INTERIOR ALASKA
Transportation Plan

TECHNICAL MEMORANDUM 1

Surface Transportation: Conditions, Issues, and Trends

October 2023

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FIGURES

TABLES

ACRONYMS

AAC	Alaska Administrative Code
AADT	Annual Average Daily Traffic
AHS	Alaska Highway System
ARRC	Alaska Railroad Corporation
ASATP	Alaska Statewide Active Transportation Master Plan
ASFP	Alaska Statewide Freight Plan
ASRP	Alaska State Rail Plan
CDP	Census Designated Place
CFR	Code of Federal Regulations
DOT&PF	Department of Transportation and Public Facilities
FAST	Fairbanks Area Surface Transportation
FHWA	Federal Highway Administration
FP	Freight Plan
GVW	Gross Vehicle Weight
HPM	Highway Preconstruction Manual
IATP	Interior Alaska Transportation Plan
IGU	Interior Gas Utility
IRI	International Roughness Index
LRTP	Long Range Transportation Plan
MACS	Metropolitan Area Commuter System
MP	Mile Post
MPO	Metropolitan Planning Organization
MPA	Metropolitan Planning Area
MPH	Miles Per Hour
MS/CVC	Measurement Standards and Commercial Vehicle Compliance
MTP	Metropolitan Transportation Plan
NHS	National Highway System
PAIP	Public and Agency Involvement Plan
PRIIA	Passenger Rail Investment and Improvement Act
RSP	Road Surface Profiling
SHSP	Strategic Highway Safety Plan
SIP	Strategic Investment Plan
STIP	Statewide Transportation Improvement Program
TAPS	Trans-Alaska Pipeline System
TDM	Travel Demand Model
TIP	Transportation Improvement Program
TRAAK	Trails and Recreational Access for Alaska Program
US	United States
VMT	Vehicle Miles Traveled
VPD	Vehicles Per Day

1.0 INTRODUCTION

1.1 What is the Interior Alaska Transportation Plan (IATP)?

The Interior Alaska Transportation Plan (IATP) is a part of the State of Alaska Department of Transportation and Public Facilities (DOT&PF) federally mandated statewide transportation planning process, per US Code of Federal Regulations (CFR), Title 23 Section 450.216, Statewide and Nonmetropolitan Transportation Planning and Programming, and as detailed in Title 17, Alaska Administrative Code (AAC), Section 05.120, Statewide transportation planning process. The DOT&PF regularly updates five regional, multi-modal, long-range transportation plans (LRTPs) throughout the state to better inform the overall Alaska Statewide Long-Range Transportation Plan (Alaska LRTP). The overall Alaska LRTP sets the policies, goals, and actions to improve the transportation network within each state, working together with the Strategic Investment Plan (SIP) to identify key transportation system improvements and allows DOT&PF to program funding for project implementation through the Statewide Transportation Improvement Program (STIP).

The DOT&PF pursues a continuous, comprehensive, and cooperative statewide planning process by collaborating directly with communities during the regional LRTP update process to identify existing conditions, key issues, and recommended priorities for funding opportunities. *Figure 1* illustrates the various elements included in the DOT&PF statewide transportation planning, program development, and strategic investment process.

The purpose of the 2040 IATP is to identify existing conditions, develop goals for the region's transportation system, identify key issues, and provide recommendations for strategic funding and implementation to achieve those goals. Through public outreach, data collection, and existing conditions evaluation, the IATP planning process results in the identification of key issues and recommendations for communities within the IATP region boundaries. The IATP was last updated in 2010 and assumes a 20-year planning horizon. The IATP provides a valuable regional perspective with focused input from the communities located within the boundaries of the IATP region, as defined in **Section 1.3, Interior Alaska Transportation Plan (IATP) .**

Figure 1. Elements of the Alaska Statewide Long-Range Transportation Planning Process

The overall IATP Update is developed through three (3) key parts of the planning process:

1) **Technical Memorandums.** Five (5) technical memorandums explore key transportation planning elements within the Interior.
    1. Surface Transportation
    2. Aviation System
    3. Risk & Resiliency in Transportation Infrastructure
    4. Winter Access in the Interior
    5. Riverine & Water Transportation

2) **Public & Agency Engagement.** Collaborative public and agency engagement activities are used to gather feedback from members of the public and agency representatives.

3) **Funding & Implementation Strategy.** To address the key issues identified in the IATP, strategies are organized into short-term, mid-term, and long-term projects with high-level estimates of cost to better inform statewide investment plan decisions from a regional perspective.

1.2 Purpose of the Technical Memorandum 1: Surface Transportation Analysis

The IATP Technical Memorandum 1: Surface Transportation Analysis (Memorandum) reviews related plans and policies, summarizes public engagement activities to date, documents existing conditions of surface transportation system facilities, develops forecasts, and identifies key issues and recommendations for a 20-year planning horizon within the boundaries of the planning area. Surface transportation includes DOT&PF-owned roads, highways, and non-motorized transportation facilities located within the boundaries of the IATP region.

There are over 60 census-designated places (CDP) communities within IATP region, with 53 of those communities located on the DOT&PF-owned surface transportation system. The 10-plus communities located off the road system connect back to regional surface infrastructure through boat, winter access, barge, and aviation facilities. Regardless of on- or off-road system location, all communities in the Interior rely on the surface transportation system for supplies, services, employment, education, subsistence, and recreation.

Information presented in this memorandum will inform the overall update to the IATP, resulting in recommended funding and implementation strategies to address multi-modal transportation system needs from a regional perspective.

1.3 Interior Alaska Transportation Plan (IATP) Region

The IATP region boundaries are shown in *Figure 2*. The Dalton Highway serves as a western boundary for the IATP region, but the analysis of this facility is covered in the 2040 Northwest Alaska Transportation Plan Update (2022).

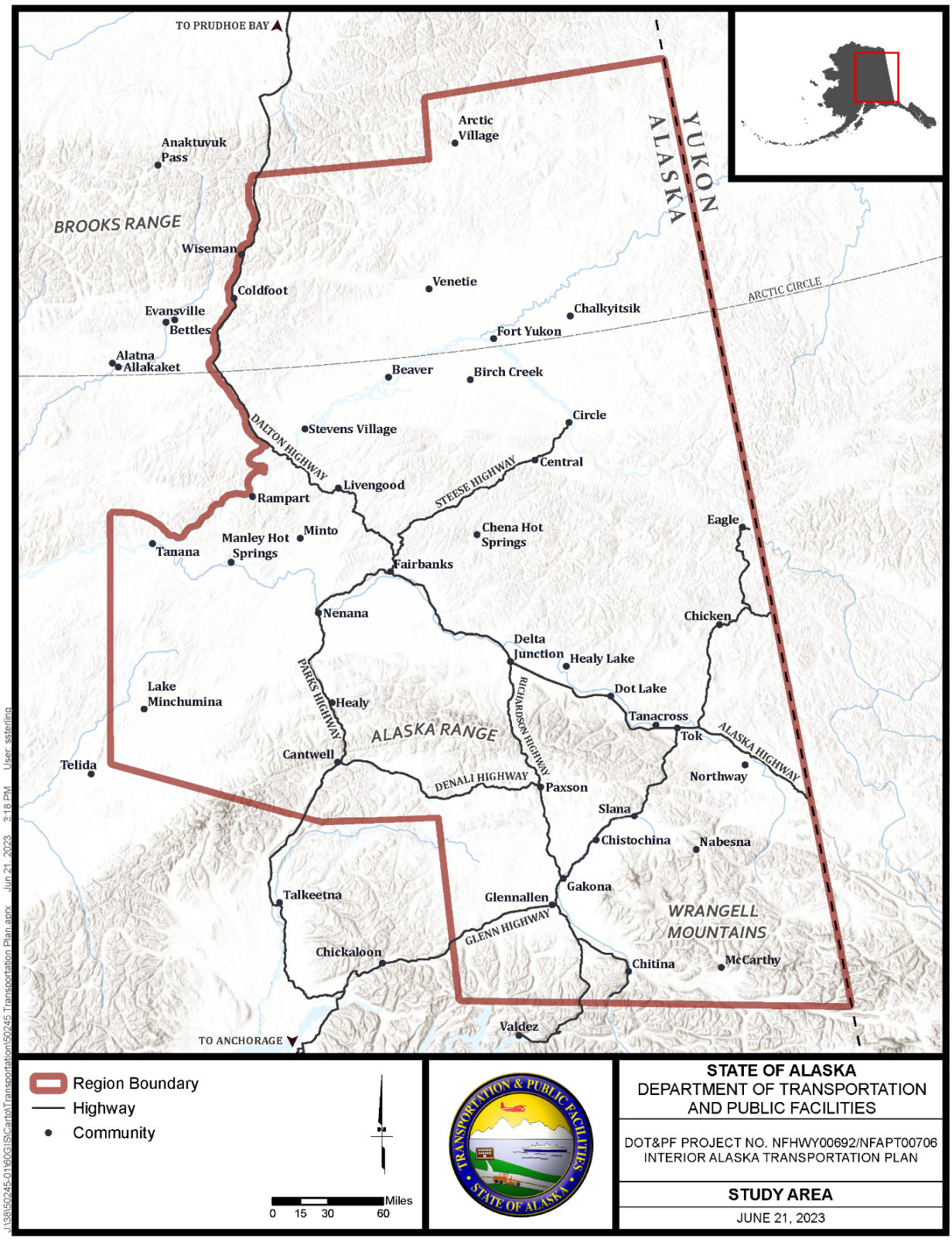

Figure 2. Interior Alaska Transportation Plan (IATP) Region Study Area & Major Surface Transportation Facilities

2.0 PUBLIC AND AGENCY INVOLVEMENT

2.1 Overview

The IATP is being developed using an efficient and inclusive outreach process. This process is outlined in the Public and Agency Involvement Plan (PAIP), which describes the methods and strategies to identify and engage area stakeholders, communicate information, and seek input throughout the IATP update process.

The PAIP sets out how the planning team will seek input from stakeholders on key issues throughout the planning process. The outreach process strives to provide opportunities for involving the public to contribute to the development of transportation policy guidance and the identification of transportation priorities within Interior Alaska.

As of the date of submission of this memorandum, public and agency involvement has included maintenance of a website, a regularly scheduled e-newsletter publication, five (5) public open house meetings, review and response to public comments, and on-going working group meetings.

2.2 Public & Agency Involvement

The first round of public meetings to support data collection was a traveling "roadshow" held in May 2023 throughout the IATP region with communities located along the road system, including:

- Healy
- Fairbanks
- Glennallen
- Delta Junction
- Tok

An additional meeting in Minto was scheduled but will be rescheduled due to a bereavement in the community.

A virtual meeting component was created using the website to inform and solicit feedback from those unable to attend a public meeting in person. Detailed meeting summaries and an online version of the roadshow presentation can be found on the website at **www.interioralaskatransportationplan.com**.

In addition to the roadshow, a working group of business, community, and agency representatives has been established and meets for regularly scheduled meetings with the planning team. The working group provides a diverse perspective to inform the planning process and the contributions will be summarized in the final IATP Update.

2.3 Key Themes

Over the course of the traveling roadshow, several key themes emerged regarding surface transportation:

- On-going risks regarding flooding of infrastructure
- Concerns with safety of military convoys on major highways
- Roadway safety
- Requests for increased non-motorized transportation facilities
- Roadway maintenance
- Railroad improvements
- Roadway improvements
- Public facilities, such as highway restroom facilities
- Concerns with Kinross's plans to transport ore from Tetlin to Ft. Knox
- Facilities to support tourism industry
- Concerns with DOT&PF emergency response plans
- Access to vital services, such as medical facilities
- DOT&PF coordination with local entities

The key themes are critical in determining issues and concerns of the community, as well as informing the Key Issues & Recommendations section of this memorandum. Although this is only a snapshot of public and agency involvement to date, the planning team will continue to collaborate with local community leaders to provide opportunities for the public to inform the planning process.

3.0 REVIEW OF RELATED PLANNING DOCUMENTS

3.1 DOT&PF Plans

3.1.1 Alaska 2036 Long-Range Transportation Policy Plan Update – Let's Keep Moving 2036 (2016)

The Alaska 2036 Long-Range Transportation Policy Plan Update (LRTP) operates under federal mandate 23 CFR 450.216 and serves as a document to guide the Alaska DOT&PF through the year 2036 by establishing policies and investment priorities. The plan established a vision to provide a transportation system that enables a robust and growing economy and meets the mobility needs of all facility users in the state.

Policies, goals, and actions were determined by addressing trends for travel growth and demand, delivery and supply systems, existing public policy, public expectation, financial capacity, climate change, and extreme weather events.

3.1.2 Alaska Moves 2050: Draft Statewide Long-Range Transportation Plan Update (2022)

The Draft Statewide Long-Range Transportation Plan Update, Alaska Moves 2050, was released for public comment in June 2022. The plan is an update of the 2036 LRTP and is based on a performance-based planning framework to support improved decision making, higher return on investments, better accountability and transparency, and improve performance of the transportation system. The draft LRTP sets out the top three transportation priorities by region, and for the Interior these are:

- Mobility for all Alaskans
- Operation and Maintenance of the System
- Resiliency

Future transportation challenges for the Interior include:

- Serving the 50 communities within the Interior
- Providing for how people get around, including using the road/highway, rail, air, and water
- Supporting facilities for the transportation of goods, including on the road/highway, rail, air, and water
- Providing opportunities for economic prosperity, including for mining, tourism, the military, and for subsistence.

The Draft LRTP sets out a range of goals, policies, actions, and performance measures to guide future transportation investment and measure results. Once they are adopted, these will guide future programming of funds for transportation investment in Alaska.

3.1.3 Alaska Moves 2050: Statewide Freight Plan (2023)

The Alaska Moves 2050 Statewide Freight Plan (ASFP) focuses on moving people and goods safely and efficiently while aligning with federal, state, and local transportation priorities, using a performance-based planning approach to measure improvement effort impacts. Trends, challenges, and opportunities related to freight traffic were identified by evaluating safety, travel mode, travel pattern, climate, existing surface condition, and existing facilities data.

For the Interior Region, Alaska's goods movement takes place through trucking, rail, pipelines, waterways, and aviation. It should be noted that although this memorandum is focused on surface transportation, freight movement throughout the Interior includes all modes of transportation and is critical to the region's economy.

Alaska's freight system goals are:

- **Safety:** Increase safety for all modes during the movement of freight
- **Mobility and Access:** Move goods safely, reliably, and cost-effectively across Alaska
- **Economic Vitality:** Facilitate economic growth and lower the cost of goods and services
- **State of Good Repair:** Keep what we have in a state of good repair
- **Resiliency:** Have a freight network that can recover quickly from disruptions
- **Sustainability:** Promote a sustainable, clean, equitable freight system
- **Strategic Partners:** Collaborate with other levels of government, industry partners, and the public
- **Stewardship of the Transportation System:** Find the best, most affordable ways to improve the freight network
- **Performance-Based Management:** Have stable, flexible, and long-term funding sources
- **Transportation Innovation:** Leverage innovations that benefit safety, efficient freight movement, and work force needs

Key trends related to freight truck traffic and the roadway system were identified as:

- Statewide lane miles increased 20 percent and total VMT increased by 18 percent, with VMT per capita increasing eight percent (2006-2019).
- Urban-area roadways carry the higher AADT and total truck volumes while rural-area roadways carry a higher percentage of truck traffic.
- DOT&PF transitioning their pavement management practices from the "worst-first" method to a life cycle planning method.
- DOT&PF has prioritized safety with its federal funding by consistently obligating HSIP funding on the order of 90 percent or greater.

