

3.6.7.1 *2010 Interior Alaska Transportation Plan (IATP) Forecasts*

The aviation activity forecasts developed for the 2010 IATP were developed for the 2010-2030 period and generally correlated population forecasts with aviation activity forecasts as the best indicator. Other factors, such as tourism, resource development, and fuel prices were considered but were determined not to be significant influences on aviation activity in the long term.

Table 42 presents enplaned passenger forecasts from the 2010 IATP. Enplaned passenger forecasts used the population growth rates for the IATP area for the low scenario, TAF growth rates for the high scenario, and the average of the two for the medium scenario.

Table 42. 2010 IATP Enplaned Passenger Forecasts

Airport/Region	2007 Actual (Base Year)	Low 2030 Forecast	Medium 2030 Forecast	High 2030 Forecast
Fairbanks International (FAI)	442,274	543,486	576,206	608,926
Avg Annual Growth		+0.9%	+1.2%	+1.4%
Fort Yukon (FYU)	9,081	10,661	11,170	11,679
Avg Annual Growth		+0.7%	+0.9%	+1.1%
Tanana (Ralph M. Calhoun) (TAL)	3,719	2,507	3,645	4,783
Avg Annual Growth		-1.7%	-0.1%	+1.1%
IATP Area	464,896	571,285	636,011	700,736
Avg Annual Growth		+0.9%	+1.4%	+1.8%

The total actual enplanements reported through BTS T-100 data for the IATP region in 2022 is 532,105. This correlates most closely with the low forecast average annual growth rate for the region of 0.9 percent. Comparing the three airports specifically forecast in the 2010 IATP, Fairbanks International has seen an actual average annual growth of about 1 percent, but Fort Yukon and Ralph M. Calhoun have seen steep declines in enplanements since 2007, experiencing an average annual decrease of 4.3 percent and 4.7 percent, respectively.

Table 43 presents air cargo forecasts from the 2010 IATP. Air cargo forecasts (low estimate) for the IATP region were also correlated with population trends, increasing by 0.9 percent per year to account for anticipated per person growth in cargo. The high estimate used the growth rate projected for outbound air cargo from Anchorage to Fairbanks from a study recently conducted at that time. The medium forecast is the average of the two.

Table 43. 2010 IATP Cargo Forecasts (pounds)

Airport/Region	2007 Actual (Base Year)	Low 2030 Forecast	Medium 2030 Forecast	High 2030 Forecast
Arctic Village (ARC)	964,257	1,520,536	1,690,768	1,861,000
Avg Annual Growth		+2.0%	+2.5%	+2.9%
Eagle (EAA)	259,249	196,393	219,166	241,939
Avg Annual Growth		-1.2%	-0.7%	-0.3%
Fairbanks International (FAI)	35,931,285	54,159,125	60,235,626	66,312,126
Avg Annual Growth		+1.8%	+2.3%	+2.7%
Fort Yukon (FYU)	2,503,097	3,606,060	4,011,526	4,416,992
Avg Annual Growth		+1.6%	+2.1%	+2.5%
Tanana (Ralph M. Calhoun) (TAL)	706,086	586,984	654,745	722,506
Avg Annual Growth		-0.8%	-0.3%	+0.1%
Venetie (VEE)	501,094	524,659	584,559	644,460
Avg Annual Growth		+0.2%	+0.7%	+1.1%
IATP Area	42,023,182	63,341,425	70,448,153	77,554,881
Avg Annual Growth		+1.8%	+2.3%	+2.7%

Based aircraft in the region were projected to grow at an annual average rate of 0.8 percent to 1.0 percent, with the medium range correlating with the region's population forecasts.

3.6.7.2 Alaska Aviation System Plan (AASP) Forecasts

The AASP created forecasts for aviation activity statewide for the 2008-2030 period, available in the 2011 *Alaska Aviation System Plan Forecasts* report. These forecasts are now more than 10 years old, and many of the conditions and circumstances influencing the AASP forecasts have changed considerably in the time since they were developed. Additionally, the Copper River Census Area was not a designated census area at the time the AASP forecasts were developed (it was part of the Valdez-Cordova Census Area at the time), and forecasts for the Fairbanks North Star Borough were sometimes not included due to the anticipated Alaska International Airport System Plan that would consider Alaska's international airports separately. The forecast average annual rates of change for the 2008-2030 period are included in Table 44 below.

Table 44. AASP Forecasts, 2008-2030, Average Annual Rates of Change of Aviation Activity

Borough/Census Area	Passengers	Cargo	Based Aircraft	Commercial Operations	GA Operations	Military Operations	Total Operations
Copper River Census Area[1]	No data	No data	No data	No data	No data	No data	No data
Denali Borough	-1.4%	0.0%	-0.1%	-2.5%	-0.5%	0%	-1.0%
Fairbanks North Star Borough[2]	See note	See note	+0.9%	+0.8%	+1.0%	0%	+1.0%
Matanuska-Susitna Borough	+2.9%	+2.8%	+2.5%	+2.0%	+2.4%	+0.7%	+2.3%
Southeast Fairbanks Census Area	+2.6%	+2.5%	+1.0%	+1.4%	+1.2%	0%	+1.3%
Yukon-Koyukuk Census Area	+0.2%	+0.4%	-0.7%	-1.0%	-0.5%	0%	-0.8%

[1] The Copper River Census Area was not a designated census area at the time the forecasts were developed; it was designated in 2019 when it was split from the Valdez-Cordova Census Area
[2] Fairbanks North Star Borough passenger and cargo data was not included and was to be updated in the Alaska International Airport System Plan; other statistics for this borough exclude Fairbanks International

3.6.7.3 Fairbanks International Airport (FAI) Forecasts

The 2014 Fairbanks International Airport (FAI) Master Plan includes aviation activity forecasts for the 2010-2030 period. The Master Plan and the data used to develop the forecasts are now approximately 10 years old. Key forecast conclusions from the report include:

- Based on the historical trends and continued growth of domestic and international passengers, air taxi and transit passengers were also expected to increase over the forecast period.
- Total enplanements were projected to increase at a rate of about 1.2 percent per year between 2010 and 2030 (a 26 percent increase over the 20-year period).
- An increase in local air cargo volume was anticipated.
- Air taxi operations were projected to grow at the same rate as enplaned passengers at 1.4 percent annually.
- General aviation operations had declined over the preceding 10 years, but the average annual growth rate for 2010-2030 was projected to be 1.2 percent.
- Passenger flights within Alaska were conducted principally on three types of aircraft, and these were expected to remain the main types over time: Beech 1900 (increased use), Cessna 208 Caravan (increased use), and Piper PA-31T Cheyenne (decreased use).
- Single engine piston aircraft were expected to dominate the GA forecast.
- An average annual based aircraft growth rate of 0.9 percent was projected.

The IATP aviation activity forecasts do not include forecasts for FAI, but the influence of this airport is significant to the region's other airports, since a large share of the reported activity originates out of FAI. Trends in air taxi operations, general aviation operations, and critical aircraft are most relevant to the IATP activity forecasts.

3.6.7.4 Upper Tanana Planning Study (UTAPS) Forecasts

The *Upper Tanana Airport Planning Study (UTAPS)* developed forecasts for the Tanacross and Tok Junction Airports for the 2019-2045 period. The final report was produced in September 2023. Forecasts from the *UTAPS* report are included in Table 45 and will be used in the IATP aviation forecasts for these two airports. Although the *UTAPS* study considered two additional airports (Northway and Gulkana), forecasts for these airports were not included in the final *UTAPS* report. An ALP update for Gulkana is being prepared separately from the *UTAPS* report, and the ALP narrative includes forecasts for Gulkana.

Tanacross enplanements are projected to remain flat and then steadily decrease at 3.0 percent annually after 2028 as the airport deteriorates and activity gravitates toward the better facility of Tok Junction. Scheduled commercial operations are also projected to remain flat and then steadily decrease at 3.0 percent annually for the same reason. Total operations are projected to remain flat and then decrease sharply (-15.0 percent) in 2028 after fire operations relocate to Tok Junction, then continue to decrease by 2 percent per year after. There are no based aircraft at Tanacross, and no change is expected.

Tok Junction enplanements are projected to decline at 0.6 percent through 2024 then increase at 0.5 percent annually after 2025 to account for growth in population, visitors, and mining operations. Scheduled commercial operations are projected to decline at 2.6 percent through 2024 then increase at 0.5 percent annually after 2025 for the same reasons. Total operations are projected to increase at 0.5 percent through 2024 then increase at 1.0 percent annually after 2025 to account for population, visitor, and mining growth, as well as increased firefighting and medevac operations. Based aircraft are projected to increase at an annual average rate of 1.0 percent. The current critical aircraft at Tok Junction is the Cessna 207 (ARC A-I), with a standard forecast critical aircraft of the Cessna 207 and a high forecast critical aircraft of the Beech King Air 200, which matches the ultimate design aircraft for the facility.

Table 45. UTAPS Forecasts for Tanacross and Tok Junction Airports, 2019-2045

Airport & Activity	2019	2025	2030	2035	2045	Rates of Change
Tanacross						
Enplanements	47	47	44	37	29	-3.0% after 2028
Scheduled Commercial Operations	16	16	15	13	11	-3.0% after 2028
Total Operations	290	290	247	214	175	-15.0% in 2028, -2.0% after 2028
Based Aircraft	0	0	0	0	0	No change
Tok Junction						
Enplanements	202	195	201	207	2019	+0.6% to 2024, +0.5% after 2024
Scheduled Commercial Operations	488	428	441	452	475	+2.6% to 2024, +0.5% after 2024
Total Operations	11,696	12,051	12,666	13,312	14,703	+0.5% to 2024, +1.0% after 2024
Based Aircraft	30	32	34	37	43	+1.0%

3.6.7.5 Gulkana Airport (GKN) Forecasts

The Airport Layout Plan update for Gulkana Airport (GKN) is being prepared concurrently with the development of this IATP technical memo. The draft narrative includes forecasts for GKN for the 2019-2045 period (Table 46), indicating that the two main drivers of aviation activity for this airport are population and visitor growth. Population in the Gulkana and Glenallen areas has been declining very slowly, and the slow downward trend is anticipated to continue, according to DOLWD statistics. Conversely, visitor volume is anticipated to show strong growth. Development plans and stakeholder input additionally contributed to an expectation of growing aviation activity for GKN. The existing critical aircraft for GKN is identified as the Cessna 206 (ARC A-I), and the ultimate critical aircraft is the Beechcraft King Air (B-II).

Table 46. Gulkana Airport (GKN) Draft Forecasts, 2019-2045

Activity	2019	2025	2035	2045	Average Annual Rate of Change
Enplanements	481	491	599	731	+2.0%
Commercial Operations	738	743	798	857	+0.7%
Total Operations	10,110	10,192	11,054	11,989	+0.8%
Based Aircraft	24	24	25	25	+0.3%

3.6.7.6 Nenana Municipal Airport (ENN) Forecasts

Nenana Municipal Airport (ENN) forecasts were developed in 2022 as part of the Airport Layout Plan update for this airport. Aviation activity trends and critical aircraft for the 2021-2031 period are included in the report. ENN has ambitious development plans, and aviation activity of all levels is anticipated to grow at this airport. Enplanements and operations are projected to grow at 6.0 percent annually, and based aircraft are projected to increase at 1.2 percent annually. The ultimate critical aircraft for ENN is projected to be in the B-II group (e.g., the Beech King Air).

Table 47. Nenana Municipal Airport (ENN) Forecasts, 2021-2031

Activity	2021	2026	2031	Average Annual Rate of Change
Enplanements	24	32	43	+6.0%
Air Taxi Operations	1000	1338	1791	+6.0%
GA Itinerant Operations	2000	2676	50	+6.0%
GA Local Operations	500	669	895	+6.0%
Military Operations	50	50	50	0%
Total Operations	3550	4733	6318	+5.9%
Based Aircraft	16	17	18	+1.2%

3.6.7.7 Northwest Alaska Transportation Plan (NWATP) Forecasts

The *NWATP* forecasts were developed considering recent (as of their March 2019 development) trends at the study area airports and population forecasts developed for communities in the region developed by Northern Economics in February 2019. A number of characteristics distinguish the DOT&PF's Interior region aviation system from DOT&PF's Northwest region aviation system, and this wide variance in the nature of each region's aviation system makes the *NWATP* aviation activity forecasts less relevant to the IATP forecasts than other, more local studies and factors. Population projections factored heavily in the *NWATP* forecasts, and population trends are distinct between regions (and within subregions of each study area). The Northwest region has a more classic hub-spoke route structure and clear relationships between airports of varying levels of service, and the forecasts were structured on these distinctions. The vast majority of the Northwest region airports are off the road system and provide the only year-round mode of transportation to communities, as opposed to the majority percentage of IATP airports being located on the road system. Oil exploration and development factor in the Northwest region aviation activity but play little role in the Interior region. The Northwest region airports are also far more heavily dependent on Essential Air Service (EAS) and the bypass mail system, which play only minor roles in the Interior region.

The *NWATP* had input from 11 air carriers and one medevac operator, and that input was used in development of *NWATP* forecasts. It was also found to be insightful for the IATP study overall. Many carriers serving the Northwest region also operate in the IATP region. Stakeholder input for the IATP is discussed further in Section 4.0.

3.7 Socioeconomic Trends

Most of the IATP area consists of small communities, and the existing economy (outside of Fairbanks) is based primarily on supporting the resident populations. The majority of jobs in the region are provided by government, mining, and service industries. The economy of the IATP area is heavily influenced by visitors, activity from the state and national parks and preserves, and mining activity. Though analysis of these socioeconomic factors provides a detailed and important snapshot of the IATP area, only population growth, personal consumption expenditure, and per capita personal income are used as definitive factors in development of the forecast. Ultimately employment, tourism, and mining trends were found to be dynamic and difficult to apply to accurately predict aviation activity across the entire region.

3.7.1 Population Growth

The IATP region includes all or portions of six borough/census areas. Not all of the populations lie within the IATP region boundaries. Very little of the Matanuska-Susitna Borough lies within the IATP region boundary, and only the eastern portion of the very expansive Yukon-Koyukuk Census Area (which stretches all the way west and south to Holy Cross, near Norton Sound on Alaska's west coast) falls within the IATP region boundary. Table 48 presents historical population counts from 2011-2022, obtained from the Alaska Division of Community and Regional Affairs (DCRA) Certified Population Counts. Table 49 presents population projections from a base year of 2021 through 2040, obtained from the Alaska Department of Labor and Workforce Development (DOLWD) website, Research and Analysis Section. Slight variations in the 2021 data are due to differences in how each organization determined data for that year.

Table 48. Alaska Division of Community and Regional Affairs Certified Population Counts 2011-2022

Borough/Census Area	2011	2019	2020	2021	2022	Change 2011-2022[3]	Avg Annual Change
Copper River Census Area[1]	No data	No data	2,699	2,644	2,619	-80	-1.5%
Denali Borough	1,820	1,860	1,806	1,655	1,645	-175	-0.9%
Fairbanks North Star Borough	97,615	95,898	97,159	97,515	96,747	-868	-0.1%
Matanuska-Susitna Borough	91,697	106,438	107,305	108,805	111,752	+20,055	+1.8%
Southeast Fairbanks Census Area	7,103	6,937	6,937	6,951	7,046	-57	-0.1%
Yukon-Koyukuk Census Area[2]	No data	5,230	5,044	5,255	5,184	-46	-0.2%

[1] *The Copper River Census Area was designated in 2019 when it was split from the Valdez-Cordova Census Area*
[2] *No data was reported for the Yukon-Koyukuk Census Area prior to 2019*
Change for the Copper River and Yukon-Koyukuk Census Areas is between the earliest reporting year for each area (2020 and 2019, respectively) and 2022

The populations of the Fairbanks North Star Borough and the Copper River, Southeast Fairbanks, and Yukon-Koyukuk Census Areas have decreased since 2011. Only the Matanuska-Susitna Borough has shown growth in the 2011-2022 period.

Table 49. Alaska Department of Labor and Workforce Development Population Projections 2021-2040

Borough/Census Area	2021	2025	2030	2035	2040	Change 2021-2040	Avg Annual Change
Copper River Census Area	2,626	2,576	2,484	2,390	2,309	-317	-0.6%
Denali Borough	1,655	1,505	1,420	1,340	1,265	-390	-1.2%
Fairbanks North Star Borough	97,515	98,790	100,278	101,136	101,585	+4,070	+0.2%
Matanuska-Susitna Borough	108,805	114,936	122,830	130,298	137,132	+28,327	+1.4%
Southeast Fairbanks Census Area	6,881	6,837	6,763	6,669	6,557	-324	-0.2%
Yukon-Koyukuk Census Area	5,255	4,976	4,766	4,563	4,379	-876	-0.9%

The populations of the Fairbanks North Star Borough and Matanuska-Susitna Borough are projected to increase over the forecast period. While historical trends show the Fairbanks North Star Borough losing population over the preceding 12 years, projections show a slight growth of 0.2 percent annually over the forecast period. The Matanuska-Susitna Borough is expected to continue its growth, but at a slower pace than it has over the preceding 12 years. The populations of the Copper River, Southeast Fairbanks, and Yukon-Koyukuk Census Areas are projected to decrease. The DOLWD projections indicate that the decrease in population for the Copper River Census Area is expected to slow from historical population loss (decreasing at 0.6 percent annually over the forecast period, as opposed to its historical average annual decrease of 1.5 percent). The populations of the Denali Borough, Southeast Fairbanks Census Area, and Yukon-Koyukuk Census Area are projected to decrease at faster rates over the forecast period than they have historically.

As smaller populations can be influenced by the changes in the region and the state as a whole, a holistic analysis determined trends by the region, Fairbanks (due to its strong presence in the region), and all of Alaska. Figure illustrates these projected growth rate percentages and the correlation between them.
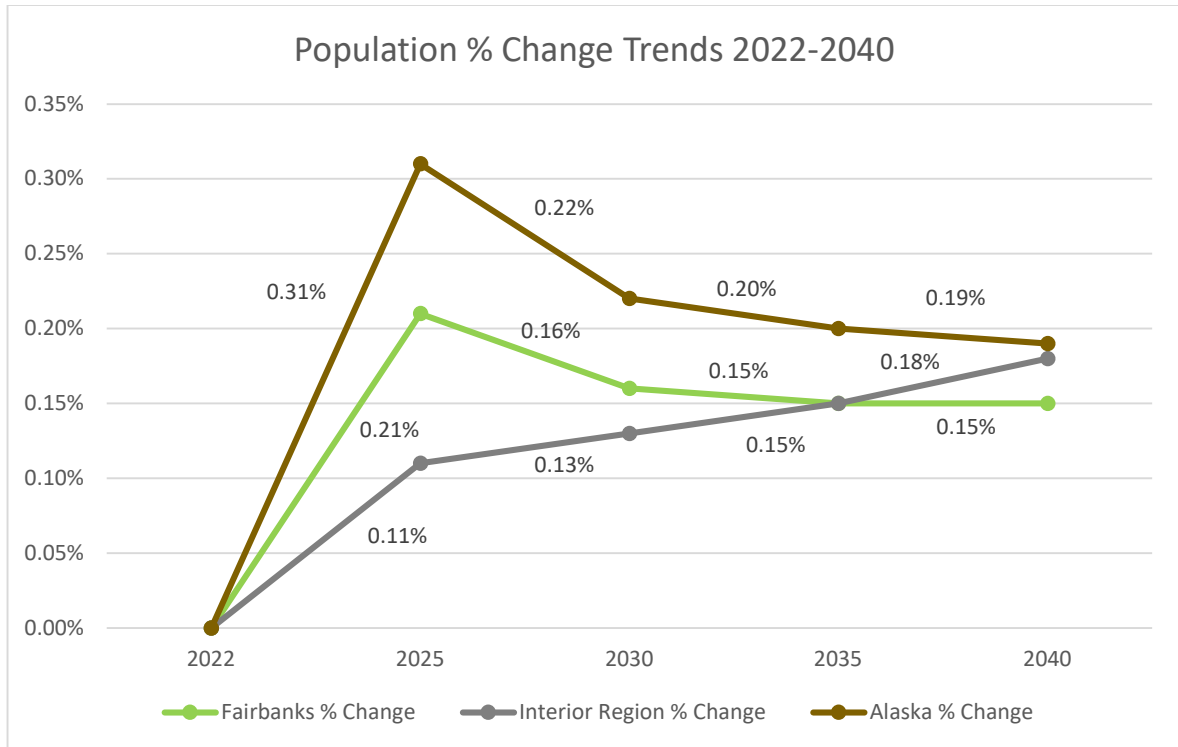
Figure 10. Population Percent Change Trends, 2022-2040, DOLWD

3.7.2 Employment

The DOLWD Research and Analysis division produces monthly and annual employment statistics. The total employment for the Interior Region, as defined by the DOLWD, from 2011-2023 is shown in

Figure *11*. The Interior Region, defined by the DOLWD, includes the Yukon-Koyukuk Census Area, Fairbanks North Star Borough, Denali Borough, and Southeast Fairbanks Census Area. Total annual employment is the sum of all annual averages for each industry reported. Employment in the Interior Region has seen an average annual decline of 0.9 percent since 2011.
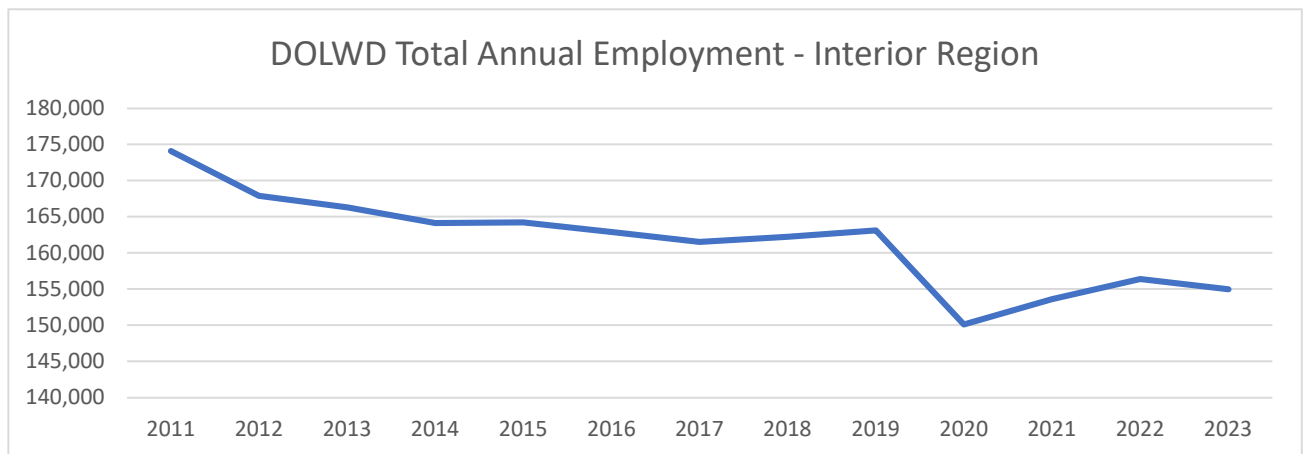

Figure 11. DOLWD Total Annual Employment – Interior Region

3.7.3 Tourism

Tourism is a sizeable factor in the economics of the IATP region. The tourism industry took heavy losses during 2020, but it has rebounded sharply in the years since. The April 2023 *Alaska Economic Trends* report by the DOLWD indicates that a continued return to normal is expected, with some uncertainty due to the possibility of an economic recession and the continued difficulty in meeting employment levels to match demand.

There are three National Parks and Preserves within the IATP region that draw large numbers of tourists to the area (Figure 12). The Denali National Park and Preserve and the Wrangell-St. Elias National Park and Preserve draw hundreds of thousands of visitors each year to the region. The National Parks Service (NPS) reports National Park Service Visitor Use Statistics online at: STATS - Welcome to Visitor Use Statistics (nps.gov). Annual visitors and the year-over-year change are presented in *Figures 13-15*. Visitor numbers have been increasing sharply since 2020, with pent up travel demand being realized. Tourism is generally expected to continue to grow statewide, and recovery to pre-pandemic levels with steep increases in activity is anticipated within the near term, with long-term growth more in line with past trends. Air traffic within the Parks and Preserves includes flightseeing, hunting/fishing, and private and agency aviation activity.
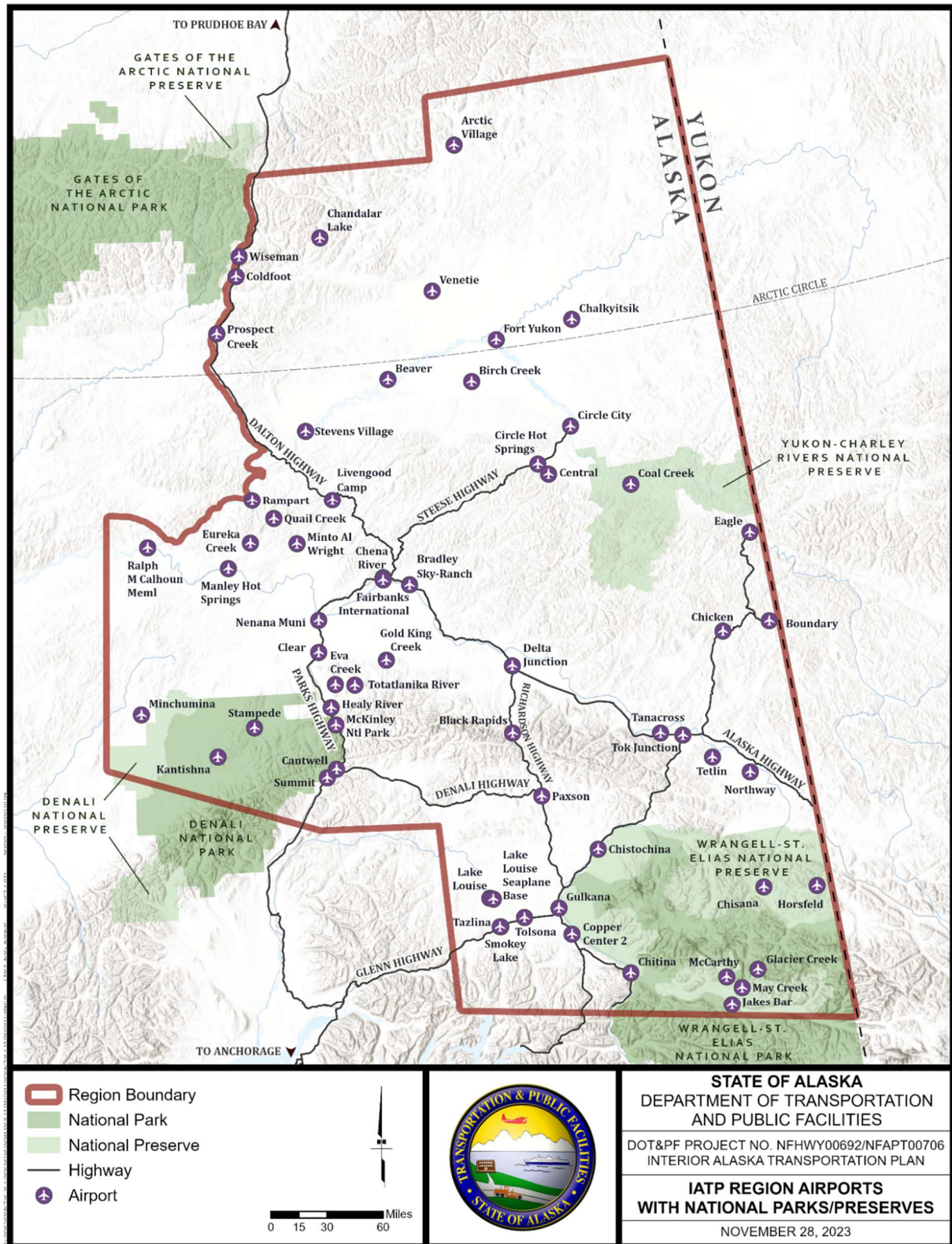
Figure 12. National Parks/Preserves in the IATP Region

