

# **Anaktuvuk Pass Comprehensive Plan**

Administrative Draft  
October 17, 2025

Cover photos courtesy of [placeholder]

# Anaktuvuk Pass Comprehensive Plan

Adopted by the North Slope Borough on [date]

North Slope Borough Assembly Ordinance #  
North Slope Borough Planning Commission Resolution #  
City of Anaktuvuk Pass Resolution #  
Naqragmiut Tribal Council #  
Nunamiut Corporation Resolution #



Prepared by  
North Slope Borough Department of Planning & Community Services  
for the community of Anaktuvuk Pass

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# Acronyms

The following list, in alphabetical order, provides the acronyms, abbreviations, and their corresponding definitions used throughout this document.

ACS	American Community Survey
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
AEA	Alaska Energy Authority
AES	ASRC Energy Services
AEWC	Alaska Eskimo Whaling Commission
AHFC	Alaska Housing Finance Corporation
AK	Alaska
AKP	Anaktuvuk Pass
AMCC	Alaska Migratory Bird Co-Management Council
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
ANTHC	Alaska Native Tribal Health Consortium
ANWR	Arctic National Wildlife Refuge
AOI	Area of Influence
ASNA	Arctic Slope Native Association
ASRC	Arctic Slope Regional Corporation
ASTAC	Arctic Slope Telephone Association Cooperative, Inc.
ASTAR	Arctic Strategic Transportation and Resources
ATV	All-Terrain Vehicle
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CAH	Central Arctic Herd
CHAP	Community Health Aid Program
CHR	Community Health Representatives
CIP	Capital Improvement Plan / Program / Project
CIPM	Capital Improvement Program Management
CMP	Cooperative Management Plan
COPD	Chronic Obstructive Pulmonary Disease
DCCED	Alaska Department of Commerce, Community and Economic Development
DSL	Digital Subscriber Line
DNR	Alaska Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
Ea.	Each
ESA	Endangered Species Act
F	Fahrenheit
FLPMA	Federal Land Policy and Management Act
GAAR	Gates of the Arctic National Park and Preserve
Gal	Gallon(s)
gpd	gallons per day
gpdpc	gallons per day per capita
gph	gallons per hour
gpm	gallons per minute
HHS	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development
ICAS	Iñupiaq Community of the Arctic Slope

IHLC	North Slope Borough Iñupiat History, Language and Culture Department
IHS	Indian Health Service
IRA	Indian Reorganization Act
kW	Kilowatt
kWh	Kilowatt hour
LF	Linear feet
LLC	Limited Liability Company
MBTA	Migratory Bird Treaty Act
MFR	Multifamily Residential
N	North
n.d.	No date
NAHASDA	Native American Housing Assistance and Self-Determination Act
NALEMP	Native American Land Environmental Mitigation Program
NDb	Nondirectional beacon
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPR-A	National Petroleum Reserve – Alaska
NPS	National Park Service
NSB	North Slope Borough
NSBEP&CR	North Slope Borough Economic Profile and Census Report
NSBMC	North Slope Borough Municipal Code
NSBSD	North Slope Borough School District
NW	Northwest
OCS	Outer Continental Shelf
ORV	Off-Road Vehicle
PAR	Project Analysis Report
PARR	Project Analysis Report Request
PCE	Power Cost Equalization
PFD	Permanent Fund Dividend
Pg	Page
PGA	Peak Ground Acceleration
POPs	Persistent Organic Pollutants
R2R	Road to Resources
RACs	Regional Advisory Councils
RDD	Resource Development District
S	South
SFR	Single Family Residences
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCC	Tanana Chiefs Conference
TCH	Teshekpuk Caribou Herd
TDHE	Tribally Designated Housing Entity
TNHA	Tagiugmiullu Nunamiullu Housing Authority
UCAN	United Caribou Association of the Nunamiut
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
VASI	Visual Approach Slope Indicator
WAH	Western Arctic Herd
Wi-Fi	Wireless fidelity



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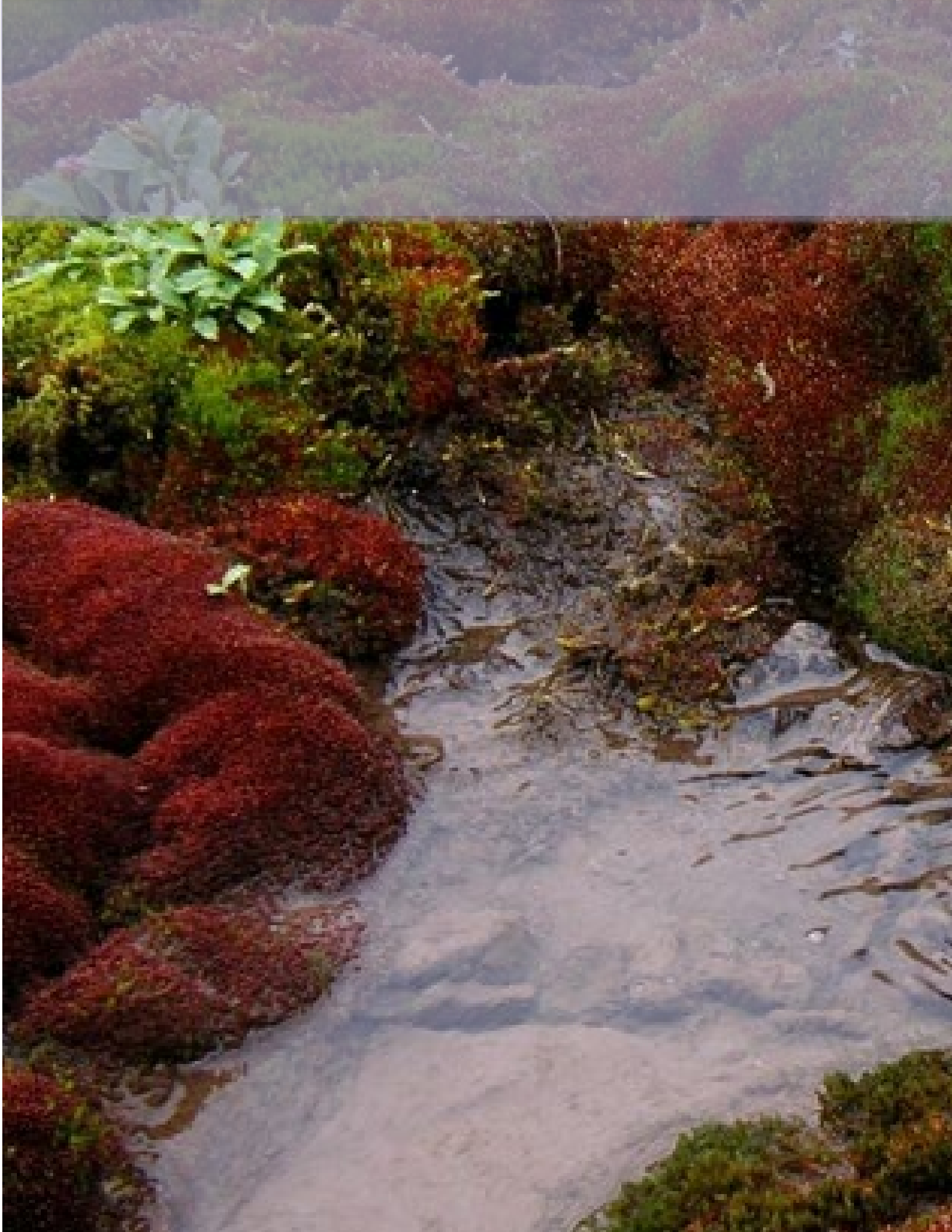
# Qaujim Kiliktuuta





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# Executive Summary



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# Introduction





# Where We Are and Where We're Going

## Community Needs Today

Anaktuvuk Pass is defined by more than its striking natural surroundings; it is shaped by the strength of its people and the deep cultural traditions that connect the community to the land. The community lies in a broad valley that straddles the continental divide within the heart of Alaska's Brooks Range. There are no roads that connect to the outside world (See Map 1.1). Daily life is shaped by the cultural traditions, the weather, and the seasons. These are the foundation of the community's subsistence way of life, guiding when to hunt, where to travel, and how knowledge is passed down through generations. Subsistence is not just a way to feed families, it is a way of life, rooted in generations of knowledge, community values, and spiritual connection to the place ancestors have called home for thousands of years.

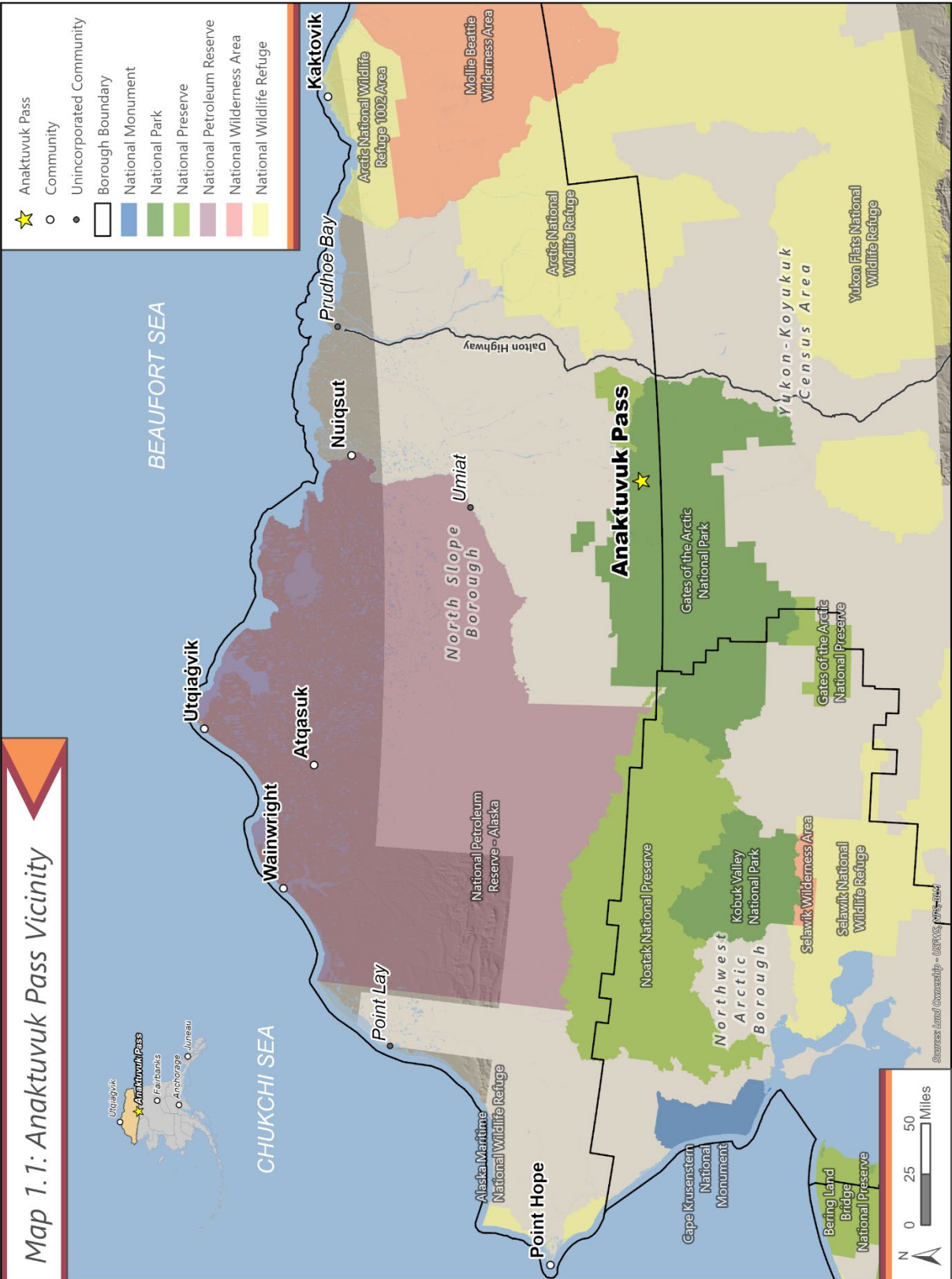
But many in Anaktuvuk Pass have voiced growing concerns about the challenges that threaten this way of life. Through public discussions held during the comprehensive planning process, community members shared that times are tougher than ever. From aging infrastructure to the rising cost of living, the burdens placed on rural residents continue to grow. Frustration has also been expressed over delayed responses from regional agencies and outside decision-makers—especially when it comes to issues that directly impact subsistence, such as land use policy and wildlife management. Political decisions made far from our community can carry serious consequences for local families who rely on hunting and gathering to survive and thrive.

At the same time, the effects of climate change are already being felt. Thawing permafrost, unpredictable weather, and changes in caribou migration patterns are disrupting both the landscape and the traditions that depend on it. Many are asking hard questions about how Anaktuvuk Pass and other remote communities across Alaska can sustain themselves in the face of these overlapping challenges.

The community stands at a crossroads. The needs are clear: improved and expanded infrastructure, better support for health and wellbeing, local input on subsistence decisions, environmental stewardship, and more economic opportunities that align with residents' values. This comprehensive plan is one tool to help meet those needs—by reflecting the community's priorities and guiding future actions that will keep Anaktuvuk Pass resilient and strong for generations to come.

## Planning for the Future

Living in a remote, roadless community like Anaktuvuk Pass presents unique challenges and opportunities. The community's deep connection to the land, its reliance on subsistence resources, and the strength of its cultural identity are central to life here. Residents depend on traditional harvesting of caribou and other natural resources. Protecting this way of life requires thoughtful planning that honors cultural traditions while preparing for future needs.



Unlike urban areas where long-range planning is often focused on managing rapid growth, Anaktuvuk Pass faces the opposite challenge: how to support community stability and facilitate modest, sustainable growth that focuses on opportunities to provide for current and future residents. The goal is not to limit expansion but to create the space and infrastructure necessary for those who want to remain in or return to Anaktuvuk Pass. Housing is one of the most critical issues. Some families are forced to leave, not by choice, but by a lack of available, affordable homes. Without enough housing, young people raised here may seek opportunity elsewhere, even when they wish to stay close to their culture and families.

Growth in rural Alaska happens in different ways, from natural population increase to the return of residents who left for education or jobs; there are few people that move to Anaktuvuk Pass without an existing connection to the community. While out-migration is common, many are eager to come return if possible. Unfortunately, the cost of new homes, lack of land availability, lack of economic opportunity, and deferred investment have left infrastructure outdated and insufficient. Limited housing, aging utilities, and lack of job opportunities all make it difficult to support even the current population, let alone to accommodate future needs.

Anaktuvuk Pass and the North Slope Borough (NSB) must plan proactively. Doing so will help ensure that the community's future reflects the values of its people, supports its subsistence economy, and maintains the balance between tradition and development. A strong plan will help guide infrastructure investment, inform policy decisions, and identify areas where growth can improve quality of life while preserving the community's unique and important identity.

## Priorities for the Future

The 2016 Comprehensive Plan for Anaktuvuk Pass provided valuable guidance at the time, but it is now dated and does not fully reflect current community priorities<sup>1</sup>. Updating the plan offers an opportunity to assess present-day conditions, recognize what has changed, and determine which issues should be emphasized or prioritized moving forward.

Through community input, there was strong consensus that this updated plan should do more than offer general ideas—it should provide clear policies, define measurable outcomes, and establish a transparent framework for accountability. As a result, this comprehensive plan introduces a set of key policies designed to guide sustainable growth, protect subsistence traditions, and support essential infrastructure improvements. Each policy is supported by a rationale that reflects local priorities and includes anticipated outcomes.

To ensure follow-through, the plan includes a dedicated chapter outlining concrete actions tied directly to the policy goals, along with an expanded implementation section that identifies responsible parties, potential funding sources, and tools for tracking progress. These updates are designed to make the plan not only aspirational but practical—something the community can use

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<sup>1</sup> North Slope Borough, Anaktuvuk Pass 2016–2036 Comprehensive Plan (Utqiagvik, AK, 2016), accessed October 1, 2025, <https://www.north-slope.org/departments/planning-community-services/comprehensive-plans/>.

as a roadmap for shaping a future that reflects its values, addresses current challenges, and prepares for change.

## How the Comprehensive Plan Works

### Legal and Administrative Framework for Comprehensive Planning

Title 29 of the Alaska Statutes provides the authority for comprehensive planning in Alaska<sup>2</sup>. The Borough is responsible for planning, platting, land use regulations, and the development of a Borough-wide comprehensive plan. Alaska Statutes state that:

*“The comprehensive plan is a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development, both private and public, of the first or second class borough, and may include, but is not limited to, the following:*

- 1. statements of policies, goals, and standards;*
- 2. a land use plan;*
- 3. a community facilities plan;*
- 4. a transportation plan; and*
- 5. recommendations for implementation of the comprehensive plan”* (Alaska Statute §29.40.030)<sup>3</sup>.

The NSB Municipal Code (NSBMC) aligns with the Alaska State Statute, outlining the contents and process for developing the Borough-wide comprehensive plan. As stated in §2.12.170<sup>4</sup>:

*“The Comprehensive Plan...shall be a compilation of policy statements, goals, standards and maps for guiding the physical, social and economic development, both private and public, of the borough, and may include, but is not limited to, the following: statements of policies, goals, standards, a land use plan, a community facilities plan, a transportation plan and recommendations for plan implementation.”*

Additionally, NSBMC §19.30.050<sup>5</sup> requires the Planning Commission to consider amendments to the plan from time to time, undertake an overall review of the plan at least once every two years (§2.12.170), and review and report to the Assembly the location, design, construction, demolition, or disposition of any public building, facility, collector or arterial street, park, greenbelt, playground, or other public facility in accordance with the comprehensive plan and capital improvements program.

The NSB Department of Planning and Community Services is responsible for implementing land use planning and regulations on behalf of the borough. Its goals include maintaining and updating the Borough’s Comprehensive Plan and empowering community-level decision-making regarding social, economic, and development issues. The Community Planning and Real Estate Division within

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<sup>2</sup> Alaska Legislature, Alaska Statutes, Title 29 (Juneau: Alaska Legislature, 2024), <https://www.akleg.gov/basis/statutes.asp>.

<sup>3</sup> Alaska Statutes § 29.40.030, "Comprehensive plan" (2024), accessed October 1, 2025, <https://www.akleg.gov/basis/statutes.asp>.