Challenges related to freight truck traffic and the roadway system were identified as:

- Limited funding, retiring personnel, studded tire use, and climate change impacts.
- Lack of roadway network redundancy leading to system-wide safety and access vulnerability.
- Travel time reliability is impacted by external factors, such as extreme weather events, roadway maintenance and mitigation, lack of network redundancy, and roadway capacity.
- Bridge height, overhead clearance, load restrictions, and roadway seasonal weight restrictions.
- Sole reliance on HSIP funds for safety improvements without additional state or more flexible federal funding.
- DOT&PF data is inconsistent with established DOT&PF boundaries and federally reported data.

Opportunities identified to address the previously mentioned roadway system challenges include:

- Discussing the potential for jurisdictional transfer of the DOT&PF managed local or collector roads to local agencies.
- Development of Tribal Safety Plans to improve coordination and alignment between DOT&PF, rural, and tribal leaders.
- Expansion of the data-driven safety approach to emphasize treatment cost-effectiveness assessments and Highway Safety Manual screening and evaluation methods at the project level.
- Treating and rehabilitating pavements and bridges in good and fair condition before deteriorating to decrease a project's life cycle cost.
- Continuing to allocate resources for improved data collection, management, and analysis to aid in accurately prioritizing investments, management of assets, and required reporting.

3.1.4 Alaska Statewide Active Transportation Master Plan (2018)

The Alaska Statewide Active Transportation Master Plan (ASATP) is aims to provide Alaskans with access to equitable, accessible, and safer walking and bicycling opportunities as an integral part of daily life. The ASATP outlines federal, state, and local policy, design, and funding guidance to aid communities in their efforts to improve active transportation facilities and mode choice options throughout Alaska.

Public engagement and analysis of data was used to identify key goal areas, their associated objectives, and performance measures to improve active transportation facilities and access over the 20-year plan period. The ASATP also identifies trends within the state and outlines how active transportation can aid in the improvement of key transportation deficiencies and impacts, with a focus on quantifying the economic benefits of increased active transportation mode choice. The ASATP acts as a supporting policy to achieve the goals and vision outlined in the *Statewide Long-Range Transportation Plan*, specifically related to active transportation facility best practice, design, planning, safety, and maintenance. It is best practice for the ASATP to be incorporated into other state, regional, and local plans that address active transportation.

3.1.5 Alaska State Rail Plan (2016)

In 2008, United States (US) Congress passed the Passenger Rail Investment and Improvement Act (PRIIA) which focuses on improving passenger rail service in the US. PRIIA resulted in the requirement for any state seeking federal assistance for either passenger or freight improvements to have an updated state rail plan. The development of an Alaska State Rail Plan (ASRP) was assigned to the Alaska DOT&PF under the Alaska Statute 44.42.050 which charges the Alaska DOT&PF with the responsibility for planning activities for all modes of transportation.

The ASRP identifies both passenger and freight rail opportunities for proposed investments and future studies. System wide, the plan suggests grade-separation of all NHS at-grade rail crossings, grade-separation of significant non-NHS at-grade crossings, and ARRC Positive Train Control. Long-term strategies identified include extending transportation facilities to provide surface access to resource development, and standardizing Alaska's track to a 286,000 pound capacity. Project specific to the Interior Region, include:

- ARRC Fairbanks Area Line Relocation - Phase 1
- Cantwell Intermodal Facility
- ARRC Nenana Rail Line Relocation
- Fairbanks Area Rail Plan

- ARRC Northern Rail Extension
- ARRC Healy Canyon Stabilization
- ARRC Fairbanks Airport Branch and Eielson Branch Staging Areas
- ARRC Fairbanks Freight Intermodal Terminal Rail/Truck Staging Area
- Extending Transportation Facilities to Provide Surface Access to Resource Development Opportunities

In addition to the project noted above, the ASRP also proposes projects for economic analysis, periodic re-evaluation, and study in the Interior, including:

- Nenana/Dunbar to Livengood Railroad Extension
- Rail Extension to North Slope
- Alaska-Canada Rail Link (ACRL)
- Island Railroad1 to Yukon Territory

It should be noted that management and operations of Alaska railroads are the responsibility of Alaska Railroad Corporation (ARRC), a state-owned corporation, established by the Alaska Railroad Corporation Act of 1984. The Alaska State Rail Plan Draft proposes continued support for ARRC, memorializes a desire by the state to invest in short and long-term passenger and freight projects, and examines the potential economic benefits and costs of rail extensions. To date, this plan has not been adopted or finalized.

3.1.6 Alaska Strategic Highway Safety Plan (2018)

The Alaska Strategic Highway Safety Plan (SHSP) focuses on a coordinated framework that works to reduce fatalities and serious injuries on all public roads. The SHSP is updated on a rolling five-year basis and is a cross-agency approach to address critical factors contributing to traffic-related fatalities and serious injuries by establishing performance goals, strategies, and action steps.

The SHSP identifies champions for each action step, including DOT&PF and Alaska's Metropolitan Planning Organizations (MPOs), including FAST (Fairbank Area Surface Transportation) Planning. Strategies are divided into three areas of emphasis, including Driver Behavior, Roadways, and Special Users. The actions identified for each champion agency includes the emphasis area and overall strategy to address safety. Interior agencies including DOT&PF and FAST Planning have been identified as champions in each emphasis area and are tasked with action steps that work together for statewide change.

The common theme that relates to the IATP is the need for improved data collection procedures, including both motorized and non-motorized users, and review and revision of statewide policies. Overall, the ASHP does not provide specific steps for the Interior Region but does emphasize department-wide actions that would benefit all of Alaska.

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[1] Note: An island railroad is a railroad that is not connected to the regional or national rail network. The White Pass & Yukon Route Railway line is an example of an island railroad. https://wpyr.com/

3.2 Metropolitan Planning Organization Plans

The IATP region includes one (1) Metropolitan Planning Organization, the Fairbanks Area Surface Transportation (FAST) Planning). FAST Planning is responsible for transportation planning and programming federal transportation funds within the defined Metropolitan Planning Area (MPA) through a Metropolitan Transportation Plan (MTP) and the accompanying Transportation Improvement Program (TIP), which is incorporated by reference into the DOT&PF Statewide Transportation Improvement Program (STIP). Because the planning process has already been completed for these projects within the MTP, projects identified will be incorporated into the overall IATP Funding & Implementation Strategy.

3.3 Other Community Plans

The IATP region includes over 60 communities, of which 24 have a federally recognized tribal government. To better understand the issues and needs in these communities, plans for 16 communities were reviewed.

Common themes include the need for new/improved transportation facilities including facilities focused on pedestrian and bicycle needs, considerations for flooding and wildfire damage, increased access to hospitals and medical care, and a focus on economic growth. Most community plans referenced surface transportation facilities which are not owned or maintained by DOT&PF; however, the community infrastructure often connects back by aviation or local road to a major DOT&PF-owned facility. On-going coordination with these communities' leadership will better inform how DOT&PF can support transportation planning efforts as appropriate.

4.0 SURFACE TRANSPORTATION SYSTEM OVERVIEW

4.1 Roads & Highways

The highway system in the IATP region is comprised of the Alaska Highway System (AHS) and the National Highway System (NHS). The National Highway System is comprised of interstates, defense routes, principal arterial roads and routes which connect major intermodal facilities such as airports, ports, and ferries. The AHS includes intrastate highways connecting communities, recreational areas, and resource lands within the IATP region.

4.1.1 National Highway System in Alaska

The NHS is established under US Code 23, Section 103 (23 USC 103) and consists of the Interstate Highway System, as well as any additional roads deemed appropriate. Roadways identified as being a part of the NHS are important to the nation's economy, defense, and mobility. The NHS includes only four percent of the nation's roads but is responsible for more than forty percent of all highway traffic, 75 percent of heavy truck traffic, and 90 percent of tourist traffic.

Although Alaska is not part of the contiguous US and roadways do not serve as traditional interstate connections, roadways connecting one US state to another, there are approximately 1,248 miles of NHS roadways located in the IATP region. Besides a few exceptions to the rule, all NHS routes in Alaska are managed by DOT&PF.

4.1.2 Alaska Highway System

The AHS is established under Alaska Administrative Code (AMC) 17, section 05.010 (17 AAC 05.010) and consists of roadways that meet at least one of the three classifications listed below:

- Roadways included within the NHS
- Are of statewide significance but are not included in the NHS
- Highways and transportation-related facilities with designation under the Community Transportation Program (17 AAC 05.170(d)) or the Trails and Recreational Access for Alaska (TRAAK) Program (17 AAC 05.170(e)).

As a result of these classifications, all roads identified as part of the NHS in the state of Alaska are also part of the AHS, but not all AHS roads are a part of the NHS. In total, the IATP region includes 1,248 miles designated as NHS, and an additional 762 miles are designated as AHS roadways.

4.1.3 National & Alaska Scenic Byways

The IATP region includes highways that are established as Alaska or National Scenic Byways. The Alaska Scenic Byways Program was established in 1993 to celebrate the beautiful landscapes visible along Alaska's highways. The National Scenic Byways Program[2], established in the Intermodal Surface Transportation Efficiency Act of 1991, is a voluntary, grass-roots effort administered through FHWA to recognize, preserve, and enhance some of America's most beautiful corridors. The IATP region includes roadways that have been designed in both the National Scenic

[2] *Scenic America. About the National Scenic Byways Program. Retrieved June 12, 2023, from https://www.scenic.org/why-scenic-conservation/scenic-byways/about-the-national-scenic-byways-program/*

and Alaska Scenic Byways programs. The Glenn Highway and Parks Highway are designed National Scenic Byways by FHWA[3], while the Steese, Taylor & Top of the World, and Richardson Highways are designated as an Alaska Scenic Byway.

4.1.4 Functional Roadway Classification

The functional classification of each roadway within the IATP region is found in *Figure 3.* The following section describes each functional classification and the identified facilities within the IATP region.

4.1.4.1 Interstate

According to the Federal Highway Administration (FHWA), interstates are the highest classification of arterials. Their purpose is to support long-distance travel and mobility linking urban areas within the US. They are designed to manage a high volume of traffic to support industry and communities throughout a region and between states, and in the case of the IATP planning area, connection with Canada.

Interstates in the IATP region include the Alaska, Glenn, Parks, Richardson, and Tok Cutoff Highways.

4.1.4.2 Arterial

The FHWA identifies two types of arterials, Principal Arterial-Other and Minor Arterial. A Principal Arterial-Other roadways operate like interstates in that they support long-distance travel and serve urban centers in combination with interstates. They are designed to support high volumes of traffic and provide connectivity between urban centers. In a rural setting, a single arterial may be the primary roadway serving an area. In these instances, the arterial provides critical corridor movements for industry, goods and services and travel. Minor arterial roadways are designed for trips of moderate length. They serve smaller geographic areas and rural population centers and are typically linked with major arterial roadways.

Arterial roadways in the IATP region include Chena Hot Springs Road, the Elliott Highway, Steese Expressway/Highway, Taylor Highway and Top of the World Highway.

4.1.4.3 Collector

Collector roadways are designed to collect traffic from local roads and connect them in with the arterial network. There are two sub-classifications, major and minor collectors. These facilities are used for shorter distances and provide intra-community travel rather than regional or statewide travel.

Major or minor Collector roadways in the IATP region include Edgerton Highway/McCarthy Road and the northern segment of the Taylor Highway serving Eagle.

4.1.4.4 Local Roads

If roadways are not classified as Interstates, Arterials or Collectors, they are, by default, Local roads. These facilities are intended for short trips and typically provide direct access to homes and businesses in communities. While some local roads are owned and maintained by DOT&PF and are important elements of the Interior region's system, they are generally serving a specific purpose such as access to airports or local services (i.e., solid waste sites). These roads have not been included in this report.

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[3] *Scenic America. Alaska Byways. Retrieved June 12, 2023, from https://www.scenic.org/state/alaska/*

4.1.4.5 Industrial Roads

Industrial roads provide access to industrial zoned land. These roadways also provide access for other development that would result in an increased frequency in truck movements. Although all roadways can provide access to industrial uses or industrial zoned land, not all roads meet the criteria to be classified as an industrial road and are not considered a functional class.

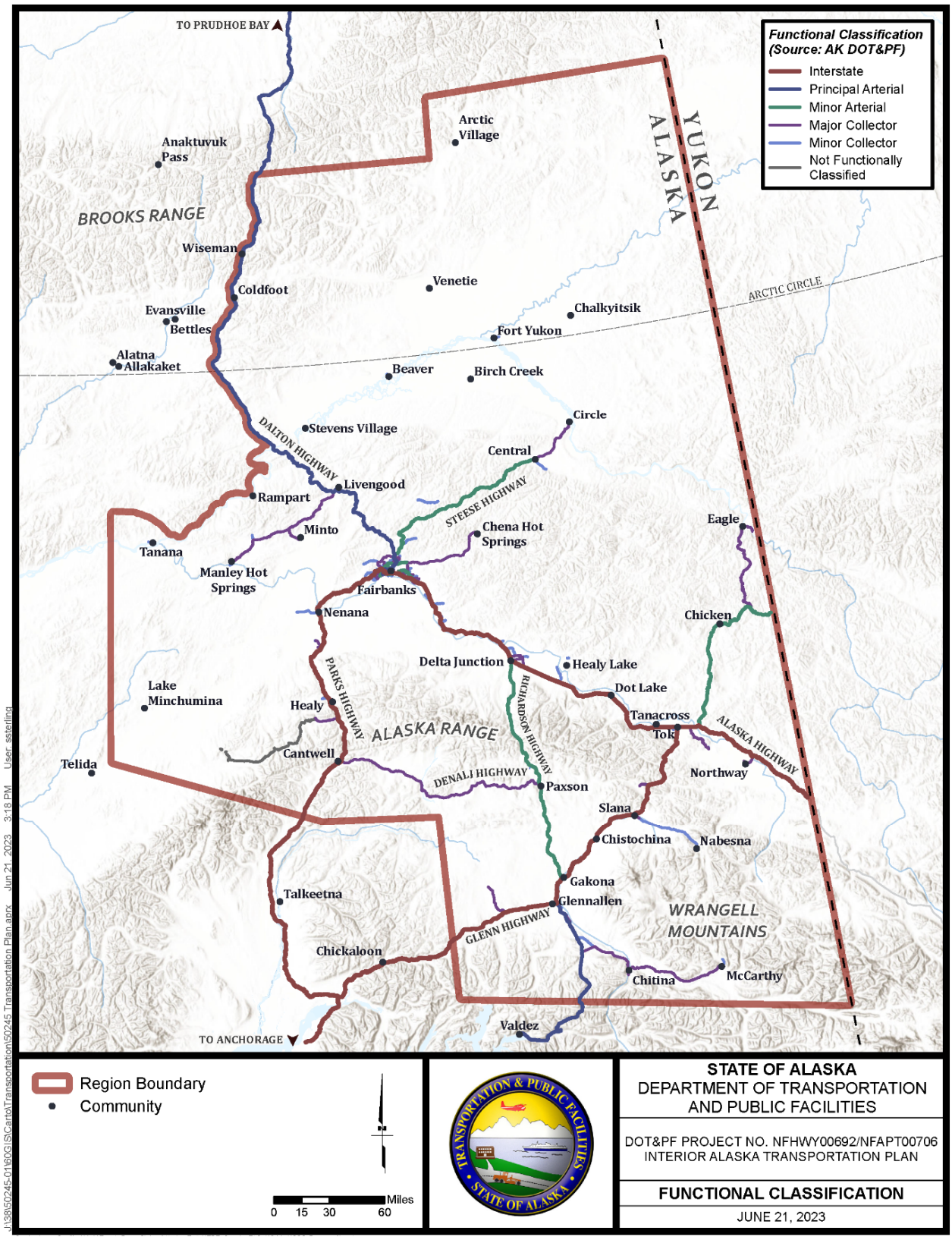

Figure 3. Interior Alaska Roadway Function Classification

4.2 Non-Motorized Facilities

4.2.1 Non-Motorized Facilities Defined

For the purposes of the IATP, non-motorized facilities are defined as surface transportation facilities adjacent or within the DOT&PF right-of-way. Winter access, which can include various user and vehicle types including non-motorized vehicles, will be addressed in Technical Memorandum 3: Winter Access in the Interior. There is not currently a full inventory of DOT&PF-owned non-motorized facilities.

