INTERIOR ALASKA
Transportation Plan

2025 Update

A Regional Component of Alaska's Statewide Long-Range Transportation Plan

TRANSPORTATION & PUBLIC FACILITIES
STATE OF ALASKA

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THE STATE of ALASKA
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July 28, 2025

Fellow Alaskans:

I am pleased to present the Interior Alaska Transportation Plan (IATP) Update, a forward-looking blueprint that outlines transportation needs and strategic recommendations for the next 20 years. This plan reflects our shared commitment to building a modern, resilient, and agile transportation system that connects communities, supports economic growth, and sustains Alaska's way of life.

The IATP was developed in close partnership with Tribes, local governments, communities, regional organizations, public agencies, and residents throughout the Interior. This collaboration ensures the plan captures the unique values, challenges, and opportunities of the region, while creating a shared vision for future progress.

As we look ahead, we do so with optimism and excitement. Interior Alaska is poised for significant transformation—with increasing industrial activity, the strategic importance of our state to national defense, the growing momentum behind a potential Alaska Gasline, and renewed global interest in Alaska's resources and logistics corridors. A sound and adaptable transportation system is essential to realizing this future, and the IATP helps chart the path forward.

While funding sources, regulatory environments, and priorities will evolve over time, the core recommendations and concepts in this plan will remain relevant. We encourage communities and stakeholders to use the IATP as a living resource—supporting local planning, enabling regional collaboration, and identifying opportunities for investment and partnership.

The plan is guided by our strategic investment areas—safety, economic vitality, state of good repair, resiliency, and sustainability—and provides a strong foundation for Interior communities to align with upcoming funding opportunities in future state and federal transportation initiatives.

Thank you to everyone who contributed time, feedback, and insight throughout the planning process. We are excited to work with you in continuing to shape Interior Alaska's transportation future.

Ryan Anderson, P. E.
Commissioner

ACRONYMS AND PHRASES

AADT	Annual Average Daily Traffic
AAM	Advanced Air Mobility
AASP	Alaska Aviation System Plan
ACUASI	Alaska Center for Unmanned Aircraft Systems Integration
ADA	Americans with Disabilities Act
AFB	Air Force Base
AHS	Alaska Highway System
AIP	Airport Improvement Plan
AK LNG	Alaska Liquified Natural Gas Project
Alcan LPOE	Alcan Land Port of Entry
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
AOPA	Aircraft Owners and Pilots Association
ARRA	American Recovery and Reinvestment Act
ARRC	Alaska Railroad Corporation
ASATP	Alaska Statewide Active Transportation Plan
ASOS	Automated Surface Observing System
AWOS	Automated Weather Observing System
CAV	Connected and Autonomous Vehicles
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CRV-RPO	Copper River Valley Regional Planning Organization
DAAPS	Denali Area Aviation Planning Study
DNR	Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
EV	Electric Vehicle
FAA	Federal Aviation Administration
FARLR	Fairbanks Area Rail Line Relocation
FAST Planning	Fairbanks Area Surface Transportation Metropolitan Planning Organization
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
FLAP	Federal Lands Access Program
FLTP	Federal Lands Transportation Program
FNSB	Fairbanks North Star Borough
Ft. Wainwright	Fort Wainwright Army Post
FY	Fiscal Year
GSA	General Services Administration
HSIP	Highway Safety Improvement Program
IAPs	Instrument Approach Procedures
IATP	Interior Alaska Transportation Plan
IIJA	Infrastructure Investment and Jobs Act
LRTP	Long-Range Transportation Plan
M&O	Maintenance and Operations
MARAD	United States Maritime Administration
Mat-Su	Matanuska-Susitna
MP	Mile Post
Need ID	Need Identification

ACRONYMS AND PHRASES

NHPP	National Highway Performance Program
NHS	National Highway System
NOFO	Notice of Funding Opportunity
NPIAS	National Plan of Integrated Airport Systems
NPS	National Park Service
PEL	Planning and Environmental Linkages Study
PLO	Public Land Order
ROW	Right-of-Way
RPO	Regional Planning Organization
RS2477	Revised Statute 2477
SSE	Scope, Schedule and Estimate
STBG	Surface Transportation Block Grant
STIP	Statewide Transportation Improvement Program
TAP	Transportation Alternatives Program
TCC	Tanana Chiefs Conference
Tech Memo	Technical Memorandum
Tech Memos	Technical Memoranda
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicles
USACE	United States Army Garrison Alaska – Fort Wainwright
USPS	United States Postal Service

LAYING THE FOUNDATION

1

1.1 PURPOSE OF THE INTERIOR ALASKA TRANSPORTATION PLAN

The Interior Alaska Transportation Plan (IATP) is a component of the Alaska Department of Transportation and Public Facilities' (DOT&PF) federally mandated statewide transportation planning process that is overseen by Alaska's governor. The Alaska DOT&PF is responsible for providing road maintenance, transportation planning and support, and management of aviation facilities. The DOT&PF also sets safety regulations, ensures environmental compliance, and provides project funding for community projects. In alignment with these responsibilities and part of DOT&PF's overarching mission to "keep Alaska moving" the IATP provides a framework for the DOT&PF to plan for, construct, and maintain the best possible multi-modal transportation system for Alaska. The DOT&PF accomplishes this through the development of the *Alaska Statewide Long-Range Transportation Plan*; supported by six, regionally focused transportation plans that includes the IATP, in addition to other mode-specific plans and special studies.

Why is the plan being updated?

Much has changed since the IATP was first written and published, including transportation funding and policy, the economics and demographics of the Region, and the condition of the transportation system itself. Some components have seen major improvements, whereas others are currently in greater need of improvements compared to 2010.

Additionally, the upcoming needs of and influences on the Region have evolved. New technologies, changes in community and transportation system user needs and priorities, evolving relationships between the modes used within the Region, potential economic developments, and other factors will impact the IATP Region's transportation system over the next 20 years.

This is an update to the Interior Alaska Transportation Plan adopted in 2010

What is the focus?

The focus of the IATP is on area specific transportation needs, such as movements between communities, both in and out of the IATP Region. It also addresses major local transportation needs that have widespread importance across the Region. The IATP is a 20-year regional multi-modal transportation plan that will guide future public investments in the transportation infrastructure of Interior Alaska through the year 2045. Table 1 identifies what the IATP Update can and cannot do.

Through public outreach, focused input from communities and transportation users, data collection, and existing conditions evaluation, the IATP planning process resulted in the identification of key issues and recommendations for communities within the IATP Region boundaries.

Table 1 Capabilities of the IATP Update

Capabilities of the IATP Update	
The IATP Update Can…	**The IATP Update Cannot…**
• Identify and describe the unique transportation characteristics and current setting of the IATP region and transportation system. • Set goals that guide the region's transportation needs and recommendations – in line with goals and objectives from higher-tier and partner plans, tailored to unique needs of the region • Describe trends and other factors that are projected to influence the needs of the region's transportation system over a 20-year planning horizon • Identify and capture an inclusive list of key transportation needs in all modes throughout the region for community and agency use in advocating for, planning for, programming, and funding improvements. • Recommend projects, programs, and policies of greatest regional significance as well as recommended funding and implementation strategies to guide near-term prioritization of transportation improvements that will provide the greatest benefit and achieve project goals.	• Change future land use • Design projects • Change the posted speed limit on the roads in the region • Guarantee a projects inclusion in statewide improvement programs: like the Statewide Transportation Program (STIP) or the Airport Improvement Program (AIP)

1.2 WHAT IS A REGIONAL LONG-RANGE TRANSPORTATION PLAN?

A regional long-range transportation plan specifically considers the transportation system within a distinct geographic region. It is developed in the context of higher-tier plans – which guide goals, objectives, policies, and funding priorities – and in consideration of partner plans and unique transportation needs of the region (Figure 1).

1.2.1 The Regional Long-Range Transportation Plan in Context

The regional planning process further develops the specific goals and priorities of the communities and transportation system users within the planning region. One key element that distinguishes regional long-range transportation plans from higher-tier plans is the level of public involvement and outreach employed in the development of regional long-range transportation plans.

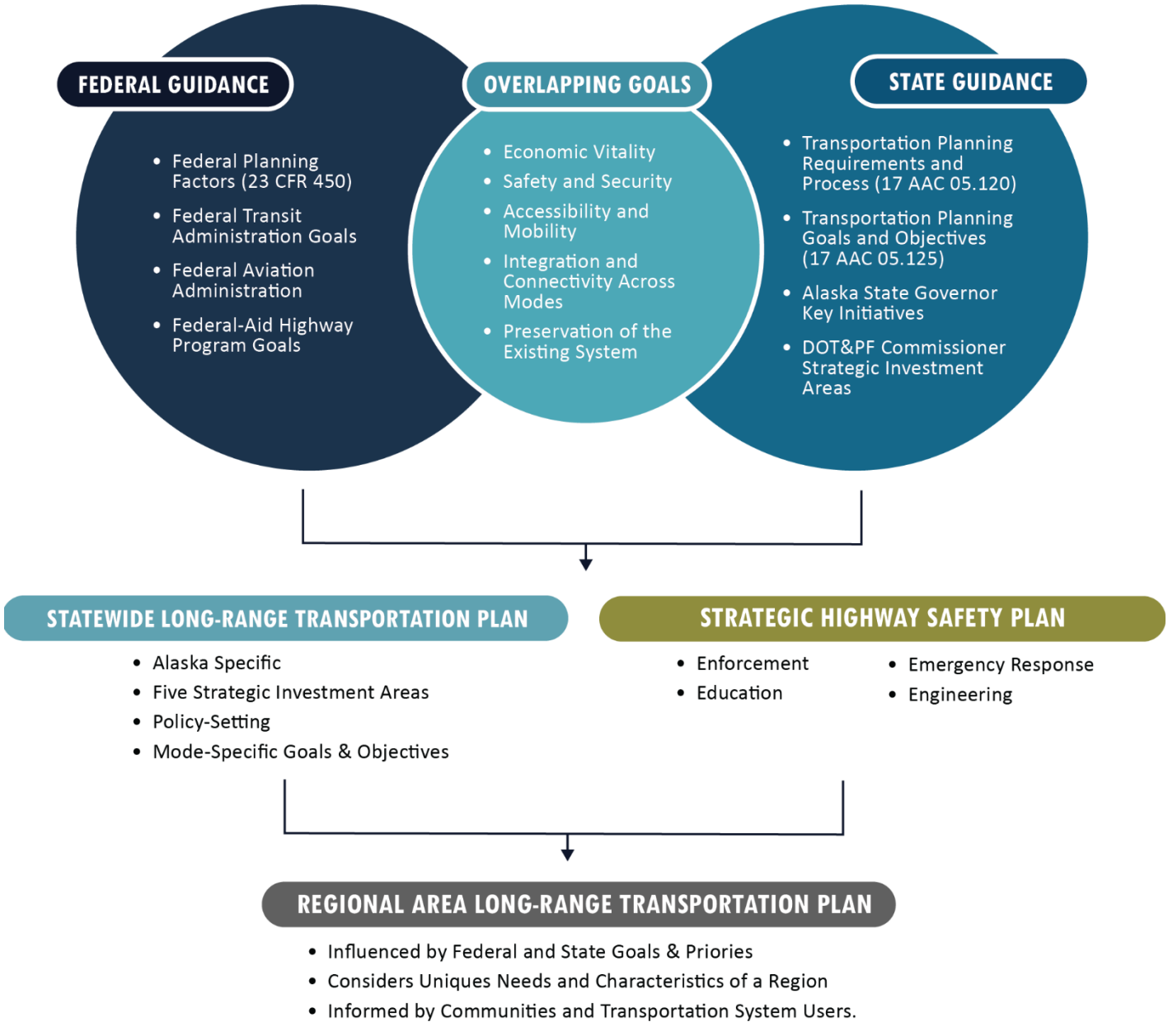


Figure 1 Transportation Plan Goals and Objectives Influences

1.2.2 Federal Transportation Planning Requirements

State transportation planning must satisfy federal requirements set forth in U.S. Code of Federal Regulations, Title 23 Section 450.200-450.226 (23 CFR 450.200-450.226). The federally mandated process specifies that each State shall carry out a continuing, cooperative, and comprehensive statewide transportation planning process (Figure 2) that provides for consideration and implementation of projects, strategies, and services that will address key transportation planning factors *(Appendix 1)*.The IATP update process includes reference to and reflection of the most current goals from each of these federal guidance sources and the Statewide Long-Range Transportation Plan, which are included in *Appendix 1*.

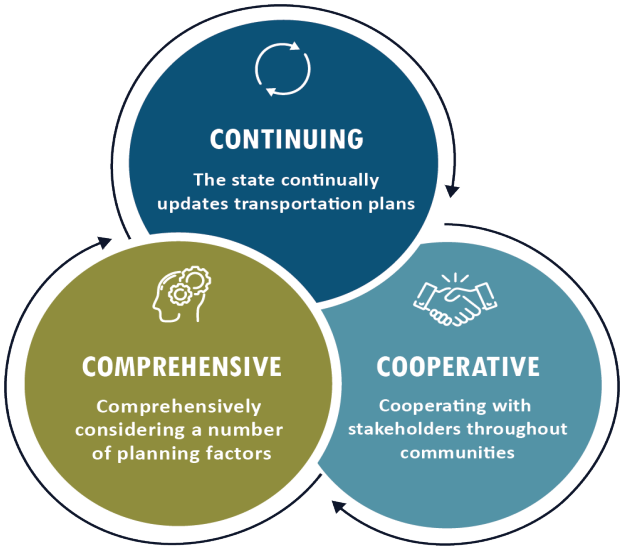


Figure 2 Federal Transportation Planning Approach

1.2.3 The Statewide Long-Range Transportation Plan

For planning context, the DOT&PF is responsible for considering – in its single *Statewide Long-Range Transportation Plan* – the same amount of geographic coverage as is considered in 22 separate state transportation plans elsewhere in the country. Due to the geographic size and variety of transportation needs throughout Alaska, the *Statewide Long-Range Transportation Plan* is an overarching policy document that is then supported by six regional LRTPs that more specifically consider transportation needs within regions of the state, one of which is the Interior Region.

As the parent plan to the IATP, the *Statewide Long-Range Transportation Plan* most directly informs the products of the IATP update. The *Statewide Long-Range Transportation Plan* presents a transportation vision for the state, and the goals, objectives, priorities, and recommendations of the IATP seek alignment with those in the *Statewide Long-Range Transportation Plan*. Statewide transportation planning goals are not found within just a single plan. The *Statewide Long-Range Transportation Plan* is a family of plans (Figure 3), which includes the policy plan, mode-specific plans, and special studies that consider important aspects of Alaska's transportation system (e.g., freight movement, highways, active transportation). *Appendix 2* includes an overview of the statewide plans used in the development of the IATP update and a summary of key considerations applicable to the IATP Region. In addition to the goals, objectives, and policies established in the statewide plans, five strategic investment areas (Figure 4) identified by the DOT&PF Commissioner are also prioritized.

Alaska's regional transportation plans are typically updated every ten years, while the overarching statewide plan is updated every five years per federal mandate. All planning documents are intended to be "living" documents with official adoption dates by the DOT&PF Commissioner.

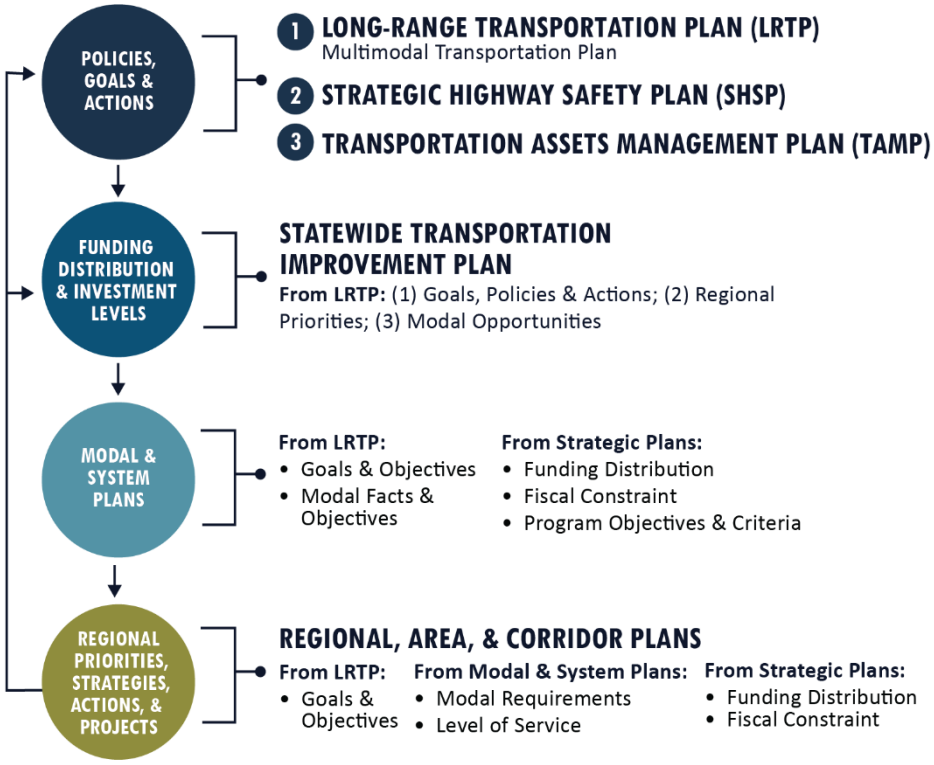


Figure 3 DOT&PF Family of Plans

MODERN: We use new ways of working to recruit, solve problems, share information with the public, and efficiently deliver transportation improvements.

RESILIENT: We build cross-functional teams, across regional boundaries, to deliver results faster. Our teams share information, collaborative, innovate to solve problems, respond to emergencies, and deliver projects.

AGILE: We partner with communities, private sector partners and other agencies to build transportation infrastructure for Alaskans. We leverage technology and implement alternative project delivery to accomplish our missions.

SAFETY: Safe and secure transportation system prevents crashes, injuries and deaths.

ECONOMIC VITALITY: Healthy and thriving multi-modal system that efficiently moves people, fuel, and freight, reducing costs and enhancing economic development.

STATE OF GOOD REPAIR: Reliable transportation system with seamless access across modes.

RESILIENCY: Agile and resilient transportation system that protects communities from extreme weather climate trends and natural disasters, which is able to adapt and recover when disruptions occur.

SUSTAINABILITY: Modern and sustainable transportation system that reduces the cost of energy, saves Alaskans money, and provides for a cleaner environment and reduced greenhouse gas emmisions.

RURAL
- Roads, Ice roads, Winter Trails, Pedestrian/Bicycle
- Rural Airports, AAM
- AMHS, Barge Services

URBAN
- Highways
- International Airport
- Pedestrian/Bicycle Trails

SURFACE CORRIDORS
- Highways
- Pedestrian/Bicycle Trails
- Multi-modal Connectivity

WATERWAYS
- AMHS, Barge Services
- Floatplane Docks
- Ports & Harbors

Figure 4 DOT&PF Strategic Investment Areas and Modes of Transportation

1.2.4 How We Got Here

The overall IATP Update was developed through three key parts of the planning process:

1. **Technical Memoranda.** Six (6) technical memoranda (tech memos) explore the transportation modes and key planning elements within the IATP Region. The plan update includes development of updated population projections and economic forecasts. The tech memos covering each mode provide a detailed analysis of the existing conditions, identification of issues and trends that are expected to influence transportation in the Region and set forth recommendations to consider in developing the final plan. The full collection of tech memos, listed below, are included in *Appendix 3, The Interior Alaska Transportation Plan 2024 Update, Technical Document.*
    - Population Projections and Economic Forecasts *(Appendix 3, Section 1)*
    - Aviation Transportation: Conditions, Issues, and Trends *(Appendix 3, Section 2)*
    - Surface Transportation: Conditions, Issues, and Trends *(Appendix 3, Section 3)*
    - Riverine Transportation System Analysis: Conditions, Issues, and Trends *(Appendix 3, Section 4)*
    - Winter Access: Conditions, Issues, and Trends *(Appendix 3, Section 5)*
    - Transportation Resiliency: Identifying and Prioritizing Risks to Interior Alaska's Transportation Infrastructure *(Appendix 3, Section 6)*
    - Funding & Implementation *(see the third element, below & Appendix 3, Section 7)*
2. **Public & Agency Engagement.** The planning team used collaborative public and agency engagement to gather input and feedback on the IATP Update. A working group consisting of members representing the following agencies were invited throughout the planning process to convene and discuss major milestones:

    Ahtna, Inc
    Alaska Power and Telephone Alaska Railroad Corporation Alaska State Legislature Alaska Trucking Association City of Tanana
    Copper River Native Association
    Copper River Valley Regional Planning Organization Council of Athabascan Tribal Governments Crowley
    Denali Borough Dot Lake Village
    Fairbanks Economic Development Council
    Fairbanks North Star Borough
    Fairbanks Area Surface Transportation Planning (FAST Planning)
    Fort Yukon Tribal Government Gakona Tribal Government Golden Valley Electric Association Healy Lake Village Council
    Native Village of Chitina Northway Tribal Council
    Tanana Chiefs Conference Tok Chamber of Commerce
    University of Alaska Fairbanks, Arctic Infrastructure Development Center

3. **Funding & Implementation Strategy.** To address the key issues identified in the IATP Update, strategies for funding and implementation were developed. The list of needs and recommendations is long, and the funding/ development pipeline requires that projects be thoughtfully programmed and evaluated to be included in future funding documents, such as the Statewide Transportation Improvement Program. A technical memorandum (tech memo) was developed to explore the details of funding and implementation opportunities by identifying priority investment areas and high interest projects. The tech memo is included in *Appendix 3, The Interior Alaska Transportation Plan 2024 Update, Technical Document,* and the key findings are presented within this summary.

1.2.5 Developing the Goals and Objectives

The planning team in coordination with the working group developed the goals and objectives for the IATP Update with consideration of federal transportation planning factors and goals, inclusion of *Statewide Long-Range Transportation Plan* goals and objectives, reflection on the goals set forth in the *2010 IATP*, and refinement based on community and transportation system user input. The identified goals provide broad statements about what we want to achieve for the IATP Region's transportation system. The objectives are specific and measurable statements about how we will achieve the goals.

STATE OF ALASKA TRANSPORTATION PLANNING GUIDANCE

17 AAC 05.120

The DOT&PF will provide for the following in the statewide transportation planning process

- Data collection and analysis
- Consideration of objectives set out in 17 AAC 05.125
- Coordination of [public
- participation] activities identified in 14 AAC 05.135
- The development of a range of transportation options designed to meet the transportation needs of passengers and freight and the safety of persons and property, including all modes and their connections, and
- Considerations of comments from the public and interested persons

17 AAC 05.125

The DOT&PF will consider goals and objectives that will further

- The economic vitality of the state
- The safety and security of users of the state's transportation system
- Accessibility and mobility options available to people and for freight
- The integration and connectivity of various modes of the state's transportation system
- The preservation of existing transportation systems
- Any metropolitan area plan developed under 23 USC 134 and 49 USC 5303-5306

The department will consider the concerns of interested persons and minimize any adverse environmental, economic, or social impacts of the goals and objectives upon any segment of the population.

ALASKA STATE GOVERNOR KEY INITIATIVES

DOT&PF COMMISSIONER STRATEGIC INVESTMENT AREAS

- Safety
- Economic Vitality
- State of Good Repair
- Resiliency
- Sustainability
  (as established in June 2023)

STATEWIDE LONG-RANGE TRANSPORTATION PLAN

- Alaska Specific
- Five Strategic Investment Areas
- Policy-Setting
- Mode-Specific Goals & Objectives

STRATEGIC HIGHWAY SAFETY PLAN

- Enforcement
- Education
- Emergency Response
- Engineering

REGIONAL AREA LONG-RANGE TRANSPORTATION PLAN

- Influenced by Federal and State Goals & Priories
- Considers Uniques Needs and Characteristics of a Region
- Informed by Communities and Transportation System Users.

1.3 2024 INTERIOR ALASKA TRANSPORTATION PLAN GOALS AND OBJECTIVES

Support the economic vitality of the State, metropolitan and non-metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency. Prioritize projects that support, protect, or enhance economic development.

OBJECTIVES

- **1A** Facilitate access to resources and energy development opportunities as often as possible in alignment with State and local priorities.
- **1B** Support Alaska Railroad Corporation improvements and expansion to facilitate economic development.
- **1C** Support access to and from rural communities and the State transportation system via roads, air, rail, and waterways for the movement of people and freight.
- **1D** Upgrade airport facilities for the design aircraft, appropriate level of instrument approach, and forecast demand.
- **1E** Minimize transportation system directional flow imbalance by supporting economic generators to move goods into and out of the interior region.
- **1F** Maximize the potential of scenic byway programs to increase tourism.
- **1G** Support the continued existence of backcountry airstrips, which serve an important role in the area economy as well as provide emergency landing areas.

Improve the overall Interior Regional transportation system to support the health, safety, and security of residents and visitors and all motorized and non-motorized travelers. This includes supporting the implementation of the National Highway Safety Improvement Program and the 4-E's (enforcement, education, emergency response, and engineering) identified in the statewide strategic highway safety plan.

OBJECTIVES

- **2A** Eliminate at-grade railroad crossings where practicable and provide adequate safety features where at-grade crossings are unavoidable.
- **2B** Continue to implement dust control measures where appropriate and practicable on transportation facilities.
- **2C** Work with villages to increase trail marking on inter-village trails and roads, where desired.
- **2D** Provide rest stops or waysides along highways at reasonable intervals, and provide appropriate notice (way-finding signage, etc.,) of the presence of rest stops and waysides.
- **2E** Promote projects that help to provide Interior communities with usable and safe access to clean water and basic sanitation.
- **2E** Evaluate highway vertical and horizontal alignments, accident statistics, and pavement design to address existing deficiencies in the transportation system.
- **2G** Promote projects that provide safe active transportation options across the Interior region.
- **2H** Identify and work to address potential conflicts between all road users including local, commercial, freight, and military transportation.
- **2I** Identify solutions to aviation problems such as improved weather information, navigational aids, and instrument approaches.

GOAL 3

ACCESSIBILITY AND MOBILITY FOR PEOPLE AND FREIGHT

Continue to provide accessibility and mobility options for both people and freight throughout the interior.

OBJECTIVES

- **3A** Continue to support transportation projects included in the Denali Access System Priority List.
- **3B** Continue partnerships with local Tribal governments and Regional Planning Organizations.
- **3C** Encourage National Scenic Byway System designation to increase funding opportunities for highway improvements and enhancements.
- **3D** Recommend appropriate inclusions and exclusions of airports in the National Plan of Integrated Airport Systems (NPIAS).
- **3E** Maximize the use of competitive discretionary funding streams to support development and improvement of transportation infrastructure in the Interior.
- **3F** Support upgrades to roads, bridges, barge landings, rail, and airports to meet industry needs, allowing for the efficient movement of people and goods.
- **3G** Support public and human services transportation programs to improve accessibility and mobility for communities in the Interior through up-to-date statewide transit planning efforts.

GOAL 4

PRESERVE AND ENHANCE EXISTING TRANSPORTATION SYSTEM

Emphasize preservation and enhancement of the existing transportation facilities to prolong their life.

OBJECTIVES

- **4A** Implement programs to address deficient highways and bridges.
- **4B** Improve pavement structures to reduce the need for seasonal weight restrictions.
- **4C** Promote access management strategies along State owned highway corridors.
- **4D** Promote land use compatibility and unobstructed airspace around airports to maintain safe operating.
- **4E** Support upgrades to roads, bridges, barge landings, rail, and airports to meet industry needs, allowing for the efficient movement of people and goods.
- **4F** Promote airfield system preservation projects (i.e., surface and lighting) and surface preservation projects which enhance safe operating conditions and allow for future growth.
- **4G** Leverage federal funding sources to support the preservation and maintenance of existing infrastructure, prioritizing safety, cost efficiency, and long-term asset longevity in alignment with State transportation goals

GOAL 5

INTERMODAL CONNECTIVITY

Provide efficient and cost-effective regional transportation facilities that promote connection between modes and support multiple transportation modes. Promote efficient transportation system management and operation, and enhance the integration and connectivity of the system.

OBJECTIVES

- **5A** Use "life cycle costs" financial analysis to determine the trade-offs in capital investments to minimize ongoing operating and maintenance cost
- **5B** Maintain or acquire rights-of-way for future access corridors.
- **5C** Support multimodal connectivity projects for people and freight.
- **5D** Support transit projects within and between Interior communities and areas outside the region.
- **5E** Review gaps and overlaps in service area coverage in the system of public use airports; identifying minimum facility and service improvements needed for airports, based on their roles within the system.

1.4 TRANSPORTATION RESILIENCY

The consideration of resiliency in transportation planning is required by federal legislation. However, more than just satisfying a federal mandate, incorporating risk and resiliency considerations into planning, programming, and project development is becoming increasingly important to ensure the integrity of Alaska's transportation systems. Resiliency is one of the IATP Region's top priorities, as identified through the *Statewide Long-Range Transportation Plan* efforts. The goal of resiliency requires an assessment of risk and investment in solutions to develop a transportation agency and system that will adapt to and recover from the effects of climate change, natural disasters, and other disruptions. Each modal analysis considered resiliency of infrastructure and the movement of people and goods.

Risks or Hazards to the IATP Area:

- Flooding and erosion
- Ice jams
- Earthquake
- Ground failure
- Severe winter weather
- Wildland fires
- Permafrost degradation

A tech memo was prepared specifically to discuss risk and resiliency throughout the IATP Region *(Section 6 of the Technical Document in Appendix 3)*. The development of the *Alaska Resilience Improvement Plan* is underway, and the resiliency and risk analysis conducted as part of the IATP will provide insight and information that will assist in the efforts to finalize that statewide plan. The goal for communities and infrastructure located within the IATP Region is to reach a functional level of resiliency, preparedness, and hazard mitigation.

No formal policies or evaluation criteria concerning resiliency are set forth by the IATP update. With the Alaska Resilience Improvement Plan underway, it is important for the detailed analysis contained in the Transportation Resiliency Memo *(Section 6 of the Technical Document in Appendix 3)* to inform the statewide plan. At a foundational level, improvements to any component of this Region's transportation system improve resiliency. Resiliency is improved by enhancing the multimodal infrastructure to create multiple modes of reliable access and ensuring the existing infrastructure is built to and operating at its highest level of functionality. Improving riverine infrastructure would create a reliable alternative mode of access to communities that may only have one reliable access point (typically the airport) currently. Ensuring that the highway system is operating at its highest level of functionality, with infrastructure in a state of good repair, braces the system against risks. Constructing airports to recommended lengths and standards provides a service level to meet community and agency needs if another mode is compromised (e.g., wildfires or flooding limiting road access).

Most of the communities in the IATP Region are high risk, with high social vulnerability, and with very low ability to prepare, adapt, and rebound from changing conditions. Approximately half (30 of 61) of the communities or Tribal entities within the IATP Region have developed their own hazard mitigation plans.

In recent years, hazards to the IATP Region have occurred and impacted communities and infrastructure with increasing frequency and severity. Being unable to control or specifically predict these natural phenomena, adoption and implementation of hazard mitigation strategies are essential. Hazards, at-risk infrastructure, and mitigation strategies in the IATP Region were identified through a combination of Federal Emergency Management Agency (FEMA) assessments, the University of Alaska Fairbanks Scenarios Network for Alaska + Arctic Planning assessments, community hazard mitigation plans, and an IATP Resiliency Working Group.

Current transportation infrastructure resiliency efforts are built into planning efforts from various state departments, federal agencies, and local government agencies. These efforts include state, local and Tribal hazard mitigation plans educational outreach, and on-going mitigation strategy implementation. The key to executing an effective resiliency strategy for DOT&PF infrastructure includes elevated and continued partnerships with key organizations, focused risk mitigation strategies appropriate for the community's infrastructure risk level, and consideration of resiliency in statewide action programs.

1.5 ENGAGING THE REGION

Public and agency engagement for the IATP Update is based in providing opportunities for all stakeholders to be informed and provide active participation in the project while ensuring all relevant Federal, DOT&PF, and local government requirements are met. The DOT&PF is required by federal agreement to include disclosure regarding Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act (ADA) of 1990 compliance as part of agency outreach and public involvement.
The following language provided by the DOT&PF reflects this compliance and is used for presentation materials and displays throughout the planning effort.

Stakeholder input was sought for:

- Vision, goals, and objectives
- Surface transportation, recreation, and aviation issues and needs
- Resiliency
- The Draft Update

"No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

"DOT&PF complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who need auxiliary aids, services, and/or special modifications should contact DOT&PF Public Involvement Representative at 907.562.2000 or via a Telephone Device for the Deaf at 711."

Comments received throughout the planning process via email, mail, verbal, or in writing were distributed to the project team and archived in a project correspondence/comment log.

1.5.1 Outreach

It is important to have a regional transportation system that facilitates social and economic opportunities through the provision of access to affordable and reliable transportation options while understanding that differing circumstances require different solutions based on community context. During the planning process, the focus was on providing and maintaining transportation accessibility throughout the region. The outreach conducted by the planning team provided opportunities for all community members to give feedback on whether their needs were being adequately met by the transportation system. The IATP Update outreach process promoted opportunities for the public to contribute to the development of transportation policy guidance and the identification of transportation needs and priorities within the IATP Region. Initial outreach and engagement for the IATP update began in the spring of 2023, which included the identification of stakeholders, the development of a working group and the establishment of a project website.

Primary Indicators for Transportation Accessibility

- Over the age of 65
- Youth (under the age of 18)
- Racial or ethnic minority
- Those living with disabilities or below the poverty line
- No vehicle access

Project Website

An ADA compliant project website was created to house the information pertinent to the planning process, including the plan description, map of the planning Region, a current schedule, upcoming meetings and events, frequently asked questions, technical memoranda, and information on contacting the planning team. Additional engagement with the public was conducted with the use of social media, guiding users to visit the project website.

StoryMap

With the use of ESRI ArcGIS StoryMaps, an interactive, multi-media content page that includes content on the overall and specific features of the IATP Update. Features of the StoryMap allowed for stakeholders to provide public comment using an interactive map.