<sup>4</sup> North Slope Borough, Municipal Code § 2.12.170, (Utqiagvik, AK)

<sup>5</sup> North Slope Borough, Municipal Code § 19.30.050 (Utqiagvik, AK).

the department oversees the development and implementation of the community comprehensive plans and the NSB Areawide Comprehensive Plan.

## Comprehensive Plan Framework





## Purpose and Function of the Comprehensive Plan

The 2016 NSB Comprehensive Plan sets priorities for guiding community development over a 20-year planning horizon. Originally adopted in 1983, the first Borough-wide comprehensive plan has undergone updates in 2005 and 2017. Each update provides an opportunity to evaluate development patterns, assess challenges, and make consensus-based decisions regarding growth and change across the borough.

As a direction-setting document, the comprehensive plan is not regulatory in the same way a zoning ordinance is. Instead, it guides local and regional decision-making by defining future land use and establishing broad priorities for infrastructure and programmatic investments. These planning principles influence revisions to development codes, district and zone amendments, discretionary project approvals, and long-term capital project planning.

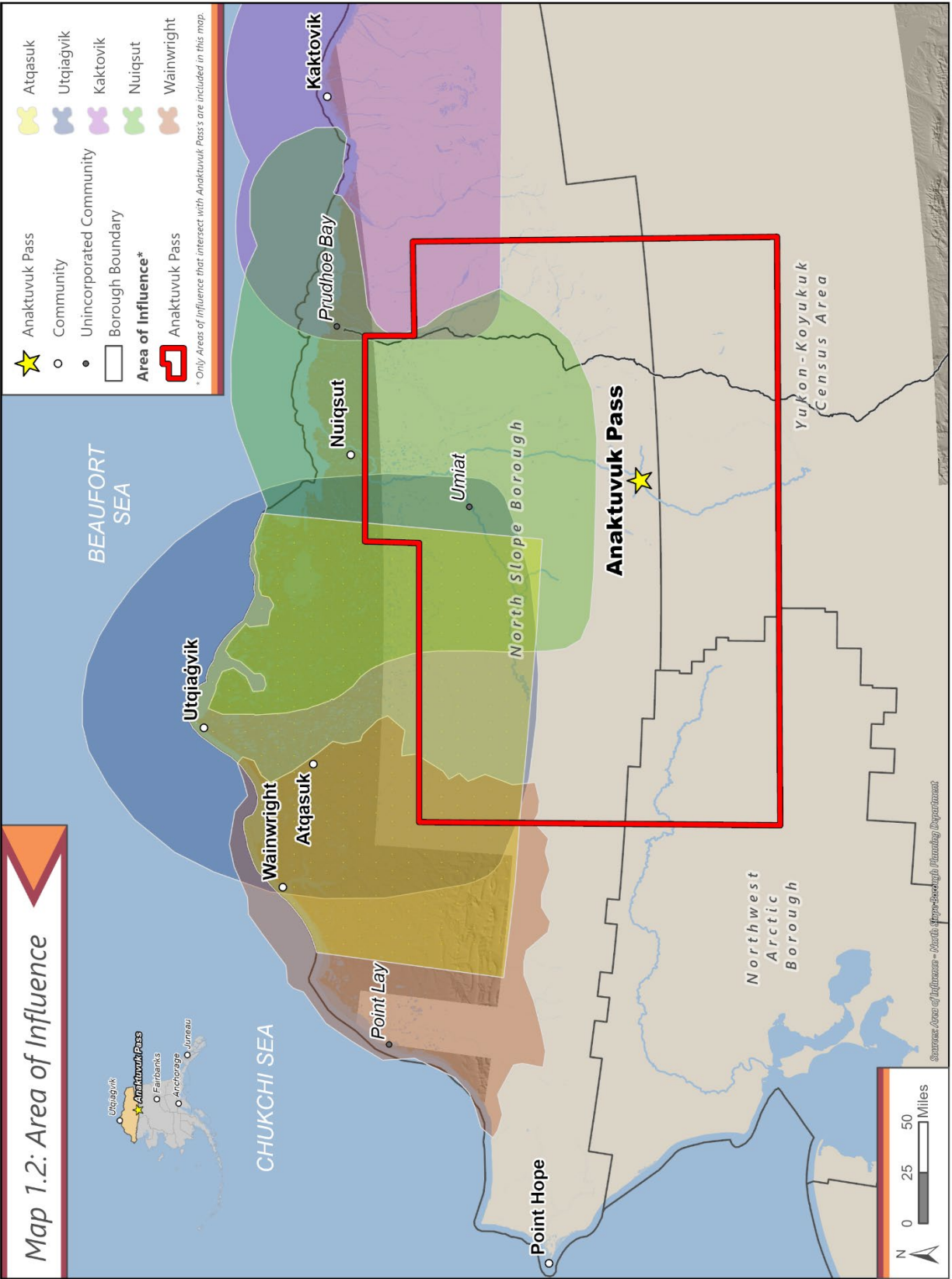
The Anaktuvuk Pass Comprehensive Plan, for example, offers guidance for both in-village development and activities within the broader Area of Influence (AOI), the region where community members regularly travel and subsistence hunt (see Map 1.2). It includes background information about the community, a summary of key challenges and strengths, and a set of shared goals, which can inform land use decisions, project planning, and funding applications.

Specifically, the plan is intended to:

- Support the community's long-term growth in a way that is respectful and sustainable;
- Reflect the community's vision for the future;
- Highlight community development successes and identify areas for improvement;
- Outline key infrastructure projects and major needs for the next two decades;
- Guide decisions to ensure they align with local values and priorities; and
- Describe how the plan will be implemented.

At its core, this comprehensive plan provides a strategic framework for guiding development, protecting vital resources, and maintaining the unique character of Anaktuvuk Pass. It supports a shared vision that balances tradition and innovation, helping the community adapt to change while preserving its identity and resilience.

Although not regulatory like a zoning ordinance or development code, this plan plays a critical policy role. It informs future revisions to land use regulations, supports district and zoning decisions, provides a foundation for evaluating discretionary projects, and guides capital improvement planning. As a high-level, direction-setting document, it will shape decisions for years to come and serve as a benchmark for tracking progress toward a sustainable and thriving future for Anaktuvuk Pass.



## Plan Use, Review, and Implementation

Although this comprehensive plan provides a long-range vision for the next 20 years, it is intended to be a living document that evolves with the community. To remain effective, the plan should be reviewed every two years to assess progress, identify emerging issues, and determine whether updates are needed. A full revision should occur at least every ten years, or more frequently if significant changes in population, land use, environmental conditions, or community priorities arise. Future plan revisions should monitor growth, evaluate how well the plan is meeting the community's goals and implementing strategies. This regular review process ensures that the plan stays relevant, responsive to changing conditions, and continues to reflect the needs and aspirations of the residents of Anaktuvuk Pass.

The plan serves as a valuable tool for tracking population trends, projecting future needs, and prioritizing community investments. It can guide the development of capital improvement programs, utility expansions, and emergency preparedness plans. By documenting current conditions and future expectations, the plan also helps protect cultural and environmental resources, such as archaeological sites, wetlands, and traditional use areas.

The **North Slope Borough** can use this plan as a foundational tool to guide decisions related to land use, development, and capital investment in Anaktuvuk Pass and its AOI. The plan informs a wide range of Borough actions, including the review of subdivision proposals, land leases, rezone requests, development permits, and project funding decisions. It helps decision-makers assess whether proposed actions are consistent with the community's long-term goals. The plan also provides guidance on the location and timing of development and infrastructure investments. It identifies areas most suitable for future housing, services, and facilities, and helps avoid conflicts with subsistence areas.

**State and Federal Agencies, including Regulatory Bodies, Land Managers, and Funding Organizations** are encouraged to use this plan when evaluating proposals, environmental reviews, or funding requests that affect Anaktuvuk Pass. Many grant programs require alignment with an adopted community plan. The plan's inclusion of maps, clearly defined priorities, and documentation of community engagement makes it a useful reference for external partners. This plan helps demonstrate local commitment and readiness for investment.

**Private Landowners and Native Corporations**, can use the plan to support decisions that align with community values and long-term goals. While Native corporations already have extensive knowledge of the communities they serve, this plan can be a helpful tool for coordinating efforts, documenting shared priorities, and reinforcing alignment with community objectives. For other stakeholders, including those less familiar with the community and region, the plan provides valuable context to help align projects with local expectations. It also informs decisions related to land use, capital investment, and project development in a way that respects local priorities.

**Residents of Anaktuvuk Pass** also benefit from this plan. It empowers residents to advocate for improvements, participate in decision-making, and ensure that growth reflects traditional

knowledge, cultural practices, and local values. When used effectively, the plan becomes a platform for asserting community needs, organizing advocacy efforts, and seeking funding for projects that improve quality of life. Additionally, this plan can help ensure that infrastructure and public services are scaled appropriately to meet future demands.

**The City of Anaktuvuk Pass, Nagsragmiut Tribal Council, and Nunamiut Corporation** can rely on the plan as a tool for evaluating opportunities, setting priorities, and coordinating development. Population trends, infrastructure conditions, and future service needs are considered to ensure that limited funding is used effectively and efficiently. The data, maps, and policies within the plan support the design and implementation of projects that reflect the values, goals, and expectations of the community.

**Local entities, including the City of Anaktuvuk Pass, Nagsragmiut Tribal Council, and Nunamiut Corporation,** can use the plan to guide collaborative planning, coordinate advocacy efforts, and support long-term community development.

At the regional level, the **North Slope Borough Planning Commission and North Slope Borough Assembly** can use this plan to evaluate land use proposals, including permitting applications and capital improvement investments, and to shape policies, funding strategies, and program development that affect Anaktuvuk Pass and the surrounding region.

## Local and Regional Planning Efforts

The NSB Department of Planning and Community Services implements land use planning and regulations on behalf of the borough. The mission of the Planning and Community Services Department is to protect the land and cultural resources of the Borough. The department works to establish effective methods for protecting land and wildlife resources, regulate and monitor development, manage Borough-owned real estate, and plan for future growth and infrastructure. It is also committed to enhancing community sustainability and overall health, while supporting local traditions and lifestyles.<sup>6</sup>

The NSB Planning Department's Community Planning and Development Division oversees the update and implementation of the borough's Comprehensive Plan and the development, implementation and update of community comprehensive plans, including this one.

The Planning Department develops and administers ordinances and rules that govern land use, development standards, and permitting procedures. These tools provide the legal framework needed to manage growth, protect resources, and ensure public safety.

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<sup>6</sup> North Slope Borough, North Slope Borough Comprehensive Plan 2019–2039 (Utqiagvik, AK, 2019), accessed October 1, 2025, <https://www.north-slope.org/departments/planning-community-services/comprehensive-plans/>.

Zoning regulations define how land in different areas of the borough can be used, such as for housing, industry, or conservation. Zoning also helps minimize conflicts between land uses and ensures that development aligns with community goals and environmental considerations.

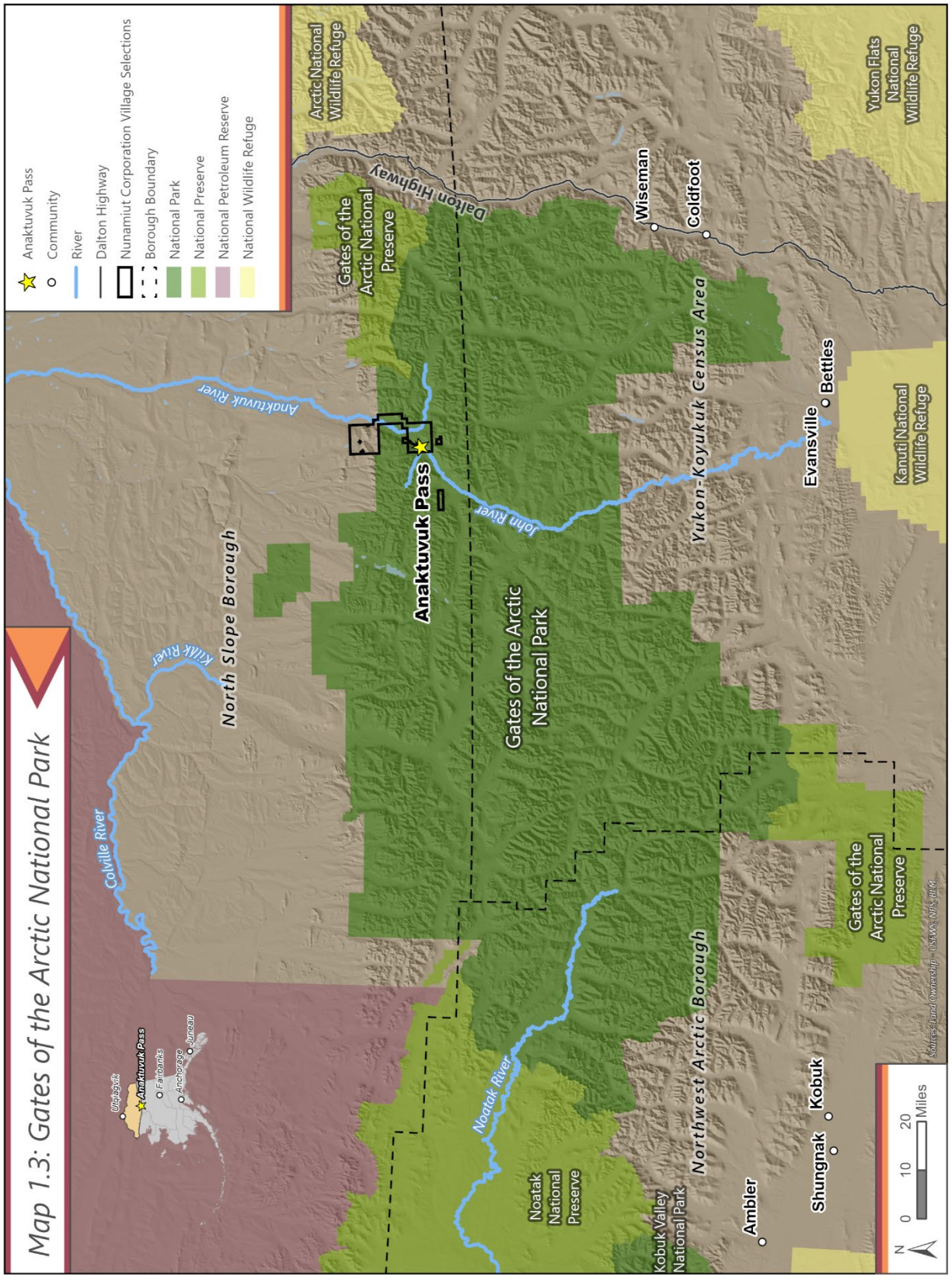
The Capital Improvement Program (CIP) is an annual process used to prioritize and fund infrastructure and public facility projects across the North Slope. It helps ensure that community needs are addressed in a strategic and coordinated way, supporting long-term growth and development. This program is administered by the NSB Planning Department and the NSB Capital Improvements Program Department.

Gates of the Arctic (GAAR) National Park surrounds the community of Anaktuvuk Pass and is guided by a portfolio of plans and studies including a General Management Plan, a Fire Management Plan, and a Transportation Plan (See Map 1.3). These Plans are routinely reviewed and modified, with public comment periods occurring online on the National Park Service Planning, Environment & Public Comment website<sup>7</sup>. The most recent public comment period occurred from January – February 2020.

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<sup>7</sup> National Park Service, “Creation of Gates of the Arctic National Park & Preserve”, Gates of the Arctic National Park & Preserve, last modified August 11, 2020, <https://www.nps.gov/gaar/learn/historyculture/creation-of-gates-of-the-arctic-national-park-and-preserve.htm>.





## Plan Organization

This plan provides background about Anaktuvuk Pass as well as management guidance for the community's future. It is not necessary to read the plan from front to back. Instead, readers may wish to focus on those sections of the plan that meet their interest. The references at the end of the plan identify studies, reports and other sources of information.

**Chapter 1** provides the introduction to the plan, including the basis for comprehensive planning.

**Chapter 2** vision and goals - the vision and goals are aspirational in nature. They describe Anaktuvuk Pass's ideal and desired state by the year 2035. The vision for Anaktuvuk Pass is organized by six overarching goals identified through the community process.

**Chapter 3** provides a community overview, including the history of both the community and its people as well as the Iñupiat values. Chapter 3 includes a historical perspective on the population growth in Anaktuvuk Pass, as well as the Alaska Permanent Fund Dividend (PFD) enrollees and population projections.

**Chapter 4** provides information on the natural environment, including the geography, vegetation, wildlife and climate change.

**Chapter 5** includes information on subsistence, including the Area of Influence and what subsistence activities mean to the residents of Anaktuvuk Pass.

**Chapter 6** examines housing issues and provides a forecast of current and future housing needs.

**Chapter 7** examines infrastructure current infrastructure needs for water, sewer, power, solid waste, and transportation.

**Chapter 8** discusses education and community health, especially as it relates to land use and community development, and provides an overview of the community's economy that includes employment and income.

**Chapter 9** includes land ownership, land use regulation, and current and anticipated future land use.

## Community Involvement

It is critical in the development of the Anaktuvuk Pass Comprehensive Plan that the public have abundant, meaningful opportunities to participate and contribute. The following public participation tools were used in order to obtain input from a wide variety of viewpoints:

- Public notices
- Informational material
- Community workshops
- Facebook announcements
- Direct contact with community leaders
- Tri-lateral meetings
- Outreach to students and elders at lunch meals

This plan was developed through collaborative efforts of Anaktuvuk Pass residents, village leadership, NSB Planning and Community Services Department staff and other NSB employees that provide services in the village. Local village leadership includes the Mayor and City Council members, the Naqragmiut Tribal Council President and Council members, the President and Board members of the Nunamiut Native Corporation, and the NSB Planning Commissioner and Alternate Commissioner representing Anaktuvuk Pass.

Methods utilized to engage residents and encourage community input and feedback include:

- A community workshop was held on July 16<sup>th</sup>, 2025, in Anaktuvuk Pass and approximately 45 residents attended. Participants discussed community strengths, weaknesses, opportunities, and threats.
- The planning team held an Elders & Youth Lunch at Nunamiut School on July 17, 2025, to seek additional input;
- A Facebook page dedicated to North Slope comprehensive planning efforts is used to announce meetings, seek comments; and provide status updates;
- *[Placeholder: The public review draft of the comprehensive plan will be placed in xx locations throughout the community for public inspection. Comment forms will be attached to the draft plans for residents to easily provide plan feedback;*
- *Placeholder: Flyers will be posted throughout the village announcing a public comment period;*
- *Placeholder: A draft plan will be posted on the North Slope Borough website for public review;*
- *Placeholder; Comments received during the public comment period and at the [date] meeting will be provided in an Appendix; and*
- *Placeholder: A Cover contest will be held]*

In addition to specific activities to engage residents of Anaktuvuk Pass, the planning team established a Comprehensive Planning Stakeholder Committee, comprised of representatives from each village, to provide guidance to the team on plan contents and engagement efforts. The Committee meets biannually to discuss the progress on the comprehensive planning effort. Additionally, the committee members represent their respective communities. When a



community's new plan is under development, the respective comprehensive planning stakeholder's role is to keep the community informed and serve as a contact for planning comments and concerns as well as relay information and concerns back to the Committee members.