4.2.2 DOT&PF's Commitment to Pedestrians & Bicyclists

In June 1995, the Commissioner of the DOT&PF directed: "It is the policy of the department that accommodations for pedestrians and bicyclists be considered and implemented for all of our highway projects.[4]" Exceptions to this policy must be approved by the Commissioner on a case-by-case basis. Formal directives continued to support this policy statement by issuing procedures for non-motorized facilities to be included in DOT&PF roadway projects, such as adopting revisions to Chapter 4 (Project Development) of the Highway Preconstruction Manual (HPM).

In 2019, the DOT&PF adopted the Alaska Statewide Active Transportation Plan (ASATP) to plan for access to equitable, accessible, safer walking and bicycling opportunities as an integral part of daily life in Alaska. The ASATP establishes five goal areas with associated objectives and performance measures: Safety, Health, Maintenance/System Preservation, Connectivity, and Economic Development. The ASATP also identifies trends within Alaska and outlines how active transportation can aid in the improvement of key transportation deficiencies and impacts, with a focus on quantifying the economic benefits of increased active transportation mode choice. The ASATP acts as a supporting policy to achieve the goals and vision outlined in the *Statewide Long-Range Transportation Plan*, specifically related to active transportation facility best practice, design, planning, safety, and maintenance, and is considered a guiding document for the IATP planning process in reference to non-motorized facilities within the IATP region.

4.3 Bridges

The DOT&PF is responsible for maintaining 194 bridges throughout the IATP region, as illustrated in *Figure 4*. Specific bridge locations are found within the Existing Conditions section of this memorandum, organized by roadway facility. A complete list of bridges, arranged by roadway can be found in Appendix 1: Bridge Inventory.

[4] *Alaska Department of Transportation & Public Facilities. Alaska Statewide Active Transportation Master Plan. Retrieved June 12, 2023, from https://dot.alaska.gov/stwdplng/areaplans/modal_system/docs/AK-Statewide-Active-Transportation-Plan.pdf*

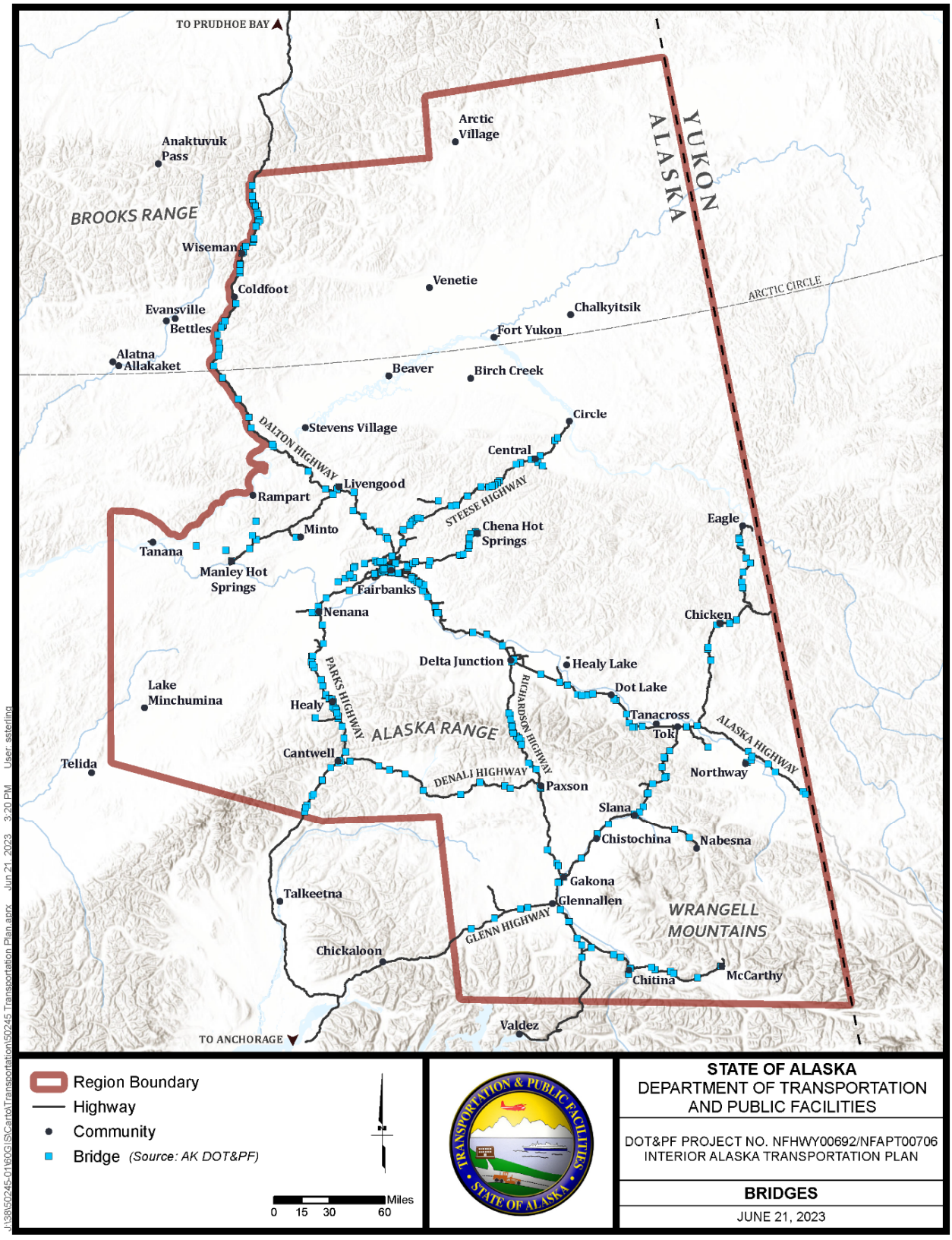

Figure 4. Interior Alaska Bridges

4.4 Safety

4.4.1 Average Annual Daily Traffic (AADT)

The Traffic Data Program within the DOT&PF is responsible for the collection, analysis, and reporting of traffic volumes on roadways within Alaska. Three field offices, including one in Fairbanks, collect both volume and class data which is used to generate Average Annual Daily Traffic (AADT) and the corresponding truck traffic percentage of AADT, as well as Truck Class Data and Continuous Count data. According to *Methodology Behind Traffic Data Collection and Statistics*[5], data are used to meet reporting requirements implemented by the FHWA to inform multiple systems and programs administered by FHWA to evaluate performance of roadways.

Figure 5 provides an overview of AADT for each DOT&PF-owned roadway in the region.

AADT is the baseline informational data used to determine traffic volume on a roadway in both design and planning for surface transportation systems. Over time, monitoring the increase, decrease, or plateau of AADT data can provide helpful insights for a state's transportation system capital improvement needs. In addition, AADT is the starting point for calculating Vehicle Miles Traveled (VMT) and provides valuable in assisting DOT&PF in meeting reporting requirements for FHWA.

For the Interior region, the trend of AADT over the last decade has remained relatively flat or decreased over time. Section 5, Existing Conditions, of this memorandum provides more detailed AADT information for each roadway analyzed within the Interior Region.

[5] *Alaska DOT&PF. Methodology Behind Traffic Data Collection and Statistics, alaska.gov, June 2020. https://dot.alaska.gov/stwdplng/transdata/pub/Methodology-Traffic-Data-June-2020.pdf. Accessed May 2023.*

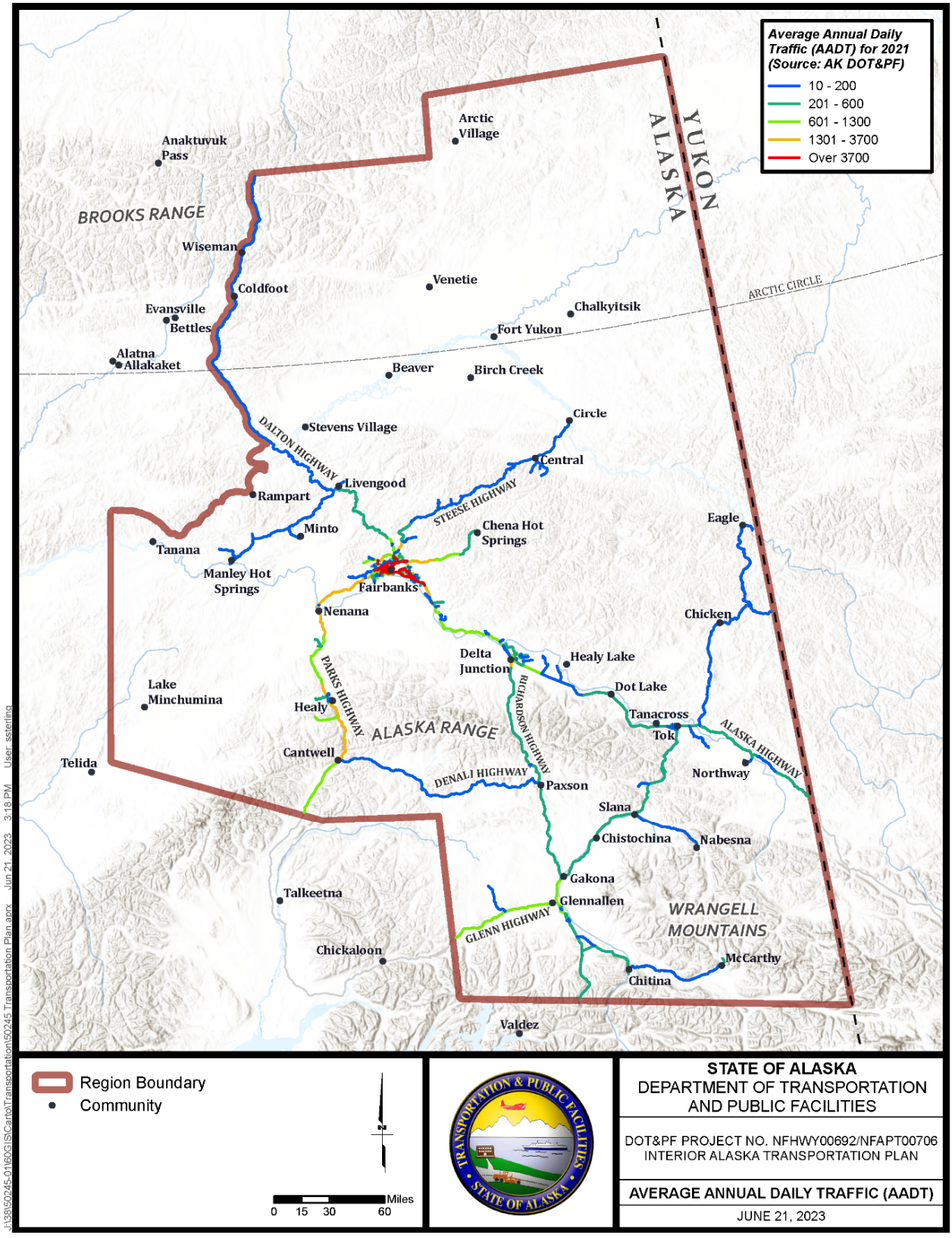

Figure 5. Interior Alaska Average Daily Traffic for 2021

4.4.2 Vehicle Crashes

Crash data provided by DOT&PF contained crashes occurring within the region between 2013 and 2021. The reports associated with each incident included information on number and severity of injuries and/or fatalities, number of motorized/non-motorized vehicles involved, weather conditions at time of incident, and lighting conditions at time of incident.

During the nine-year period analyzed, roadways within the region had 2,558 crashes documented due to either multiple motor vehicles colliding or single motor vehicle collisions. The highest number of crashes occurred in 2013, with 387 documented incidents. In recent years the number of crashes reduced from 252 in 2019 to 212 in 2021. Most crashes happened during the winter months of November, December, January, and February. The years with the highest number of fatalities in the region were 2017 and 2018 with 15 and 12 fatalities respectively.

Most crashes within the IATP region were a result of single vehicles running off the road, which accounted for 1,285 incidents, or 50 percent of all incidents involving motorized vehicles. Even with the limited hours of daylight during the winter, nearly half of all winter incidents occurred during daylight hours.

4.4.3 Non-Motorized Crashes

Between 2013 to 2021, the region had 909 crashes involving wildlife, bicycles, off-road vehicles, or pedestrians. This accounts for 26 percent of all crashes (3,467 incidents). Eight-hundred-and-eighty-seven of these crashes were the result of animal versus vehicle, with the most occurring in 2014 and 2015 with 126 and 125 respectively. Of the incidents not involving wildlife, eight occurred between pedestrians and motorized vehicles and five occurred between bicycles and motorized vehicles. Thirteen of the 887 non-motorized crashes resulted in a fatality.

4.4.4 All-Purpose Vehicles on Public Roads

As of January 1, 2022, all-purpose vehicles (also known as all-terrain vehicles, utility terrain vehicles, and off-road vehicles) are allowed to be used on Alaska's roadways with speed limits under 45 miles per hour, unless otherwise prohibited by local laws or regulations. The new law requires all-purpose vehicles (APVs) to be registered as a motor vehicle and have certain equipment to be driven on roadways and requires that operators of APVs on roadways have a valid drivers license. This law has raised safety concerns in many communities, but due to the recency of its implementation sufficient data is not yet available.

This law does not apply to snowmachines and hovercraft.

4.5 Rail

The Alaska Railroad extends from Seward and travels north to Fairbanks and includes 470 miles of main line and 12 miles of secondary line serving Whittier. The railroad within the region is shown on *Figure 6*. The railroad is managed and operated by ARRC and is categorized as a Class II railroad, indicating an annual operating revenue of less than $250 million. The railroad provides passenger and freight transportation.