Denali National Park & Preserve: Prior to the pandemic (2011-2019), the number of visitors was growing at an annual average of six percent per year. The recovery has been substantial since 2020, and although visitor numbers have not yet returned to pre-pandemic levels, this region expects continued strong growth in tourism for the long term.
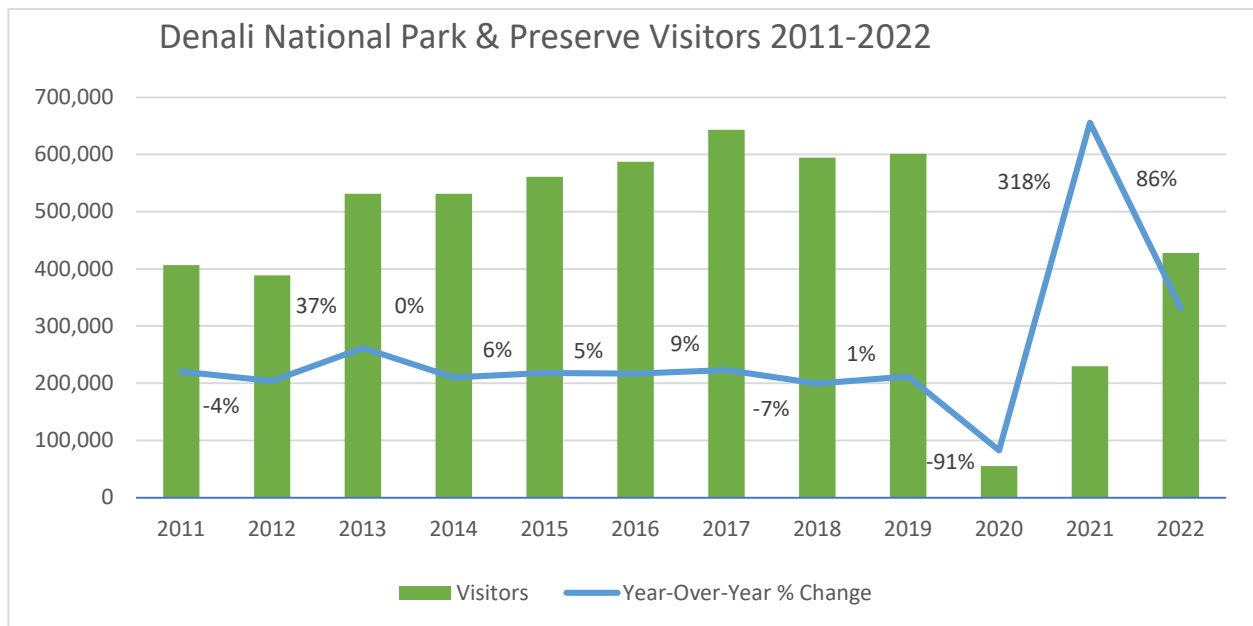

Figure 13. Denali National Park & Preserve Visitors 2011-2022

Wrangell-St. Elias National Park: Prior to the pandemic (2011-2019), the number of visitors was growing at an annual average of one percent per year.
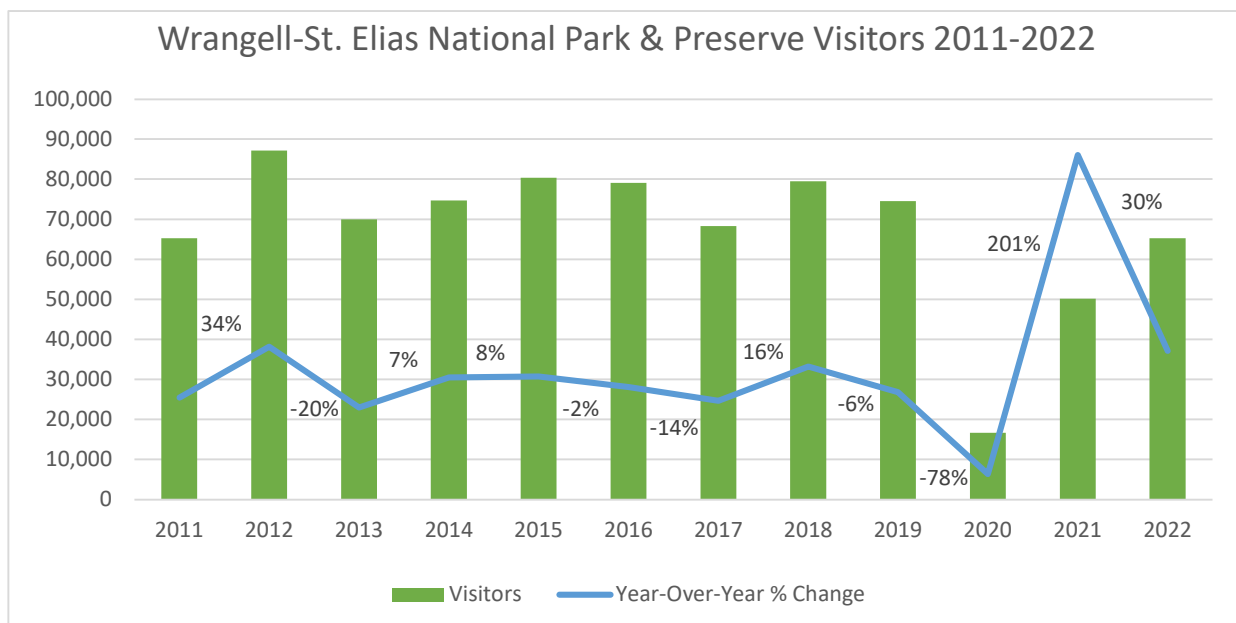

Figure 14. Wrangell-St. Elias National Park & Preserve Visitors 2011-2022

Yukon-Charley National Preserve: Prior to the pandemic (2011-2019), the number of visitors was declining at an annual average of four percent per year. The number of visitors to this Preserve is much smaller than those visiting Denali or Wrangell-St. Elias. The number of visitors was holding fairly steady at an average of 1,100 annual visitors from 2015-2019.
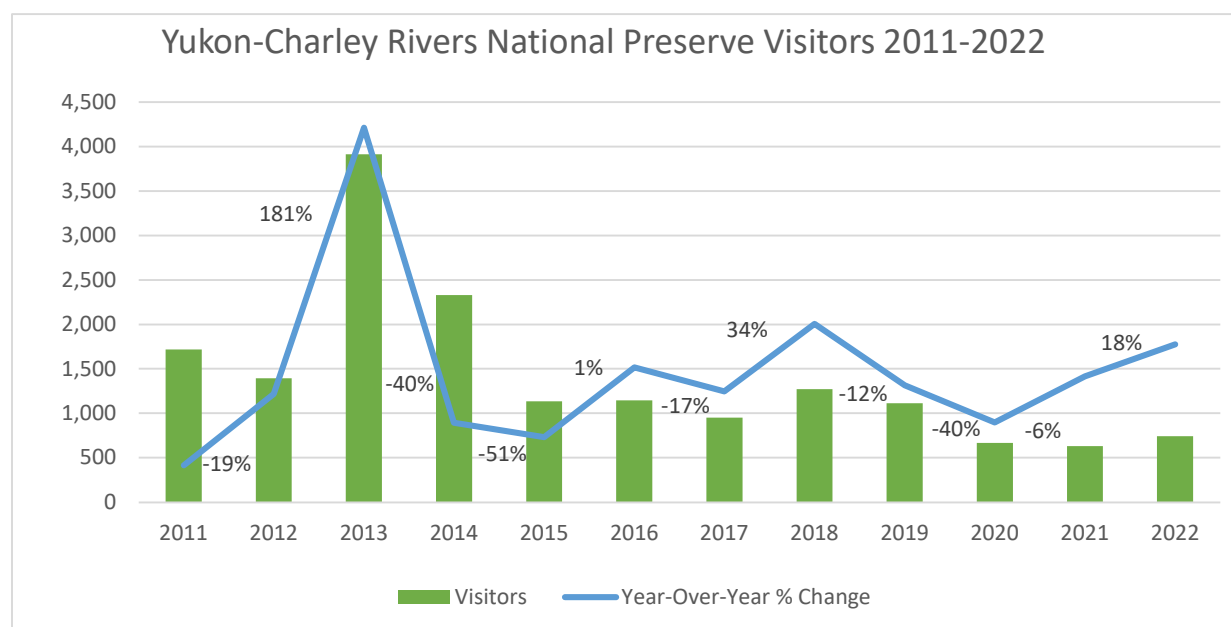

Figure 15. Yukon-Charley Rivers National Preserve Visitors 2011-2022

3.7.4   Mining

There are several mining exploration and development projects within the IATP region. Kinross Gold (Alaska) has plans to develop an open-pit gold mine called Manh Choh in an area near Tok and Tetlin, roughly 250 miles southeast of Fairbanks. Raw materials would be hauled via the highway and other roads to the Fort Knox processing mill just north of Fairbanks. Kinross reports that the mine may generate 400 jobs in the area. If the project is deemed feasible and permits are obtained, production could begin as early as 2024.

Doyon owns millions of acres of land in Alaska, and the Doyon Region includes most of the IATP area, as shown in Figure 16. Much of the land has rich and unexplored mineral potential in gold, cobalt, copper, nickel, rare earth elements, and other precious metals. Partnering with Tectonic Metals, Inc. (a Canada-based exploration company), Doyon has begun exploratory work in the IATP region at the Seventymile, Road Metals, Tibbs, and Maple Leaf projects, among others. Seventymile lies roughly 170 miles east of Fairbanks near Eagle. Tibbs and Maple Leaf are located in the Big Delta B1 Quadrangle east of Fairbanks and north of Healy Lake. The Road Metals project is near the community of Northway. These are just some of the mineral properties owned by Doyon – additional sites within the IATP region in earlier stages of exploration include the Sawtooth (65 miles northwest of Fairbanks, just north of the Elliott Highway) and Nenana gold prospects and the Tofty, NW Rampart, and Fortymile District prospects containing precious, base, and critical metals properties.

Mining activity in the region may generate modest increases in aviation activity, from exploration activities at many off-road sites and from the eventual jobs and economic impacts to the region that may increase levels of general and commercial aviation.
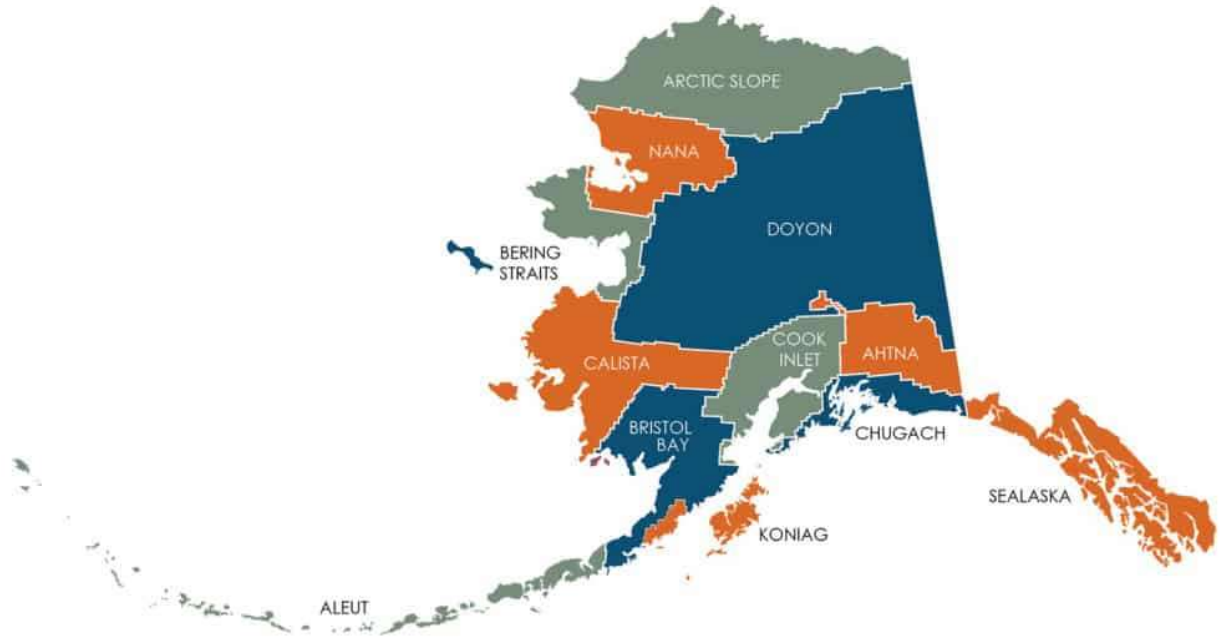
Figure 16. Alaska Native Claims Settlements Act (ANCSA) Regions (Source: ANCSA Regional Association)

3.7.5 Personal Consumption Expenditure Price Index

The personal consumption expenditure (PCE) price index can be a strong indicator of economic activity and expenditure on goods and services within a region. The PCE price index looks at U.S. inflation by measuring changes in the cost of living for households and gives a glimpse in changes in consumer behavior. The PCE price index was examined for the United States and adjusted for Alaska. Figure 17 shows that the adjusted PCE in Alaska, per billion United States Dollars (USD), is projected to decrease from 11 percent to 2.4 percent from January 2022 to January 2040.

Figure 17. Personal Consumption Expenditure Price Index (2022-2040). Source: U.S. Bureau of Economic Analysis (2023)

3.8   Forecast Development

Factors considered to be most influential in development of forecast activity for the IATP region include population, national and regional economic trends, published historical activity, and interviews with regional air carriers. Forecasts developed for the IATP region considered the influ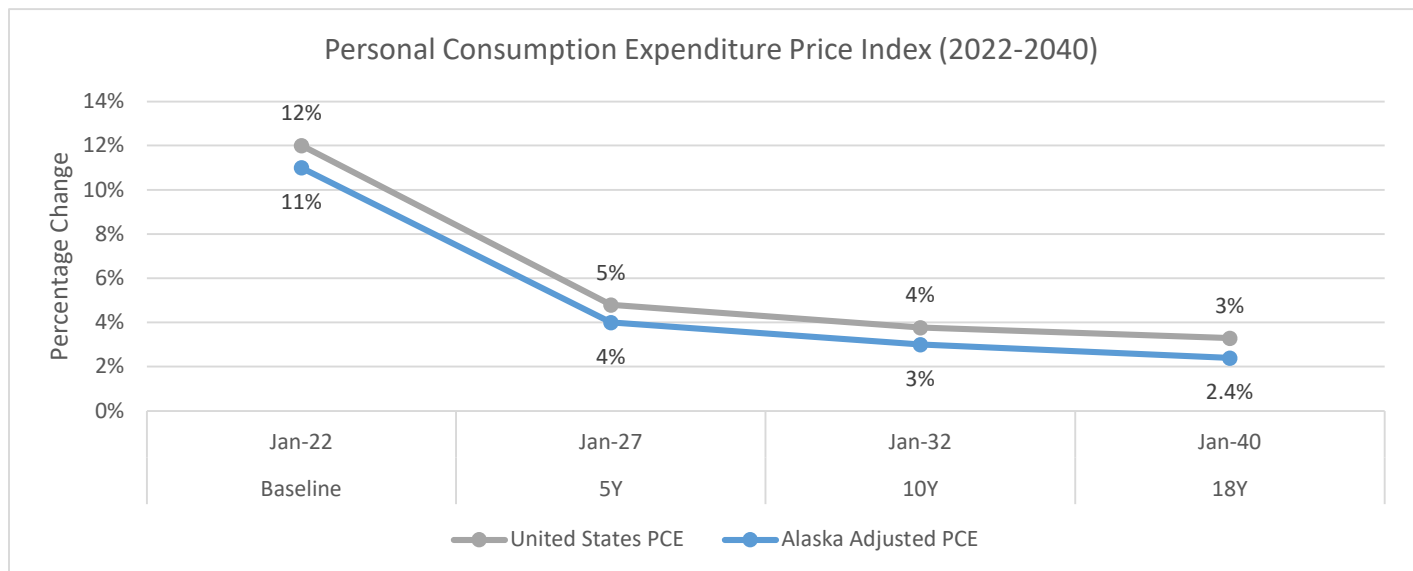ence of the COVID-19 pandemic on aviation activity and the rebound in activity seen so far in the post-pandemic period. Although many influencing factors were considered and presented in this chapter, the forecasts were ultimately based primarily on economic and population metrics.

3.8.1   COVID-19 Effects

The COVID-19 pandemic has had severe and undetermined effects on the aviation industry. The *FAA Aerospace Forecast Fiscal Years 2022-2042* notes that:

The rapid spread of the novel coronavirus (COVID-19) that began in early 2020 resulted in the largest decline in aviation activity since the jet era began in the late 1950s. Although the FAA forecast is a long-term trend forecast and it has been almost two years since a global pandemic was declared, there is still a good deal of uncertainty about the path of aviation's recovery from the 2020 downturn. This uncertainty arises from a variety of factors including the willingness of consumers to resume air travel as infection rates are reduced, the success of the strategies U.S. and foreign carriers are employing to recover from the downturn in demand, the stability of consumer attitudes and behaviors towards aviation in a post-COVID environment, as well as the breadth and depth of the and the speed and nature of the economic recovery, all of which apply both domestically and globally.

Within Alaska, the COVID-19 pandemic had a significant impact on air travel in Alaska, leading to a period of reduced demand, increased health and safety measures, and changes in travel regulations. Airline activity during the pandemic had the most drastic impact on aviation in 2020, when several airlines suspended service to some remote communities due to reduced demand and safety concerns.

The post-pandemic period has seen rapid growth in enplanements because of returning service by the airlines and a resurgence of tourism travel; however, other factors such as changes in airline routes, mergers, and economic fluctuations have contributed to fluctuations in passenger numbers.

3.8.2   Forecast Methodology

The forecasts were developed using historical air traffic estimates (FAA's Passenger Enplanement data, 5010 Airport Master Records, and U.S. Department of Transportation Air Carrier Statistics data) and population forecasts (population projections through 2040 for the Regional communities from the Alaska Department of Labor and Workforce Development, Research and Analysis Section), the personal consumption expenditure (PCE) index, and per capita personal income for communities in the Interior developed for this evaluation.

Interviews with regional air carriers were also considered in the forecast development. Sources interviewed for this report and stakeholder input from other recent aviation planning efforts provided qualitative information, insightful to aviation expectations and trends A summary of stakeholder input is included in *Appendix 6*: Stakeholder Input Used in IATP Update.

The forecasting method was a time-series trend with smoothing from socioeconomic and interview data. A summary of the chosen forecast percentage metrics used for smoothing in this forecast is illustrated in Table 50.

Table 50. Forecast Percentage Metrics used for Smoothing

Source	Baseline	+1 YR	+2 YR	+3 YR	+4 YR	+5 YR	+10YR	+18 YR
Personal Consumption Expenditure Index (PCE)	11.1%	11.1%	10.1%	9.2%	8.3%	4.0%	3.0%	2.0%
Per Capita Personal Income (PCPI)	5.7%	6.7%	7.6%	8.6%	9.7%	11.0%	13.1%	7.1%
Fairbanks Population	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.15%
Interior Population	1.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%
Alaska Population	-0.04%	-0.04%	0.0%	0.31%	0.0%	0.0%	0.0%	0.19%

Baseline (2022) data for the IATP region's airports were developed using the sources mentioned above and FAA Airport Master Record information. Historical growth rates for aviation indicators, such as enplaned passengers, commercial flights, and deplaned mail and freight, were developed from historical data. The growth factors of regional aviation indicators were combined with the growth rates of the population estimates for each airport, combined with base year data, and projected out until 2040. The growth estimates for these forecasted indicators are explained below. Rounding errors may be present. The consultant's preferred estimate (CPE) was determined with a high, medium, and low forecast for operations at each airport.

The following is a list of growth rates used to develop the Interior Alaska Aviation Traffic Forecasts for this report.

- **Population Growth** – Population growth rates through 2040 for each regional community were obtained from the Alaska Department of Labor and Workforce Development website, Research and Analysis Section.

- **Personal Consumption Expenditure Index (PCE)** – The PCE baseline was obtained from the U.S. Bureau of Economic Analysis Consumer Spending by State, which was 11 percent for Alaska and represented a part of the U.S. national expenditure. The forecasts were obtained from the Financial Forecast Center for PCE for a short-term forecast and were extrapolated until the end of the IATP period in 2040.

- **Per Capita Personal Income (PCPI)** – Per capita personal income was obtained from the U.S. Bureau of Economic Analysis Interactive Data Tables Regional Data GDP and Personal Income (Alaska Non-Metropolitan Areas) 2020-2021. The per capita personal income was $63,883 and represented a percentage change of 5.7 percent for the state of Alaska. This baseline percentage change of 5.7 percent was applied to this forecast via statistical smoothing and combined with the forecast element's respective metrics as detailed in the bullets below.

- **Enplaned Passengers** – Historical enplanement data sourced from BTS T-100 Market statistics were analyzed and presented in Table 35. Due to the devastating effects of the COVID-19 pandemic on passenger volumes, the historical growth rate of 3.0 percent, measured from 2011 to 2019, was chosen as the historical growth factor in this forecast. The derived historical growth factor was then combined with future population, income, and expenditure growth rates for individual communities and individual years (2023 through 2040) and applied to base year estimates to forecast passenger enplanements. In some specific cases, additional smoothing was applied based on interview data.

- **Consultant's Preferred Estimate (CPE)** – The CPE is the estimate of total operations within the Interior. It was calculated using assumptions from the DOT and FAA 5010 data.

- **Commercial Operations** – Historical commercial operations data sourced from the FAA TAF were analyzed from 2002 to 2022, and though mostly static, showed an average annual rate of decline of 1.9 percent for the Interior Region. The TAF uses FAA 5010 Airport Master Record data, which is not always accurate but is at least consistently available data for many of these non-towered airports. The 5010 Master Record data does not indicate any outlier data points due to the COVID-19 pandemic and for this reason post pandemic data was included. The derived historical growth factor (or loss) was then combined with future population, income, and expenditure growth rates for individual communities and individual years (2023 through 2040) and applied to base year estimates to forecast commercial operations. In some specific cases, additional smoothing was applied based on interview data from Tok, Chisana, Chicken, Healy Lake, Delta Junction, Eagle, and McCarthy air operators.

- **General Aviation** – Similarly to historical commercial operations, historical general aviation data were also sourced from the FAA TAF for years 2002 to 2022. The average regional rate of decline was 1.6 percent. The derived historical growth factor was then combined with future income and expenditure growth rates for individual communities and individual years (2023 through 2040) and applied to base year estimates to forecast general aviation operations.

- **Military** – The baseline of military operations was given a growth factor equivalent to Instrument Flight Rules (IFR) operations in the western region Air Route Traffic Control Center (ARTCC) forecast found within the FAA 2023-2050 Aerospace Forecast tables for the Anchorage, Alaska ARTCC (ZAN). Because the forecasted growth was reported as zero percent in the Aerospace Forecast, the historical military IFR growth was extrapolated, and a cumulative growth rate of 1.2 percent was used for the forecast period.

- **5010 Total Operations** – Forecasts were not calculated for 5010 Total Operations, but the data were used to determine the CPE and percentage shares of commercial, general aviation, and military indicators.

- **BTS Total Operations** – Forecast BTS Total Operations were calculated by adding all BTS operations forecasts previously developed.

- **Based Aircraft** – Historical based aircraft data sourced from the FAA TAF were analyzed, and the derived historical growth rate of -6.0 percent was chosen as the historical growth factor. The historical growth factor was then combined with future income and expenditure growth rates for individual communities and individual years (2023 through 2040) and applied to base year estimates to forecast based aircraft counts.

- **Deplaned Freight** – Deplaned freight—freight unloaded at a community—is a better indicator of aviation activity than freight loaded in the IATP region. The historical average regional difference showed a growth of 6.0 percent. For this growth rate, pounds of freight unloaded per community resident were calculated, and grown annually at the population, income, and expenditure growth rate for each community. These growth rates were smoothed by 10 percent each year, in tons for each community that had favorable projected freight growth.

- **Deplaned Mail** – Deplaned mail—mail unloaded at a community—is a better indicator of aviation activity than mail loaded in the IATP region. The historical average regional difference showed a decline of 1.1 percent. The IATP aviation activity forecasts combine freight and mail, so this declining rate was factored into an overall rate for freight/mail combined and projected as described in the "Deplaned Freight" component.

- **Critical Aircraft** – The critical aircraft forecast was developed (without specifying a type) using base year critical aircraft and considered the fleet mix trends for carriers serving the Interior. The report was not required to analyze and recommend Critical Aircraft type forecasts; however, Critical Aircraft Design Groups and associated requirements were considered.

3.9   IATP Aviation Activity Forecasts

The IATP aviation activity forecasts developed low, medium, and high projections for operations, enplanements, mail and cargo, and based aircraft for target year 2040. Forecasts are for the IATP region overall (excluding Fairbanks International Airport). Forecasts for Fairbanks International Airport are not included, but the influence of FAI is considered regarding impacts on regional aviation. Regional forecasts paint a broad picture of aviation activity across the entire IATP area, but factors influencing aviation activity vary widely within this region. The individual airports and individual boroughs/census areas within the IATP region are diverse. Detailed, focused activity forecasts will need to be developed for any airport or sub-region considering development work.

Table 51 presents forecasts of passenger enplanements; commercial, general aviation, military, and total operations; deplaned cargo (mail and freight combined); and based aircraft through 2040. The data excludes Fairbanks International (FAI) statistics and forecasts. The forecast factors in Table 51 are the "High" scenario, and the high scenario factors were chosen based on several considerations suggesting optimistic aviation growth – the ambitious plans for regional airport developments; growth in UAS testing, development, and use; tourism and mining activity; and the expected continued upward trend in online shopping and delivery. The medium and low scenario forecast rates are included in Appendix 5: Airport Forecasts Data.

Passenger enplanements for the IATP area are expected to grow at a positive 1.6 percent average annual rate.

Total operations for the IATP area are expected to grow from 88,975 operations (2022) to 108,340 operations (2040) with a positive 1.1 percent average annual rate.

General aviation operations are expected to grow at a faster average annual rate (1.5 percent) than that of commercial operations (0.2 percent) likely due to the expansion of UAS/UAV, eVTOL/VTOL, and NextGen applications in the state.

Military operations are forecasted to grow ever so slightly at an average annual rate of 0.1 percent, following suit with the FAA Aerospace Forecast.

Air cargo is expected to grow at an average annual rate of 2.0 percent.

Based aircraft growth usually grows in tandem with general aviation activity, give or take, depending on the infrastructure available to accommodate based aircraft. The forecast average annual rate of change for based aircraft is 1.9 percent.

Table 51. IATP Region Airport Forecast Levels and Growth Rates, Base Year 2022

| | Base Yr. Level (2022) | Base Yr.+1yr. (2023) | Base Yr.+5yr. (2027) | Base Yr.+10yr. (2032) | Base Yr.+15yr. (2037) | Base Yr.+18yr. (2040) | Average Annual Compound Growth Rates (High Scenario) | | | | |
							Base Yr. to +1 (2023)	Base Yr. to +5 (2027)	Base Yr. to +10 (2032)	Base Yr. to +15 (2037)	Base Yr. to +18 (2040)
Passenger Enplanements	**21,968**	**22,891**	**27,507**	**28,674**	**29,134**	**29,233**	**4.2%**	**4.6%**	**2.7%**	**1.9%**	**1.6%**
Operations											
Commercial Operations	33,441	34,979	34,800	34,803	34,458	34,666	4.6%	0.8%	0.4%	0.2%	0.2%
General aviation	54,215	56,438	66,918	69,400	70,849	70,877	4.1%	4.3%	2.5%	1.8%	1.5%
Military	1,319	1,344	1,346	1,346	1,339	1,343	1.9%	0.4%	0.2%	0.1%	0.1%
TOTAL OPERATIONS	**88,975**	**92,445**	**103,648**	**107,401**	**107,996**	**108,340**	**3.9%**	**3.1%**	**1.9%**	**1.3%**	**1.1%**
Cargo/Mail (deplaned lbs)	**5,207,447**	**5,499,064**	**6,870,681**	**7,204,902**	**7,324,186**	**7,437,517**	**5.6%**	**5.7%**	**3.3%**	**2.3%**	**2.0%**
Based Aircraft	**181**	**186**	**233**	**246**	**251**	**254**	**3.0%**	**5.2%**	**3.1%**	**2.2%**	**1.9%**

Sources: AASP (2023); FAA (2023); USDOT (2023 | Statistics exclude Fairbanks International (FAI))

3.10 Critical Aircraft Considerations

The critical aircraft, as stated in AC 150/5000-17, is defined as the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport. Regular use is set at 500+ annual operations, including both itinerant and local operations, but excluding touch-and-go operations. Each flight generally accounts for two operations (one takeoff and one landing).