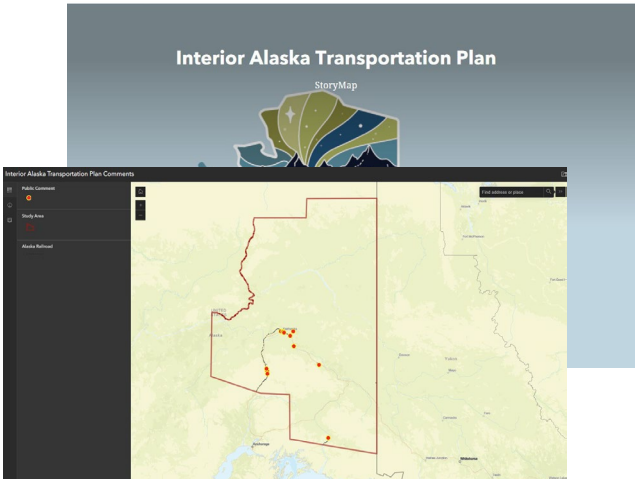


Figure 6 IATP Website and StoryMap

Open Houses

The planning team conducted a series of in person and virtual open houses. The first round of open houses in 2023 focused on gathering support data and informing the Region communities about the IATP Update, while the second round in early 2025 focused on providing an opportunity for public review and feedback of the draft plan.

Open Houses for planning projects are publicly advertised events that invite community members and interested parties to learn more about the planning process gain insight on the progress of a plan and provide feedback to the planning team. These may be held virtually or in-person

• Round One

The open houses provided an opportunity to gather data and inform the Region's communities. The meetings were conducted in a roadshow format during May 2023. Communities visited included Healy, Fairbanks, Glennallen, Delta Junction, and Tok. Collectively, this effort reached 112 individuals across the IATP Region and garnered input on specific community needs and interests. The planning team hosted an additional open house in Minto in August of 2023. The Minto open house hosted 20 community members.

• Round Two

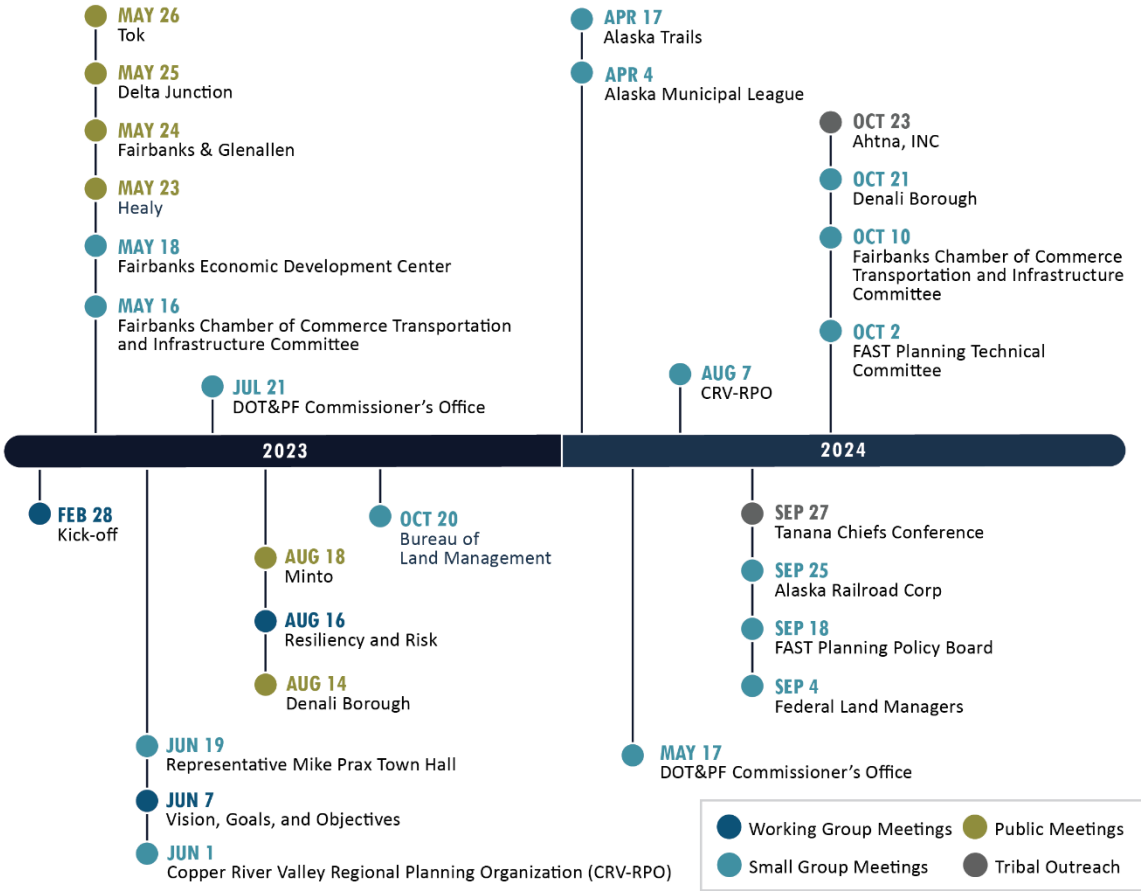
The second round of open houses were held in May/June and were conducted in a roadshow format similar to the first round of open houses. The second round of open houses were conducted in Fairbanks, Glennallen, Delta Junction, Healy, and Fort Yukon. This effort garnered feedback from communities on the draft IATP that led to productive and community focused updates.

Working Groups

A working group comprised of various industry representatives, trade organizations, tribal councils, and local government representatives was formed to provide an opportunity for more detailed discussion and planning to occur with stakeholders that both work and live within the IATP Region. The working group meetings focused on kicking off the plan update, identifying plan goals and objectives, resiliency, and the draft IATP Update.

Small Group Meetings

The IATP Update overlapped with numerous other state and regional planning efforts, such as the STIP. To reduce the possibility of stakeholder fatigue, targeted small group meetings were used to allow for stakeholders and technical advisors to have more informal and personal interactions with the planning team. Small group meetings focused on providing an overview of the plan, updates, next steps, and prompting continued feedback.



1.5.2 Tribal Coordination

Tribal outreach and coordination across the State are critically important for cultural, social, environmental, and economic reasons. The IATP Region is home to 24 federally recognized tribes and 22 Alaska Native Corporations, identified in Table 2 on the next page. Each of these Federally Recognized Tribes have their own distinct traditions, history, and knowledge of the area, Figure 7 includes the historical cultural boundaries for the State with an outline showing where the IATP boundary overlaps various Athabascan communities.

Effective outreach to these communities fosters collaboration while respecting their sovereignty and ensures their voices are central in decision-making. The inclusion of this outreach, coordination, and engagement strengthens relationships between state, federal, and tribal entities, helping to create a more inclusive planning process for all Alaskans.

The IATP outreach included tribal coordination by ensuring tribal representatives received updates and notice prior to all community engagement activities that took place. In addition, members of the planning team attended the Tanana Chiefs Conference 2024 Annual Symposium, which brings together various communities throughout the IATP Region in Fairbanks, to share updates and information on the IATP Update efforts.

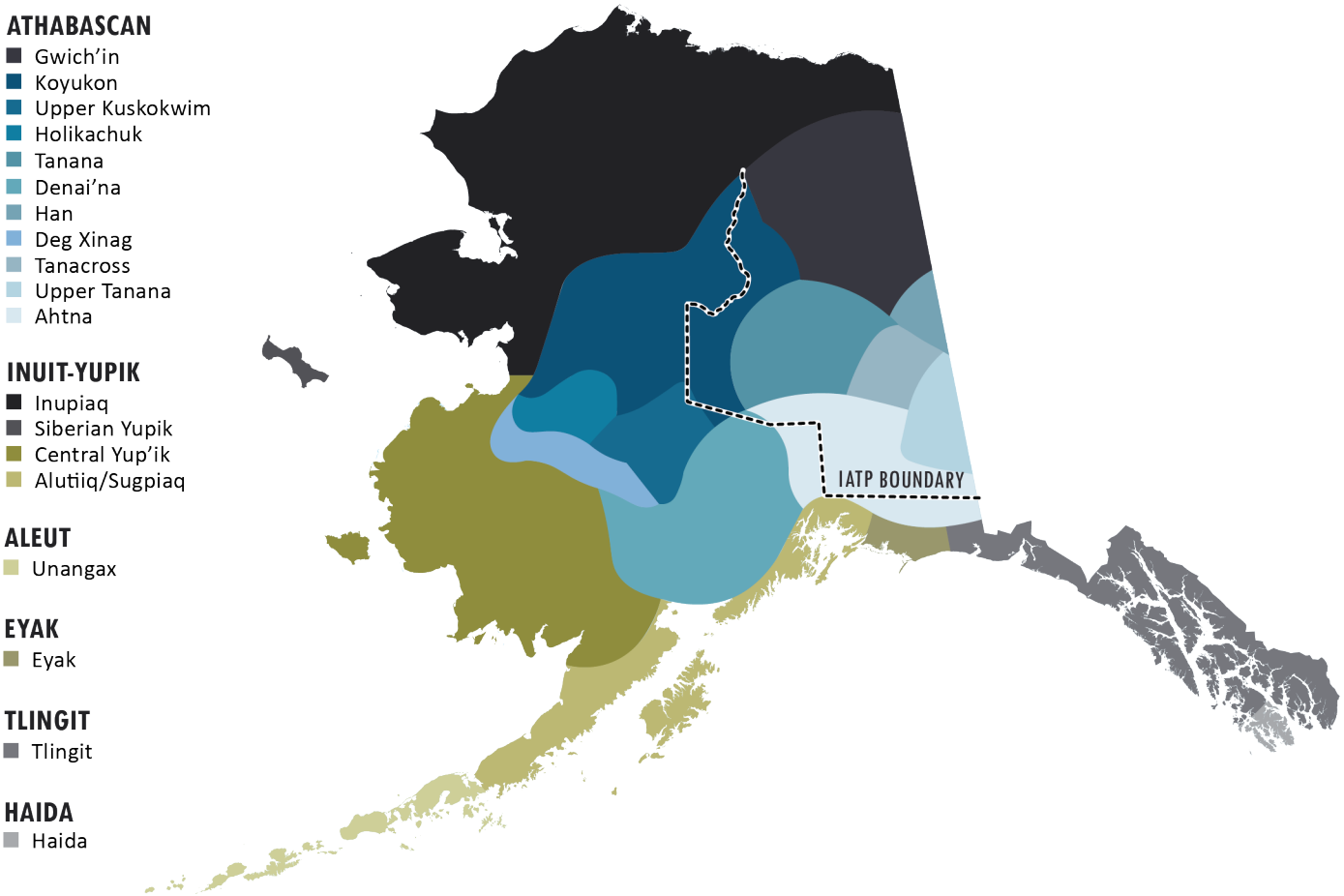


Figure 7 Historical Map of Native Alaskan Communities

Table 2 Federally Recognized Tribes and Alaska Native Corporations in the IATP Region

Federally Recognized Tribes	
Arctic Village Traditional Council	Beaver Village Council
Birch Creek Tribe	Canyon Village Council
Ch'eeshna Tribal Council	Chitina Traditional Indian Village Council
Circle Native Community, dba, Circle Tribal Council	Denduu Gwich'in Tribal Council
Dot Lake Village Council	Eagle IRA Council
Gakona Village Council	Gulkana Village Council
Healy Lake Traditional Council	Mentasta Traditional Council
Native Village of Cantwell	Native Village of Fort Yukon
Native Village of Minto	Native Village of Tanana
Native Village of Venetie Tribal Government	Nenana Native Traditional Council
Native Village of Venetie Tribal Government	Tanacross IRA Council
Northway Village Council	Tetlin Village Council
Tazlina Village Council	
Alaska Native Corporations	
Ahtna, Inc	Doyon, Ltd
Bean Ridge Corporation	Beaver Kwit'chin Corporation
Chalkyitsik Native Corporation	Chitina Native Corporation
Danzhit Hanlaii Corporation	Dinyee Corporation
Dot Lake Native Corporation	Gana-A'Yoo
Gwitchyaa Zhee Corporation	Hungwitchin Corporation
Mendas Cha-ag Native Corporation	Minto Development Corporation
Northway Native Corporation	Seth De-Ya-Ah Corporation
Tanacross, Inc	Tetlin Native Corporation
Tihteet'aii, Inc	Toghotthele Corporation
Too-gha, Inc	Tozitna, Ltd
Tanana Chiefs Conference (TCC)	

1.6 A LOOK INTO THE INTERIOR ALASKA PLANNING REGION

The Interior Alaska Transportation Plan Region encompasses a large area that is made up of different communities that have different priorities and challenges. To build a fully informed background of the Region the planning team examined past and current planning documents, the communities within the Region, as well as current and projected population and economic drivers.

1.6.1 The Plans That Shaped the Interior Alaska Transportation Plan Update

Statewide and regional plans played an integral part in developing the IATP Update. Table 3 identifies the overarching plans and studies that aided in informing, shaping, and growing the IATP Update. Not included in Table 3 are the aforementioned plans in Section 1.2.1 of this document, which includes the Statewide Long-Range Transportation Plan. In addition to the plans included in Table 3 and plans such as the *Statewide Long-Range Transportation Plan*, many community level plans were reviewed and provided additional context for the Region. These plans include community plans, tribal transportation plans, and hazard mitigation plans. The majority of community and tribal transportation plans were identified through the Tanana Chiefs Conference, which provides technical resources to many of the Native communities in the IATP Region.

Table 3 Statewide and Regionally Significant Plans

Plan	Year	Agency	Description
Interior Alaska Transportation Plan	2010	DOT&PF	The predecessor to this plan update. Written to support Alaska DOT&PF's 2008 statewide Long-Range Transportation Plan (LRTP) Let's Get Moving 2030.
Alaska Regional Ports	2011	United States Army Corps of Engineers (USACE)	Written in response to the first Alaska Regional Ports Conference in 2008, identifying the need for ongoing collaboration, comprehensive planning, and leadership to best meet Alaska's current and future needs. This study is part of a multiphase research effort by the DOT&PF and USACE.
Alaska State Rail Plan [draft]	2016	DOT&PF	Formulates a vision for rail in Alaska in addition to guiding passenger and freight planning activities and project development plans for the railroad over a 20-year horizon.
Alaska Statewide Active Transportation Plan	2019	DOT&PF	Provides the state of Alaska with an updated approach to active transportation planning which was detailed in the original 1994 plan. The plan update focuses on improving safety, accessibility, and promoting healthy lifestyles in Alaska communities.
Regional Transportation Strategy for Rural Villages Located in Alaska's Interior	2019	Tanana Chiefs Conference	Identifies four transportation goals for the Tanana Chiefs Conference region: maintenance, construction, safety, and dust control.
Report Card for Alaska's Infrastructure	2021	American Society of Civil Engineers	Identifies an overall rating for Alaska's transportation infrastructure (C-). Includes key solutions for improving transportation infrastructure in Alaska by focusing on leadership and action, investment, and resilience.
Twice Damaged Assets Report	2021	DOT&PF	Identifies a list of locations in Alaska where Emergency Repair funding was spent on NHS and Non-NHS routes between January 1997 and December 2019.
Alaska Aviation System Plan (AASP)	Continuous	DOT&PF	The AASP is guided by the Federal Aviation Administration and is key to supporting the statewide LRTP. The ASSP Identifies airport improvement needs, sets funding priorities, proposes new and updated aviation policy, and facility existing conditions.
Tanana Chiefs Conference (TCC) Comprehensive Economic Development Strategy	2022	TCC	Identifies ways to strengthen the regional economy for TCC communities.

1.6.2 The Region Today

As described in Section 1.2.3, the Interior Region is one of six DOT&PF long-range transportation planning regions in Alaska (Figure 8). Each region is distinguished – for transportation planning purposes – by the types of communities, the transportation modes used, and the economic factors within the region. The Interior Region holds urban, rural, and remote rural communities. The primary modes of transportation used to access the diverse collection of communities include essentially all of them, except Alaska's Marine Highway System. The Region includes highways, local roads, railroad, airports, waterways, trails and winter trails, and active transportation routes that form the overall multi-modal transportation system and connect the Region's communities to each other and to places beyond the IATP Region's boundaries. Major economic influences include mining and mineral access, tourism, the military, and subsistence activities. When evaluating transportation needs for the IATP Region, the diversity of communities and modes creates unique complexity, especially compared to other regions of the state which typically hold more similarly situated communities (predominantly remote/roadless) and fewer primary modes of transportation.

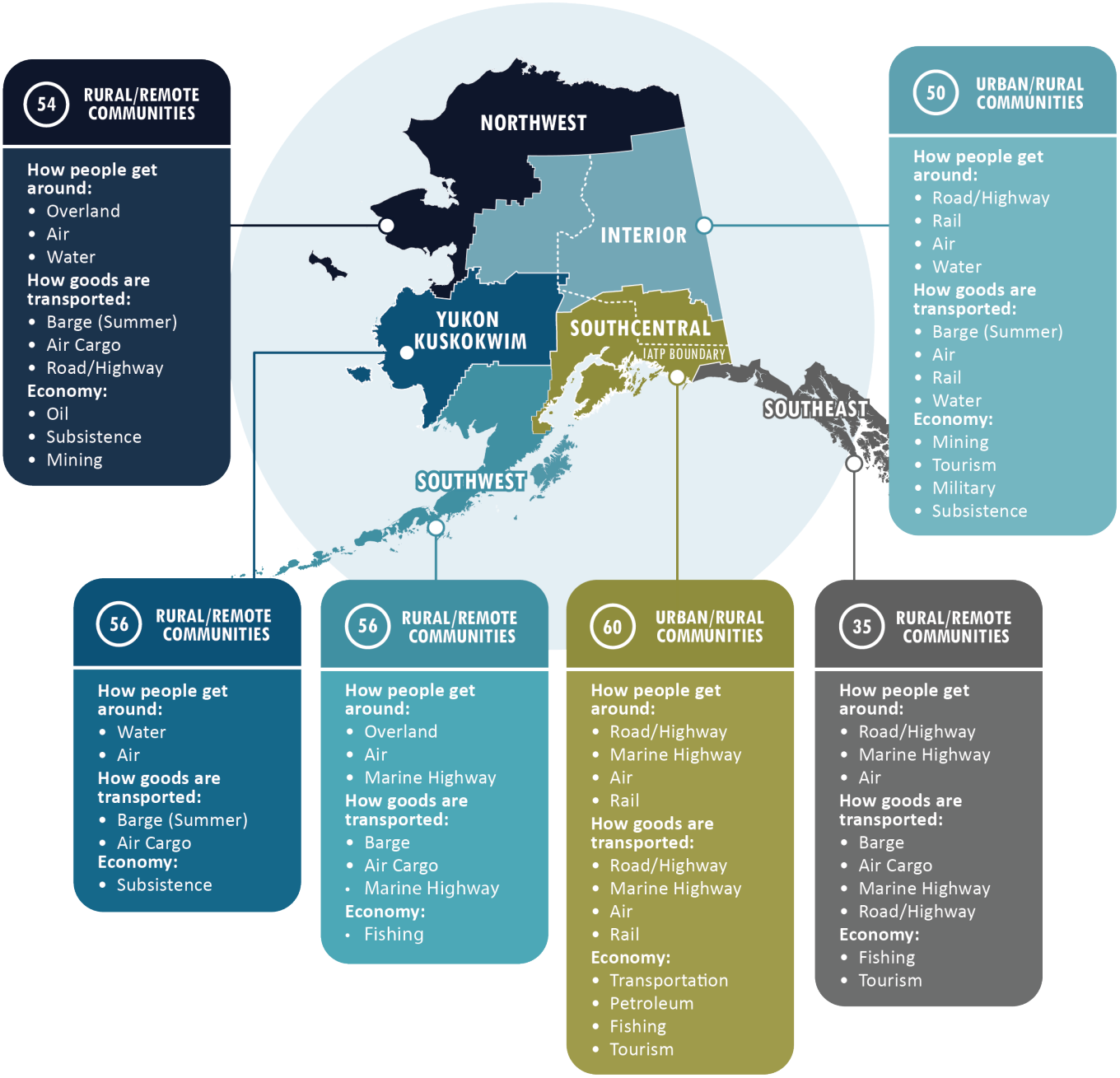


Figure 8 DOT&PF Long-Range Transportation Planning Regions

1.6.3 The Communities of the IATP Region

The *Statewide Long-Range Transportation Plan* identifies approximately 50 urban and rural communities in the Interior Region. Through the IATP planning process, a total of 58 communities were identified. These communities are composed of census designated places, the Fairbanks North Star Borough, and the Denali Borough. The Interior Region's communities range from the state's second largest city (Fairbanks), which is connected by highway, rail, air, and waterway; to remote, roadless communities like Venetie, which relies almost exclusively on its airport for year-round transportation access. The IATP Region, itself, is larger than the combined area of the 11 smallest U.S. states. If it were an individual state, it would be the fifth largest in the country. Just as the state has been divided into planning regions to provide more specific and tailored consideration of each region's unique circumstances and needs, the IATP Region is considered by sub-regions (Figure 9, see next page) so that issues, needs, and recommendations can better be defined for the communities and transportation system users most closely affected.

The sub-regions defined in this IATP update are intended to fit approximately into the state's proposed framework of Regional Planning Organizations.[i] The DOT&PF is seeking to expand capacity for planning and securing funding for projects through the formation of cooperative community partnerships through a pilot program encouraging Regional Planning Organizations throughout the state. This pilot program has a focus on facilitating community-based transportation planning and building strong partnerships between DOT&PF and communities.

The power and potential of Regional Planning Organizations (RPO) lies in their ability to have local groups work together to decide on local transportation priorities and coordinate with the DOT&PF on moving through the planning, funding, and implementation process. Local transportation planning would feed into DOT&PF's plans and funding programs, but the regions would have a voice in the transportation planning process.

Alaska's RPO Pilot Program is helping to define what RPOs in Alaska are, how they operate and how coordination with the DOT&PF will be implemented.

"Alaska Legislature Fiscal Year 2022 Capital Budget Language: 'It is the intent of the legislature that the Department of Transportation and Public Facilities increase consultation and collaboration with local municipalities, including by establishing Regional Transportation Planning Organizations, to advance the identification and planning for locally driven projects where there is both interest and capacity.'"

The cost to construct the long list of transportation needs (statewide and within any region) is not the only hurdle to accomplishing improvement work. The effort to plan, identify funding, and pursue funding for any project takes time and expertise. The DOT&PF alone does not have the capacity to take on the entire collection of needs, and many smaller sub-regions, boroughs, communities, and tribes do not have enough staff or staff with the necessary experience to conduct this type of work.

Alaska's first Region Planning Organization, the Copper Valley Regional Planning Organization, can be found in the Copper River Sub-Region. A complete overview of all the sub-regions for the IATP Region is included in Figure 9.

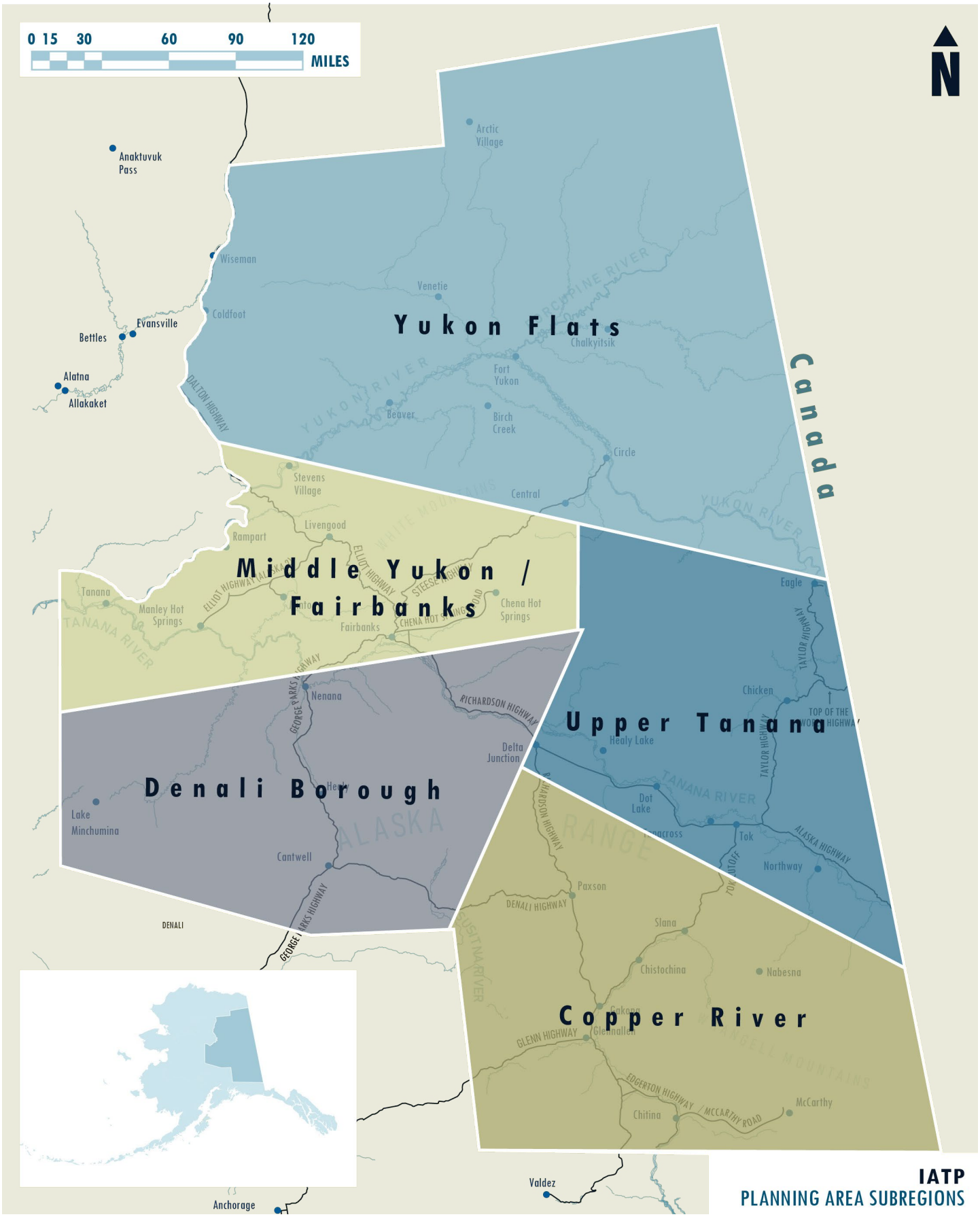


Figure 9 IATP Region Subregions

1.6.4 The Impacts of the Mining and Oil and Gas Industries on the IATP Region

When thinking about the communities of the IATP Region, it is important to consider the roles of the mining, oil and gas industries have in shaping the Region.

Mining

The IATP Region is home to three producing mines and one advanced exploration site. These mines and the exploration site along with the minerals produced and estimated number of employees are included in Table 4.

Table 4 Active and Potential Mining Activity in the IATP Region

Mine, Location	Mineral(s) Produced	Employment	Significant Facts
Fort Knox, Fairbanks	Gold	Approximately 725 employees and 170 onsite contactors	• Alaska's largest producing gold mine
POGO, Delta Junction	Gold	Approximately 320 employees	• Eighth largest gold producer in the United States
Usibelli, Healy	Coal	Approximately 110 employees	• The oldest mine in Alaska with continuous operations since its first production in 1943. • The only coal mine in the State. • Fuels approximately 29 percent of Interior Alaska's electricity.
Livengood Advanced Exploration, Livengood	Gold	Potential to provide 330 production jobs	• Pre-feasibility study completed in 2017

Oil and Gas

For many years, the State of Alaska has been ranked among the top oil producers in the nation, with much of the oil production occurring on the North Slope before traveling south to Valdez via the Trans-Alaska Pipeline System. This ranking as one of the top oil producers in the nation has faltered somewhat with the maturation of the State's fields, although new fields coming online and technological advances in the industry help to mitigate this effect. The production and movement of oil is essential to the way of life for many in Alaska, seeing as in 2024, petroleum liquids fueled 15 percent of the State's electricity generation at utility-scale power plants while diesel-fueled generators produce electricity in many rural communities.[ii] According to the 2023 American Community Survey one-year estimates, approximately three out of every ten households in Alaska rely on fuel oil, kerosene, or propane for heat.

Future of Oil and Gas in Alaska and the IATP Area

Several global and local events have reshaped priorities and considerations, including Executive Order 14153 and the Department of Interior Secretary Order 3418, both titled "Unleashing Alaska's Extraordinary Resource Potential". These Executive Orders include the revocation of withdrawals along the Trans-Alaska Pipeline Corridor and the Dalton Highway north of the Yukon River to allow for the conveyance of these lands to the State of Alaska. This action helps to move forward the proposed Ambler Road and the Alaska Liquified Natural Gas (AK LNG) Pipeline Project, both projects are expected to increase job opportunities and encourage economic growth in Alaska. At completion, the AK LNG Pipeline Project is expected to deliver an average of 3.5 billion cubic feet of gas per day, much of the produced gas is expected to be intended for international markets. On the home front, Alaskans are expected to gain a long-term and affordable source of natural gas, which is essential for heating homes, generating power, and meeting industrial needs. The AK LNG Pipeline Project has been considered within the IATP Update when evaluating economic drivers (see section 1.6.6) and capital investment projects (see section 5.5.1).

"The announcement today from the Department of Interior is more great news for Alaska. … The news today will provide more investment opportunities, more jobs, and a better future for Alaskans. We look forward to our continued work … to move Alaska and our country forward." – Governor Mike Dunleavy, March 20, 2025.

1.6.5 Population and Economic Forecasts

In long-range transportation planning, population and economic projections can be used to help identify future infrastructure needs to accommodate and support growth as well as assist when identifying funding sources and setting implementation schedules. In the Interior Region, these forecasts help to understand industry drivers, the potential for economic stimuli, any increasing or decreasing economic activity, the socioeconomic outlook, and implications for transportation demand.

Population

Initially, population projections for the IATP update were developed in the spring of 2023 using the most recent population projections published by the Alaska Department of Labor and Workforce Development (DOLWD) for the years 2021-2050. The work done during the spring of 2023 informed the January 2024 Population Projections and Economic Forecasts Technical Memorandum included in *Section 1 of the Technical Document in Appendix 3*.

During the public comment period for the draft IATP update in the spring of 2025, it became apparent that the population projections required additional review and updates based on the most recent DOLWD data for the years 2023-2020 (released July 2024). The change between the IATP population projections for 2021-2050 and 2023-2050 are illustrated in Table 5 below.

Table 5 IATP Area Population Projections and Change 2024-2045

Projection Period	2024 Population	Projected 2045 Population	2024-2045 Change	Percentage Change
2021-2050 Projections	110,839	113,682	+2,843	+3%
2023-2050 Projections	110,839	105,110	-5,729	-5%

Data from the *Population Projections and Economic Forecasts* work was used to generate demographic information for each of the IATP sub-regions described in the sections that follow. Various economic drivers were identified for the Region including infrastructure projects and mining operations. Due to the use of census data, the economic forecasts created reflect the census areas and two boroughs in the Region. It is important to note that the regional populations for the Yukon-Koyukuk Census Area and the Fairbanks North Star Borough both include the population of communities that are not within the IATP boundary. Table 6 includes the identified projected annual average population rate of change by borough/census area using 2023-2050 projections. These figures have been used in the subsequent sections to illustrate the total percentage change for the communities within the IATP area.

Table 6 Population Projections per IATP Borough/Census Area

Borough/Census Area	2023-2025	2025-2030	2030-2035	2035-2040	2040-2050
Yukon-Koyukuk Census Area (Includes portions of the Yukon Flats, Denali and Middle Yukon/Fairbanks Sub-Regions)	-0.1%	-0.9%	-0.9%	-1.0%	-1.0%
Fairbanks North Star Borough (Includes the Middle Yukon/Fairbanks Sub-Region)	-0.1%	-0.2%	-0.3%	-0.4%	-0.4%
Denali Borough (Includes the Denali Sub-Region)	-1.2%	-0.7%	-0.8%	-0.9%	-1.0%
Southeast Fairbanks Census Area (Includes the Upper Tanana Sub-Region)	0.3%	1.1%	0.7%	0.6%	0.5%
Copper River Census Area (Includes the Copper River Sub-Region)	-0.4%	0.3%	0.0%	-0.1%	-0.1%
Matanuska-Susitna Borough (Representative of the community of Lake Louise included in the Copper River Sub-Region)	0.7%	1.3%	1.2%	1.0%	0.7%

Economics

Various economic drivers including Alaska Liquified Natural Gas, tourism impacts, mining, and ore hauling were considered when evaluating the IATP area and have been identified in more detail in Table 7.

Table 7 Economic Drivers Evaluated

Identified Economic Drivers Considered	Forecast Inclusion Status			Notes
	Low	Medium	High	
Alaska LNG	✘	✘	✓	Not yet permitted at the time of evaluation, but still in consideration and was included in the 2010 Interior Alaska Transportation Plan update.
Ambler Road	✘	✘	✘	Not permitted at this time; no communities in the IATP Region to be impacted.
Clear Space Force Station	✘	✘	✘	No current expectation of an increase or decrease in staffing or operations. Impacts of the installation to remain static.
Fort Wainwright Combined Heat and Power Generation	✓	✓	✓	Planned.
Eielson Air Force Base Expansion	✓	✓	✓	F-35 expansion complete, K-135 expansion planned.
IGU-Hilcorp LNG Trucking	✘	✘	✘	No expectation of population impacts on communities in the IATP Region.
Demographics, Infrastructure, and Broadband Projects	✓	✓	✓	Multiple infrastructure and broadband projects have received funding in the communities that are a part of the Tanana Chiefs Conference as well as possible projects in Copper River.
Livengood Gold Project/Other Increases in Mining Activity or Other Potential Mining Activity	✘	✘	✓	Livengood Gold Project is currently not permitted. This economic driver is included as a high scenario proxy for an increase in mining activity or any other potential mining activity within the IATP Region.
Manh Choh Mine and Ore Hauling	✓	✓	✓	Mostly permitted and investments made. Impacts are considered for the community of Tetlin and the Upper Tanana Sub-Region as well as surrounding Sub-Regions.
Tourism/Visitor Seasonal Impacts	✓	✓	✓	Identified and influenced by community input, data used from Denali National Park, Wrangell-St Elias Park, and Alaska Travel Industry.