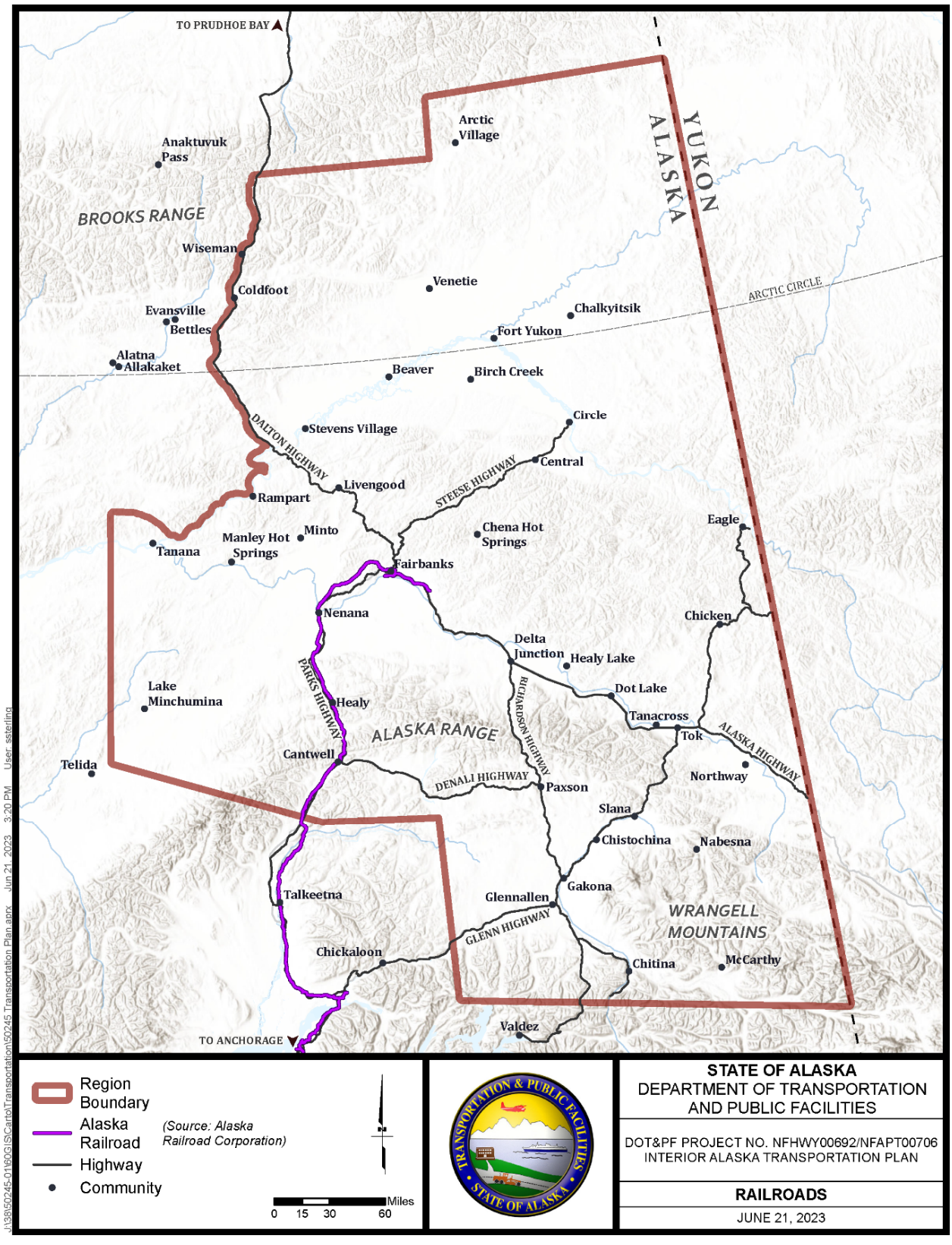

Figure 6. Interior Alaska Railroads

4.6 Freight

Freight commodity flows within Alaska and the Interior are primarily dependent upon heavy truck, rail, and marine/riverine transportation modes. Top commodities by value in the region are petroleum products, which are transported via the Trans-Alaska Pipeline System (TAPS) and are primarily distributed within the IATP region using marine/riverine transportation modes.

Key intermodal connection points within Interior Region are identified within the Alaska Statewide Freight Plan (ASFP) and include the Nenana marine/riverine port, the TAPs, the Fairbanks International Airport, and nearly all of the region's highways. The ASFP also identifies critical urban and rural freight (trucking) corridors and their extent within the IATP region. The urban corridors identified are in Fairbanks, while rural corridors are highway specific. These critical freight corridor locations are described in *Table 1*.

Table 1. Urban and Rural Freight Corridors

Route	Built Environment	Start	End	Length (Miles)
Van Horn Road	Urban	University Avenue S	South Cushman Street	3.9
South Cushman Street	Urban	Richardson Highway	Van Horn Road	0.5
Steese Highway	Urban	Johansen Expressway	Hagelbarger Avenue	4.4
Richardson Highway	Urban	Richardson Highway MP 351	Petro Star Refinery	2.9
Peger Road	Urban	Johansen Expressway	Tria Road	3.1
Dalton Highway	Rural	Elliott Highway	Chandalar	235

The ASFP identified and ranked locations where the reliability and delay for truck traffic results in high cost to the freight industry and thus are determined to be freight bottleneck locations. These identified locations are largely within the urban area of Fairbanks. The bottleneck locations within the region are listed by rank in *Table 2*.

Table 2. Interior Region Freight Bottleneck Locations by Severity[6]

Rank	Location	Roadway	Direction
1	3rd Street/Steese Highway Intersection	Steese Highway	WB
2	Geist Road/Johansen Expressway/University Avenue Intersection	Johnson Expressway	WB
3	Geist Road/Johansen Expressway/University Avenue Intersection	University Avenue	NB
4	Johansen Expressway/Steese Highway	Steese Highway	EB
5	Johansen Expressway/Steese Highway	Johansen Expressway	EB
6	Geist Road/Johansen Expressway/University Avenue Intersection	University Avenue	SB

[6] *Alaska Department of Transportation & Public Facilities. Alaska Moves 2050 Long Range Transportation Plan & Freight Plan. Transportation and Freight Technical Memorandum. Retrieved June 12, 2023, from https://alaskamoves2050.com/wp-content/uploads/2022/09/Appendix-D-Consolidated_Transportation-Assessment-August-2022-1.pdf*

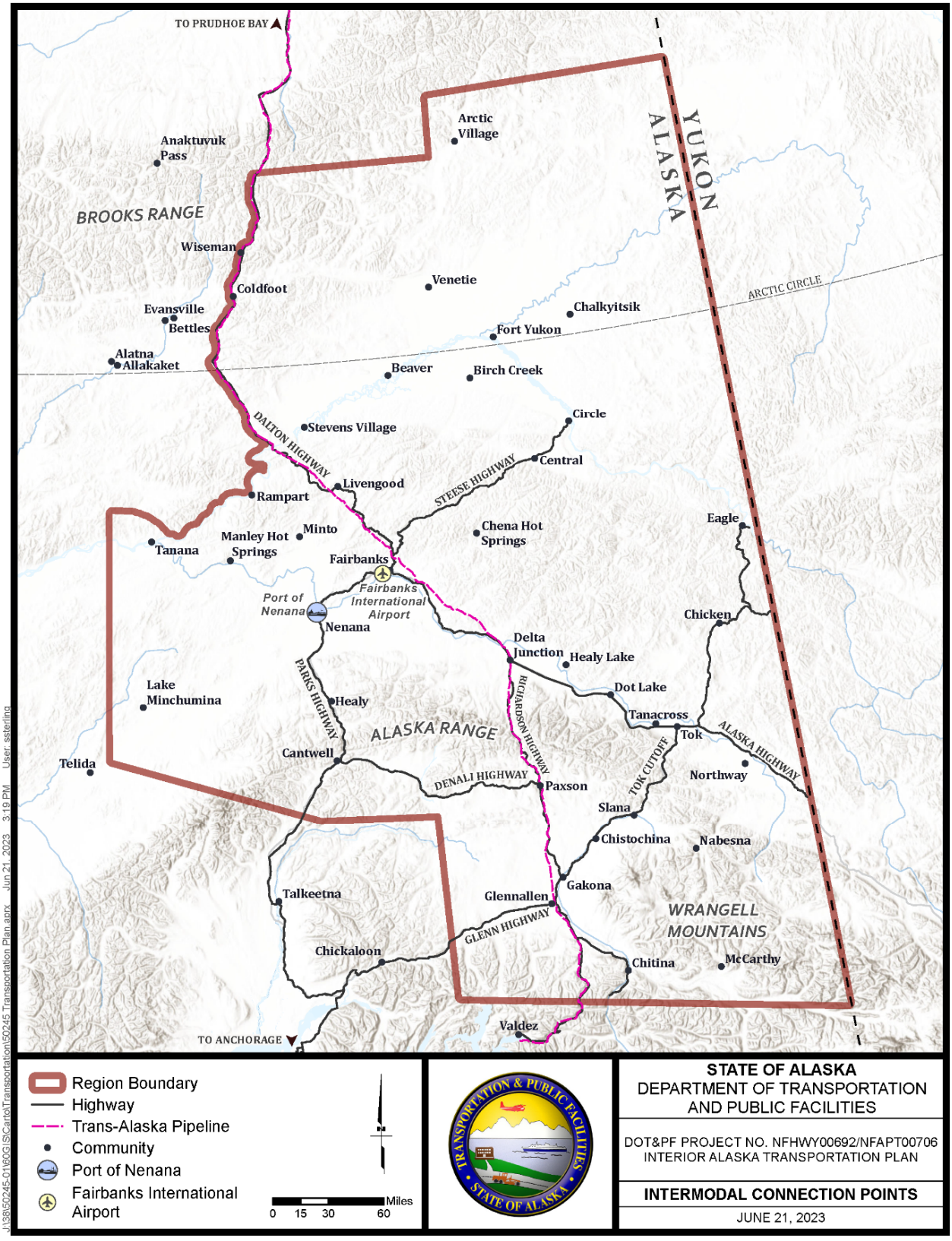

Figure 7. Interior Alaska Intermodal Connection Points

4.7 Transit

The metropolitan area of Fairbanks including North Pole is served by the Metropolitan Area Commuter System (MACS) transit system. There is the main MACS transit system operates on a fixed-route bus service and is supplemented with "Van Tran", an on-demand transit option for individuals who are unable to use the fixed-route locations. Van Tran requires users to complete an application to determine eligibility.

The Interior Alaska Bus Line travels from Anchorage to Tok on the Glenn Highway and from Tok to Fairbanks on the Richardson Highway with stops along the way. Pricing is dependent on the destination but ranges from $30 to $65 for more local destinations and $85 to $130 for locations outside of the Interior region, such as Palmer and Anchorage. The routes run daily, and reservations are recommended.

The village of Gulkana has Soaring Eagle Transit, which operates on a fixed schedule for service to Anchorage, Valdez, and Copper River Basin. Additionally, Soaring Eagle Transit operates a call out service with a 50-mile radius. These services allow users access to health care, education, employment, recreation, entertainment, and shopping. Users are required to make reservations for service 24-hours in advance.

4.8 Maintenance

4.8.1 Facilities

The region is comprised of six maintenance districts: Mat-Su, Dalton, Fairbanks, Tazlina, Denali, and Tok. There are a total of 25 maintenance stations responsible for the roads. Error! Reference source not found.*Table 3* identifies these stations, the areas they service, days of operation, and average number of operators where applicable.

4.8.2 Pavement Management and Preservation

To successfully implement pavement preservation measures, DOT&PF documents pavement conditions annually along roadways throughout Alaska and issues weight restrictions within the IATP region. Road Surface Profiling[7] (RSP) 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 (IRI)
- **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.

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 (GVW) over 10,000

[7]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

pounds. These restrictions begin at the start of spring break-up to minimize damage to roadways and can reduce allowable GVW 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.

4.8.3 Winter Road Maintenance Priority Identification

The DOT&PF uses priority level identification to assess the times required to provide winter maintenance. Winter conditions vary and the actual response times may be influenced by the severity and length of a storm. Non-motorized facilities such as sidewalks are assigned the same priority level as the road within the accompanying right-of-way. Five priority levels are used:

- **Priority Level One:** High volume, high-speed highways, expressways, minor highways, all safety corridors, and other major urban and community routes. These roads may take up to 12 hours to clear following a winter storm event.
- **Priority Level Two:** Routes identified as lesser priority based on traffic volume, speeds, and uses. Typically, these are major highways and arterials connecting communities. These roads may take up to 18 hours to clear following a winter storm event.
- **Priority Level Three:** Major local roads or collector roads located in larger urban communities. These roads may take up to 24 hours to clear following a winter storm event.
- **Priority Level Four:** Minor local roads that provide residential or recreational access. These roads may take up to 30 hours to clear following a winter storm event.
- **Priority Level Five:** These are roads that are designated as “no winter maintenance” routes. They are generally only cleared in spring to prepare the road for summer traffic.

Table 3. DOT&PF Maintenance Stations

District	Station Name	Area Covered	Days of Operation	Avg # of Operators
Dalton	Livengood	Elliott Hwy MP 28-110 Dalton Hwy MP 0-28	7 days a week	3
	Manley	Elliott Hwy MP 110-156	7 days a week	2
Denali	Cantwell	Parks Hwy MP 163-231 Denali Hwy MP 133-135	7 days a week	4
	Healy	Parks Hwy MP 231-276	7 days a week	2
	Nenana	Parks Hwy MP 276-344	7 days a week	2
Fairbanks	Birch Lake	Richardson Hwy MP 287-341 Local Roads	7 days a week	2
	Fairbanks	Parks Hwy MP 344-Fairbanks Elliott Hwy MP 0-28 Steese Hwy MP 0-44 Richardson Hwy MP 341-Fairbanks Chena Hot Springs	7 days a week Two rotating shifts for 24-hour operations	9 per shift
	Montana Creek	Steese Hwy MP 44-Yukon River at Circle	7 days a week	3
Tazlina	Ernestine	Richardson Hwy MP 42-82	7 days a week	3
	Chitina	Edgerton Hwy McCarthy Road (summers only), and local roads	7 days a week	3
	Tazlina	Richardson Hwy MP 82-148 Tok Hwy MP 0-18 Glenn Hwy MP 176-189 local roads	7 days a week	5
	Nelchina	Glenn Hwy MP 118-176	7 days a week	2
	Slana	Tok Hwy MP 18-91	7 days a week	3
	Paxson	Richardson Hwy MP 148-202	7 days a week	3
Tok	Trims	Richardson Hwy MP 203-238	7 days a week	2
	Delta	Richardson Hwy MP 238-287 Alaska Hwy MP 1370-1422	7 days a week	3
	Tok	Alaska Hwy MP 1285-1370 Tok Hwy MP 91-124	7 days a week	3
	Northway	Alaska Hwy MP 1222-1285	7 days a week	2
Mat-Su	Cascade	Glenn Hwy MP 66-118	5 days a week	N/A

5.0 EXISTING CONDITIONS

5.1 Richardson Highway

Richardson Highway (Alaska Route 2 and 4) was the first long-distance all-weather road to be built in Alaska. The route started as a five-foot-wide packed trail to provide military access from Valdez to the Alaska Interior at the start of the Klondike Gold Rush, circa 1899. After the Alaska Road Commission was established in 1905, the commission's first president and the highway's eventual namesake, Major Richardson, identified the trail as a top priority for upgrades. Today, the highway follows roughly the same route as the original trail.

The majority of the Richardson Highway is in the IATP region, from around MP 50 outside of Valdez to the boundary of the FAST Planning MPA. The portion of the highway between Valdez and Delta Junction is designated as Alaska Route 4 and Delta Junction to Fairbanks is designated as Alaska Route 2. It intersects with the Edgerton Highway, Glenn Highway, Tok Cutoff, Denali Highway, and the Alaska Highway. The Richardson Highway is in the Unorganized Borough until it reaches the Fairbanks North Star Borough. It provides roadway access to the Delta Junction, Gulkana, and Copper Center airports.

Richardson Highway has two Alaska Scenic Byway designations: the North segment and the South segment. The North segment was designated for its natural, recreational, historic, and archaeological qualities and the South segment was designated for its scenic, natural, recreational, historic, and cultural qualities.

5.1.1 System Identification and Functional Classification

The Richardson Highway is part of the NHS and is classified as a minor arterial roadway from Valdez to where it intersects with the Glenn Highway near MP 115, an Interstate from MP 115 to Gakona Junction, a major collector roadway from Gakona Junction to Delta Junction, and an Interstate between Delta Junction and Fairbanks.