The critical aircraft determination is an important aspect of airport planning and design. It sets dimensional requirements on an airport, such as the separation distance between taxiways and runways, and the size of certain areas protecting the safety of aircraft operations and passengers. An accurate critical aircraft determination helps to ensure the proper development of airport facilities and appropriate federal investments in airport facilities.

The critical aircraft in this forecast are determined on a regional level and not for specific facilities, as this exercise is typically reserved for the development of individual airport master plans or airport layout plans. The identification of critical aircraft for individual facilities, for the purpose of capital fund expenditures using federal funds, must be taken into consideration just prior to individual development projects. Airports with more recent or concurrent studies may have specific critical aircraft called out. This chapter does include consideration of the various aircraft, or influences, which will likely be considered for facilities within the region regarding identification of critical aircraft.

Table 52 presents the base year (2022) critical aircraft for the communities in the Interior. The Airport Reference Code (ARC) considers the approach speed and wingspan/tail height of each aircraft in relation to the length and width of the runway they can operate on safely.

Table 52. Base Year (2022) Critical Aircraft for Interior Alaska Airports

Airport	Critical Aircraft Design Group
Beaver, Birch Creek, Black Rapids, Bradley Sky-Ranch, Cantwell, Central, Chandalar Lake, Chena River, Chisana, Chistochina, Coal Creek, Copper Center 2, Eureka Creek, Eva Creek, Glacier Creek, Gold King Creek, Healy River, Horsfeld, Jakes Bar, Kantishna, Lake Louise, Lake Louise Seaplane Base, Livengood Camp, Manley Hot Springs, May Creek, McCarthy, McKinley Ntl Park, Minchumina, Minto Al Wright, Paxson, Quail Creek, Stampede, Summit, Tazlina, Tazlina/Smokey Lake, Tetlin, Tok Junction, Tolsona Lake, Totatlanika River, Wiseman	ADG-I Small
Arctic Village, Boundary, Chalkyitsik, Chicken, Chitina, Circle City, Circle Hot Springs, Clear, Coldfoot, Delta Junction, Eagle, Fort Yukon, Gulkana, Nenana Muni, Northway, Ralph M. Calhoun Meml, Rampart, Stevens Village, Venetie	ADG-II Small
Tanacross	ADG-II Large
Prospect Creek	ADG-III Large

Source: USDOT (2023)

Table 53. Critical Aircraft Design Group Forecast, Interior Alaska, 2022-2040

Airport	2040 Forecast Critical Aircraft Design Group
Beaver, Birch Creek, Black Rapids, Boundary, Bradley Sky-Ranch, Cantwell, Central, Chandalar Lake, Chena River, Chicken, Chisana, Chistochina, Circle Hot Springs, Clear, Coal Creek, Copper Center 2, Delta Junction, Eureka Creek, Eva Creek, Glacier Creek, Gold King Creek, Healy River, Horsfeld, Jakes Bar, Kantishna, Lake Louise, Lake Louise Seaplane Base, Livengood Camp, Manley Hot Springs, May Creek, McCarthy, McKinley Ntl Park, Minchumina, Minto Al Wright, Northway, Paxson, Quail Creek, Ralph M. Calhoun Meml, Stampede, Summit, Tazlina, Tazlina/Smokey Lake, Tetlin, Tolsona Lake, Totatlanika River, Wiseman	ADG-I Small
Arctic Village, Chalkyitsik, Chitina, Circle City, Coldfoot, Eagle, Fort Yukon, Gulkana, Nenana Muni, Rampart, Stevens Village, Tok Junction, Venetie	ADG-II Small
Tanacross	ADG-II Large
Prospect Creek	ADG-III Large

Source: USDOT (2023), based on forecast operational data only

Table 53 presents the preliminary forecasts of critical aircraft design for IATP region airports. While the based aircraft forecast does not indicate that many airports will need to change their design aircraft in the future, the trend toward integrating larger aircraft into the Interior over time and the trend toward more mail and freight movement into the Interior can lend to the expectation that aircraft such as the Beech-1900 may replace some of the smaller critical aircraft in some communities with expected population growth; those communities will need a runway that will accommodate this aircraft.

As the demand for air cargo in the Interior grows, the critical aircraft at general aviation airports may also become larger and more demanding, especially in the larger Interior communities. This may require airports in the Interior to expand their runways and taxiways and improve their air traffic control systems. In addition to the critical aircraft, other factors that will affect airport infrastructure development in the future include growth of tourism in the Interior, mining activity in the region, development of new oil and gas resources on the North Slope, and increasing use of drones and other unmanned aircraft.

3.11 Potential Impacts on Regional Facilities from Possible Trends of New Technology (UAS/UAV and NextGen Efforts)

3.11.1 UAS/UAV Trends

Unmanned Aircraft Systems (UAS) and Unmanned Aerial Vehicles (UAV) have the potential to revolutionize transportation in Alaska. These technologies could provide new ways to access remote communities, deliver goods and services, and support search and rescue operations. However, the following challenges need to be addressed before UAS and UAV can be safely and effectively deployed in Alaska and the Interior:

- Alaska is a vast, remote, and rugged environment, with extreme weather conditions that can pose a challenge for all flight operations, inclusive of UAS and Advanced Air Mobility (AAM) operations. Many parts of Alaska lack the infrastructure needed to support UAS and UAV operations, such as broadband internet service and weather reporting.

- Maintenance of the existing airport facilities in the Interior has proven to be a challenge to sponsors. Lighting systems – which are a critical component of instrument flight rules and aviation safety – are challenging to maintain or upgrade. Though periodic funding may be available, the availability of skilled aviation electricians willing to go to these remote locations and put themselves in harm's way in a harsh environment provides a challenge.

- The regulatory environment for UAS and UAV is still evolving, and there is a need for clear and consistent regulations that will allow these technologies to be safely and effectively deployed in Alaska. Though the FAA has established an Advanced Aviation Advisory Committee to provide independent advice and recommendations to the FAA on key UAS and AAM integration issues, interests, and policies, has released an Urban Air Mobility (UAM)

Concept of Operations, and has published Vertiport Design Standards to support the safe integration of AAM aircraft, widespread implementation within operations have not yet been adopted.

- UAS and UAV operations could generate noise pollution, which could be a nuisance to residents and wildlife.

Despite these challenges, there is a growing interest in UAS and UAV in Alaska and the IATP region. Several companies are working to develop UAS and UAV solutions that are specifically designed for the Alaskan environment. These companies are working with the FAA and other stakeholders to address the regulatory challenges. The following potential benefits of UAS and UAV in Alaska are significant:

- UAS and UAV could be used to deliver goods and services to remote communities that are currently difficult or impossible to reach by road or air and provide new ways to access remote communities. One such example is autonomous cargo flights. The bypass mail service and EAS to the Interior are critical aspects that create recurring costs to the state and the United States Postal Service. Autonomous cargo flight operations could be an efficient option. To capitalize on this, airport sponsors would need to identify the priority of centralized facilities that could serve as preliminary autonomous cargo and mail locations within the Interior. Existing infrastructure, such as roads, for logistic supplies and consumables, power, internet, water, suitable housing, and the development of existing hangar structures would create viable options for short-term demand. UAS and UAV operators will need these in place to quickly build and capitalize on the market.

- UAS and UAV could improve search and rescue operations for missing persons or survivors of accidents in remote areas. The use of UAS could reduce the overhead costs for the search and rescue (SAR) units and allow for multiple concurrent flight operations to locate survivors in a timely manner. This is a proven method adopted by aerial firefighting units that deploy several aircraft to combat bush fires with multiple water bombardments and increased air coverage. Identifying airfields that specialize in SAR operations would be important. Efficient operations may encourage higher profitability, and it may also encourage these operators to invest in faster aircraft and equipment for medical evacuations. This would eventually require future planning for longer runways and larger hangars and not the usual T-hangars.

- UAS and UAV reduce the cost of transportation for goods and people, which could reduce the cost of transportation into the Interior. Eleven of the airports in this report are remote Community On-Road airports and, though road accessibility is available, the commute time can be long, especially during bad weather. The demand for this would be greater in areas of higher population growth to avoid traffic congestion for deliveries. Targeting less populated communities should be something to consider in the long term.

The use of UAS and UAV in Alaska is still in its early stages, but the potential benefits are significant. With careful planning and execution, these technologies have the potential to improve the quality of life for Alaskans and make the state more accessible.

3.11.2 NextGen

NextGen is the FAA's initiative to modernize the National Airspace System (NAS). NextGen will use new technologies to improve safety, efficiency, and capacity in the NAS. One of the key components of NextGen is the use of Satellite-Based Augmentation System (SBAS) Navigation. SBAS will provide more accurate and reliable navigation data for aircraft, which will help improve safety and efficiency. This will reduce the need for older, localized navigational facilities like non-directional beacons (NDBs), very high frequency omni-directional station (VORs), and instrument landing systems (ILSs). However, caution should be used when depending only on satellite-based navigation. Some sort of secondary navigation facilities may still be required during solar flares or meteorological phenomena.

Another key component of NextGen is the use of NextGen air traffic control (ATC). NextGen ATC will use new technologies to manage air traffic more efficiently and safely. The Interior is one of the areas that will benefit most from NextGen. The Interior is home to several remote communities that are currently difficult to reach by air. Challenges to growth caused by continual disruption of service (delays or costly re-routes) and IFR activity because of limitations from high activity within military operating areas (MOAs) and their extensive areas are abundant. For many of these Interior communities, NextGen will make it easier and more efficient to fly to these communities, through increased navigation reliability and traffic management, safety flight following, search and rescue coordination, and increased military flight route separation. New

satellite technologies may be used to improve weather forecasting, which will help prevent accidents, incidents, and route-planning reliability. It would also remove the need to have a localized weather facility that is costly to maintain or implement.

NextGen is a major initiative that will have a significant impact on the Interior. By improving safety, efficiency, and capacity in the NAS, NextGen is expected to make it easier and more convenient to fly to the Interior's remote communities.

4.0 AVIATION SYSTEM ISSUES & NEEDS

4.1 Introduction

The *Aviation System Issues & Needs* section analyzes the existing system and identifies the challenges and problems to be resolved over the 20-year life of the plan. The IATP update has benefited from the development of multiple local, regional, and statewide plans conducted or published within the preceding three years. These plans support the IATP by providing current data on aviation conditions, issues, needs, and priorities. The plans that contributed to the IATP aviation analysis include:

- *Statewide Long-Range Transportation Plan – Alaska Moves 2050* (public review draft published September 2022)
- *FAA Flight Plan 21* (published 2021)
- FAA's *Alaska Aviation Safety Initiative FY21 Final Report* (published 2021)
- *Upper Tanana Airport Planning Study (UTAPS)* (published September 2023)
- *AASP Classifications & Performance Measures* update (published May 2022)
- Various other special studies conducted under the AASP, such as the *Lighting Analysis for Rural Airports* (June 2021) and *Alaska Weather Equipment Needs Summary* (November 2017)

Although the IATP has benefited in many ways from the availability of so many other recently conducted studies, one key element of the IATP has suffered for them – the stakeholder involvement. It is believed that the multitude of recent studies – and the surveys and outreach conducted for each – has created a "survey fatigue." Efforts to reach airport managers, air carriers, and other aviation stakeholders were often ignored or declined.

The collective information and stakeholder input from companion studies and information/input gathered specifically for this IATP update has identified strong and consistent support for a number of aviation investment and development goals. A summary of stakeholder input gathered for this study and referenced from other recent studies is included in *Appendix 6*: Stakeholder Input Used in IATP Update.

4.2 Investment & Development Goals

The recommendations of the IATP are intended to address major local transportation needs that have widespread importance across the region. The project and policy recommendations are in line with the state long-range transportation goals of safety, state of good repair, economic development, resiliency, and sustainability. The aviation recommendations additionally align with FAA priorities and goals, identified in recently published FAA plans, with specific support for increased weather reporting at airports and en route, additional weather cameras, and development of new IAPs.

Stakeholder input is also strongly considered, and although very little stakeholder input was provided for the IATP update specifically, a great amount of stakeholder input has been provided for other aviation plans and studies, and much of it is current and relevant to this plan.

A consistent thread through the various studies and stakeholder comments is the priority placed on safety and functionality. Most airport users and operators prioritize an airport system that provides for safe, efficient, and functional air travel by means of keeping infrastructure in serviceable condition, maintaining and expanding the navigation and weather reporting systems, and providing basic amenities at airports such as fuel and wi-fi. In addition to the basic desire for well-maintained existing infrastructure, there are several airports in the region that have ambitious development plans to better serve the needs of airport users, their communities, and surrounding areas.

4.3 Airport Roles & Classifications

The AASP completed a review of Alaska's airport classifications and published the results in the May 2022 *AASP Phase III Chapter 3 Classifications & Performance Measures* report. This IATP update finds the current classifications for airports in the IATP area to be adequate and reasonable. No changes are recommended, at this time.

There are a number of individual work efforts underway that may justify reconsidered classifications in the future for a few specific facilities. The *UTAPS* has recommended Tok Junction (6K8) be considered for development as a regional facility. Gulkana Airport (GKN) is undergoing an Airport Layout Plan update that will consider development goals for this airport, also potentially serving a greater regional role in the future. Nenana Muni (ENN) is also updating its Airport Layout Plan to consider significant development. The results of these studies and the ultimate completed developments may provide justification at a future date to reclassify these airports.

This IATP update pushes forward one legacy recommendation from the 2010 IATP regarding Healy Lake. Healy Lake is a community located off the road system, north of the Alaska Highway between Delta Junction and Tok. This community receives Essential Air Service (EAS), currently contracted to 40-Mile Air. This community also receives Bypass Mail service. The runway at Healy Lake is not registered, is not a facility considered by the AASP, and is not part of the NPIAS. This plan recommends that Healy Lake airport be registered so that it is recognized as an official facility. Inclusion of this facility in the NPIAS should also be considered so that the airport may be eligible for AIP funding. One administrative benefit of getting Healy Lake registered would be its assigned designation (its three- or four-character airport ID code). Currently, several airport databases include operations, enplanements, and other statistics for Healy Lake, but they are mis-designated to Healy River (a completely separate community on the George Parks Highway, with its own registered airport) or to unofficial airport codes.

4.4   Airport Service Level Changes

One of the objectives of this plan is to identify any locations where new or improved airports are needed. This IATP echoes and endorses recommendations from other area plans and heard in public outreach efforts, including:

- The need for improved airports at Tok and Gulkana
- The need to study a potential new airport serving the Denali Borough
- The need to preserve and improve backcountry airstrips and landing strips

Additionally, this plan found one airport that, if left unimproved, is recommended to be deactivated (closed).

4.4.1   Tok Junction Airport

The *UTAPS* is a follow-through on the 2003 *Copper Basin and Upper Tanana Valley Regional Airport Plan* and the 2010 IATP, which both recommended identifying a regionally significant airport at which to concentrate future development and expansion for the benefit of the entire Copper Basin-Upper Tanana Valley region. *UTAPS* (published September 2023) studied Tok Junction, Tanacross, Northway, and Gulkana airports for their potential as a regionally significant airport. The plan recommends Tok Junction Airport be considered for further evaluation as a regionally significant airport and proposes development plans to support that role.

The study determined that the scale of the regionally significant airport would be driven, in large part, by the need to serve Alaska DNR forestry aviation operations. DNR is currently operating from the BLM-owned Tanacross Airport, but this facility is in poor condition, and continued use would require major maintenance and rehabilitation. Tanacross is not in the NPIAS, so is not eligible for AIP funding, and neither the owner (BLM) nor the primary user (DNR) have the financial resources to make the needed improvements. Without improvements to Tanacross, DNR will need a facility with runway dimensions of at least 5,000 ft by 75 ft.

A regionally significant airport should be located within close proximity of population centers, airport users, and community services accessed by airport users. A regionally significant airport would also need facilities to serve various other aviation activities, including scheduled and charter commercial passenger service, cargo, transient corporate aircraft, military flights, medevac flights, and general aviation. Airport land should be available, or land acquisition should be feasible, without contamination or development constraints. Facilities and services proposed include lease lots and tie down space, helicopter facilities, fuel service, maintenance space, a pilot's lounge, airport maintenance facilities, certified weather reporting, NAVAIDs, and instrument approaches.

The plans to develop Tok Junction into a regional facility include the upgrade of Runway 7-25 to a 5,000 ft by 75 ft B-II runway; construction of an adjacent ski/gravel strip (1,900 ft by 60 ft); phased development of apron, taxiway, road, and

NAVAID improvements; and an ultimate crosswind runway. The total cost for all phases of development is estimated at roughly $32.7 million. It is anticipated that this development will need to be funded by more than just AIP funding. The runway extension is not fully AIP-eligible, and additional funding may need to be secured by for the length not funded by the FAA. The next phase in pursuing development of Tok as a regional airport is preparation of a master plan (with its accompanying airport layout plan) and additional public and user engagement to investigate several considerations more fully. From the *UTAPS* report:

Tok Junction Airport is recommended for further evaluation because it is within the population center of Tok which generates much of the aviation demand expected for the airport and it is near the lodging, food, supplies, and services used by airport employees and users. It is home to the DNR Forestry firefighting headquarters, which would like to relocate to Tok Junction Airport if improvements are made. While many aviation services and improvements are already available at Tok Junction, development of the regional airport would require considerable investment in an extension of the main runway to approximately 5,000 feet, a possible crosswind runway, associated taxiway expansions, and apron expansion. Some of these improvements were already proposed in the current ALP. Some of the improvements can be made on the existing airport, but property acquisition would be needed for the runway extension and crosswind runway. This site would benefit from the large presence of airport maintenance and operations (M&O) staff and equipment at the airport and the nearby Tok Maintenance Station, about 2 miles away.

A summary of why the other airports were not recommended by *UTAPS* for further consideration:

- Tanacross – contamination, non-NPIAS, owner or user agencies not in a position to fund needed improvements, lack of existing amenities and services
- Northway – distance from population centers, at outer border of fire response area, lack of existing amenities and services
- Gulkana – outside the Upper Tanana Valley and serves a geographically separate area, already considered a regionally significant airport by users for the region in which it is located, getting an Airport Layout Plan (ALP) update in 2023.

4.4.2   Gulkana Airport

Gulkana Airport (GKN) is already considered a regionally significant airport by many users, even though it is not officially classified as such. GKN is currently a GA-Local airport in the NPIAS and a Community On-Road airport in the AASP classification system. The update to Gulkana's ALP is underway, giving consideration to development needs for this airport to become a regional facility. Primary drivers for this work include anticipated growth in visitors to the area, forecasts that indicate the airport may see increasing numbers of operations by larger aircraft, community desires to increase cargo operations, and the potential to support medevac and fire tanker bases.

GKN is primarily used for scheduled and charter flights, military training, medevac services, law enforcement, firefighting, recreation flying, and flight training. Reeve Air Alaska currently has an Essential Air Service (EAS) subsidy for scheduled air service to and from Anchorage, and Copper Valley Air Service currently has an EAS subsidy and a mail contract between Gulkana and May Creek and McCarthy. Much of the air traffic at GKN is generated by flights to the Wrangell-St. Elias National Park and Preserve and other back country areas for tours, hunting, fishing, camping, hiking, and other backcountry activities. During summer and fall hunting season, a large amount of GA traffic by aircraft not based at GKN uses the airport to access fuel and other services.

GKN has two runways – a 5,001 ft by 100 ft paved runway and a 2,300 ft by 60 ft gravel runway. The airport already has most facilities suited to meet the needs of a regionally significant airport, including fuel service, maintenance, and tie downs. The primary needs for developing the airport into a regional facility include an apron and lease lot expansion. Gulkana is the only airport in the IATP region with a documented need for additional lease lots and additional parking area (AASP Performance Measures reporting). Additional consideration is being given to extending the runway, relocating the gravel runway, and development of a float pond. The completed ALP (anticipated December 2023) will specify ultimate development goals for GKN.

4.4.3 Denali Area Airport Planning Study

Initiated in mid-2023, the *Denali Area Airport-Planning Study* will study the airport needs of the Denali Borough area to determine the most appropriate airport site or sites for future public investments. The Denali Borough includes the communities of Anderson/Clear, Healy, Denali Park (formerly known as McKinley Park or McKinley Park Village), Cantwell, and a number of smaller settlements. The communities and Alaska Native Corporation Doyon, Limited have great interest in an airport configuration in the borough that supports local needs, tourism, and industry.

Infrastructure needs in this area are changing, and the study will analyze airports in the Denali Borough to identify and propose alternatives for the most suitable location for future aviation investment in the area. Facilities included in the analysis include Clear, Gold King Creek, Healy River, Kantishna, and Summit, but the analysis may include consideration of a completely new airport location.

4.4.4 Backcountry Airstrips and Landing Strips

Alaskan backcountry airstrips and landings strips are an important aviation resource. They provide access to remote areas and support recreation, hunting and fishing, flight training, state and federal agency access to their lands, and emergency landings. In the remote and largely roadless IATP region, subject to harsh and rapidly changing weather conditions, landing strips (both backcountry strips and strips located along road systems) are especially important. Pilots must often traverse long distances between population centers, and there is a need for safe places to land in between. Comparable to rest stops or pull outs along highways, some runways' most critical role may simply be to remain available and serviceable to aircraft en route to other destinations.

It is the policy of the DOT&PF that these essential facilities be preserved and protected and continue to benefit Alaskans. These facilities are not in the NPIAS and are not eligible for federal funding. Thus, a functional preservation strategy includes efforts to educate the public on the benefits of these facilities, a system for pilots to report conditions of these airstrips, and the coordination of volunteer/stakeholder groups for maintenance efforts. This plan recommends the work of the Backcountry Airstrip Work Group be revived and continued to further explore opportunities for volunteer/stakeholder involvement in the maintenance of landing strips important to the aviation community.

Several backcountry airstrips need critical improvements to remain serviceable. Of these, Eva Creek (2Z3), a DNR-owned facility, is in the most urgent need for maintenance and improvements. Eva Creek (2Z3) is located east of the Parks Highway, between the communities of Healy River and Anderson/Clear. Remarks published through the ADIP indicate that the runway acts as an emergency landing field for light planes only. The last Form 5010 inspection was conducted in 2020, and the inspection report includes the statement that this runway is unusable. This plan recommends DNR make the improvements necessary to restore this airstrip to a safe, usable condition. It is published as a public-use facility, and the expectation should be that published facilities are usable.

Several other airports have been remarked as being unmaintained, in poor condition, and trending toward the unusable conditions found at Eva Creek. Glacier Creek (KGZ), Jakes Bar (AK0), Quail Creek (20K), and Totatlanika River (9AK) are among the most notable. These airports – as well as several other unmaintained facilities – are either in the public domain (no identified owner) or are owned by agencies that do not have the resources or expertise to effectively own and operate airports. If a Backcountry Airstrip Work Group is formed (as this plan recommends), and efforts successfully identify volunteer or stakeholder groups that will maintain airstrips, their work could be vital to keeping these landing strips usable.

4.4.5 Airport Recommended to be Deactivated

There is one airstrip – Eureka Creek (2Z2) – that appears to have fallen into such a state of neglect and deterioration that, without major improvements, should be deactivated (closed and removed from FAA's publications and charting). Eureka Creek (2Z2) is located near the western border of the IATP area, northeast of Manley Hot Springs along the Elliott Highway. Eureka Creek has no identified owner. Documentation as far back as 2005 recommended the airport be decommissioned at that time. The Form 5010 inspection report from 2013 remarks that the airport is dangerous and overgrown. The last Form 5010 inspection was conducted in 2020, and the inspection report includes the statement, "The runway is unusable." Remarks published through the ADIP indicate the runway is hazardous, not maintained nor recommended for emergency use, unsuitable for all aircraft, and to use the Elliot Highway or an alternate airport for emergency landings.

Airports can be deactivated through a process that begins with filing FAA's Form 7480-1 *Notice for Construction, Alteration and Deactivation of Airports*. In the absence of any agency or organization that will improve the airport to a safe and usable condition, this plan recommends that an airport remarked as unusable, hazardous, or unsuitable even for emergency landings should be deactivated.

4.5   Improving Safety

Improving safety is an umbrella term that includes improved airport infrastructure, improved navigation and weather reporting, improved aircraft operations, improved communication, and various other elements that contribute to safer air travel. Many of these elements are identified and addressed specifically as "Needs" of the IATP aviation system. Overall, improving safety is a goal shared by all entities involved in the development and use of the aviation system.

DOT&PF's *Statewide LRTP (Alaska Moves 2050)* includes Safety as one of its goals – to provide for and continuously improve the transportation system's safety for all users. Safety is a pillar of the FAA's FY22-26 strategic plan (*Flight Plan 21*), and aviation safety in Alaska is addressed specifically in the FAA *Alaska Aviation Safety Initiative FY21 Final Report (FAASI FY21)*. One of the cornerstone goals of the AASP is to develop, operate, and maintain an airport system that contributes to aviation safety and meets user needs. Maintaining the IATP region airports at safe and usable standards and developing the system to improve aviation safety are clear goals that this IATP update shares with other guiding plans.

For the traveling public, the expectation is that they will make it safely from Point A to Point B. As the owner and operator of so much of the infrastructure that supports that travel, the DOT&PF has an obligation to ensure that the expectation of safety is met.

4.6   Infrastructure

Infrastructure recommendations in this IATP update will focus on regionally important needs. Each airport in the IATP region has its own detailed list of needs (compiled and available through the AASP internal web-based facilities database) to meet AASP performance measures and development goals, but there are several key components of airport infrastructure that support systemwide health. The two most regionally important components of infrastructure are runway length (and condition) and runway lighting.

Critical infrastructure and desirable amenities are primarily based on classification and performance measures (current performance measure reports are included in *Appendix 4*: AASP Performance Measure Report Cards). There are airports with desire to grow (Tok, Gulkana, and Nenana, most specifically), but for the most part, airport users generally desire reliably usable, well-maintained airports with services like fuel. The airport users generally enjoy operating as they currently do, and while they have the expectation of safe, reliable facilities, they do not wish for major improvements that might bring additional fees, regulations, or changes to airport use that disrupt their operations.

4.6.1   Runways

Most of the airports in the IATP region have runways of sufficient length to satisfy airport infrastructure performance measures. In other words, most runways are a suitable length to accommodate the aircraft using the airport. There are six airports that still need runway extensions to meet AASP minimum length requirements. Table 54 identifies these airports, current runway length, and target minimum runway length. All of these airports are classified as Community On-Road facilities, the type that rarely scores well for funding when in competition with Alaska's many off-road facilities and often do not have the operations, critical aircraft, or demand to justify runway extensions. Only airports in the AASP Hub and Community classifications have minimum specified runway lengths.

Table 54. IATP Airports Needing Longer Runways to Meet AASP Minimums

Airport	ID	AASP Classification	Existing Runway Length (ft)	Target Minimum Runway Length (ft)
Central[1]	CEM	Community On-Road	2,782	3,300
Chistochina	CZO	Community On-Road	2,060	3,300
Circle City[1]	CRC	Community On-Road	2,979	3,300
Delta Junction	D66	Community On-Road	2,500	3,300
Healy River	HRR	Community On-Road	2,910	3,300
Tok Junction	6K8	Community On-Road	2,509	3,300 (5,000 if developed into regional facility)

[1] Central and Circle City are 33 road miles apart, and both would not ultimately qualify to receive AIP funding for longer runways, but the AASP performance measures do not account for this nuance.

Most of the runway conditions throughout the region are satisfactory – gravel runways in good condition or better and paved runways with a Pavement Condition Index (PCI) of 70 or greater are considered to meet AASP performance measures. Approximately 30 percent of the runways do not meet these marks. Runway surface conditions are a performance metric for Hub, Community, and Local class airports. The airports in need of runway surface improvements are identified in Table 55.