The planning team carefully evaluated these economic drivers for their potential impact on the IATP area and in turn produced high-, medium-, and low-impact population scenarios for the communities in the Interior. These scenarios are described in Table 8.

Table 8 Economic Scenarios

Region and Economic Scenario	Economic Drivers
Yukon-Koyukuk Census Area – Includes parts of the Yukon Flats and Middle Yukon/Fairbanks Sub-Regions	
Low Total Population	School closure
Medium Total Population	Infrastructure projects: positions added at Tribal Governments, temporary construction jobs added 2025 to 2035
High Total Population	Infrastructure projects: additional positions added at Tribal Governments, additional temporary construction jobs added 2025 to 2035 Alaska LNG permanent positions added in 2035, 2040, with drop in 2045 New mining operation in Yukon-Koyukuk Census Area, assume small operations crew based in region, 2035 to 2045
Fairbanks North Star Borough – Included in the Middle Yukon/Fairbanks Sub-Region	
Low Total Population	Fort Wainwright Army Post (Ft. Wainwright) construction, temp positions added in 2025 Eielson Air Force Base (AFB), Boeing KC-135 Stratotanker personnel & dependents added in 2025 and kept through 2045 Manh Choh Mine and Ore Hauling, low range of positions added in 2025 to 2029
Medium Total Population	Ft. Wainwright construction, temp positions added in 2025 Eielson AFB, KC-135 personnel & dependents added in 2025 and kept through 2045 Manh Choh Mine and Ore Hauling, medium range of positions added in 2025 to 2029
High Total Population	Ft. Wainwright Construction, temporary positions added in 2025 Eielson AFB, KC-135 personnel, dependents & population from induced activity (0.74 per every personnel/dependent) added in 2025 and kept through 2045 Manh Choh Mine and Ore Hauling, high range of positions added in 2025 to 2029 AK LNG, permanent positions added in 2035, 2040, 2045, expect to drop by 2050 New mining operation in Yukon-Koyukuk Census Area, assume construction, operations crew based in Fairbanks North Star Borough, 2030 to 2045
Denali Borough – Included in the Denali Sub-Region	
Low Total Population	No economic drivers documented; base population used
Medium Total Population	No economic drivers documented; base population used
High Total Population	Alaska LNG, permanent positions added in 2035, 2040, 2045
Fairbanks North Star Borough – Included in the Middle Yukon/Fairbanks Sub-Region	
Low Total Population	School closure, Manh Choh Mine and Ore Hauling, low range of positions added in 2025 to 2029
Medium Total Population	Manh Choh Mine and Ore Hauling, medium range of positions added in 2025 to 2029, infrastructure projects, positions added at Tribal Governments, infrastructure projects, temp. construction jobs added 2025 to 2035
High Total Population	Manh Choh Mine and Ore Hauling, high range of positions added in 2025 to 2029, infrastructure projects, additional positions added at Tribal Governments, infrastructure projects, additional temp. construction jobs added 2025 to 2035
Copper River Census Area – Included in the Copper River Sub-Region	
Low Total Population	School Closure
Medium Total Population	Infrastructure projects, additional positions at Tribal Governments
High Total Population	Infrastructure projects, additional positions at Tribal Governments

Socioeconomic Key Findings

Key findings from this exercise indicate the following:

- The population in the IATP Region is generally expected to decline in most rural regions and slightly increase in more populated regions by 2045, based on historic trends and without consideration of any economic drivers.
- The small community of Lake Louise is projected to experience significant growth through 2045, adding 62 people which is a 133 percent increase.
- The demographic impact of increasing mortality and declining fertility is expected to impact the Yukon-Koyukuk Census Area and Denali Borough populations over the next several decades

1.7 COMMUNITY PROFILES

All except for the Southeast Fairbanks Census Area and the Matanuska-Susitna (Mat-Su) Borough (home to Lake Louise in the Copper River Sub-Region) are projected to experience an annual decrease in population. The Southeast Fairbanks Census Area and the Mat-Su Borough (home to Lake Louise and on the periphery of the IATP boundary) are both projected to experience an annual increase in population over the next 20 years.

Total Population:
175,693*

Communities:
58

Unincorporated Census Designated Places:
51

1st Class Cities:
1

2nd Class Cities:
3

Boroughs:
2

Home Rule Cities:
1

Regional Planning Organizations:
2

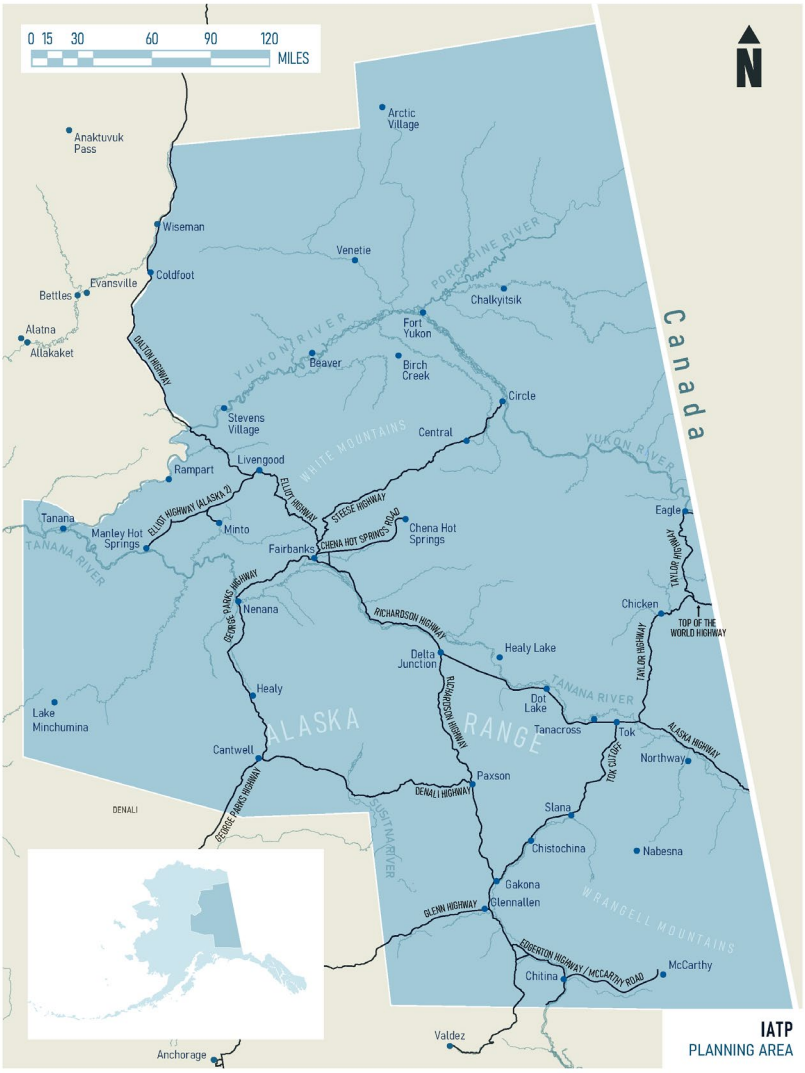
Communities with Barge Service:
7

Total Aviation Facilities:
60

Regional Hub Ports:
2

Major Roadways:
11

***Includes the total populations of the city of Fairbanks and North Pole**



1.7.1 Yukon Flats Sub-Region

The Yukon Flats Sub-Region includes nine communities which are included in the Yukon-Koyukuk Census Area. The populations for the entirety of the Yukon-Koyukuk Census Area are generally expected to decrease by -17 percent through 2045. This decrease is expected due to increasing mortality and declining fertility throughout the Yukon-Koyukuk Census Area.

MAJOR ROADS
- Dalton Highway
- Elliott Highway
- Steese Highway

AVIATION
- 1 Regional Hub
- 4 Community Off-Road
- 2 Community On-Road
- 6 Local NPIAS Low-Activity

BARGE FACILITIES
- Beaver
- Fort Yukon
- Circle

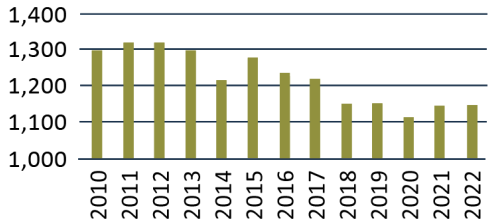
DOT&PF MAINTENANCE FACILITIES
- Birch Lake
- Montana Creek

KEY ECONOMIC DRIVERS
- Livengood Gold Project/Other Potential Mining Activity

ICE ROADS
- Fort Yukon

RAIL
- Yes

POPULATION GROWTH



Community	2025	2030	2035	2040	2045	Population Change 2025-45	Percent Population Change 2025-45
Arctic Village	139	133	127	121	115	-24	-17%
Beaver	50	48	46	43	41	-9	-17%
Birch Creek	30	29	27	26	25	-5	-17%
Central	61	58	56	53	50	-11	-17%
Chalkyitsik	49	47	45	43	40	-9	-17%
Circle	78	74	71	68	64	-14	-17%
Coldfoot	27	26	25	23	22	-5	-17%
Fort Yukon	492	470	449	427	406	-85	-17%
Venetie	188	180	172	163	155	-33	-17%

1.7.5.1 Yukon Flats Sub-Region

The Yukon Flats Sub-Region is the northernmost sub-region for the IATP Region. This Sub-Region is made up of eight rural communities, many of which are located off the road system.

Minority Population: 72.8 Percent

Unemployment Rate: 12.34 Percent

Median Income: $29,749.67

Tribal Communities: 8

Transportation Accessibility

The Yukon-Koyukuk Census Area, which makes up the Yukon Flats Sub-Region and houses portions of the Middle Yukon-Fairbanks Sub-Region, is considered the most disadvantaged census tract in the IATP Region with the highest rate of poverty, ethnic/racial minority, unemployment, those without vehicles, limited broadband access, and the highest income inequality. The Yukon-Koyukuk's minority population at approximately 73 percent, is over three times as much as the average of the rest of the census tracks in the IATP Region. This Sub-Region also exceeds other census tracts for highest transportation costs with the least number of major roadways. This area is also ranked the highest in terms of issues related to housing and transportation, contributing to its limited access to resources.[iii] With the most abundant tribal communities of 32, The Yukon-Koyukuk Census Area has the lowest ranking of beneficial health outcomes in 2024 out of the other census tracts in the IATP Region.[iv]

Resiliency and Risk

Resiliency risks for the Yukon Flats Sub-Region are included in Table 9. In addition to the identification of the risk, the table includes potential mitigation strategies for decreasing risk and increasing resiliency. These risks and potential mitigation strategies have been identified and included with assistance from the Resiliency Working Group. All communities in the Sub-Region have a FEMA Risk Index Category of "Relatively Moderate", this identification means these communities are at a relatively moderate risk for the hazards identified.

Table 9 Yukon Flats Sub-Region Resiliency Overview

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Arctic Village	• Flooding • Wildfire • Permafrost	Relatively Moderate	Arctic Village Airport, Mountain Street, Airport Street, Village Center	Protect in Place
Venetie	• Flooding • Wildfire	Relatively Moderate	Venetie Airport, Fort Yukon Trail and Landfill Access Road (responsible for providing access to Airport)	Protect in Place
Beaver	• Flooding • Wildfire	Relatively Moderate	Government Road, Beaver Airport, Landfill Access Road	Protect in Place
Fort Yukon	• Flooding • Wildfire • Permafrost	Relatively Moderate	Fort Yukon Airport, Fort Yukon Long Range Radar Site, FAA Site Road, First Avenue	Protect in Place
Chalkyitsik	• Flooding • Wildfire	Relatively Moderate	Fishhook Drive, Kutchin Street, Gravel Pit Road, Ridge Road	Protect in Place
Birch Creek	• Flooding • Wildfire	Relatively Moderate	Landfill Road, Fort Yukon Trail, Birch Creek Airport	Protect in Place
Circle	• Flooding • Wildfire • Permafrost	Relatively Moderate	River Street (Steese Highway), Circle City Airport, Steese Highway, Town Center	Protect in Place
Central	• Flooding • Wildfire	Relatively Moderate	River Street (Steese Highway), Circle City Airport, Steese Highway, Town Center	Protect in Place

1.7.2 Middle Yukon/ Fairbanks Sub-Region

The majority of communities in the Middle Yukon/Fairbanks are expected to decrease in population ranging from -6 percent (-6,129 people) in Fairbanks North Star Borough to -17 percent in other communities within the sub-region. Over the last decade, the population decline in the Fairbanks North Star Borough showed consistency with the statewide trends experienced during Alaska's recession (roughly 2015-2018). There is a low rate of annual decline related to continued outmigration anticipated for FNSB, regarded as the Interior's population center.

MAJOR ROADS
- Richardson Highway
- Steese Expressway/Highway
- Parks Highway
- Chena Hot Springs

AVIATION
- 1 Small Hub
- 2 Community Off-Road
- 2 Community On-Road
- 1 Local NPIAS High-Activity
- 1 Local NPIAS Low-Activity
- 2 Local Non-NPIAS
- 5 Landing Strips

BARGE FACILITIES
- Nenana
- Rampart
- Manley Hot Springs
- Tanana
- Stevens Village

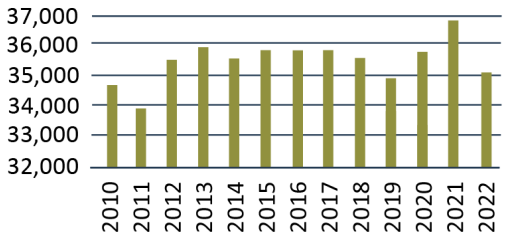
DOT&PF MAINTENANCE FACILITIES
- Livengood
- Manley
- Fairbanks
- Nenana

KEY ECONOMIC DRIVERS
- Fort Wainwright Combined Heat and Power Generation
- Eielson Air Force Base Expansion
- Tourism
- Manh Choh Mine and Ore Hauling

ICE ROADS
- Stevens Village

RAIL
- Yes

POPULATION GROWTH



Community	2025	2030	2035	2040	2045	Population Change 2025-45	Percent Population Change 2025-45
Fairbanks North Star Borough (Includes the Cities of Fairbanks and North Pole)	97,230	96,261	94,826	92,945	91,100	-6,129	-6%
Four Mile Road	33	32	30	29	27	-6	-17%
Livengood	17	16	16	15	14	-3	-17%
Manley	95	91	87	82	78	-16	-17%
Minto	162	155	148	141	134	-28	-17%
Nenana	381	364	348	331	314	-66	-17%
Rampart	48	46	44	42	40	-8	-17%
Stevens Village	19	18	17	16	16	-3	-17%
Tanana	223	213	204	194	184	-39	-17%

1.7.5.2 Middle Yukon/ Fairbanks Sub-Region

The Middle Yukon/Fairbanks Sub-Region includes the southwest portion of the Yukon-Koyukuk census area (Livengood, Manley Hot Springs, Minto, Nenana City, Rampart, Stevens Village, Tanana City, and Venetie) and the Fairbanks North Star Borough. Within the Fairbanks North Star Borough are the cities of Fairbanks and North Pole; the metropolitan areas of these cities are omitted from the IATP Region boundary, and planning is conducted by FAST Planning, a Metropolitan Planning Organization. To understand the projected population growth for the Sub-Region the populations for the Cities of Fairbanks and North Pole have been included in the overall population totals, since any population increase or decrease in these communities directly affects the future needs of the Sub-Region.

Alaska Native Population: 8.12 Percent

Unemployment Rate: 6.63 Percent

Population Below Poverty: 6.55 Percent

Median Income: $56,523

Tribal Communities: 10

The Middle Yukon/ Fairbanks Sub-Region is expected to have an added seasonal population (visitors) of 320,000.

Transportation Accessibility

The Fairbanks North Star Borough has the highest number of major roadways in the IATP Region. Typically, this amount of access to the transportation network would reflect a more equitable transportation area. However additional regional characteristics, such as the number of tribal communities, contribute to an imbalance in transportation accessibility within the Sub-Region.

Resiliency and Risk

Resiliency risks for the Middle Yukon/Fairbanks Sub-Region are included in Table 10. In addition to the identification of the risk, the table includes potential mitigation strategies for decreasing risk and increasing resiliency. These risks and potential mitigation strategies have been identified and included with assistance from the Resiliency Working Group. All communities in the Sub-Region, except one, have a FEMA Risk Index Category of "Relatively Moderate", this identification means these communities are at a relatively moderate risk for the hazards identified. The Fairbanks North Star Borough, however, has a FEMA risk category of "Relatively Low Risk" indicating the borough is at a relatively low risk of experiencing the hazards identified. This difference in risk categorization is influenced by a myriad of factors, including population size, geography, and resources.

Table 10 Middle Yukon/Fairbanks Sub-Region Resiliency Overview

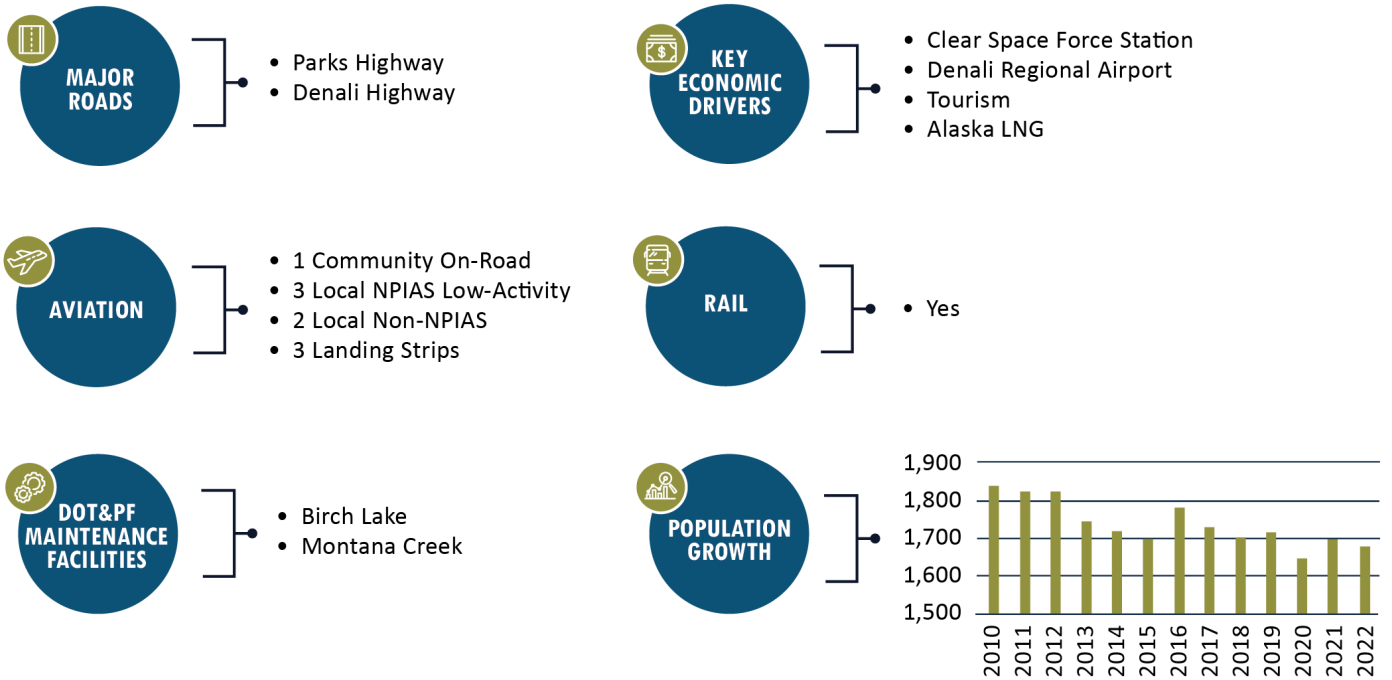
Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Stevens Village	• Flooding • Wildfire • Permafrost	Relatively Moderate	Harding Road, Airport Road, Stevens Village Airport	Protect in Place
Livengood	• Flooding • Wildfire	Relatively Moderate	Venetie Airport, Fort Yukon Trail and Landfill Access Road (responsible for providing access to Airport)	Protect in Place
Rampart	• Flooding • Wildfire	Relatively Moderate	Livengood Camp Airport, Livengood M&O Station, Elliott Highway, Dalton Highway	Protect in Place/ Accommodate
Fort Yukon	• Flooding • Wildfire • Permafrost	Relatively Moderate	1st Avenue, 6th Avenue, 2nd Avenue, Rampart Airport. Minook Creek Road	Protect in Place
Minto	• Flooding • Wildfire	Relatively Moderate	Minto Road, Minto Al Wright Airport	Protect in Place/ Accommodate
Nenana	• Flooding • Wildfire	Relatively Moderate	Alaska Native Veterans Honor Bridge, Shirley Demientieff Memorial Bridge, Parks Highway, Totchaket Road, 10th Street, Cemetery Road, Port of Nenana, Airport Service Road, Nenana Municipal Airport	Protect in Place

Table 10 Middle Yukon/Fairbanks Sub-Region Resiliency Overview Cont.

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Manley Hot Springs	• Flooding • Wildfire • Permafrost	Relatively Moderate	Elliott Highway (Near the Tanana River)	Protect in Place/ Accommodate
Tanana	• Wildfire	Relatively Moderate	Ralph M Calhoun Airport, All Roadways along Tanana River, White Alice Road, Tanana Road (Elliott Highway)	Protect in Place/ Accommodate
Fairbanks North Star Borough	• Flooding • Wildfire • Permafrost	Relatively Low Risk	Chena Hot Springs Road, Flat Creek Bridge, Little Chena River Bridge, Goldstream Road, Ballaine Road, Goldstream Creek Bridge, Washington Creek Bridge, Elliott Highway	Protect in Place/ Accommodate

1.7.3 Denali Sub-Region

The Denali Borough is expected to decrease in population by -250 individuals or -16 percent through 2045. This decrease in population only accounts for Denali Borough residents and does not consider the potential population of season residents, however the impacts from seasonal residents and tourists have been considered. At the same time, the community of Lake Minchumina is also expected to decrease in population by about -5 individuals or -17 percent.



Community	2025	2030	2035	2040	2045	Population Change 2025-45	Percent Population Change 2025-45
Denali Borough	1,594	1,539	1,478	1,413	1,344	-250	-16%
Lake Minchumina	28	27	26	24	23	-5	-17%

1.7.5.3 Denali Sub-Region

The Denali Sub-Region includes the Denali Borough (a home rule borough that does not possess road powers) and the community of Lake Minchumina.

Alaska Native Population: 2 Percent

Unemployment Rate: 3 Percent

Population Below Poverty: 16 Percent

Median Income: $78,750

The Denali Sub-Region is expected to have an added seasonal population (visitors) of 601,152, annually.

Transportation Accessibility

The Denali Sub-Region is considered the least disadvantaged census tract of the IATP Region, from a transportation accessibility perspective. This is because the area is connected to most major roadways and has the lowest percentage of unemployment, youth, ethnic or racial minority, and limited English proficiency.

Communities within the Denali Borough include Anderson, Cantwell, Denali Park, Healy, Ferry, and the unincorporated community of Clear

Resiliency and Risk

Resiliency risks for the Denali Sub-Region are included in Table 11. In addition to the identification of the risk, the table includes potential mitigation strategies for decreasing risk and increasing resiliency. These risks and potential mitigation strategies have been identified and included with assistance from the Resiliency Working Group. All communities in the Sub-Region, except one, have a FEMA Risk Index Category of "Relatively Moderate", this identification means these communities are at a relatively moderate risk for the hazards identified.

Table 11 Denali Sub-Region Resiliency Overview

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Anderson	• Flooding • Wildfire • Earthquake	Relatively Moderate	Anderson Road	Protect in Place
Clear	• Flooding • Wildfire • Earthquake	Relatively Moderate	Bear Creek Bridge	Accommodate
Healy	• Flooding • Wildfire • Earthquake	Relatively Moderate	Healy River Airport, Dry Creek Bridge, Stampede Road, Panguinegue Creek Bridge	Protect in Place
Ferry	• Flooding • Wildfire • Earthquake	Relatively Moderate	Ferry/Eva/Moose Creek Road	Protect in Place
North of McKinley/ Denali Park Area	• Wildfire • Earthquake • Ground Failure	Relatively Moderate	Kantishna Airport, Denali National Parks Road, Alaska Railroad, Parks Highway Railroad Underpass	Accommodate by updating infrastructure and design
Cantwell	• Wildfire • Earthquake	Relatively Moderate	Parks Highway, Jack River Bridge	Protect in Place

1.7.4 Upper Tanana Sub-Region

The Southeast Fairbanks Census Area located in the Upper Tanana Sub-Region is one of the few census areas within the IATP area that is expected to have an overall population increase between 2025 and 2045. Communities within the Upper Tanana Sub-Region are projected to increase in population by about 16 percent.

MAJOR ROADS
- Richardson Highway
- Alaska Highway
- Tok Cutoff
- Taylor Highway
- Top of the World

AVIATION
- 4 Community On-Road
- 3 Local NPIAS Low-Activity
- 4 Landing Strips

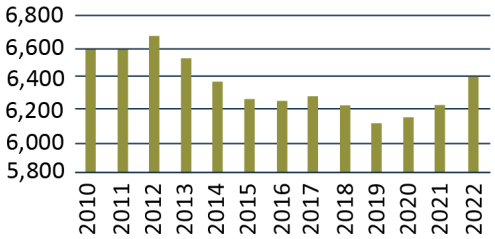
BARGE FACILITIES
- Northway
- Eagle

DOT&PF MAINTENANCE FACILITIES
- Northway
- Tok
- Delta
- Trims

KEY ECONOMIC DRIVERS
- Fort Greely
- Eielson Air Force Base Expansion
- Tourism
- Manh Choh Mine and Ore Hauling

ICE ROADS
- Healy Lake
- Whitestone

POPULATION GROWTH



Community	2025	2030	2035	2040	2045	Population Change 2025-45	Percent Population Change 2025-45
Alcan Border	29	31	32	33	34	5	16%
Big Delta	422	446	462	476	488	66	16%
Chicken	13	14	14	15	15	2	16%
Delta Junction	980	1,035	1,072	1,104	1,132	152	16%
Deltana	2,499	2,640	2,734	2,817	2,888	388	16%
Dot Lake	20	21	22	23	23	3	16%
Dot Lake Village	39	41	43	44	45	6	16%
Dry Creek	53	56	58	60	61	8	16%
Eagle City	73	77	80	83	85	11	16%
Eagle Village	34	36	37	38	39	5	16%
Fort Greely	341	360	373	384	394	53	16%
Healy Lake	14	15	15	16	16	2	16%
Northway	235	248	257	264	271	36	16%
Tanacross	134	142	147	151	155	21	16%
Tetlin	152	161	167	172	176	24	16%
Tok	1,339	1,414	1,464	1,509	1,547	208	16%

1.7.5.4 Upper Tanana Sub-Region

The Upper Tanana Sub-Region is comprised of the Southeast Fairbanks Census Area and has a total of 16 communities.

Alaska Native Population: 13.8 Percent

Unemployment Rate: 10.3 Percent

Population Below Poverty: 11.4 Percent

Median Income: $68,634

Transportation Accessibility

This Sub-Region is made up of two census tracts. Out of the two census tracts, one is identified as disadvantaged, and the other is considered partially disadvantaged regarding transportation accessibility. The partially disadvantaged census tract only contains one tribal area, which qualifies it as disadvantaged. Subsequently, the disadvantaged tract within Southeast Fairbanks census track has five tribal areas coupled with a high rate of unemployment and a high number of the population with less than high school education attainment. The disadvantaged census tract is also further from major connected roadways with the second highest transportation cost burden of the IATP Region.

Resiliency and Risk

Resiliency risks for the Upper Tanana Sub-Region are included in Table 12. In addition to the identification of the risk, the table includes potential mitigation strategies for decreasing risk and increasing resiliency. These risks and potential mitigation strategies have been identified and included with assistance from the Resiliency Working Group. Of all communities in the Sub-Region, seven have a FEMA Risk Index Category of "Relatively High", this identification means these communities are at a relatively high risk for the hazards identified. The communities of Healy Lake, Fort Greely, and Delta Junction/Deltana/Big Delta all have a FEMA Risk Index Category of "Very High Risk", indicating they are at a very high risk for the hazards identified.

Table 12 Upper Tanana Sub-Region Resiliency Overview

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Eagle/ Eagle Village	• Avalanche • Flooding	Relatively High Risk	Taylor Highway, Eagle Airport, American Creek	Protect in Place
Northway	• Flooding • Wildfire • Erosion • Permafrost	Relatively High Risk	Fish Camp Creek Bridge, Northway Airport, Alaska Highway, Northway Road, All Facilities Near Nabesna River, Population Center	Protect in Place/Accommodate
Tanacross	• Flooding • Wildfire • Permafrost	Relatively High Risk	Tanacross Airport, Alaska Highway, Richardson Highway	Protect in Place
Tetlin	• Wildfire	Relatively High Risk	Tetlin Airport	Protect in Place
Dot Lake/ Dot Village	• Wildfire	Relatively High Risk	Alaska Highway	Protect in Place
Dry Creek	• Wildfire	Relatively High Risk	Alaska Highway, Dry Creek Road	Protect in Place
Healy Lake	• Flooding • Wildfire	Very High Risk	Landfill Access Road	Protect in Place
Fort Greely	• Flooding • Wildfire	Very High Risk	Alaska Highway, Meadows Road	Protect in Place
Delta Junction/ Deltana/ Big Delta	• Flooding • Ground • Failure	Very High Risk	Delta Junction Airport, Alaska Highway, Richardson Highway, Tanana River Big Delta Bridge, Delta Junction Maintenance & Operations Station	Protect in Place

1.7.5 Copper River Sub-Region

The Copper River Sub-Region's population has been largely stable over the last decade which is projected to remain with only a slight population change within the IATP update planning horizon. The outlier for the Copper River Sub-Region is the community of Lake Louise, which is projected to increase by about +23 percent between 2025 and 2045. This increase is significantly influenced by the trends seen within the Matanuska-Susitna Borough and the Wasilla-Palmer core of positive natural increase (births minus deaths) and net in-migration over the past decade.

MAJOR ROADS

- Glenn Highway
- Richardson Highway
- McCarthy Road
- Nabesna Road
- Tok Cutoffs

AVIATION

- 4 Community On-Road
- 3 Local NPIAS Low-Activity
- 4 Landing Strips

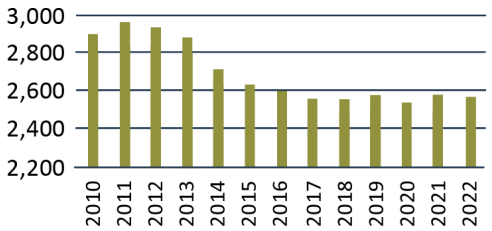
DOT&PF MAINTENANCE FACILITIES

- Ernestine
- Chitina
- Tazlina
- Nelchina
- Slana
- Paxson
- Cascade

KEY ECONOMIC DRIVERS

- Demographics Infrastructure and Broadband Projects
- Tourism
- Manh Choh Mine and Ore Hauling

POPULATION GROWTH



Community	2025	2030	2035	2040	2045	Population Change 2025-45	Percent Population Change 2025-45
Chisina	-	-	-	-	-	0	0%
Chistochina	56	57	57	56	56	0	0.5%
Chitina	109	110	110	110	109	1	0.5%
Copper Center	294	298	298	297	295	1	0.5%
Gakona	180	183	183	182	181	1	0.5%
Glennallen	410	417	417	414	412	2	0.5%
Gulkana	74	75	75	74	74	0	0.5%
Kenny Lake	318	323	323	321	319	2	0.5%
McCarthy	127	129	129	129	128	1	0.5%
Mendeltna	46	47	47	46	46	0	0.5%
Mentasta Lake	109	110	110	110	109	1	0.5%
Nabesna	1	1	1	1	1	0	0.5%
Nelchina	43	43	43	43	43	0	0.5%
Paxson	16	16	16	16	16	0	0.5%
Silver Springs	120	121	121	121	120	1	0.5%
Slana	119	120	120	120	119	1	0.5%
Tazlina	247	251	251	249	248	1	0.5%
Tolsona	11	11	11	11	11	0	0.5%
Tonsina	64	65	65	64	64	0	0.5%
Willow Creek	195	198	198	197	196	1	0.5%
Lake Louise (Mat-Su)	41	44	47	49	51	10	23%

1.7.5.5 Copper River Sub-Region

The Copper River Census Area is a mostly rural area, contained entirely within the IATP Region and makes up the Copper River Sub-Region, with the inclusion of the small town of Lake Louise, located in the Matanuska-Susitna (Mat-Su) Borough.

Alaska Native Population: 27.6 Percent

Unemployment Rate: 7.7 Percent

Population Below Poverty: 11.4 Percent

Median Income: $67,439

The Copper River Sub-Region is expected to have an added seasonal population (visitors) of 75,000, annually.

Transportation Accessibility

This Sub-Region is considered disadvantaged, in regard to transportation accessibility, due to nine different tribal areas and its low-income status. The Sub-Region has several major roadways that serve as access opportunities for health care, employment, and education opportunities. Both the Copper River Census Area and the Yukon-Koyukuk Census Area have some of the highest energy costs in Alaska and rank within the 96th and 97th percentile compared to the rest of the nation. High costs of energy often force individuals to use more expensive, less efficient, and often more dangerous forms of heating options to offset the high costs of energy. The use of these forms of heating tie into the identification of affordable transportation accessibility within the Sub-Region.

Hazards for Glennallen Alaska are identified as relatively low risk; this includes flooding events. Although, flooding in Glennallen has become common place in recent years. Many of the flooding events in Glennallen are not documented as FEMA categorized events as they are the result of ice jams, which FEMA does not track.