There is no median along the Richardson Highway from MP 0 until the intersection with the Alaska Highway in Delta Junction (MP 266), where it has a short segment with a curbed median. It then returns to no median until it nears Eielson Air Force Base after MP 340. Lanes on the Richardson Highway are a minimum of seven feet wide. The entire Richardson Highway is paved.

Posted speed limits vary across the length of the Richardson Highway. Most of the highway outside of Fairbanks has a posted speed limit of 65 miles per hour (mph), with some stretches of 55 mph, most notably between MP 159 and MP 235, the corridor approximately 25 miles south of Paxson to approximately 30 miles south of Delta Junction.

5.1.2 AADT & Truck Volume Percentage

The AADT on the Richardson Highway in 2021 ranged from 220 to 25,500, with higher volumes occurring from around MP 261 near the Alaska Highway to the end of the Richardson in Fairbanks (average AADT 8,802 for this segment) and near the Glenn Highway (AADT of 1,030). The highest volumes occur within the FAST Planning MPA boundary (average AADT of 15,611). Trucks account for approximately 13 percent of AADT (11 percent single unit and 1.7 percent combination unit trucks).

5.1.3 Seasonal Limitations

The majority of the Richardson Highway is designated Priority 2 for winter maintenance, though it is designated as Priority 1 around MP 341 to the end of the highway within the FAST Planning MPA boundary.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. Based on data from 2013-2022, restrictions typically begin in mid-March or early April and end in late May to mid-June, with an average of 72 days per year under weight restrictions. Exact start and end times vary year to year.

5.1.4 Crashes

Table 4 summarizes the crash type reported to DOT&PF between 2013 and 2021 on the portion of the Richardson Highway within the IATP region. There were 1,385 reported crashes, with **933** crashes having no apparent injuries and 57 crashes with no identified crash severity. In total, there were **465** minor injuries, 62 serious injuries, and 17 fatalities.

Approximately 45 percent of crashes occurred under clear weather conditions. Of the remaining crashes, 20 percent occurred while it was cloudy, 18 percent while there was snow or blowing snow, six percent occurred during other precipitation events and eight percent of crashes occurred during blowing sand, fog/smoke, and severe crosswinds. Conditions for the remaining crashes were unreported or are unknown.

Roughly 48 percent of crashes occurred under daylight conditions, 32 percent of crashes occurred in the dark with no lighting, six percent occurred in the dark with lighting documented, and eight percent at dawn or dusk. Lighting conditions for the remaining crashes were unreported or are unknown.

Table 4. Richardson Highway Crashes 2013 – 2021

Crash Type	Richardson Highway
Animal – Vehicle	378
Head-On	32
Motorcycle	19
Rear End	185
Sideswipe	34
Single Vehicle Run-Off-Road	500
Undetermined	160
Angle – Left Turning	44
Angle – T-Bone	28
Bicycle	1
Pedestrian	3
Off-Road Vehicle	1
TOTAL	**1385**

5.1.5 Bridges

The Richardson Highway has 40 bridges within the IATP region. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.1.6 Surface Conditions

Roadways are inspected annually for various conditions including rutting, cracking, and roughness. These conditions are rated as good, fair, or poor. The data in *Table 5. Richardson Highway Surface Conditions 2021*, notes the number of road miles and their rating relative to the listed condition measures. The Richardson Highway has approximately 345.6 road miles within the Interior Region. In 2021, 14.9 percent of the road miles were rated as poor for roughness, 6.9 percent were rated poor for rutting, and 11.7 percent were rated poor for cracking.

The surface conditions data reflected in the table below illustrates the challenges with frost heave along this corridor, particularly in the more remote sections from just outside of the Fairbanks North Star Borough boundary to the southern boundary of the Interior Region.

Table 5. Richardson Highway Surface Conditions 2021

Richardson Highway			
Condition Measure	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	129.6	164.4	51.6
Rutting	177	144.6	24
Cracking	222.9	82	40.7

5.1.7 Maintenance Stations

The Richardson Highway is maintained by seven service stations: Ernestine (MP 42-82), Tazlina (MP 82-148), Paxson (MP 148-202), Trims (MP 203-238), Delta (MP 238-287), Birch Lake (MP 287-341), and Fairbanks (MP 3412-Fairbanks).

5.2 Steese Expressway

The Steese Highway (Alaska Route 6) was originally developed to access placer mines from Circle, a town along the Yukon River. After gold was discovered in Fairbanks, the trail was extended and eventually developed into a road. The highway was named after one of the presidents of the Alaska Road Commission.

The majority of the Steese Highway is in the IATP region, except for the first few miles that are in the FAST Planning MPA boundary. The highway is in both the Fairbanks North Star Borough and the Unorganized Borough. It intersects with the Elliot Highway at Fox and provides roadway access to the Central, Circle City, and Circle Hot Springs airports.

The Steese Highway is designated as an Alaska Scenic Byway for its scenic, natural, recreational, and historic qualities.

5.2.1 System Identification and Functional Classification

The Steese Highway is part of the NHS from MP 0 until it reaches Fox, where it becomes part of the AHS. It is classified as a Minor Arterial from its origin in Fairbanks until it reaches Fox, a Major Collector from Fox to the Central maintenance station, and a Minor collector from the Central maintenance station to Circle.

Median types on the Steese Highway vary between MP 0 and MP 8, including stretches of unprotected, curbed, and positive barrier medians. After MP 8 there is no median on the Steese Highway. Lanes on the Steese Highway have a minimum width of eight feet. The Steese Highway is paved from MP 0 to around MP 81, where it turns to gravel for the remainder of the roadway.

Most of the Steese Highway outside of Fairbanks has a posted speed limit of 50 mph, with some areas up to 55 mph.

5.2.2 Bridges

The Steese Highway has 25 bridges within the IATP region. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.2.3 AADT & Truck Volume Percentage

In 2021 the AADT on the Steese Highway ranged from 40 to 25,300, with higher volumes occurring between MP 0 to around MP 20. The highest volumes occur within the FAST Planning MPA boundary (AADT of greater than 13,000). Trucks account for an average of approximately 20 percent of AADT (10.6 percent single unit and 9.9 percent combination unit trucks).

5.2.4 Seasonal Limitations

The Steese Highway has multiple winter maintenance priority designations along its route. For the first 25 miles outside of the FAST Planning MPA boundary, it is designated as Priority 2, then Priority 3 around MP 31, and finally Priority 4 after the Montana Creek maintenance station.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. Based on data from 2013-2022, restrictions typically begin in late March to mid-April and end sometime in June with an average of 67 days under weight restrictions. Exact start and end times vary year to year.

5.2.5 Crashes

Table 6 summarizes the crash type reported to DOT&PF between 2013 and 2021 on the portion of the Steese Highway within the IATP region. There were 150 crashes reported, with **80** crashes having no apparent injuries and seven crashes with no identified crash severity. In total, there were **61** minor injuries, 14 serious injuries, and ten fatalities.

Nearly half (49 percent) of crashes occurred under clear weather conditions. Of the remaining crashes, 21 percent occurred while there was snow or blowing snow, 15 percent occurred while it was cloudy, seven percent during other precipitation events, and two percent of crashes occurred during blowing sand, fog/smoke, and severe crosswinds. Conditions for the remaining crashes are unknown.

Table 6. Steese Highway Crashes 2013-2021

Crash Type	Steese Highway
Animal – Vehicle	32
Head-On	9
Motorcycle	12
Rear End	16
Sideswipe	1
Single Vehicle Run-Off-Road	50
Undetermined	18
Angle – Left Turning	4
Angle – T-Bone	5
Pedestrian	1
Off-Road Vehicle	1
Bicycle	1
TOTAL	150

Approximately 49 percent of crashes occurred under daylight conditions, 39 percent occurred in the dark, and seven percent at dawn or dusk. Lighting conditions for the remaining crashes are unknown.

5.2.6 Surface Conditions

The Steese Expressway is inspected annually to identify locations where rutting, cracking and roughness are present. These conditions receive ratings of good, fair, and poor. *Table 7*, notes the number of road miles and their rating relative to the listed condition measures. The Steese Expressway has approximately 78.4 road miles within the Interior Region. In 2021, 7.2 percent of the road miles were rated as poor for roughness, 3.3 percent were rated poor for rutting, and 3.0 percent were rated poor for cracking.

Table 7. Steese Highway Surface Conditions 2021

Steese Highway			
Condition Measure	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	25.2	47.5	5.7
Rutting	39.6	36.1	2.6
Cracking	52	24	2.4

5.2.7 Maintenance Stations

The Steese Highway is serviced by the Fairbanks maintenance station (MP 0-44) and Montana Creek (MP 44-Yukon River at Circle).

5.3 George Parks Highway

The George Parks Highway originates near Wasilla and extends in a northeasterly direction to Fairbanks. The segment within the region begins at Mile Post 173 and continues to MP 352 at the boundary of the FAST Planning MPA. The road was originally called the Anchorage – Fairbanks Highway when it was first

opened in 1971, but was renamed the George Parks Highway after George Alexander Parks, the governor of the Territory of Alaska from 1925 to 1933. The road is most frequently referred to as the Parks Highway.

The highway offers views of Denali and provides access to Denali State Park, Denali National Park and Preserve and other recreational amenities in the area. Many communities within the interior are located along the route, including Cantwell, Healy, Nenana, and Fairbanks.

A 116-mile segment of the Parks Highway, beginning at the south end of Denali State Park to Healy, is designated as a National Scenic Byway since 2009[8]. The designation was based upon the natural terrain experienced along the corridor, including Denali State Park and Denali National Park and Preserve amongst others.

5.3.1 System Identification and Functional Classification

The Parks Highway is classified as an interstate and is part of the NHS. The segment of the Parks Highway within the region is an asphalt road with lane widths varying from 12 to 14 feet. There are isolated sections of the highway that have lane widths between 20-28 feet (Mile Post 245-247; 251-253 and 294-296). Generally, medians are not used along the portion of the highway within the region, except near Mile Post 239, where there is a concentration of overnight accommodations, food, beverage, and gas to support tourism in the area.

Posted speeds are primarily 65 mph, transitioning to gradually lower speeds as the road enters neighboring communities along the corridor. The segment of the roadway between the Denali National Park entrance and the City of Healy is posted at 55 mph.

5.3.2 AADT & Truck Volume Percentage

During 2021, the AADT along the Parks Highway ranged from 290 to 18,300 vpd, with the highest volume being reported at the Parks Highway on-ramp at Geist Road in Fairbanks. The highest volumes reported outside of the FAST Planning MPA is between the Old Nenana Highway and Gold Hill Road near the community of Ester. Trucks account for approximately 11.6 percent of AADT (8.2 percent single unit and 3.4 percent combination unit trucks).

5.3.3 Seasonal Limitations

The Parks Highway is affected by seasonal weather conditions. The DOT&PF has identified the segment of the Parks Highway within the IATP region as a Priority 2 for winter maintenance.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. Data reported by Measurement Standards and Commercial Vehicle Compliance (MS/CVC) from 2013 through 2022 reflects that the highway experienced weight restrictions beginning either during March or April and continuing into late May or June each year. On average, weight restrictions are imposed 61.8 days per year.

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[8] National Scenic Byway Foundation (n.d.). The George Parks Highway Scenic Byway. Retrieved June 12, 2023, from https://nsbfoundation.com/nb/the-george-parks-highway-scenic-byway

5.3.4 Crashes

Table 8, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the portion of the Parks Highway within the IATP region. During this period, 1016 crashes were reported, including 688 crashes having no apparent injuries and 27 crashes with no identified crash severity. In total, there were 350 minor injuries, 77 serious injuries, and 28 fatalities.

Table 8. Parks Highway Crashes 2013-2021

Crash Type	Parks Highway
Animal – Vehicle	196
Angle – Left Turning	40
Angle – T-Bone	23
Bicycle	1
Head-On	54
Motorcycle	21
Off-Road Vehicle	2
Pedestrian	2
Rear End	129
Sideswipe	36
Single Vehicle Run Off Road	414
Undetermined	98
TOTAL	**1016**

Of the crashes reported, 45 percent occurred under clear weather conditions, while 25 percent occurred while conditions were cloudy, 16 percent while there was snow or blowing snow, and six percent during other precipitation events. Of the remaining crashes, three percent occurred during blowing sand, fog/smoke, and severe crosswinds and five percent occurred during unknown conditions.

Over half, or 51 percent of crashes occurred under daylight conditions, 37 percent occurred in the dark, and nine percent at dawn or dusk. Lighting conditions for the remaining crashes are unknown.

5.3.5 Bridges

There are 52 bridges along the Parks Highway and 39 of these are within the interior region. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.3.6 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor. *Table 9*, notes the number of road miles and their rating relative to the listed condition measures. The Parks Highway has approximately 310.2 road miles within the Interior Region. In 2021, a vast majority of the roadway received a rating of good in all three categories. However, deficiencies were noted. Specifically, 5.2 percent of the road miles were rated as poor for roughness, 8.6 percent were rated poor for rutting, and 4.1 percent were rated poor for cracking.

Table 9. Parks Highway Surface Conditions 2021

Parks Highway			
Condition Measure	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	208.56	85.42	16.30
Rutting	204.68	78.90	26.70
Cracking	231.88	65.50	13.0

5.3.7 Maintenance Stations

The Parks Highway is maintained by four facilities located either along the highway or within communities adjacent to the roadway including Cantwell (MP 163-231), Healy (MP 231-276), Nenana (MP 276-344), and Fairbanks (MP 344 to Fairbanks). All facilities are staffed seven days per week and generally have two to four operators apart from the Fairbanks facility which maintains facilities in the urban areas, primarily outside of the IATP region.

5.4 Chena Hot Springs Road

Chena Hot Springs Road is approximately 56 miles in length and starts from an east bound ramp off Steese Expressway. From Fairbanks, the road generally follows the Chena River east until crossing the river near MP 39 where it takes a northerly direction. The road terminates at Chena Hot Springs where a resort and many other tourist and recreational amenities are located.

5.4.1 System Identification and Functional Classification

Approximately six miles of Chena Hot Springs Road is identified as functional class rural minor arterial and an additional 50 miles is identified as rural major arterial. The full length of Chena Hot Springs Road is asphalt.

5.4.2 Bridges

Chena Hot Springs Road has 12 bridges within the IATP region. One of the 12 bridges identified at Monument Creek is classified as being on private land. All bridge names, mileposts, lengths and funding eligibility are found in Appendix 1: Bridge Inventory

5.4.3 AADT & Truck Volume Percentage

According to AADT data from 2021, traffic on Chena Hot Springs Road ranged from 570 to 7,210 vpd with the highest volume occurring east of Steese Highway.

5.4.4 Seasonal Limitations

The length of Chena Hot Springs Road has two distinct winter maintenance priorities identified. The first 18.5 miles from the center of Fairbanks is designated as a level 3 priority and the remaining 31.5 miles are designated as level 4 priority.

5.4.5 Crashes

Table 10 summarizes the crash type reported to DOT&PF between 2013 and 2021 on Chena Hot Springs Road. There were 418 crashes reported, with 267 crashes having no apparent injuries and 19 crashes with no identified crash severity. In total, there were 155 minor injuries, 27 serious injuries, and nine fatalities.

Over half of the reported crashes occurred under clear weather conditions. Of the remaining crashes, 20 percent occurred while conditions were cloudy, 11 percent occurred while there was snow or blowing snow and only 12 percent occurred during events of blowing debris or fog/smog/smoke.