The theme of this comprehensive plan acknowledges that Anaktuvuk Pass's strength lies in its community and the ability to work together to provide a bright future for all residents. The elements of the planning process are described below:

# Planning

# Process

## 001 Recognizing the Need

Local leaders and stakeholders identify the importance of planning for the community's future. This step sets the foundation by initiating the process to develop or update the comprehensive plan.



## 002 Establishing a Shared Vision

Community members participate in shaping a collective vision for the future. Through surveys, community meetings, and informal outreach, residents articulate values, long-term aspirations, and priorities that reflect the character and goals of the community.

## 003 Assessing Existing Conditions

Data is gathered and analyzed to understand the current context, including demographics, land use, housing, infrastructure, environmental conditions, and population trends.



## 004 Setting Goals and Developing Strategies

Building on the community vision and research findings, clear goals are established. Strategies are developed to address needs and guide decision-making on land use, infrastructure, and more.

## 005 Drafting the Plan

A draft comprehensive plan is prepared, combining background information, community input, goals, strategies, and implementation actions. This draft is presented to residents at a community meeting to begin a formal 30-day comment period.

## 006 Incorporating Community Feedback

Comments and suggestions received during the public review period are carefully evaluated. Revisions are made to strengthen the plan, clarify recommendations, and ensure the final document reflects community values and concerns.

## 007 Formal Review and Endorsement

Community leaders, the NSB Planning Department, and other key stakeholders review the revised plan. Recommendations for adoption are considered by the NSB Planning Commission through public hearings and formal deliberation.



## 008 Assembly Adoption

Following public hearings and Planning Commission recommendations, the NSB Assembly reviews the plan and votes on its adoption. Once adopted, the comprehensive plan becomes an official guiding document for the community's development.

## 009 Implementation and Ongoing Monitoring

The adopted plan provides direction for future decisions. The NSB Planning Department, community leadership, and others use it to guide investments and policy. The plan is updated as needed to reflect new circumstances or shifting priorities.

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The following five pages include the results of the 2025 community Strengths, Weakness, Opportunities, Threats (SWOT) exercise that was held in Anaktuvuk Pass on July 16, 2025. Information from the SWOT analysis provided the basis for the Vision Statement.



## Community Strengths

- An exceptionally scenic alpine environment with abundant wildlife
- Pristine water
- Unique culture; the only inland Nunamiut Eskimos
- Strong, traditional values
- Strong vibrant people that value our family and elders
- A museum that helps to preserve our culture for education
- There are no more subsistence access boundaries within the Park
- Camping, Fishing, hunting, berry picking, harvesting plants
- Gravel
- Greenhouse
- Established quad-lateral
- Local control and self-governance
- Great equipment for road maintenance and fire station
- The Tribe is involved in child protective visits
- Community Winter Access Trails (CWAT)

## Community Weaknesses

- Less mask making than in the past
- High transportation costs which contribute to the high costs of fuel and goods. Lack of access road drives up these costs
- Overcrowded housing conditions that are poorly equipped to handle harsh climates
- Only people with jobs can afford and qualify for houses,
- ?septic tanks causing health hazards
- houses too close together is a fire hazard with one water tank
- Lack of recreational opportunities and, many underprivileged people in the community, lack of sewer and running water hookups, large families living on limited water supply opportunities for our youth
- Changing caribou migration patterns
- High unemployment
- Lack of childcare to support working parents
- Community divided by creek with one bridge; would like secondary bridge
- Dusty roads in summer
- Individual hikers not contributing to economy and scare caribou herds
- Eleanor Lake is contaminated
- Village has not settled its 14(c)(3) land transfer to the City
- Number of people who are fluent in Iñupiaq is small
- It is a challenge to maintain traditional activities and cultural values between generations (school needs to implement more culturally based curriculum. Suggestions are partnership between IHLC, NSBSD, community. Also have Elders work together to teach the Iñupiaq class at the school. Using Iñupiaq Bible to teach language)
- Freight costs
- Incidence of domestic violence and drug and alcohol use is not being adequately addressed
- Cancer incidence by residents subjected to 1956 and 1957 radiation experiments by U.S. Air Force
- Aeromedical Laboratory, many want acknowledgement of past military tests on residents
- Strength and weakness - Preserving our culture
- Teshekpuk, Western Arctic, and Central Arctic Caribou Herds have declined in population / rerouted
- No monitoring or accountability from the park service for hikers (camping on allotments, using private cabins, finding and keeping artifacts, affecting wildlife)
- National Park service representative is not present in the community
- Lack of qualified teachers, both from the community and outside
- Access and hunting permits are issued to outside hunters by the NSB and State of Alaska that fail to consider the impacts to local resident hunters and the community
- Iñupiaq culture diminishing from competition with technology with the younger generation.
- No swimming pool
- No high speed internet
- Need new and bigger playground / multiple playgrounds



- Need drum making
- More youth activities during the winter / recreation center are needed
- Need laundromat and showers
- Some kids are placed in foster homes outside AKP; community would like kids to stay
- Need help in with paperwork for getting families foster licenses
- Elders are often sent to outside communities because there are not resources in AKP
- Need to resume public transit system
- Because residents are TCC, do not qualify for travel benefits through ASNA. Fractured health system between NSB and TCC
- Senior center needs to be upgraded
- Fix health policies
- Virtually no access to mental health and suicide awareness, preventive, and assistance resources
- Need to update flood control
- Church needs repairs from broken pipes and flooding
- Need a pastor
- Need to plan ahead to move airport further away to prevent negative health effects of dust
- Need airport terminal
- Emergency preparedness programs for utility outages
- Need RELI program for housing maintenance
- Help with renovations for Elders homes
- Local hire for local projects
- Nunamiut Corporation needs to utilize their resources. One example is providing gravel resources to communities that need it. May be a permanent road
- Need standby generators for when power goes out
- Need new and bigger City building
- Need new fire station
- The National Park Service needs to provide portable bathrooms for hikers
- Need a new cemetery location
- Cost of gas is too high
- Need place to buy oil and parts for ATVs
- Need new school bus
- Need improved system for repairing heat immediately
- Need maintenance technicians locally
- Need additional housing
- Training courses for younger generations
- More native allotments and homes
- More jobs
- Need Nunamiut Corporation to convey land for another subdivision
- Dusty roads
- Land access and land management
- Need partnership with contractors for local employment
- Need health assistance like hearing aids and glasses (through TCCNeed x-ray machine for clinic





# Community Threats

- Climate change threatens our subsistence lifestyle, particularly affecting the migration of caribou and increased likelihood of wildfires from lightning strikes
- Outside hunters compete for limited resources and potentially divert the traditional migration route of caribou by hunting and frightening the first group of migrating caribou
- Resource development up north impacting caribou migration
- Increased transportation costs leading to increased goods and fuel prices
- South access road and east of the village flood in the spring
- Smoke from wildfires and threat of fire
- Funding and material access is limited to properly maintain or improve community facilities such as the community hall, Tribal offices, the cemetery, piped water and sewer utilities, and outdoor recreation facilities
- Lack of local hire by developers
- Lack of permanent jobs
- National Park designation attracts nature walkers that places burdens on the community, including increased calls for search and rescue efforts
- Long lag time for search and rescue operations
- Permits that NSB signs to allow the sports hunters to hunt inland
- Domestic violence and drug /alcohol use is not being adequately addressed
- Individual hikers tend to scare caribou herds
- Empty diesel barrels in Eleanor Lake that need to be cleaned up
- Reversal of the 1986 decision on Gates of the Arctic Park boundary could face opposition





# Vision Statement



A vision statement establishes community's desired outcome of the Comprehensive Plan. The statement provides a shared sense of how residents see the community developing over the next 20 years, the time horizon for this comprehensive plan. This vision statement, presented below, was developed from input during community meetings held as part of the planning process.

A vision statement describes what we, as a community, want for the future of Anaktuvuk Pass. It expresses our shared hopes, values, and priorities, and serves as a foundation for the decisions and actions outlined in this Comprehensive Plan. The vision helps ensure that future development reflects what matters most to us, protecting our land, supporting our families, preserving our culture, and building a strong and healthy community for the next generation.

This vision is not just for government leaders or planners, it belongs to all of us. It reflects how we see Anaktuvuk Pass changing over the next 20 years and what we want to hold on to along the way. It provides direction for how our community should develop, what kinds of improvements are needed, and how we can protect what makes our community special.

The vision statement on the next page comes from the voices of local residents. It was shaped through discussions at community meetings, where people shared what they value, what challenges they face, and what they hope the future will look like for their children and grandchildren. It includes our desire to keep subsistence strong, protect caribou, support local education, create housing and job opportunities, and ensure that development happens in a way that respects our Iñupiaq traditions and ways of working together.

This vision is meant to guide us, remind us of what we're working toward, and help future generations understand the path we've chosen. By coming together and agreeing on this vision, we are making sure that Anaktuvuk Pass stays a place we're proud to call home.

# Vision Statement

Anaktuvuk Pass is a close-knit community where residents value family, education, and a strong cultural work ethic. We maintain deep ties to the land and take pride in passing our traditional and community values from one generation to the next.

We cherish the natural environment as God created it and are committed to protecting it for future generations. By safeguarding our clean water and air, thriving wildlife and plant life, and the landscapes that surround us, we ensure that residents can continue to enjoy the land's beauty and abundance.

We deeply value the traditional harvest and subsistence way of life. Preserving our Iñupiaq culture remains a priority, even as we welcome new ideas that help us create a safe, sustainable, and affordable community. Protecting healthy caribou populations and their migratory routes near and through the village is especially critical to our way of life.

Our vision includes creating opportunities for all residents to live and thrive in Anaktuvuk Pass. We support the development of affordable housing that meets local needs, meaningful employment opportunities that build on our strengths, and access to quality education for learners of all ages. We are committed to preparing our youth to become the future leaders of our community, grounded in our values, equipped with knowledge, and inspired to serve.

In Anaktuvuk Pass, we respect one another and recognize the strength of working together. By fostering a spirit of cooperation and honoring our traditional decision-making processes, we can solve problems, face new challenges, and guide development in a way that reflects our values and supports the well-being of the entire community.







# Goals and Strategies



# Anaktuvuk Pass Goals

## Goal 1:

### Protect and enhance subsistence activities, resources, and infrastructure.

- Strategy 1.1 Advocate for co-management of subsistence between federal and state regulators and the Iñupiaq people, inclusion of indigenous Knowledge in policies, and increased Iñupiaq representation in resource management decisions.
- Strategy 1.2 Identify subsistence cabins that may be vulnerable to damage from thawing permafrost, fire, erosion, and/or flooding and consider appropriate mitigation action(s).
- Strategy 1.3 Work with North Slope Borough Department of Planning & Community Services to reduce or eliminate light and noise producing projects within the fall caribou migration corridor from August 1 to October 31 of each year.
- Strategy 1.4 Identify storage needs for subsistence foods to determine how many ice cellars and/or community freezers are needed, where they may be located, and seek funding for construction or purchase.
- Strategy 1.5 Encourage community tracking of tundra health by reporting damage to the North Slope Borough Department of Planning & Community Services, as well as the landowner when on Nagsragmiut lands or Gates of the Arctic National Park and Preserve lands.

**Goal 2:**

**Establish future land use designations within Anaktuvuk Pass and its environs to manage growth and ensure appropriate location of housing, commerce, services, and facilities.**

- Strategy 2.1 Work with North Slope Borough Department of Planning & Community Services to identify current and future preferred locations of housing, commerce, services, and facilities.
- Strategy 2.2 As practicable, locate needed community facilities away from known wildlife migration corridors, away from known hazard zones, and away from community evacuation routes.
- Strategy 2.3 Seek funding for community facilities which may need repair or replacement or meet with leadership to discuss plans for future upgrades to community facilities such as City Hall and the Church.
- Strategy 2.4 Foster meaningful community and intergovernmental cooperation. Encourage community members to attend government planning meetings open to the public and utilize open comment periods on planning documents, including North Slope Borough Planning Commission meetings and Gates of the Arctic National Park and Preserve planning documents.

**Goal 3:**

**Support additional, good quality housing and the incorporation of energy-efficient elements in existing housing.**

- Strategy 3.1 Undertake a lot-by-lot study to determine ownership status issues, safety and weatherization needs, viability of property to be used for infill housing as appropriate, etc.
- Strategy 3.2 Explore funding opportunities for Tribal housing authorities, elder housing, and low-income housing, such as federal and state grants.

- Strategy 3.3 Seek grant funds to supplement NSB funding for weatherization efforts, passive ventilation systems, and other alternative building techniques to reduce energy consumption in existing houses and reduce costs for homeowners.
- Strategy 3.4 Promote financial literacy programs offered by TNHA, NSB Housing, lenders, and non-profits that help prepare residents for homeownership.
- Strategy 3.5 Analyze existing housing programs and efforts within different entities to determine gaps and duplicative efforts. Set up a housing coordination committee comprised of, for example, community leadership, homeowners, TNHA, etc. to coordinate housing activities.
- Strategy 3.6 Investigate the feasibility of a program that provides housing maintenance assistance for homeowners, especially elders, and sells supplies for housing maintenance at or near cost to facilitate affordability.

#### **Goal 4:**

### **Support the development and maintenance of essential social services, public facilities, and infrastructure, including the transportation network.**

- Strategy 4.1 Evaluate the current health clinic facility and equipment against both current and future residents' need and proactively plan for equipment, repairs, renovations, and/or expansion.
- Strategy 4.2 Investigate the feasibility of hosting visiting doctors more frequently to provide health care in-person, especially near the beginning of the school year to conduct annual physicals for students. Investigate the possibility of having more than one dental health aide to provide routine oral care for residents.
- Strategy 4.3 Support and encourage use of telemedicine (teleconference and video conference) for mental and physical health needs by providing a private space within the health clinic facility where residents may connect with care, and assist with scheduling.
- Strategy 4.4 Seek funding for community services such as a transit bus system and domestic violence shelter, which would both meet a community need and provide employment opportunities.



- Strategy 4.5 Advocate for regular inspections of infrastructure and asset management.
- Strategy 4.6 Examine culverts and maintain adequate drainage to all properties, especially during and after breakup. Keep materials on hand to repair or replace culverts as needed. Upgrade culverts as needed to increase drainage capacity or efficiency.
- Strategy 4.7 Investigate additional funding opportunities for road and utility development from Bureau of Indian Affairs, State of Alaska, Denali Commission, the U.S. Department of Housing and Urban Development, and federal transportation funds.
- Strategy 4.8 Develop a Community Wildfire Protection Plan (CWPP) for Anaktuvuk Pass to include specific recommendations for homeowners to reduce risk of structural damage from fire.

#### **Goal 5:**

### **Facilitate economic development activities.**

- Strategy 5.1 Seek funding to establish workspaces for locals to operate businesses that the community needs, such as a vehicle or small engine repair shop, food processing, art studio, and restaurants.
- Strategy 5.2 Establish a community storefront to loan equipment and tools and offer home repair technical assistance.
- Strategy 5.3 Proactively engage with NSB and the State of Alaska Department of Transportation and Public Facilities (ADOT&PF) on planned projects, project prioritization, policies, and studies, and advocate for prioritizing projects important to Anaktuvuk Pass.
- Strategy 5.4 Seek upgrades to the water and wastewater plant, as well as the power plant, to facilitate additional housing and other development.

**Goal 6:**

**Preserve and celebrate Iñupiaq culture, language, and history.**

- Strategy 6.1 Incorporate the Iñupiat Heritage, Language, and Culture Department oral historian(s) in documenting and promoting the history and culture of Anaktuvuk Pass.
- Strategy 6.2 Have Students conduct interviews with community Elders to hear and document stories of their youth.
- Strategy 6.3 Develop a story night for community members to share cultural stories. Encourage use of Iñupiaq in story telling or consider providing Iñupiaq translation.
- Strategy 6.4 Seek funding for cultural center/ recreational spaces.
- Strategy 6.5 Advocate for expanding the NSBSD Iñupiaq Immersion Program.
- Strategy 6.6 Develop a program to pair young children with fluent speakers to speak only in Iñupiaq, especially during cultural activities and teaching subsistence.

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# History, Culture, and Governance



## History

The Nunamiut, whose name means “people of the land,” have lived in and around Alaska’s Brooks Range for thousands of years. Historically nomadic, the Nunamiut moved in extended family groups across inland river valleys and mountains, relying on caribou, fish, and other wildlife for survival. Nunamiut life revolved around subsistence hunting, seasonal migration, and trade with other Native Alaskans. This section highlights the history of the Nunamiut people and changes that led to settle and formation of the community of Anaktuvuk Pass.

### Pre-1880s

The Iñupiaq Eskimos traditionally inhabited Alaska’s coastal regions, with survival closely tied to the sea’s abundant resources. Archaeologists indicate Nunamiut have roots from the Arctic coast and the Noatak and Kobuk rivers<sup>8</sup>. The Nunamiut eventually moved inland to the Brooks Range and adopted a nomadic lifestyle, traveling through mountain passes and along river valleys in constant pursuit of caribou. Caribou served as a primary source of food, clothing, and materials for shelter and tools.<sup>9</sup>

The Nunamiut traditionally lived in three major family-based groups, named for the regions they occupied: the Tulugakmiut near Tulugak Lake – the closest to present-day Anaktuvuk Pass, the Narivakvukmiut around Chandler Lake, and the Kitlikmiut near the Killik River.<sup>10</sup> The groups typically consisted of 25 to 200 individuals each, traveling seasonally in search of food and resources. An estimated 1,000 Nunamiut lived throughout the mountains and river valleys of the central Brooks Range.