Resiliency and Risk

Resiliency risks for the Copper River Sub-Region are included in Table 13. In addition to the identification of the risk, the table includes potential mitigation strategies for decreasing risk and increasing resiliency. These risks and potential mitigation strategies have been identified and included with assistance from the Resiliency Working Group. Most of the communities in the Sub-Region, have a FEMA Risk Index Category of "Relatively Low", this identification means these communities are at a relatively low risk for the hazards identified. The community of Lake Louise is identified as having a FEMA Risk Index Category of "Relatively High Risk", indicating they are at a relatively high risk for the hazards identified.

Table 13 Copper River Sub-Region Resiliency Overview

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Entire Sub-Region	• Wildfire	See all communities in the Census Area	All Transportation Facilities	Protect in Place, provide additional maintenance opportunities, additional road access spots, improve evacuation routes, and increase air transportation facilities
Slana	• Flooding - Low	Relatively Low Risk	Tok Cutoff Highway, Nabesna Road	Protect in Place
Chistochina	• Flooding - Low	Relatively Low Risk	Chistochina Airport	Protect in Place
Gulkana	• Flooding - Low	Relatively Low Risk	Richardson Highway, Gulkana Airport	Protect in Place
Glennallen	• Flooding	Relatively Low Risk*	Glenn Highway, Richardson Highway, Glenn Highway Crossing	Protect in Place
Copper Center Area	• Flooding – Low • Erosion	Relatively Low Risk	Richardson Highway, Copper Center Airport, Brenwick-Craig Road, Edgerton Highway/McCarthy Road, Tazlina M&O Station, Tazlina River Bridge, Klutina River Bridge, Old Richardson Highway	Protect in Place

Location	Identified Hazards	Community FEMA Risk Index Category for All Hazards	Facilities At Risk	Mitigation Strategy(s)
Chitina	• Permafrost • Flooding - Low	Relatively Low Risk	Edgerton Highway/ McCarthy Road, Copper River Spur	Protect in Place
Tonsina/ Chisana	• Flooding – Low • Wildfire	Relatively Low Risk	Chisana Airport	Protect in Place
McCarthy	• Flooding – Low • Wildfire • Erosion	Relatively Low Risk	Edgerton Highway/McCarthy Road, May Creek Airport, McCarthy Airport	Protect in Place/ Accommodate
Lake Louise	• Avalanche • Earthquake	Relatively High Risk	Richardson Highway, Glenn Highway, Lake Louise Airport	Protect in Place/ Accommodate

2

INTERIOR ALASKA TRANSPORTATION INFRASTRUCTURE

The IATP Region covers approximately 132,220 square miles; the transportation system of the Interior Region is a complex network of roads, airports, waterways, rail, and trails that provide access not only to the Region's communities, but also to the many remote expanses within the Region that are used for activities such as mining, tourism, recreation, and hunting. The road and rail system are critical transportation arteries within the Region, but only a small fraction of this vast area is accessible by the limited road and rail miles. There are numerous rural communities and extensive subsistence and recreational resources that can only be accessed by alternative transportation methods. Rural airports, backcountry landing strips, waterways, and trails provide access to the Region's great expanses of roadless terrain. This section presents the state of infrastructure for each of the primary modes considered in the IATP update. The plan's recommendations consider policy and projects that improve and develop a well-integrated multimodal transportation network for this Region.

2.1 AVIATION

The airports in the IATP Region are essential components of this Region's robust, multi-modal transportation system. Although many communities in the IATP Region 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. Each airport in the plan Region holds a distinct support role for its community or specific geographical setting. The collective 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.

The aviation system of the Interior Region has a different character than aviation systems elsewhere across Alaska. The route structure of flights is less of a hub-spoke pattern – as is common across most regions – and more point-to-point. This Region's airports have a lower proportion of participation in the United States Postal Service Bypass Mail program and the United States Department of Transportation's Essential Air Service program, which has implications on carrier service and passenger, mail, and cargo activity. The airports included in the Region are more varied in terms of classification, use, ownership, and purpose than the collections of airports in most other regions of the state.

The airports in the IATP region serve a wide range of important roles, 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

DOT&PF Owned Airports on the Road System: 25

DOT&PF Owned Airports off the Road System: 12

Military activity and airspace, while common throughout Alaska, are especially influential in the IATP Region. These distinctions, among others, create issues and needs that are important to the IATP Region and require customized solutions to meet the needs. Detailed aviation information can be found in *Section 2 of the Technical Document in Appendix 3 the: Aviation System*.

2.1.1 Interior Alaska Transportation Plan Region Airports

There are 60 airports included in the IATP Region. These 60 airports are the public-use facilities registered with the Federal Aviation Administration (FAA).

There are several military facilities, numerous registered private-use facilities, and countless more unregistered airstrips in the IATP Region, 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.

The IATP airports are as diverse as the communities and locations they serve, ranging considerably by size, ownership, classification, use, and intramodality. The majority (37) of the airports are owned by the Alaska DOT&PF, while the remaining 23 are owned by a wide range of public and private entities. Airports are classified by both the FAA's National Plan of Integrated Airport Systems (NPIAS) and the DOT&PF's Alaska Aviation System Plan (AASP). Each of these classification systems has implications to how the IATP airports are considered for funding and development. 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.

The 22 off-road airports, 12 of which are owned by the DOT&PF, 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, 25 of which are owned by the DOT&PF, are part of the intermodal transportation network. Communities, businesses, and agencies are able to use a combination of roads, airports, and other modes 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. 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 (and/or ice roads, riverine access) is important for preventing communities in this Region from becoming isolated when one mode is compromised. Figure 10 contextualizes the location of the airports in the IATP Region while also identifying their specific AASP classification.

Airport Ownership in the Interior Planning Area by Numbers

- DOT&PF: 37
- Municipal/Local Government: 4
- National Park Service: 5
- Bureau of Land Management: 3
- Department of Natural Resources: 2
- Alaska Department of Fish & Game: 1
- Private Domain: 4
- Public Domain: 4

IATP Airport AASP Classifications (2023)

- Small Hub: 1
- Regional Hub: 1
- Community Off-Road: 6
- Community On-Road: 11
- Local NPIAS (High Activity):1
- Local NPIAS (Low Activity): 16
- Local Non-NPIAS: 6
- Landing Strips (Unclassified): 18

IATP Airport NPIAS Classifications (2023)

- Primary Commercial Service (Small Hub): 1
- Nonprimary Commercial Service (Local): 2
- General Aviation (Local): 2
- General Aviation (Basic): 25
- General Aviation (Unclassified): 4
- Non-NPIAS: 26

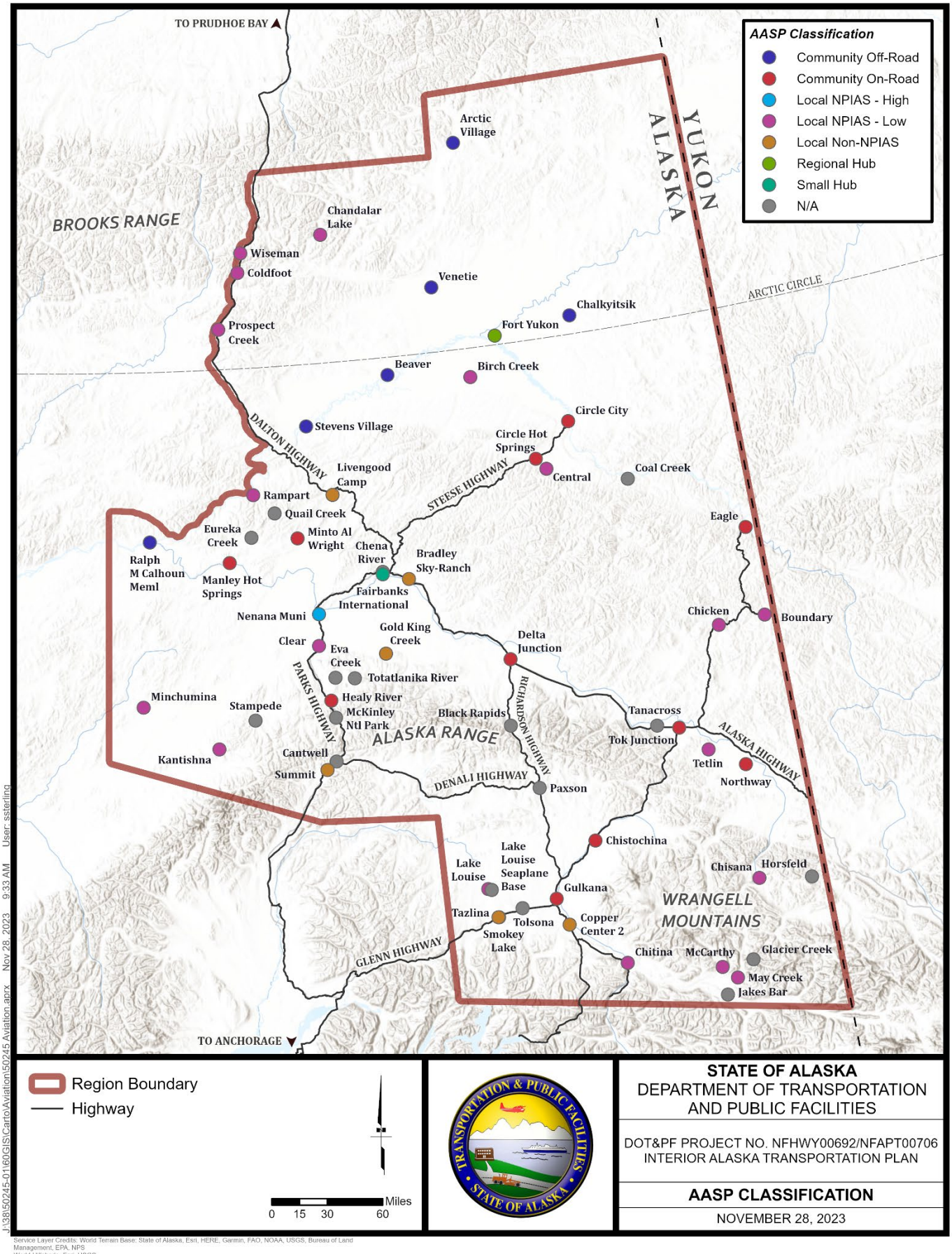


Figure 10 IATP Airport Locations

2.1.1.1 Implications of Ownership on Operations & Maintenance

Airport ownership has an equally significant role in determining how airports are operated, funded, and managed. The following sections identify the implications associated with different types of ownership as well as identifies the ownership for airports in the IATP Region.
The location of these airports are also identified on Figure 10. Most of the airports not owned by the DOT&PF or another local government are considered Landing Strips (or backcountry airports) by the AASP.

National Park Service (NPS) In-Holdings

Within the IATP Region, there are six National Park Service (NPS) In-Holding airports. These are privately owned airstrips or public use airports located on national park land that were established prior to the inception of the parks. These airports often serve as critical access points for residents, researchers, and tourists. The ownership of some of these airports is disputed by the federal government, however, airport master records identify DOT&PF as the owner of Chisana (CZN), McCarthy (MXY), May Creek (MYK), and Kantishna (5Z5) and the National Parks Service as the owner of McKinley National Park (INR) and Stampede (Z90). In instances where the ownership is disputed by the federal government a co-management arrangement exists.
The NPS In-Holdings are identified to the right in blue under their respective ownership.

DOT&PF Ownership

In total, the DOT&PF owns and maintains 37 airports in the IATP Region, of which 25 are on the road system and 12 are off. DOT&PF owned airports tend to have high level of expectation in regard to safety and reliability, no matter the location or airport classification. There is often an imbalance when it comes to airports on the road system versus off the road system. Airports on the road system tend to benefit from greater access to maintenance, especially in the winter, as they often have the ability and access to use highway snow removal equipment and resources. Additionally, airports on the road system often have more DOT&PF staff, materials sources, utilities and additional amenities depending on location. Airports off the road system frequently lack some of the additional amenities and benefits while also depending on dedicated contractors to provide maintenance. However, the off-road airports often perform better when competing for funding as these facilities are typically seen as more essential since they provide the only reliable year-round access to communities off the road system.

Local Government Ownership

In total, four airports in the IATP Region are owned and maintained by local governments; two of which are on the road system and two are not. Local government owned airports often have the ability to identify the specific needs of their airports. However, many local governments have limited staff with limited expertise in airport management.

DOT&PF Airports	
Beaver Creek (WBQ)	Gulkana (GKN)
Birch Creek (Z91)	Healy River (HRR)
Boundary (BYA)	Kantishna (5Z5)
Central (CEM)	Lake Louise (Z55)
Chalkyitsik (CIK)	Livengood Camp (4AK)
Chandalar Lake (WCR)	Manley Hot Springs (MLY)
Chicken (CKX)	May Creek (MYK)
Chisana (CZN)	McCarthy (MXY)
Chistochina (CZN)	Minchumina (MHM)
Chitina (CXC)	Minto Al Wright (51Z)
Circle City (CRC)	Northway (ORT)
Circle Hot Springs (CHP)	Rampart (RMP)
Clear (Z84)	Ralph M Calhoun Meml (TAL
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)	
Local Government Owned Airports	
Arctic Village (ARC)	Nenana Muni (ENN)
Delta Junction (D66)	Venetie (VEE)
ADF&G	
Tolsona Lake (58A)	
NPS	
Coal Creek (L20)	Glacier Creek (KGZ)
McKinley Ntl Park (INR)	Stampede (Z90)
BLM	
Black Rapids (58K)	Jakes Bar (AK0)
Paxson (PXK)	
DNR	
Eva Creek (2Z3)	QuailCreek (20K)

Federal and State Agency Ownership

In total, 11 airports in the IATP Region are owned and maintained by federal (eight) or state (three) agencies. Of the 11 airports, five are on the road system and six are off. Often, the missions of the responsible agencies rarely include the maintenance and operations of airports, leaving them to be minimally maintained.

Private Ownership

There are four privately owned airports, which are available for public use, in the IATP Region. These often have owners who have limited experience in airport operations and maintenance and may experience limited financial resources. However, well-run privately owned airports are a valuable asset to the system.

Privately Owned Airports	
Bradley Sky-Ranch (95Z)	Lake Louise Seaplane Base (ENN)
Cantwell (TTW)	Tazlina/Smokey Lake (D66)

Public Domain

There are four airports in the IATP Region that are public domain, which are commonly landing strips or backcountry airports. Often these facilities have no designated owner/operator as well as no responsible party when it comes to facility improvement or maintenance. However, these facilities play an important role in providing safe access and safe landing areas in remote places.

In addition, public domain airports, there are additional backcountry airports or landing strips that are not accounted for or inventoried by the DOT&PF. These locations are documented on aeronautical charts and maintained by entities such as an experimental air club and/or the National Parks Service.

2.1.2 Aviation Activity & Trends

Fairbanks International (FAI) is the dominant airport in the IATP Region, accounting for 76 percent (76%) of the total based aircraft, 56 percent (56%) of total operations, 96 percent (96%) of enplaned passengers, and 84 percent (84%) of deplaned freight. However, FAI accounts for only 20 percent (20%) 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 (4%) of total operations, one percent of total enplaned passengers, five percent (5%) of deplaned freight, and 30 percent (30%) 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 (11%) of based aircraft, 25 percent (25%) of total operations, two percent (2%) of enplaned passengers, 10 percent (10%) of deplaned freight, and 44 percent (44%) of deplaned mail.

The 25 Local airports account for 10 percent (10%) of based aircraft, 11 percent (11%) of total operations, one percent (1%) of enplaned passengers, two percent (2%) of deplaned freight, and six percent (6%) of deplaned mail.

The Landing Strips have data reported for based aircraft and operations only and account for three percent (3%) of the Region's-based aircraft and four percent (4%) of total operations.

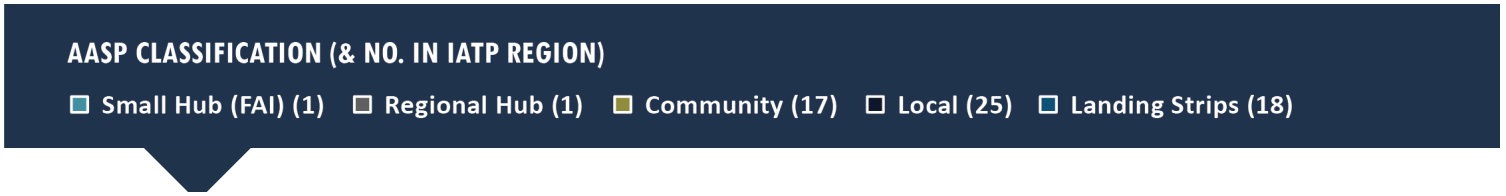
Forecasts have been created to illustrate the expected changes in aviation activity for the IATP Region. Factors considered to be most influential in development of forecast activity for the IATP Region include:

- Population
- National and regional economic trends,
- Published historical activity, and
- Interviews with regional air carriers.

Forecasts developed for the IATP Region considered the influence of the COVID-19 pandemic on aviation activity and the rebound in activity in the post-pandemic period. Although many influencing factors were considered and presented in Section 3 of the Technical Document in *Appendix 3*, the forecasts were ultimately based primarily on economic and population metrics. The forecasting method was a time-series trend with smoothing from socioeconomic and interview data, a complete overview of the methods used can be referenced in *Section 3 of the Technical Document in Appendix 3*.

Regional forecasts paint a broad picture of aviation activity across the entire IATP Region, but factors influencing aviation activity vary widely within this Region. The individual airports and individual boroughs/census areas within the IATP Region are diverse. The comprehensive aviation forecasts are located in *Section 3 of the Technical Document in Appendix 3*.

Detailed, focused activity forecasts will need to be developed for any airport or sub-region considering development work.



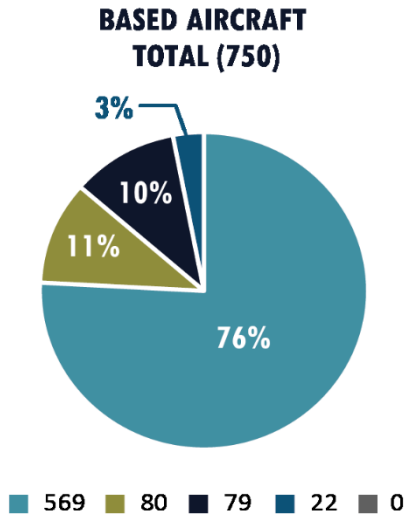


Figure 11 IATP Based Aircrafts

Based Aircraft

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 aircrafts serving airports in the IATP region include:

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

General Aviation Operations

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 and use of new avionic technology in the state. 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.
Total operations for the IATP Region are expected to grow from 88,975 operations (2022) to 108,340 operations (2040) with a positive 1.1 percent average annual rate.

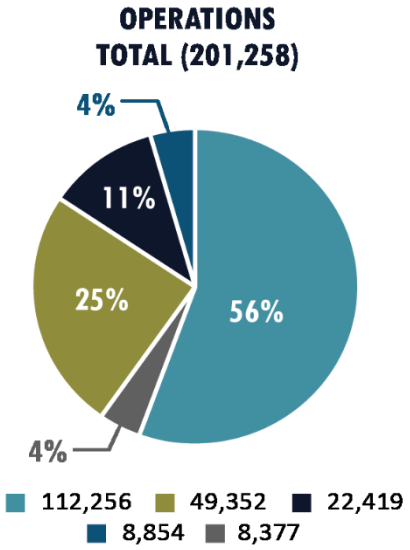


Figure 12 IATP Aviation Operations

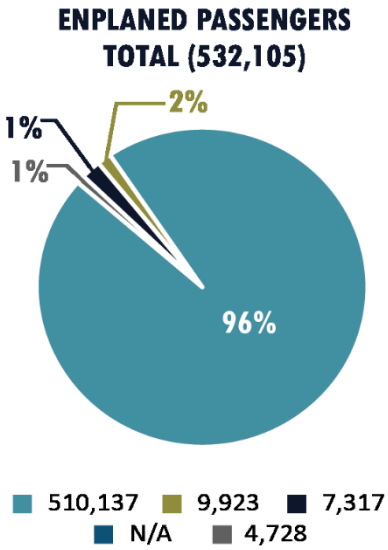


Figure 13 IATP Enplaned Passengers

Enplanement

Prior to the pandemic, enplanements were increasing at 1.3 percent annually for the entire Region. Yet, the Yukon-Koyukuk Census Area had been experiencing an average decline of 2.0 percent in annual enplanements, while other boroughs/ census areas saw a growth of between 1.4 percent and 67.2 percent annually. Passenger volumes declined precipitously in 2020, but the rebound has been swift.
Through the planning horizon, passenger enplanements for the IATP Region are expected to grow at a positive 1.6 percent average annually.

AASP CLASSIFICATION (& NO. IN IATP REGION)

Small Hub (FAI) (1) Regional Hub (1) Community (17) Local (25) Landing Strips (18)

Freight

Historical air cargo volumes generally show decreasing trends for most of the IATP Region prior to the pandemic, with the exception of the Upper Tanana Sub-Region and Denali Sub-Region (which is likely over-reported since Healy Lake data gets incorrectly attributed to Healy River). With many of the airports in the IATP Region having road access, it is likely that cargo was delivered by less expensive ground-based methods. However, the pandemic resulted in a nationwide surge of goods delivered through freight and mail, resulting in a nearly doubling of the total air cargo volume for the IATP Region compared to the pre-pandemic level.

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

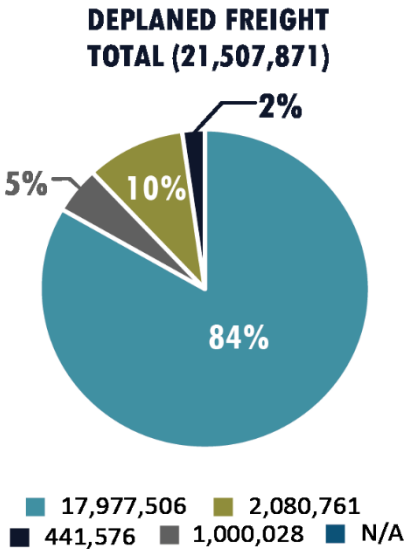


Figure 14 IATP Deplaned Passengers

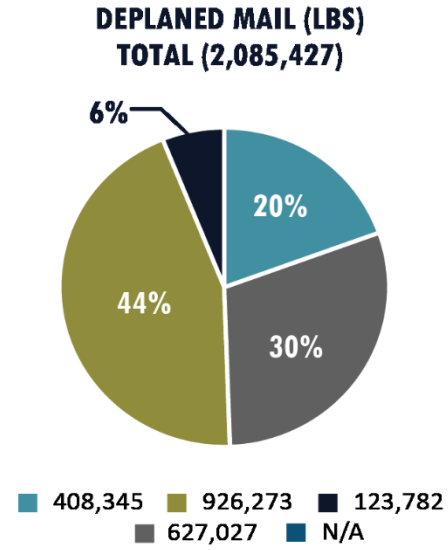


Figure 15 IATP Deplaned Mail

Mail

Deplaned mail has generally been in decline across the IATP Region, 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.

2.1.3 Challenges to the Aviation System

The IATP Region's diverse and widespread airports share several common needs to improve the safety and operability of the aviation system. These needs include lighting systems in a state of good repair, runway surfaces maintained in fair or better condition, and accurate weather reporting for pilots. 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.

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

The cost to maintain and operate facilities within rural areas such as the IATP Region has greatly increased over the years. For rural airports the maintenance and operation costs have more than doubled compared to the costs presented in the *2010 IATP*. 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 fiscal years 18-22 vs fiscal Years 02-06). 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 cost to maintain the airports is nearly ten times the revenue generated by these airports.

Additionally, many of the airports in the IATP Region and the rest of the State have unique challenges and needs that traditionally would not align with the authorizations set in place by the FAA. The most recent FAA re-authorization, released in 2024, includes laws providing Alaska with exemptions regarding many of the rules including runway length requirements, aviation fuel provisions, equipment sharing, etc.

Runway Length

The two (2) most regionally important components of infrastructure are runway length (and condition) and runway lighting. Airports that have been identified with potential future roles as more official regional hubs (Tok and Gulkana) may ultimately need longer runways than the current performance measures prescribed in the Alaska Aviation System Plan.

Six (6) of the airports in the IATP Region do not meet the recommended minimum runway lengths specified by Alaska Aviation System Plan

- The average age of lighting systems at airports in the IATP Region is 24 years, with a number of systems exceeding 30 years.
- Two (2) airports in the IATP area need new first-time installation of lighting system.
- One (1) needs a lighting system upgrade from **M**edium **I**ntensity **R**unway **L**ights to **H**igh **I**ntensity **R**unway **L**ights.
- Nineteen (19) airports are recommended to have lighting system replacements/rehabilitations.

Approximately 30 percent of the region's runways need surface condition improvements to restore poor/fair conditions to good or excellent.

Runway 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 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, fog, 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 have kept many of the older systems operational well beyond their expected lifespans, considering the harsh environment and limited funding that cause lighting systems to deteriorate.

Airport Amenities

Airport amenities may include features such as public restrooms, passenger waiting shelters, emergency maintenance shelters, fuel service, and broadband internet connection. 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. The DOT&PF does not provide fuel service, but airport improvement and development plans should include suitable locations for fuel service to be provided by private parties. 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 Unmanned Aircraft Systems (UAS) operations. To meet performance measures, broadband connectivity is needed at ten of the 17 Community airports and at the single Regional Hub airport in the IATP Region.

Six (6) Airports in the IATP Region have Fuel Available

Eight (8) Airports in the IATP Region have Broadband Available

Weather Reporting Systems

The fiscal year 2021 FAA Alaska Aviation Safety Initiative includes goals of increasing weather reporting at airports and enroute, installation of additional weather cameras, additional automated weather observing system (AWOS) coverage, and development of new instrument approach procedures (IAPs). The DOT&PF *Statewide Long-Range Transportation Plan* recommends continued support of AWOS and IAPs and continued support of airspace protection and management. The 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.

New and improved instrument approach procedures (IAPs) improve flight safety.

Twelve (12) airports in the IATP region have been identified as needing weather reporting systems

Military aviation is and will remain a major user of airspace in the IATP Region. 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 FAA has no current plans to develop new instrument approach procedures at any of the visual flight rule airports in the IATP Region. This plan recommends several airports in the IATP Region be considered by the AASP work to receive new or improved IAPs. Several of the airports in the Region have IAPs but lack weather reporting sources or depend on weather reporting from nearby airports, these airports are identified in Table 14 on the next page. Efforts to get weather reporting systems at airports currently without should also continue. 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.

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.

This plan recommends that the DOT&PF, the Alaska Airmen's Association, the Aircraft Owners and Pilots Association, and other affected stakeholders remain engaged with the Alaska Civil-Military Aviation Council as changes to airspace are proposed

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. More reliably operational system of weather reporting – the maintenance and timely repair of broken systems is critical to flight planning and safety. 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, Birch Creek, Circle City, McCarthy, Stevens Village, Tetlin, and Venetie.

Table 14 IAPs, AWOS, and Weather Camera Status at Select IATP Region Airports

Location	Airport ID	Instrument Approach Procedures	Access to an Automated Weather Observing Station (AWOS)	Weather Camera Available
Beaver	WBQ	✓	✘ – Identified in the 2017 Alaska Aviation System Plan (AASP) as a high-priority site.	✓
Birch Creek	Z91	✘	AWOS off-site @ Fort Yukon (FYU), 22.6 nautical miles (nm)	✘
Boundary	BYA	✘	Automated Surface Observation System (ASOS) off-site @ Eagle (EAA), 42 nm	✘
Central	CEM	✓	✘ – Identified in the 2017 AASP as a high-priority site.	✓
Chalkyitsik	CIK	✓	✘ – Identified in a 2016 survey as a desirable location for a weather station.	✓
Chandalar Lake	WCR	✘	✘	✘
Chicken	CKX	✘	ASOS off-site @ EAA, 47.4 nm	✘
Chisana	CZN	✘	ASOS off-site @ Northway (ORT), 53.6 nm	✘
Chistochina	CZO	✘	ASOS off-site @ Gulkana (GKN), 32.8 nm	✓
Chitina	CXC	✘	✘	✓
Circle City	CRC	✘	None – Identified in a 2016 survey as a desirable location for a weather station.	✘
Circle Hot Springs	CHP	✘	✘	✘
Clear	Z84	✘	ASOS off-site @ Nenana (ENN), 14.9 nm AWOS-3P off-site @ McKinley Ntl Park (INR), 34.6 nm	✘
Copper Center 2	Z93	✘	ASOS off-site @ GKN, 13.6 nm	✘
Gold King Creek	AK7	✘	AWOS off-site @ INR, 37.2 nm ASOS off-site @ Fairbanks International Airport (FAI), 38.2 nm	✘
Healy River	HRR	✓	AWOS-3P off-site @ INR, 8.3 nm ASOS off-site @ ENN, 41 nm Identified in a 2016 survey as a desirable location for a weather station.	✘
Kantishna	5Z5	✘	✘	✘
Lake Louise	Z55	✘	AWOS-39 off-site @ Adak (AZK), 27.1 nm	✘
Livengood Camp	4AK	✘	ASOS off-site @ FAI, 44.1 nm ASOS off-site @ ENN, 56.5 nm	✓
Manley Hot Springs	MLY	✓	✘ — Identified in 2016 survey as a desirable location for a weather station	✘
May Creek	MYK	✘	✘	✘
McCarthy	15Z	✘	✘ — Identified in 2016 survey as a desirable location for a weather station	✘
Minto Al Wright	51Z	✘	ASOS off-site @ ENN, 36.9 nm	✓
Rampart	RMP	✘	✘	✘
Stevens Village	SVS	✘	✘	✘
Summit	UMM	✘	AWOS-3P off-site @ INR, 24.9 nm	✓
Tazlina	Z14	✘	AWOS-3P off-site @ AZK, 21.5 nm ASOS off-site @GKN, 28.9 nm AWOS-3P off-site @ Valdez (VDZ), 56.4 nm	*Information not available
Tetlin	3T4	✘	AWOS-3PT off-site @ Tok Junction (6K8), 16.9 nm ASOS off-site @ ORT, 18.9 nm	✘

Wildland Firefighting Response

Wildland firefighting relies heavily on aircraft support in Alaska. The Interior Region is especially prone to wildfires, and strategic locations to support fire response are important. The DOT&PF should continue to pursue improvements to Tok as a regional facility, in part so that Department of Natural Resources (DNR) can relocate its Tanacross operations to that airport and continue to conduct aircraft activities effectively in the Region. The DNR Division of Forestry commented that if Tanacross becomes unusable and no other facility nearby were available for relocation, pulling back operations to Fairbanks would greatly increase the amount of time it takes for firefighting response and thus increase the overall costs and damage from wildland fires in the Region.

This plan recommends that the 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.

Unmanned Aircraft Systems

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 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 well positioned to take advantage of UAS and Advanced Air Mobility Technologies.

2.2 SURFACE TRANSPORTATION

The surface transportation system is made up of all modes of transportation that move people and goods over land. This includes roads and highways, transit, freight, and rail.

2.2.1 Roads and Highways

The highway system in the IATP Region is comprised of approximately 2,010 miles of Alaska Highway System (AHS) roadways, of which approximately 1,248 are designated as National Highway System (NHS) roadways. The remaining 762 miles of highway in the IATP Region are solely designated as AHS roadway. Roadways identified as being a part of the NHS are important to the nation's economy, defense, and mobility. With few exceptions, NHS routes in Alaska are managed by the DOT&PF. The AHS includes intrastate highways connecting communities, recreational areas, and resource lands within the IATP Region. Figure 17 includes identification of the major surface routes in the IATP Region as well as their functional classification as discussed in Section 2.2.1.1. Additional information on the AHS, NHS, and interstates within the IATP Region and their importance can be found in *Appendix 3, Section 3*.

The Alaska Highway System (AHS) includes roadways that are:

- Included within the NHS
- Of Statewide Significance, but not Included in the NHS
- Highways and Transportation Facilities Designated Under the Community Transportation Program

The National Highway System (NHS) includes:

- Interstates
- Defense Routes
- Principal Arterial Routes
- Routes Connecting to Major Intermodal

In addition to NHS and AHS designated routes, the IATP Region includes highways established as Alaska or National Scenic Byways. To be designated as Alaska Scenic Byways the highway must highlight the scenic, historic, and cultural appeal of the state. This designation provides additional funding opportunities and promotes tourism. Once a state byway designation is obtained, the highway becomes eligible to apply for a National Scenic Byway designation, which uses similar factors when determining designation.

Alaska Scenic Byways in the IATP Area
The Alaska Railroad (Seward to Fairbanks): One of the last surviving 'flag stop' passenger rail lines in the US.
The Steese Highway (Fairbanks to 50 miles from the Arctic Circle): The White Mountains National Recreation Area and Birch Creek National Wild and Scenic River are accessible via the Steese Highway.
The Taylor and Top of the World Highways (Tetlin Junction to Boundary): Provides access to the historic Fortymile gold mining district, Dawson City, and Yukon Territory.
Richardson Highway North (Fort Greely to Fairbanks) and South (Valdez to Glennallen): Alaska's oldest highway.
National Scenic Byways in the IATP Area
The Glenn Highway (Anchorage to Glennallen): Follows a path left behind by ancient glaciers and was designated as a National Scenic Byway in 2002.
The Parks Highway (Anchorage to Fairbanks): Connects Alaska's two largest cities while taking travelers through breathtaking wilderness. The Parks Highway received the National Scenic Byway designation in 2009.

2.2.1.1 Functional Classifications

Functional classifications pertain to the grouping of roadways into classes or systems based on the type of service they are intended to provide. These classifications vary depending on the composition of the communities in which they serve and are used as a guide for determining design standards such as road widths, speed limits, intersection control, etc. The IATP Region is made up of rural areas with the following classification types, interstate, arterial, collector, and local roads, as defined in Table 15 and displayed in Figure 16.