Table 10. Chena Hot Springs Road Crashes 2013-2021

Crash Type	Chena Hot Springs
Angle – Left Turning	18
Angle – T-Bone	13
Animal - Vehicle	109
Head-On	29
Motorcycle	5
Off-Road Vehicle	2
Rear End	46
Sideswipe	6
Single Vehicle Run-Off-Road	143
Undetermined	47
TOTAL	**418**

5.4.6 Surface Conditions

Surface conditions data is unavailable for Chena Hot Springs Road.

5.4.6.1 Maintenance Stations

Chena Hot Springs Road is serviced by the Fairbanks maintenance station. This station operates on 24-hour schedule seven days a week. There are typically nine operators on staff per shift.

5.5 Denali Highway

The Denali Highway first opened in 1957, following roughly four years of construction. The 135-mile road historically served as the primary access to Denali National Park and Preserve until the Parks Highway was opened. The entire highway is located within the IATP region and traverses land that is primary owned by the State and the Bureau of Land Management. The cities of Cantwell and Paxson are situated at either end of the highway, but no other cities are located along the route. The road provides access to recreational destinations and lodging along the route.

5.5.1 System Identification and Functional Classification

The Denali Highway is classified as a major collector and is part of the AHS. It begins between Mileposts 185 and 186 along the Richardson Highway. The road is asphalt for approximately 30 miles before

transitioning to gravel and intermittent paved sections for approximately 100 miles, and then transitions back to asphalt approximately two-and-a-half miles east of Cantwell Road.

Denali Highway has a posted speed of 50 mph except for a roughly two-and-a-half-mile section near the interchange with the George Parks Highway, where speeds are reduced to between 40-45 miles per hour. Curbs and medians are not present along the Denali Highway.

5.5.2 AADT & Truck Volume Percentage

The AADT reported on the Denali Highway in 2021 ranged from 50 to 2,250 vpd, with the highest volume being reported at Denali National Park Road. Trucks account for approximately 5.3 percent of AADT (3.53 percent single unit and 1.74 percent combination unit trucks).

5.5.3 Seasonal Limitations

The Denali Highway experiences seasonal closures and is not maintained during the winter. Maintenance crews typically remove snow, thaw culverts and complete repairs along the roadway beginning in mid-April and regularly maintain the road until October 1st. The DOT&PF issues a press release each year to inform the public of the status of the road and when maintenance will end.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. According to MS/CVC the timing and severity of the weight restrictions vary year to year. In reviewing data from 2013 through 2022, the highway generally experienced weight restrictions beginning during the month of April and extending into June. However, in 2019 weight restrictions were implemented in late March and in 2020 weight restrictions extended into July. On average, weight restrictions were imposed 63.7 days per year between 2013-2022.

5.5.4 Crashes

Table 11, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the Denali Highway. There were 17 crashes reported, with 13 crashes having no apparent injuries and one crash with no identified crash severity. Injury crashes included two minor injury crashes and one fatal crash. In total, there were two minor injuries, and one fatality.

Of the reported crashes, 24 percent occurred under clear weather conditions, 41 percent occurred while conditions were cloudy, 12 percent while there was snow or blowing snow, and 12 percent during other precipitation events. Of the remining crashes, six percent occurred during blowing sand, fog/smoke, and severe crosswinds and five percent occurred during unknown conditions. Approximately 71 percent of crashes occurred under daylight conditions and 29 percent occurred in the dark

Table 11. Denali Highway Crashes 2013-2021

Crash Type	Denali Highway
Animal – Vehicle	2
Head-On	1
Motorcycle	2
Off-Road Vehicle	1
Rear End	1
Sideswipe	2
Single Vehicle Run-Off Road	5
Undetermined	3
TOTAL	17

5.5.5 Bridges

The Denali Highway has 10 bridges within the IATP region. All bridge names, waterbody names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.5.6 Surface Conditions

The 135-mile Denali Highway is comprised of predominately gravel surfacing with approximately 66.59 miles of pavement at either end of the roadway termini at Cantwell and Paxson. The roadway traverses the Denali National Park and has extreme variability in topography resulting in inconsistent road material composition which results leads to rough surface conditions.

The paved portions of the road are inspected annually to identify locations where rutting, cracking and roughness are present. DOT&PF assigns these imperfections with a rating of good, fair, or poor. *Table 12*, notes the number of road miles and their rating relative to the listed condition measures. In 2021, 68.71 percent of the road miles were rated as poor for roughness, 1.6 percent were rated poor for rutting, and less than 0.15 percent were rated poor for cracking.

Table 12. Denali Highway Surface Conditions 2021

Denali Highway			
Condition Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	1.71	19.13	45.75
Rutting	25.74	39.75	1.10
Cracking	62.14	4.35	.10

5.5.7 Maintenance Stations

The Cantwell Maintenance Facility and the Paxon Maintenance Facility are located near the western and eastern terminus of the Denali Highway respectively. Both facilities are staffed seven days and week, year-round. Cantwell has an average of four operators while the Paxon facility runs a three-operator crew.

5.6 Glenn Highway

Approximately 62 miles of the Glenn Highway, also known as Alaska 1, is within the IATP region. The Glenn Highway originates in Anchorage and runs in a northeasterly direction and connects with the Richardson Highway just east of Glennallen.

A 135-mile segment of the Glenn Highway is designated as a National Scenic Byway[9] which extends from Anchorage to the Little Nelchina State Recreation Site. Approximately 11 miles of the Scenic Byway are within the IATP region.

5.6.1 System Identification and Functional Classification

Glenn Highway is classified as an interstate and is part of the NHS. It is a two-way asphalt road with lane widths varying from 12 to 14 feet along the alignment. Curbs or medians are not constructed along the Glenn Highway.

The Glenn Highway has a posted speed of 65 mph except for the final 3.5-miles at the east end of the highway as the road approaches and passes through Glennallen before the interchange with the Richardson Highway, where speeds are reduced to between 40-50 mph.

5.6.2 AADT & Truck Volume Percentage

In 2021, the AADT along the Glenn Highway ranged from 700 to 1,780 vpd, with the highest volume being reported between Terrance Road and the interchange with the Richardson Highway just east of Glennallen. Trucks account for approximately 5.2 percent of AADT (4.4 percent single unit and 0.8 percent combination unit trucks).

5.6.3 Seasonal Limitations

The Glenn Highway is affected by seasonal weather conditions. The DOT&PF has identified the highway as a Priority 2 for winter maintenance.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. In reviewing data from MS/CVC for the years 2013-2022 the highway generally experienced weight restrictions beginning during April and extending into June, though in 2015, 2016, 2018 and 2019, weight restrictions began in late March. On average, weight restrictions are imposed 65.1 days per year.

5.6.4 Crashes

Table 13, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the portion of the Glenn Highway within the IATP region. There were 151 crashes reported, with 95 crashes having no apparent injuries and five crashes with no identified crash severity. In total, there were 65 minor injuries, 13 serious injuries, and three fatalities.

[9] *Federal Highway Administration. Glenn Highway National Scenic Byway. National Scenic Byways & All-American Roads. Retrieved June 12, 2023, from https://fhwaapps.fhwa.dot.gov/bywaysp/StateMaps/Show/byway/2483*

Table 13. Glenn Highway Crashes 2013-2021

Crash Type	Glenn Highway
Animal – Vehicle	45
Angle – Left Turning	2
Head-On	6
Motorcycle	4
Off-Road Vehicle	1
Pedestrian	1
Rear End	16
Sideswipe	6
Single Vehicle Run-Off-Road	53
Undetermined	17
TOTAL	**151**

Approximately 45 percent of the reported crashes occurred under clear weather conditions, while 25 percent occurred while conditions were cloudy, 14 percent while there was snow or blowing snow, and seven percent during other precipitation events. Of the remaining crashes, three percent occurred during blowing sand, fog/smoke, and severe crosswinds and six percent occurred during unknown conditions.

Over half, or 53 percent of crashes occurred under daylight conditions, 37 percent occurred in the dark, and nine percent at dawn or dusk. Lighting conditions for the remaining crashes are unknown.

5.6.5 Bridges

The Glenn Highway has four bridges within the IATP region. All bridge names, mile points, lengths and funding eligibility are found Appendix 1: Bridge Inventory.

5.6.6 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor.

Table 14, notes the number of road miles and their rating relative to the listed condition measures. An approximately 173.8 mile stretch of the Glenn Highway is located within the Interior Region. In 2021, a vast majority of the roadway received a rating of good or fair in all three categories. However, deficiencies were noted. Specifically, 6percent of the road miles were rated as poor for roughness, 10.7percent were rated poor for rutting, and 1.6percent were rated poor for cracking.

Table 14. Glenn Highway Surface Conditions 2021

Glenn Highway			
Condition Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	106.66	56.74	10.44
Rutting	82.74	72.38	18.72
Cracking	132.93	38	2.91

5.6.7 Maintenance Stations

Maintenance personnel stationed out of the Nelchina Maintenance Station are responsible for the segment of Glenn Highway between Mile Posts 118 and 176. Two person crews operate from this facility seven days per week.

The Tazlina Maintenance Station, which has an average five operators, covers the segment of the highway from MP 176-189. Maintenance operations occur daily.

5.7 Alaska Highway

The Alaska Highway extends from Dawson Creek British Columbia, Canada to Delta Junction in Alaska. Approximately 200 miles of the Alaska Highway is located within the IATP region beginning at the Alaska and Canada border near MP 1222, where it becomes Alaska Route 2 and continues west to its intersection with the Richardson Highway in Delta Junction at MP 1422. The Alaska Highway is connected to several other transportation facilities in the area including the Taylor Highway and Tok Cutoff, and numerous airports located within communities along this route.

The Alaska highway was built in 1942 during World War II, and connected a series of existing airfields from Edmonton, Alberta to Fairbanks, Alaska. These airfields were collectively referred to as the Northwest Staging Route and used to transport war planes from Great Falls, Montana to Ladd Air Base in Fairbanks. The Parks Highway has approximately 310.2 road miles within the Interior Region.

5.7.1 System Identification and Functional Classification

The Alaska Highway is classified as an interstate and is part of the NHS. The road is paved with either asphalt or concrete for the entire 200-mile segment within the IATP region. Lane widths vary from 12 to 13 feet and do not include any medians or curbs along the highway except where it transitions to the Richardson Highway in Delta Junction.

Speeds along the Alaska Highway vary. Slower speeds of 35 mph are posted near the Canadian and US Border, before gradually increasing to 55 and 65 mph as the route progresses westward. Slower speeds are posted as the road passes through Tok and Dot Lake.

5.7.2 AADT & Truck Volume Percentage

The AADT reported on the Alaska Highway in 2021 ranged from 200 to 1,370 vpd, with the highest volume being reported between MP 1420 and South Clearwater Avenue in Delta Junction. Trucks account for approximately 16.8 percent of AADT (13.4 percent single unit and 3.4 percent combination unit trucks).

5.7.3 Seasonal Limitations

The Alaska Highway is affected by seasonal weather conditions. The DOT&PF has identified the Alaska Highway as a Priority 2 for winter maintenance.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. According to the MS/CVC the timing and severity of the weight restrictions vary year to year. In reviewing data from 2013- 2022, the highway generally experienced weight restrictions beginning during the month of April and extending into June, though in both 2016 and 2019, weight restriction began in late March. On average, weight restrictions are imposed 52.9 days per year

5.7.4 Crashes

Table 15, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the portion of the Alaska Highway within the IATP region. There were 279 crashes reported, with 164 crashes having no apparent injuries and nine crashes with no identified crash severity. In total, there were 107 minor injuries, 22 serious injuries, and six fatalities.

Table 15. Alaska Highway Crashes 2013-2021

Crash Type	Alaska Highway
Animal – Vehicle	119
Angle – Left Turning	4
Angle – T-Bone	1
Head-On	8
Motorcycle	7
Off-Road Vehicle	1
Pedestrian	1
Rear End	13
Sideswipe	4
Single Vehicle Run Off Road	98
Undetermined	23
TOTAL	**279**

Half of the reported crashes occurred under clear weather conditions. Of the remaining, 23 percent occurred while conditions were cloudy, 14 percent while there was snow or blowing snow, six percent during other precipitation events, one percent occurred during blowing sand, fog/smoke, and severe crosswinds, and six percent occurred during unknown conditions.

Approximately 47 percent of crashes occurred under daylight conditions, 42 percent occurred in the dark, and seven percent at dawn or dusk. Lighting conditions for the remaining crashes are unknown.

5.7.5 Bridges

The Alaska Highway has 22 bridges within the IATP region. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.7.6 Surface Conditions

The Alaska Highway is inspected annually to identify locations where rutting, cracking and roughness are present. The DOT&PF rates these conditions as good, fair, and poor. *Table 16*, notes the number of road miles and their rating relative to the listed condition measures for thar portion of the highway that is within the Interior Region. In 2021, 17 percent of the road miles had a roughness rating of poor, 1.89 percent were rated as poor for rutting, and 1.58 percent were rated poor for cracking.

Table 16. Alaska Highway Surface Conditions 2021

Alaska Highway			
Condition Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	96.27	65.90	33.35
Rutting	117.47	74.35	3.70
Cracking	137.06	55.37	3.10

5.7.7 Maintenance Stations

Maintenance of the Alaska Highway is split between the Northway, Tok and Delta Maintenance Stations located along the highway. These facilities are staffed seven days a week, year-round and typically have two to three operators each.

5.8 Tok Cutoff/Tok Highway

The Tok Cutoff/Tok Highway (Alaska Route 1) started as a trail during the construction of the Alaska-Canada Highway, though the present-day highway does not follow the same route as the original trail. Today, it connects with the Richardson Highway at Gakona Junction and the Alaska Highway at Tok. The entire highway is within the IATP region and is within the Unorganized Borough. It provides roadway access to the Chistochina airport.

5.8.1 System Identification and Functional Classification

The Tok Cutoff/Tok Highway is part of the NHS and is classified as an Interstate. There are no medians on the Tok Cutoff/Tok Highway and lanes have a minimum width of nine feet. The entire Tok Cutoff/Tok Highway is paved.

The posted speed limit for the Tok Cutoff/Tok Highway is 55 mph from MP 0 to around MP 123, where the speed limit is reduced to 35 mph until the Tok Cutoff/Tok Highway intersects with the Alaska Highway.

5.8.2 AADT & Truck Volume Percentage

The AADT on the Tok Cutoff/Tok Highway ranges from 240 to 540 vpd, with the highest volume on the segment between the Tok maintenance station access road and the Alaska Highway. Trucks account for approximately 20 percent of AADT (17 percent single unit and 2.6 percent combination unit trucks).

5.8.3 Seasonal Limitations

The entire Tok Cutoff/Tok Highway is designated as Priority 2 for winter maintenance.

Weight restrictions are imposed annually for large trucks and freight movement through the corridor. Based on data from 2013-2022, restrictions typically begin in late March to mid-April and sometime in late May or early to mid-June with an average of 56 days under weight restrictions. Exact start and end times vary year to year.

5.8.4 Crashes

Only four crashes were reported to DOT&PF between 2013 and 2021 on the Tok Cutoff/Tok Highway. All four crashes were single vehicle incidents in which the vehicle ran off the road when it was dusk or dark. All crashes resulted in injuries, with a total of three minor injuries and three serious injuries. Two crashes occurred during clear conditions, one during blowing snow, and one under unknown conditions. Three occurred in the dark and one at dusk.