Before the introduction of firearms, the Nunamiut relied on sophisticated hunting techniques to capture caribou. Large corralling systems were constructed to funnel animals into ponds or stone enclosures, where hunters used spears or arrows to take the animals. To help direct the herds toward these traps, stone figures that resembled people, known as “inuksuks,” were built to resemble humans, serving to direct the caribou toward the corrals.<sup>11</sup>

Each spring, families traveled by dog team to the mouth of the Anaktuvuk River, where they retrieved skin boats stored the previous fall. They floated downstream to Nigliq, near the mouth of the Colville River, where a seasonal trade fair was held with the coastal Iñupiat. Some also traveled to Utqiagvik to trade. In August, the Nunamiut returned upriver to fish until freeze-up, then spent the winter hunting caribou in the valleys of the Brooks Range.

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<sup>8</sup> Simon Paneak Memorial Museum, Anaktuvuk Pass, AK, 2025, accessed October 2, 2025, <https://www.north-slope.org/departments/inupiat-history-language-culture/simon-paneak-memorial-museum/>.

<sup>9</sup> John M. Kauffmann, *Alaska's Brooks Range: The Ultimate Mountains*, 2nd ed. (Anchorage, AK: Mountaineers Books, 2007), 35.

<sup>10</sup> Robert L. Rausch, "Notes on the Nunamiut Eskimo and Mammals of the Anaktuvuk Pass Region, Brooks Range, Alaska," *Arctic* 4, no. 3 (December 1951): 147–95.

<sup>11</sup> Kauffmann, *Alaska's Brooks Range*, 35.

## **1800s – 1920s**

The late 1880s marked the beginning of sporadic contact with outside explorers. Over the next few decades, the Nunamiut suffered devastating population losses from disease and starvation. By the 1920s, dwindling food sources forced many families to migrate toward the Arctic coast and east into Canada, where fur trapping and trade offered limited subsistence opportunities. Despite this, the Nunamiut retained traditional practices and had little sustained contact with Westerners until the 1940s.

At the time of contact with explorers in 1885–1886, nearly a thousand people were living in scattered, semi-nomadic, family-based bands of 50 to 100 individuals. Each band was led by a headman, or *Umialik*, who occupied a home valley and the surrounding territories. These groups were united by a common language, frequent intermarriage, and a shared culture centered around hunting caribou. Some of the largest bands included the Kafianibmiut of the upper Colville River drainage west of the Killiq River; the Killibmiut, who lived along the Killiq, Uqpigruaq, and Uqquumilaat rivers; the Qafmalibmiut of the Anaktuvuk area; and the Ulumiut of the Itqixiq River drainage.<sup>12</sup>

## **1930s -1940s**

About a hundred years ago, a combination of famine, illness, declining caribou herds, and the appeal of readily available coastal goods prompted Nunamiut leaders to leave the Brooks Range and temporarily relocate to the coast. By the 1930s, however, they decided to return to their homeland. The returning families divided into three groups: one eventually settled at Tulugaq Lake, just a few miles north of Anaktuvuk Pass; another moved westward to the Killik Valley and its surrounding areas; and the third headed east, returning to their former homeland near the Ulu Valley. Over time, the eastern group dispersed, with some members joining the other two groups.

During the 1940s, contact with outsiders brought a reliable supply of guns, ammunition, and food supplies through barter for wolf hides and other furs. By 1949, families living in the Killik region observed the advantages experienced by the Tulugaq group, including access to regular air service, trade, mail delivery, and visiting teachers and missionaries who provided education and spiritual guidance.<sup>13</sup> In June of that year, the Killik families embarked on a month-long, 100-mile journey to join the Tulugaq settlers, marking the first steps away from a nomadic lifestyle and toward the eventual creation of a permanent village.<sup>14</sup>

Anaktuvuk Pass was founded in 1949 by seven families who came from various parts of the Brooks Range. The heads of these families were respected leaders – decision-makers, lawmakers, and visionaries – who recognized that the world was changing quickly. They believed their children needed an education and the tools to face an uncertain future. With this in mind, they made the

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<sup>12</sup> Simon Paneak Memorial Museum.

<sup>13</sup> North Slope Borough, "Heritage Event Programs," PDF, accessed October 2, 2025, [https://www.north-slope.org/assets/images/uploads/heritage\\_event\\_programs.pdf](https://www.north-slope.org/assets/images/uploads/heritage_event_programs.pdf).

<sup>14</sup> Simon Paneak Memorial Museum.

pivotal decision to settle in Anaktuvuk Pass.<sup>15</sup> Before long the community had its own school, airstrip, and church.<sup>16</sup>

In Iñupiat tradition, introductions begin with the names of one's parents, followed by the community of origin, before giving one's own name. This practice reflected deep respect and recognition for ancestral heritage. Prior to the arrival of missionaries in Alaska, last names were not used among the Iñupiat.<sup>17</sup> These founding families were among the first to be known by both a first and last name.

The Anaktuvuk Pass founding families include:

- Aguk/Ahgook
- Ieujjuuraq/Hugo
- Kakieaaa/Kakinya
- Mekiana
- Panniaq/Paneak
- Rulland"<sup>18</sup>

### 1950s – Today

Although Anaktuvuk Pass is a more recently settled village, its people have an ancient heritage. In the early 1950s, Anaktuvuk Pass was still more a base camp than a village. During most of the year, many families were out at camps on creeks and lakes, coming back to the pass for resupply, then going out again.<sup>19</sup> The Nunamiut traveled by dog-team and sled in winter and on foot in summer, hunting and fishing throughout valleys of the Brooks Range and its northern foothills, while living in caribou skin tents and houses built of moss. The Nunamiut were the last of the North America nomadic peoples to settle into village life.<sup>20</sup>

In 1951, a small post office was established in the current village site and in 1959 the community incorporated as a fourth-class city. Once Alaska became a state in 1959, full-time teachers came into our community to live and teach our children. At the time, the only building large enough for classroom use was our log church, the Chapel in the Mountains. The church generously allowed the use of its building until a public school could be constructed the following year."<sup>21</sup>

In 1961, the newly dedicated school was constructed. The facility included classrooms, office space, a modern kitchen, and an independent power generator building. Students from kindergarten to eighth grade were required to attend the school. The school brought not just Western educational opportunities but also heralded the end of the nomadic lifestyle. For the first time, families with school-age children were legally tethered to the village for nine months of the year.<sup>22</sup> Over the next

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<sup>15</sup> Simon Paneak Memorial Museum.

<sup>16</sup> National Park Service, "An Anaktuvuk Pass History," Gates of the Arctic National Park & Preserve, last modified August 18, 2020, <https://www.nps.gov/gaar/learn/historyculture/anaktuvuk-pass.htm>.

<sup>17</sup> Simon Paneak Memorial Museum.

<sup>18</sup> Simon Paneak Memorial Museum.

<sup>19</sup> William R. Hunt, "Chapter 7, Gates of the Arctic National Park and Preserve, The Alaska National Interest Lands Conservation Act of 1980, and the Future," in Gates of the Arctic National Park and Preserve Historic Resource Study (Anchorage, AK: U.S. Department of the Interior, National Park Service, 1984), <https://www.npshistory.com/publications/gaar/hrs/chap7.htm>.

<sup>20</sup> North Slope Borough, Department of Iñupiat Heritage, Language and Culture, "Simon Paneak Memorial Museum," accessed October 2, 2025, <https://www.north-slope.org/departments/inupiat-history-language-and-culture/simon-paneak-memorial-museum>.

<sup>21</sup> Simon Paneak Memorial Museum.

<sup>22</sup> Simon Paneak Memorial Museum.



few years, the community became increasingly important as families built log cabins and sod houses for winter use and spruce pole tent frames for canvas wall tents in summer. In the mid-1960s, plywood frame homes began to replace traditional structures, and by the late 1970s, the North Slope Borough began investing large sums in the community. Through its Capital Improvement Program Management (CIPM), the Borough provided residents with homes, schools, a clinic, public safety facilities, communications systems, water and sanitation systems, power and roads.

“Meanwhile, from the mid-1950s until the late 1970s, teenagers had to travel to the Bureau of Indian Affairs or state-operated board schools in Alaska and the Lower 48 (including Chemawa in Oregon and Chilocco in Oklahoma) if they wanted a high school education. This unpopular practice badly disrupted family and social life. The schools forbade young people from speaking their Native language and took them out of our community for most of the year, just at the age when they normally received their most intensive instruction in our cultural ways. The state school did make it possible, however, for local educations like John Morry to teach the younger children their Native language as part of the school curriculum. This was a welcome change from restrictive and repressive BIA language policies. The Revend John Chambers observed that John Morry learned to read and write his own language in only two weeks, during which time he studied mimeographed copies of translations of the Bible.”<sup>23</sup>

As the original school building aged rapidly in the cold and windy weather of the Arctic, a temporary school building was constructed in the 1970s. “In 1981, an \$8 million school opened. It provides education from kindergarten through high school. Complete with a swimming pool, full-sized gym and fully furnished shop facilities, the school is funded and operated by the North Slope Borough School District. This beautiful and well-maintained facility has been at the center of community education and social activities from the day of its opening.”<sup>24</sup>

The National Park Service (NPS) first began to consider a parkland in the central Brooks Range in the early 1960s, but it was not until 1968 that an NPS team surveyed the area and recommended a 4.1 million-acre, two-unit Gates of the Arctic National Park<sup>25</sup>. The two units of this early proposal were drawn well away from Anaktuvuk Pass and the John River valley to the south. During the same period, petroleum discoveries on the North Slope inspired Governor Walter Hickel to carve an “ice road” out of the wilderness that ran through Anaktuvuk Pass and beyond to the oil fields.

For six weeks after its completion in the winter of 1968–69, bulldozers and large trucks roared through the village and ended the community’s isolation in the blink of an eye. Subsequent NPS park proposals also avoided including Anaktuvuk Pass, and it was not until the early 1970s that local people began to recognize that designating their lands as a national park would buffer the community from outside development.<sup>26</sup>

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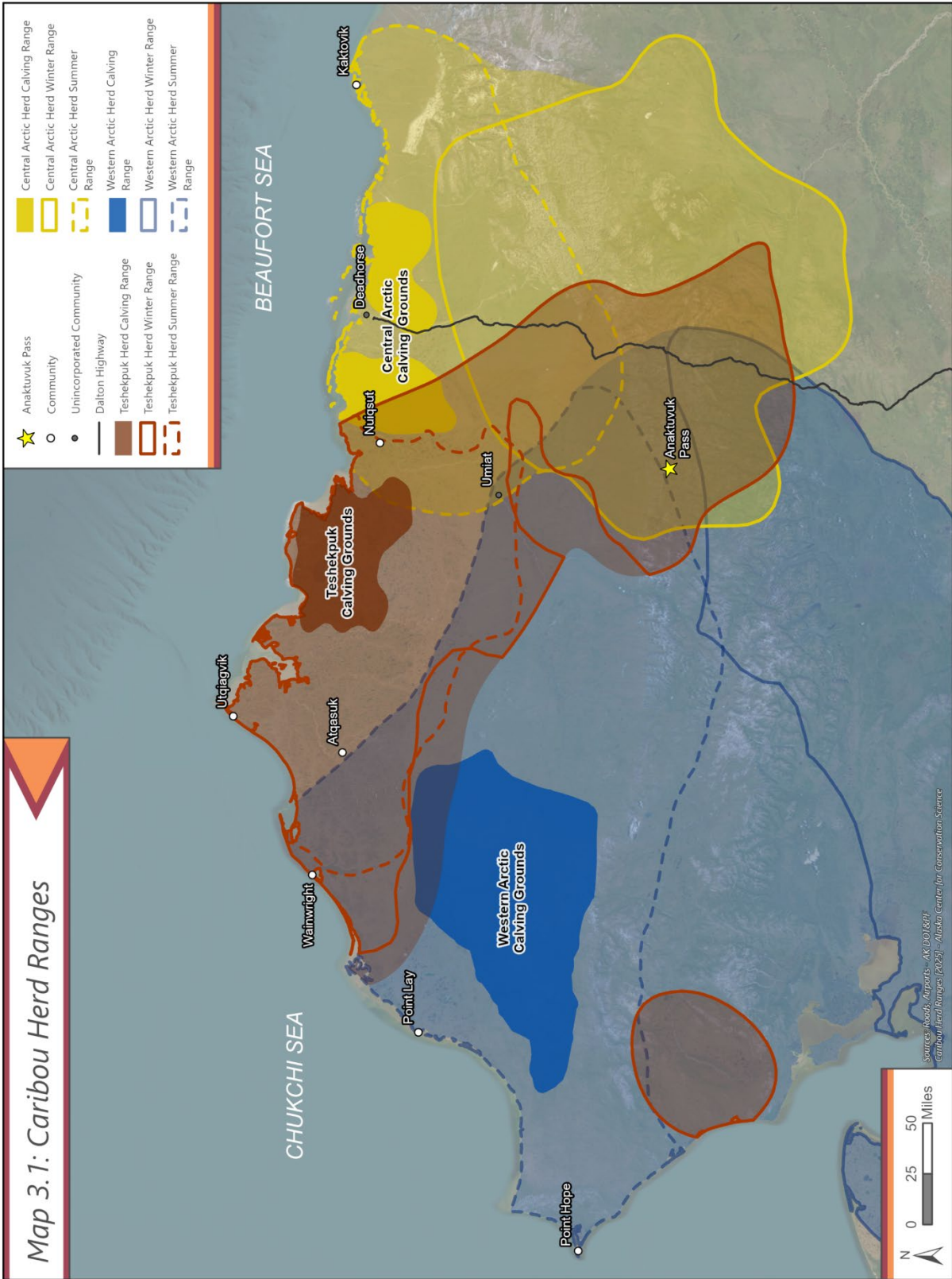
<sup>23</sup> Simon Paneak Memorial Museum.

<sup>24</sup> Simon Paneak Memorial Museum.

<sup>25</sup> National Park Service, “Creation of Gates of the Arctic National Park & Preserve”, Gates of the Arctic National Park & Preserve, last modified August 11, 2020, <https://www.nps.gov/gaar/learn/historyculture/creation-of-gates-of-the-arctic-national-park-and-preserve.htm>.

<sup>26</sup> National Park Service, “An Anaktuvuk Pass History,” Gates of the Arctic National Park & Preserve, last modified August 18, 2020, <https://www.nps.gov/gaar/learn/historyculture/anaktuvuk-pass.htm>.

Today, Anaktuvuk Pass is the only remaining community of the Nunamiut. The community's residents have adopted a unique blend of old and new ways. Hunters continue to harvest caribou along traditional migration routes and they may travel 200 miles a day by snow machine to check their trap lines and obtain other subsistence resources (see Map 3.1).



## Culture and Values

The people of the region, the Nunamiut, have a long history of living off the land. Nunamiut means “people of the land”, and the ancestors of today’s residents lived a nomadic life way in family-based groups. The residents of Anaktuvuk Pass honor cultural ties to ancestors and the land through traditional Iñupiaq values. The Iñupiat highly regard kinship and respect for Elders, the use and preservation of the Iñupiaq language, and sharing food and knowledge of animals with a deep respect for the environment which provides fresh water, clean air, and subsistence foods. The Iñupiat people of Anaktuvuk Pass lead a subsistence lifestyle, depending on fishing, gathering, and hunting of land mammals to obtain food and maintain a traditional way of life. Activities throughout the year revolve around the harvest of caribou. Aqpik berries, willow leaves, wild rhubarb, stinkweed, and Eskimo potatoes are commonly gathered foods.

The NSB works to preserve the history, language, and culture of the North Slope region, in part through the Iñupiat Heritage, Language, and Culture (IHLC) Department. The NSB is committed to safeguarding the history, language, and culture of the North Slope region. IHLC’s primary objective is to document, preserve, and sustain the region’s rich history, language, and culture while ensuring that cultural resources are given due consideration. IHLC maintains the borough’s Traditional Land Use Inventory, which is a historical account of the land, people, and villages of NSB. The department also collaborates on development projects to ensure that traditional subsistence activities and values at cultural, historic, and archaeological sites are not affected. The department is also focused on preserving oral history through traditional land use studies, historical accounts, stories, legends, and life histories using various media formats. The Heritage Center in Utqiagvik serves as a gathering space and an educational venue for visitors interested in cultural revitalization efforts.

The Nunamiut of Anaktuvuk Pass continue to honor cultural ties to the land and their ancestors while they implement traditional Iñupiaq values. Iñupiat highly regard family, work ethic, the Iñupiaq language, drumming and dancing, and sharing food and knowledge of animals with a deep respect for the environment in which they live, which provides fresh water, clean air and subsistence foods, particularly caribou. The following two pages summarize values of the North Slope Iñupiat.



## IÑUPIAT VALUES

### Paaqjaktaitaeiq

#### Resolution of Conflict

The Iñupiat way is to think positive, act positive, speak positive and live positive.

### Nagliktuutiqabniq

#### Compassion

Though the environment is harsh and cold, our ancestors learned to live with warmth, kindness, caring and compassion.

### Paammaabigeiq

#### Cooperation

Together we have an awesome power to accomplish anything.

### Ixagiigeiq

#### Family and Kinship

As Iñupiat people, we believe in knowing who we are and how we are related to one another. Our families bind us together.

### Qieuiieiq

#### Humility

Our hearts command that we act on goodness. We expect no reward in return. This is part of our cultural fiber.

### Quvianbuniq

#### Humor

Indeed, laughter is the best medicine.

## Afuniallaniq

### Hunting Traditions

Reverence for the land, sea, and animals is the foundation of our hunting traditions.

## Ieupiuraallaniq

### Knowledge of Our Language

With our language, we have an identity. It helps us to find out who we are in our mind and in our heart.

## Piqpakkutiqabniq suli Qiksiksrautiqabniq

### Utuqqanaanan Allanullu

#### Love and Respect for our Elders and One Another

Our Elders model our traditions and ways of being. They are a light of hope to younger generations. May we treat each other as our Elders have taught us.

## Qiksiksrautiqabniq Ieuniabvigmun

### Respect for Nature

Our Creator gave us the gift of our surroundings. Those before us placed ultimate importance on respecting this magnificent gift for their future generations.

## Aviktuaqatigiigaiq

### Sharing

It is amazing how sharing works. Your acts of giving always come back.

## Ukpiqqutiqabniq

### Spirituality

We know the power of prayer. We are a spiritual people.

## Simon Paneak Memorial Museum

The Simon Paneak Memorial Museum in Anaktuvuk Pass was established in 1986. Since then, museum staff have worked closely with Nunamiut elders, researchers and students to record the locations of cultural sites, to map and photo-document physical remains and to conduct interviews. This research and documentation assists in preserving the social, cultural, and personal contexts of cultural sites surrounding Anaktuvuk Pass.