Table 55. IATP Airports Needing Runway Surface Improvements

Airport	ID	AASP Classification	Surface Type	Surface Condition
Arctic Village	ARC	Community Off-Road	Gravel	Poor
Bradley Sky-Ranch	95Z	Local Non-NPIAS	Gravel	Fair
Chalkyitsik[1]	CIK	Community Off-Road	Gravel	Fair
Central	CEM	Community On-Road	Gravel	Poor
Chisana	CZN	Local NPIAS-Low	Gravel	Poor
Chistochina	CZO	Community On-Road	Gravel	Fair
Clear	Z84	Local NPIAS-Low	Paved	PCI 61
Copper Center 2	Z93	Local Non-NPIAS	Gravel	Fair
Gold King Creek	AK7	Local Non-NPIAS	Gravel	Fair
Healy River	HRR	Community On-Road	Paved	PCI 48
McCarthy	15Z	Local NPIAS-Low	Gravel	Fair
Northway	ORT	Community On-Road	Paved	PCI 40
Tok Junction	6K8	Community On-Road	Paved	PCI 34
Wiseman	WSM	Local NPIAS-Low	Gravel	Poor

[1] Chalkyitsik Airport Improvements project will be completed with FFY 2023 and 2024 AIP grant funding and will address the need for improved surface condition at this airport.

4.6.2 Lighting

Runway lighting is a critical airport component that enables safe operations at night and when visibility is reduced by fog, blowing snow, wildfire smoke, or combinations of weather and low light. Airport lighting systems help pilots locate runways and identify where to land, supplementing an aircraft's on-board instrumentation and providing a visual ground reference. Airport lighting is required by medevac aircraft landing at night in response to a medical emergency.

The IATP region experiences all of the conditions that make runway lighting especially significant in providing safe and reliable airport use – darkness during much of the year, low light, smoke, snow, and vast stretches of unmarked or featureless terrain by which to navigate. The runway lighting systems at most of the IATP airports are aged and in poor condition. The skill and dedication of DOT&PF's maintenance crews has kept many of the older systems operational well beyond their expected lifespan, considering the harsh environment and limited funding that cause lighting systems to deteriorate.

The AASP produced the *Rural Airport Lighting* fact sheet in April 2023. This fact sheet reports some of the following life cycle considerations for airport lighting systems:

- The FAA designates 10 years for useful life of airfield lighting – this minimum useful life does not indicate expected system failure at 10 years, rather that lighting system replacement or rehabilitation are not eligible for funding until after 10 years.
- The industry average for replacing airport lighting systems is about 15 years. The length of time that runway systems remain operable varies greatly, depending on the quality of the initial installation, environmental factors, and maintenance practices.
- The average age of DOT&PF rural airport lighting systems in Alaska is about 20 years.

In the IATP region, the average age is closer to 24 years, with a number of systems exceeding 30 years. Without repeating everything that the *Rural Airport Lighting* fact sheet presents, it suffices to state that the IATP region faces all the challenges identified with maintaining, preserving, and repairing airport lighting systems – lack of funding, lack of qualified electricians statewide, lack of experience and appropriate equipment for those maintaining runways, harsh climates, freeze and thaw cycles, erosion, settlement, flooding, and difficulty in procuring reliable power sources.

Despite this overwhelming list of challenges, keeping airport lighting systems operational is of paramount importance. As the fact sheet concludes, "Airport lighting is critical to the mission of reliable transportation and access to goods and services. Without it, medevac pilots cannot reach destinations and remote Alaska becomes increasingly more remote."

The *Rural Airport Lighting* fact sheet was developed following a more comprehensive study and report – the *Lighting Analysis for Rural Airports* (June 2021). A primary conclusion from this report was that DOT&PF had made significant progress in adding new systems and improving airport lighting at rural airports during the preceding 12 years; however, reduced maintenance funding and aging systems are creating new challenges statewide. The consensus was that the airports with the greatest need for lighting systems have been addressed or are programmed for lighting projects in the near term. The task for management is to focus on the aging infrastructure with a programmatic approach to replace systems that have reached, or, in many cases, exceeded their economic lives.

Lighting projects alone do not score well in APEB or with FAA, and mobilizing construction to accomplish standalone lighting work is prohibitively expensive, so lighting is often bundled with other airport work. The 2021 report recommends that any major surface rehabilitation project should include upgrading and replacing associated lighting infrastructure. In 2022, DOT&PF developed a statewide 10-year lighting priority assessment which identifies airports in need of lighting projects, identifies which airports have lighting projects programmed, and prioritizes future airport lighting projects by funding year.

Within the IATP region, there are still three airports in need of new or upgraded lighting systems. Two are completely without lighting systems, and one needs a lighting system upgrade to meet its performance measure. Runway lighting is a performance measure for AASP Hub, Community, and Local NPIAS High-Activity airports. Numerous IATP airports have lighting project detailed in the 2022 statewide 10-year lighting priority assessment. Table 56 details IATP airports recommended to receive new (first-time) lighting systems, airports recommended to receive upgraded lighting systems, airports programmed for lighting replacement/rehab, and airports recommended additionally to receive lighting projects.

Table 56. IATP Airport Lighting Improvements Needed

Airport	ID	Lighting System	Age	Lighting Need & Lighting Priority Assessment Programming
NEW (FIRST-TIME) LIGHTING				
Chistochina	CZO	None	--	Community class airport requires MIRL system
Delta Junction	D66	None	--	Community class airport requires MIRL system
UPGRADE TO NEW LIGHTING SYSTEM				
Fort Yukon	FYU	MIRL	13	Regional class airport requires HIRL system; lighting system failure anticipated within 10 yrs; FY33 target grant funding
LIGHTING SYSTEM PROJECTS PROGRAMMED				
Beaver	WBQ	MIRL	34	Lighting system failing; project programming imminent
Birch Creek	Z91	MIRL	28	Lighting system failure anticipated within 5 yrs; FY26 target grant funding
Chalkyitsik	CIK	MIRL	29	Lighting system failure anticipated within 5 yrs; FY23 project programmed with AIP grant awarded September 2023
Eagle	EAA	MIRL	38	Lighting system failure anticipated within 10 yrs; FY27 target grant funding
Gulkana	GKN	MIRL	38	Lighting system failure anticipated within 10 yrs; FY29 target grant funding
Manley Hot Springs	MLY	MIRL	11	Lighting system failure anticipated within 10 yrs; FY33 target grant funding
Minchumina	MHM	MIRL	34	Lighting system failure anticipated within 10 yrs; FY29 target grant funding
Minto Al Wright	51Z	MIRL	16	Lighting system failure anticipated within 10 yrs; FY32 target grant funding
Nenana Muni	ENN	MIRL	27	Lighting system programmed for replacement in FY23
Northway	ORT	MIRL	15	Lighting system failure anticipated within 10 yrs; FY32 target grant funding
Ralph M Calhoun Meml	TAL	MIRL	18	Lighting system failure anticipated within 10 yrs; FY31 target grant funding
Rampart	RMP	MIRL	22	Lighting system failure anticipated within 10 yrs; FY30 target grant funding
Stevens Village	SVS	MIRL	17	Lighting system failure anticipated within 10 yrs; FY32 target grant funding
Tetlin	3T4	MIRL	19	Lighting system failure anticipated within 10 yrs; FY32 target grant funding
ADDITIONAL LIGHTING PROJECTS RECOMMENDED				
Arctic Village	ARC	MIRL	Unk	Age of lighting system unknown, evaluate condition with local sponsor
Central	CEM	MIRL	30	Consider lighting system project with future runway work; not currently programmed
Circle City	CRC	MIRL	35	Lighting system estimated to be 35 yrs old, not currently programmed for replacement
Clear	Z84	MIRL	24	Lighting system estimated to be 24 yrs old, not currently programmed for replacement
Venetie	VEE	MIRL	20	Lighting system estimated to be 20 yrs old, evaluate condition with local sponsor

4.7   Amenities

Airport amenities include features such as public restrooms, passenger waiting shelters, emergency maintenance shelters, fuel service, and broadband internet connection. The two amenities of greatest regional importance are fuel availability and broadband internet connection. Only six of the airports in the IATP region currently have fuel available for aircraft, and only eight airports currently report having broadband connectivity.

4.7.1   Fuel

The availability of fuel is one of the most desired amenities by pilots using the IATP airports. The AASP performance measures specify fuel availability as a target metric for Hub, Community, and Local NPIAS High-Activity airports. Only six of the 20 airports in these classifications currently have fuel available. DOT&PF is not in the business of providing fuel service, but airport improvement and development plans should include suitable locations for fuel service to be provided by private parties.

4.7.2   Broadband Connectivity

One of the AASP performance measures for Community and Hub airports is broadband connectivity – having broadband available through a local fiber connection. Broadband connectivity would support weather reporting, pilot and airport user communications and access to information, and UAS operations. To meet performance measures, broadband connectivity is needed at 10 of the 17 Community airports and at the single Regional Hub airport in the IATP region.

Federal funding was announced in June 2023 to expand high-speed internet access nationwide, with funding distributed over the coming two years. States will be tasked with determining where and how to deploy new high-speed internet. The State of Alaska Governor's Task Force on Broadband released a report in November 2021 that sets forth state goals and actions to expand broadband connectivity in Alaska. Although the AASP performance measure reporting indicates that seven airports have broadband connectivity, the 2021 Broadband report indicates that several of these communities are "unserved" by broadband, which means that these locations either do not have internet connectivity or the internet connectivity has download/upload speeds unsuitable for real-time applications.

This plan recommends that DOT&PF be engaged in the process for implementing high-speed internet access and identify ways to connect airports currently not connected or unserved by broadband service. Additional information on the status and plans for community broadband connectivity is best referenced in the November 2021 *State of Alaska Governor's Task Force on Broadband Final Report*. *Appendix 7*: Broadband Connectivity at IATP Airports includes the list of IATP airports and their broadband status according to the AASP performance measures and according to the 2021 task force report.

4.8   Airspace & Navigation

The FY21 *FAA Alaska Aviation Safety Initiative* includes goals of increasing weather reporting at airports and en route, installation of additional weather cameras, more AWOS coverage, and development of new IAPs. The DOT&PF Statewide LRTP recommends continued support of AWOS and IAPs and continued support of airspace protection and management. DOT&PF is most often *not* the agency responsible for development and management of airspace, navigational aids, weather systems, or instrument approaches, but DOT&PF is deeply involved in planning for all of these components and is often a leading source in identifying locations where issues exist and improvements to airspace and navigation are needed.

4.8.1   Airspace

Military aviation is and will remain a major user of airspace in the IATP area. The number and frequency of military exercises is anticipated to increase, and military operations areas with periodic and permanent restrictions are growing with the multitude of exercises. The two largest exercises, Red Flag and Northern Edge, require over 60,000 square miles of special use airspace when they are active. Northern Edge, which has previously been an exercise conducted every two years, is going to be an annual event.

Clear Space Force Station (Clear SFS), known as Clear Air Force Station until it was renamed in 2021, is a radar station in the community of Clear/Anderson. This station serves to provide missile warning, missile defense, and space domain awareness. A Long-Range Discrimination Radar (LRDR) was installed in late 2021 at Clear SFS, and restricted area airspace over the Clear SFS was modified to provide the protective airspace needed for this system. Airspace restrictions were determined necessary to ensure that aircraft do not encounter high-intensity radiated fields (HIRF) resulting from the LRDR operations that exceed FAA's HIRF certification standards for aircraft electrical and electronic systems. The LRDR is currently in an integration and test phase, and the military is determining the actual HIRF resulting from LRDR operations. It is possible that their determinations may result in additional proposed changes to or expansion of restricted airspace around the Clear SFS in the future.

No other current airspace issues were identified by this evaluation. This plan recommends that DOT&PF, the Alaska Airmen's Association, the Aircraft Owners and Pilots Association (AOPA), and other affected stakeholders remain engaged with the Alaska Civil-Military Aviation Council (ACMAC) as changes to airspace are proposed. These groups have effectively worked with the military on previous occasions to define airspace areas and use that serve both military and civilian needs. Echoing a sentiment from the 2010 IATP, DOT&PF needs to be diligent in identifying military airspace impacts on the civilian population and economy and participating in ACMAC efforts to find workable compromises.

4.8.2   Instrument Approach Procedures

New and improved instrument approach procedures (IAPs) improve flight safety, and they are a key initiative from the *FAA Alaska Aviation Safety Initiative FY21 Final Report (FAASI FY21)*. Per the report, the FAA plans to publish Wide Area Augmentation System (WAAS) approaches to every qualified runway end in the national airspace. FAA is also considering modifying the design criteria for these approaches to allow more runways to qualify.

Some key acronyms used in the language regarding IAPs include:

- WAAS – Wide Area Augmentation System: an air navigation aid developed by the FAA to augment the GPS with the goal of improving its accuracy, integrity, and availability to enable aircraft to rely on GPS for all phases of flight, including approaches to airports within its coverage area.

- LPV – Localizer Performance with Vertical Guidance: an instrument approach that provides both course and glidepath information; the highest precision GPS/WAAS-enabled aviation instrument approach procedures currently available without specialized training requirements.

- RNAV – Area Navigation: a form of navigation that uses satellites and onboard computers to project a lateral path to help aircraft navigate from point to point without the use of ground-based navigational aids.

Seventeen of the airports in the IATP area have published IAPs. Another three airports have special IAPs, which are not published. These special procedures may be available to certain carriers only or may be in proof-of-concept phase, which means they may not satisfy the general need for an IAP to a given airport. Table 57 lists airports in the IATP region with IAPs, airports without IAPs that have previously been recommended to received them, and the support infrastructure available at each airport.

Table 57. Instrument Approach Procedures (IAPs) at IATP Airports

Airport	ID	IAP	Weather Source	Weather Camera	Remarks
AIRPORTS WITH PUBLISHED IAPS AND WEATHER REPORTING					
Arctic Village	ARC	RNAV	AWOS	Yes	
Coldfoot	CXF	RNAV	AWOS	Yes	
Eagle	EAA	RNAV	ASOS	Yes	
Fairbanks International	FAI	ILS, RNAV, VOR, or TACAN	ASOS	Yes	
Fort Yukon	FYU	RNAV	AWOS	Yes	2010 IATP recommended improvement to ¾ mile min.
Gulkana	GKN	RNAV, VOR	ASOS	Yes	2010 IATP recommended improvement to ¾ mile min.
Minchumina	MHM	RNAV, NDB	AWOS	Yes	
Nenana Muni	ENN	RNAV, NDB	ASOS	Yes	Aeronautical survey conducted in 2021 in support of LPV approach development
Northway	ORT	RNAV, VOR/DME	ASOS	Yes	
Ralph M Calhoun Meml	TAL	RNAV, VOR/DME	ASOS	Yes	
Tok Junction	6K8	RNAV	AWOS	Yes	2010 IATP recommended improved IAP
AIRPORTS WITH PUBLISHED IAPS BUT LACKING WEATHER REPORTING					
Beaver	WBQ	RNAV	NONE	Yes	Lacks weather reporting
Central	CEM	RNAV	NONE	Yes	Lacks weather reporting
Chalkyitsik	CIK	RNAV	NONE	Yes	Lacks weather reporting
Healy River	HRR	RNAV	NONE	No	Lacks weather reporting, weather camera
Manley Hot Springs	MLY	RNAV	NONE	No	Lacks weather reporting, weather camera
Venetie	VEE	RNAV	NONE	No	Lacks weather reporting, weather camera
AIRPORTS WITHOUT IAPS, RECOMMENDED BY 2010 IATP TO HAVE IAPS DEVELOPED					
Birch Creek	Z91	--	NONE	No	
Circle City	CRC	--	NONE	No	
McCarthy	15Z	Special Only	NONE	No	Proof-of-concept phase
Stevens Village	SVS	--	NONE	No	
Tetlin	3T4	--	NONE	No	WAAS survey conducted
AIRPORTS WITH SPECIAL APPROACH PROCEDURES ONLY					
Prospect Creek	PPC	Special Only	NONE	No	
Rampart	RMP	Special Only	NONE	No	Proof-of-concept phase

According to a Senior Aeronautical Specialist with the Air Traffic Organization, the FAA has no current plans to develop new instrument approach procedures at any of the VFR airports in the IATP region. The DOT&PF Division of Statewide Aviation, at one time, maintained a list of airports at which new or improved approach procedures were desired. This list is no longer maintained or available, but the AASP will undertake a special study of IAPs statewide in an upcoming phase of the plan. This plan recommends that airports in Table 57 without IAPs and with recommendations to receive improved IAPs be considered specifically by the AASP work. The AIP history for Tetlin indicated a WAAS survey was conducted in 2013. It is unclear why this airport did not have an IAP developed after the survey was complete, and it is worth investigating whether the survey determined the airport is unsuitable for an RNAV approach or whether approach development has not yet been requested.

Several of the airports in the above table have IAPs but lack weather reporting sources. Efforts to get weather reporting systems at airports currently without should also continue in earnest. The combination of an on-field certified weather station and a published instrument approach procedure at an airport greatly enhances access to the community the airport serves. The 2017 AASP *Alaska Weather Equipment Needs Summary* indicated that Beaver, Central, and Venetie were high priority sites for AWOS installations. This report additionally named Chalkyitsik, Circle City, Healy River, Manley Hot Springs, and McCarthy as airports that surveyed stakeholders identified as locations where weather reporting was desired. Weather reporting needs for the IATP region are discussed in greater detail in a later section of this report.

4.8.3   Navigational Aids (NAVAIDs)

The nationwide trend for Navigational Aids (NAVAIDs) is the phasing out of ground-based infrastructure and the development and improvement of GPS-enabled navigation. Alaska is seeing the improvements in GPS-enabled navigation, but the ground-based NAVAIDs remain critical in many areas of the state.

The Very High Frequency Omni-directional Range (VOR) network still persists in AK – FAA has excluded Alaska from current efforts to reduce the overall footprint of the VOR network elsewhere and has made it a priority to sustain the VOR infrastructure in Alaska. This is an effort to address the lack of back-up navigation system to address GPS outages, including when the Department of Defense GPS Testing exercises are underway. Fort Yukon is one of the locations at which VOR projects were scheduled to be complete before CY 2022. Several other airports in the IATP region still have VORs – Fairbanks International, Gulkana, Nenana, Northway, and Ralph M Calhoun Meml (Tanana).

Non-directional beacons (NDBs) are radio transmitters used as a navigational aid that transmit non-directional signals whereby the pilot of a properly equipped aircraft can determine bearings and "home" to the station. These NAVAIDs are being phased out. Per a Senior Aeronautical Specialist with the FAA's Air Traffic Organization, NDBs co-located with VORs – as well as a few non co-located ones – are being decommissioned. The FAA's plan was to have NDBs phased out by 2030, but that timeline may be extended. The NDB for Chandalar Lake (WCR) is one with an expected decommissioning date in 2025. Additionally, the FAA will probably continue to pursue cancelling NDB approaches if RNAV approaches are published providing IFR services at those locations.

There is strong demand for en route navigational aids. *FY21 FAASI* stakeholders commented on the need for continued development of terminal transition routes (T-routes) for GPS/WAAS-equipped aircraft and alternative procedures where communication capabilities are unavailable along some parts of a route. Airways that use ground-based Non-Directional Beacon (NDB) NAVAIDs are no longer sustainable in Alaska (per *FAASI*). These airways have provided air taxi and GA operators the routes needed to support over 80 percent of the communities throughout Alaska for decades. The low minimum en route altitudes (MEAs) established on such airways are critical to ensure the safest and most efficient way of transporting people and cargo throughout Alaska. With NDBs being decommissioned, a new and safe airway structure is needed to support Alaska aviation. The T-route structure is expected to be a long-term solution to this challenge. T-routes are not limited by ground-based equipment. These routes provide GPS mapping safely around terrain and can be flown on Instrument Flight Rules (IFR) through clouds to avoid aircraft icing.

As a result of the *FY21 FAASI* recommendations, the FAA began action on publishing 54 T-Routes (30 new and 24 amended routes) (Figure 18). The FAA reported in early 2023 (through the FAASI website https://www.faa.gov/alaska) that it had published 39 of the 54 planned T-routes in Alaska. The remaining 15 T-routes were anticipated to be published by September 2023, and although the FAASI website has not reflected an update, the Federal Register contains records of seven new and twelve amended T-Routes published in 2023 (July through September). The FAA is planning to develop additional T-routes to replace airways that rely on ground-based NAVAIDs through 2025.
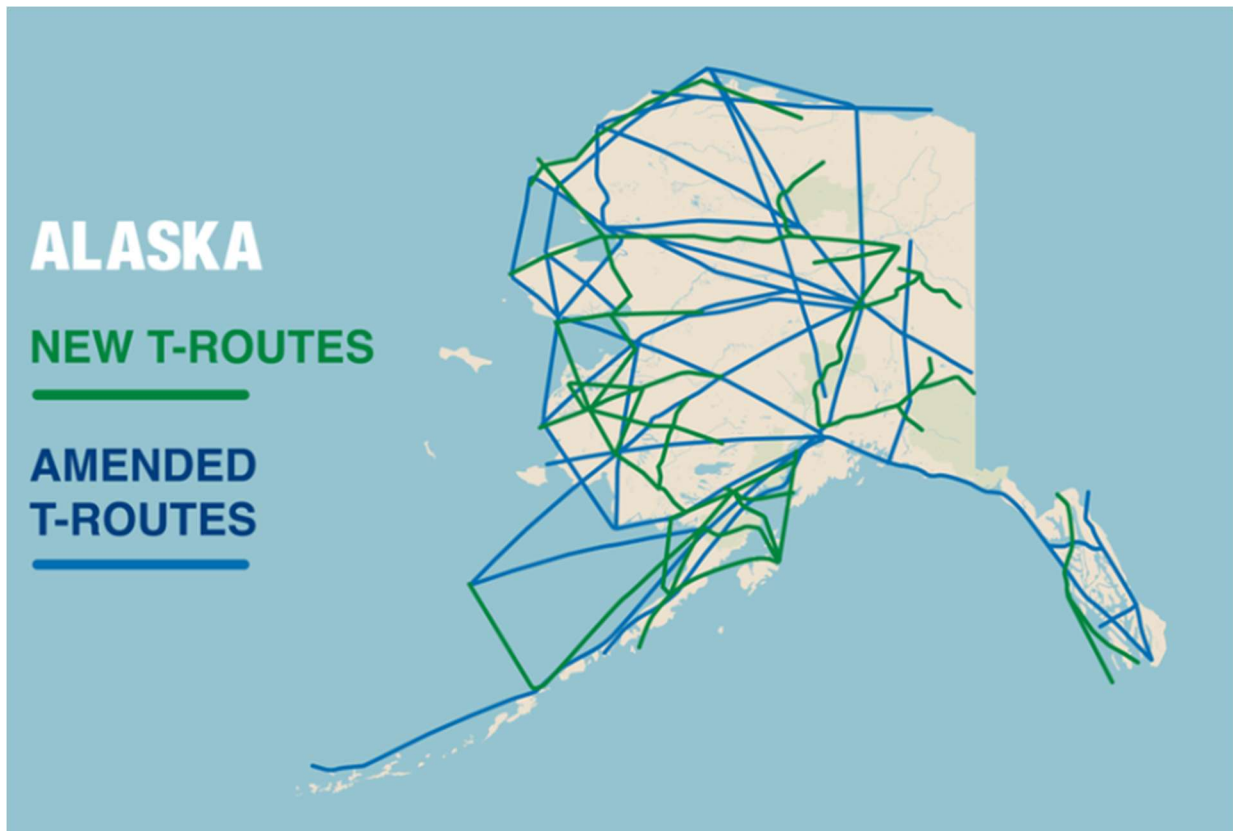
Figure 18. Alaska T-Routes (Source: FAA, https://www.faa.gov/alaska)

4.9 Weather Reporting & Communication

Weather observations are critical to aviation safety and to pilots flying both VFR and IFR. Pilots must check current and forecast weather prior to every flight to make go/no-go decisions and continually monitor updated weather information en route to determine if continued flight to the intended destination is possible. Improved and expanded aviation weather reporting is one of the most significant elements that has improved aviation safety and can continue to improve safety.

A strong and consistent theme through the plans conducted recently by DOT&PF and the FAA is the need for continued improvements in weather reporting and communication. This IATP update echoes and reinforces the DOT&PF and FAA goals regarding weather reporting improvements, as they are just as critical for the IATP region as they are statewide. Expansion of additional weather systems and supporting infrastructure will increase safety, efficiency, and access to numerous locations statewide.

DOT&PF's *Alaska Moves 2050 Long-Range Transportation Plan* identified improved weather reporting as a statewide goal. From the plan:

Key Opportunity: Continue to support installation of automated weather stations and certified instrument approach procedures to provide access to rural airports during poor weather conditions. Combined, these two efforts will increase the safe and efficient movement of goods and people in rural communities.

Action: Continue to promote the Federal Aviation Administration (FAA) program to add/upgrade weather reporting, navigation, and communication equipment at rural airports.

Performance Measure: Increased number of rural airports with weather reporting, navigation, and communication equipment.

Additionally, the FAA *Alaska Safety Initiative Report* stresses the need for reliable weather reporting/forecasts due to the state's terrain and high latitude weather. Most rural airports do not have weather observation systems, and the weather observation systems in existence are often spaced great distances from each other. The sparsity of weather reporting inhibits operations at the airports and inhibits the weather forecasting that supports flight planning and en route flight navigation. In partnership with reliable and adequate coverage of weather reporting, there is a need for the associated communications infrastructure which supports both Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) operations.

4.9.1   AWOS / ASOS

The primary source of aviation surface weather observations is from automated weather stations - Automated Weather Observing System (AWOS) and Automated Surface Observing System (ASOS) stations. AWOS and ASOS stations contain a suite of sensors that measure ceiling, visibility, wind, temperature, pressure, and other meteorological elements. The stations operate 24 hours a day, issuing reports via locally broadcast radio transmission, as well as by phone and computer network, to a national distribution system operated by the FAA. These automated weather stations are certified by the FAA and must meet specific siting requirements and maintenance standards. According to FAA's Surface Weather Observation Stations, last updated February 8, 2023, there are currently 137 certified automated weather stations in Alaska (https://www.faa.gov/air_traffic/weather/asos/?state=AK).

Weather information from ASOS and AWOS units is "approved" or "legal" weather data. Both types of systems provide the type of weather information necessary for pilots to make go/no go and en route flight planning decisions, and pilots must use the information from these stations when conducting instrument approach landings at airports. A few distinctions exist between the AWOS and ASOS stations in the type of data collected and how often the data is reported. An AWOS measures the combined barometric pressure, wind speed and gusts, wind direction, temperature and dew point, visibility, sky condition, runway-surface condition, and other parameters, depending on which instrument sensors are present. Weather reports are generally reported in 20-minute intervals, and the weather data are disseminated via a computer-generated voice message and broadcast over radio in the airport vicinity. The FAA Tech Ops is responsible for status monitoring, NOTAM issuances, maintenance, and restoration of all AWOS systems in Alaska.

An ASOS unit reports at hourly intervals, but ASOS stations also report special observations if weather conditions change rapidly and cross aviation operation thresholds. ASOS stations almost always have a basic level comparable to AWOS-III – which means that they can tell barometric pressure, wind speed and direction, density altitude, visibility, sky condition, ceiling height, and precipitation – and they have the additional capabilities of reporting temperature and dew point, present weather, icing, lightning, sea level pressure, and precipitation accumulation. ASOS stations are mostly operated and controlled by the National Weather Service (NWS), Department of Defense (DoD), and sometimes the FAA. The ASOS program was a joint effort between the FAA, the NWS, and the DoD to deploy a network of high-grade weather monitoring stations across the U.S. ASOS units were installed across Alaska between 1994 and 2004. The ASOS development program no longer exists, and no new ASOS units are currently planned. ASOS sensors were 100 percent paid for by the federal agencies that installed them, and they are maintained by those same agencies today. The National Weather Service (NWS) is responsible for all ASOS systems in Alaska, although FAA Tech Ops supports the modem and telecommunications lines that connect these units to the FAA weather database via the internet.