5.8.5 Bridges

The Tok Cutoff/Tok Highway has 27 bridges along its alignment. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.8.6 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor. The entirety of the approximately 115-mile highway is within the Interior Region. *Table 17*, notes the number of road miles and their rating relative to the listed condition measures. In 2021, 19.9 percent of the road miles were rated as poor for roughness, with most mileage condition measures related to rutting and cracking rated as good or fair.

Table 17. Tok Cutoff/Tok Highway Surface Conditions 2021

Tok Highway Cutoff			
Conditions Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	45.6	47	23.1
Rutting	93	22.4	.3
Cracking	84.3	30	1.4

5.8.7 Maintenance Stations

The Tok Cutoff/Tok Highway is maintained by the Tazlina station (MP 0-18), the Slana station (MP 18-91), and the Tok station (MP 91-124).

5.9 Edgerton Highway/McCarthy Road

The Edgerton Highway/McCarthy Road stretches for 91 miles from the Richardson Highway to McCarthy. The Edgerton Highway transitions to McCarthy Road at Chitina. The Edgerton Highway alignment parallels

the Copper River and was formerly an old pack trail that was established in the early 1900's as the Richardson Highway was being constructed. McCarthy Road parallels the old railroad right of way that was relied upon to transport copper ore from Kennecott Mine in the early 1900's.

5.9.1 System Identification and Functional Classification

The Edgerton Highway/McCarthy Road is classified as a major collector and is part of the AHS. The Edgerton Highway is a 33-mile-long asphalt or concrete road from the Richardson Highway to Chitina. As the road continues east it transitions to McCarthy Road which has intermittent segments of pavement but is predominantly gravel for approximately 60 miles before reaching McCarthy. Medians are not used along this roadway.

Edgerton Highway has a posted speed of 55 mph until MP 32 where speed is reduced to 30 mph as the road enters Chitina. Speeds on McCarthy Road range between 30 and 35 mph.

5.9.2 AADT & Truck Volume Percentage

The AADT along Edgerton Highway/McCarthy Road in 2021 ranged from 80 to 480 vpd, with the highest volume being reported between the Old Edgerton Loop Road to the Copper River Spur at Chitina. Trucks account for approximately 5.3 percent of AADT (3.5 percent single unit and 1.7 percent combination unit trucks).

The Edgerton Highway experiences a seasonal spike in AADT during the summer months due to the popularity of summer recreational activities. Although winter average daily trips hover below 200 vph, June and July 2021 saw a monthly average of over 1,000 vph.

5.9.3 Seasonal Limitations

Edgerton Highway is classified as a Level 3 priority for winter maintenance.

Winter maintenance is not provided on McCarthy Road. Maintenance crews typically begin to remove snow, thaw culverts and complete repairs along the roadway in mid-April and regularly maintain the road until October 1st. The DOT&PF issues a press release each year to inform the public of the status of the road. Weight restrictions are not imposed on this facility given the limited volume of commercial or truck traffic.

5.9.4 Crashes

Table 18, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the Edgerton Highway/McCarthy Road. There were 26 crashes reported, with 14 crashes having no apparent injuries and one crash with no identified crash severity. In total, there were 12 minor injuries and one serious injury.

Table 18. Edgerton Highway/ McCarthy Road Crashes 2013-2021

Crash Type	Edgerton Highway/McCarthy Road
Animal – Vehicle	3
Angle – Left Turning	1
Bicycle	2
Head-On	2
Rear End	1
Sideswipe	1
Single Vehicle Run-Off Road	12
Undetermined	4
TOTAL	**26**

Half of the reported crashes occurred under clear weather conditions. Approximately 31 percent occurred while conditions were cloudy, four percent while there was snow or blowing snow, and eight percent during other precipitation events. The remaining crashes (seven percent) occurred during unknown conditions.

Approximately 81 percent of crashes occurred during daylight conditions, 12 percent occurred in the dark, and four percent at dusk. Lighting conditions for the remaining three percent of crashes are unknown.

5.9.5 Bridges

The Edgerton Highway/McCarthy Road has 9 bridges. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.9.6 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor. *Table 19*, notes the number of road miles and their rating relative to the listed condition measures. In 2021, 55 percent of the road miles were rated as poor for roughness, with the majority of condition measures related to rutting and cracking rated as good or fair.

Table 19. Edgerton Highway/McCarthy Road Surface Conditions 2021

Edgerton Highway/McCarthy Road			
Conditions Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	16.20	5.30	26.40
Rutting	28.04	19.16	.70
Cracking	39.80	8	.10

5.9.7 Maintenance Stations

The Edgerton Highway/McCarthy Road is maintained during the summer months by the Chitina Maintenance Station. The facility operates seven days per week with an average of three operators.

5.10 Taylor Highway

The Taylor Highway (Route 5) was first constructed in 1953 to connect Eagle, Chicken, and the Forty Mile Mining District to the Alaska Highway. All of Taylor Highway is within the IATP region and is within the Unorganized Borough. It intersects with the Top of the World Highway at Jack Wade Junction and provides roadway access to Chicken airport. The Taylor Highway, in combination with the Top of the World highway, is designated as an Alaska Scenic Byway for its scenic, natural, and historic qualities.

5.10.1 System Identification and Functional Classification

The Taylor Highway is part of the AHS. It is classified as a Major Collector from its origin at the Alaska Highway until it intersects with the Top of the World Highway, where it becomes a Minor Collector until its terminus in Eagle.

There are no medians on the Taylor Highway and lanes have a minimum width of seven feet. It is mostly paved from MP 0-67, with some unpaved gravel stretches, and entirely gravel after MP 67 to the end of the highway. Approximately 63 miles of the Taylor Highway are asphalt, and 94 miles are gravel.

The Taylor Highway has a posted speed limit of 50 mph for its entire length until it reaches Eagle (near MP 159), where it changes to 15 mph.

5.10.2 AADT & Truck Volume Percentage

In 2021, the AADT on the Taylor Highway ranged from 20 to 180 vpd, with the highest volume on the segment between the Logging Creek Bridge and the South Fork maintenance station access road. Trucks account for 12 percent of AADT (11 percent single unit and one percent combination unit trucks).

5.10.3 Seasonal Limitations

The entire Taylor Highway is designated as a Priority 5 for winter maintenance, as it is closed during the winter. It may receive some maintenance in the spring to prepare the road for summer travel.

5.10.4 Crashes

Table 20, summarizes the crash type reported to DOT&PF between 2013 and 2021 on the Taylor Highway. There were 19 crashes reported, with 13 crashes having no apparent injuries. At least one crash was reported every year, except 2020, with seven occurring in 2013. In total, there were four minor injuries, two serious injuries, and one fatality.

Table 20. Taylor Highway Crashes 2013-2021

Crash Type	Taylor Highway
Animal – Vehicle	3
Head-On	1
Motorcycle	5
Rear End	1
Sideswipe	1
Single Vehicle Run-Off-Road	5
Undetermined	3
TOTAL	19

Eleven of the crashes occurred under clear conditions, four when it was cloudy, one during foggy/smokey conditions, and one in the rain. Conditions for the remaining crashes were not reported.

Fourteen of the crashes occurred during daylight conditions, four in the dark, and one under unknown lighting conditions.

5.10.5 Bridges

The Taylor Highway has 16 bridges. All bridge names, mile points, lengths and funding eligibility are found in Appendix 1: Bridge Inventory.

5.10.6 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor. *Table 21*, notes the number of road miles and their rating relative to the listed condition measures. In 2021, nearly 99.8 percent of the road miles were rated as fair or poor for roughness while instances of rutting and cracking were predominantly rated as good or fair.

Table 21. Taylor Highway Surface Conditions 2021

Taylor Highway			
Condition Measures	Good	Fair	Poor
	(Number of Road Miles)		
Roughness	.1	30.3	32.1
Rutting	27.2	33.6	1.7
Cracking	58.8	3.8	0

5.10.7 Maintenance Stations

The Taylor Highway is maintained by the South Fork station near MP 72 and the Eagle station in Eagle Village.

5.11 Top of the World Highway

The Top of the World Highway (Alaska Route 5) started as a trail from Dawson City, Yukon, Canada to access mining camps in both Canada and Alaska. Today, the highway runs from the Taylor Highway at Jack Wade Junction to the Canadian border, where it continues to Dawson City. Only the portion of the highway between the Canadian border and the Taylor Highway is within the IATP region and this segment of the highway is within the Unorganized Borough.

5.11.1 System Identification and Functional Classification

The Top of the World Highway is part of the AHS and is classified as a Major Collector. There are no medians on Top of the World Highway and lanes have a minimum width of 12 feet. Approximately 13 miles of the highway are paved asphalt, with less than a half mile of gravel where it joins with the Taylor Highway. It provides roadway access to the Boundary and Eagle airports.

The posted speed limit for the Top of the World Highway is 50 mph.

5.11.2 AADT & Truck Volume Percentage

The AADT in 2021 for the Top of the World Highway is 130 vpd, with Truck AADT accounting for approximately 11 percent (10 percent single unit and one percent combination unit trucks).

5.11.3 Seasonal Limitations

The entire Top of the World Highway is designated as Priority 5 for winter maintenance. It may receive some maintenance in the spring to prepare the road for summer travel.

5.11.4 Crashes

There were two crashes reported to DOT&PF on the Top of the World Highway from 2013-2021, one each occurring in 2015 and 2017. The 2015 crash involved a single vehicle running off the road and resulted in no injuries. The 2017 crash involved a motorcyclist falling off their motorcycle, resulting in a serious injury. Both occurred in the month of June on clear days under daylight conditions.

5.11.5 Surface Conditions

DOT&PF inspects roadways annually to identify locations where rutting, cracking and roughness are present. Where these surface imperfections are noted, they are given a rating of good, fair, and poor. *Table 22*, notes the number of road miles and their rating relative to the listed condition measures. In 2021, the Top of the World Highway received a rating of good for each condition measure for most of the roadway inspected. Approximately 1.4 miles received a rating of fair for roughness.

Table 22. Top of the World Highway Surface Conditions 2021

The Top of the World Highway			
Conditions Measures	**Good**	**Fair**	**Poor**
	(Number of Road Miles)		
Roughness	11.5	1.4	.1
Rutting	13	0	0
Cracking	12.9	.1	0

5.11.6 Maintenance Stations

The Top of the World Highway does not have any dedicated maintenance stations.

5.12 Dalton Highway & Elliott Highway

The Dalton Highway starts in Livengood, runs along the western edge of the IATP region into the North Slope Borough, and terminates at Deadhorse. The entire 414-mile highway is classified as Principal Arterial - Other and is part of the NHS.

The Elliott Highway originates in Fox at the intersection of the Steese Highway and the Old Steese Highway North. From its origin to its intersection with the Dalton Highway at milepost 73, the Elliott Highway is classified as a Principal Arterial-Other and is part of the NHS. The remaining length of the road from MP 73 to the roads terminus in Manley Hot Springs is classified as a Collector and is part of the AHS.

Both the Dalton and Elliott Highways were evaluated as part of the Northwest Alaska Transportation Plan (NWATP) 2022 update and further information on these highways is addressed in that Plan. The roads are summarized at a high level in this document as the Dalton and Elliott Highways form the western border of the IATP region.

6.0 ROADWAY TRAFFIC FORECASTS

6.1 Methodology

The analysis began with the collection of DOT&PF historic traffic counts on all major highways within the IATP region. Data were collected for the years 2010 through 2020 (11 years of data). Each highway has a different number of traffic count locations, ranging from a low of two to a high of 17.

Data for each traffic count location were placed into a spreadsheet and graphed. A trendline was also added to each graph to help visualize trends in traffic volume. Most count locations showed negative growth. No segments of any highway in the IATP region are experiencing or will likely experience highway capacity issues.

Many of the rural/remote count locations recorded very low traffic volumes. Therefore, even a small change in year-over-year traffic can have a large impact on the overall trend. Flat growth was assumed many of the highways (rather than negative growth) and the analysis included a review of several potential scenarios that could impact traffic volumes or traffic composition. These scenarios included:

- Manh Choh trucking (Richardson, Alaska Highways; 5-year duration)
- Fort Greely Expansion
- Clear Space Force Expansion
- Tourism
- Ambler Road
- Eielson growth
- Denali Regional airport
- Interior Gas Utility (IGU) Liquefied Natural Gas Trucking (via North Slope)
- Livengood mine
- Willow Project
- Northern Rail Extension

Highways were evaluated as sub-regions because of similarities in traffic volumes and traffic composition. Evaluating the highways as systems rather than individual routes ensures that recommendations are consistent along corridors. Likewise, many of the IATP highways are connected to or a continuation of another highway (e.g., Alaska Highway to Richardson Highway connects Fairbanks with Canada).

6.2 Fairbanks Area

AADT data for the Steese Expressway show that the highest volumes of traffic occur in and near Fairbanks (AADT counts in the tens of thousands) with counts dropping off steeply outside the city. The traffic counts north of Fox are roughly 60 percent of the counts just south of Fox, indicating that just over a third of vehicles are either not traveling past Fox or are turning onto the Elliott Highway. There has been a steady decrease in traffic counts on the Steese Expressway in Fairbanks from 2010 to 2020 that began before the impacts of the COVID-19 pandemic.

Chena Hot Springs Road originates just north of Fairbanks along the Steese Expressway, and data show varying trends along the roadway. There has been a decrease in AADT where the road meets the Steese

Expressway and an increase in AADT from Nordale Road to the easternmost Continuous Count station at Little Chena River Bridge. The traffic counts between the Steese Expressway and Nordale Road either showed slight decreases or no clear trends in traffic. The highest volume of traffic on Chena Hot Springs Road is at the start of the road (typically greater than 8000 vpd) with lower volumes farther east.

On the Richardson Highway from Delta Junction to Fairbanks, AADT data show varying trends in traffic counts. Data collected at stations from Delta Junction to Eielson Air Force Base show a decrease in traffic in the late 2010s, whereas data from Moose Creek to Fairbanks show increased traffic prior to the COVID-19 pandemic. Traffic volumes are highest in and near Fairbanks (AADT counts in the tens of thousands) and lowest near Delta Junction (under 1000 vpd).

The Steese Expressway and a portion of the Richardson Highway (from Delta Junction to Fairbanks) will be impacted by the Manh Choh Mine ore hauling activities starting in 2024, which will involve trucks moving between the Manh Choh Mine near Tok to the Fort Knox Mine northeast of Fairbanks. The ore hauling route as currently planned will pass through Delta Junction but avoid downtown Fairbanks. Traffic on the Richardson Highway may also be impacted by possible expansion activities at Eielson Air Force Base.

6.3 Delta/Tok/Glennallen Area

The Alaska Highway, Tok Cutoff/Tok Highway, and a portion of the Richardson Highway form a triangle between Tok, Glennallen, and Delta Junction, and as such activity on each of these highways may impact the others.

The AADT data on the Alaska Highway for 2010-2020 indicate that traffic volumes are decreasing throughout most of the highway. The area with the highest traffic volume, Delta Junction between MP 1420 and South Clearwater Avenue, showed an increase in traffic. The AADT station at Gardiner Creek (MP 1256) is the closest station to the Alaska-Canada border. It also showed an increase in traffic prior to the COVID-19 pandemic.

The Alaska Highway is expected to see an increase in traffic due to ore hauling from the Manh Choh Mine, which is expected to begin operating in 2024. The trucking route is currently identified as starting at the mine's access road and passing through Tok and Delta Junction on the Alaska Highway before transferring to the Richardson Highway toward Fairbanks. There will also likely be an increase in local motorized, pedestrian, and bicycle traffic because of the presence of workers at the mine. The Alaska Highway may also be impacted by the oil drilling project in Willow, which may require the transport of thousands of large modules up the Alaska Highway through Delta Junction and Fairbanks to the Dalton Highway to reach the North Slope.