The Museum is named in memory of Simon Paneak (1900–1975), a respected Nunamiut hunter, trapper, storyteller, and historian. Born in the Killik River valley just 15 years after the first Western explorers arrived in the region, Simon lived through a time of dramatic cultural change. As a child, he witnessed the collapse of the traditional nomadic lifestyle due to famine and disease caused by declining caribou herds and introduced illnesses. Like many Nunamiut, his family moved to the Arctic coast in search of food, trade, and work, where Simon grew into a skilled hunter and learned to read, write, and speak English.<sup>27</sup>

In the 1930s, as the fur trade economy declined, Simon joined a movement of families determined to return inland, made possible by the recovery of the caribou herds. His knowledge of the land, fluency in English, and deep respect for Iñupiat traditions made him a valuable resource to visiting scientists and researchers. Over three decades, he worked closely with biologists, anthropologists, and archaeologists, serving as a cultural bridge and sharing traditional knowledge and oral histories. Through recordings, letters, and journals, Simon played a key role in preserving Nunamiut heritage.<sup>28</sup> His legacy lives on not only through his family and community but also in the museum that bears his name.

## Mask-Making

The art of mask making in Anaktuvuk Pass began in 1950 as a spontaneous and creative act by two young trappers: Bob Ahgook and Zaccharias Hugo. While tending their traplines just before Christmas, the two found themselves with time to spare one evening and a fresh, uncured caribou skin on hand. Inspired by the moment, they decided to hand sew masks, each crafting one from the hide. Once finished, they carefully stuffed the masks to help them keep their shape as they dried. Upon returning home, they hid the masks until the holiday Eskimo dances. This origin story, preserved and shared through interpretive displays at the Simon Paneak Memorial Museum in

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<sup>27</sup> North Slope Borough, Department of Iñupiat History, Language, and Culture, "Simon Paneak," Simon Paneak Memorial Museum, accessed October 2, 2025, <https://www.north-slope.org/departments/inupiat-history-language-culture/simon-paneak-memorial-museum/simon-paneak>.

<sup>28</sup> North Slope Borough, "Simon Paneak."

Anaktuvuk Pass, provides the foundation for understanding the community's unique mask-making tradition.<sup>29</sup>

Although the first masks were created just for fun, the practice quickly evolved. The richness of caribou anatomy became integral to the craft. In addition to the main hide, mask makers used a variety of parts: bull caribou throat hair, leg skins, the hides of unborn calves, hooves, back tendons, and liver. Each component had a purpose, both functional and aesthetic. Descriptions of these materials and their specific uses are drawn from detailed museum exhibits and historical notes curated by the local community. This transformation, as presented in the Simon Paneak Memorial Museum, highlights the intersection of traditional knowledge and economic adaptation in a remote Arctic community.<sup>30</sup>

By 1956, a few wooden masks had been produced and sold, but it was Justus Mekiana who transformed mask making into a thriving village industry. He developed a method for creating skin masks using carved wooden molds, which allowed for consistency and efficiency in shaping the forms. Caribou hides were scraped, cut to size, and soaked in until pliable. The hair was removed from the outer surface, and the hides were applied inside out onto the molds. To give the finished product a rich brown tone, the hides were steeped in tea before drying. Early masks sold for \$12.50 each, and by the mid-1960s, mask making had become a vital source of cash income for many adults in the village.

The molds themselves, carved from cottonwood or spruce harvested some 30 miles south of Anaktuvuk Pass, are a testament to the skill and durability of early mask makers. Many of those created in the 1960s and 1970s are still in use today.

Not all caribou hides are suitable for mask making. Skins from September and October caribou are preferred due to their thickness and durability. Springtime hides, by contrast, are too thin. Specific parts of the caribou leg are used for male facial features on the masks: the area just above the hoof is used for hair, the section above that for mustaches, and the upper part for eyebrows. In summer, when leg hair is short, commercial calfskin is now often used for features like eyelashes. These seasonal preferences and adaptations are well documented in the Museum's collection, which captures the process for handcrafting masks.<sup>31</sup>

Bull caribou throat hair, harvested in the fall, is split down the middle and anchored to the sides of the mask to create a central hairline. Glue is added to help the hair stay in place. The caribou skin can be difficult to sew, but soaking or scraping helps soften it. Sinew—strands separated from the dried leg or back tendons of the caribou—serves as a traditional thread, although some mask makers now use manufactured sinew sold in large spools.

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<sup>29</sup> Simon Paneak Memorial Museum.

<sup>30</sup> Simon Paneak Memorial Museum.

<sup>31</sup> Simon Paneak Memorial Museum.



The ruff, which surrounds the face of the mask, is typically made from wolf fur. However, when wolf is unavailable, other furs are substituted. Fox—gray, red, or white—is commonly used, and occasionally black bear fur is incorporated as well. Before features are added, caribou liver is rubbed onto the dry skin of the mask to enhance its texture and appearance. Each of these steps reflects the deep ecological knowledge of the Iñupiat people, as conveyed through museum interpretation panels and recorded oral traditions.<sup>32</sup>

Today, Anaktuvuk Pass masks remain both an art form and a cultural emblem, connecting the present to the resourcefulness and creativity of the community's past. What began as a playful evening experiment has become a lasting tradition grounded in deep knowledge of the land, the caribou, and Iñupiat craftsmanship.

## Iñupiaq Language

Language reflects a people's identity, culture, and way of thinking; it carries stories, values, and knowledge from one generation to the next. Across the Arctic, Inuit languages form a broad linguistic continuum. In Northern Alaska, four main dialects of Iñupiaq are spoken, connecting communities to their heritage and to one another.

According to the 2019 North Slope Borough Economic Profile and Census Report (NSB Census or NSBEP&CR), 14.3 percent of Anaktuvuk Pass residents reported speaking Iñupiaq fluently and preferring to use it. A full 25 percent of the population reported fluency in the language, while another 31 percent stated they could understand Iñupiaq (which includes: speaks Iñupiaq fluently and prefers this language; speaks Iñupiaq fluently but prefers another language; speaks Iñupiaq but with difficulty or with minor flaws; and understands Iñupiaq well and speaks enough), placing overall understanding on par with other North Slope communities.<sup>33</sup>

In Anaktuvuk Pass, the trend shows a continuing decline in Iñupiaq use over time. According to the 2019 NSB Census, only 4.5 percent of household heads in Anaktuvuk Pass reported speaking Iñupiaq mostly at home. This reflects a downward trend from 6 percent in 2010 and 13 percent in 2003.

Households in Anaktuvuk Pass that reported speaking both English and Iñupiaq at home have also declined over time; from 48 percent in 2003, to 39 percent in 2010, and down to 36 percent in 2019. Meanwhile, the percentage of households speaking mostly English has increased, rising from 53 percent in 2010 to 58 percent in 2019.<sup>34</sup>

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<sup>32</sup> Simon Paneak Memorial Museum.

<sup>33</sup> North Slope Borough, North Slope Borough 2019 Economic Profile & Census Report (Utqiagvik, AK, 2019), 42, accessed October 1, 2025, <https://www.north-slope.org/your-government/nsb-economic-profile-census-report/>.

<sup>34</sup> North Slope Borough, 2019 Economic Profile & Census Report.

Perhaps most concerning is the growing number of Iñupiat households in Anaktuvuk Pass that report having no Iñupiaq speakers at all. This figure has grown significantly over the years, from nearly 24 percent in 2003, to over 32 percent in 2010, and to 42 percent in 2019.

The decline in Iñupiaq use across the North Slope is even more pronounced when viewed through a generational lens. The 2019 NSB Census found a clear connection between age and fluency. There is a sharp contrast between those under the age of 35 and those in older age groups. In 2019, less than one in ten Iñupiat aged 18 or younger spoke Iñupiaq. Fewer than one-fourth (21 percent) of all fluent speakers were under the age of 40. Meanwhile, two-thirds (66 percent) of individuals who either spoke or understood Iñupiaq were over the age of 35. In comparison, only 33 percent of those who spoke or understood the language were between the ages of 2 and 35. These figures illustrate the generational divide and highlight how fluency has become increasingly rare among younger Iñupiat.

The use of Iñupiaq has declined over time, shaped by both systemic disruption and cultural shifts. One of the most significant impacts came from the era of boarding schools. For much of the 20th century, many Alaska Native children were sent away, sometimes thousands of miles from home to schools run by the federal government, religious organizations, or later the State of Alaska. Some attended schools within the state, while more than a thousand were sent as far away as Oregon, Oklahoma, and New Mexico.<sup>35</sup> These institutions often operated with the goal of assimilation, and students were regularly punished for speaking their language. Many returned home fluent in English, but with fewer opportunities to continue using Iñupiaq or reconnect with the cultural knowledge carried through the language.

The boarding school experience had a lasting impact on language and cultural identity. Students were frequently punished, sometimes physically, for speaking their Native languages. These environments were designed to promote assimilation, at the cost of personal and cultural heritage. Many students returned home fluent in English, but with a limited ability to use Iñupiaq and less exposure to the cultural knowledge passed down through the language. Upon returning home, many found it difficult to reintegrate into their communities, having missed out on learning essential traditional skills and knowledge.<sup>36</sup>

Although the 1976 *Tobeluk v. Lind* decision required the State of Alaska to establish a system of village high schools, the generational impact of boarding schools had already taken root. The effects of that period continue to reverberate through generations. Many who lost fluency in Iñupiaq were unable to pass it on to their children. Today, Iñupiaq is considered endangered. The Alaska Native Language Preservation & Advisory Council estimates that there are currently only 500 to 1,500 highly proficient Iñupiaq speakers in Alaska, with an additional 5 to 50 highly proficient second-language speakers.<sup>37</sup>

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<sup>35</sup> Diane Hirshberg and Suzanne Sharp, *Thirty Year Later: The Long-Term Effect of Boarding Schools on Alaska Natives and Their Communities* (Anchorage, AK: University of Alaska Anchorage, Institute of Social and Economic Research, 2005).

<sup>36</sup> Hirshberg and Sharp, *Thirty Year Later*.

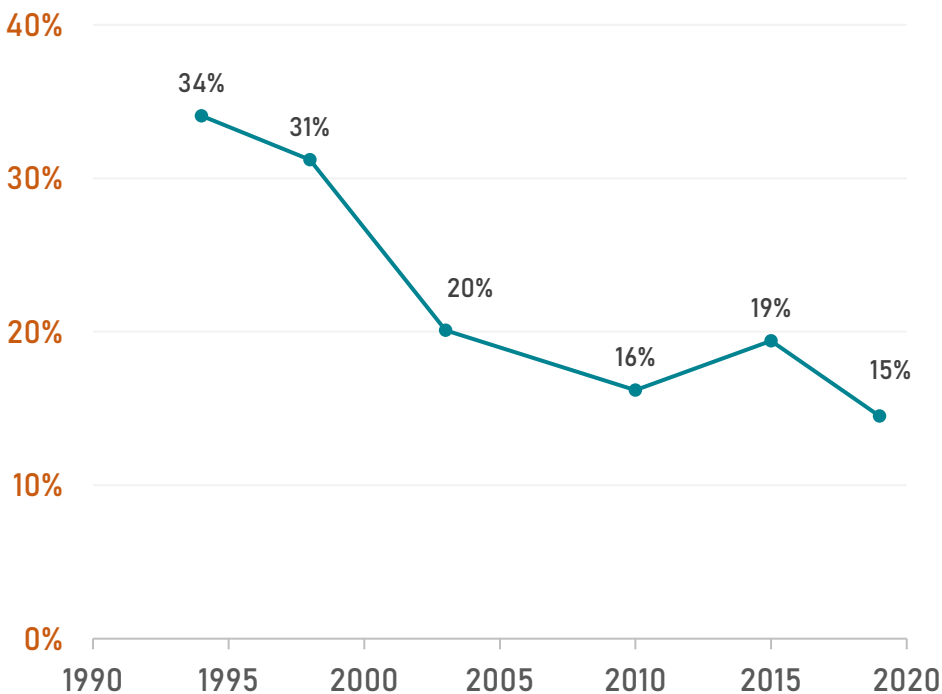
<sup>37</sup> Alaska Department of Education and Early Development, "Alaska Native Language Preservation & Advisory Council," 2023, accessed October 1, 2025, <https://education.alaska.gov/canl>.

Language is more than a means of communication; it is a foundation for cultural identity, connection, and knowledge transfer. Speaking Iñupiaq allows individuals to engage more fully in traditional activities, form deeper relationships with elders, and maintain a strong sense of belonging and pride. Fluency in the Iñupiaq language also allows for deeper engagement in cultural practices and community life.

Recognizing the urgency of the situation, the Borough's IHLC partnered with Rosetta Stone's Endangered Languages Program to develop an online Iñupiaq language course. This initiative focuses on helping adults learn or relearn Iñupiaq, with the goal of bridging generational gaps in fluency. In 2024, the North Slope Borough School District (NSBSD) launched *Uqautilunja Iñupiatun* ("Speak Iñupiaq to Me"), an immersion program that begins at the pre-kindergarten level. The district intends to expand the program through high school and to bring it to more communities across the North Slope.<sup>38</sup>

The effort to revitalize the Iñupiaq language is not only about preserving words, but also about safeguarding a way of life. While the challenges are significant, sustained efforts across generations offer real hope. With continued investment in education, community programs, and intergenerational learning, future generations may not only speak Iñupiaq, but continue to live its values, carrying forward the cultural legacy of the Iñupiat people.

Figure 1: Fluent Iñupiat Speaker, 1994 - 2019



<sup>38</sup> Alena Naiden, "Iñupiaq Immersion Program's Revival in Utqiagvik Sparks Plans for Growth," Anchorage Daily News, January 2, 2024.

## Governance

Anaktuvuk Pass has both municipal and tribal governments, both local and regional. Each of these four governmental organizations is described below.

**City of Anaktuvuk Pass:** The City of Anaktuvuk Pass is a second class city and a subdivision of the North Slope Borough. It that was originally incorporated as a fourth class city in in 1959. The seven members of the City Council are elected at-large and the mayor is elected by the Council. The Mayor leads the City Council and is responsible for day-to-day management with assistance from a city administrator.

**Naqsrarmiut Tribal Council:** The seven-member Naqsrarmiut Tribal Council governs the Village of Anaktuvuk Pass, a federally recognized tribe. It was established under authority of the Indian Reorganization Act (IRA) of 1934. The Naqsrarmiut Tribal Council is a member of the Iñupiat Community of the Arctic Slope (ICAS) regional Tribal government.

**Iñupiat Community of the Arctic Slope:** ICAS is the regional tribal government for all the North Slope villages. It was established in 1971 as an Indian Reorganization Act (IRA) government and is one of only two regional sovereign Tribal governments in Alaska recognized by the United States government.

**North Slope Borough:** Anaktuvuk Pass is located within the North Slope Borough (NSB or Borough), a regional home-rule government comprised of 94,763 square miles of northern Alaska. It retains all power not specifically restricted by its charter or by state law. The Borough provides some services for Anaktuvuk Pass residents, including planning and zoning authority. The NSB generally levies a property tax of 18.5 mills, with authority for up to 20.0 mills.

The NSB Department of Planning and Community Services administers the subdivision and zoning ordinances in Titles 18 and 19 of the NSBMC. The Department strives to provide a balanced and orderly community development process and to encourage economic development throughout the Borough (NSBMC § 19.05.040). It issues administrative zoning permits through the authority of Title 19 (Zoning Code) and approves subdivisions through Title 18 (Subdivision Code).

One person from each North Slope village is appointed by the Mayor and confirmed by the Assembly to serve on the Borough Planning Commission (NSBMC § 2.12.010). The Planning Commission is responsible for preparing the Borough's Comprehensive Plan and recommending its approval to the Assembly. In addition, the Planning Commission:

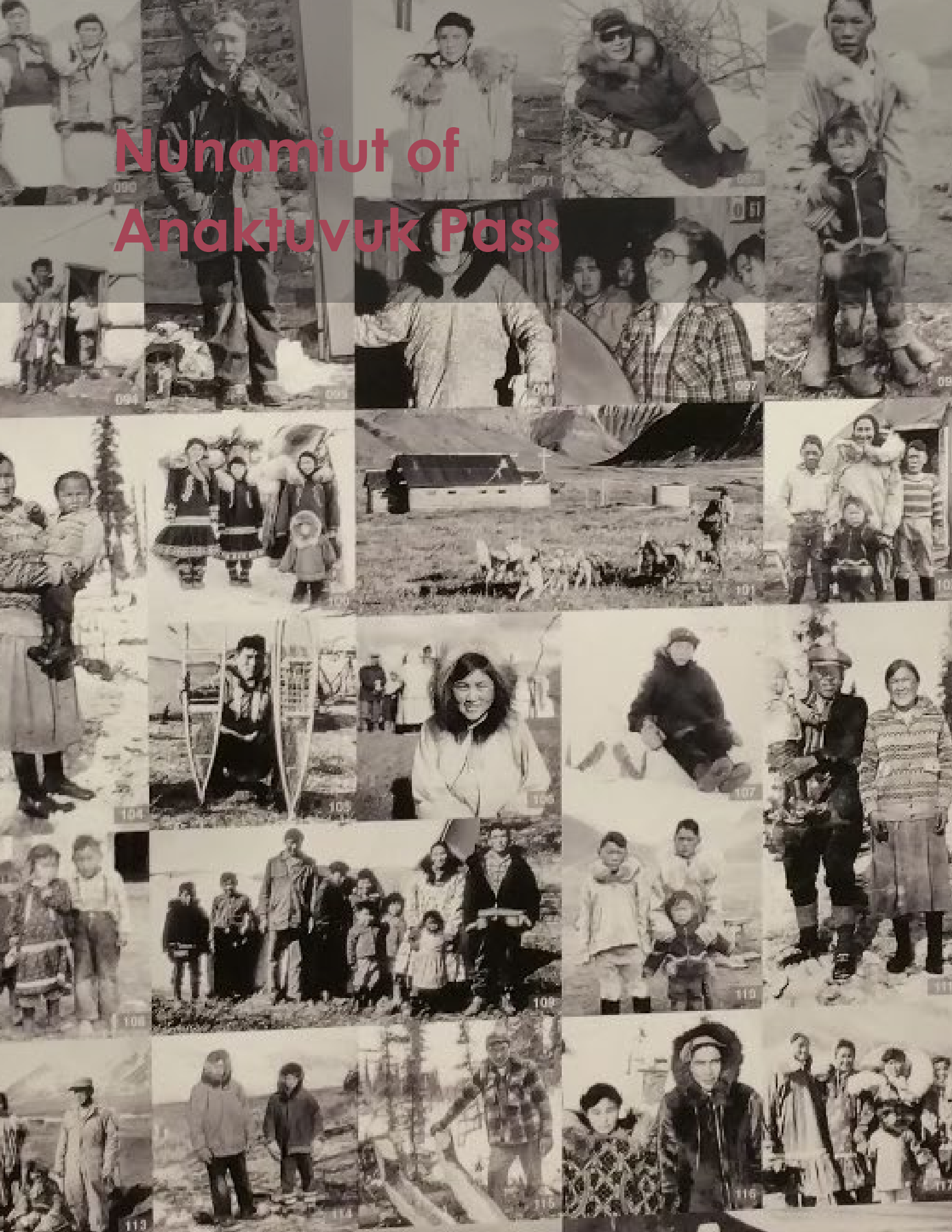
- Makes recommendations to the Assembly on amendments to Titles 18 and 19 and zoning amendments (outside of Barrow);
- Reviews the annual capital improvements program and 6 Year Capital Plan and submits a recommendation to the Assembly;
- Makes recommendations to the Assembly on public improvements;
- Decides on preliminary plats for subdivisions under Title 18;



- Reviews NSB Planning and Community Services Department permits and approvals and hears and decides conditional use permits and appeals of administrative permit decisions; and
- Provides a forum for North Slope village residents to voice concerns, receive answers to questions on a wide range of topics and obtains information on activities planned in a village's general vicinity and subsistence use area.