There are both AWOS and ASOS weather reporting units in the IATP region. Several of the IATP region's AWOS/ASOS units are reported out of service (as of December 2023). The AWOS at Fort Yukon has been out of service since flooding earlier in 2023. Although the IATP region's weather reporting systems avoided the massive damage caused by Typhoon Merbok (September 2022) that rendered dozens of AWOS/ASOS out of service in the western portion of the state, the sheer number of sites statewide that are in need of repair has affected FAA's ability to repair the systems statewide and has impacted plans to fully certify and install new systems.

Alaska has significantly less weather reporting coverage than the contiguous United States. The FAA Surface Weather Observation Stations database lists 137 weather reporting stations (AWOS or ASOS) in Alaska, compared to approximately 2,300 in the contiguous 48 states. To achieve the density of weather reporting stations in the continental U.S., Alaska would need approximately 350 *additional* weather stations throughout the state. Figure 19 shows the locations of automated weather reporting stations statewide, and it can be seen in the figure that the IATP region has less weather reporting coverage than much of the state. The density of AWOS/ASOS stations of the IATP region is half that as the rest of Alaska (averaged).
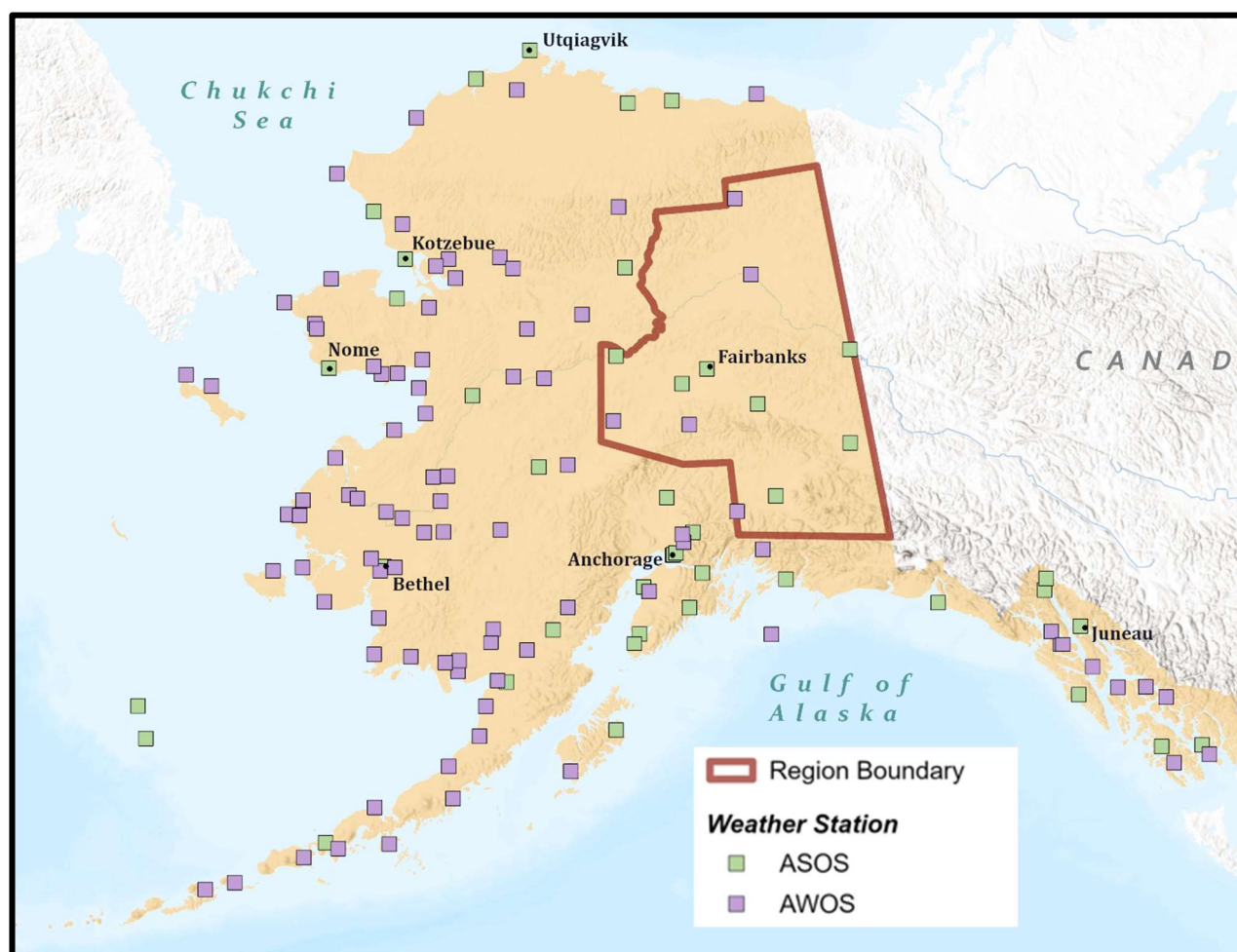

Figure 19. Alaska Locations of Automated Weather Reporting Stations

One of the primary focuses of the *FAASI FY21* report is "the requirement for additional and enhanced weather reporting capability via ground-based systems such as AWOS and VWOS." The report recommends the FAA continue focusing on new-installation AWOS units (at airport sponsor request) and optimizing the transfer process and timeline. The *FAASI FY21* Final Report details how valuable and necessary the AWOS stations are to flight planning. More AWOS coverage is desired, and stakeholders would like to see a more reliably operational system of weather reporting – the maintenance and timely repair of broken systems is critical to flight planning and safety.

According to the Statewide Aviation System Planner, the total cost to design, purchase, and install a basic AWOS unit in remote Alaska is estimated at $2 million. Eight systems statewide were purchased and installed in 2022, with complete certification and ownership transferal to the FAA anticipated by Sep/Oct 2022 (FAA's FAASI website now specifies 2023). The FAA no longer procures and installs systems, but language in the 2018 FAA Reauthorization Act provided the ability for airport sponsors to purchase and install AWOS units and for the FAA to assume ownership and maintenance of the systems once installed. As of the writing of this report (December 2023), the certification and ownership transfer has been formally

completed for at least four of the eight AWOS systems (those in DOT&PF's Northern Region). DOT&PF will consider purchasing and installing additional units once the initial eight have successfully made it through the full process. Additionally, DOT&PF is awaiting final language in the upcoming FAA reauthorization bill that continues support for the program allowing the State to turn over AWOS units to the FAA after purchase and installation. FAA's reauthorization was originally anticipated in October 2023, but at the time this report was developed, the FAA's authorities had been extended through December 31, 2023 as part of a continuing resolution to fund the federal government.

This plan recommends continuing to support the FAA AWOS/ASOS program by identifying airports in need of new systems, supporting the work of repairing systems, and continuing to make use of the program which allows DOT&PF to install systems then turn them over to the FAA for maintenance. The 2017 Alaska Weather Equipment Needs Summary identified and prioritized airports in need of weather reporting. The highest priority for new weather station development was assigned to the airports that had FAA approved instrument approaches but no certified on-site weather station. Airports in the IATP region identified as the highest priority were Beaver, Central, Coldfoot, Tok Junction, and Venetie. Since that time, Coldfoot and Tok Junction have had AWOS-3PT units installed. The other three sites remain in need of weather stations.

Additionally, pilots and air carriers were provided surveys in 2016 as part of the weather needs study, and from the responses, several other airports were named as places at which weather reporting would be especially valuable. In the IATP region, airports named in the open-ended request to "List the top 5 airports in order of priority (airports that were not included in the list of airports with IAPs but no weather reporting) where you would like to see a weather station installed" were McCarthy, Healy River, Cantwell, Manley Hot Springs, Circle City, and Chalkyitsik. Table 58 identifies locations of 14 existing aviation weather reporting systems in the IATP region and nine locations at which weather reporting stations are desired. Figure 20 shows the weather station coverage with existing locations (on the left) compared with the possible weather station coverage if all additional nine locations received AWOS units (on the right). Installing the additional units would fill in several of the "blank spaces" on the map, improving flight safety within the region.

Table 58. Aviation Weather Reporting Systems in IATP Region

| EXISTING LOCATIONS	REQUESTED LOCATIONS
Allen AAF – ASOS	Beaver
Arctic Village – AWOS	Cantwell
Coldfoot - AWOS	Central
Eagle - ASOS	Chalkyitsik
Fairbanks – ASOS	Circle City
Fort Yukon - AWOS	Healy River
Gulkana - ASOS	Manley Hot Springs
McKinley Ntl Park – AWOS	McCarthy
Minchumina - AWOS	Venetie
Nenana Muni – ASOS	
Northway – ASOS	
Ralph M Calhoun Meml - ASOS	
Tok Junction - AWOS	
Eureka (near privately-owned, private use airport Skelton airport (3AK1)) -AWOS	
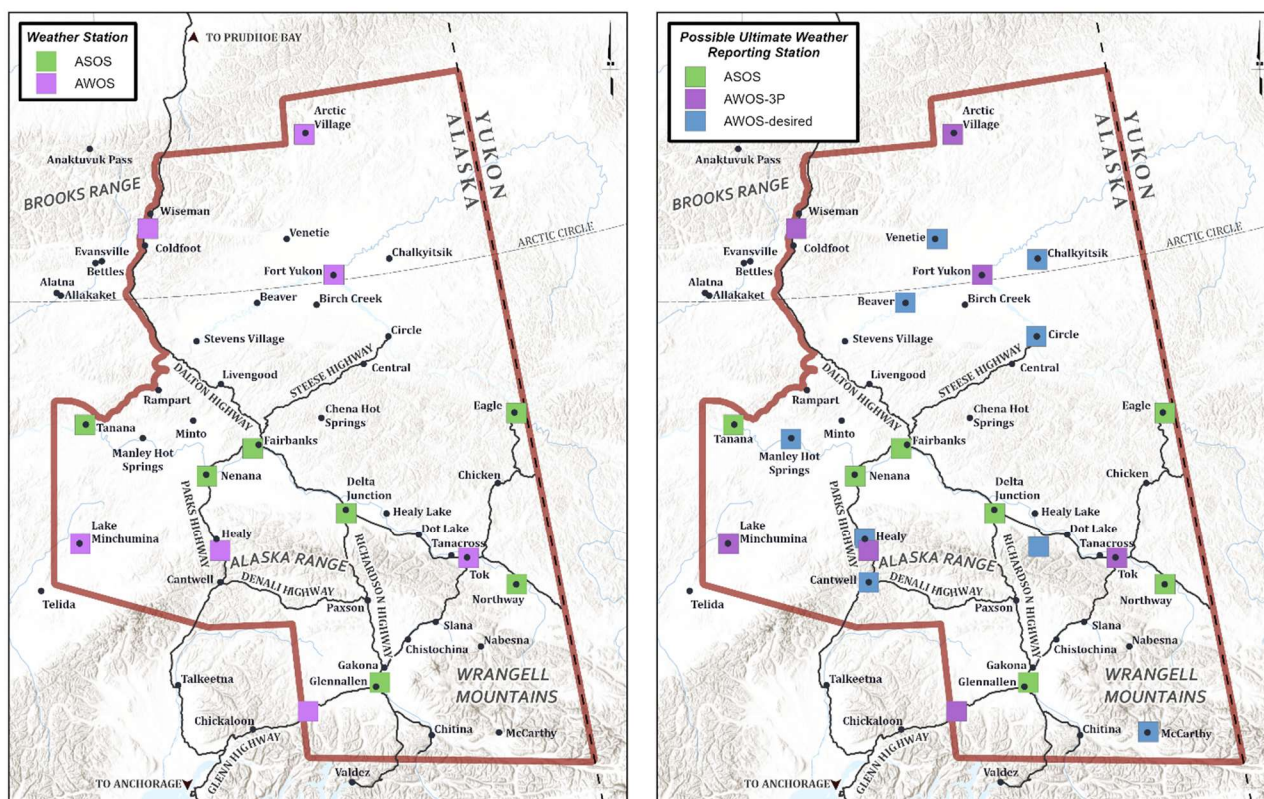
Figure 20. Existing and Proposed Weather Station Coverage in IATP Region

4.9.2   Weather Cameras

The FAA owns and operates a network of internet linked cameras across Alaska. At each location, between two and four cameras record views in different directions once every ten minutes. These images are then uploaded and made available over the internet. Many are at locations near existing AWOS or ASOS stations, allowing a fuller characterization of the weather at a given location. The weather camera program's network provides benefits in aviation access, safety, and efficiency. They exist to improve pilot situational awareness and flight decision-making, resulting in the reduction of weather-related aviation accidents and flight interruptions.

Weather cameras alone do not allow operators to conduct IFR flights. They provide "advisory' as opposed to "approved" weather information. While they provide very valuable flight planning information at a low cost, they do not act as a reliable enough mechanism to gauge ceilings and visibility, which would be necessary to be used as a legal/approved weather reporting source. Weather cameras also only provide weather information during daylight hours. Regardless of their limitations, a stakeholder quoted in *FAASI FY21* described the Weather Camera Program as "one of the best things FAA has done." There is considerable support and demand for additional weather camera installations and increasing information provided plus access to information by airmen while in flight.

When the 2010 IATP was published, only eight facilities in the IATP area had weather cameras. The 5010 records reflect that 23 facilities currently have weather cameras (Figure 21). Another seven facilities have weather cameras nearby, according to the FAA weather camera website, and these camera locations deserve to be evaluated for whether they should be remarked as weather information sources.

The 2010 IATP identified 14 locations scheduled to receive weather cameras and identified an additional seven location at which weather cameras were recommended. Of the 14 locations listed in the 2010 IATP that were scheduled to receive weather cameras (Nenana, Delta Junction Airport, Mentasta, Murphy Dome, Tok, Beaver, Gulkana, Livengood, Manley Hot Springs, Tazlina, Central, Chalkyitsik, Chistochina Airport, and Prospect Creek), only two of those locations remain without. Manley Hot Springs and Prospect Creek still need weather cameras. The weather camera proposed for Murphy Dome appears to have ultimately been installed at Esther Dome, nearer to Fairbanks. Of the seven additionally recommended locations (Birch Creek, Circle City, McCarthy, Minto, Stevens Village, Tetlin, and Venetie), only Minto *has* had a weather camera installed since the 2010 plan.
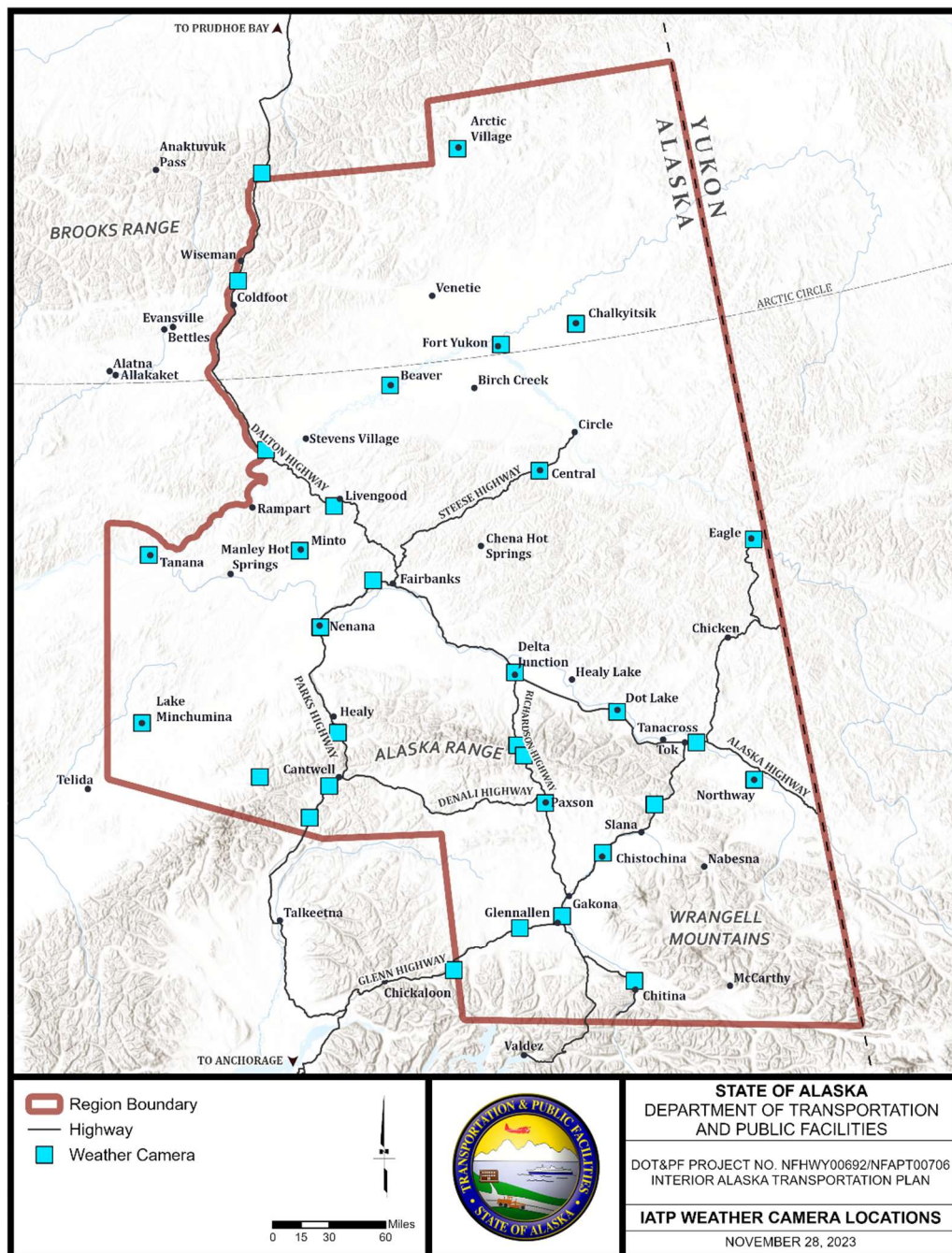

Figure 21. IATP Weather Camera Locations

At the time the *FAASI FY21* report was published, the Weather Camera Program was conducting a business case analysis, expected to be completed in early FY23, to fund up to 160 new camera facilities at locations throughout Alaska. Since that time, funding expectations have decreased dramatically, and the current (June 2023) plan is for the installation of up to 160 new camera facilities at locations across the Continental U.S. and Alaska. A list of the Alaska sites included in the weather camera expansion was provided on request for this study by FAA's Weather Camera Program Implementation Lead. Of the twenty sites on the expansion list, two fall within the IATP area – both located near Eielson Air Force Base. Implementation of the new sites is anticipated to roll out over seven years, beginning in September 2023.

This plan advocates for continuing to identify the airports and air route sites in need of weather cameras and working on a continuing basis with the FAA Weather Camera Program to get them installed. The list of Alaska sites included in the expansion does not include any of the airports already identified as needing cameras in the IATP region. Further coordination is needed to secure weather camera installation at Manley Hot Springs, Prospect Creek, Birch Creek, Circle City, McCarthy, Stevens Village, Tetlin, and Venetie.

4.9.3   Visual Weather Observation System (VWOS)

The FAA Weather Camera Program has conducted analysis of its new Visual Weather Observation System (VWOS) – an advanced low-cost, advisory weather station that combines 360-degree camera images with quality weather sensors to provide pilots and users with both visual and textual weather observations. The system provides winds, temperatures, ceiling, visibility, pressure, cloud, and other important weather information necessary to support aviation operations. The system has undergone over a year of testing and analysis at four Alaska airports, one of which (Healy River) is in the IATP region. According to the FAA Weather Camera Program manager, the VWOS systems have proven to be viable weather sources, providing accurate weather information. The next steps for this system involve the FAA seeking funding for the investment analysis – the phase in which the VWOS system undergoes the FAA process to become an approved weather source and in which FAA pursues funding for development and installation of additional systems. The earliest FAA expects to receive such funding is FY25. VWOS units may be a viable and less expensive alternative to AWOS systems in the future.

4.9.4   Remote Automated Weather Stations (RAWS)

There is a considerable network of Remote Automatic Weather Stations (RAWS) in Alaska (Figure 22). RAWS are self-contained, battery and solar powered weather stations that provide timely local weather data used primarily in fire management. The type of data collected includes relative humidity, wind speed, wind direction, air temperature, and fuel moisture. RAWS stations lack measurements for ceiling and visibility. These stations monitor the weather and provide weather data that assists land management agencies with a variety of functions such as monitoring air quality, rating fire danger, and providing information for research applications. RAWS units collect, store, and forward data to a computer system at the National Interagency Fire Center (NIFC) in Boise, ID. These stations are typically affiliated with the USFS or the BLM, monitored by the NIFC, and data is shared with several other weather agencies. These weather stations are not FAA certified and are not connected to the FAA weather network. They are considered only an advisory weather source. Some weather information is better than none, but RAWS do not provide the critical ceiling and visibility data that pilots need for flight operations. However, allowing the information generated by RAWS to be easily available to pilots would enhance safety, particularly considering the density of these units in the IATP region, which is underserved by approved/legal weather reporting systems.
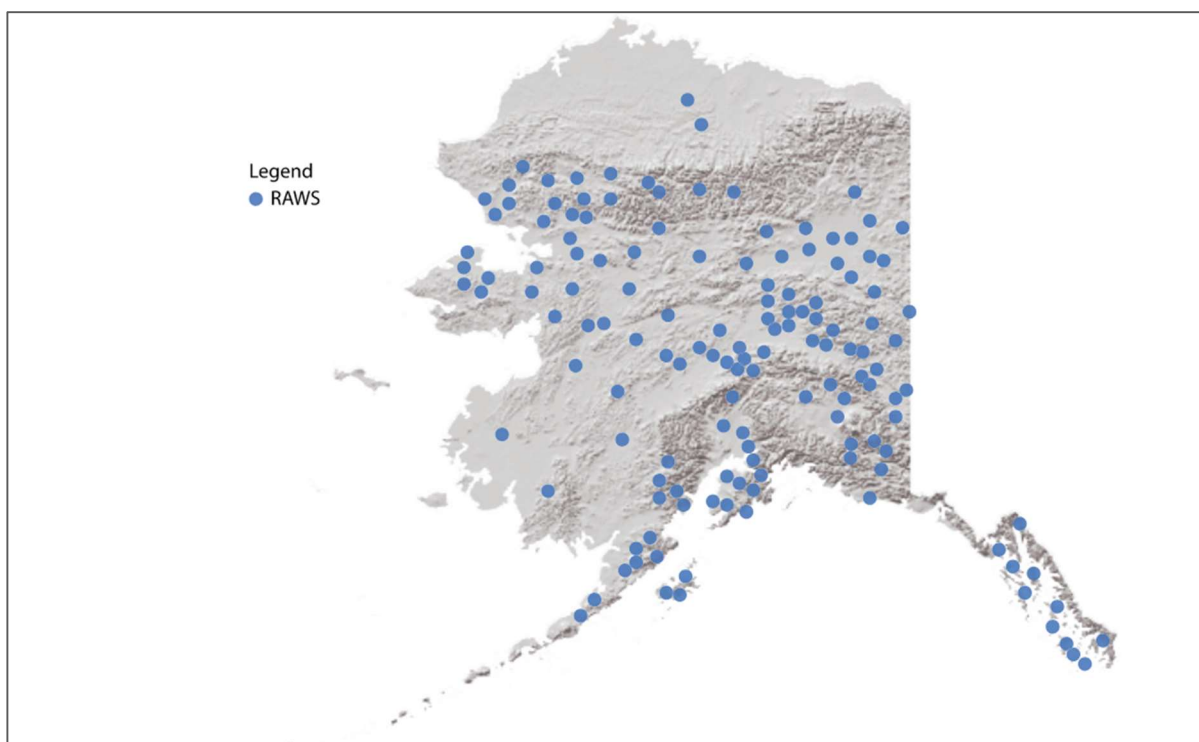
Figure 22. Remote Automatic Weather Stations. Source: 2016 AASP Weather Fact Sheet

4.9.5   Communications Infrastructure

Reliable, operative surface communications are an essential component of the weather reporting function. Weather reporting stations cannot be used for preflight planning or forecasting if the surface communication link is not operating. Automated weather systems must be connected to a reliable power source, and two lines of reliable data connectivity (phone or internet) are also required for connection of the units to the FAA weather network.

This is one primary reason why broadband connectivity is an important metric for the IATP region's airports. Broadband connectivity would help ensure that surface communications infrastructure is robust and able to support real-time weather reporting and pilot/flight service communications and data transmission. This reinforces the earlier recommendation that DOT&PF be engaged in the process for implementing high-speed internet access and identify ways to connect airports currently not connected or unserved by broadband service.

4.9.6   Flight Service Two-Way Texting Service

FAA's Flight Service Two-Way Texting Service is a service offered to pilots to improve communications between pilots and FSS. The goal of the service is to make it possible for pilots to fly to remote locations and close out flight plans, activate flight plans prior to remote departure, amend flight plans, and activate emergency/search-and-rescue response. Pilots enroll for this service through Alaska FSS.

Many of the communication options are initiated by the pilot – the pilot can send flight plan information and intentionally activate emergency response, if needed. The two-way texting system offers *additional* emergency response capability by establishing a regular communications check-in with the pilot, and if the check-in goes unanswered, emergency response can be launched. The concept is that text messages are sent to a pilot's cell phone or satellite-based device at a pre-set regularity (every five or ten minutes), and if contact is lost (i.e., the pilot does not respond), search and rescue is launched, and the search effort knows precisely where to look using the device's location.

The DOT&PF has no authority or influence over this two-way texting service, but it can promote the service through the AASP website, through newsletters, and through involvement with aviation stakeholders, and through communications shared at airports across the state.

4.9.7 Enhanced Special Reporting Service (eSRS)

Another communication service offered by FSS is the enhanced Special Reporting Service (eSRS), which is a satellite assisted flight plan tracking service. Similar to two-way texting, the service provides registered pilots with a means to communicate with Flight Service and enable them to activate, close, or amend their flight plans. Aircraft equipped with certain models of satellite/GPS tracking devices can transmit tracking or alert information to FSS. The concept is to be able to launch Search and Rescue at the earliest possible opportunity when it is believed that an aircraft is in distress. Quoted from the eSRS brochure, "Rapid responses save lives!"

The difference between the eSRS and two-way texting services are primarily in the types of devices compatible with each service. As with the two-way texting service, the DOT&PF has no authority in the program, but it can share program information with stakeholders and promote pilot enrollment.

4.10 Bypass Mail Program

The United States Postal Service (USPS) is required by law to perform its mail delivery mission of "providing universal service at universal rates" to all persons in the United States. In order to meet its mission to deliver mail to all persons in Alaska, the USPS must use air transportation to deliver mail to many of the communities statewide. Bypass mail is a type of mail that falls within the non-priority mail category. Customers pay a non-priority shipping rate, and the items - which would typically (elsewhere in the U.S.) be transported and delivered by ground service – are delivered by air because that is the only way to reach many communities. The non-priority mail rate is significantly lower than the air delivery rate, and it is much less expensive than air freight rates.

Several airports in the IATP region receive mail service by air under the USPS Bypass Mail program. This program is critical to providing fresh food and basic supplies to communities that could not otherwise afford to receive these goods if they were transported at the much higher air freight rates.

Fairbanks, Fort Yukon, and Glenallen are listed in the USPS Handbook PO-508 (March 2012) as "hub points." Table 59 presents IATP communities designated as "bush points" served out of each hub. Not all of these locations receive mail by air delivery, but the communities off the road system can only get mail – of all types – delivered by aircraft.

Table 59. IATP Mail Hub & Bush Points

Fairbanks	Fort Yukon (off)	Glennallen
Beaver (off)	Arctic Village (off)	Chitina (on)
Central (on)	Birch Creek (off)	Gulkana (on)
Chicken (on)	Chalkyitsik (off)	May Creek (off)
Chisana (on)	Venetie (off)	McCarthy (on**)
Circle (on)		
Eagle (on)		
Healy Lake (off)		
Lake Minchumina (off)		
Manley Hot Springs (on)		
Minto (on)		
Nenana (on)		
Rampart (off)		
Stevens Village (off)		
Tanana (off)		
Tok (on)		

(off) indicates that the community lies off the road system | (on) indicates that the community lies on the road system.