On the Tok Cutoff/Tok Highway, AADT data north of Mentasta Lake show little change in traffic counts from 2010-2019, though there was a decrease in 2020. Traffic counts south of Mentasta Lake have shown a decline from 2010, with a steady decrease from 2016-2020. AADT counts have remained under 500 on this highway, with the highest volumes occurring near Tok.

AADT data do not show a clear trend on the portion of the Richardson Highway from Glennallen to Delta Junction, though there have been slight declines in traffic counts at the station north of the Denali Highway and the station at Jarvis Creek Bridge. Future traffic volumes may be impacted by expansion activities at Fort Greely, which is located south of Delta Junction, and tourism to the Castner Glacier ice caves and Summit Lake. Additionally, a preliminary planning study is underway for a regional airport for the Denali Borough, which may impact how people travel into and out of the region, including travel on the

Richardson Highway. There was not a timeline available for the airport project at the time this plan was written.

This area, and particularly Delta Junction, would be impacted if the Alaska to Alberta railroad project is ever reinstated. Similarly, Fort Greely and the Richardson Highway would be impacted by the construction of an extension of the Alaska Railroad to Fort Greely.

6.4 Seasonally Dependent Highways

The Denali Highway, the Taylor Highway, and Top of the World Highway are closed during the winter and therefore only see traffic during the summer months.

The AADT data on the Denali Highway for 2010-2020 show generally low volumes of traffic. The station located east of the Parks Highway reported AADT counts in the high-100 to mid-200 vpd, which are slightly increasing over time. The station west of the Richardson Highway, however, reported lower counts (80 to low 100 vpd) with a slight decrease over time. Similarly, the Taylor Highway experienced a slight decline in traffic counts over the same period with overall low volumes (AADT counts under 200). AADT data for the portion of the Top of the World Highway within Alaska, which connects to the Taylor Highway, show consistently low volumes of traffic, declining slightly over time.

The Denali Highway is expected to continue to be a popular drive for tourists. A preliminary planning study is underway for a regional airport for the Denali Borough, which may impact how people travel into and out of the region.

6.5 Southernmost Highways

The AADT data on the Glenn Highway for 2010-2020 show relatively minor change in traffic volumes over time on the portion of the highway within the IATP region. Counts farther west, near Nelchina, were slightly higher than those farther east. The counts in this area were increasing from 2014-2017 but started to decline in 2018 and beyond. The traffic counts farther east, closer to the Richardson Highway, show no clear trends.

A clear trend in traffic could not be determined for the portion of the Richardson Highway from the IATP region boundary to Glennallen. From the IATP region boundary to MP 62, traffic counts have remained consistent for the period between 2010-2020, whereas from MP 62 north to Glennallen counts were increasing from 2014 to 2018 before sharply dropping off in 2019 and 2020.

The AADT data on the Edgerton Highway for 2010-2020 show a steady overall decrease in traffic. Data near the start of the highway show that traffic counts have nearly halved over time, while counts farther east have changed less dramatically. There is typically a higher volume of traffic at the start of the highway, with the AADT station farther east counting a third of the traffic that the western station counts, though this may change as the population of McCarthy continues to grow. Chitina, located along the Edgerton Highway, experiences surges in traffic when people travel there for dip netting but does not otherwise experience high volumes of traffic.

6.6 George Parks Highway

The AADT data on the George Parks Highway for 2010-2020 show either minor change or slight declines in traffic counts from Nenana to the IATP region boundary. Counts from Nenana to Fairbanks show either minor change or increases in traffic until 2018, at which time most continuous count stations start to show a decline in traffic. Overall, 2020 AADT traffic volumes are higher closer to Fairbanks, typically over

10,000. Farther south past Nenana, the 2020 AADT counts dip below are below 2,000. Increased tourism to Denali and Healy could increase these numbers, though many visitors to Denali arrive via train.

Traffic on the George Parks Highway could be impacted by the eventual trucking needs of the Lucky Shot mining project or by future expansions of the Clear Space Force Station, formerly the Clear Air Force Station. A preliminary planning study is underway for a regional airport for the Denali Borough, which may impact how people travel into and out of the region, including travel on the Parks Highway.

7.0 KEY ISSUES AND RECOMMENDATIONS

The review of existing conditions, traffic forecasts, and public involvement summaries has assisted to identify key issues, concerns, and challenges. These have been grouped into theme categories and coupled with recommended next steps to improve DOT&PF's transportation system within the IATP region.

7.1 Improvements to Roads and Highways

Roadway User Safety Risks. Safety risks, both perceived and actual, continue to be a topic of concern for community members throughout the IATP region. Safety concerns include military convoy crashes on major highways, heavy truck use on roads and bridges with narrow lanes, lack of turning lanes to exit higher speed facilities for access to local roads and posted speed limits along communities that use major DOT&PF roadways as a main street. Additionally, the conditions of DOT&PF-owned facilities pose a risk, for example the Alaska and Richardson Highways experience heavy frost heave, narrow lanes and shoulders, and a lack of non-motorized facilities, resulting in extremely unpredictable roadway conditions for all users.

Recommendation: Collaborate with local communities to address safety risks that address local concerns and issues. **Example Solution Ideas from Community Meetings include:**

- Turning lanes along the George Parks Highway for local road access to reduce risk of rear-end collisions.
- Reduce posted speeds as appropriate for local community users of the roadways system.
- Improve advanced signage and turning lanes for access to rest stops, pull-outs, and toilets along roadways.
- Improve or add non-motorized facilities adjacent to current DOT&PF-owned facilities to provide safer access for users of all ages and abilities.

Non-Motorized Facilities. A major theme for all community plans and public outreach included a desire for more non-motorized facilities to provide options for connections between communities that are safe for both pedestrian and bicycle users.

Recommendation: Continue to implement the recommendations detailed in the ASATP.

Roadside Amenities. The IATP region includes long stretches of DOT&PF facilities that are without access to goods or services for hundreds of miles. Roadways users, including locals, freight truckers, and tourists, benefit from state-owned and maintained facilities such as rest stops and pull-outs along the roadways. Additionally, community feedback requested that these amenities be available year-round.

Recommendation: Increase location and year-round maintenance of public rest stops, including restroom facilities, along all major highways.

7.2 Resiliency & Risk

Annual Flooding of Community Infrastructure. The in-person public outreach efforts for the IATP update included a visit to the community of Glennallen. Glennallen community members reported ongoing, annual flooding events that have adversely impacted community infrastructure including all levels of roadways, public buildings, schools, and homes. When DOT&PF-owned roadways flood, the community is stranded without access to goods and services during a flood emergency. Although DOT&PF is responding to emergencies, the community reported a lack of knowledge regarding the DOT&PF emergency response and efforts to address ongoing flooding events.

Recommendation: Increase efforts to communicate DOT&PF emergency response plans for infrastructure damage and coordinate with local entities on emergency response planning and implementation.

Recommendation: Reevaluate local flooding causes and determine any long-term solutions to maintain DOT&PF-owned infrastructure resiliency.

7.3 Other Identified Issues

Forecasting Tools. Throughout Alaska, data collection for surface transportation facilities and user experience is largely organized by DOT&PF on a regional basis, if not at a sub-region level. However, best practices for regional and statewide LRTP efforts, such as the IATP, includes forecasting travel and traffic demands on the surface transportation system, which would benefit from a holistic, system-wide approach. Investment in a statewide approach to a travel demand model would provide a benefit for statewide planning activities such as modeling future scenarios based on potential changes to land use, major economic developments, and population shifts.

Recommendation: Create and maintain a statewide traffic/travel demand model tool (TDM).

Data Gaps. Data gaps exist for roadside assets in or adjacent to the DOT&PF right-of-way. These gaps include non-motorized facilities, toilets, and rest stops.

Recommendation: Create inventory of road user amenities including rest stops, pull-outs, and toilets.

Recommendation: Create an inventory of existing non-motorized facilities.

APPENDICES

Appendix 1: Bridge Inventory

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Steese Highway	Fairbanks Mining Road Undercrossing	2059	19.5	121
	Captain creek	820	31.1	51
	Kokomo creek	821	35.8	51
	Trooper Gabe Rich Memorial	392	37.4	317
	Crooked Creek	816	38.8	56
	Belle Creek	822	39.9	100
	McKay Creek	823	41.1	111
	Boston Creek	7132	42.1	11
	Long Creek	799	43.8	32
	Sourdough Creek	825	62.9	44
	Faith Creek	430	66.1	80
	Idaho Creek	7135	74.4	13
	Reed Creek	826	84.9	57
	North Fork 12 Mile Creek	275	89.4	123
	Willow Creek	827	91.6	57
	Bear Creek	828	93.3	47
	Fish Creek	829	95.4	57
	Ptarmigan Creek	1242	97.0	116
	Mammoth Creek	831	111.3	47
	Bedrock Creek	7137	113.9	10
	Boulder Creek	832	120.0	52
	Crooked Creek	431	122.5	81
	Albert Creek	833	125.7	76
	Crazy Creek	7167	138.9	15
	Birch Creek	355	141.7	355

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
George Parks Highway	Shirley Demientieff Memorial	201	269.508404	617
	Jack Coghill Bridge to the Interior	216	240.099095	510
	Crabbie S Crossing	694	195.406591	358
	Riley Creek	695	201.45364	230
	Chena River (Parks Highway NB)	1913	318.921822	520
	Bison Gulch	1142	207.823117	148
	Panguingue Creek	313	216.737075	127
	Little Goldstream Creek	678	278.796399	67
	Julius Creek	317	249.925005	85
	Carlo Creek	693	188.201787	77
	Alder Creek	7118	311.620085	10
	Parks Highway Railroad Underpass	696	200.931021	240
	Dragon Fly Creek	1075	206.602631	82
	Jack River	302	173.967199	197
	Airport Way OC	1914	319.380118	126
	Bear Creek	311	233.653451	81
	Antler Creek	1141	208.857175	220
	Nenana River Parks Station	1147	202.187432	500
	Dry Creek Overflow	852	213.520709	180
	Fish Creek	722	261.015315	62
	Nenana River at Windy	1243	180.123459	389
	Parks/Chena Ridge Number 2 (To Fairbanks)	1879	318.166286	107
	Nenana River at Moody	1143	207.109036	891
	Hornet Creek	1145	204.450112	92
	Rex Overhead	1993	240.557453	72
	Fox Creek	1144	205.436462	82
	Mondersoa Overhead	1980	272.419359	144
	Dry Creek	851	214.034443	301
	Kingfisher Creek	697	202.454868	111
	Rock Creek Overflow	7114	225.535926	34
	June Creek	7115	233.348544	10
	Eagle Creek	7111	206.230816	13
	Alaska Native Veterans Honor	202	269.205412	1307
	Birch Creek	7116	236.831909	10
	Slate Creek	7113	222.048956	32
	Bonanza Creek	7117	293.745789	10
	Cushman Street Overcrossing	1705	323.659231	106
	Little Panfuingue Creek	7112	235.132466	10
	Ice Worm Gulch	1146	204.273885	82

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Chena Hot Springs Road	North Fork Chena River	242	55.132	106
	North Fork Chena River	237	48.770	182
	North Fork Chena River	234	43.852	182
	West Fork Chena River	239	52.155	163
	Jenny M Creek	312	20.025	63
	North Fork Chena River	232	37.674	162
	Angel Creek	238	49.635	82
	North Fork Chena River	4058	37.034	28
	North Fork Chena River	235	45.523	122
	North Fork Chena River	233	39.294	162
	Little Chena River	270	11.749	123
	Monument Creek	1319	56.413	41

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Denali Highway	Seattle Creek	690	110.965492	124
	Fish Creek	4009	128.521463	35
	Canyon Creek	688	94.689897	152
	Susitna River	687	79.220967	1039
	Rock Creek	684	24.640316	60
	MacLaren River	685	41.708212	362
	Clearwater Creek	686	55.623155	157
	Gulkana River	681	0.219635	81
	Tangle Creek	683	21.239985	103
	Brushkana Creek	689	104.325756	81

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Glenn Highway	Mendeltna Creek	551	143.681423	89
	Tolsona Creek	552	163.429541	116
	Little Nelchina River	1241	128.622737	285
	Little Woods Creek	7106	159.285134	10

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Alaska Highway	Black Veterans Recognition	503	24.237671	119
	Scott Johnson Memorial	506	85.20565	360
	Desper Creek	7084	4.041695	12
	Tenmile Creek	7085	30.319853	11
	Sheep Creek	4000	117.998505	20
	Johnson River	518	155.922323	970
	Bear Creek	513	133.098231	55
	Robertson River	509	123.096123	1979
	Cathedral Rapids Number 2	510	114.510459	68
	Beaver Creek	504	44.989535	80
	Sears Creek	516	150.065987	26
	Tanana River	505	79.201656	903
	Sawmill Creek	521	179.364218	139
	Yerrick Creek	507	109.46151	202
	Cathedral Rapids Number 1	508	113.972338	68
	Chief Creek	514	134.47777	41
	Little Gerstle River	519	163.863383	200
	Scottie Creek	501	2.028073	126
	Gerstle River	520	168.119631	1819
	Berry Creek	515	147.14988	90
	Cathedral Rapids Number 3	511	114.824745	68
	Dry Creek	517	153.678503	42

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Tok Cutoff/Tok Highway	Gakona River	646	1.7	336
	Tulsona Creek	1250	17.6	148
	Sinona Creek	648	34.0	91
	Chistochina River	649	34.7	798
	Indian River	651	43.1	164
	Athell Creek	652	59.8	110
	Porcupine Creek	653	63.0	41
	Carlson Creek	888	66.6	41
	Slana River	654	74.3	224
	Slana Slough	655	74.7	122
	Mabel Creek	656	75.2	122
	Bartell Creek	657	82.1	41
	Little Tok River	1092	96.0	136
	Tok River	663	101.5	336
	Tok River Overflow	4106	102.2	28
	Tok River Overflow #2	4107	102.3	26
	Clearwater Creek	2102	107.1	105

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Edgerton Highway/ McCarthy Road	Chokosna River	1193	60.249668	103
	Kuskulana River	397	50.593964	775
	Strelna Creek (Minor Culvert)	7183	48.254643	17
	Gilahina River	1194	62.40199	41
	Copper River (Chitina)	205	34.594628	1378
	Lakina River	1195	77.429482	336
	Willow Creek	4081	5.360939	27
	Liberty Falls Creek	279	23.501682	175
	Tonsina River	288	19.234625	351

Roadway	Waterbody/Bridge Name	Bridge Number	Starting Mile Post (MP)	Length (Feet)
Taylor Highway	Logging Cabin Creek	276	41.7	80
	West Fork Dennison River	442	48.0	189
	Taylor Creek	277	49.2	23
	Mosquito Fork	441	63.0	219
	Chicken Creek	1140	65.2	26
	South Fork 40 Mile River	839	73.5	300
	Walker Fork 40 Mile River	299	80.0	189
	Forty Mile River	297	110.7	558
	O'Brien Creek	298	111.3	189
	Alder Creek	296	115.1	110
	Columbia Creek	322	122.5	60
	King Solomon Creek	380	129.6	80
	North Fork King Solomon Creek	321	133.7	110
	Discovery Fork Creek	840	146.6	80
	American Creek #1	841	149.2	110
	American Creek #2	842	149.8	110