Table 15 Alaska Functional Roadway Classifications and Examples

Alaska Functional Roadway Classifications	Examples
Interstate - The highest classification in the United States, these are arterial roads that provide the highest level of mobility and speed.	The Alaska, Glenn, Parks, and Tok Cutoff Highways as well as two portions of the Richardson Highway which are between Glennallen and the start of the Tok Cutoff and between Delta Junction and Fairbanks
Arterial - Roads that typically have high traffic volumes and provide mobility so traffic can move from one place to another quickly and safely.	Chena Hot Springs Road, the Elliott Highway, Steese Expressway/Highway, and the Taylor/Top of the World Highway.
Collector - Roads that link arterial and local roads, collectors often function with similar characteristics as both arterials and local roads.	The Edgerton Highway/McCarthy Road, Nabesna Road, and the northern segment of the Taylor Highway that serves the community of Eagle.
Local - Roads provide access to homes, businesses, and other property.	Local roads are not included in the inventory of surface transportation for the IATP area as they are more commonly owned and operated by local governments and are considered in local transportation planning efforts. However, local road needs established by communities are included in the overall needs list.

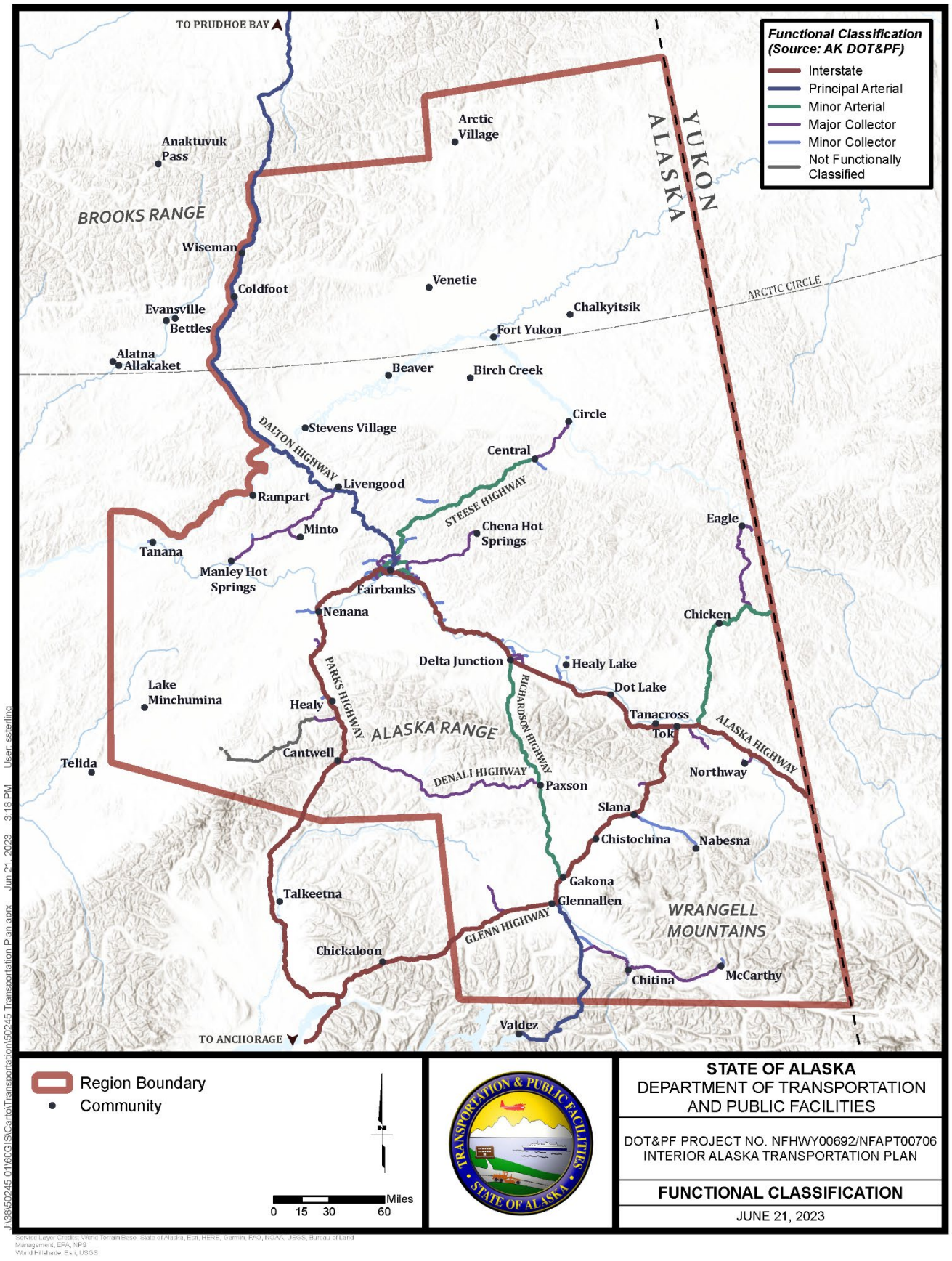


Figure 16 IATP Major Surface Routes and Functional Classification

2.2.1.2 Average Daily Traffic Trends

The average daily traffic (AADT) has remained relatively flat or decreased over the last decade. The exception to this trend is during the peak tourist season of May to October. These trends are expected to continue, driven by flat population projections and an increased level of tourism activity during the summer months. Even with an increase in AADT during peak tourism season, no segments of any highway in the IATP Region are experiencing or will likely experience highway capacity issues.

During the summer months the AADT can increase anywhere between 20 and 389 percent depending on the location[5].

2.2.1.3 Pavement Conditions

To successfully implement pavement preservation measures, DOT&PF documents pavement conditions annually along roadways throughout Alaska. Road Surface Profiling[8] equipment is used to analyze pavement conditions including cracking, rutting and smoothness, which are defined as:

- Roughness: irregularities in the pavement that impact ride quality, measured using the International Roughness Index
- Rutting: depressions in the pavement surface that run in the same direction as travel in the lane
- Cracking: fissures or discontinuities in the pavement surface, which may or may not extend through the entire thickness of the pavement

The surface condition information is incorporated into the asset management system where it is compared with traffic data and other information to help inform estimates on pavement life. The data is collected and published annually and can be used to inform capital project timing and funding. The 2021 pavement conditions for the IATP Region are included throughout *Section 2 of the Technical Document in Appendix 3*. The majority of the major roadways in the IATP Region have pavement conditions rated as good or fair. However, some of the roadways have over 50 percent of their total road miles within the IATP Region rated as poor for roughness, the other condition measures all fall under 50 percent of the total road miles within the IATP Region. These outliers include the following, based on condition measure:

- Roughness: The Denali Highway (45.8 miles/68.8 percent rated as poor), the Edgerton Highway/McCarthy Road (26.4 miles/55.1 percent rated as poor), and the Taylor Highway (32.1 miles/51.3 percent rated as poor).

In addition to surface condition monitoring, DOT&PF preserves paved roadways in the interior with the implementation of seasonal weight restrictions on certain roadways. Additional restrictions such as seasonal weight restrictions are placed on vehicles that have a gross vehicle weight over 10,000 pounds. These restrictions begin at the start of spring break-up to minimize damage to roadways and can reduce allowable gross vehicle weight by as much as 50 percent, impacting the quantity of freight that can be moved during this period of time. Restrictions are dependent on local weather, soil conditions, and frost depth and therefore vary by year and by highway. The majority of the major roadways in the IATP Region have seasonal weight restrictions from either March or April until late May or June.[v]

2.2.1.4 Bridges

The DOT&PF is responsible for maintaining 194 bridges throughout the IATP Region (Figure 17). A majority of bridges in the United States have an average lifespan of 50 years, new bridge construction aims to extend that lifespan to 100 years. Bridges in the Interior Region have an average year of construction of 1967, putting the average age at 57. Both the Robertson River Bridge and the Gerstle River Bridge were built in 1944 making them 80 years old and the oldest in the IATP Region.

In addition to many of the bridges in the Interior Region being over 50 years old, many of the bridges were built around the same time; making them reach the age of replacement simultaneously. Currently six percent of bridges in the Interior Region are considered to be in poor condition while 38 percent are considered to be in good condition and 56 percent, the majority, are considered to be in fair condition. The full inventory of bridges in the IATP Region and their condition ratings are included in *Section 2 of the Technical Document in Appendix 3*.

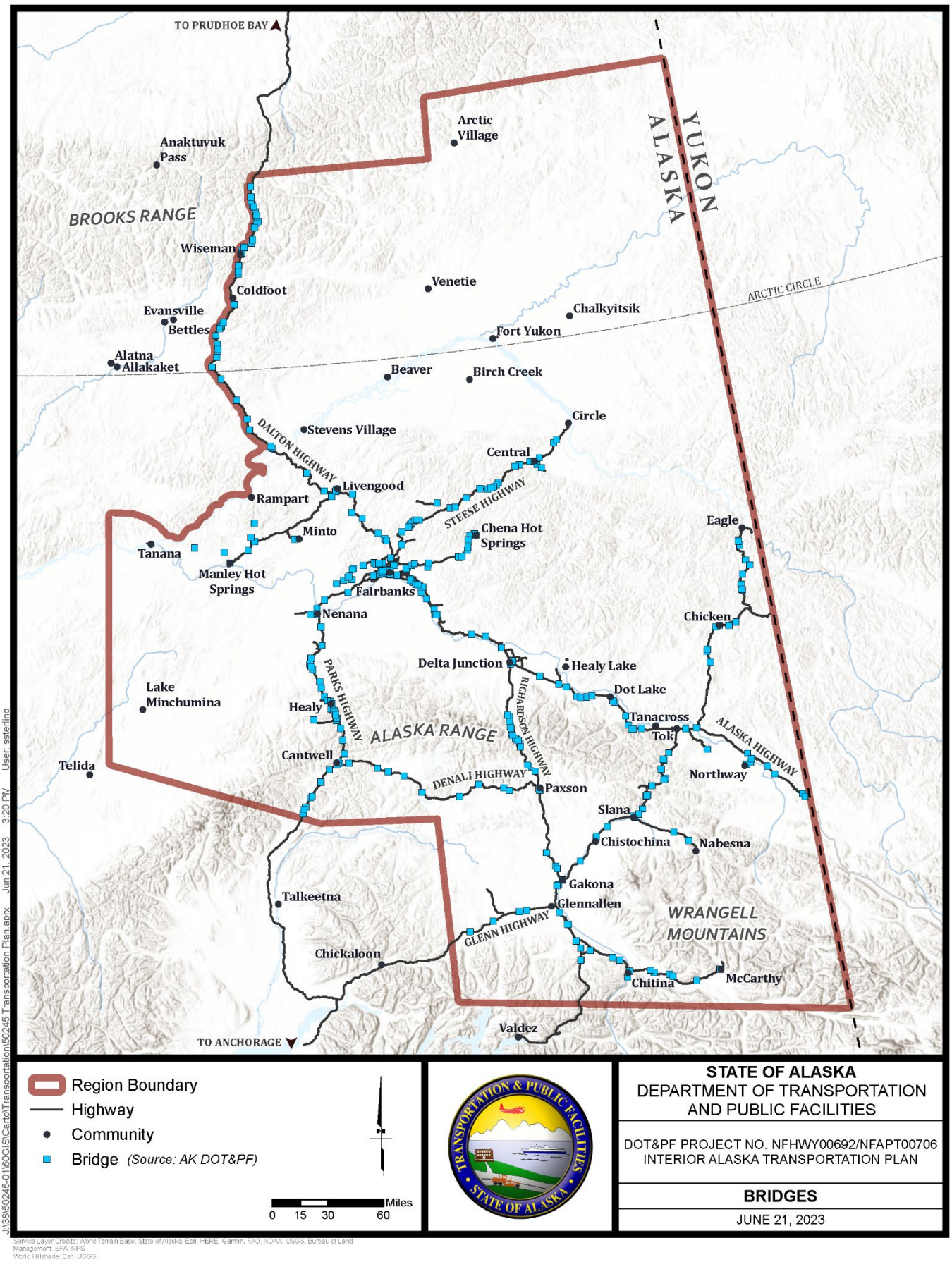


Figure 17 IATP Region Bridges

2.2.1.5 Transit

There are two transit services that operate within the IATP Region and outside the boundary of FAST Planning, both service operations receive Federal Transit Administration funding. The Interior Alaska Bus Line operates daily and travels from Anchorage to Tok on the Glenn Highway and from Tok to Fairbanks on the Richardson Highway with stops along the way and the village of Gulkana has Soaring Eagle Transit, which operates on a fixed schedule for service to Anchorage, Valdez, and Copper River Basin. These transit services enhance users access to health care, education, employment, recreation, entertainment, and shopping.

2.2.1.6 Maintenance and Operations

The overall cost to operate and maintain all transportation facilities has increased over the years, especially in rural areas like the IATP Region. The increase in these costs may be attributed to aging infrastructure, increased material, fuel, and labor costs, and increased regulatory and compliance standards. In addition to cost affecting the maintenance and operations (M&O), there is the lack of personnel and overall funding funneled towards M&O. Many of the regional M&O stations are functioning with staffing that is undercapacity.

Strategies that, upon thoughtful implementation, have a chance to reduce these costs include:

- Investing in asset management by optimizing the life cycle of transportation assets
- Investing in emerging and innovative technologies (detailed further in Section 2.11 of this document)
- Implementing Transportation Systems Management and Operations strategies that improve traffic flow and reduce congestion, ultimately resulting in a reduction of operational costs
- Promoting Public Private Partnerships, which leverage investments and expertise from the private sector
- Diversifying revenue streams

DOT&PF's M&O section uses asset conditions and survey data to prioritize projects. At the time of writing (March 2025) the M&O section is in the process of developing a quality assurance/quality control program that may impact the future prioritization of projects.

2.2.1.7 International Connections

Separating Alaska from its international neighbor, Canada, is a 1,538-mile-long border. In many areas this border is delineated by natural structures while other more rugged areas are nearly invisible except for markers resembling tiny Washington Monuments lining the way. Along the border, at Milepost (MP) 1221.8 of the Alaska Highway is the Alcan Land Port of Entry (Alcan LPOE) (Figure 18), one of the few surface transportation crossings between Alaska and Canada. This port of entry is the only 24-hour, year-round, full service, port of entry serving both personal vehicles and commercial truck traffic between Yukon Territory, Canada and Interior Alaska, per the United States General Services Administration (GSA). The Alcan LPOE is currently undertaking a design-build project to replace the existing port operational facilities, housing, and community complexes with modern facilities that will meet the needs of the United States Customs and Border Protection and General Services Administration. Construction is anticipated to be completed by spring 2031.[vi]

Figure 18 December 2012, Official Photos of Alcan Border Crossing Source: United States General Services Administration

Imports and Exports

According to a 2025 document from the Consulate General of Canada to the United States, Alaska exports approximately $111 million US dollars (USD) worth of services to Canada annually.[vii] These services include transport, travel, business, use of intellectual property, and maintenance and repair. Additionally, Alaska exports approximately $614 million USD in goods to Canada annually including minerals and metals (62%), agriculture (17%), energy (11%), equipment and machinery (4%), transportation (4%) and other (2%). Table 16 below lists the top ten goods exported to Canada including their value in millions of USD.

Table 16 Exported Good to Canada from Alaska with Values in Millions of USD

Exported Goods (Alaska to Canada)	Value in Millions of USD
Ores, Slag, and Ash	$374
Fuel Oil	$70
Fish and Crustaceans	$67
Meat, Fish, and Seafood Preparations	$24
Aircraft and Parts	$20
Animal or Vegetable Fats, Oils, and Waxes	$8
Animal Feed and Food Industry Residues	$6
Wood and Semi-Finished Wood Products	$6
Optical, Medical, and Precision Instruments	$5
Iron and Steel Tubes, Pipes, and Sheets	$4

The above totals in Table 16 are cumulative for the State of Alaska on an annual basis. Exports to Canada from Alaska that pass through the Alcan LPOE are primarily transported by truck, as reported by the United States Department of Transportation (USDOT) Bureau of Transportation Statistics. Table 17 lists the top ten commodities exported to Canada from Alaska via the Alcan LPOE, including their value in millions of USD between January 2023 and December 2024.

Table 17 Exported Goods to Canada from Alaska at the Alcan Land Port of Entry in Millions of USD

Exported Goods (Alaska to Canada)	Value (Millions of USD)
Computer-Related Machinery Parts	$27.01
Measuring and Testing Instruments	$6.05
Electrical Machinery; Equipment Parts	$2.31
Aircraft; Spacecraft and Parts	$2.17
Fish and Crustaceans	$1.98
Articles of Iron and Steel	$1.82
Vehicles Other than Railway	$1.61
Mineral Fuels; Oils and Waxes	$0.71
Tools of Base Metal	$0.24
Products of Animal Origin	$0.15

Overall, from January 2023 to December 2024, the Alcan LPOE facilitated the export of approximately $44.75 million USD worth of goods to our Canadian neighbors. Most of these exports were machinery and equipment parts for a variety of sectors including technology, measuring and testing, electrical, and aircraft. Exports during this time were down by approximately -3.7 percent from the previous years.

Not only is Alaska exporting goods and services to Canada, but Alaska also imports approximately $1.0 billion in goods from Canada annually. Goods imported to Alaska from Canada include energy (44%), equipment and machinery (19%), other (14%), minerals and metals (13%), transportation (7%), and chemicals (3%). Table 18 below lists the highest goods imports to Alaska from Canada including their value in millions of USD.

Table 18 Imported Goods to Alaska from Canada in Millions of USD

Imported Goods (Canada to Alaska)	Value (Millions of USD)
Fuel Oil	$351 Million
Crude Petroleum	$84 Million
Ores, Slag, and Ash	$62 Million
Iron and Steel Tubes, Pipes, and Sheets	$48 Million
Compressors and Pumps	$36 Million
Woods and Semi-Finished Wood Products	$24 Million
Automobiles	$20 Million
Furniture and Bedding	$18 Million
Engines and Turbines	$16 Million
Pearls, Gems, Precious Metals and Jewelry	$16 Million

Compared to exports from Alaska to Canada via the Alcan LPOE, imports from Canada to Alaska from January 2023 to December 2024 were up by approximately 45.5 percent from previous years, totaling approximately $394 million USD. Imports from Canada to Alaska at the Alcan LPOE are primarily transported via truck with some coming by air. Table 19 below lists the top ten commodities exported to Alaska from Canada via the Alcan LPOE, including their value in millions of USD between January 2023 and December 2024

Table 19 Imported Goods to Alaska from Canada at the Alcan Port of Entry in Millions of USD

Imported Goods (Canada to Alaska)	Value (Millions of USD)
Computer-Related Machinery Parts	$148.6
Special Classification Provisions	$71.2
Articles of Iron and Steel	$36.1
Vehicles Other than Railway	$34.4
Furniture; Lamps and Prefab Buildings	$16.5
Electrical Machinery; Equipment Parts	$15.9
Wood and Articles	$15.7
Mineral Fuels; Oils and Waxes	$9.2
Plastics and Articles	$8.7
Aluminum and Articles	$8.2

Tourism

In addition to the exchange of goods and services between Alaska and Canada, the Alcan LPOE also facilitates the movement of people via active transportation, passenger vehicles, trucks, and air travel between the United States and Canada. Table 20 below provides an overview of travelers by mode of transport at the Alcan LPOE during fiscal years 2022, 2023, and 2024 as reported by the United States Customs and Border Protection agency.

Table 20 Border Crossings at the Alcan Port of Entry by Transportation Mode

Fiscal Year (FY)	Transportation Mode			
	Passenger Vehicles	Pedestrians	Trucks	Air
2022	66,600	3,600	5,900	221
2023	83,500	4,400	8,300	169
2024	85,500	4,600	10,700	133

The majority of tourism traffic through the Alcan LPOE occurs in the prime tourism months of May, June, July, and August. Figure 19 below illustrates the traveler arrivals at the Alcan LPOE each fiscal year per month. *Appendix 4* includes a detailed table with traveler crossings by mode.

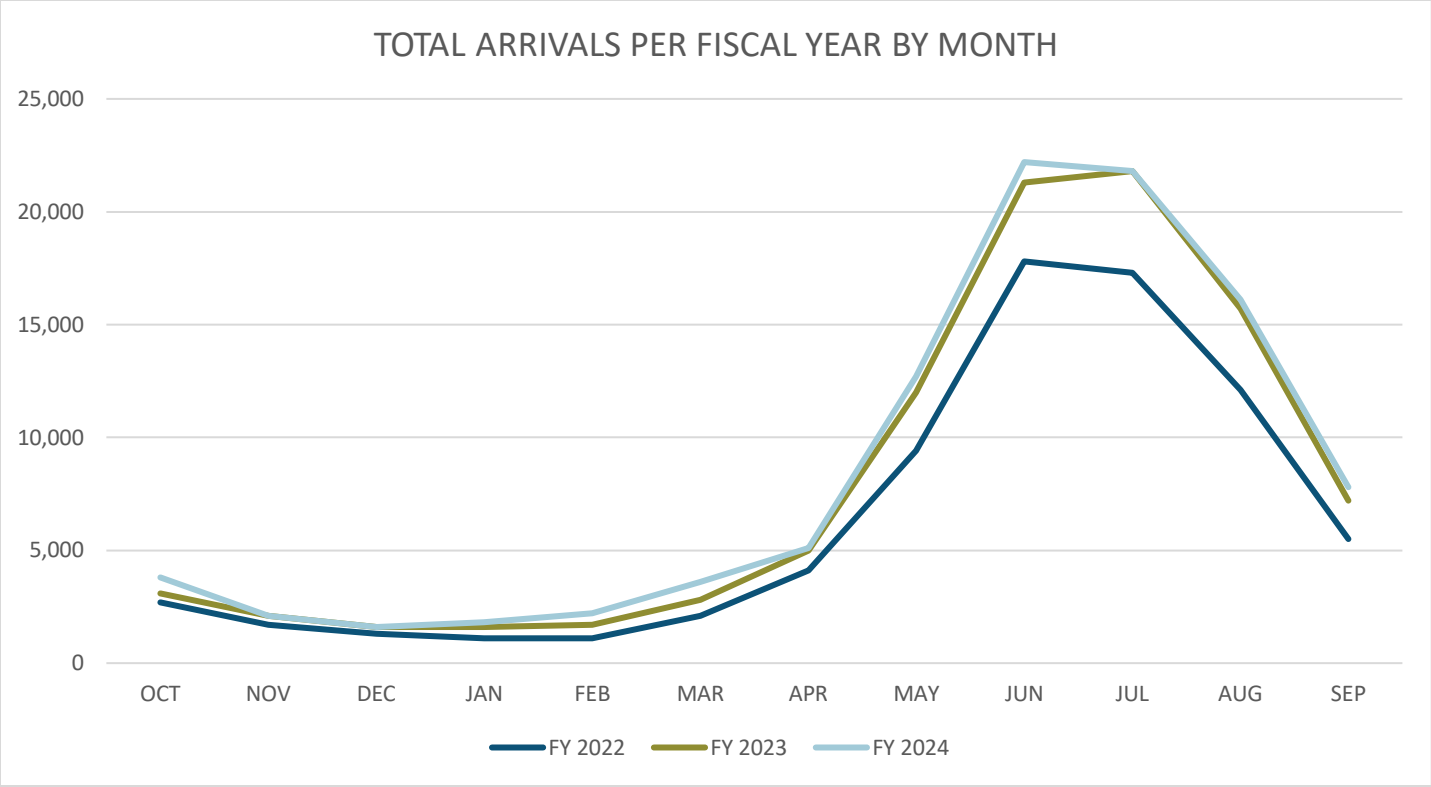


Figure 19 Change in Border Arrivals at the Alcan Port of Entry per Fiscal Year by Month

Opportunities for Growth

Alaska's relationship with Canada is mutually beneficial, however, there are areas of increased opportunity for growth and collaboration. There is widespread community support, within the IATP area to construct an almost 2,000-mile railroad link between the existing North American rail grid and the Alaska Railroad, which would require immense cooperation between Alaska and Canada. This type of international connection would provide additional access to and from Interior Alaska and Alaska at large, as well as Canada's Northwest Territories and Alberta. Additionally, this type of connection would assist in "Unleashing Alaska's Extraordinary Resource Potential"[viii] by providing increased access to some of the more active mineral exploration areas.[ix]

Alaska and Canada Partnership

In Spring 2025, the DOT&PF successfully directed $7.2 million USD in federal funding to support essential restoration projects throughout the Shakwak corridor in Canada's Yukon Territory. This investment will assist the Alaska Highway to remain safe, reliable, and passable year-round for travelers, freight movement, and emergency services. DOT&PF Commissioner Ryan Anderson said "[The Shakwak Project] reflects [Alaska, the United States, and Canada's] shared commitment to keeping the international corridor open, well-maintained, and strategically capable."[x]

2.2.2 Challenges

From safety to funding, the IATP Region faces a myriad of challenges in relation to surface transportation. Many users report perceived safety issues stemming from the existing road conditions, high number military convoys and the impact these convoys have on civilian traffic, and natural environmental events. Additionally, the population of the IATP Region is consistently increasing with seasonal visitors, even though the permanent population shows trends of consistent decrease. This fluctuation in population can lead to difficulties when planning for, prioritizing, and identifying areas for improvement.

The movement of freight via the surface transportation system in the Region remains imperative and faces its own challenges. Truck drivers are only permitted to drive up to 11 hours within a 14-hour duty window before requiring a mandatory, consecutive, ten-hour rest. For those moving freight between Anchorage and the IATP Region, it can often be difficult making it from their origin to destination within this timeframe because of the size of the region and long

travel distances between locations. A 2015 report identified that for the entire state of Alaska, there are no public facilities for truck parking. Instead, there are 18 private truck stops providing 179 parking spaces. There continues to be a need for additional facilities to accommodate this essential service. Challenges pertaining to funding are multifaceted and include increased maintenance costs, lack of personnel to effectively complete work, and competing project priorities.

2.3 Active Transportation

The 2019 Alaska Statewide Active Transportation Plan (ASATP) cites, "It is the policy of the department that accommodations for pedestrians and bicyclists be considered and implemented for all our highway projects". The ASATP provides policy for the planning and development of projects that allow for access to accessible and safer walking and bicycling opportunities as an integral part of daily life in Alaska. The five goal areas of the ASATP are Safety, Health, Maintenance/System Preservation, Connectivity, and Economic Development.

For much of the IATP area active transportation infrastructure is a community level issue that focuses on connections and access within communities. However, there is ample community support for community-to-community connections between Fairbanks, North Pole, and Salcha as well as between Nenana and Denali.

2.3.1 Challenges

The Interior Region is composed of many rural communities, motorized and aviation transportation are the most common ways in which individuals navigate the Region. Active transportation in this area is most commonly intracommunity connections rather than intercommunity connections. Many of the facilities provided are located on the shoulder of roads if not part of the larger trail network. Active transportation users often share these facilities with all-terrain vehicles and snowmachines. Active transportation facilities for the Interior Region not only accommodate pedestrians and cyclists, but also dog sleds and skiing.

2.4 Waysides and Recreation Access

Visitors and Alaska residents alike enjoy the extensive opportunities for recreation and exploration of the IATP Region year-round, making tourism and recreation important economic drivers across the region. There are 1,064 known waysides in the IAPT Region, ranging from small pull-outs to large parking lots with restrooms, trailheads, and picnic tables. These waysides vary in ownership, with some owned and maintained by DOT&PF while others are owned and maintained by the Bureau of Land Management, United States Forest Service, or local community members. With varying owners, maintenance operators, and typography, waysides in the Interior and around the state lack any standard or prioritization.

2.4.1 Challenges

Waysides owned and maintained by DOT&PF and have restroom facilities are only open seasonally (May through October). Other waysides may not be formally closed, but due to the lack of available resources for continued maintenance such as snow removal, these waysides become inaccessible. In response to the lack of roadside amenities, including waysides, locally owned businesses have become makeshift waysides and rest areas. The management and maintenance of waysides require interagency coordination between the DOT&PF and federal land managers. Concurrently, maintenance and operation facilities throughout the state are lacking in personnel and funding. This leads to difficultly prioritizing which waysides need attention and which organizations or agencies will be able to provide resources.

Despite these challenges, the DOT&PF has initiated efforts to develop a robust inventory of the existing waysides and their amenities and to identify gaps within the system. This effort is assisted by the data and information gathered throughout the IATP update process.

2.5 Rail

The Alaska Railroad Corporation (ARRC) operates and manages the railroad throughout the IATP Region, and Alaska at large. Rail is considered specifically by the draft 2016 Alaska State Rail Plan, and its inclusion in the IATP update is limited to understanding rail issues and needs in context of the complete, multimodal system being evaluated. The DOT&PF and ARRC are also planning an update of the State Rail Plan in 2025. The railroad in the IATP Region (Figure 20) extends through the Denali, Middle Yukon/ Fairbanks, and Yukon Flats Sub- Regions. Coordination between the planning team and ARRC provided insight into the high interest needs for the railroad, which include projects such as bridge replacement, rockfall mitigation in the Healy/Nenana Canyon, and implementation of the Fairbanks-North Pole Rail Realignment. The high interest needs provided by The ARRC are included in *Appendix 3, Section 7*, while community identified high interest needs are included in Section 5.

WANT MORE RAIL INFORMATION?

Don't worry, you're in luck!

The Alaska DOT&PF has a statewide rail plan available at dot.alaska.gov.

You can also visit the ARRC's website at alaskarailroad.com

On The Rails: Focusing on Sub-Regional Issues

Key concerns for ARRC and community members are focused in the Denali Borough and the Middle Yukon/Fairbanks sub-regions. Within the Denali Borough sub-region, the ARRC has a focus on rockfall mitigation within the Healy/Nenana Canyon area[xi], improvements to the Denali Depot[xii], and rail realignment in the Denali Park area.[xiii]

Within the Middle Yukon/Fairbanks sub-region, there is one project of major interest, the Fairbanks Area Rail Line Relocation (FARLR). FARLR is proposed as a way to optimize the realignment of the mainline and branch tracks within the Fairbanks area in order to improve safety, customer response, and minimize transportation conflicts. Additionally, FARLR also seeks to identify potential passenger transit services for communities along project corridor which extends the northwest side of Fairbanks near Sheep Creek to the Southeast side of North Pole near Moose Creek. FARLR has been a topic of planning studies and reports since the early 2000's. A 2007 Memorandum of Understanding between the Fairbanks North Star Borough and the ARRC, included as *Appendix 5*, outlines the corporation and borough's intent.

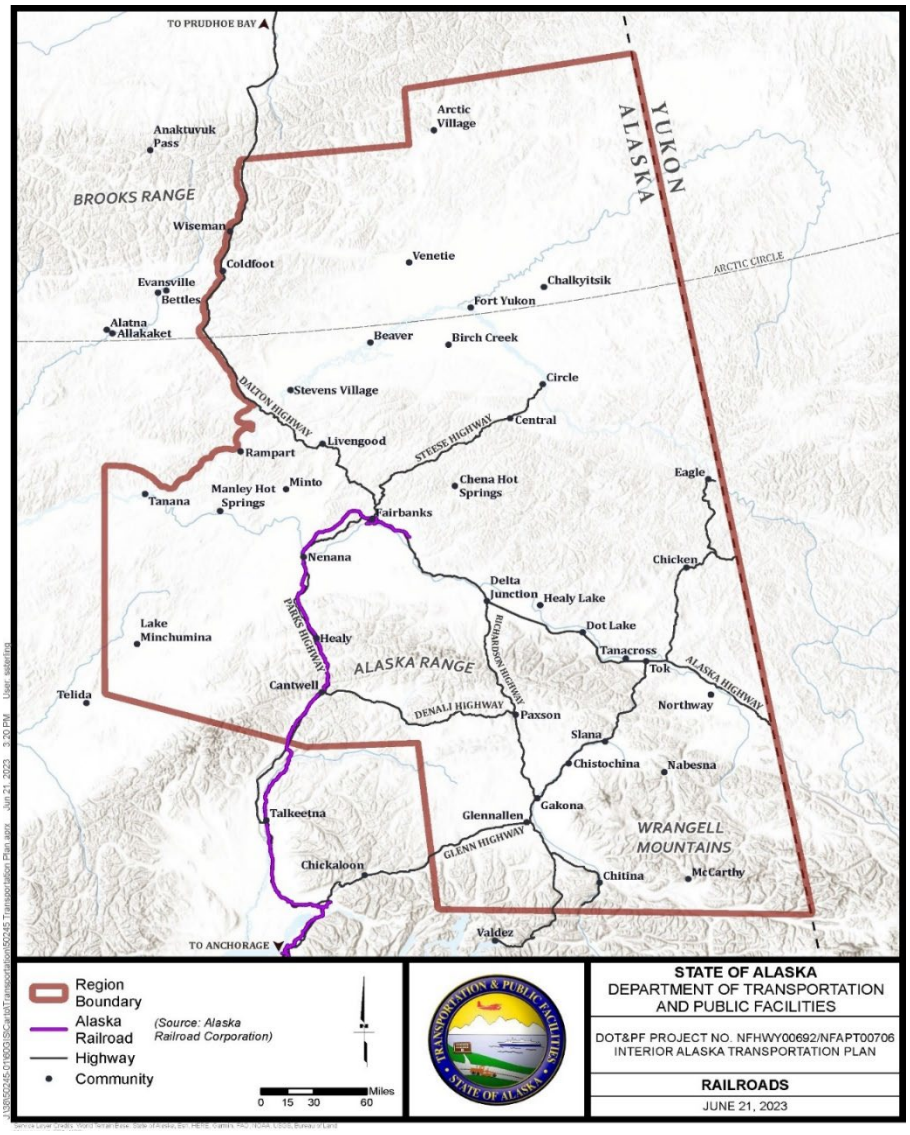


Figure 20 Existing Alaska Railroad

2.5.1 Challenges

The railroad facilities in the IATP Region are aging, with many of the bridges close to 100 years old. There is also a desire throughout the State to eliminate at-grade rail crossings, one of which is located in the Denali Sub-Region. Additional challenges are consistent with the topography of the Region, including the potential land/rockslides.

2.6 Winter Access

Many remote Alaskan communities rely on winter trails and seasonal ice roads to support the movement of goods and people between communities and the road system during the long dark seasons of ice and snow cover. These vital seasonal links provide communities with access to places that are otherwise only reachable by air. Traveling between villages for social events, to visit family, and to seek medical care is becoming increasingly common in the Region, simultaneously, the cost to travel by air is becoming more expensive and travel dates are often limited due to weather conditions and availability. Winter trails are heavily used and enjoyed by many and provide access to subsistence areas, recreation, neighboring communities, and the wider transportation network at a fraction of the cost of air travel. The IATP Update focuses on components of winter transportation that have roles in the Region's transportation goals and objectives. Winter access is fully considered in *Section 5 of the Technical Document in Appendix 3*.