One of the actions specified by the 2022 DOT&PF *Statewide LRTP* is to "monitor and take all available actions for the continuation of the U.S. Postal Service Bypass Mail program." Victoria O-Hara, the USPS Network Analyst, reported to the Aviation Advisory Board (AAB) in May 2021 that the USPS 10-year plan included no mention of Alaska's bypass mail program, and no changes to the program are anticipated in the near term. This plan recommends the continued monitoring of the Bypass Mail program and continued communications with USPS officials to ensure the Alaska's rural communities are adequately considered by USPS actions.

4.11 Wildland Firefighting Support

Wildland firefighting relies heavily on aircraft support in Alaska. Responsibilities for wildland firefighting are coordinated among the Bureau of Land Management Alaska Fire Service (BLM AFS), State of Alaska Department of Natural Resources Division of Forestry and Fire Protection (DOF), and the U.S. Forest Service (USFS). BLM AFS, and DOF are the agencies primarily operating in the IATP region. Each of these agencies depends on airports and landing strips to access fire locations and provide fire protection and suppressions services to communities statewide. The interior region of the state is especially prone to wildfires, as can be seen by the orange shading in Figure 23. This area also has limited road connections to areas off the major highways, making aircraft an even more significant component of the wildfire management and response efforts.
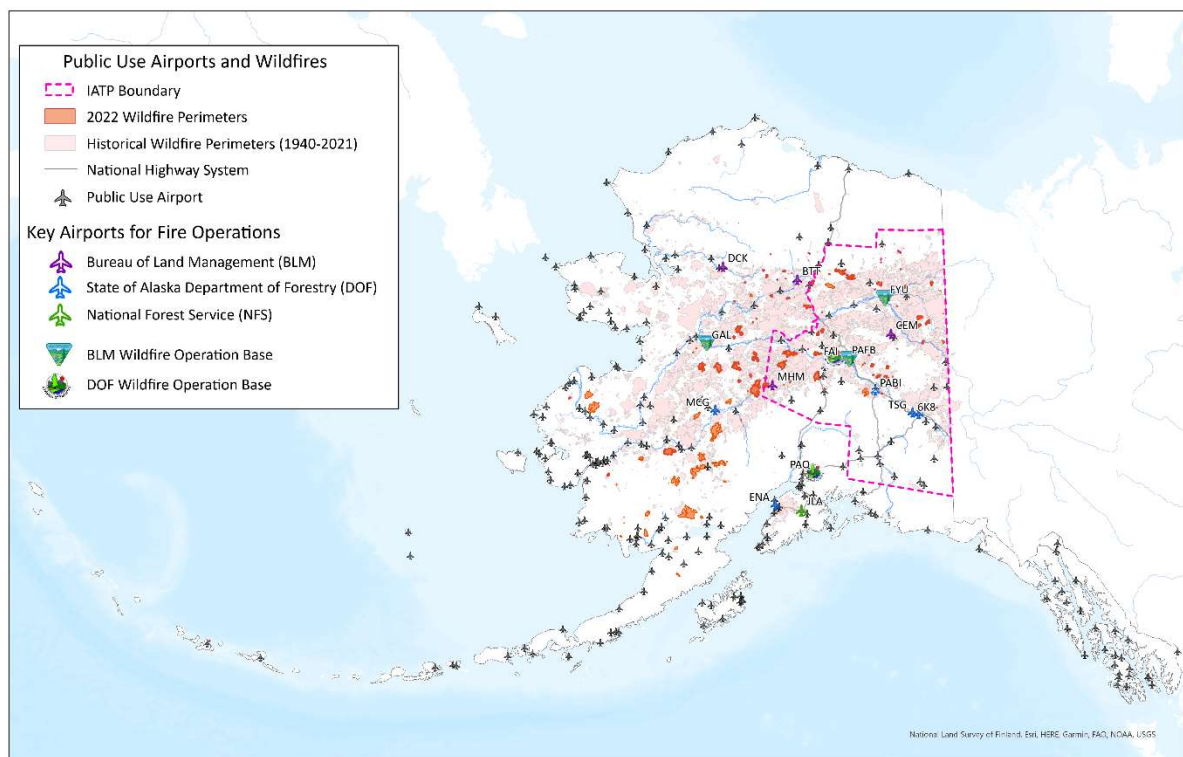
Figure 23. State of Alaska Public Use Airports and Wildfires[1]

The BLM Alaska State Aviation Office is currently located on Fort Wainwright, but the operations may be moved to Fairbanks International to facilitate efficient wildland fire management efforts in Interior Alaska. This office is responsible for providing safe, cost-effective aviation support to BLM Alaska and its interagency partners, including fire response. BLM AFS maintains a seasonal fire base at the Fort Yukon airport (FYU). Central and Lake Minchumina are other airports in the IATP region that BLM AFS uses often for fire response. BLM owns four aircraft nationwide, and four of those aircraft are based in Alaska, including a PC-12 Pilatus and a Quest Kodiak that serve wildfire response, habitat survey, and personnel transport needs.

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[1] Alaska Department of Transportation & Public Facilities, Alaska Aviation System Plan Newsletter, Fall 2022.

The BLM additionally contracts aircraft annually for Alaska's wildland season, including four water-scooping Fire Boss Single Engine Air Tractor aircraft.

DOF uses both fixed and rotary wing aircraft, as well as ground-based fire apparatus in its firefighting operations. DOF owns four aircraft for logistics and aerial supervision and coordination of the contracted tankers. These aircraft are a de Haviland Beaver, two Aero Commanders, and a Cessna Caravan. The agency also has two exclusive use contracts for air tankers, a Convair 580 turboprop air tanker based out of Fairbanks and a Bombardier Q-400 twin turboprop air tanker based in Palmer. The DOF also contracts additional aircraft, as needed. DOF has a permanent fire base headquartered at the Palmer airport, and it operates a seasonal aviation tanker fire base at Fairbanks International (FAI). The FAI seasonal base includes space for tanker staging and refilling and a small lawn area to temporarily house personnel during the season. DOF has intentions of upgrading the seasonal FAI base to a more permanent site. Tanacross airport is also used by DOF during fire operations.

This plan recommends that DOT&PF keep all its facilities used for wildland firefighting support serviceable – that it maintains safe airports out of which to operate and at which to land. The DOT&PF should continue to pursue consideration of Tok as a regional facility so that DNR can relocate its Tanacross operations to that airport and continue to conduct aircraft activities effectively in the region. DNR DOF commented that, if Tanacross becomes unusable and no other facility nearby were available for relocation, pulling back operations to Fairbanks would greatly reduce firefighting response times and thus increase costs and damage from wildland fires in the region.

4.12 UAS

The Interior region is a hotbed for UAS use, testing, and development. Fairbanks International is considered the center of UAS activity, and rapid growth in UAS operations and applications is anticipated throughout the region. The DOT&PF Division of Statewide Aviation UAS/Drone Program Coordinator reports that Nenana and Clear are UAS integrated with plans to expand UAS capabilities.

In June of 2023, Merlin Labs, in partnership with ACUASI and Everts Air Cargo, completed 25 test flights of a fully autonomous Cessna 208 Caravan from Fairbanks International to Fort Yukon, Galena, Huslia, Tanana, and Prudhoe Bay.

The AASP Performance Measures for Hubs, Community, and Local NPIAS High-Activity airports include a metric for UAS Integration. Presently, only Fairbanks International reports meeting this criterion, although Nenana has recently achieved UAS integration. Clear is a Local NPIAS Low-Activity facility, and UAS integration is not a tracked metric for facilities in this classification.

To achieve UAS integration at an airport, there are two primary requirements to make it possible:
1. Communications
2. Real-time weather reporting

These two requirements are already high priorities in this region, and this plan includes recommendations for both – in the DOT&PF being engaged and proactive in broadband deployment throughout the state and in aggressively pursuing the further development of weather reporting stations throughout the region. If broadband and real-time weather reporting are available at an airport, that airport is positioned well to take advantage of UAS and Advanced Air Mobility.

4.13 Funding Landscape

The airports in the IATP region have not seen significant investment in the last 13 years. The state has justifiably prioritized projects statewide at airports that provide the only reliable year-round access to communities. However, as other regional plans suggest, much of the direly needed work at these other airports has been accomplished. This plan recommends that long-deferred capital needs in the IATP region be pushed forward for consideration in future AIP funding and other grant opportunities.

The 2010 IATP history of AIP work included $124.5 million in project funding, spent at 34 facilities (excluding FAI) in the region between FY 1986 and FY 2009. Since that report, AIP work has totaled $62.5 million in projects at 24 facilities (excluding FAI) between FY 2011 and FY 2022. There is only $23 million in project work at twelve facilities (excluding FAI) in the IATP region included in DOT&PF's 2020-2027 Airport Capital Improvement Program (ACIP). The ACIP includes projects planned by the DOT&PF, but these projects have not necessarily received AIP grant funding yet. For the twelve IATP facilities included in the 2020-2027 ACIP, only two major improvement projects are planned (at Chalkyitsik, which went to grant in September 2023, and at Eagle); four airports are planned to receive new equipment only; four airports are planned for resurfacing work only; one airport is planned for resurfacing work and new equipment; and one airport is planned to receive a new electric bank and resurfacing work. No facilities from the IATP region were scored in the most recent Aviation Project Evaluation Board (APEB) meeting. The needs of this region – particularly the runway improvements, lighting projects, and weather reporting stations – need to be brought forward for project evaluation, programming, and funding.

The Airport Improvement Program (AIP) remains the primary source of capital funding to accomplish airport development. AIP funding includes both apportioned (entitlement) grants and discretionary (competitive) grants. Apportioned funds must be used on an airport's highest-priority projects. Discretionary funding is determined after entitlement funding has been determined, and its purpose is to fund needs that exceed an airport's available apportioned funds. AIP funding for the state of Alaska averaged approximately $220 million annually over the 2010-2019 time period (the time period ending just prior to the COVID-19 pandemic and the many supplemental appropriations made since 2020). Funding has been significantly higher in the most recent years - $274 million in 2020, $338 million in 2021, and $383 million in 2022. These higher levels of funding have unfortunately not translated into a significant number of additional projects. A major portion of the additional funding has simply served to cover the inflated costs of construction.

The limitations and constraints on AIP funding and the FAA reauthorization language can hinder Alaskan airport priorities – federal priorities focus on safety and FAA objectives and do not account for the other needs/priorities of Alaska such as economic development support. The DOT&PF Division of Statewide Aviation has been dedicated to working with decision-makers and the FAA to advocate for Alaska's priorities and needs and to get appropriate funding and authorization language included in future appropriations.

There have been supplemental appropriations made to AIP funds annually since 2018, each year with a 3-year window in which to be awarded the funding and sometimes with specific priorities identified by the Secretary of Transportation or Congress. The FAA issues a Notice of Funding Opportunity for airports in the NPIAS to apply for these discretionary grants. Alaska has pursued this funding, and over the years has received approximately $33 million each year for projects. Alaska airports that have been awarded these supplemental grants include Ted Stevens Anchorage International, Bethel, Bettles, Juneau International, Kaltag, Kasigluk, Kongiganak, Lake Hood, Merrill Field, Napaskiak, Newtok, Nome, Palmer, and Soldotna. The eight AWOS units currently awaiting final certification and turnover to the FAA were funded in the first round of these supplemental appropriations. Northern Region is pursuing a grant for Manley Hot Springs airport from the latest appropriations and funding opportunity.

The State match program for local airport owners/sponsors has ceased to be in practice over recent years. This program previously helped local sponsors meet their match funding for AIP grants by providing half of the required sponsor match. The State is considering reinstating this program, but no official determination has yet been made.

Funding to accomplish broadband build-out comes from the BIL, separate from the AIP, and will not likely be managed by the DOT&PF. The funds will be overseen by the U.S. Department of Commerce and are slated to be divvied up over the next two years through the Broadband Equity, Access, and Deployment program.

A relatively new source of prospective funding may be the funding that is supporting UAS research, development, and build-out. This funding is separate from the AIP and is sourced from a variety of public and private entities, including federal USDOT and FAA grants, private investments, partnerships, and funding from State of Alaska agencies. The funding has potential to address some aviation needs that support both UAS and classic aircraft, outside of the AIP. Coordination with the DOT&PF Division of Statewide Aviation UAS/Drone Program may identify possibilities to fund various airport needs in the IATP region.

A side note regarding funding is that the FAA faces funding shortfalls/limitations, just like DOT&PF, and this has impacts to their goals of weather reporting, weather cameras, instrument approach procedure developments, and all other work they would do to improve aviation. The DOT&PF (and other airport sponsors) would be well-served to be looking for opportunities to creatively fund needs outside of conventional funding streams. – opportunities such as UAS funding, in particular.

4.14 Other

4.14.1 Resiliency

Resiliency was a key area of interest identified by the Interior region during the *Alaska Moves 2050* public engagement efforts. One of the "Key Opportunities" for the rural aviation system is listed in the plan as, *"Continue to improve the resiliency of rural airports with innovations in technology and seasonal solutions, like ice roads."* The AASP is presently conducting the *Western Alaska Airport Resiliency Study*, which is intended to provide valuable insights on factors and decisions contributing to the long-term stability and resiliency of airports. Work began on this study in December 2022 and is expected to be complete in June 2024. Although none of the 29 airports being considered in the study are within the IATP region, information developed by this study will likely be of interest and application to airport development and maintenance in the IATP region.

4.14.2 U.S. Customs and Border Protection

There are three ports of entry in the IATP region for surface traffic – Alcan just inside the Alaskan side of the border, along the Alcan Highway, Eagle, and Poker Creek (seasonal). There is only one port of entry for aircraft – Northway. Northway is approximately 50 miles northwest of the Alcan Port of Entry, and pilots must meet U.S. Customs and Border Protection (CBP) agents there at specified times. The most recently published hours of operation for CBP at the Northway Airport are 9:00 AM and 5:00 PM, seven days a week, which means there are only two times each day that aircraft have as options to clear customs when crossing into Alaska from Canada (referenced from CPB, last updated January 26, 2023). Floatplanes clear customs at Yarger Lake, an unregistered (but charted) waterway eight miles east of Northway on the Alaska Highway. A U.S. Customs Agent must travel to meet and clear the aircraft at Yarger Lake. Although Eagle is a surface port of entry, the CPB website states that aircraft arriving from foreign must be inspected by CPB *prior* to landing at Eagle and directs contact to the Alcan port of entry.

The BIL included funding for a new port of entry on the Alaska Highway – a replacement for the current Alcan facility. Proposed elements include infrastructure to support larger vehicle inspections and additional staff. The new station will be constructed in close proximity to the existing station. Although there has been speculation that a new station could be located closer to an existing population center (Tok, most notably), ports of entry must be located as near borders as possible. There are no anticipated changes for aircraft clearance once the new facility is built. Aircraft will still be cleared at Northway Airport or Yarger Lake. The project is currently in the environmental study phase.

5.0 KEY ISSUES & RECOMMENDATIONS

Throughout this memorandum, key issues and recommendations for projects, plans, studies, administrative actions, and on-going policy engagement has been noted. This section provides a summary reference for all recommendations. Recommendations are not exclusive to the DOT&PF – they are intended to support an improved aviation system in the IATP region overall, and some recommendations would fall under the responsibility of agencies or groups other than the DOT&PF.

5.1   Administrative Recommendations

AIRPORT/LOCATION	RECOMMENDATION
Healy Lake Airport	Register airport with FAA and consider adding to NPIAS.
Eureka Creek (2Z2)	Deactivate.
Eva Creek (2Z3)	Work with facility owner (DNR) to have critical improvements made that will restore this facility to a safely usable condition.
Tetlin (3T4)	Investigate why Tetlin (3T4) did not have an IAP developed after the 2013 WAAS survey was completed, to determine whether the airport was deemed to be unsuitable for an RNAV approach or the approach procedure development has not yet been requested.

5.2   Programmatic & Funding Recommendations

PROGRAM	RECOMMENDATION	AIRPORTS/LOCATION
DOT&PF Statewide 10-year Lighting Priority Assessment	Continue to program and pursue funding.	Beaver (WBQ) Birch Creek (Z91) Chalkyitsik (CIK) *[FY24/FY25]* Eagle (EAA) Gulkana (GKN) Manley Hot Springs (MLY) Minchumina (MHM) Minto Al Wright (51Z) Nenana Muni (ENN) Northway (ORT) Ralph M Calhoun Meml (TAL) Rampart (RMP) Stevens Village (SVS) Tetlin (3T4)
Backcountry Airstrip Work Group	In partnership with aviation interest groups, encourage the development and further work of a Backcountry Airstrip Work Group to explore volunteer/stakeholder maintenance of critical landing strips.	Areawide
Wildland Firefighting	Ensure there are plans in place to maintain wildland firefighting operations in the region at a safe and serviceable level.	Areawide
Flight Service Two-Way Texting Service & eSRS	Share information with stakeholders about Flight Service Two-Way Texting Service and eSRS.	Areawide

5.3   Policy & Planning Engagement

PLAN/POLICY TOPIC	RECOMMENDATION	LOCATION/AIRPORT
Raise AIP Entitlement Funding for Nonprimary NPIAS Airports	Engage with policy makers and the FAA to elevate the entitlement funding for nonprimary NPIAS airports.	Areawide
Aviation Master Plans & Airport Layout Plans	Consider space for and facilitation of fuel being made available at airports.	Areawide
UAS, Broadband	Remain active in broadband roll-out, especially in support of UAS integration.	Areawide
Airspace Changes	Continue participation in ACMAC and engagement in airspace issues, proposed changes.	Areawide
IAPs	Pursue development of IAPs in coordination with installing weather source systems at these airports.	Birch Creek (Z91) Circle City (CRC) McCarthy (15Z) Stevens Village (SVS)
AASP	Include IAP needs and requests from this study in the upcoming AASP special study (IAPs Statewide).	Areawide
Weather Reporting	Monitor status of AWOS, VWOS, and other weather reporting systems; pursue opportunities to install these systems.	Areawide

5.4   Recommended Plans & Studies

PLAN/STUDY TOPIC	RECOMMENDATION	LOCATION/AIRPORT
Regionally Significant Airports	Further study (Master Plans or expanded Airport Layout Plan updates) of specific airports as regionally significant facilities.	Tok Junction (6K8) Gulkana (GKN)
Denali Area Airport Planning Study	Continue and complete on-going planning study.	Denali Area
Lighting System Evaluation & Replacement Plan	Evaluate aging lighting systems that are not currently included in DOT&PF's 10-year priority list or other sponsor's needs lists and evaluate need for replacement.	Arctic Village (ARC) Central (CEM) Circle City (CRC) Clear (Z84) Venetie (VEE)
Relocation of Wildland Firefighting Seasonal Tanker Base	Evaluation needed for Division of Forestry to relocate its seasonal tanker base for Wildland Firefighting.	Tok (6K8)

5.5 Recommended Capital Projects

PROJECT	LOCATION/AIRPORT
Runway Extensions	Central (CEM) Chistochina (CZO) Circle City (CRC) Delta Junction (D66) Healy River (HRR) Tok Junction (6K8)
Runway Surface Improvements	Arctic Village (ARC) Bradley Sky-Ranch (95Z) Chalkyitsik (CIK) [*Pending FY24/FY25*] Central (CEM) Chisana (CZN) Chistochina (CZO) Clear (Z84) Copper Center 2 (Z93) Gold King Creek (AK7) Healy River (HRR) McCarthy (15Z) Northway (ORT) Tok Junction (6K8) Wiseman (WSM)
Install MIRL Lighting Systems	Chistochina (CZO) Delta Junction (D66)
Upgrade to HIRL Lighting System	Fort Yukon (FYU)
Install Weather Reporting Stations	Beaver (WBQ) Cantwell (TTW) Central (CEM) Chalkyitsik (CIK) Circle City (CRC) Healy River (HRR) Manley Hot Springs (MLY) McCarthy (15Z) Venetie (VEE)
Install Weather Cameras	Birch Creek (Z91) Circle City (CRC) Manley Hot Springs (MLY) McCarthy (15Z) Prospect Creek (PPC) Stevens Village (SVS) Tetlin (3T4) Venetie (VEE)
Refer to Table 4 to identify owner/sponsor of each airport listed above.	

APPENDICES

6.0 APPENDICES

- Appendix 1: Airport Improvements Recommended by 2010 IATP

- Appendix 2: AASP & NPIAS Classifications

- Appendix 3: Summary of IATP Airports by Ownership, AASP Classification, On/Off Road Status, and Seaplane Base Status

- Appendix 4: AASP Performance Measure Report Cards

- Appendix 5: Airport Forecasts Data

- Appendix 6: Stakeholder Input Used in IATP Update

- Appendix 7: Broadband Connectivity at IATP Airports

- Appendix 8: Aerial Photo Log of IATP Airports by AASP Classification

- Appendix 9: References

Appendix 1: Airport Improvements Recommended by 2010 IATP

Table 60 shows recommendations from the 2010 IATP and the current disposition of those recommendations. The projects have historically not scored well when competing for funds with so many airports statewide serving off-road communities. Many projects identified in the 2010 IATP have been dropped. Many of the projects were in some stage of design, but when they did not score well and receive funding, all that design time went un-reimbursed, and Alaska State OMB/Legislature started curbing the process of having DOT spend significant time on projects not likely to be funded. Very little significant work has been done since 2010.

Table 60. 2010 IATP Airport Capital Improvement Recommendations

Airport	Description	Estimated Cost	Priority	Current Disposition
Beaver	Resurfacing, grading, drainage.	$5,000,000	Medium	Obstruction removal and rwy rehab in 2019
Birch Creek	Instrument approach (1 mile min.), SRE Building, resurfacing.	$3,000,000	Medium	None of the recommended work has been accomplished
Central	700' runway extension, instrument approach (1 mile min.), AWOS, obstruction removal, resurfacing.	$2,500,000	Medium, Long	Got RNAV, rwy rehab, all else still needed
Chalkyitsik	Reconstruction, apron, road relocation, lighting rehab, drainage, SRE Building.	$10,500,000	Short, Medium	Much of this appears to be in 2023 grant project
Chistochina	Airport relocation.	$10,000,000	Long	Master Plan in 2009??? No relocation yet
Chitina	SRE Building upgrade.	$150,000	Medium	Not done
Circle City	400' runway extension, instrument approach (1 mile min.), taxiway and apron rehab, resurfacing.	$5,000,000	Long	Rwy resurfaced in 2014
Coldfoot	Erosion control, lighting replacement, obstruction clearance, resurfacing.	$6,500,000	Medium, Long	Rwy, twy, apron rehab work done twice since; lighting rehab in 2015
Dalton-5 Mile	Airport Reconnaissance for gas pipeline support	$1,000,000	Long	No records
Delta Junction/Allen Army Airfield	Joint civilian/military use or better, NPIAS airport recommended. Cost could be $2 - $20 million.	$11,000,000	Short, Medium	Still a military airport available for public use, with permission
Eagle	Instrument approach (1 mile min.), resurfacing.	$3,500,000	Long	Got RNAV, rwy rehab
Fort Yukon	Instrument approach Improvement to 3/4 mile min., resurfacing, safety area improvements, drainage, and SRE building.	$15,550,250	Short (FFY 2009)	IAPs still look like 1 mi. min; all other work looks like it was accomplished with ARRA economic stimulus funding
Gold King Creek	Modest Safety Improvements	$50,000	Short, Medium	No work done
Gulkana	Instrument approach improvement to 3/4 mile min. requiring approach lights,	$15,000,000	Medium, Long	IAPs still look like 1 mi. min; rwy has had a couple rehabs; float basin and parallel twy not done

Airport	Description	Estimated Cost	Priority	Current Disposition
	parallel taxiway, airfield repaving, floatplane basin.			
Lake Louise	2nd stage of runway rehab.	$2,300,000	Short (FFY 2009/ FFY 2010)	Accomplished
Livengood Camp	Improvements for gas pipeline support TBD.	$3,000,000	Medium	Major work done – not in AIP grant history; funded by State? Gas pipeline work?
Manley Hot Springs	Airport relocation.	$13,800,000	Short (FFY 2010)	Accomplished in 2016/2017 grant projects
McCarthy	Instrument approach (1 mile min.), MIRL, AWOS, resurfacing.	$3,500,000	Long	Still needs all except rwy rehab
Minchumina	Resurfacing, apron reconstruction	$8,000,000	Long	Rwy rehab done; no apron work
Nenana Municipal	Airfield pavement rehab, fencing, other improvements	$12,000,000	Medium, Long	Rwy rehab, fencing, fuel farm in 2011-2013; airport currently making plans for further improvements
Pippin Lake/Tonsina New Airport	New Local-Major airport, turf runway, visual approaches, serving small A-I aircraft	$2,000,000	Long	No records
Prospect Creek	Runway Safety Area Improvement, resurfacing, improvements for gas pipeline support.	$5,600,000	Medium, Long	No work done – unobligated airport, State does not want to obligate
Rampart	SRE Building upgrade, resurfacing.	$3,500,000	Medium, Long	No work done
Stevens Village	Instrument approach (1 mile min.), resurfacing.	$3,500,000	Long	No work done
Summit	Tiedown, access road improvements.	$100,000	Medium	No work done
Tetlin	Instrument approach (1 mile min.)	$450,000	Medium, Long	Got aeronautical survey for WAAS approach, but has no IAP
Tok Junction/ Tanacross	More runway length and better instrument approach. Recommend upgrades for Tok Junction, Tanacross, or another site for Regional Airport to serve Tok population. Improvements to support gas pipeline TBD. Tok Junction has $7 mil runway & crosswind runway project programmed after FFY2012.	$35,000,000	Medium, Long	No major work done – rwy same length, rehab a couple times but no major projects; rwy extension a tough hurdle with FAA regs, land status UTAPS study (2022-2023) to consider regional airport.
Venetie	Instrument approach (1 mile min.), AWOS, resurfacing.	$3,000,000	Medium	Got RNAV; no other work

Appendix 2: AASP & NPIAS Classifications

Airport classification and performance measures are part of the foundation of aviation system planning and provide essential metrics to track system health (*AASP Classifications & Performance Measures*, May 2022). Although the FAA classifies airports through the NPIAS, the designations primarily relate to federal funding considerations. The AASP airport classification system provides more clarity on the roles and needs of Alaska's 700+ registered facilities. The FAA recognizes the value and purpose of state classification systems, and the NPIAS and state classifications are both considered when planning airport developments.

NPIAS classifications broadly divide airports into two categories – Primary and Nonprimary – which are then further qualified by designations of hub type or airport role. The distinction between categories of Primary airports in the NPIAS is based on the number of annual enplanements at an airport. Nonprimary airport categories are based on existing activity (number and types of based aircraft and volume and types of flights), geographic factors, and public interest functions.

The graphic below summarizes the NPIAS and AASP classification definitions. The content was adapted from the 2022 *AASP Classifications and Performance Measures Final Report*.

Full definitions of NPIAS classifications can be found in the FAA's *NPIAS Narrative*, published every two years and available at https://www.faa.gov/airports/planning_capacity/npias.

Full definitions of AASP classifications can be found in the 2011 *AASP Mission, Goals, Measures, and Classifications* available at https://www.alaskaasp.com/documents/phase-i-documents.aspx.

NPIAS and AASP Classifications Summarized Definitions

NPIAS Classification Summarized Definitions

Primary Commercial Service Medium and Small Hub: A medium hub airport has at least 0.25 percent, but less than 1 percent of the total annual passenger boardings in the U.S., and a small hub airport has at least 0.05 percent, but less than 0.25 percent, of the total annual passenger boardings in the U.S.

Primary Commercial Service Nonhub: A nonhub airport receives more than 10,000 passenger boardings but less than 0.05 percent of the total annual passenger boardings in the U.S.

Nonprimary, Commercial Service, Nonhubs: Also referred to as nonhub nonprimary, these airports have scheduled passenger service and between 2,500 and 10,000 annual enplanements.

Nonprimary, General Aviation, Local: A public airport that does not have scheduled service or has scheduled service with less than 2,500 passenger boardings each year and provides access to markets within a state or immediate region.