# Nunamiut of Anaktuvuk Pass



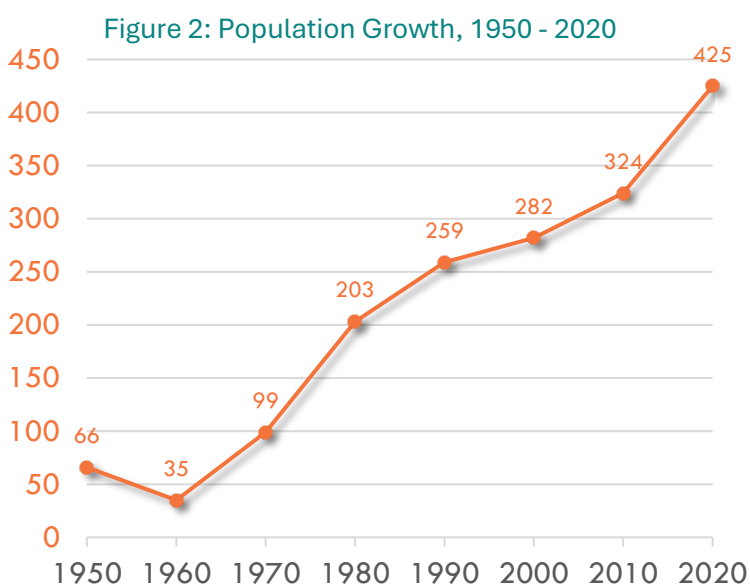
The people of Anaktuvuk Pass form a close and resilient community, made up primarily of Alaska Natives who have occupied this region for hundreds of years. This chapter provides an overview of key demographic characteristics, including population size and trends, racial composition, age distribution, and dependency ratios. It also considers factors that may influence future population growth, such as birth rates, migration, and the return of younger generations.

The Borough conducts its own population census on a regular basis, generally every five to seven years, with surveys completed in 1988, 1992, 1998, 2003, 2010, 2015, and 2019. These borough-led counts typically reach nearly all households in the villages and a substantial share in Utqiagvik. The NSB Census collects a wide range of data, including employment, income, education, housing, subsistence harvests, health indicators, food security, voting patterns, and Iñupiaq language fluency. The results help the borough identify community needs, design targeted programs, and support long-range planning, grant applications, and Tribal initiatives. This chapter draws heavily on that locally gathered data.

The State of Alaska’s population estimates build on U.S. Decennial Census and American Community Survey data supplemented with birth and death records, PFD data, and other administrative sources<sup>39</sup> while the NSB Census is based on firsthand, door-to-door data collection within its communities. The Borough effort has produced extremely accurate figures, particularly for remote villages that are often difficult to estimate. The federal census has undercounted the number of North Slope residents in the past, with the State of Alaska’s figures perpetuated those errors. To address the problem, the borough has routinely appealed the state’s counts, noting that population totals directly influence funding – each resident generates a significant amount in annual borough tax revenue.

## Historical Population

About 31 people settled the village of Anaktuvuk Pass during the late 1940s. According to the NSB Census<sup>40</sup> from 2019, Anaktuvuk Pass had 376 residents. The U.S. Decennial Census in 2020 estimated the AKP population at 425<sup>41</sup>. Since then, population estimates certified by the State of Alaska Department of Commerce, Community and Economic



<sup>39</sup> Alaska Department of Labor and Workforce Development, Research and Analysis Section, “About Population Estimates,” LaborStats.Alaska.Gov, accessed October 2, 2025, <https://live.laborstats.alaska.gov/pop/about.html>.

<sup>40</sup> North Slope Borough, North Slope Borough 1998, 2003, 2010, 2015, 2019 Economic Profile and Census Report (Utqiagvik, AK).

<sup>41</sup> U.S. Bureau of the Census, Census of Population: 1960, 1970, 1980, 1990, Vol. I, Characteristics of the Population, Alaska (Washington, D.C.: U.S. Government Printing Office, 1992), accessed October 1, 2025, <https://live.laborstats.alaska.gov/article/decennial-census-data-alaska>.



Development (DCCED) indicate that the 2024 village population is 395<sup>42</sup>.

The number of residents can vary seasonally. Subsistence activities may take residents out of the community for weeks at a time and some teachers at Nunamiut School and their families live elsewhere during the summer months.

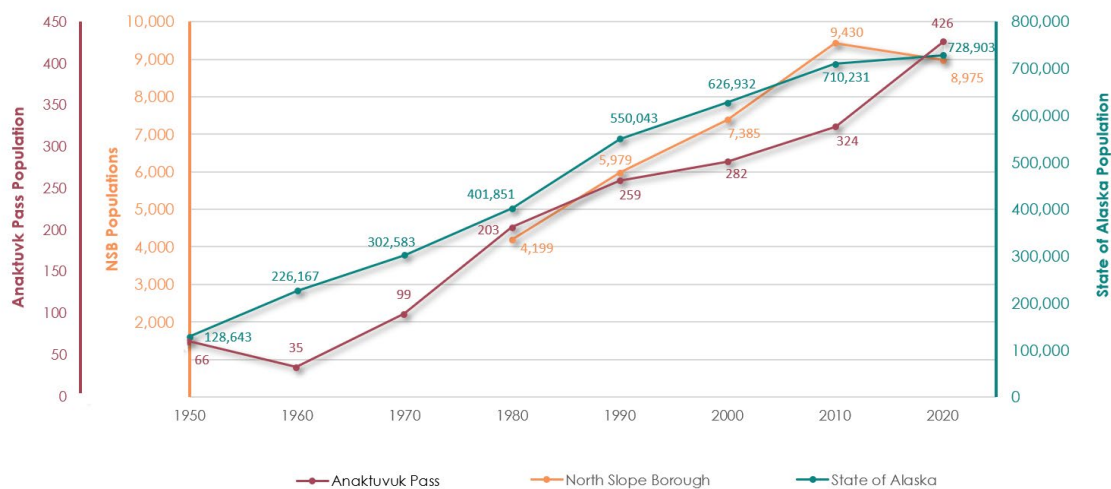
Table 1 provides a historical perspective of Anaktuvuk Pass's population since the village was established. Complementing Table 1 is Figure 2, graphically depicting the population changes between 1950 and 2020.

**Table 1: Historical Population, 1950- 2024**

Year	Population	Source
1950	66	U.S Decennial Census
1960	35	U.S Decennial Census
1970	99	U.S Decennial Census
1980	203	U.S Decennial Census
1990	259	U.S Decennial Census
1998	314	NSB Census
2000	282	U.S Decennial Census
2003	346	NSB Census
2010	324	U.S Decennial Census
2010	388	NSB Census
2014	375	DCCED Certified
2015	348	NSB Census
2019	349	NSB Census
2020	425	U.S Decennial Census
2024	395	NSB

<sup>42</sup> Alaska Department of Commerce, Community, and Economic Development, "Population Adjustment," Mapping, Analytics, & Data Resources, last modified 2025, accessed October 1, 2025.

Figure 3: State of Alaska, NSB, and Anaktuvuk Pass Populations, 1950- 2024



## Population Trends

The population of Anaktuvuk Pass has generally increased over time, with only one notable decline between 1950 and 1960. The 1960 U.S. Decennial Census recorded a drop from 66 residents in 1950 to just 35 in 1960, followed by a rebound to 99 residents in 1970. According to the Anaktuvuk Pass Tri-lateral, the 1960 decrease was primarily due to older children attending boarding schools outside the community. Seasonal movement for subsistence activities may have also influenced census counts, depending on when census takers visited.<sup>43</sup>

From 1970 to 1980, the population doubled, increasing by 104 people to reach 203 residents.<sup>44</sup> This growth corresponded with the passage of the Alaska Native Claims Settlement Act (ANCSA), when many Native Alaskans returned to their home communities to reclaim land and participate in newly formed village corporations. The return of families also reinforced cultural ties and increased the demand for housing, services, and local infrastructure. By 1990, the U.S. Census recorded 259 residents. Between 1980 and 2000, growth stabilized, with an increase of 79 people over two decades.<sup>45</sup>

Between 2000 and 2010, the population grew by at least 42 people, although the North Slope Borough Census showed a larger increase than U.S. Census figures. Designed to be more thorough, the NSB Census likely captured residents historically undercounted in federal counts. Today, the community continues to grow, with the estimated 2024 population reaching 395 people.

## 2003–2019 Demographic Shifts

From 2003 to 2019, the population remained relatively stable, fluctuating between 346 and 388 residents. The largest increase occurred between 2003 and 2010, when the population grew by 42

<sup>43</sup> U.S. Bureau of the Census, Census of Population: 1960, 1970, 1980, 1990.

<sup>44</sup> U.S. Bureau of the Census, Census of Population: 1970, 1980

<sup>45</sup> U.S. Bureau of the Census, Census of Population: 1980, 2000

people (12.1 percent). This was followed by a modest decline of 13 residents by 2015 and then stability through 2019.<sup>46</sup>

## Community Characteristics

Table 2 provides details on specific Anaktuvuk Pass population characteristics and the changes that have taken place between 2003 and 2019 based on the NSB Census.

Table 2: Population Characteristics, 2003, 2010, 2015, 2019

Resident Characteristic	1993	1998	2003	2010	2015	2019
Total Population	270	314	346	388	375	376
Female	50.4%	53.5%	48.2%	45.7%	48.3%	43.6%
Male	49.6%	46.5%	51.8%	54.3%	51.7%	56.4%
Median age	18	20	23	25	26	27
Median age of females	17	18	21	27	28	27
Median age of males	22	25	26	24	26	26
Percent of population 16 years of age and younger	%	%	40%	31.9%	34.3%	35.5%
Percent of population 65 years of age and older	%	7%	4%	3.1%	6.7%	5.1%
Dependency Ratio ( $\leq 16$ and $\geq 65$ )	%	%	45.8%	36.6%	41.0%	40.6%
Average household size	3.54	3.96	3.54	3.61	3.61	3.6
Ethnicity						
Iñupiat	90.6%	92.0%	88.3%	87.5%	88.9%	91.4%
Caucasian	8.2%	6.4%	8.6%	6.6%	8.4%	5.7%
Other	1.2%	2.2%	3.1%	5.9%	2.7%	2.9%
Labor Force						
Size of labor force (16-64)	132	147	178	175	157	143
Percent of labor force with permanent full-time employment	%	39.5%	34.9%	43.4%	50.9%	45.4%
Percent of labor force underemployed*	%	30.6%	31.3%	44%	43.4%	34%
Percent temporary/seasonal	%	%	26.6%	7.4%	13.8%	%
Percent of labor force unemployed	8.74%	0.07%	20.1%	34.9%	26.1%	38.5%
Iñupiat Language						
Iñupiaq speakers (percent of population who are fluent)	34.1%	31.2%	20.1%	16.2%	19.3%	14.5%
Income						
Per capita income	\$	\$12,584	\$11,437	\$13,619	\$17,105	\$18,114
Average household income	\$	\$52,732	\$40,549	\$53,011	\$61,414	\$68,057

\* Includes those who believe themselves to be underemployed and those who worked less than 40 weeks/year

## Age and Gender

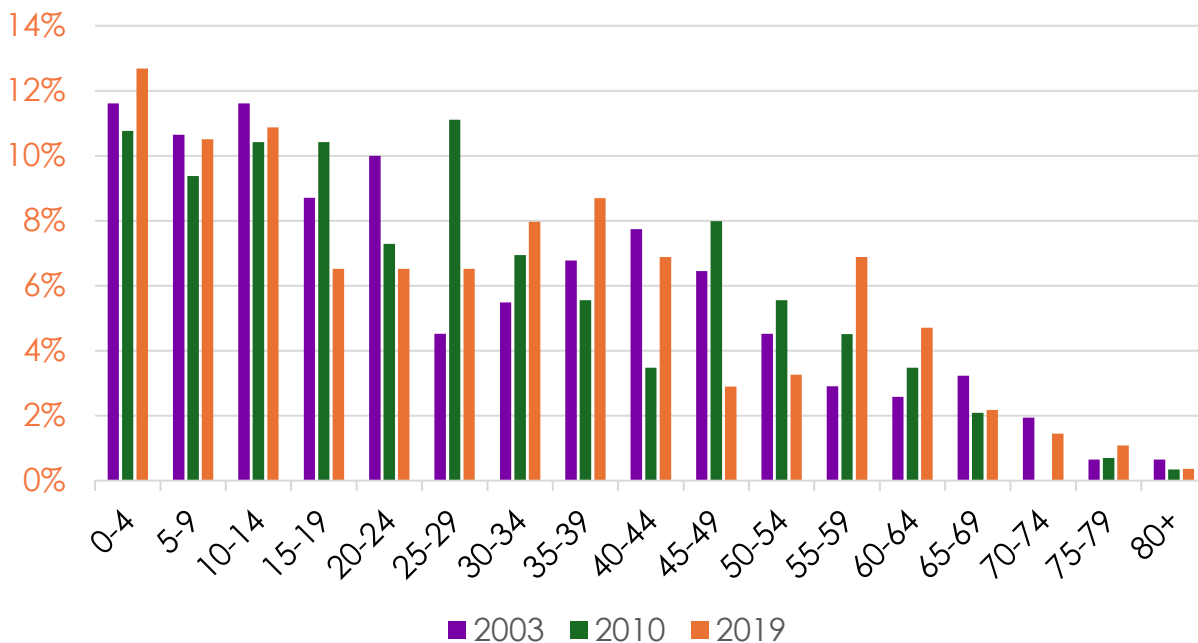
Median age trends suggest gradual aging, though the community remains relatively young. In 2003, the median age was 23, rising to 27 by 2019. Female median age rose from 21 in 2003 to 27 in 2010

<sup>46</sup> North Slope Borough, 2019 Economic Profile and Census Report.

and remained stable, while male median age dipped slightly to 24 in 2010 before climbing back to 26. The percentage of residents under 16 years declined from 40 percent in 2003 to 33.7 percent in 2010, then rebounded slightly to 35.5 percent in 2019. The proportion of residents 65 years and older remained small, ranging from 5.8 percent in 2003 to 6.7 percent in 2015 before dropping to 5.1 percent in 2019. In 2019, the median age was 33.6 in Alaska and 38.4 in the United States.<sup>47</sup>

The NSB 2010 Census shows that between 2003 and 2010, the dependency ratio – the number of people that are below age 16 or above age 64 (dependents) compared to wage earners – declined significantly, as shown in Table 3.<sup>48</sup> In 2010, Anaktuvuk Pass had 50 percent fewer elders than in 2003, along with a 10 percent decrease in children under the age of 16. However, in more recent years, both the number of children and the number of elders have grown relative to the labor force, resulting in an increased dependency ratio.<sup>49</sup>

Figure 4: Resident Age Distribution, 2003, 2010, 2019



The gender balance shifted between 2003 and 2019, with males increasing from 51.8 percent of the population in 2003 to 56.4 percent in 2019, and females decreasing from 48.2 percent to 43.6 percent. This change may reflect migration patterns, such as men moving in for employment opportunities and women leaving for education or work, as well as natural variability in small populations.<sup>50</sup>

<sup>47</sup> North Slope Borough, 2019 Economic Profile and Census Report.

<sup>48</sup> North Slope Borough, 2010 Economic Profile and Census Report.

<sup>49</sup> North Slope Borough, 2019 Economic Profile and Census Report.

<sup>50</sup> North Slope Borough, 2019 Economic Profile and Census Report.