What are Winter Trails?

Seasonally maintained, public use, routes that cross land, rivers, and/or lakes. Often accommodate travel by off road vehicles, fat tire bikes, skis, or snowshoes.

What are Ice Roads?

Seasonally constructed surfaces over frozen landscapes.

Ice roads, which are constructed across the frozen riverine system, are an effective method to lower the overall cost required to transport freight and provide users the opportunity to reach employment opportunities, medical care, and other amenities during all seasons. Much like winter trails, seasonal ice roads provide communities increased access to the transportation network at a fraction of the cost of air travel. Communities use their seasonal ice roads to bring in deliveries of fuel, construction materials, and other bulk goods that typically can only be delivered by air or barge these communities are identified in Figure 21. The communities identified in Figure 21 all have access to air service. However, travel and the delivery of goods via air is a more expensive option.

Currently, there is no comprehensive inventory of winter trails or ice roads in the IATP Region or the state. The DOT&PF, in collaboration with communities, is working to create a comprehensive inventory while exploring and advocating for additional federal funds focused on these vital seasonal connections. However, there is an extensive network of 17(b) easements and Revised Statute 2477 Historic Transportation Routes (RS2477), which likely provide a reasonable representation of logical winter travel routes.

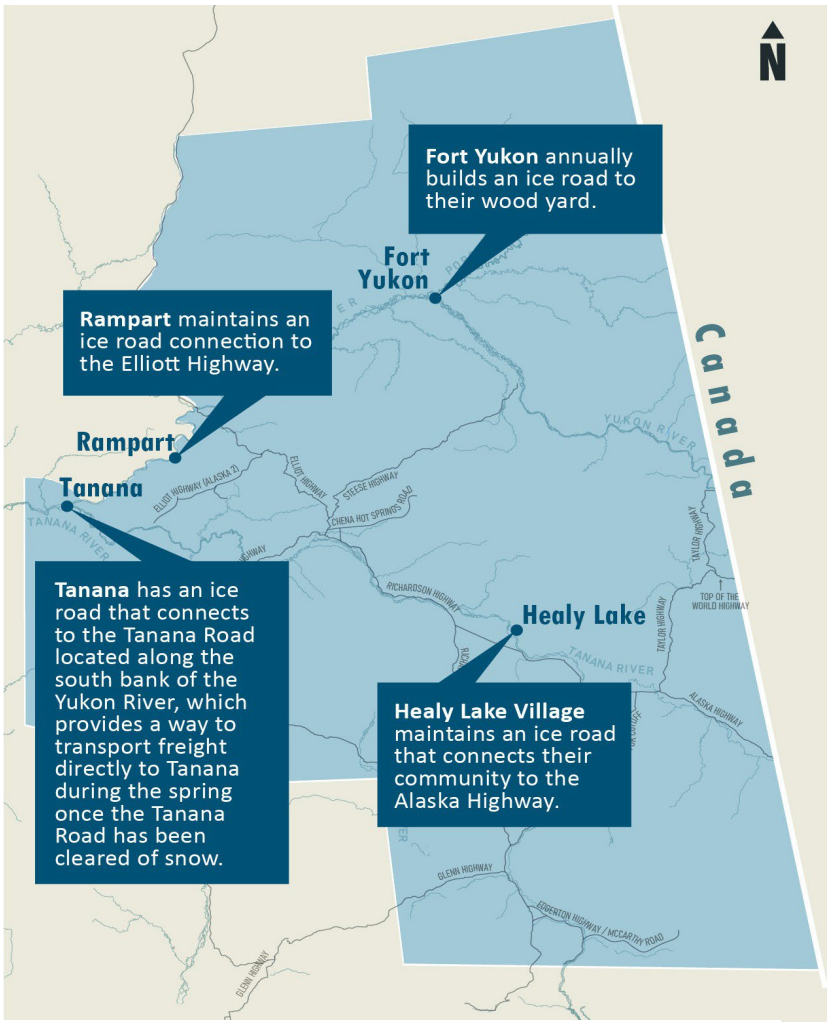


Figure 21 Ice Roads in the IATP Region

2.6.1 Challenges

The establishment and maintenance of winter trails is generally the responsibility of rural communities, local volunteers, partner agencies, tribal organizations, and/or non-profits, rather than the DOT&PF, but a goal of the *Statewide Long-Range Transportation Plan* is to increase coordination and collaboration with other levels of government to achieve a well-integrated multimodal transportation network. Funding options for winter trails and ice roads are limited with strict eligibility requirements, but there are several new programs that support this mode.

As with all modes and projects, there is plenty of competition for limited funding. The DOT&PF has taken steps to address funding challenges by providing programs to fund trail marking as well as ice road construction and maintenance projects. However, funding for other needs, including equipment, ice road signage, and the establishment of safety shelters, currently relies on the initiative and resources of communities.

The stretches between communities are often long, with combinations of harsh and difficult or nearly featureless terrain, both of which pose challenges for navigation and wayfinding. Winter weather in this Region presents additional challenges of severe cold temperatures, limited visibility during snowfall, and the possibility of winter storms. Unexpected events, such as storms or snowmachine breakdowns while traveling on remote trails, can quickly have dire consequences.

Trail shelters, strategically located along the trail network, are important in mitigating these risks. The *TCC Regional Transportation Strategy* recognizes trail shelters as crucial for improving trail travel safety and has identified key locations for the construction of proposed shelters to fulfill this safety need.

Many communities identified the need for maintenance of trails and existing trail amenities (shelters, signage, markers, etc.), the need for additional emergency shelters, and consistent universal trail marking along winter trails. New housing developments also have the potential to impact trails.

In addition to the needs associated with maintaining trails and their amenities, communities have identified additional challenges for winter access, including new housing developments and changing climates. Recently, housing developments constructed in Healy have impacted the Historic Stampede Trail, while climate change is causing warmer and more unpredictable winter temperatures. These warmer temperatures have created increasingly unsafe conditions for traveling on frozen water bodies and unpredictability regarding the length of the viable winter season.

2.7 Land Use

Land use designations and ownership influence where roads and access points can be constructed. The following sections describe key statutes and laws providing overland access in Alaska.

2.7.1 Revised Statute 2477

RS 2477 was derived from Section 8 of the Mining Law of 1866 and provided a legal means for establishing highways over public lands. The term "highway" had a different meaning at the time the law was written but has since been interpreted to refer to a broad range of overland transportation infrastructure, including, but not limited to modern highways, roads, trails, tunnels, and bridges. RS2477 rights of way were established until the law was repealed in 1976, though they were effectively stopped in Alaska in 1969 when Public Land Order (PLO) 4582 mandated a land freeze in anticipation of the Alaska Native Claims Settlement Act. RS2477 rights of way that were established prior to the law being repealed continue to be valid access routes.

Examples of RS2477 rights of way in the Interior include Farmer's Loop Road in Fairbanks, the Nabesna-Chisana Trail in Wrangell-St. Elias National Park, and Klutina Lake Road near Glennallen. Alaska Statute 19.30.400 lists more than 600 trails that have been accepted as RS2477 rights of way within the State, and many more have been identified since AS 19.30.400 was written. Designation as an RS2477 does not provide unconditional use of the right-of-way (ROW). The landowner has significant say in how the ROW can be used and many RS2477s are co-managed by the State of Alaska (e.g., DNR) and the landowner.

Community Land Use Spotlight: Fairbanks North Star Borough (FNSB)

The FNSB identifies land use strategies and actions in their 2024 Comprehensive Roads Plan, that includes coordination with the DOT&PF

These Strategies and Actions include:

- **Action 3.1.A** "…prohibit direct lot access onto Major Collector or higher classified roads[1]"
- **Action 3.1.C** "Enforce access management in partnership with the DOT&PF … through plat notes and driveway permits and standards"
- **Action 3.1.D** "Partner with FAST Planning, DOT&PF … to apply access management design features such as turn lanes, frontage roads, and driveway consolidation where appropriate or as aspects to construction projects".

For example, the Bielenberg Trail in Yukon Charley National Preserve is an established RS2477 that was used to support mining activities prior to the Alaska Native Interest Lands Conservation Act (ANILCA). Following ANILCA, miners were required to obtain permits for moving heavy equipment over the Bielenberg Trail.
One miner felt that permits were unnecessary because this was an RS2477, so he drove a large bulldozer over the trail, causing significant damage to the environment. The subsequent legal cases established that:

1. The Federal government had authority to regulate access and mining within Alaska's national parks.
2. Regulations did not deprive the defendant of "adequate and feasible" access to his claims and were within power granted under property clause.
3. The Federal government had authority to reasonably regulate travel on trails, even assuming it was an established right-of-way (RS2477).

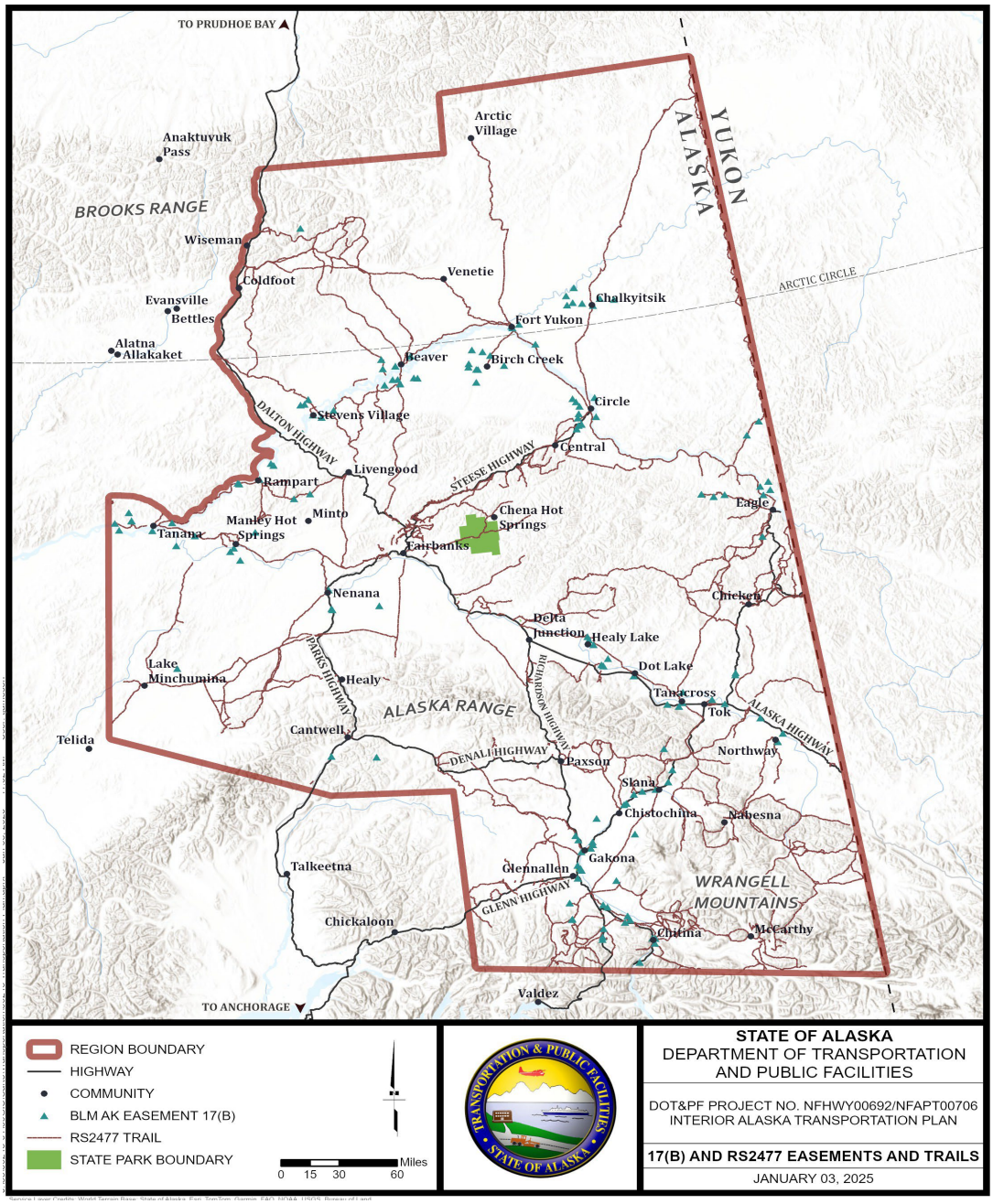


Figure 22 17(b) and RS2477 Easements and Trails in the IATP Region

2.7.2 PLO 5150

PLO 5150 reserves an area of land within Alaska as a transportation and utility corridor to provide federal access along the Trans-Alaska oil pipeline route. These lands are managed by the Bureau of Land Management and are subject to development restrictions. The Dalton Highway, which creates the western boundary of the IATP Region, is within PLO 5150 lands.

2.7.3 Alaska National Interest Lands Conservation Act Title XI

Section 1104 of the ANILCA establishes an evaluation process for transportation and utility systems within conservation system units and other designated conservation areas. This law was intended to provide "a single comprehensive statutory authority for the approval or disapproval of applications" which requires the participation of all federal agencies. ANILCA Title XI can be relevant to the development of road corridors across federal lands, if the route will cross through conservation areas.

2.7.4 17(b) Access Easements

17(b) easements are established under the Alaska Native Claims Settlement Act (ANCSA) and reserve the right of the federal government to provide public access through private lands to reach public lands and waterways. Establishment of these easements is a collaborative process; for example, the Copper River Access Study completed in 2023, involves Ahtna, Inc., the National Park Service, the Bureau of Land Management, the Alaska DOT&PF and the Federal Highway Administration, Western Federal Lands Highway Division. This access study seeks to establish a 17(b) easement to provide public access to the Copper River through Ahtna land and has involved analysis of multiple possible routes.

2.8 Tourism and Recreation

In the summer of 2022, over 580,000 people visited the Interior and spent over $700 million dollars[14]. Travelers, whether visitors or Alaska residents, enjoy the opportunities for recreation and exploration in the Region year-round, making tourism and recreation important economic drivers across the Interior. Activities range from road trips to the Arctic Circle to bus tours in Denali, to dip netting in Chitina; Table 21 includes a more extensive, though not exhaustive, list of seasonal recreational activities.

Traffic volumes and visitor experiences can be impacted by many factors, some of which are beyond the scope of the transportation system. For example, the recent decline in salmon populations has resulted in a lack of recreational or subsistence fishing in some rivers. Other factors are more directly related to the transportation system, such as road conditions, signage, and public amenities along travel corridors. Access to trailheads, public lands, and intermodal connections like boat ramps are key features of the AHS for recreators in the Interior. Waysides are also an important feature for recreation and safety.

Table 21 Common Recreational Activities in the IATP Region

Winter	Summer
Snowmachining	Biking
Fat Tire Biking	Hiking
Skiing (Alpine, Nordic, Back Country)	Mountaineering
Dog Mushing	Camping
Ice Climbing	Hunting
Mountaineering	Fishing
Hunting	Boating
Ice Fishing	Flightseeing
Flightseeing	Train Travel
Aurora Viewing	Road Trips

2.9 WATERWAYS

Acknowledging the importance of Alaska's waterways, the United States Maritime Administration (MARAD) in conjunction with the DOT&PF announced the addition of over 6,500 miles of Alaskan waterways to National the Marine Highway Program. This new addition, "Marine Highway M-11" also referred to as the Arctic Gateway (Figure 23), includes both coastal and river ports.

Figure 23 Arctic Gateway, Marine Highway Route M-11

This non-conventional marine highway route extends from the Aleutian Islands up the western and northern coast of Alaska. It aims to align with the Marine Highway Program's vision of increasing the use of America's navigable waterways, providing new and efficient transportation options, and increasing the connectivity of the waterway transportation system to the surface transportation system. This designation creates additional opportunities to acquire federal funding for Alaskan waterways.[xiv] A unique quality of this route is the connection to intercostal waterways that extend into the IATP Region.

2.9.1 IATP Region Rivers

The IATP Region's rivers – both large and small – provide waterway access to several communities within the IATP Region (Figure 24) including access to subsistence-based living, recreational opportunities, and access between communities. However, many of these rivers are not suitable for barge traffic. Therefore, barge service (the shipment and delivery of goods) in the IATP Region is limited to the Yukon and Tanana rivers.

Both the Yukon and Tanana rivers are wide and deep enough in places to serve as riverine highways that support barge traffic during ice-free months (typically mid-May through mid-October) and truck traffic in specific areas when the frozen rivers can be used as ice roads *(see Section 2.3.5 of this document)*.

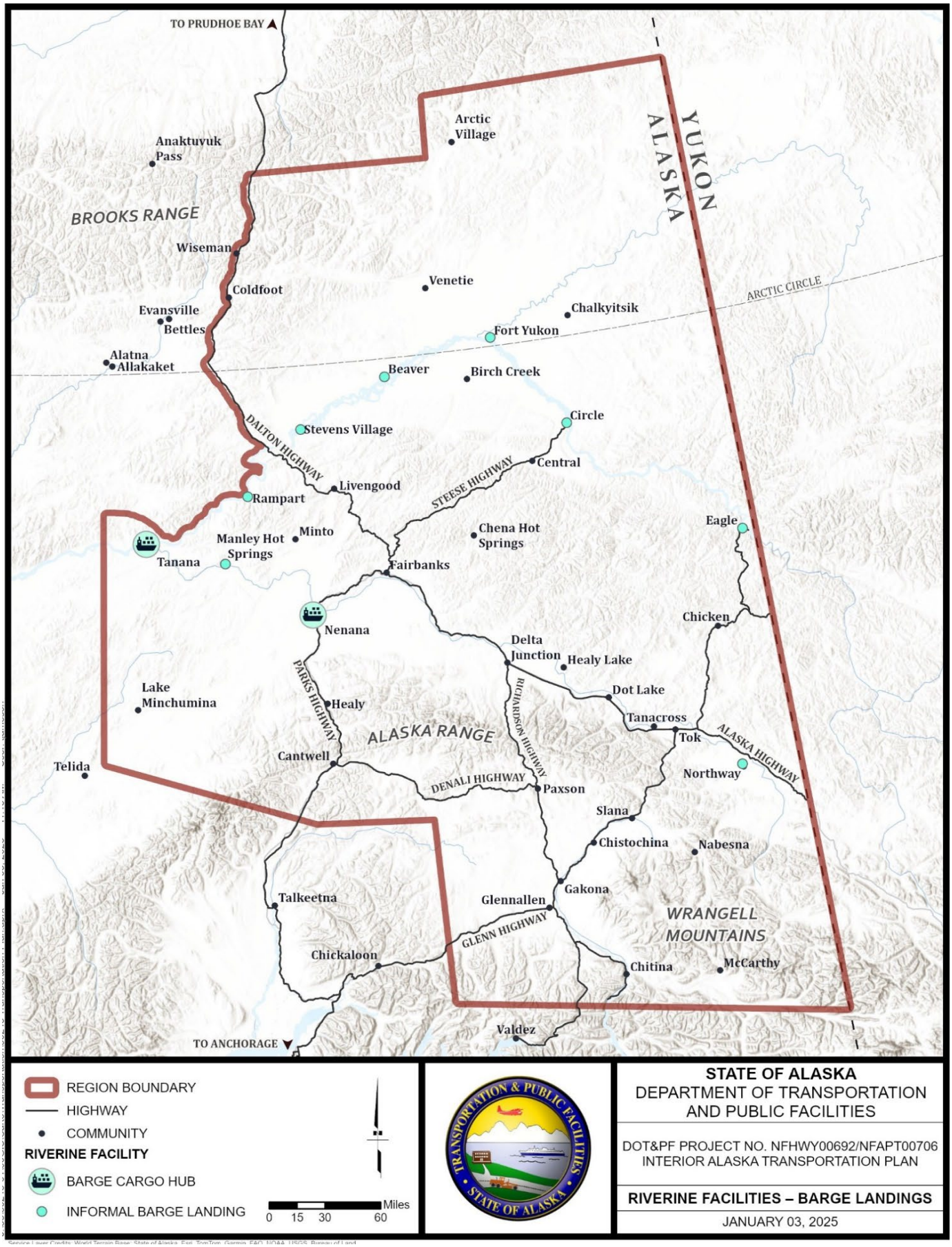


Figure 24 IATP Region Waterway Facilities

2.9.2 Interior Waterways Infrastructure

Waterway infrastructure within the IATP Region includes commercial- or community-owned barge, harbor, and port transportation facilities, as well as locations used in support of waterway transportation that lack formal facilities. The intermodal connection points serving the waterway facilities are also included in the evaluation and inventory of facilities. A full insight into the Interior's waterways can be found in *Appendix 3, Section 4.*

For communities off the road system, barge service is an economical alternative delivery mode to air service, allowing critical items such as bulk goods, heavy equipment, and fuel to be delivered to communities at a much lower cost than having them flown in.

The waterway transportation system is a prime model of inter-modality in the IATP Region. When used recreationally and for other individual purposes, the rivers can operate as transportation systems independently, with people using personal boats or snowmachines to travel along the riverways. For the purpose of cargo and goods delivery, the rivers are part of the interconnected transportation network of rivers, highway, rail, air, and local roads.

The Yukon and Tanana rivers serve the IATP Region from two barge cargo hubs – the Port of Nenana and Tanana. These communities are in areas with easy access from both Fairbanks and Anchorage, contain additional intermodal access points, and have the ability to store goods prior to shipment to outlying communities. Riverine transportation facilities are typically one of the following:

- Unimproved barge off-loading areas – unofficial sites, anchoring systems near shoreline, barges offloaded on the edge of the river, no built barge infrastructure.
- Public docks used as barge landings – also an unofficial facility for barge use, these sites have some infrastructure that can be used for barge activities but are in place primarily for the purpose of supporting other watercraft and uses. Use of these locations for barge activities often requires operators to maneuver personal vessels out of the way, which can sometimes cause conflicts between users.
- Barge cargo hubs – official barge facilities at Tanana and Nenana; intermodal connection point; loading and off-loading infrastructure, storage capacity for goods to stage before being delivered to outlying destinations.

With the exception of the two cargo hubs, the riverine facilities are operated unofficially by the local communities they serve.

Twelve (12) communities are within proximity to the waterway system, with seven identified as actively receiving cargo via barge service (Table 22). Some communities are within proximity to the waterway system but are not active on the rivers due to limitations within the river system. For example, at Chalkyitsik, where historically barge deliveries were made during high water times; deliveries are unable to be made due to the persistent change in river depth.

Table 22 Communities in the IATP Region in Proximity to the Waterway System

Community	On Road/ Off Road	Barge Service?	Barge Facilities	Riverine System	Modes	Issues
Beaver	Off Road	Yes	Unimproved Off-Loading Area	Yukon	Air, River	Erosion/ sedimentation, fuel storage capacity
Chalkyitsik	Off Road	No	N/A	Yukon	N/A	Shallow river
Circle	On Road	Yes	Public Dock / Boat Launch	Yukon	Road, Air, River	Mixed use facility, navigation, erosion/ sedimentation
Delta Junction Area	On Road	No	N/A	Tanana	N/A	Navigation (river gradient)
Eagle City/ Village	Seasonally On Road	No	N/A	Yukon	N/A	Distance from hub facilities Navigation (river gradient)
Fort Yukon	Off Road / Winter Ice Road	Yes	Unimproved Off-Loading Area	Yukon	Air, River, Ice road	Erosion/ sedimentation
Healy Lake Village	Off Road / Winter Ice Road	No	N/A	Tanana	N/A	Location

Table 22 Cont. Communities in the IATP Region in Proximity to the Waterway System

Community	On Road/ Off Road	Barge Service?	Barge Facilities	Riverine System	Modes	Issues
Manley Hot Springs	On Road	No	N/A	Tanana	N/A	Barges are required to navigate the slough – most cargo is now delivered to the area via the road connecting Manley Hot Springs and Tanana or by air
Nenana	On Road	Yes	Barge Cargo Hub	Tanana	Road, Rail, Air, River	Shallow river
Rampart	Off Road / Winter Ice Road	Yes	Unimproved Off-Loading Area	Yukon	Air, River, Ice road	N/A
Stevens Village	Off Road / Winter Ice Road	Yes	Unimproved Off-Loading Area	Yukon	Air, River, Ice road	Erosion/ sedimentation
Tanana	Winter Ice Road	Yes	Barge Cargo Hub	Yukon & Tanana	Air, River, Ice road	Erosion/ sedimentation, fuel storage capacity

2.9.3 Frozen Links: How Nenana Unites Modes in the Last Frontier

The Home-Rule City of Nenana may be small on the map, but it plays a vital role in connecting remote communities through its vast intermodal transportation system. In a region where extreme weather and rugged terrain are the norms, Nenana's strategic location makes it a vital hub community. Here, rail meets road, river, and air to create a seamless flow of goods and services. Nenana employs innovative technologies and approaches to support year-round connectivity, which includes the integration of different methods of transportation. The various modes allow for redundancy in the system, if roads are too icy for the effective movement of goods there are other reliable options to make sure goods, from food to fuel, reach their destinations without delay. The intermodal approach in Nenana not only enhances efficiency but also promotes economic stability. By linking freight movement with the strengths of rail, air, road, and water the community is able to reduce transit times as well as operating costs.

The success of Nenana in integrating multiple transportation modes offers a blueprint for other rural communities in Alaska. It demonstrates that even in the harshest of environments, innovative planning, strategic investment, and inter agency cooperation can "break the ice" to keep logistical challenges at bay, support the local economy, and help community members remain connected, regardless of the season.

Image 1: The Nenana River Photo by Blair Roberts Castagnetta on Unsplash

2.10 EMERGING TECHNOLOGY

Alaska's diverse and broad geography and settlement pattern requires a diverse mix of transportation modes. Large areas of the state are not served by the road system, resulting in a heavy reliance on aviation as a core transportation mode. Within the Interior Region, many of the communities are connected by road, but long travel distances between communities means careful planning is needed for road travel, particularly in winter conditions.

Airports within the interior are at the forefront of testing emerging aviation technologies, including UAS for industrial and commercial purposes. In addition to these opportunities, emerging technology provides opportunities for surface transportation innovations, which could ease challenges associated with the dispersed settlement pattern and long travel distances throughout the interior.

Emerging technologies that are either being tested or provide future opportunities for the interior include:

Advanced Air Mobility (AAM) and Unmanned Aircraft Systems (UAS): AAM is a fairly new sector for the aerospace industry which uses advanced technology to facilitate the transport of people and/or cargo by air. AAMs aim to create transportation systems that are more efficient, sustainable, and equitable. A prime example of these advancements is seen in the explosive growth of UAS research, use, and development. 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. 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. ACUASI has worked to bring more industry into Alaska, as companies all over the world are actively seeking out places to test their systems. In addition, DOT&PF has been working with other state departments, such as Alaska Department of Fish and Game, DNR, and Department of Public Safety, on the use and applications of UAS.

UAS and Unmanned Aerial Vehicles (UAV): UAS and 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, currently many parts of Alaska lack the infrastructure needed to support UAS and UAV operations, such as broadband internet service and weather reporting, and this infrastructure needs to be created to support future operations.

Connected and Autonomous Vehicles (CAV): CAVs are an emerging transportation mode that use a combination of technologies to assist or replace the driver. These include sensors to assist with detecting obstructions and support navigation, on-board and remote processing capabilities to assist with or replace driver decision-making, and GPS and telecommunications infrastructure to help equipped vehicles communicate with other vehicles and infrastructure. Currently, driverless vehicle technology is being trialed but is not expected to be widely available in the next five years. In the Interior Region, the lack of infrastructure needed to support CAVs place limitations on their use, but as this infrastructure is implemented CAV technology has the potential to create opportunities for commerce and quality of life across the interior.

Electric Vehicle (EV) Infrastructure: EVs are already widely available across Alaska but they are currently not suited for long trips because of limited EV charging infrastructure statewide. Within the interior, there are very few EV charging stations currently available, but as these are rolled out, the opportunity exists for greater use of EVs for longer trips in the Region. Much of this work is due in part to a collaborative effort between the Alaska Energy Authority and the DOT&PF using funds from the National Electric Vehicle Infrastructure formula program funding and the State of Alaska's Volkswagen Environmental Mitigation Trust.

Micromobility: Micromobility refers to small, lightweight vehicles available for personal use for transportation. Vehicles include bicycles, e-bicycles, e-scooters, and shared fleets of bicycles and e-scooters. Micromobility vehicles tend to be lower speed and lightweight, meaning they are generally used for short trips within more densely populated cities and communities. As opportunities are provided to improved non-motorized transportation across the Interior Region, there is likely to be increased demand for micromobility. Local communities also have the opportunity to develop micromobility fleets to support movement that does not rely on motorized vehicles within communities.

Ride Share: Ride share is becoming increasingly popular as a mode of transportation, with companies developing mobile-based applications to support ride share opportunities worldwide. Within the interior, ride share is likely to become increasingly used within communities to support movement of people, particularly as cell coverage improves across the Region.

3

BRIDGING THE GAPS

3.1 IDENTIFIED NEEDS

Key issues and needs have been identified throughout the planning process and are included in the various technical memoranda, which are all included in *Appendix 3, The Interior Alaska Transportation Plan 2024 Update, Technical Document*. This section provides a comprehensive overview of these identified issues and needs which helps to bridge the identified gaps and the IATP project recommendations.

3.1.1 Aviation

Aviation key issues and needs for the 60 public use airports in the IATP Region are identified in *Section 2 of the Technical Document in Appendix 3*. The planning team identified gaps in the investment of aviation capital projects and provided an overall recommendation of prioritizing funding for select airports. Additional key issues needs are listed below.

3.1.1 Aviation	
Key Issue:	**Need:**
Airport Roles and Classification	Evaluate the classification for Healy Lake airport.
Airport Coverage	Improve airports at Tok and Gulkana. Study a potential new airport serving the Denali Borough. Preserve and improve backcountry airstrips and landing strips.
Infrastructure (pavement, runways, and lighting)	Provide infrastructure improvements based on priority for pavement, runways, and lighting.
Amenities (fuel and broadband connectivity)	Although DOT&PF is not in the business of providing fuel service, airport improvement and development plans should include suitable locations for fuel service to be provided by private parties. DOT&PF should be engaged in the process of implementing high-speed internet access and identify ways to connect airports not currently connected or unserved by broadband service.
Airspace and Navigation	DOT&PF should continue to engage in conversations on proposals for changes to airspace.
Weather Reporting and Communication	Continue to promote the FAA program to add/upgrade weather reporting, navigation, and communication equipment at rural airports
Bypass Mail Program	Continue to monitor of the Bypass Mail program and continue communications with the United States Postal Service (USPS) to make sure Alaska's rural communities are adequately considered by USPS actions.
Wildland Firefighting Support	DOT&PF should maintain all facilities used for wildland firefighting support as appropriate for field operations and take-offs/landings.
Unmanned Aerial Systems	Continue support for communications/broadband and real-time weather reporting to position airports to be well positioned to take advantage of UAS and Advanced Air Mobility.
Funding Landscape	Prioritize deferred capital need aviation projects in the IATP region.

3.1.2 Surface Transportation

Surface transportation key issues and needs are identified in *Section 3 of the Technical Document in Appendix 3*. The planning team reviewed the major road networks in the IATP Region, including the Richardson, Steese, Parks, Denali, Glenn, Alaska, Tok Cutoff, Edgerton, Taylor, and Top of the World Highways. In addition to these highways, summaries were provided for major community roads that have higher traffic volumes, such as Chena Hot Springs Road, Nabesna Road, and McCarthy Road, which is a part of Edgerton Highway. The planning team identified key issues in data collection practices in Alaska, as well as non-motorized uses and safety for all users. The key issues and needs are listed below.

3.1.2 Surface Transportation	
Key Issue:	**Need:**
Roadway User Safety Risks	Collaboration with local communities to address safety risks.
Non-Motorized Facilities	Continue to implement the recommendations detailed in the Alaska Statewide Active Transportation Master Plan to address increased desire for additional non-motorized facilities and fill network gaps.
Truck Parking (Roadside Amenities/Waysides)	Increase location, frequency, and maintenance of public rest stops, including truck parking and restroom facilities, along all major highways.
Forecasting Tools	Create and maintain a statewide traffic/travel demand model tool.
Data Gaps	Create an inventory of road user amenities including rest stops, pull outs, and toilets. Create an inventory of existing non-motorized facilities.
Recreation and Tourism Access	Continue to build on the "Last 'Fun'tier" initiative by collaborating with landowners, communities, and other agencies to conduct tourism and recreation corridor studies.

3.1.3 Waterways

Waterway system key issues and needs are identified in *Section 4 of the Technical Document in Appendix 3*. A common issue amongst waterways is the historic limitation in funding, this issue is expected to be addressed through recent updates to "The Infrastructure Investment and Jobs Act" (IIJA) and restructuring in the DOT&PF planning department. Additional key issues and needs are listed below.

3.1.3 Waterways	
Key Issue:	**Need:**
Erosion and Washout	Implement erosion control methods and mitigation.
Funding Opportunities and Limitations	Prioritize development of and funding for barge facilities.

3.1.4 Winter Access

Winter access key issues and needs are identified in *Section 5 of the Technical Document in Appendix 3*. Regionwide winter travel way issues identified include funding limitations, maintenance needs, and safety.

3.1.4 Winter Access	
Key Issue:	**Need:**
Funding Limitations	Continue to advocate for federal funding toward winter access facilities.
Safety Infrastructure	Strategically place additional safety/emergency shelters along the trail network. The TCC Regional Transportation Strategy has identified key locations for the construction of proposed shelters to fulfill this safety need.
Trail and Trail Amenity Maintenance	Coordinate with communities to implement a collaborative maintenance agreement.
Inconsistent Trail Marking Throughout the Region	Continue to promote the Community Winter Trail Program which encourages consistency across the state for trail marking. Facilitate a winter trails advisory committee that disseminates information to communities.
Unpredictable Weather	Promote resilient communities, encourage safe practices, and prepare for the unknown.