Nonprimary, General Aviation, Basic: A public airport that does not have scheduled service or has scheduled service with less than 2,500 passenger boardings each year, provides a means for general aviation flying, and links the community to the national airport system. These airports support general aviation activities (e.g., emergency response, air ambulance service, flight training, and personal flying).

Nonprimary, General Aviation, Unclassified: These airports are currently in the NPIAS but with limited activity.

Non-NPIAS: These airports are registered and tracked by the FAA but are not included in the NPIAS and are not eligible for AIP funding.

AASP Classification Summarized Definitions

Medium and Small Hubs: A medium hub airport has at least 0.25 percent, but less than 1 percent, of the total annual passenger boardings in the U.S., and a small hub airport has at least 0.05 percent, but less than 0.25 percent, of the total annual passenger boardings in the U.S.

Regional Hubs: Regional hubs meet three or more of the following criteria: (1) are designated primary airports, as defined by the FAA, with at least 10,000 annual passenger boardings; (2) are air carrier hubs, as defined by the FAA; (3) are Federal Aviation Regulation (FAR) Part 139 certificated; (4) are USPS hubs; (5) serve communities with health facilities that serve two or more communities; (6) are DNR-designated fire tanker bases; or (7) serve communities with U.S. Coast Guard facilities.

Community Class: Community class airports are a community's primary airport that service basic needs (e.g., passenger travel to regional hubs, mail service, local aviation-related business, and emergency needs). This classification includes communities with a year round population of at least 25 people, has a public school, and is located more than 1 hour by road from an internal, regional hub, or other community class airport.
- **Off-Road**: Not connect to then National Highway System (NHS)
- **On-Road**: Connected to the NHS

Local Class – NPIAS High Activity: These airports accommodate mostly general aviation activity. They either supplement hub and community airports by providing additional general aviation capacity in the more densely populated portions of the state or serve low-population areas where a community airport is not warranted. High activity airports must have at least 20 based aircraft.

Local Class – NPIAS Low Activity: These airports accommodate mostly general aviation activity. They either supplement international, regional hub, and community airports by providing additional general aviation capacity in the more densely populated portions of the state or serve low population areas where a community airport is not warranted. Low activity airports have fewer than 20 based aircraft.

Local Class – Non-NPIAS: These public-use airports, heliports, or seaplane bases are documented in the FAA Alaska Chart Supplement but are not included in the NPIAS and are not eligible for federal grant funding.

Landing Strips: Landing Strips are the remaining public and privately owned, non-NPIAS facilities that are registered with the FAA, not owned by DOT&PF, and not included in previously defined classifications.

Appendix 3: Summary of IATP Airports by Ownership, AASP Classification, On/Off Road Status, and Seaplane Base Status

Ownership	Small Hub	Regional Hub	Community Off-Road	Community On-Road	Local NPIAS High-Activity	Local NPIAS Low-Activity	Local Non-NPIAS	Landing Strips
DOT&PF	Fairbanks International (FAI)	Fort Yukon (FYU)	Beaver (WBQ) Chalkyitsik (CIK) Ralph M Calhoun Meml [Tanana] (TAL) Stevens Village (SVS)	Central (CEM) Chistochina (CZO) Circle City (CRC) Eagle (EAA) Gulkana (GKN) Healy River (HRR) Manley Hot Springs (MLY) Minto Al Wright (51Z) Northway (ORT) Tok Junction (6K8)		Birch Creek (Z91) Boundary (BYA) Chandalar Lake (WCR) Chicken (CKX) Chisana (CZN) Chitina (CXC) Circle Hot Springs (CHP) Clear (Z84) Coldfoot (CXF) Kantishna (5Z5) Lake Louise (Z55) May Creek (MYK) McCarthy (15Z) Minchumina (MHM) Prospect Creek (PPC) Rampart (RMP) Tetlin (3T4) Wiseman (WSM)	Copper Center 2 (Z93) Gold King Creek (AK7) Livengood Camp (4AK) Summit (UMM) Tazlina (Z14)	
Local Government			Arctic Village (ARC) Venetie (VEE)	Delta Junction (D66)	Nenana Muni (ENN)			
Federal Agency								Black Rapids (5BK) Coal Creek (L20) Glacier Creek (KGZ) Jakes Bar (AK0) McKinley Ntl Park (INR) Paxson (PXK) Stampede (Z90) Tanacross (TSG)
State Agency								Eva Creek (2Z3) Quail Creek (20K) Tolsona Lake (58A) **SPB**
Private							Bradley Sky-Ranch (95Z)	Cantwell (TTW) Lake Louise Seaplane Base (13S) **SPB** Tazlina/Smokey Lake (5AK) **SPB**
Public Domain								Chena River (2Z5) **SPB** Eureka Creek (2Z2) Horsfeld (4Z5) Totatlanika River (9AK)

Off the road system

On the road system

SPB: Seaplane Base

Appendix 4: AASP Performance Measure Report Cards

	Performance Measure	Metric Definition	Target Metric	Fairbanks Intl (FAI)
IATP Small Hub Airport AASP Performance Measures Score Card				
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	No
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No
	Parallel Taxiway	Metric only applicable to facilities with more than 20,000 annual operations	Full	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	Yes
Airport Safety Measures	Primary Runway Length	5,000 ft or longer for Hub classes	≥ 5,000	11,800
	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	PCI 71
	Primary Runway Lighting	HIRL for Hubs and Regionals	HIRL	HIRL
	Primary Runway ALS or REIL	Approach Lighting System or Runway End Indicator Lights	Not UNK or NSTD	Not UNK or NSTD
	Wind Coverage > 95% and/or Crosswi	Wind coverage of 95% or higher or existing crosswind runway	Yes or Wind Coverage > 95%	> 95%
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	ASOS
	Weather Camera	FAA weather camera onsite	Yes	Yes
Airport Planning Measures	Airport Layout Plan (ALP)	Less than 5 years for Med/Small Hubs	< 5 Yrs	>5 yrs (2013)
	Airport Master Plan (AMP)	5 years for Med/Small Hubs	< 5 Yrs	> 5 yrs (2016)
	Part 139 Compliant	No FAA letter of correction indicating capital project is needed to resolve Part 139 annual inspection deficiency/violation	Yes	Yes
	FAA Compliant GIS Data	Approved AGIS compliant with AC 150/5300-18B	Yes	Yes
Community: Quality of Life	Public Restrooms	Public restrooms available	Yes	Yes
	Passenger Waiting Shelter	Passenger waiting shelter available	Yes	Yes
Community: Economic Development	Fuel Available	Fuel available for purchase - type of fuel	Yes	Yes
	Documented Need for Additional Lea	Documented need for additional lease lots	No	No
	Documented Need for Aircraft or Veh	Documented need for vehicle or aircraft parking	No	No
	Unmanned Aerial System (UAS) Integ	Airport connected to UAS corridor	Yes	Yes
	Broadband Connectivity Available	Broadband available through local fiber connection	Yes	Yes

Remarks on Score Card:
Airport Design: FAI does not meet any of the 4 Measures, however Current Deisgn A/C might be an error in report generation for all facilities
Airport Safety: FAI meets all Safety measures
Airport Planning: FAI's ALP is 10 years old in 2023; FAI's AMP is 7 years old in 2023
Community: FAI meets all Community measures

IATP Regional Hub Airport AASP Performance Measures Score Card				
	Performance Measure	Metric Definition	Target Metric	Fort Yukon (FYU)
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	No
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No
	Parallel Taxiway	Metric only applicable to facilities with more than 20,000 annual operations	Full or Partial	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	Yes
Airport Safety Measures	Primary Runway Length	5,000 ft or longer for Hub classes	≥ 5,000	5,000
	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	Good
	Primary Runway Lighting	HIRL for Hubs and Regionals	HIRL	MIRL
	Primary Runway ALS or REIL	Approach Lighting System or Runway End Indicator Lights	Not UNK or NSTD	Not UNK or NSTD
	Wind Coverage > 95% and/or Crosswi runway	Wind coverage of 95% or higher or existing crosswind	Yes or Wind Coverage > 95%	> 95%
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	AWOS
	Weather Camera	FAA weather camera onsite	Yes	Yes
Airport Planning Measures	Airport Layout Plan (ALP)	Less than 10 years for Regional Hubs	< 10 Yrs	< 10 yrs(2013)
	Airport Master Plan (AMP)	10 years for Regionals	< 10 Yrs	> 10 Yrs
	Current CIIMP Inspection	3 years for Regional	< 2 Yrs	> 2 yrs
	Part 139 Compliant	No FAA letter of correction indicating capital project is needed to resolve Part 139 annual inspection deficiency/violation	Yes	N/A
	FAA Compliant GIS Data	Approved AGIS compliant with AC 150/5300-18B	Yes	Yes
Community: Quality of Life	Public Restrooms	Public restrooms available	Yes	No
	Passenger Waiting Shelter	Passenger waiting shelter available	Yes	Yes
Community: Economic Development	Fuel Available	Fuel available for purchase - type of fuel	Yes	No
	Documented Need for Additional Lea:	Documented need for additional lease lots	No	No
	Documented Need for Aircraft or Veh	Documented need for vehicle or aircraft parking	No	No
	Unmanned Aerial System (UAS) Integ	Airport connected to UAS corridor	Yes	No
	Broadband Connectivity Available	Broadband available through local fiber connection	Yes	No

Remarks on Score Card:

Airport Design: FYU does not meet any of the 4 Measures, however Current Deisgn A/C might be an error in report generation for all facilities, and FYU does not have > 20,000 ops so parallel twy should be N/A

Airport Safety: FYU should improve lighting to HIRL, although MIRL are acceptable for its existing NPI approach; MALSF Rwy End 22 satisfies the runway end lighting criteria

Airport Planning: FYU's ALP will be 10 years old in 2023; FYU needs an AMP (no AMP in document files); FYU has not received a CIMP to date

Community: There are no public restrooms available; there is no fuel available; FYU is not connected to UAS corridor; there is no broadband through local fiber connection

	Performance Measure	Metric Definition	Target Metric	Arctic Village (ARC)	Beaver (WBQ)	Chalkyitsik (CIK)	Ralph M Calhoun Meml (TAL)	Stevens Village (SVS)	Venetie (VEE)
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	Yes	Yes	Yes	No	Yes	Yes
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No	No	No	No	No	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	No	Yes	Yes	Yes	No	No
Airport Safety Measures	Primary Runway Length	3,300 ft or longer for Community classes	≥ 3,300	4,500	3,934	4,000	4,400	4,000	4,000
	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	Poor	Good	Fair	Good	Good	Good
	Primary Runway Lighting	MIRL for Community	MIRL	MIRL	MIRL	MIRL	MIRL	MIRL	MIRL
	Primary Runway ALS or REIL	Approach Lighting System or Runway End Indicator Lights	Not UNK or NSTD	Not UNK or NSTD	UNK	UNK	UNK	Not UNK or NSTD	UNK
	Wind Coverage > 95% and/or Crosswi	Wind coverage of 95% or higher or existing crosswind runway	Yes or Wind Coverage > 95%	> 95%	No	No	> 95%	> 95%	> 95%
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	AWOS	No	No	ASOS	No	No
	Weather Camera	FAA weather camera onsite	Yes	Yes	Yes	Yes	Yes	No	No
	Seasonal Closures	Closed more than 48 hours in multiple years	None	None	None	None	None	None	None
Airport Planning Measures	Current CIIMP Inspection	3 years for Community	< 3 Yrs	> 3 Yrs	> 3 Yrs	> 3 Yrs (2017)	> 3 Yrs (2014)	> 3 Yrs (2017)	> 3 Yrs
	FAA Compliant GIS Data	Approved AGIS compliant with AC 150/5300-18B	Yes	No	Yes	Yes	Yes	Yes	No
Community: Quality of Life	Public Restrooms	Public restrooms available	Yes	No	No	No	Yes	No	No
	Passenger Waiting Shelter	Passenger waiting shelter available	Yes	Yes	No	No	No	No	Yes
	Emergency Maintenance Shelter	Emergency maintenance shelter onsite	Yes	No	Yes	Yes	Yes	Yes	No
Community: Economic Development	Fuel Available	Fuel available for purchase - type of fuel	Yes	No	No	No	No	No	No
	Documented Need for Additional Leas	Documented need for additional lease lots	No	No	No	No	No	No	No
	Documented Need for Aircraft or Veh	Documented need for vehicle or aircraft parking	No	No	No	No	No	No	No
	Unmanned Aerial System (UAS) Integr	Airport connected to UAS corridor	Yes	No	No	No	No	No	No
	Broadband Connectivity Available	Broadband available through local fiber connection	Yes	No	Yes	No	No	No	No

IATP Community Off-Road Airports AASP Performance Measures Score Card

Remarks on Score Card:

Airport Design: TAL, WBQ, and CIK have work needed to meet Design measures; Current Deisgn A/C might be an error in report generation for all facilities

Airport Safety: a couple gravel runways need improvement; most Community Off-Road in need of weather stations and/or weather camera

Airport Planning: all 6 need CIMP inspections; AGIS data desired at ARC & VEE

Community: Public restrooms needed at 5 of 6; PAX shelter needed at 4 of 6; emergency Mx shelter needed at 2 of 6; no fuel available at any; UAS integration needed; broadband needed at 5 of 6

IATP Community Off-Road Airports AASP Performance Measures Score Card

Category	Performance Measure	Metric Definition	Target Metric	Central (CEM)	Chistochina (CZO)	Circle City (CRC)	Delta Junction (D66)	Eagle (EAA)	Gulkana (GKN)	Healy River (HRR)	Manley Hot Springs (MLY)	Minto Al Wright (51Z)	Northway (ORT)	Tok Junction (6K8)
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No	No	No	No	No	No	No	No	No	No	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	No	No	Yes	No	No	Yes	No	No	Yes	No	Yes
Airport Safety Measures	Primary Runway Length	3,300 ft or longer for Community classes	≥ 3,300	2,782	2,060	2,979	2,500	3,600	5,001	2,910	3,400	3,400	5,100	2,509
	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	Poor	Fair	Good	Good	Good	PCI 85	PCI 48	Good	Good	PCI 40	PCI 34
	Primary Runway Lighting	MIRL for Community	MIRL	MIRL		MIRL		MIRL	MIRL	MIRL	MIRL	MIRL	MIRL	MIRL
	Primary Runway ALS or REIL	Approach Lighting System or Runway End Indicator Lights	Not UNK or NSTD	UNK	UNK	UNK	UNK	UNK	UNK	UNK	UNK	Not UNK or NSTD	Not UNK or NSTD	UNK
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	No	No	No	No	ASOS	ASOS	No	No	No	ASOS	No**
	Weather Camera	FAA weather camera onsite	Yes	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes	Yes
	Seasonal Closures	Closed more than 48 hours in multiple years	None	None	None	None	None	None	None	None	None	None	None	None
Airport Planning Measures	Current CIIMP Inspection	3 years for Community	< 3 Yrs	> 3 Yrs	> 3 Yrs	> 3 Yrs	> 3 Yrs	> 3 Yrs (2017)	< 3 Yrs (2021)	> 3 Yrs (2016)	> 3 Yrs (2017)	> 3 Yrs	< 3 Yrs (2021)	< 3 Yrs (2021)
	FAA Compliant GIS Data	Approved AGIS compliant with AC 150/5300-18B	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Community: Quality	Public Restrooms	Public restrooms available	Yes	No	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes
Community: Economic Development	Fuel Available	Fuel available for purchase - type of fuel	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes
	Documented Need for Additional Lea	Documented need for additional lease lots	No	No	No	No	No	No	Yes	No	No	No	No	No
	Documented Need for Aircraft or Veh	Documented need for vehicle or aircraft parking	No	No	No	No	No	No	Yes	No	No	No	No	No
	Unmanned Aerial System (UAS) Integ	Airport connected to UAS corridor	Yes	No	No	No	No	No	No	No	No	No	No	No
	Broadband Connectivity Available	Broadband available through local fiber connection	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes

Remarks on Score Card:

Airport Design: 3of 11 have noncompliant RPZ; 4 of 11 have non-standard condition on ALP; Current Deisgn A/C might be an error in report generation for all facilities

Airport Safety: 6 of 11 do not meet minimum desired rwy length; surface conditions have been neglected at 5 of 11; 2 need MIRL; most need REIL/ALS; certified wx needed at 7; wx cams needed at 4

Airport Planning: 8 need CIMP inspections; AGIS data desired at 5

Community: Public restrooms needed at 6 of 11; fuel needed at 7; GKN has need for lease lots and parking; UAS integration needed at all; broadband needed at 5 of 11

** Tok has a recently installed AWOS that is not yet published and does not reflect in the AASP data

IATP Local NPIAS High-Activity Airport AASP Performance Measures Score Card

	Performance Measure	Metric Definition	Target Metric	Nenana Muni (ENN)
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	No
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	Yes
Airport Safety Measures	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	PCI 80
	Primary Runway Lighting	MIRL for Local High Activity	MIRL	MIRL
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	ASOS
	Weather Camera	FAA weather camera onsite	Yes	Yes
	Seasonal Closures	Closed more than 48 hours in multiple years	None	None
Airport Planning Measures	Current CIIMP Inspection	5 years for Local	< 5 Yrs	> 3 Yrs (2014)
	FAA Compliant GIS Data	Approved AGIS compliant with AC 150/5300-18B	Yes	No
Community: Economic Development	Fuel Available	Fuel available for purchase - type of fuel	Yes	Yes
	Documented Need for Additional Lea	Documented need for additional lease lots	No	No
	Documented Need for Aircraft or Veh	Documented need for vehicle or aircraft parking	No	No
	Unmanned Aerial System (UAS) Integ	Airport connected to UAS corridor	Yes	No

Remarks on Score Card:
Airport Design: ENN does not currently meet any Design measures; Current Deisgn A/C might be an error in report generation for all facilities
Airport Safety: ENN meets all Safety measures
Airport Planning: ENN needs a current CIMP inspection; AGIS data collected for ENN in 2021 not yet reflected in AASP database
Community: UAS integration needed; ENN has fuel available, and this may be a significant contributing factor to the airport's success and planned developments

	Performance Measure	Metric Definition	Target Metric	Birch Creek (Z91)	Boundary (BYA)	Chandalar Lake (WCR)	Chicken (CKX)	Chisana (CZN)	Chitina (CXC)	Circle Hot Springs (CHP)	Clear (Z84)	Coldfoot (CXF)	Kantishna (5Z5)	Lake Louise (2Z5)	May Creek (MYK)	McCarthy (15Z)	Minchumina (MHM)	Prospect Creek (PPC)	Rampart (RMP)	Tetlin (3T4)	Wiseman (WSM)
Airport Design Measures	RPZ Control/Compliance	RPZ in compliance and property control or easement established	Yes	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes	No
	Current Design Aircraft Met	Design aircraft on last approved ALP or Master Plan	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	Non-Standard Condition	Non-standard condition documented on current ALP	No	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	No	No	Yes	Yes	No	No
Airport Safety Measures	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	Good	Good	Good	Good	Poor	Good	Good	PCI 61	Good	Good	Excellent	Good	Fair	Good	Good	Good	Good	Poor
	Certified Weather Reporting	Certified weather reporting onsite	ASOS, AWSS, or AWOS	No	No	No	No	No	No	No	No	No**	No	No	No	No	AWOS	No	No	No	No
	Weather Camera	FAA weather camera onsite	Yes	No	No	No	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No
	Seasonal Closures	Closed more than 48 hours in multiple years	None	None	No Details	No Details	None	No Details	None	None	None	No Details	None	No Details	None	No Details	None	No Details	None	None	No Details
Airport Planning	Current CIIMP Inspection	5 years for Local	< 5 Yrs	> 5 Yrs	> 5 Yrs (2016)	> 5 Yrs	> 5 Yrs (2016)	> 5 Yrs	> 5 Yrs	> 5 Yrs	> 5 Yrs	> 5 Yrs	> 5 Yrs	> 5 Yrs (2015)	> 5 Yrs	> 5 Yrs	> 5 Yrs (2014)	> 5 Yrs	> 5 Yrs	> 5 Yrs (2016)	> 5 Yrs
Community: Economic Development	Documented Need for Additional Lease	Documented need for additional lease lots	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	Documented Need for Aircraft or Vehicle	Documented need for vehicle or aircraft parking	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

Remarks on Score Card:
Airport Design: 9 facilities have noncompliant RPZs; Current Deisgn A/C might be an error in report generation for all facilities; 9 facilities have non-standard conditions on ALP
Airport Safety: 4 of 18 facilites need surface improvements; 16 need weather reporting; 14 need weather cams; seasonal closure status needs to be determined at 8 facilities
Airport Planning: all 18 facilities need a current CIMP inspection
Community: there are no documented needs for additional lease lots or parking

** Coldfoot has a recently installed AWOS that is not yet published and does not reflect in the AASP data

				IATP Local Non-NPIAS Airports AASP Performance Measures Score Card					
	Performance Measure	Metric Definition	Target Metric	Bradley Sky-Ranch (95Z)	Copper Center 2 (Z93)	Gold King Creek (AK7)	Livengood Camp (4AK)	Summit (UMM)	Tazlina (Z14)
Airport Safety Measures	Primary Runway Condition	Good for gravel, PCI rated 70 or better for paved	70+ PCI or Good+	Fair	Fair	Fair	Good	Good	Good
	Seasonal Closures	Closed more than 48 hours in multiple years	None	None	None	None	None	None	None

Remarks on Score Card:

Local Non-NPIAS facilities only have two performance measures, both in the Airport Safety category

Airport Safety: 95Z, Z93, & AK7 runway surfaces are in fair condition, need improvement to meet measure

Appendix 5: Airport Forecasts Data

Table 61. IATP Region Airport Forecast Average Annual Compound Growth Rates – High, Medium, & Low Scenarios

Forecast Category	Base Yr. Level (2022)	Base Yr. to +1 (2023)	Base Yr. to +5 (2027)	Base Yr. to +10 (2032)	Base Yr. to +15 (2037)	Base Yr. to +18 (2040)
Passenger Enplanements	HIGH MEDIUM LOW	4.2% 2.5% 0.6%	4.6% 3.0% 0.3%	2.7% 1.9% 0.1%	1.9% 1.4% 0.1%	1.6% 1.2% 0.1%
Total Operations	HIGH MEDIUM LOW	3.9% 2.5% 0.6%	3.1% 3.0% 0.3%	1.9% 1.9% 0.1%	1.3% 1.0% 0.1%	1.1% 1.0% 0.1%
Cargo/Mail (deplaned lbs)	HIGH MEDIUM LOW	5.6% 2.5% 0.6%	5.7% 2.9% 0.3%	3.3% 1.9% 0.1%	2.3% 1.3% 0.1%	2.0% 1.2% 0.1%
Based Aircraft	HIGH MEDIUM LOW	3.0% 2.5% 0.6%	5.2% 3.0% 0.3%	3.1% 1.9% 0.1%	2.2% 1.4% 0.1%	1.9% 1.2% 0.1%

Appendix 6: Stakeholder Input Used in IATP Update

Several air carriers, aviation interest groups, and airport management entities were interviewed in early 2023 to determine issues and needs of the IATP aviation system. There was a low level of participation by stakeholders contacted specifically for this IATP update, so this study also made use of stakeholder input provided for other studies conducted recently for specific airports within the IATP region, subregions within the IATP area, and neighboring regions. Interviews were conducted for UTAPS between late 2021 and through 2023 and input relevant to the greater IATP region was evaluated for this study. Additionally, input from other recent studies (the NWATP, Nenana ALP update, Gulkana ALP update, etc.) of significance to the IATP study was incorporated. Input provided by air carriers and airport managers was also considered in the aviation activity forecasts when that input related to current and future aviation trends in the region. A summary of comments provided is presented below by broad topic, in no particular order of priority, and without specifying which individual provided the comment.

Summary of Aviation Issues Identified through Stakeholder Input

- Airports in this region are important for medevac operations, medical travel, delivery of essential goods, supplies, and medicine, firefighting support, recreation and remote access, hunting/guiding/fishing, and mineral exploration and development.
- Rural and emergency landing strips are important due to long distances and poor weather between airports; Paxson and Tazlina provided as specific useful strips.
- A good regional airport, along with several smaller community airports at intervals along major flight routes, is essential to provide access and flight safety for those traveling by aircraft.
- Customs at Northway – limited availability of staff to clear aircraft, interest in alternative way or location to deal with customs.
- Airports provide access to the large expanses of roadless areas of the state – unmaintained airstrips that become unusable lead to less and less of the state being accessible.
- Unmanaged brush/vegetation encroachment has been cutting off access to many sites in the state – Eureka Creek given as an example.
- More of the state is becoming accessible by helicopter only – very expensive, very limited pool of people who could use this mode.
- Aviation interest groups often prioritize issues at airports where major carriers operate and EAS/Bypass Mail programs are in effect – hoping this plan will elevate issues of importance to smaller operators and private pilots.
- Demand for fuel across the region; limited availability currently.
- Several airports serve as alternate landing areas for FAI in inclement weather (Bradley Sky-Ranch, Nenana Muni named).
- Better approaches, new approaches desired. RNAV approach at McCarthy, lower minimums at Tok specified.
- Medevac providers would likely make greater use of their Learjets if runways were 5,000 ft or longer.
- The large sections and use of military airspace in the region is a major concern to some operators – can cause extensive delays or costly re-routes.
- Desire for IFR corridors through military airspace to create fewer civilian flight disruptions.
- Firefighting operations will continue at Tanacross until it becomes unusable – hoping that Tok gets improved to accommodate a relocation of firefighting services (wildland would like a minimum length of 5,000 ft, another carrier recommended 4,000 ft).
- Concerns that wildland firefighting operations, if moved to new location(s), may negatively impact carrier and private pilot activity.
- Gravel/turf runways at several airports can see more activity than the paved runway during hunting season.

- 3,000 ft minimum runway length desired by several carriers.
- 4,000 ft minimum runway length with an instrument approach and fuel services would be ideal at regionally important facilities.
- Beyond emergency medical needs, airports support transporting medical services and supplies in a timely manner.
- DOT&PF leasing practices and prices are prohibitive to some operators.

Summary of Future Aviation Trends Identified through Stakeholder Input

- Carriers seeing increased aviation recreational and tourism demand, expect the trend to stay positive.
- One medevac carrier intends to retire Lear 35s from fleet.
- Most carrier fleets remaining largely stable, a few upgrades and fleet additions expected, most within operational demands of existing fleet.
- Consolidation of larger operators followed by new influx of smaller operators (NWATP).
- Hopes that the government does not start changing things. Keep programs the same (NWATP).
- Pilot (qualified pilot) shortage (NWATP).
- Oil price fluctuations and increases in costs for fuel, parts, insurance, etc. (NWATP).
- Less traffic in the bush, village residents may be traveling less (NWATP).
- Anticipated increase in freight movement due to rise of Amazon and other online retailers (NWATP).
- Expectation that air traffic will remain robust (NWATP).