Figure 5: Resident Age Distribution

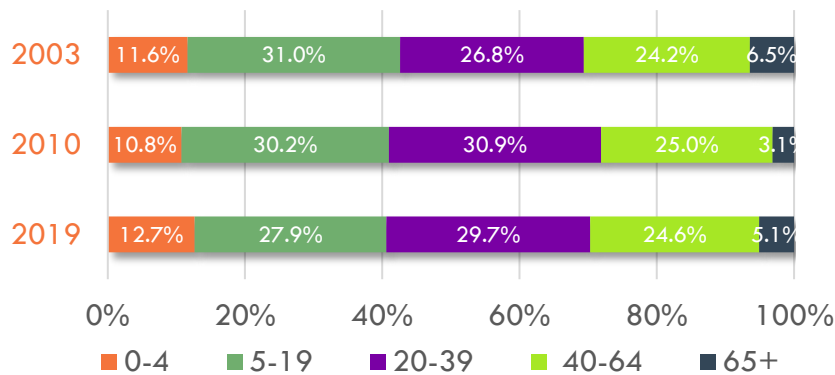


Table 3: Resident Age Distribution, 2003 - 2019

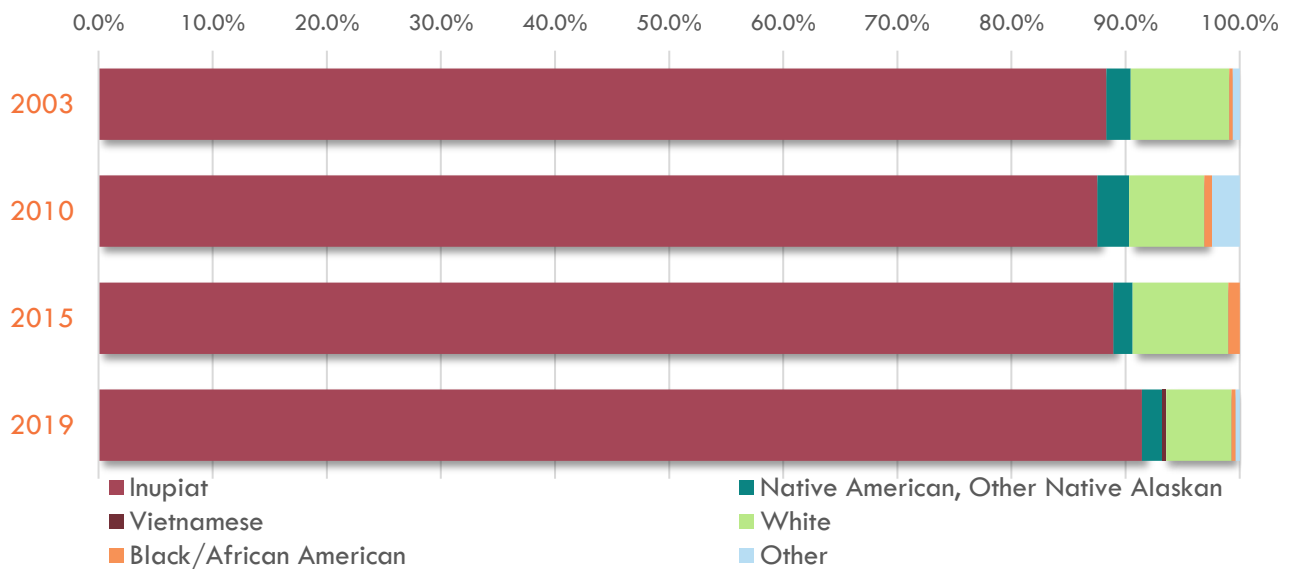
Age Range	2003		2010		2015		2019	
	AKP	NSB	AKP	NSB	AKP	NSB	AKP	NSB
Ages 0 - 4	11.6	9.8	10.8	11.7	12.9	11.8	12.7	11.2
Under 15	33.9	31.8	30.6	28.9	20.0	31.5	34.1	33.3
15 - 64	59.7	62.3	66.3	66.1	60.3	62.8	60.9	60.9
65+	6.5	5.8	3.1	5.0	6.8	5.7	5.1	5.8
Youth Dependency Ratio	56.7	51	46	43.7	33.1	50.1	55.9	54.6
Age Dependency Ratio	6.5	5.8	3.1	5.0	6.8	5.7	5.1	5.8
Total Dependency Ratio	40.3	66.1	33.7	54.4	39.7	63.8	39.1	68.4

## Ethnicity and Language

The community has consistently maintained a strong Iñupiat majority, increasing from 88.3 percent in 2003 to 91.4 percent in 2019. The proportion of Caucasian residents declined from 8.6 percent to 5.7 percent, while those identifying as another ethnicity fluctuated between 2.7 percent and 5.9 percent. Despite the high percentage of Iñupiat residents, the share of the population fluent in the Iñupiaq language has declined, from 20.1 percent in 2003 to 14.5 percent in 2019, with a brief rebound to 19.3 percent in 2015. A more detailed discussion of language is found in Section xx.<sup>51</sup>

<sup>51</sup> North Slope Borough, 2019 Economic Profile and Census Report.

Figure 6: Race, 2003 - 2019



### Household Size

Between 2003 and 2019, household size remained consistent, averaging between 3.54 and 3.61 people per household. This stability likely reflects both enduring cultural and economic patterns favoring multi-person households, often including extended family members. However, it also reflects the substantial lack of new housing in the community. In 2010, the average household size was 3.61 persons overall, but there were notable differences by ethnicity. The average Iñupiat household had 3.8 people, with about half containing four or more members, while the average Caucasian household size was 2.18, with all having four members or fewer. A similar pattern appeared in 2019, when the median household size for Iñupiat families was 3.73 people compared to 2.29 people for non-Iñupiat households.<sup>52</sup>

<sup>52</sup> North Slope Borough, 2019 Economic Profile and Census Report.

Figure 7: Dependency Ratio, 2003 - 2019

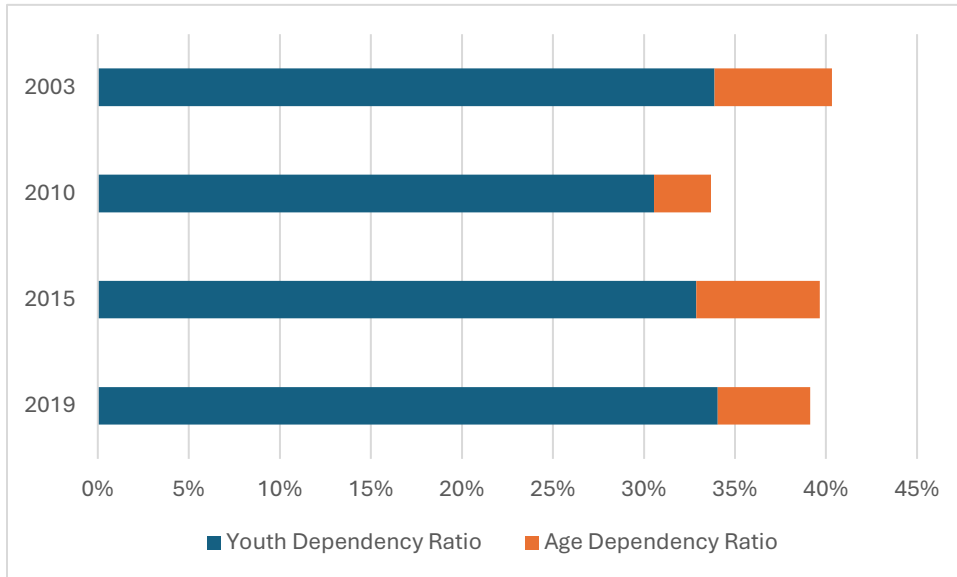
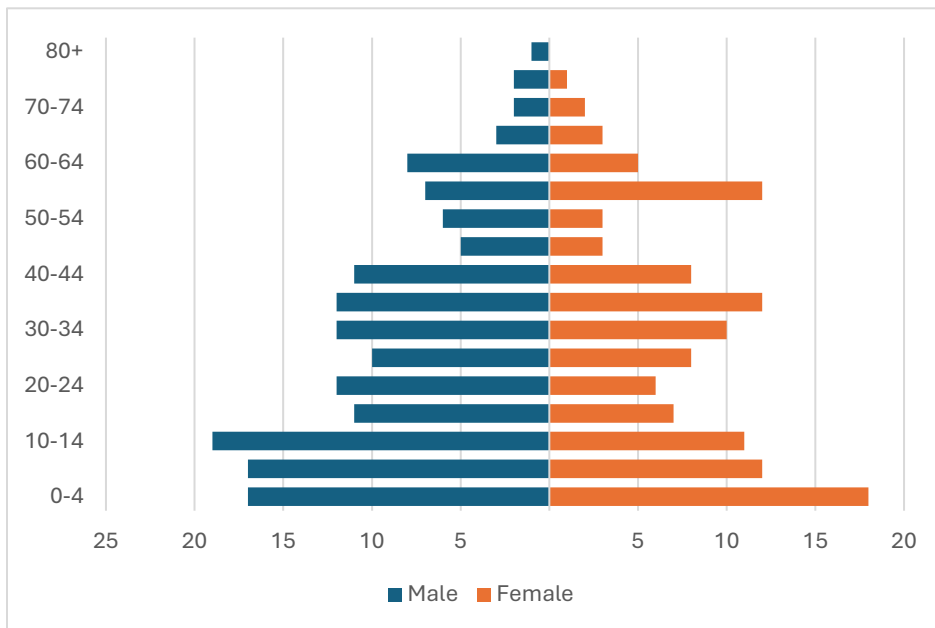


Figure 8: Population Pyramid, 2019



## Population Growth

In Anaktuvuk Pass, population growth has been shaped more by children being born than by new families moving in. This natural increase, more births than deaths, has steadily added to the community's numbers over the years. Because the State of Alaska protects the privacy of small communities, births and deaths are reported in five-year rolling averages rather than as exact annual counts. These long-term snapshots smooth out year-to-year variation and help reveal the bigger picture.

The story told through 5-year averages in Anaktuvuk Pass is one of steady family growth. The most births were during the 2012–2016 period, with other intervals between about 2008 and 2016 close behind. The smallest counts, 38 births, came at both the beginning and end of the time frame shown in Figure 9. Still, in every single period, births outpaced deaths by at least 20, keeping natural increase a constant driver of population change.

When it comes to residents moving in or out of the community, the picture is less clear. Neither the U.S. Census nor the Borough tracks detailed migration data for communities like Anaktuvuk Pass. Stories from residents help fill in the blanks: young adults leaving for college, job seekers heading to other parts of the state, or families relocating to be closer relatives in other communities. Those who move in often come to be near family or for cultural ties to the land and tradition.

One way to glimpse these patterns is through PFD records, which track applicants by community each year. The State of Alaska notes that the Northern Region (including the North Slope and Northwest Arctic Boroughs and the Nome area) and the Southwest Region have long lost more residents than they've gained, often to larger towns and cities. The Northern region has experienced a net migration loss for decades. High birth rates have helped Northern Region communities like Anaktuvuk Pass maintain and grow their populations despite the net outflow to other areas.<sup>53</sup>

Figure 10 traces PFD applicants in Anaktuvuk Pass from 2000 to 2024, adults and children combined.<sup>54, 55</sup> The totals tell a story of steadiness over this 24-year period. The applicant peak was in 2013 with 326 applicants; the lowest number was in 2007 with 273 applications. Over time, the graph shows ups and downs but ends almost exactly where it began: in 2024, the number of applicants was nearly the same as in 2000, despite the official population count growing by 113 residents over that span.

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<sup>53</sup> Sara Whitney, "An in-depth look at migration-by-age patterns in Alaska since 1985," Alaska Economic Trends (March 2021) (Anchorage, AK: Alaska Department of Labor and Workforce Development, 2021), accessed October 1, 2025, <https://labor.alaska.gov/trends/trends2021.htm>.

<sup>54</sup> Alaska Department of Revenue, Permanent Fund Dividend Division, Annual Report 2023 (Juneau, AK: State of Alaska: Department of Revenue Permanent Fund Dividend, 2023), <https://pfd.alaska.gov/Division-Info/Annual-Reports>. Accessed October 1, 2025.

<sup>55</sup> Alaska Department of Revenue, "Anaktuvuk Pass PFD Applicants for 2018–2024," personal communication (email from Permanent Fund Dividend Division Operations Manager, Corey Bigelow, June 27, 2025).

In years where both census counts and PFD records are available, the PFD totals almost always trail the population count, except for 2000, when there were two more applicants than official residents. In all other such years, the gap has ranged from just 26 more people than PFD applicants in 2003 to 126 more residents than PFD applicants in 2020, with an average difference of 76.

For state demographers, PFD data is just one part of the equation, used alongside birth, death, and census data to estimate a community's population. However, relying solely on PFD applications can result in an undercount of the population and inaccurate estimates.<sup>56</sup> Not everyone applies for a PFD due to various financial and personal reasons.

The 2019 NSB Census noted ongoing problems with population estimates for rural Alaska, due in part to how the U.S. Decennial Census works. Even in 2010, when the Census Bureau reported that about 74 percent of households mailed in their forms, the rest had to be counted the old-fashioned way — with door-to-door visits. In small, remote communities, those visits can be anything but straightforward. Housing is limited, which can make it hard for census workers to stay long enough to complete their work. Severe weather can delay or even prevent travel. And in some cases, a house that's lived in might be mistakenly marked as vacant.<sup>57</sup> Each of these hurdles chips away at the accuracy of the count. For communities like Anaktuvuk Pass, that means the official population number may tell only part of the story.

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<sup>56</sup> North Slope Borough, North Slope Borough 2015 Economic Profile & Census Report (Utqiagvik, AK, 2015).

<sup>57</sup> U.S. Census Bureau, "Our Censuses," last modified 2020, accessed October 2, 2025, <https://www.census.gov/programs-surveys/censuses.html>.



Figure 9: Births and Deaths on Rolling Five-Year Intervals, 2000 - 2024

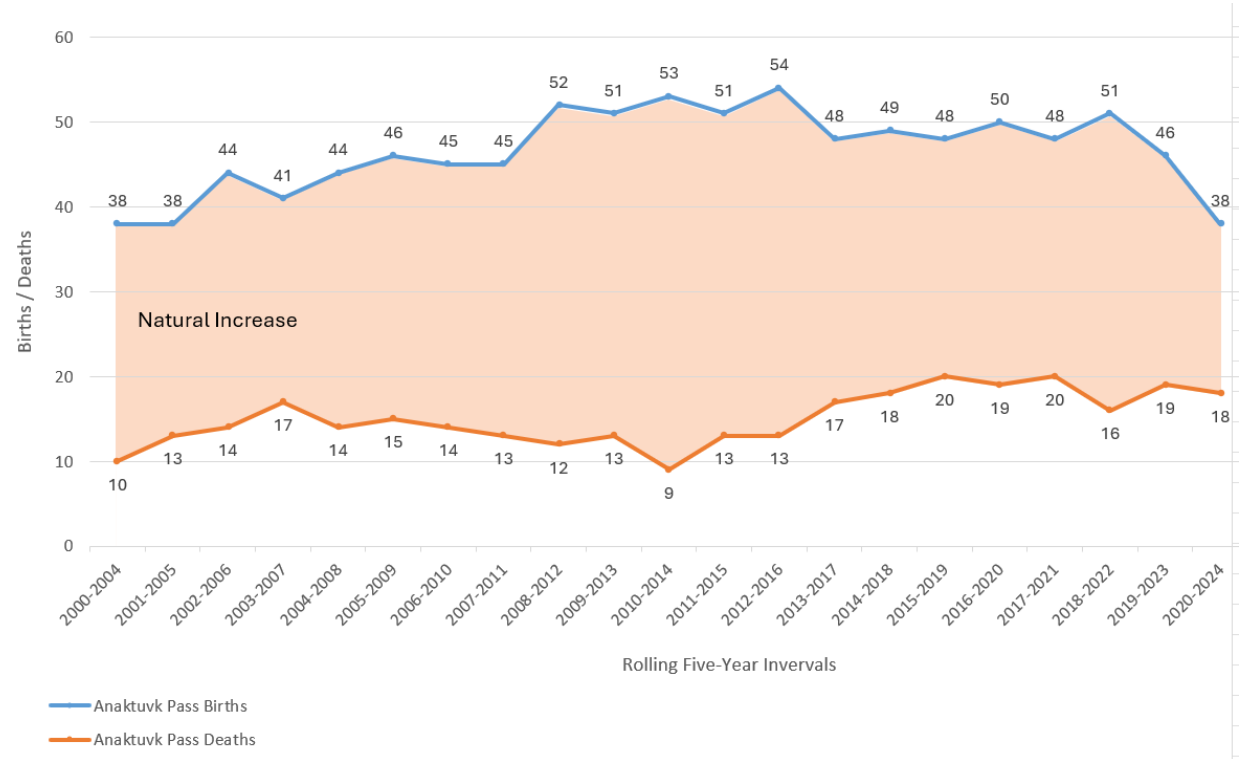
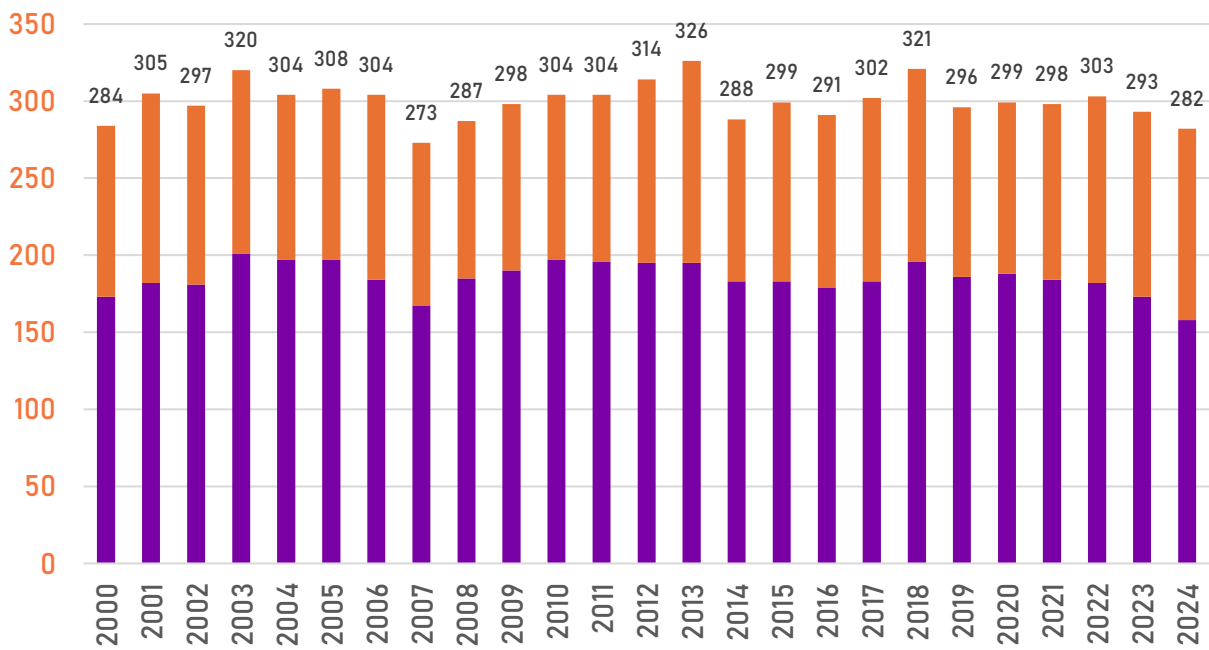


Figure 10: Permanent Fund Dividend Applicants, 2000 - 2024



## Population Growth Projections

Planning for the future of a community begins with knowing how many people are likely to call it home. Accurate estimates of current and future population sizes form the foundation for many decisions, from where to build homes and schools, to how much water and power will be needed, to planning for access to healthcare in the community. For a small, remote place like Anaktuvuk Pass, these projections are more than just numbers on a chart; they help shape how the community grows, adapts, and cares for its people.