3.1.5 Resiliency

Key issues and needs related to resiliency are identified in *Section 6 of the Technical Document in Appendix 3*, which focuses on community preparedness and infrastructure risk. Key issues identified include the need for DOT&PF to be involved in community planning efforts and assist in identifying and assigning infrastructure risk as well as working with communities to identify material sites, which with ample access to communities gain the ability to conduct mitigation measures such as protecting in place from flooding. Additional key issues and needs are listed below.

3.1.5 Resiliency	
Key Issue:	**Need:**
Community Based Resiliency Efforts	Provide on-going and focused engagement as a partner by encouraging and collaborating in the development of hazard mitigation plan development and implementation.
Establish Infrastructure Risk Mitigation Strategies	Perform scenario planning by identifying and prioritizing community infrastructure and assigning appropriate mitigation strategies.
Resiliency Action Program	Establish evaluation criteria for a resiliency action program that assists in identifying at-risk infrastructure.
Lack of Redundancy in the Transportation System	Identify areas that would benefit from infrastructure that builds redundancy within the transportation system for emergency situations such as wildfires, road closures due to vehicular crashes, train derailments, chemical spills, etc.
Waning Material Site Access in Tanana, Rampart, Stevens Village, Beaver, Circle, Healy Lake, and Northway	Work with communities to identify material sites to facilitate access to gravel and riprap to assist communities in implementing mitigation measures.

3.1.6 Maintenance and Operations

Maintenance and operation needs are addressed in all the memos. These include the following key issues:

3.1.6 Maintenance and Operations	
Key Issue:	**Need:**
Road Maintenance	Pavement preservation, additional clearing and grubbing, and increased winter maintenance.
Airport Maintenance	Additional clearing and grubbing and increased winter maintenance.

Additionally, there is an overwhelming need for additional maintenance staffing and funding in all areas of the state but particularly in the IATP Region.

3.1.7 Other Agency Needs

Separate agencies within the IATP Region that have their own established needs lists are the FAST Planning Metropolitan Planning Organization, the Denali Commission, and the Alaska Railroad Corporation. These agencies have a hand in improving the transportation system within the IATP Region and supporting the overarching goals set forth by the DOT&PF.

The DOT&PF is currently coordinating to establish Regional Planning Organizations. To date, two (2) Regional Planning Organizations have been established in the IATP Region. One is located in Fairbanks, outside of the FAST Planning boundary and the other is the Copper River Valley Regional Planning Organization, which represents the Copper River Sub-Region. Several more Regional Planning Organizations are being considered. Regional Planning Organizations will have a role in the future management of the transportation system, including addressing needs and delivering on the goals set forth by DOT&PF.

4

FUNDING THE PLAN

4.1 FUNDING OVERVIEW

Funds for capital projects come from various sources such as federal grants and loans, formula fund allocations, or sometimes even private investors. This section will explore capital funding and trends for the IATP Region.

4.1.1 Capital Funding

Capital projects are those that focus on building, reconstructing, preserving, and sustaining a viable multimodal transportation system. Capital projects are most commonly funded through the federal government using transportation bills. The most recent transportation and infrastructure bill, IIJA, also known as the "Bipartisan Infrastructure Law", provides approximately $350 billion over Fiscal Years 2022 to 2026 for federal highway programs nationwide. Additional information on federal transportation investments, BIL, formula fund allocations, and discretionary fund programs can be found in *Section 7 of the Technical Document in Appendix 3*.

Formula Allocations
Funds that are only made available to the state by a formula contained in law.

Competitive Allocations
Eligible applicants may seek and apply for funding through a Notice of Funding Opportunity (NOFO).

Statewide Transportation Improvement Program

Federal allocations often include set-a-side amounts for Tribal and Rural projects. However, these set-a-side funds are not managed by the State DOT&PF.

The Statewide Transportation Improvement Program or STIP is the DOT&PF's four-year program to identify and allocate funding for projects that support transportation system preservation and development. All projects included in the STIP promote transportation system improvements for which partial or full federal allocation is approved and is expected to take place during the STIP's four-year duration. The STIP includes interstate and state highway, some local highway, bridge, ferry, and public transportation projects; the STIP does not include airport and non-ferry related ports and harbor projects. The STIP is approved by the Federal Highway Administration (FHWA) and the Federal Transit Administration. The STIP assigns FHWA funding sources to the identified needs throughout the state.

Table 23, on the next page includes information on the most common programs used to fund projects in the IATP Region.

Table 23 Common Surface Transportation Funding Programs

Program	Allocation Type	Federal Portion	Fast Facts
Highway Safety Improvement Program (HSIP)	Formula	90.97%	• Addresses Safety. • HSIP funds are able to be used to meet the non-federal share for Transportation Alternatives Program projects that meet HSIP requirements.
Surface Transportation Block Grant Program (STBG)	Formula and Competitive	90.97%	• Covers Community Transportation Program, Alaska Highway System Routes, Metropolitan Planning Organizations. • STBG funds are further allocated at the state level. • 10% set-a-side for safety construction activities and for enhancement activities • Additional allocations are made depending on population size. • Regarded as the most flexible apportioned funding source.
National Highway Performance Program (NHPP)	Formula	90.97%*	• Addresses projects for the National Highway System. • NHPP funds have a mandatory allocation set-a-side of two percent towards state planning and research. • A state may transfer up to 50% of NHPP funds to any other apportionment. *The federal portion for NHPP interstate projects is reduced to 93.4%.
Transportation Alternatives Program (TAP)	Competitive	90.97%	• Non-Motorized/Active Transportation • Nationwide, 10% of STBG funds must be set aside for TAP.
Congestion Mitigation and Air Quality (CMAQ) Program	Formula	90.97%	• Used to fund projects that are designed to reduce traffic congestion and improve air quality, most often in areas that do not attain national air quality standards. • In the IATP region, CMAQ funding is often used in the FAST planning area but projects outside the FAST planning boundary retain qualifications for funding under CMAQ. • States are allowed to transfer up to 50 percent of CMAQ funds allocated each Fiscal Year to any other apportionment, such as NHPP, HSIP, STBG, etc.

Airport Improvement Program

The Airport Improvement Program (AIP) is funded via the Aviation Trust Fund, which is an accumulation of taxes imposed on aviation users. Airports on the NPIAS earn entitlements, which are pooled and made available across the State airport system for airport development projects. Projects included in the AIP undergo scoring based on aviation criteria and guidance, including safety, health and quality of life, economic development, maintenance and operations issues, project fund match ability, among others. Scoring of projects is done at the regional level before being evaluated by the greater Aviation Project Evaluation Board. The highest scoring aviation projects are ranked competitively in the AIP schedule.

State Funding

State funds are used as a match for federally funded capital projects, to maintain the transportation system, and for transportation system operations. State funding is allocated every fiscal year to maintain and operate the transportation system.[xv]

State transportation funding sources in Alaska include:

- State motor fuel taxes: revenue generated from state-level taxes on gasoline and diesel.
- Vehicle rental tax: fees collected from vehicle rentals within the state.
- General fund: The State of Alaska's primary operating fund.

4.1.2 Community Solicited Funding Sources

It is important to note that these community solicited funding opportunities are based on the availability of allocated funds and may not be continuously available to pursue. Projects in these programs use Title 23 funds and are developed by the DOT&PF with design and construction oversight. Examples of community solicited funding sources include:

- **CTP – Community Transportation Program**
  - A competitive surface transportation program focused on projects that make new or maintain/ improve existing surface transportation facilities. The total funding amount allocated for the state varies on a yearly basis with a not-to-exceed federal share amount of $15 million.
- **CWTP – Community Winter Trails Program**
  - A competitive funding program providing funding and support to rural communities to mark public winter trails. This program aims to facilitate connections between rural communities, public roads and/or highways, and public use areas.

4.1.3 Internal DOT&PF Funding Programs

The DOT&PF identifies programs for state-managed infrastructure, including in the IATP Region. These programs are guided by asset data, Alaska DOT&PF M&O, community discussions, and planning documents. Some internally funded DOT&PF programs include Pavement and Bridge Preservation, ADA Implementation and Compliance, Culvert Repair and Replacement, Highway Safety Improvement Program, Rock Slope Stabilization Program, State of Good Repair (NHS and AHS)[xvi], Light up the Highways (Surface Transportation), and the Airport Project Evaluation Board.[xvii]

4.1.1 Federal/State Funding Partners

Various state and federal partners also have funding opportunities that contribute to the advancement and preservation of the transportation network in Alaska.

Denali Commission

The Denali Commission is an independent federal agency introduced by Congress in 1998. It is designed to provide critical utilities, infrastructure, and economic support throughout Alaska. As a grant-making agency, the Denali Commission is dedicated to fulfilling its mission through strategic partnerships.

It collaborates with tribal, federal, state, and local governments, as well as all Alaskans, to enhance the efficiency of government services, cultivate a skilled workforce for a diverse and sustainable economy, and ensure the operation and maintenance of Alaska's basic infrastructure.

Through their ongoing partnerships and commitment to Alaska, the Denali Commission has invested over $1.2 billion and leveraged over $900 million from other sources to fund rural infrastructure, workforce and economic development, and community resilience projects in over three hundred communities across the state.

The Denali Commission provides its funding as grants to communities, bound by a grant agreement. Denali Commission funding is flexible and can serve as non-federal match, with some caveats, to Title 23 funding.

Western Federal Lands Highway Division

Federal Lands Highway Division is an office of the United States Department of Transportation, Federal Highway Administration. It is represented by three regions: western (responsible for Alaska), central, and eastern. The Western Federal Lands Highway Division serves the transportation needs of Federal and Indian lands through various partnerships and cooperative agreements with state and local governments and other federal agencies such as the Bureau of Indian Affairs, National Park Service, US Forest Service, etc. Western Federal Lands Highway Division administers both the Federal Lands Access Program (FLAP) and the Federal Lands Transportation Program (FLTP). FLTP provides funding for transportation facilities owned and maintained by a federal land management agency within its boundaries. FLAP provides funding to non-federal agency partners in partnership with a federal land manager. The goal of FLAP is to fund projects that provide increased access to federal lands.

Federal Emergency Management Agency and Alaska Department of Homeland Security and Emergency Management

The Federal Emergency Management Agency (FEMA) has grant funds available for pre-and post-emergency or disaster-related projects, including support for critical recovery initiatives, innovative research, and many additional programs. Grants through FEMA are the main funding mechanisms used to commit and award federal funding to state, local, tribal, territorial, and certain private non-profits, individuals, and institutions of higher learning.
The Alaska Department of Homeland Security and Emergency Management coordinates with FEMA on grant management, offers community assistance, and also administers the Individual Assistance Fund.

4.1.2 Tribal Funding Opportunities

The Infrastructure Investment and Jobs Act includes historic investments in Tribal transportation through the Tribal Transportation Program. These investments include increased funding for programs dedicated to tribal needs and increased tribal eligibility. Additionally, the legislation contains resources to assist Tribes in advancing projects and works with Tribes to support the inclusion of project elements that proactively address workforce development, economic development, and removing barriers to opportunity. Tribal funding opportunities through Federal Highway Administration and U.S. Department of Transportation can be accessed through the Office of Tribal Transportation or by working with a representative of the Bureau of Indian Affairs. Additional information on accessing assistance and the programs offered can be found in *Section 7 of the Technical Document in Appendix 3*.

Tribal communities within the Tanana Chiefs Conference (TCC) service area have the opportunity to request technical assistance for road projects from TCC in partnership with the Bureau of Indian Affairs.

4.1.3 Discretionary Federal Grants and Programs

Categories for discretionary federal grants and programs can be grouped into the following categories:

- Roads, Bridges, and Major Projects
- Public Transportation
- Electric Vehicles, Buses, and Ferries
- Passenger and Freight Rail
- Ports and Waterways
- Aviation/Airports/FAA
- Other

Since the start of BIL, Alaska has received approximately $3.73 billion for general transportation, $1.15 billion for roads, bridges, and major projects, and $284.16 million for airports.

4.1.4 Community Workforce Development

When transportation projects are funded and come to fruition, they provided more than just new or updated transportation facilities. Rural transportation projects create a vital opportunity for the investment in local people and economies. Often, community members who live in rural areas face barriers when it comes to finding and being qualified for high-wage and/or high-skill jobs due to the geographic isolation or the limited offerings of training programs. Integrating workforce development into transportation projects helps to advance the access by creating local jobs and offering on-the-job training while also helping to advance relationships amongst communities and transportation departments. When local residents are hired and trained to build, maintain, and operate the

transportation network within in their communities, projects become more dynamic and benefit the local community. The approach of integrating community workforce development into projects has been demonstrated successfully in the community of Hughes, Alaska, which boasts a population of about 85 year-round residents. The DOT&PF provided funding to Hughes Village Council and the City of Hughes to design and build a 2.4-mile road. The State and the community of Hughes worked together to provide high-paying jobs and training to local community members. In the end, the project provided well-trained workers, quality construction equipment, and a community desire to continue to improve their infrastructure.

4.2 FUNDING TRENDS

One of the best ways to understand the potential of future funding is to look back to the past and identify funding trends. To do this for the IATP Region, the historical funding for both aviation and surface transportation were analyzed. Throughout much of the IATP Region, funding has been allocated for airport reconstruction, highway safety improvements, and bridge replacements.

Livengood Camp (4AK) completed major improvements, including a runway extension from 1,425 ft to 3,000 ft with State of Alaska Deferred Maintenance Funding.

4.2.1 Historic Funding Aviation

The 2010 IATP recommended capital improvements totaling approximately $185 million in 2010 dollars. Since that time, about $62.5 million has been spent on airport improvements in the Region, and much of the work recommended by the 2010 IATP remains unaccomplished. These airports, their funding source, and the improvements made are included in Table 24.

Table 24 Major Airport Projects Since the 2010 IATP

Airport	Funding Source	Improvements Made
Fort Yukon (FYU)	Airport Improvement Program (AIP) and American Recovery and Reinvestment Act (ARRA)	• Runway, taxiway, and apron improvements • New Snow Removal Equipment Building
Lake Louise (Z55)	AIP	• Full reconstruction
Manley Hot Springs (MLY)	AIP	• Full reconstruction
Minto Al Wright (51Z)	AIP	• Reconstructed with a longer, wider, and lighted runway
Northway (ORT)	FEMA	• Reconstruction from damage sustained from the 2002 Denali Fault Earthquake
Stevens Village	AIP	• New airport constructed

Aviation funding primarily comes from the Airport Improvement Program (AIP) and other federal funding sources including the FAA. An overview of AIP investments for NPIAS airports located in the IATP Region is included in Table 25. These investments are considered for fiscal years 82-08 and fiscal years 09-22.

Table 25 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%
	Fiscal Years 82-08	**Fiscal Years 09-22**
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 federal funding, such as ARRA, Coronavirus Aid, Relief, and Economic Security Act, and American Rescue Plan Act Funding Additional information on historic aviation funding can be found in both *Sections 2 and 7 of the Technical Document in Appendix 3.*

4.2.2 Historic Surface Transportation Funding

Surface transportation funding is federal funding apportioned to states on an annual basis. It can be tapped into though various means, including state funded programs designed to benefit the local community and federal funded programs designed to benefit State facilities. State DOT&PF programs such as those identified in Section 4.1.3 of this document are opportunities for local communities to apply for funding for their specific needs. However, these funding opportunities are competitive and are subject to a review board to determine the projects most competitive to receive funding.

The 2010 IATP included 28 capital projects for surface transportation totaling approximately $698.8 million dollars. Of the 28 capital projects recommended, all but one have been completed or partially completed in the Region.

The one legacy project identified is the Richardson Highway Mile Point (MP) 65-80 Rehabilitation, including the replacement of the Tonsina River Bridge, this project is included in the 2024-2027 STIP.

In addition to funding for capital projects, since the 2010 IATP several state DOT&PF programs have continued to operate and have provided funding in the IATP Region.

4.3 FUTURE FUNDING OPPORTUNITIES

Challenges related to funding are not unique to the IATP Region or even to Alaska. Across the nation, states have experienced a small reprieve with the adoption of IIJA in 2021. However, this “once in a generation investment” of approximately $350 billion concludes at the end of the 2026 federal fiscal year. With the current round of IIJA funding concluding, it is imperative to consider all potential future funding opportunities.

Without IIJA, the Highway Trust Fund, which is funded through fuel taxes, will remain a vital part in funding transportation projects throughout the US. However, without reauthorization of IIJA or new transportation and infrastructure funding legislation, states will see a decrease in allocated funding compared to what has been received under IIJA. The small certainty in anticipated funding provided by HTF is vital for states when planning for the future. The DOT&PF will also be looking closely at future funding through either reauthorization or new legislation continue to fund vital transportation infrastructure investments.

Additional funding opportunities may emerge through local partnerships such as the Denali Commission, FLAP, Tribal Transportation and others. The key to future funding opportunities in the IATP Region is largely dependent on future federal funding allocations and decisions at the state level.

4.3.1 Aviation

A relatively new source of prospective funding is 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.

4.3.2 Surface Transportation

The DOT&PF recently created the Safe Ice Roads for Alaska Program. This program provides funding to local and tribal governments using the Federal STBG Program for the development and maintenance of ice roads. The implementation of this program illustrates the ways in which the DOT&PF can craft local funding opportunities to match the needs and interests of Alaskans.

5

HIGH INTEREST NEEDS

5.1 IDENTIFYING AND ADDRESSING HIGH INTEREST NEEDS

The cumulative list of needs for the IATP Region began with over 1,000 needs and potential projects identified, spanning years of work, outreach, and effort undertaken by the DOT&PF. Through the evaluation of the needs in conjunction with the IATP planning process, it became evident that that there are systemic issues across the IATP Region that require immediate and comprehensive attention. These issues span multiple modes and sectors, highlighting inefficiencies and barriers that hinder progress. One critical aspect is the disproportionate and inconsistent allocation of funding, which directly impacts the capability to implement strategic solutions that would most benefit the Region. Needs across the State of Alaska and the Interior Region far outweigh the funding available. Addressing these systemic challenges will require a coordinated approach, strategic resource allocation, and targeted investments to support the ability for long-term effective change. To assist in bridging the gap between identified needs and potential projects and the identified systemic issues inhibiting functional implementation and progress, the IATP includes Stakeholder Identified High Interest needs in addition to a Transportation Project Need List. The Transportation Project Needs List identifies transportation projects in the IATP Region that the DOT&PF hopes to accomplish may be attainable during the 20-year planning horizon of the IATP, given funding and resource limitations.

5.1.1 Stakeholder Identified High Interest Needs

Stakeholder High-Interest Needs are identified needs that have a significant importance to stakeholders in the Region, but due to the limited availability of funding or specific funding rules and regulations, may not be practicable for DOT&PF to execute. Communities and agencies across the Region have expressed a high interest in promoting, prioritizing, and supporting needs that address maintenance and operations, safety, mobility, and access concerns, as well as providing a robust, active transportation network. Each identified high interest need includes the title, scope, and corresponding IATP goals. Included is the identification of potential community partners/project sponsors where applicable. The following tables are also included as *Appendix 3, Section 7* where in addition to the identification of the corresponding IATP goals, the corresponding DOT&PF Commissioner strategic investment area(s) are included.

- **Maintenance and Operations:** Included in Table 26, these high interest needs pertain to promoting, prioritizing, and supporting funding for maintenance and operations, preventative maintenance activities, and maintaining a state of good repair for bridges and culverts in the Interior Region. It is important to note, DOT&PF's Maintenance and Operations section uses asset conditions and survey data to prioritize projects. At the time of writing (March, 2025) the Maintenance and Operations section is in the process of developing a quality assurance/quality control program that may impact the future prioritization of projects.
- **Safety and Rural Community Support:** Included in Table 27, these high interest needs pertain to promoting, prioritizing, and supporting safety and providing technical assistance to rural communities.
- **Advancement in Mobility and Infrastructure:** Included in Table 28, these high interest needs pertain to promoting, prioritizing, and supporting the advancement and modernization of various transportation facilities that facilitate the movement of people and freight.
- **Advancement in Access:** Included in Table 29, these high interest needs pertain to promoting increased access to transportation facilities especially those that provide opportunities for winter, recreation, and subsistence access.
- **Robust Active Transportation:** Included in Table 30, these high interest needs pertain to promoting, prioritizing, and supporting a robust active transportation network by building new facilities and connections and maintaining existing facilities.

Table 26 High Interest Needs: Maintenance and Operations

Sub-Region	High Interest Need	Category	Description	Associated IATP Goal(s)	Potential Local Partner/Project Sponsor
Region Wide	Maintenance and Operations Funding	M&O	High interest in identifying ways to increase funding for maintenance and operations across all transportation modes.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement	
Region Wide	Waysides/Roadside Amenities	M&O	High interest in identifying consistent wayside typology, level of service, and maintenance needs across the IATP region in support of statewide efforts. Interest in collaboration with Federal Land Managers.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement	Federal Land Managers
Region Wide	Pavement Preservation	Preventative Maintenance	High interest in pavement preservation projects, specifically on the following roadways: • Alaska Highway • Taylor Highway • Richardson Highway • Parks Highway • Nabesna and McCarthy Roads	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement	
Copper River	Nabesna Road Culvert Improvements	State of Good Repair	High interest in culvert improvements on Nabesna Road to assist in the mitigation of washouts.	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement	Federal Land Managers
Copper River	McCarthy Road Drainage Improvements	State of Good Repair	High interest in drainage and roadway surface improvements on McCarthy Road.	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement	
Denali	Ghiglione Bridge Replacement, Denali Park Road	State of Good Repair	High interest in the replacement of Ghiglione Bridge at Mile Post (MP) 42 of the Denali Park Road. Project includes the elimination of the existing bridge and installation of a new bridge upstream in a manner that will remain consistent with the cultural landscape.	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement	Federal Land Managers
Denali	Pretty Rocks Slide Bridge, Denali Park Road MP44/ Polychrome Area Improvements	State of Good Repair	High interest in an approximately 475-foot-long bridge to span the active Pretty Rocks Landslide. A combination of earthwork, horizontal drains, and a possible cut slope side retaining wall will likely be required to address the Perlite Landslide on the east side of the Pretty Rocks Landslide.	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement	Federal Land Managers

Table 27 High Interest Needs: Safety and Rural Community Support

Sub-Region	High Interest Need	Category	Description	Associated IATP Goal(s)	Potential Local Partner/Project Sponsor
Region Wide	Rural Community Winter Trails and Ice Roads	Rural Support	High interest in the continued promotion and support of community winter trails and ice roads using Community Winter Trails Program and Safe Ice Roads for Alaska. Explore opportunities to support rural communities through the application and budgeting process.	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility, Intermodal Connectivity	Denali Commission Alaska Municipal League
Region Wide	Backcountry Airstrip Work Group	Rural Support	High interest in reviving the Backcountry Airstrip Work Group responsible for identifying issues impacting backcountry airstrips and helping to guide future preservation decisions.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	Aircraft Owners and Pilots Association (AOPA) or other aviation groups
Region Wide	Northern Region Rural Community Dust Control	Safety & Rural Support	High interest in supporting projects that provide dust control measures to village communities.	Health, Safety, and Security	Denali Commission
Multiple	Healy Canyon/ Nenana River Canyon Area	Safety	High interest in continuing to support investments in the Healy Canyon area that allow for a safe and resilient transportation system. Includes the Denali and Middle Yukon/Fairbanks Sub-Regions	Health, Safety, and Security, Accessibility and Mobility, Intermodal Connectivity	Alaska Railroad Corporation, federal land managers (National Parks Service)
Copper River	McCarthy Road Kotsina Bluffs Realignment	Safety	High interest in realignment of McCarthy Road at Kotsina Bluffs	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement Intermodal Connectivity	Ahtna, Inc., Federal land managers (U.S. Army Corps of Engineers)
Copper River	Richardson Highway Safety Improvements	Safety	High interest in improvements on the Richardson Highway identified in the Richardson Highway PELS, improve the existing infrastructure, and increase safety	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	Copper River Valley Regional Planning Organization
Denali	Denali Highway Winter Trail Safety	Safety	High interest in projects, programs, and initiatives to promote winter trail safety on the Denali Highway, such as “Light Up the Lead Dogs”.	Health, Safety, and Security, Accessibility and Mobility	Denali Commission
Upper Tanana	Alaska Highway Safety	Safety	High interest in highway and safety improvements on the Alaska Highway, including the addition and upgrade of passing lanes where applicable.	Health, Safety, and Security, Accessibility and Mobility Preservation and Enhancement	

Table 28 High Interest Needs: Advancement in Mobility and Infrastructure

Sub-Region	High Interest Need	Category	Description	Associated IATP Goal(s)	Potential Local Partner/Project Sponsor
Region Wide	Aviation Lighting and Infrastructure	Modernization	High interest in projects that include upgrading the lighting systems, Automated Weather Observing System, and/or weather cameras at various airports within the Northern Region	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	FAA, AOPA or other air carrier groups/ organizations
Region Wide	Use of Significant Planning Documents	Advancement	High interest in referring to and implementing projects and recommendations identified in significant planning documents, including but not limited to: Tribal Transportation Plans, Upper Tanana Airport Planning Study, Cantwell to Healy Parks Highway Mile Post (MP) 203-259 Planning and Environmental Linkages (PEL) Study, Richardson Highway MP 206-233 PEL, NWATP	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement Intermodal Connectivity	
Multiple	Aviation Facility Investment	Modernization	High interest in investments at the following airports: Nenana Airport – Includes needs identified in the Nenana Airport Layout Plan, pavement maintenance on taxiways and apron, new Snow Removal Equipment Building and equipment, improved signage, construction of partial parallel taxiway at runway end 22R, water/sewer/C St utilities extension, and the construction of helicopter parking, among others. See the final Nenana Airport Layout Plan for all identified projects. Gulkana Airport – Includes needs identified for funding in the AASP such as pavement markings, crack sealing and replacement of snow removal equipment. Additional identified needs, not programed for funding, include construction of new apron, installation of Continuously Operating Reference Stations, toilet facilities, and the construction of tie-downs[13].	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	FAA
Multiple	Riverine Facility Investment	Advancement	High interest in projects that support riverine facility improvements and investments relating to improved movement of freight. Includes the following sub-regions: Denali, Middle Yukon/Fairbanks, Upper Tanana, and Yukon Flats.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	Denali Commission
Multiple	Railroad Support and Investments	Modernization	High interest in continued support of the ARRC and promotion of interagency collaboration in the pursuit of modernizing the railroad in Alaska. Includes the following sub-regions: Denali, Middle Yukon/Fairbanks, and Yukon Flats.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	ARRC
Denali	Denali Area Airport Planning Study (DAAPS)	Advancement	High interest in pursuing recommendations set forth by the Denali Area Airport Planning Study (DAAPS). The final DAAPS is scheduled to be completed in winter 2025/26.	Economic Vitality, Accessibility and Mobility, Preservation and Enhancement, Intermodal Connectivity	FAA
Copper River	McCarthy Road Right of Way Corrections	Advancement	High interest in conducting rights of way corrections on McCarthy Road	Accessibility and Mobility Preservation and Enhancement	CRVPO

Table 29 High Interest Needs: Advancement in Access

Sub-Region	High Interest Need	Category	Description	Associated IATP Goal(s)	Potential Local Partner/Project Sponsor
Denali	Recreational Access to the Nenana River	Recreation Access	High interest in promoting safe and meaningful usage of the Nenana River with additional recreational access.	Economic Vitality, Accessibility and Mobility	Federal Land Managers
Upper Tanana	Healy Lake Ice Road	Winter Access	High interest in the continued investment of the Healy Lake ice road providing the community of Healy Lake affordable year-round access to goods and the ability to access larger communities in the area for work, social events, and medical appointments.	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility	Tribe

Table 30 High Interest Needs: Robust Active Transportation

Sub-Region	High Interest Need	Category	Description	Associated IATP Goal(s)	Potential Local Partner/Project Sponsor
Denali	Nenana Canyon to McKinley Village Bike Trail/Nenana River Trail	New Facility Connections	High interest in the construction of a bicycle trail along the Parks Highway from the Nenana Canyon Trail to the McKinley Village area, approximately six miles.	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility, Intermodal Connectivity	Federal Land Managers/Denali Borough
Copper River	Kenny Lake Bike Path Extension	Connections	High interest in extending the Kenny Lake Bike Path from its terminus at Kenny Lake School, MP 4 Edgerton Highway to the Richardson Highway, MP 0. Community desires bike path to run towards the general store.	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility	CRV-RPO
Middle Yukon/ Fairbanks	Salcha Area Pedestrian Path (North Pole to Salcha)	New Facility Connections	High interest in the construction of a Salcha area pedestrian path with the intention of connecting the communities of North Pole and Salcha.	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility	FNSB
Upper Tanana	Delta to Fort Greely Bike Path	New Facility Connections	High interest in the construction of a bike/pedestrian path from the Alaska/ Richardson Highway intersection to Fort Greely	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility	Department of Defense/Fort Greely Military Base
Upper Tanana	Tok MP 1314 – 1326 Existing Bike Path Rehabilitation	Maintenance of Existing Facility	High interest in rehabilitating the existing bike path from Tok MP 1314 to Tanacross MP 1326	Economic Vitality, Health, Safety, and Security, Accessibility and Mobility	Tok Umbrella Corporation; Tok Chamber of Commerce

5.2 A COLLABORATIVE EFFORT

Accomplishing the vision and recommendations of the IATP Update will be a collaborative effort between various agencies and communities. The DOT&PF is a powerhouse in planning for, constructing, and maintaining transportation infrastructure, but the needs and workload are too extensive for one agency to tackle alone, especially when many are facing staffing and funding shortages. The Region's federal partners, Regional Planning Organizations, Metropolitan Planning Organizations, and communities all have a role in developing and maintaining a well-integrated multimodal
transportation system that serves the Region. Furthermore, collaboration with local jurisdictions and communities ensures the investments in the transportation system are consistent with the goals and values of the residents they serve.

5.3 RECOMMENDED POLICY UPDATES

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 enroute, additional weather cameras, and development of new instrument approach procedures (IAPs).
The IATP encourages the continuation of already implemented policy, including:

- Continue to provide continuous support and collaboration with the Interior's designated Metropolitan Planning Organization and Regional Planning Organizations, per 49 U.S.C. 5303.
- Continue to provide on-going engagement with municipalities and tribal entities on plan progress/status of implementation.

5.4 CURRENT TRANSPORTATION SYSTEM EFFORTS

To assist in understanding the transportation needs and projects identified in this Plan it is imperative to look at the current construction, design, and planning efforts significant to the IATP Region. Table 31 identifies these efforts by construction, design, and planning.

Table 31 Current/Upcoming IATP Area Construction, Planning, and Design Efforts

Current/Upcoming IATP Area Construction, Planning, and Design Efforts as of May 2025	
Construction	**Planning**
Deadhorse Airport Improvements[+]	Alaska Richardson Steese Highway Corridor Action Plan
Dalton Highway Mile Post (MP) 247 – 289 and 305 – 365 Delineator Replacement[+,*]	McCarthy Road Planning and Environmental Linkages (PEL) Study
Dalton Highway MP 289 – 305	**Design**
Dalton Highway MP 245 – 274 Resurfacing[+]	Airport Way / Cushman Street Intersection Reconstruction
Chalkyitsik Airport Improvements	Steese Expressway/Johansen Expressway Interchange
Dalton Highway Yukon River Bridge Redecking[+]	Chena Lake Recreation Area Bicycle and Pedestrian Access Project
Elliott Highway MP 51 – 63 Rehabilitation	Denali Borough Separated Paths
Parks Highway MP 319 – 325 Reconstruction (Stage 1)[+]	Elliott Highway MP 43 -51 Resurfacing
Land Development for Nenana Totchaket	Glenn Highway MP 158 – 172 Rehabilitation
Northern Region Systemic Signal Upgrades – Nenana Canyon[+]	Healy Area and School Pedestrian Path
Glenn Highway MP 143 – 154 Resurfacing[+]	Holmes Road Rehabilitation
Richardson Highway MP 97 – 106.5 Resurfacing[+]	Parks Highway MP 234 – 238 Reconstruction and Railroad Relocation
Alaska Highway MP 1252 – 1268 Rehabilitation	Chena Flood Control
Richardson Highway MP 266 – 341 Passing Lanes[+,*]	
[+]Indicates construction projects added in 2025 [*]Indicates projects that will be advertised later in the 2025 construction season and may only see preliminary construction in 2025	

5.5 TRANSPORTATION PROJECT NEED LIST

On both the regional and sub-regional level, projects included on the Transportation Project Needs List are guided by community and agency input, existing conditions, statewide goals, and the established goals for the IATP. The items included in the Transportation Project Need List differ from those included in the high interest needs listed in Section 5.1.1 of this document. Rather, these project needs included below address needs across the Region for assets in which the DOT&PF owns and maintained either wholly or partially.

A total of 34 projects, both surface transportation and aviation have been identified for the Transportation Project Need List. The breakdown of how these projects are distributed across the sub-regions by mode is depicted in Figure 25. While the estimated capital investments required per sub-region are included in Table 32.