Interviews Conducted for IATP – Air Carriers/Air Taxis/Medevac Companies/Aviation Organizations

- Aircraft Owners and Pilots Association, Tom George, Alaska Regional Manager, 907.388.9955
- Aviation Risk Solutions, Dave Wilson, Chief Pilot/Owner, 907.841.1340
- Copper Valley Air Service, Martin Boniek, Chief Pilot/Owner, 907.822.4200
- Reeve Air, Mike Reeve, Owner, 907.250.4766
- Wrangell Mountain Air, Austin Robel, Director of Operations, 907.302.6230
- Interviews Conducted for IATP – Airport Sponsors/Managers/Owners
- Alyeska Pipeline Company, Renier Swart, Airport Manager, 907.787.8959
- Bradley Sky-Ranch, James Bradley, Airport Manager, 907.488.9792
- Bureau of Land Management, Rhonda Williams, Airport Manager (Black Rapids & Paxson), 907.822.3217
- City of Delta Junction, Jimmy Wayne Musgrove, Airport Manager, 907.460.6688
- Tazlina/Smokey Lake Seaplane Base, Bonny Wikle, Airport Manager, 907.822.3061

Interviews Conducted for IATP – DOT&PF

- DOT&PF Maintenance & Operations, Jason Ludington, Jeff Russell, Chad Heller, Sam Jennings, & Daniel Schacher
- DOT&PF Northern Region Planning, Judy Chapman & Sara Lucey
- DOT&PF Statewide Aviation, Troy LaRue, Rebecca Douglas, Andrew Warner, & Ryan Marlow

Other Organizations Contacted for IATP

- FAA Air Traffic Organization, Kyle Christiansen, Senior Aeronautical Specialist, 907.841.6764
- U.S. Customs and Border Protection, Leopoldo Reyez, Assistant Area Port Director, 907.271.2681

Interviews Conducted for Upper Tanana Airport Planning Study (2021-2023), Used to Support IATP

- 40-Mile Air, Leif Wilson, Owner
- Aircraft Owners and Pilots Association, Tom George, Alaska Regional Manager
- Alaska Airman's Association, Adam White, Government & Legislative Affairs Advocate
- Doyon Limited, Jamie Marunde, VP of Lands
- DNR Division of Forestry and Fire Protection, Jason Jordet, Fixed Wing Aviation Manager
- LifeMed Alaska, Ricci Coon, Aviation Program Manager
- Reeve Air, Mike Reeve, Owner
- Tok Air Service, Zack Knaebel, Chief Pilot/Owner
- Tok Ambulance/EMS, Jack Rutledge
- Warbelow's Air Ventures. Daryn Young, Director of Operations

Organizations Attempted to Contact for IATP Who Did Not Participate or Were Unreachable

- Alaska Department of Fish and Game, Bruce & Michelle Heaton, Airport Management (Tolsona Lake)
- Alaska Land Exploration, LLC, Alex Shapiro, Owner/Director of Operations
- Birchwood Aircraft Services, Eric Fox, Owner
- Bureau of Land Management, Lanore Heppler, Airport Management (Tanacross)
- Bushwacker Air Service
- Cantwell Airport, Ray Atkins, Airport Manager
- City of Nenana, Dan Smith, Airport Manager (did provide input for Nenana ALP Update)
- Coyote Air, Dirk Nickish
- Department of Natural Resources, Diana Leinberger, Airport Management (Eva Creek)
- Department of Natural Resources, Jacqueline Cheek, Airport Management (Quail Creek)
- Ellis Air Taxi
- Everts Air, Mike Allen & Matt Stone (did provide input for 2020 NWATP Tech Memo)
- Fly Denali, Eric Rovey, Chief Pilot
- Golden Eagle Outfitters, Jim, Jesse, & Jared Cummins, Owners/Operators
- Guardian Flight, Riley Little (did provide input for 2020 NWATP Tech Memo)
- Kantishna Air Taxi, Greg LaHaie, Owner/Chief Pilot
- Lake Louise SPB, Dennis Oakland, Airport Manager
- Mt. Hayes Air, Gary Hall, Owner/Operator
- National Park Service, Coal Creek/Yukon-Charley Rivers, Superintendent
- National Park Service, Stephanie Ford, McKinley/Stampede, Superintendent
- National Park Service, Nyssa Landers, Glacier Creek & Jakes Bar, Superintendent
- Native Village of Venetie Tribal Government, Eddie Frank, Venetie Airport Manager
- Native Village of Venetie Tribal Government, Jonathan Johns, Arctic Village Airport Manager
- Quicksilver Air, Inc., Rick Swisher, Owner/Director of Operations
- Shadow Aviation
- Suburban Air Express, Inc., Mark Meyer

- Swift Fork Air
- Temsco Helicopters, Inc.
- Trinity Air, Inc., Kristy & Karl Braun, Owners/Pilots
- U.S. Army HQ 172 Infantry Brigade, Allen AAF Management
- Wright Air Service, Everett Leaf (did provide input for 2020 NWATP Tech Memo)
- Yukon Air Service, Kirk Sweetsir, Owner/Pilot

Appendix 7: Broadband Connectivity at IATP Airports

Table 62 shows the broadband connectivity, as reported by the AASP Performance Measures and compared with how the airport's associated community is reported in the 2021 *Governor's Task Force on Broadband Final Report*. AASP Performance Measures do not capture the broadband status for all airports, and it is unknown what the AASP uses as a data source. The status does not always match between the AASP and the broadband task force report.

Broadband connectivity per AASP performance measures is reported as:

- **Yes:** Broadband connectivity is a performance measure for this airport classification, and the airport does have broadband connectivity
- **No:** Broadband connectivity is a performance measure for this airport classification, and the airport does not have broadband connectivity
- **Not a PM:** Broadband connectivity is not a performance measure for this airport classification and is not reported through the AASP
- **N/A:** The AASP has no performance measures for this airport classification

Broadband connectivity per the 2021 *Governor's Task Force on Broadband Final Report* is reported as:

- **25/3 Service:** The community is a Census-Designated Place (CDP) in Alaska's Division of Community and Regional Affairs (DCRA) community database, and it has internet connectivity of at least 25 Mbps download and 3 Mbps upload speeds with latency suitable for real-time applications
- **Unserved:** The community is a CDP in Alaska's DCRA community database, and it lacks internet connectivity of at least 25 Mbps download and 3 Mbps upload speeds with latency suitable for real-time applications
- **Not a CDP:** The community is not a CDP listed in Alaska's DCRA community database
- **No Pop:** The community is a CDP listed in Alaska's DCRA community database, but it has no population and is not included in the 2021 broadband task force report

*Table 62. Broadband Connectivity at IATP Airports*

Community	Airport	AASP Classification	Broadband Connectivity per AASP Performance Measures	Broadband Connectivity per 2021 Task Force on Broadband Report
Arctic Village	Arctic Village	Community Off-Road	No	Unserved
Beaver	Beaver	Community Off-Road	Yes	Unserved
Birch Creek	Birch Creek	Local NPIAS - Low	Not a PM	Unserved
Black Rapids	Black Rapids	Landing Strip	N/A	Not a CDP
Boundary	Boundary	Local NPIAS - Low	Not a PM	No Pop
Cantwell	Cantwell	Landing Strip	N/A	25/3 Service
Central	Central	Community On-Road	No	Unserved
Chalkyitsik	Chalkyitsik	Community Off-Road	No	Unserved
Chandalar Lake	Chandalar Lake	Local NPIAS - Low	Not a PM	Not a CDP
Chicken	Chicken	Local NPIAS - Low	Not a PM	Unserved
Chisana	Chisana	Local NPIAS - Low	Not a PM	Unserved
Chistochina	Chistochina	Community On-Road	Yes	25/3 Service
Chitina	Chitina	Local NPIAS - Low	Not a PM	25/3 Service
Circle	Circle City	Community On-Road	No	Unserved
Circle Hot Springs	Circle Hot Springs	Local NPIAS - Low	Not a PM	No Pop
Clear (Anderson)	Clear	Local NPIAS - Low	Not a PM	25/3 Service
Coldfoot	Coldfoot	Local NPIAS - Low	Not a PM	Unserved

Community	Airport	AASP Classification	Broadband Connectivity per AASP Performance Measures	Broadband Connectivity per 2021 Task Force on Broadband Report
Copper Center	Copper Center 2	Local Non-NPIAS	Not a PM	25/3 Service
Delta Junction	Delta Junction	Community On-Road	No	Unserved
Eagle	Eagle	Community On-Road	Yes	Unserved
Eureka Creek	Eureka Creek	Landing Strip	N/A	Not a CDP
Eva Creek	Eva Creek	Landing Strip	N/A	Not a CDP
Fairbanks	Chena River	Landing Strip	N/A	25/3 Service
Fairbanks	Gold King Creek	Local Non-NPIAS	Not a PM	Not a CDP (airport loc)
Fairbanks	Fairbanks Intl	Small Hub	Yes	25/3 Service
Fort Yukon	Fort Yukon	Regional Hub	No	Unserved
Glacier Creek	Glacier Creek	Landing Strip	N/A	Not a CDP
Gulkana	Gulkana	Community On-Road	Yes	25/3 Service
Healy	Healy River	Community On-Road	Yes	25/3 Service
Horsfeld	Horsfeld	Landing Strip	N/A	Not a CDP
Kantishna	Stampede	Landing Strip	N/A	Not a CDP
Kantishna	Kantishna	Local NPIAS - Low	Not a PM	Not a CDP
Lake Louise	Lake Louise SPB	Landing Strip	N/A	25/3 Service
Lake Louise	Lake Louise	Local NPIAS - Low	Not a PM	25/3 Service
Lake Minchumina	Minchumina	Local NPIAS - Low	Not a PM	Unserved
Livengood Camp	Livengood Camp	Local Non-NPIAS	Not a PM	Unserved
Manley Hot Springs	Manley Hot Springs	Community On-Road	No	Unserved
May Creek	May Creek	Local NPIAS - Low	Not a PM	Not a CDP
McCarthy	Jakes Bar	Landing Strip	N/A	Not a CDP (airport loc)
McCarthy	McCarthy	Local NPIAS - Low	Not a PM	25/3 Service
McKinley Park	McKinley Ntl Park	Landing Strip	N/A	Not a CDP
Minto	Minto Al Wright	Community On-Road	No	Unserved
Nenana	Nenana Muni	Local NPIAS - High	Not a PM	Unserved
North Pole	Bradley Sky-Ranch	Local Non-NPIAS	Not a PM	25/3 Service
Northway	Northway	Community On-Road	Yes	Unserved
Paxson	Paxson	Landing Strip	N/A	Unserved
Prospect Creek	Prospect Creek	Local NPIAS - Low	Not a PM	Not a CDP
Quail Creek	Quail Creek	Landing Strip	N/A	Not a CDP
Rampart	Rampart	Local NPIAS - Low	Not a PM	Unserved
Stevens Village	Stevens Village	Community Off-Road	No	Unserved
Summit	Summit	Local Non-NPIAS	Not a PM	Not a CDP
Tanacross	Tanacross	Landing Strip	N/A	25/3 Service
Tanana	Ralph M Calhoun Meml	Community Off-Road	No	Unserved
Tazlina	Tazlina/Smokey Lake	Landing Strip	N/A	25/3 Service
Tazlina	Tazlina	Local Non-NPIAS	Not a PM	25/3 Service
Tetlin	Tetlin	Local NPIAS - Low	Not a PM	25/3 Service
Tok	Tok Junction	Community On-Road	Yes	25/3 Service
Tolsona Lake	Tolsona	Landing Strip	N/A	25/3 Service
Totatlanika River	Totatlanika River	Landing Strip	N/A	Not a CDP
Venetie	Venetie	Community Off-Road	No	Unserved
Wiseman	Wiseman	Local NPIAS - Low	Not a PM	Unserved
Yukon Charley Rivers	Coal Creek	Landing Strip	N/A	Not a CDP

Appendix 8: Aerial Photo Log of IATP Airports by AASP Classification

Aerial photos sourced primarily from Form 5010 Airport Master Record safety data inspections, available through the AASP facilities database (https://internal.alaskaasp.com/Facilities/Default.aspx).

SMALL HUB FACILITIES
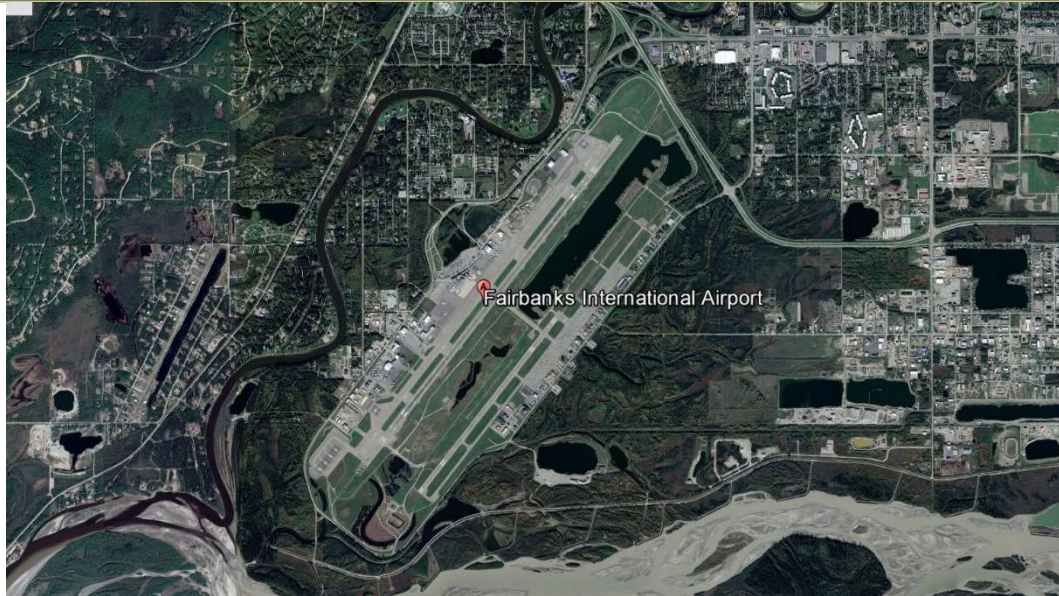
Fairbanks International (FAI) 2018

REGIONAL HUB FACILITIES

Fort Yukon (FYU) 2021

Arctic Village (ARC) 2020

Beaver (WBQ) 2020

Chalkyitsik (CIK) 2021

Ralph M Calhoun (TAL) 2023

Stevens Village (SVS) 2020

Venetie (VEE) 2023

Central (CEM) 2016

Chistochina (CZO) 2019

Circle City (CRC) 2022

Delta Junction (D66) 2020

Eagle (EAA) 2019

Gulkana (GKN) 2019

Healy River (HRR) 2020

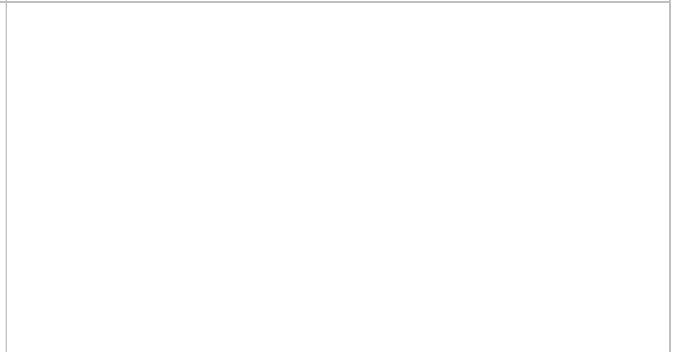Manley Hot Springs (MLY) 2015

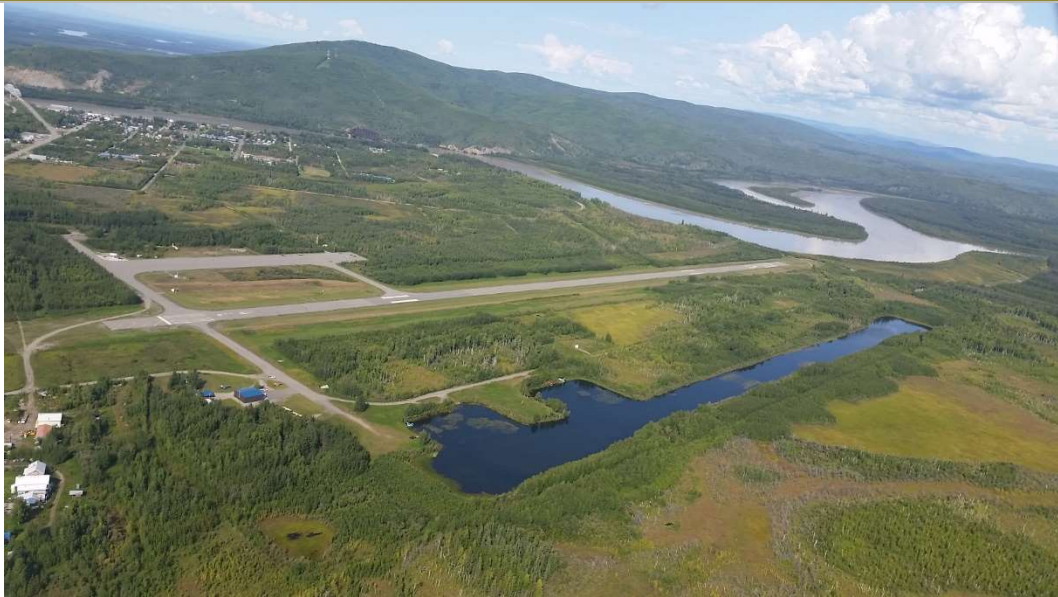## COMMUNITY ON-ROAD FACILITIES

Minto Al Wright (51Z) 2020

Northway (ORT) 2020

Tok Junction (6K8) 2020

LOCAL NPIAS HIGH-ACTIVITY FACILITIES

Nenana Muni (ENN) 2020

Birch Creek (Z91) 2021

Boundary (BYA) 2022

Chandalar Lake (WCR) 2020

Chicken (CKX) 2022

Chisana (CZN) 2022

Chitina (CXC) 2020

Circle Hot Springs (CHC) 2022

Clear (Z84) 2020

Coldfoot (CXF) 2017

Kantishna (5Z5) 2021

Lake Louise (Z55) 2019

May Creek (MYK) 2015

McCarthy (15Z) 2015

Minchumina (MHM) 2021

Prospect Creek (PPC) 2023

Rampart (RMP) 2020

LOCAL NPIAS LOW-ACTIVITY FACILITIES

Tetlin (3T4) 2015

Wiseman (WSM)

LOCAL NON-NPIAS FACILITIES

Bradley Sky-Ranch (95Z) 2020

Copper Center 2 (Z93) 2020

Gold King Creek (AK7) 2020

Livengood Camp (4AK) 2020

Summit (UMM) 2020

Tazlina (Z14) 2019

Black Rapids (5BK) 2020

Cantwell (TTW) 2020

Chena River SPB (2Z5) 2020

Coal Creek (L20) 2022

Eureka Creek (2Z2) 2020

Eva Creek (2Z2) 2020

Glacier Creek (KGZ) 2022

Horsfeld (4Z5) 2022

Jakes Bar (AK0) 2022

Lake Louise Seaplane Base (2020)

McKinley Ntl Park (INR) 2020

Paxson (PXK) 2022

Quail Creek (20K)

Stampede (Z90) 2013

Tanacross (TSG) 2020

Tazlina/Smokey Lake (5AK) 2020

Tolsona Lake (58A) 2020

Totatlanika River (9AK) 2006

Appendix 9: References

- *Alaska Department of Labor and Workforce Development. (2023). Research and Analysis: Labor Statistics & Alaska Economic Trends. Retrieved from https://live.laborstats.alaska.gov/*

- *Alaska Department of Transportation and Public Facilities. (2023, January). Alaska Statewide Long-Range Transportation Plan & Freight Plan - Alaska Moves 2050. Retrieved from https://alaskamoves2050.com/documents/*

- *Alaska Department of Transportation and Public Facilities. (2023, January). RFP #25-23-1-031, Denali Area Airport Planning Study. Retrieved from https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=209586*

- *Alaska Department of Transportation and Public Facilities. (2010, November). Interior Alaska Transportation Plan. Retrieved from https://dot.alaska.gov/stwdplng/areaplans/area_regional/iatp.shtml*

- *Alaska Department of Transportation and Public Facilities. (2022). Northwest Alaska Transportation Plan. Retrieved from https://dot.alaska.gov/stwdplng/areaplans/area_regional/nw.shtml*

- *Alaska Department of Transportation and Public Facilities. (2022, September). AKDOT&PF Statewide 10 Year Lighting Priority Assessment.*

- *Alaska Department of Transportation and Public Facilities. (2023, June) Upper Tanana Airport Planning Study Draft Report. Prepared by DOWL.*

- *Alaska Department of Transportation and Public Facilities. (2018, March). Yukon-Kuskokwim Delta Transportation Plan 2018. Retrieved from https://dot.alaska.gov/stwdplng/areaplans/area_regional/ykd.shtml*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2021, May 13). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2021-05-13.pdf*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2021, December 6). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2021-12-06.pdf*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2022, February 16). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2022-02-16.pdf*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2022, July 22). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2022-07-22.pdf*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2022, October 27). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2022-10-27.pdf*

- *Alaska Department of Transportation and Public Facilities, Aviation Advisory Board. (2023, February 15). Aviation Advisory Board Meeting Minutes. Retrieved from https://dot.alaska.gov/stwdav/documents/AAB/AABMinutes2023-02-15.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2011, June). Alaska Aviation System Plan Forecasts. Retrieved from https://www.alaskaasp.com/documents/phase-i-documents.aspx*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2023). Alaska Aviation System Plan Aviation Database. Retrieved from https://internal.alaskaasp.com/*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2022, May). Alaska Aviation System Plan Phase III Chapter 3 Classifications & Performance Measures. Retrieved from https://www.alaskaasp.com/media/4092/aasp3_classifications___performance_measures_report_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2021, Spring). Alaska Aviation System Plan Spring 2021 Newsletter. Retrieved from https://www.alaskaasp.com/media/4461/summer_23_newsletter_hi-res_for_web.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2021, Summer). Alaska Aviation System Plan Summer 2021 Newsletter. Retrieved from https://www.alaskaasp.com/media/3763/summer_21_newsletter_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2021, Fall). Alaska Aviation System Plan Fall 2021 Newsletter. Retrieved from alaskaasp.com/media/3806/fall_21_newsletter_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2022, Winter). Alaska Aviation System Plan Winter 2022 Newsletter. Retrieved from https://www.alaskaasp.com/media/3977/winter_22_newsletter_hi-res.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2022, Spring). Alaska Aviation System Plan Spring 2022 Newsletter. Retrieved from https://www.alaskaasp.com/media/4055/aasp_spring_22_newsletter_web_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2022, Summer). Alaska Aviation System Plan Summer 2022 Newsletter. Retrieved from https://www.alaskaasp.com/media/4119/summer_22_newsletter_hi-res_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2022, Fall). Alaska Aviation System Plan Fall 2022 Newsletter. Retrieved from https://www.alaskaasp.com/media/4152/fall_22_newsletter_hi-res_final.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2023, Winter). Alaska Aviation System Plan Winter 2023 Newsletter. Retrieved from https://www.alaskaasp.com/media/4180/winter_23_newsletter_hi-res.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2023, April). Alaska Aviation System Plan Rural Airport Lighting Fact Sheet. Retrieved from https://www.alaskaasp.com/media/4219/aasp_lighting_fact_sheet_for_web.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2017, November 1). Alaska Aviation System Plan Alaska Weather Equipment Needs Summary. Retrieved from https://www.alaskaasp.com/media/1897/ak_weather_bundle_update.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2016, May). Alaska Aviation System Plan Aviation Weather Reporting in Alaska. Retrieved from https://www.alaskaasp.com/media/1761/aviation_weather_reporting_in_alaska_optimized.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2017, August). Alaska Aviation System Plan Backcountry Airstrips of Alaska. Retrieved from https://www.alaskaasp.com/media/1867/aasp_backcountry_brochure_august_2017.pdf*

- *Alaska Department of Transportation and Public Facilities, Division of Statewide Aviation. (2021, June). Lighting Analysis for Rural Airports, A Component of the Alaska Aviation System Plan. Retrieved from file://dowl.com/j/Projects/38/50245-01/40Study/Aviation/Aviation%20Reference%20Material/rural_airport_lighting_study_final_20210630r1.pdf*

- *Denali Citizens Council. (2022, November 22). Doyon proposes a regional airport at Denali. Retrieved from https://denalicitizens.org/2022/11/an-airport-for-denali/*

- *Federal Aviation Administration. (1999-2002). AIP History. Retrieved from https://www.faa.gov/airports/aip/grant_histories*

- *Federal Aviation Administration. (2006, September). National Plan of Integrated Airport Systems (NPIAS) 2007-2011 Appendix A: List of Airports. Retrieved from https://www.faa.gov/airports/planning_capacity/npias/current/historical*

- *Federal Aviation Administration. (2022, September). National Plan of Integrated Airport Systems (NPIAS) 2023-2027 Appendix A: List of Airports. Retrieved from https://www.faa.gov/airports/planning_capacity/npias/current*

- *Federal Aviation Administration. (2022, September). National Plan of Integrated Airport Systems (NPIAS) 2023-2027. Retrieved from https://www.faa.gov/airports/planning_capacity/npias/current*

- *Federal Aviation Administration. (2022). FAA Aerospace Forecast Fiscal Years 2022-2042. Prepared by the FAA Forecasts and Performance Analysis Division (APO-100), Office of Aviation Policy and Plans. Retrieved from https://www.faa.gov/sites/faa.gov/files/2022-06/FY2022_42_FAA_Aerospace_Forecast.pdf*

- *Federal Aviation Administration. (2021, September). FAA Alaska Aviation Safety Initiative. Retrieved from https://www.faa.gov/alaska*

- *Federal Aviation Administration (2022, March). FAA Begins Adding Weather Reporting Stations Across Alaska. Retrieved from https://www.faa.gov/newsroom/faa-begins-adding-weather-reporting-stations-across-alaska*

- *Federal Aviation Administration. (2022, October). FY22-26 Flight Plan 21. Retrieved from https://www.faa.gov/general/flight-plan-21/fp21*

- *Federal Aviation Administration. (2023, June). National Based Aircraft Inventory. Retrieved from https://www.basedaircraft.com/BaCounts/Default.aspx*

- *Federal Aviation Administration. (2023, June 22). Surface Weather Observation Stations (ASOS/AWOS). Retrieved from https://www.faa.gov/newsroom/faa-begins-adding-weather-reporting-stations-across-alaskahttps://www.faa.gov/air_traffic/weather/asos*

- *Federal Aviation Administration Alaska Flight Service. (2021, May). Enhanced Special Reporting Service (eSRS) Satellite Assisted Flight Plan Tracking. Retrieved from https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/ato/Sat_Assist_FP_brochure_v21i.pdf*

- *Federal Aviation Administration. (2023). Airport Master Records. Retrieved from: https://adip.faa.gov/agis/public/#/public*

- *Joint Base Elmendorf-Richardson. (2023, March). Alaska Military Aviation Operations Special Use Airspace Map. Retrieved from https://www.jber.jb.mil/Portals/144/Info/AlaskanAirspaceInfo/PDF/AKAirspaceInfo-Special-Use-Airspace-Map.pdf*

- *Joint Base Elmendorf-Richardson. (2023, March). Alaska Military Operations Areas (MOAs) Special Use Airspace Information Service (SUAIS). Retrieved from https://www.jber.jb.mil/Portals/144/354%20RANS%20SUAIS%20Pamphlet_web_pdf_safe_1.pdf*

- *National Weather Service. (2023, June 22). NWS Alaska Weather Station List. Retrieved from https://www.weather.gov/aawu/stnlist*

- *State of Alaska. (2021, November). State of Alaska's Governor's Task Force on Broadband Final Report. Retrieved from https://gov.alaska.gov/home/broadband/*

- *U.S. Bureau of Economic Analysis. (2023). Personal Consumption Expenditures Price Index, U.S. Personal Consumption Expenditures | Billion USD | SAAR and Alaska Adjusted Index. Retrieved from https://www.bea.gov/data/personal-consumption-expenditures-price-index*

- *U.S. Department of Transportation. (2022, November). Subsidized EAS Report for Communities in Alaska. Retrieved from https://www.transportation.gov/office-policy/aviation-policy/essential-air-service-reports*

- *U.S. Department of Transportation Bureau of Transportation Statistics. (2019-2022). T-100 Domestic Market (U.S. Carriers). Retrieved from https://www.transtats.bts.gov/Fields.asp?gnoyr_VQ=FIL*

- *U.S. Department of Transportation **B**ureau of Transportation Statistics. (2019-2022). T-100 Domestic Segment (U.S. Carriers). Retrieved from https://www.transtats.bts.gov/Fields.asp?gnoyr_VQ=FIM*

- *U.S. General Services Administration. (2022, February 25). New Alaska Border Station to be Built Under Bipartisan Infrastructure Deal Signed by President Biden. Retrieved from https://www.gsa.gov/about-us/regions/region-10-northwest-arctic/region-10-newsroom/r10-press-releases/new-alaska-border-station-to-be-built-under-bipartisan-infrastructure-deal-signed-by-president-biden-02252022*