Table 32 Estimated Capital Investments for the IATP Region

Sub-Region	Estimated Capital Investment*
Region Wide	$2,510,176
Yukon Flats	$86,258,969
Middle Yukon/Fairbanks	$92,887,815
Denali	$256,813,000
Upper Tanana	$306,439,988
Copper River	$199,385,928
Total	$944,295,876

*Does not include obligated funds identified for aviation projects

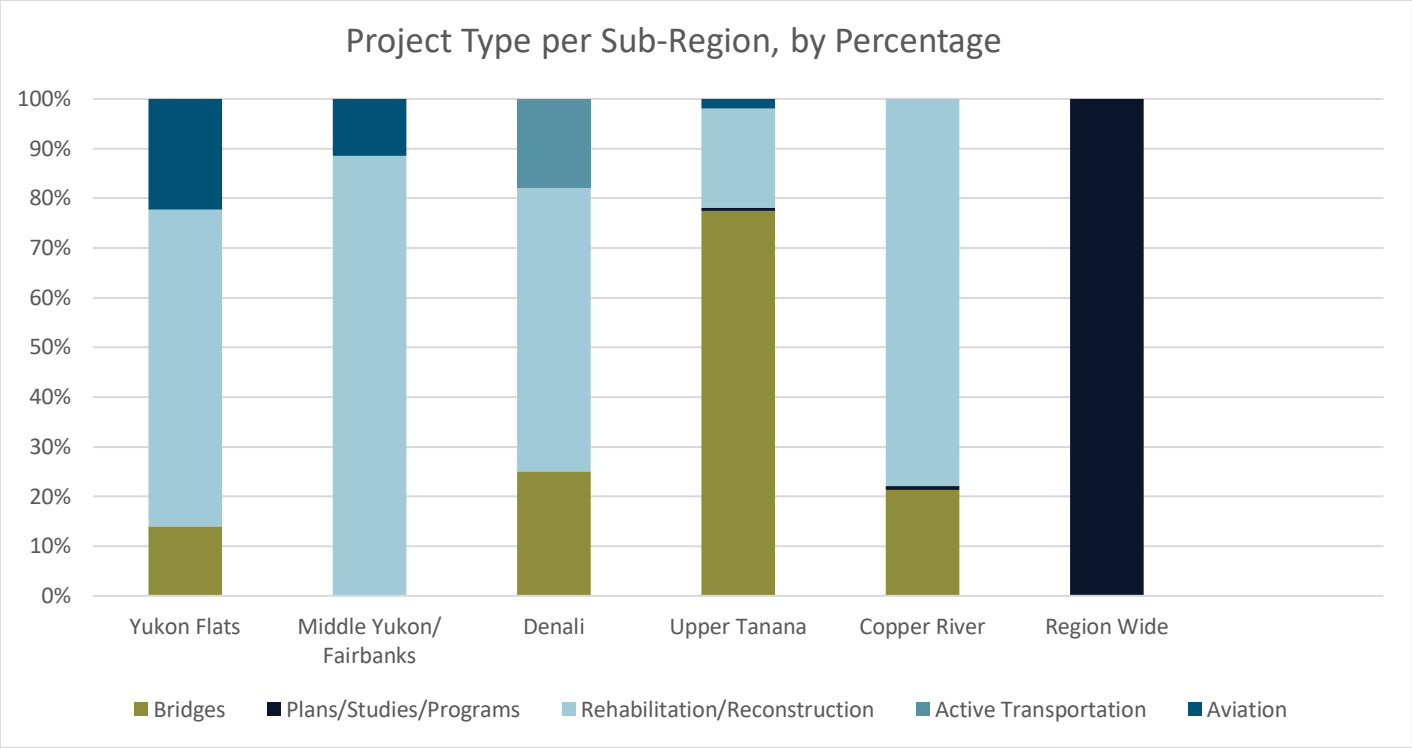


Figure 25 Project Type per Sub-Region

5.5.1 Capital Improvement Projects Related to the Alaska Liquified Natural Gas Pipeline

The projects included in Table 33 are currently in development or soon going to construction and would be considered supportive of the AK LNG Pipeline Project. Projects on this list that are also included in the sub-regional sections are denoted in blue.

Table 33 Capital Improvement Projects Related to AK LNG Pipeline Project

Project	STIP ID	Estimated Cost ($M)
Alaska Hwy MP 1235-1268 Rehab (Parent)	22299	42.2
Alaska Hwy MP 1348 Robertson River Bridge Replacement	34126	135
Alaska Hwy MP 1380 Johnson River Bridge Replacement (Parent)	33824	116
Alaska Hwy MP 1393 Gerstle River Bridge Replacement (Parent)	22322	127
Dalton Hwy MP 0-9 Reconstruction	22453	84
Dalton Hwy MP 109-144 Reconstruction (Parent)	22452	161
Dalton Hwy MP 190 Hammond River Bridge Replacement	33240	12.5
Dalton Hwy MP 90-104 Resurfacing	34302	17.8
Dalton Hwy Yukon River Bridge Redecking	34302	4.5
Elliott Hwy MP 12-18 Rehab	33600	17.8
Elliott Hwy MP 43-51 Resurfacing	22331	14
Parks Hwy MP 163-183 Rehabilitation (MP 174-183 remaining)	28429	47
Parks Hwy MP 183-192 Reconstruction	28429	35
Parks Hwy MP 206-209 Reconstruction	30995	17.1
Parks Hwy MP 234-238 Reconstruction & Railroad Realignment	34637	TBD
Parks Hwy MP 303-306 Rehab	34304	3.3
Parks Hwy MP 315-325 Reconstruction (Parent)	22335	102.6
Parks Hwy MP 99-163 Improvements (Parent)	29914	109.3
Parks Hwy Nenana River Bridge at Rex Replacement	34302	61.6
Parks Hwy Sheep Creek Ext Traffic Signal (HSIP)	34657	6.8
Richardson Hwy MP 346 Chena Bridge Replacement	34130	105

5.5.2 Surface Transportation Projects

Transportation projects are identified by location and mode. Each transportation project has a need identification number (Need ID) which is used by DOT&PF to track the project through its lifecycle. Each identified project also has a planning level cost estimate and the IATP goal(s) that are met. These identifiers ultimately assist planners, at the state, regional, and community level to view the needs and project recommendations in the IATP Region and swiftly understand where to focus efforts in the short- medium- and long- term, and which funding and grant opportunities best align. In addition to the recommended priority projects, all identified needs for the sub-regions in the IATP are included with their descriptions in *Section 7 of the Technical Document in Appendix 3*. All projects are displayed in the following format:

Project Name | Need ID | Community

Description

Planning Level Cost Estimate:	IATP Goals Met:
XXX	XXX
Strategic Investment Area	XXX

5.5.2.1 Region Wide

Ice Roads, Seasonal Roads, and Winter Trails Program | Need ID: 33962| Region Wide | $2,510,176

Invest in community winter trails and ice roads using Community Winter Trail Program and Safe Ice Roads for Alaska to bridge connections between communities. These investments in community connections promotes the distribution of goods and services, the well-being of community members, and provides safe alternatives for access.

Planning Level Cost Estimate:	IATP Goals Met:
$2,510,176 (Statewide)[18]	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Intermodal Connectivity
Strategic Investment Area	Sustainability

5.5.2.2 Yukon Flats

A Steese Highway Mile Post (MP) 53-74 Rehabilitation | Need ID: 34713| Central

Rehabilitate the Steese Highway from MP 53 to MP 74, providing an improved experience for all users.

Planning Level Cost Estimate:	IATP Goals Met:
$55,000,000	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

Figure 26 Yukon Flats Sub-Region

B Steese Highway MP 137-148 Erosion/Birch Creek Bridge| Need ID: 34110 | Circle

Replace Birch Creek Bridge (#355) at MP 144 of the Steese Highway and construct erosion protection measures from MP 137 to MP 148.

Planning Level Cost Estimate:	IATP Goals Met:
$12,000,000	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Resiliency

C Steese Highway MP (MP) 156-161 Resurfacing | Need ID: 34776| Circle

Resurfacing the Steese Highway from MP 156 to 161. Project will include right-of-way vegetation clearing.

Planning Level Cost Estimate:	IATP Goals Met:
$4.5M	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

See the 2022 Northwest Alaska Transportation Plan for Elliott and Dalton Highway Priorities

5.5.2.3 Middle Yukon/Fairbanks

A Chena Hot Springs Road Mile Post (MP) 13-20 Rehabilitation| Need ID: 32998 | Fairbanks

Rehabilitate Chena Hot Springs Road from MP 13-20. Work includes roadside hardware, drainage improvements, and utilities.

Planning Level Cost Estimate:	IATP Goals Met:
$14,194,500[18]	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

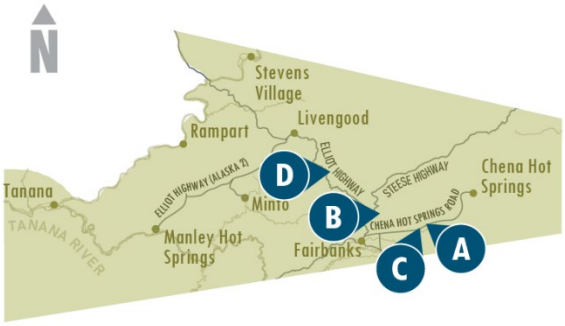


Figure 27 Middle Yukon/Fairbanks Sub-Region

B Steese Highway MP 10-17 Rehabilitation | Need ID 33719 | Fairbanks

Rehabilitate the Steese Highway from MP 10 to MP 17. Work includes roadside hardware, drainage improvements, and utilities.

Planning Level Cost Estimate:	IATP Goals Met:
$13,000,000[19]	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

C Richardson Highway – Chena Hot Springs Road Connector Feasibility Study | Need ID 34774| Fairbanks

Assess the feasibility, benefits, impacts, and cost of constructing a new connector road between the Richardson Highway and Chena Hot Springs Road. The study will evaluate alternatives, identify constraints, and provide recommendations to inform future project development and potential inclusion in long-range transportation planning. This project is identified in Fairbanks North Star Borough's Comprehensive Roads Plan as project number 382.

Planning Level Cost Estimate:	IATP Goals Met:
$750,000	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Resiliency

D Elliott Highway MP 29-50 Rehabilitation | Need ID 34714 | Fairbanks

Rehabilitate the Elliott Highway from MP 29 to MP 50. Work includes roadside hardware, drainage improvements, and utilities.

Planning Level Cost Estimate:	IATP Goals Met:
$55,000,000	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

See the 2022 Northwest Alaska Transportation Plan for additional Elliott Highway Priorities

5.5.2.4 Denali

A Parks Highway MP 206-209 Reconstruction| Need ID:30995 | Denali

Reconstruct the Parks Highway from Milepost 206-209 including replacement of the Pass Creek Bridge #0293. Project includes drainage improvements, roadside hardware, and utilities.[16]

Planning Level Cost Estimate:	IATP Goals Met:
$17,786,000[20]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

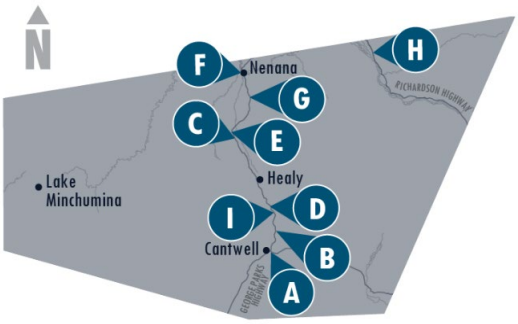


Figure 28 Denali Sub-Region

B Parks Highway Mile Post (MP) 234-238 Reconstruction and Railroad Realignment | Need ID: 34637 | Denali

Remove the ARRC and Parks Highway MP 235 at-grade crossing. Reconstruct the Parks Highway from MP 234 to MP 238. Project will include drainage improvements, intersection improvements, utilities, and roadside hardware.

Planning Level Cost Estimate:	IATP Goals Met:
$68,123,296	Economic Vitality |Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Economic Vitality

C Parks Highway MP 238-239 Reconstruction (Stage 1) | Need ID: 34715 | Denali National Park

Reconstruct the Parks Highway from MP 238 to MP 239. This project ID is representative of a single stage of reconstruction for the Parks Highway.[16]

Planning Level Cost Estimate:	IATP Goals Met:
$10,256,000[20]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement.
Strategic Investment Area	State of Good Repair

D Parks Highway MP 239-240 Nenana Canyon Rockfall Mitigation (Stage 2) | Need ID: 34716 | Denali National Park

Install rockfall mitigation along the Parks Highway from MP 239 to 240. Project will include drainage improvements, rockfall mitigation, and roadside hardware.[16]

Planning Level Cost Estimate:	IATP Goals Met:
$22,777,000[20]	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement.
Strategic Investment Area	Safety

E Parks Highway MP 263-275 Rehabilitation| Need ID:29874 | Healy

Rehabilitate the Parks Highway from MP 263-275.

Planning Level Cost Estimate:	IATP Goals Met:
$15,000,000[21]	Health, Safety, and Security, Accessibility and Mobility, Preservation and Enhancement
Strategic Investment Area	State of Good Repair

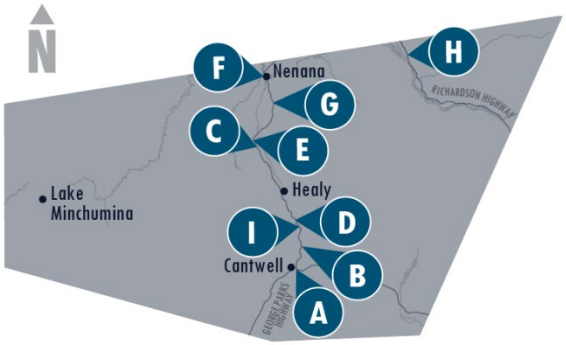


Figure 28 Denali Sub-Region

F Parks Highway Nenana River Bridge at Rex (#0216) Replacement| Need ID:34303 | Denali

Replace the Nenana River Bridge at Rex (#0216) located on the Parks Highway at MP 276. Project will include drainage improvements, road reconstruction, roadside hardware, and utilities.

Planning Level Cost Estimate:	IATP Goals Met:
$64,234,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity.
Strategic Investment Area	State of Good Repair

G Parks Highway Mile Post (MP) 285-305 Rehabilitation| Need ID:33604 | Denali

Reconstruct the Parks Highway between MP 285-305. Project includes drainage improvements, roadside hardware, utilities, and rehabilitation of Julius Creek Bridge (#0317), Fish Creek Bridge (#0722), Tanana River Bridge (#0202) and North Slough Tanana.

Planning Level Cost Estimate:	IATP Goals Met:
$50,375,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity
Strategic Investment Area	State of Good Repair

H Richardson Highway MP 317-326 Rehabilitation | Need ID: 334717 | Denali National Park

Rehabilitate the Richardson Highway from MP 317 to MP 326.

Planning Level Cost Estimate:	IATP Goals Met:
$27,000,000	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity
Strategic Investment Area	State of Good Repair

I Denali to Healy Separated Path| Need ID: 34718| Denali | Active Transportation

Construct a separated path along the Parks Highway that connects the communities of Healy and Denali. This project is broken up into achievable projects each with their own Need ID assigned as well as varying funding, design, and construction statuses.

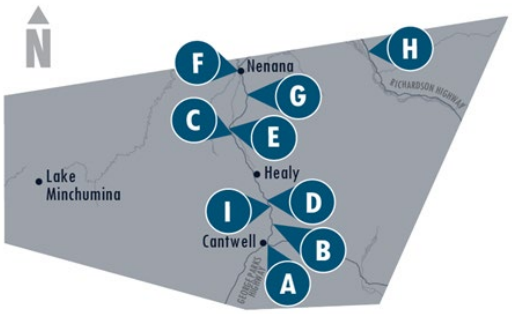


Figure 28 Denali Sub-Region

IATP Goals Met:	Strategic Investment Area:
Health, Safety, and Security | Accessibility and Mobility | Intermodal Connectivity	Sustainability
Planning Level Cost Estimate:	$65,896,000*

Path Section	Status:
Jack River Bridge to Carlo Creek MP 209 - 224	No Current Funding
Carlo Creek to MP 231 Pullout MP 224-231/ Carlo Creek to McKinley Village Path Segment	Design and Engineering Funded
MP 231 Nenana River Pedestrian Bridge	Design, Engineering, and Construction Funded
Tsenesdghaas' Na Wayside to Denali Park Rd MP 231-237	Design and Engineering Funded
Denali Park Rd to Nenana Canyon MP 237-238	Construction Complete
Nenana Canyon to Antler Ridge MP 238-245	No Current Funding
Antler Ridge to Suntrana Ave MP 245-249	Design, Engineering, and Construction Funded
Suntrana Ave to Stampede Rd MP 249-251	Design and Engineering Funded

*Represents the total planning level cost estimate from MP 211-251

5.5.2.5 Upper Tanana

A Johnson River Bridge Replacement| Need ID:33824 | Alaska Highway | Delta Junction

Replace the Johnson River Bridge #518 (MP 1380.5) on the Alaska Highway. The proposed new bridge will be an eight-span concrete decked bulb-tee girder bridge, approximately 1,160-feet long and 43-feet wide. Project activities include replacing the bridge, embankment widening and realignment of the Alaska Highway, pavement resurfacing and striping, drainage improvements including ditching, grading and replacing damaged or undersized culverts and installing new culverts, replacing signs and guardrail, vegetation clearing, potential utility relocations, and potential for ROW acquisition on the north-east side of the bridge for road realignment.

Planning Level Cost Estimate:	IATP Goals Met:
$118,000,000	Health, Safety and Security | Accessibility and Mobility | Preservation and Enhancement.
Strategic Investment Area	State of Good Repair

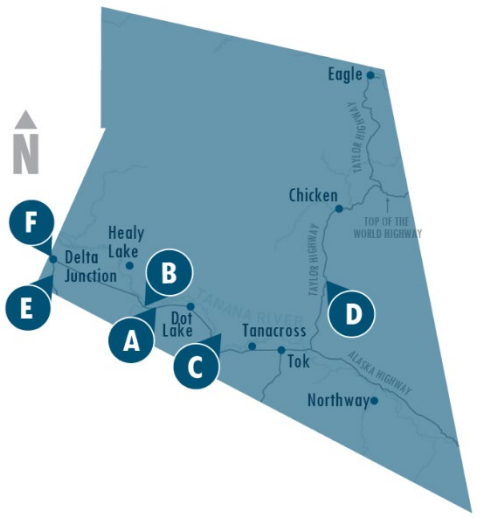


Figure 29 Upper Tanana Sub-Region

B Gerstle Bridge Replacement| Need ID:22322 | Alaska Highway | Delta Junction

Replace the Gerstle River Bridge #520 (MP 1392.7) on the Alaska Highway. The proposed new bridge will be a 13-span concrete decked bulb-tee girder bridge, approximately 1,885-feet long and 43-feet wide. Project activities include replacing the bridge, embankment widening and realignment of the Alaska Highway, pavement resurfacing and striping, drainage improvements including ditching, grading and replacing damaged or undersized culverts and installing new culverts, replacing signs and guardrail, vegetation clearing, utility relocations, and ROW acquisition on the north side of the bridge for road realignment.

Planning Level Cost Estimate:	IATP Goals Met:
$130,000,000	Health, Safety and Security | Accessibility and Mobility | Preservation and Enhancement.
Strategic Investment Area	State of Good Repair

C Robertson Bridge Replacement| Need ID:34126 | Alaska Highway | Tok

Replace the Robertson River Bridge #509 at MP 1347.5 on the Alaska Highway. The proposed new bridge will be approximately 43-feet wide. The length of the new bridge is still being determined. Project activities include replacing the bridge, embankment widening and realignment of the Alaska Highway, pavement resurfacing and striping, drainage improvements including ditching, grading and replacing damaged or undersized culverts and installing new culverts, replacing signs and guardrail, vegetation clearing, potential utility relocations, and potential for ROW acquisition for road realignment.

Planning Level Cost Estimate:	IATP Goals Met:
$138,000,000	Health, Safety and Security | Accessibility and Mobility | Preservation and Enhancement.
Strategic Investment Area	State of Good Repair

D **Taylor Highway Corridor Study| Need ID: 34720 | Tetlin**

Use a Planning and Environmental Linkage Study to identify future investments on the Taylor Highway and work towards solving existing ROW issues.

Planning Level Cost Estimate:	IATP Goals Met:
$2,000,000	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility
Strategic Investment Area	Safety

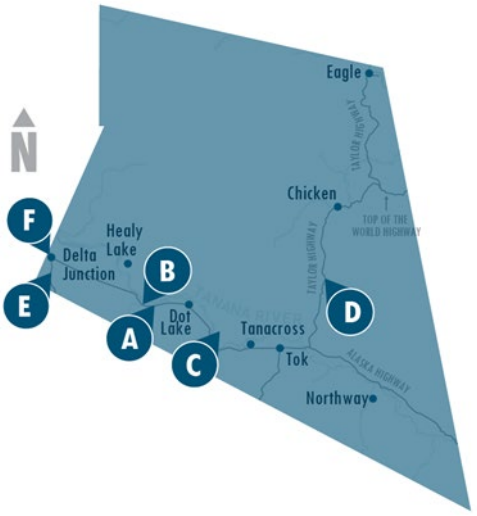


Figure 29 Upper Tanana Sub-Region

E **Richardson Highway Mile Post (MP) 234-244 Rehabilitation | Need ID: 30929 | Fort Greely**

Rehabilitate the Richardson Highway from MP 234 (Ruby Creek) to MP 244.
Original documented need has been abbreviated to create an attainable project goal.

Planning Level Cost Estimate:	IATP Goals Met:
$30,000,000	Health, Safety and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

F **Richardson Highway MP 245-256 Rehabilitation | Need ID: 30929 | Fort Greely**

Rehabilitate the Richardson Highway from MP 245 to MP 256.
Original documented need has been abbreviated to create an attainable project goal.

Planning Level Cost Estimate:	IATP Goals Met:
$31,000,000[22]	Health, Safety and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

5.5.2.6 Copper River

A **Richardson Highway Mile Post (MP) 65-80 Rehabilitation/Tonsina Bridge Replacement | Need ID: 29973 | Tonsina**

Rehabilitate the Richardson Highway between Milepost 65-80. Improvements include bridge work, drainage improvements, roadside hardware, and utilities. This project will include the replacement of the Tonsina River Bridge (#0569). This is part of a legacy project from the 2010 IATP.

Planning Level Cost Estimate:	IATP Goals Met:
$42,457,928	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

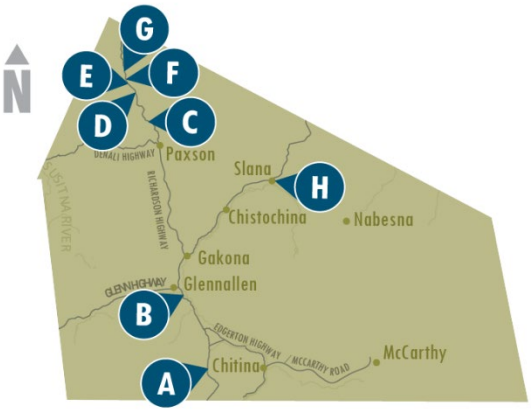


Figure 30 Copper River Sub-Region

B **Richardson Highway MP 113 Realignment (Slide) | Need ID:31017 | Copperville**

Realign the Richardson Highway at MP 113.

Planning Level Cost Estimate:	IATP Goals Met:
$9,830,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Safety

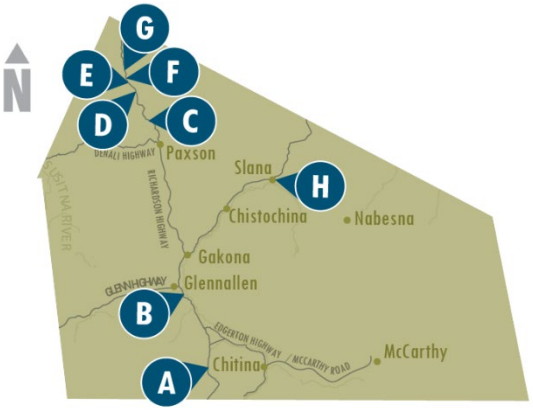


Figure 30 Copper River Sub-Region

C **Richardson Highway MP 187-205 Rehabilitation | Need ID: 34721 | Paxson**

Rehabilitate the Richardson Highway from MP 187 to MP 205.

Planning Level Cost Estimate:	IATP Goals Met:
$35,000,000	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

D **Richardson Highway MP 209-212 Reconstructions | Need ID: 34722 | Paxson**

Reconstruct the Richardson Highway between mileposts 209 and 212. Work includes sections of realignment, roadside hardware, utilities, and drainage improvements.[22]

Planning Level Cost Estimate:	IATP Goals Met:
$42,612,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Safety

E **Richardson Highway Mile Post (MP) 218-221 Reconstruction Trims to Ruby Creek | Need ID: 34762 | Trims**

Reconstruct the Richardson Highway from MP 218 to MP 221, Trims to Ruby Creek. This is a variation of a legacy project from the 2010 IATP and has a Need ID already created (#2124).[22]

Planning Level Cost Estimate:	IATP Goals Met:
$22,084,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

F Richardson Highway MP 224-227 Reconstruction | Need ID: 34723| Northern Region

Reconstruct the Richardson Highway between mileposts 224 and 227, near Donnelly, Alaska. Work includes replacing Lower Suzy Q Creek bridge #0589 and replacing Upper Suzy Q Creek culvert #7146 and Falls Creek culvert #7147 with bridges. Work will also include sections of realignment, roadside hardware, utilities, and drainage improvements.[22]

Planning Level Cost Estimate:	IATP Goals Met:
$32,800,000[22]	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

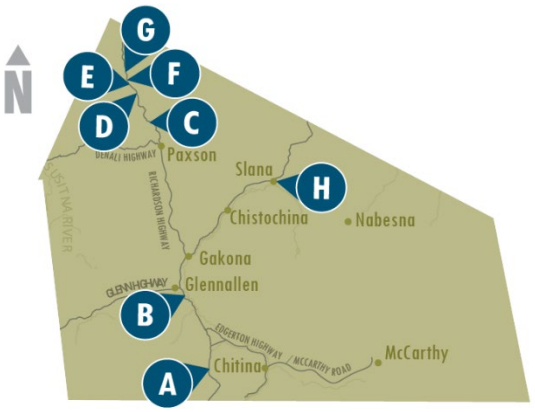


Figure 30 Copper River Sub-Region

G Richardson Highway MP 227-229 Reconstruction | Need ID: 34724 |Northern Region

Reconstruct the Richardson Highway between mileposts 227 and 229, near Donnelly, Alaska. Work includes replacing Gunnysack Creek bridge #0590, sections of realignment, roadside hardware, utilities, and drainage improvements. [22]

Planning Level Cost Estimate:	IATP Goals Met:
$13,102,000	Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	State of Good Repair

H Nabesna Corridor Study | Need ID: 34763 | Nabesna

Conduct a corridor study for Nabesna Road to identify and address existing conflicts for residents and tourists visiting Wrangell-St. Elias National Park and Preserve.

Planning Level Cost Estimate:	IATP Goals Met:
$1,500,000	Economic Vitality | Health, Safety, and Security | Accessibility and Mobility | Preservation and Enhancement
Strategic Investment Area	Safety

14 *Determined using Scope, Schedule, and Estimate (SSE) documentation*
15 *Based on SSE for 11-20*
16 Cantwell to Healy – Parks Highway MP 203-259 PEL Study https://dot.alaska.gov/nreg/parkshealypel/files/php-studyreport.pdf
17 *Determined using 2015 SSE and adjusted for inflation*
18 *Determined using SSE*
19 *Alaska STIP https://dot.alaska.gov/stwdplng/cip/stip/*
20 *Richardson Highway MP 206-233 PEL https://richardson-highway-mp-206-233-pel-akdot.hub.arcgis.com/documents/34cc6a6928d647c8b6ce8801729c4826/explore*

5.5.3 Aviation Projects

This section outlines aviation capital improvement projects that have been identified as having immediate or near-term infrastructure needs. These projects are prioritized based on their potential to enhance operational safety, improve facility efficiency, or address system constraints within the next five years. By focusing on short-term investments, the plan supports timely improvements that ensure continued reliability and responsiveness across the aviation network.

To further support the future of the aviation system within the IATP area, a complete Aviation Capital Improvement list is included the Aviation Transportation: Conditions, Issues, and Trends technical memorandum *(Appendix 3, Section 2)*.

5.5.3.1 Yukon Flats

Beaver Airport Lighting Improvements | Need ID: 34725 | Beaver

Various needs have been identified for the Beaver Airport, including the rehabilitation of airport lighting to meet current standards, this need has been identified through inspection. All needs for the Beaver Airport are included in Table 34, including the estimated cost and status.

IATP Goals Met: Economic Vitality | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity

Table 34 Beaver Airport Needs, Estimated Cost, and Status

Need	Estimated Cost[1]	Status
Replace Wind Cone	$100,000	Obligated[2]
Construct Snow Removal Equipment Building	$1,658,186	Community Identified Need[3]
Minor Gravel Resurfacing	$399,000	Inspection Identified Need
New Fuel Storage Tank (300+ gallons), Construct Fence to secure, and add lighting	$65,775	Inspection Identified Need
Fuel Tank Upgrades	$210,000	Inspection Identified Need
Rehabilitate Airport Lighting	$2,060,000	Community Identified Need[3]

Birch Creek Airport Lighting and Rehabilitation | Need ID: 34726 | Birch Creek

Various needs have been identified at Birch Creek Airport and are included in Table 35, along with the estimated cost, and status.

IATP Goals Met: Economic Vitality | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity

Table 35 Birch Creek Airport Needs, Estimated Cost, and Status

Need	Estimated Cost[1]	Status
Replace Windsock Pole and Lighting	$61,492	Obligated[2]
Acquire New Grader	$444,187	Obligated
Acquire Loader (Replace #37954)	$450,000	Programmed
Reconstruct Miscellaneous Navigational Aids	$100,000	In Project
Reconstruct Runway Lighting	$800,000	In Project
Reconstruct Taxiway Lighting	$400,000	In Project
Rehab Access Road	$1,900,000	In Project
Rehab Apron	$2,500,000	In Project
Rehab Runway 16/34	$6,000,000	In Project
Rehab Taxiway	$1,000,000	In Project
Construct Snow Removal Equipment Building	$1,721,821	Community Identified Need[3]

5.5.3.2 Middle Yukon/Fairbanks

Stevens Village Airport Lighting and Resurfacing | Need ID:31961 | Stevens Village

Various needs have been identified for Stevens Village Airport, including the rehabilitation of pavement surfacing and application of dust palliative on the runway, taxiway, apron and access road, the replacement and upgrade of airport lighting and electrical components, and the removal and replacement of a culvert at the taxiway. All needs, estimated cost, and status are included in Table 36.

IATP Goals Met: Economic Vitality | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity.

Table 36 Stevens Village Airport Needs, Estimated Cost, and Status

Need	Estimated Cost[1]	Status
Acquire New Grader	$444,187	Programmed
Acquire Loader (Replace #37954)	$450,000	Programmed
Stevens Village Airport Lighting and Resurfacing	$7,649,089	Queued for Airport Capital Improvement Program (ACIP)
Drainage Improvements	$56,275	Inspection Identified Need
Fuel Tank Upgrades	$33,764	Inspection Identified Need
Install Automated Weather Observing System (AWOS)	$2,060,000	Community Identified Need[2]

5.5.3.3 Upper Tanana

Eagle Airport | Need ID:XXXXX | Eagle

Replace and upgrade the lighting system and navigational aids, as well as rehabilitate and apply dust palliative on the runway, taxiway, apron, and access road and construct drainage improvements on the access road.

IATP Goals Met: Economic Vitality | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity.

Table 37 Eagle Airport Needs, Estimated Cost, and Status

Need	Estimated Cost[1]	Status
Runway Resurfacing	$7,920,000	In ACIP Queue
Install New Lighting	$721,000	In ACIP Queue
Construct New EEB	$309,000	Obligated[2]
Drainage Improvements	$530,450	In ACIP Queue
Construct Passenger Shelter		Community Identified Need[3]
Construct Tie-Downs		Community Identified Need[3]

Tok Junction Airport | Need ID:22396 | Tok

Various needs have been identified for the Tok Junction Airport and are included in Table 38 on the next page, along with the estimated cost and status.

IATP Goals Met: Economic Vitality | Accessibility and Mobility | Preservation and Enhancement | Intermodal Connectivity.

Table 38 Tok Junction Airport Needs, Estimated Cost, and Status

Need	Estimated Cost[1]	Status
Install AWOS	$1,273,080	Obligated[2]
Construct New Snow Removal Equipment Building	$309,000	Obligated[2]
Pavement Marking and Crack Seal	$60,938	Programmed
Extend Runway and Rehab runway, taxiway and apron	$5,768,113	In Project
Construct Tie Downs	$0	Community Identified Need[3]
Install Continuously Operating Reference System	$75,000	Sponsor Identified Need

[1]*Estimated costs are from the Alaska Aviation System Plan Needs List. These estimates are planning level estimates that will improve through the design process*

[2]*Obligated status indicates that the needs have been identified to receive funding. Needs with obligated status are included as the work is to be completed during the 20-year planning horizon of the IATP.*

[3]According to the AASP, community identified needs/quality of life needs make the airport more viable for reasons of economic development, community comfort, and may be accomplished through community funds combined with other sources.

End Notes

[i] *Alaska Department of Transportation and Public Facilities Program Development, Regional Transportation Planning in Alaska. Https://dot.alaska.gov/stwdplng/rpo*

[ii] *U.S Energy Information Administration, Alaska State Profile and Energy Estimates https://www.eia.gov/state/analysis.php?sid=AK#54*

[iii] *Alaska Health Equity Index, 2022*

[iv] *County Health Rankings, 2024*

[v] *Alaska Department of Transportation & Public Facilities. Pavement Management and Preservation Office. Retrieved June 12, 2023, from https://dot.alaska.gov/stwddes/asset_mgmt/pave_mgt.shtml*

[vi] *https://www.gsa.gov/about-us/gsa-regions/region-10-northwestarctic/buildings-and-facilities/alaska/alcan-land-port-of-entry*

[vii] *https://connect2canada.com/wp-content/fact-sheets/ak.pdf*

[viii] *January 20, 2025 Presidential Executive Order*

[ix] *Mead Treadwell when speaking on an Alaska to Canada rail connection*

[x] *https://dot.alaska.gov/comm/pressbox/arch2025/PR25-0021.shtml*

[xi] *https://www.alaskarailroad.com/sites/default/files/Communications/FCTSHT_2024_MP_357.1_Slope_Stabilization_Drainage_Improvements.pdf*

[xii] *https://www.alaskarailroad.com/sites/default/files/Communications/FTCSHT_2025_Denali_Depot.pdf*

[xiii] *https://www.alaskarailroad.com/sites/default/files/Communications/2017%20Denali%20Realignment%20Prelim.pdf*

[xiv] https://www.maritime.dot.gov/grants/marine-highways/marine-highway

[xv] *https://publicinput.com/Customer/File/Full/eaf4a719-5016-44b7-ac4a-99f5f1d6ca46*

[xvi] *State of Good Repair projects are identified using asset data, Alaska M&O discussions, community discussions, and planning documents*

[xvii] *Note: Program or funding availability for the programs listed are subject to change and may not always be available*