Population projections guide how land is used. They help planners ask questions such as: Will more housing be needed in the coming decades? Should space be set aside for another school or a senior center? In a community where land and resources are limited, these choices have long-term consequences, making reliable population estimates essential in meeting the needs of residents.

Infrastructure represents another key factor influenced by population change. Every new resident adds demand to community systems like water treatment, electricity, waste disposal, and schools. By looking ahead, the Borough and community leadership can assess whether the existing systems are strong enough to meet future needs or if upgrades and expansions are necessary. Projections also help guide investments, ensuring that the community remains equipped for growth rather than scrambling to catch up.

Healthcare is equally connected to population. Healthcare providers depend on knowing how many people they will be serving in the future. In remote communities like Anaktuvuk Pass, where access to medical services can already be limited, anticipating future needs for clinic space or expansion, equipment, and trained staff becomes especially important.

Population projections come with uncertainty, particularly in small communities. A single major factor can alter the trajectory. The availability and quality of housing, for example, can determine whether families stay or leave. Improvements in internet access may encourage young people to remain in the community while working remotely or even encourage former residents to return. An abundance or reduction of subsistence wildlife can influence the size of the population. The amount of land available for new housing also directly influences how much the community can grow. If there is not available housing, growth may slow or even decline, no matter what the birth rates suggest.

One common tool for looking ahead is the linear trend projection, which assumes that a community will grow or shrink by about the same number of people each decade as it has in the past. This method is simple, and often just as reliable as more complicated models, but it has limits. With smaller populations, even minor changes, like few families moving in or out, can throw off the projections.

The history of Anaktuvuk Pass illustrates this challenge. Over the past seventy years, growth has been anything but steady. Between 1950 and 2020, the average decadal growth rate was 46 percent, but the swings were wide, from a sharp decline of -47 percent to a dramatic increase of 183 percent.

Such variation shows how difficult it can be to predict population. More recently, the trend in Anaktuvuk Pass has settled somewhat. The past two decades (2000 – 2020) have seen a steadier decadal average growth rate of 18 percent, or about 2.1 percent per year when measured as a compounded annual rate.

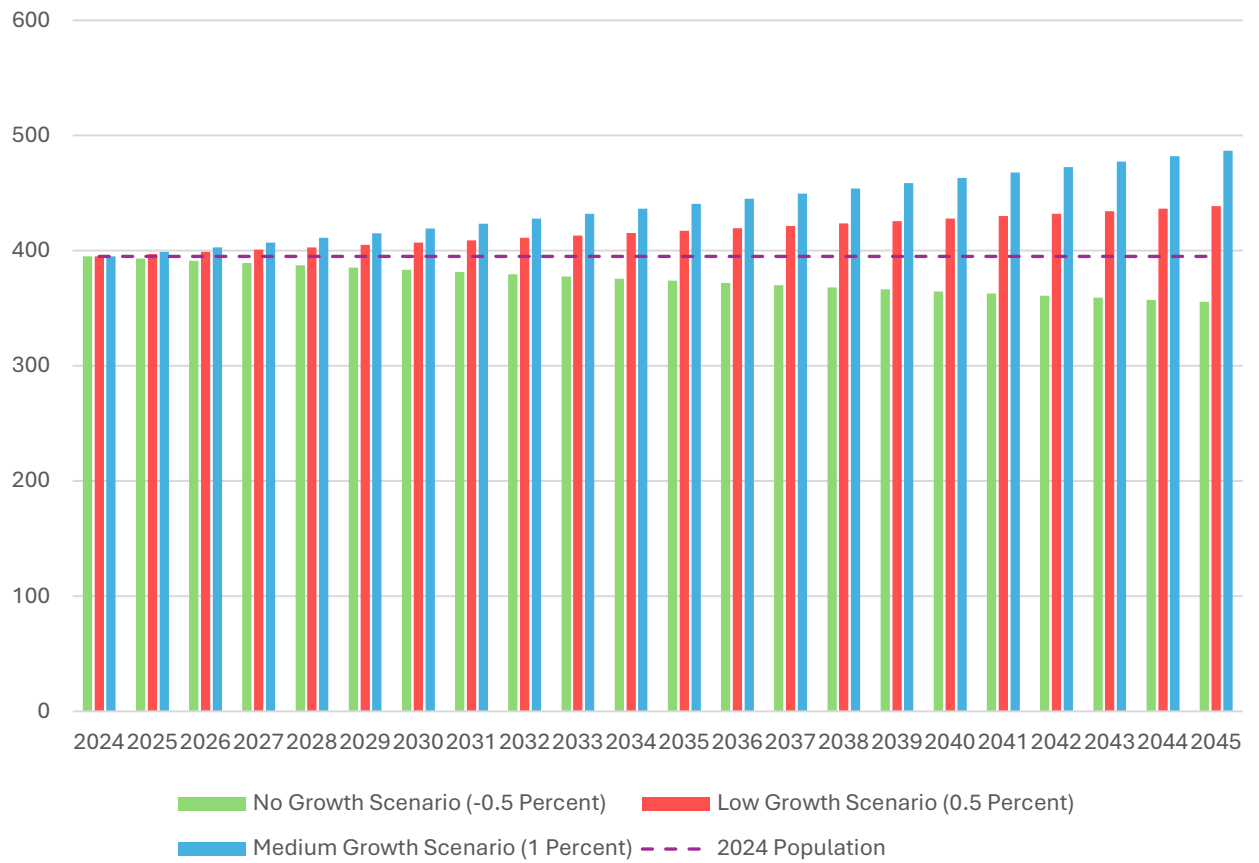
Looking ahead, projections tell two different stories depending on the method used. A percent-based projection model estimates that by 2045, Anaktuvuk Pass could have around 486 residents. A linear trend model, using U.S. Census counts from 2000 and 2020, points higher, to about 604 residents in 2045. Table 4 and Figure 11 show these estimates, as well as a potential range of outcomes based on average annual growth rates of –0.5 percent, 0.5 percent, and 1 percent.

Table 4: Population Projections

Percent Projection						
Rate of Growth	2024 (base year)	2025	2030	2035	2040	2045
1% growth	395	399	419	441	463	487
Linear Trend Projection						
U.S. Decennial Years	2020 (base year)	2025	2030	2035	2040	2045
2000 and 2020	425	462	498	534	570	606

What these figures make clear is not certainty, but possibility. Projecting the future for a small village will always involve some guesswork. That is why it is important to revisit and update population estimates regularly, adjusting for new conditions and opportunities. By staying flexible and responsive, community leaders can use projections as a tool to prepare for the future, helping to enable Anaktuvuk Pass to grow in a way that supports its families and sustains its way of life.

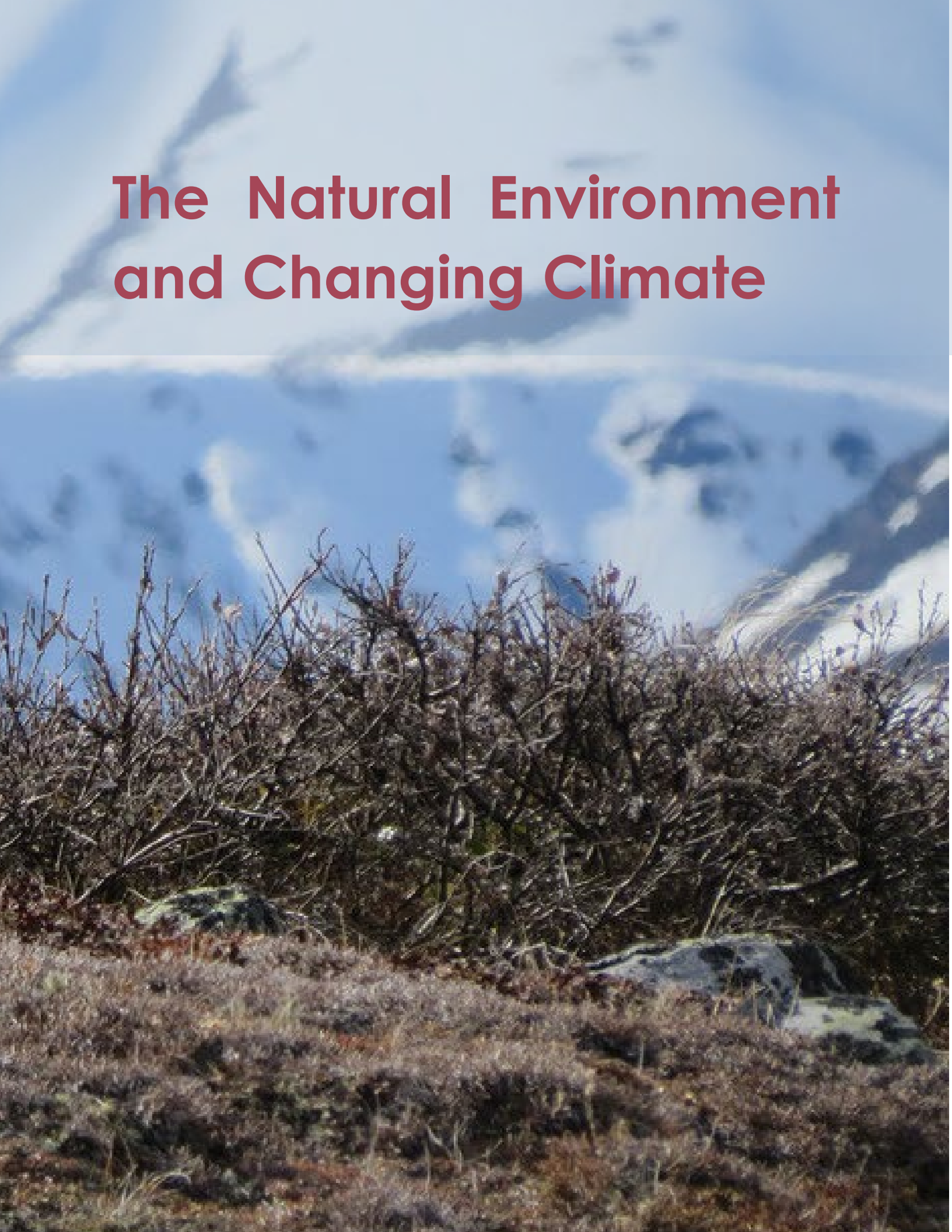
Figure 11: No Growth, Low Growth, and Medium Scenarios, 2024 – 2045







# The Natural Environment and Changing Climate



Anaktuvuk Pass lies in a broad valley along the continental divide, surrounded by the towering Endicott Mountains of the central Brooks Range. Contact Creek flows through the heart of the community toward the Arctic Ocean, while just beyond the valley waters drain south into the Koyukuk and Yukon rivers before reaching the Bering Sea. The intertwined landscape of land, water, and mountains shapes daily life in the community.

The xx residents of Anaktuvuk Pass are Nunamiut, the only inland Iñupiat people of the North Slope. For generations, the Nunamiut have depended on caribou for food, clothing, tools, and cultural identity. The location of Anaktuvuk Pass along a major caribou migration route reflects this deep connection: the community's very name, "Anaktuvuk," means "place of caribou droppings."

Today, Anaktuvuk Pass encompasses about 4.8 square miles of land and a tenth of a square mile of water,<sup>58</sup> situated at 2,200 feet in elevation. It is roughly 250 miles southeast of Utqiagvik, 260 miles northwest of Fairbanks, and 165 miles southwest of Prudhoe Bay. The village sits on the divide between the Anaktuvuk and John rivers,<sup>59</sup> a place where geography, climate, and ecology converge. This chapter provides background on the natural setting, including climate, geography, geology, soils, vegetation, and wildlife, while also considering how a changing climate is altering these patterns.

Much of what is known about the Brooks Range environment comes from Nunamiut hunters, keen observers of the natural world. Among them, Simon Paneak stands out as a respected hunter whose detailed notes and insights provided scientists with the first in-depth understanding of the Brooks Range.<sup>60</sup> His observations of wildlife, migratory birds, and the rhythms of the Arctic landscape became foundational to Arctic research. Paneak's knowledge stood out not only because of his intelligence and precision, but also because he was able to communicate effectively in English, allowing his expertise to reach beyond the community. Yet within Anaktuvuk Pass, such knowledge was not unique—it was expected of a skilled hunter responsible for sustaining family and community in a demanding environment. Paneak's prominence serves as a reminder that the Nunamiut way of life is rooted in generations of lived expertise, a knowledge base that remains vital as the community faces new environmental changes.<sup>61</sup>

### **Gates of the Arctic National Park and Preserve**

The community of Anaktuvuk Pass lies within the federal Gates of the Arctic National Park and Preserve, established in 1980. The purpose is to "preserve the vast, wild, undeveloped character and environmental integrity of Alaska's central Brooks Range and to provide opportunities for wilderness recreation and traditional subsistence uses."<sup>62</sup> The park and preserve span roughly 200 miles north of the Arctic Circle, stretching across the Brooks Range and encompassing 8.4 million acres. Of this,

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<sup>58</sup> Alaska Department of Commerce, Community and Economic Development, "DCRA Open Data Community Database Online," ArcGIS Hub, last modified 2025, accessed October 1, 2025, <https://dcra-cdo-dccd.opendata.arcgis.com/>.

<sup>59</sup> Alaska Consultants Incorporated, Background for Planning: City of Anaktuvuk Pass, prepared for the North Slope Borough ([Anchorage, AK]: Alaska Consultants Incorporated, 1983).

<sup>60</sup> Laurence Irving, "Birds of Amchitka and Kiska Islands, Alaska," *The Auk* 78, no. 3 (July 1961): 412–425, <https://repository.si.edu/items/7f34b137-a3f8-419b-8f8c-e5a2c982de6c>

<sup>61</sup> North Slope Borough, "Simon Paneak."

<sup>62</sup> National Park Service, Foundation Statement: Gates of the Arctic National Park and Preserve (Anchorage, AK, 2014), <https://www.nps.gov/gaar/learn/management/upload/GAAR-Foundation-Statement-2014-508.pdf>.

about 7.1 million acres are designated wilderness, making it one of the largest protected wilderness areas in the United States.

Six federally designated Wild and Scenic Rivers: the Alatna, John, Kobuk, Noatak, North Fork Koyukuk, and Tinayguk, flow within and beyond GAAR, connecting mountains, valleys, and people across the region. The National Wild and Scenic Rivers System was created by Congress in to preserve rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. To the west, GAAR joins the Noatak National Preserve (6.4 million acres), and to the south, the Kobuk Valley National Park (1.7 million acres). Together these three NPS areas form a vast, connected landscape of ecological and cultural importance, stretching from the Dalton Highway on the east almost to the Chukchi Sea on the west.<sup>63</sup> For the Nunamiut, whose community lies at the heart of this region, these lands are not merely public lands; they are the living homeland, central to daily life, history, and subsistence.

### **Soils**

Anaktuvuk Pass sits in a wide valley formed by the divide between the Anaktuvuk and John River watersheds. The Anaktuvuk River flows northward to the Colville River and ultimately to the Beaufort Sea, while the John River runs south to the Koyukuk, a tributary of the Yukon River, before reaching the Bering Sea. Smaller tributaries and lakes, including Eleanor Lake, are scattered across the valley, providing vital water sources for the Nunamiut, fish, and wildlife. Within the community itself, most of the land drains into Contact Creek, which winds north toward the Arctic Ocean.

The valley floor rises about 2,200 feet above sea level, framed by mountains that climb between 6,000 and 7,000 feet. The pass stretches nearly 30 miles long and three miles wide, opening north onto the Arctic Coastal Plain and south into the canyon of the John River, eventually leading into the wooded interior of Alaska.<sup>64</sup>

The soils of Anaktuvuk Pass tell a story of glaciers, wind, and water. Glaciers once filled the valley, carving ridges of gravel and stone and winds shaped sand dunes and bluffs along the rivers. Moss, grasses, and other plants create a thick mat of organic material that insulates the frozen ground. Within the community, soils are mostly loamy fine sand with occasional gravel, underlain by well-drained sands. Their permeability allowed some areas to be more suitable for building than others. However, because permafrost lies beneath, gravel pads and other insulating measures are often used to stabilize homes, roads, and other structures as the ground shifts with thawing.

Surrounding Anaktuvuk Pass, soils are underlain by discontinuous permafrost. Beyond the community, the ground becomes more ice-rich and the permafrost more continuous, sometimes thousands of feet deep.<sup>65</sup> Only the upper “active layer” thaws each summer, often just one or two feet, before freezing again in winter. This shallow, seasonal soil layer limits how deeply plants can

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<sup>63</sup> Alaska Geographic Society, “Alaska National Interest Lands: The D-2 Lands,” *Alaska Geographic Society Magazine* 8, no. 4 (1981).

<sup>64</sup> Laurence Irving, “Birds of Amchitka and Kiska Islands, Alaska,” *The Auk* 78, no. 3 (July 1961): 412–425, <https://repository.si.edu/items/7f34b137-a3f8-419b-8f8c-e5a2c982de6c>.

<sup>65</sup> Alaska Consultants Incorporated, *Background for Planning*.

root and how water drains, which is why the valley floor is dotted with wetlands, ponds, and tundra vegetation.

## **Vegetation**

Three major landscapes converge around Anaktuvuk Pass: the high Arctic Mountains, the rolling Arctic Slope Foothills, and the Spruce Forests of the Alaska Interior.<sup>66</sup> The community itself lies within the dry alpine tundra of the Brooks Range, where hardy groundcover plants, sedges, mosses, lichens, and small shrubs, adapt to the short growing season and cold soils. On drier slopes, heath plants, with their tiny evergreen leaves, also thrive.

North of Tukugak Lake, the land opens into the Arctic Slope Foothills, where tundra meadows and willows grow along streams. To the south, the land changes again, giving way to upland spruce forests with white spruce, balsam poplar, and birch.

Several hundred different kinds of plants grow in the Anaktuvuk Pass region. Many of these, like sedges, grasses, willows, lichens, fungi, and ferns, feed caribou and other animals that the Nunamiut depend on. Willows, spruce, and birch once supplied firewood and were carved into tools, sled parts, and shelter frames. The roots of sweet vetch, often called Eskimo potatoes, were gathered and stored for food through the long winter. In summer, vitamin- and antioxidant-rich berries like blueberries, crowberries, and cloudberry ripen across the tundra.

These plant communities remain important to life in and around Anaktuvuk Pass. They support the caribou and other animals that are central to subsistence and they provide seasonal foods and materials. While modern life has changed some practices, residents still rely on plants native to the region; the health of these plants remains closely tied to the well-being of the community.

## **Wildlife**

The Anaktuvuk Pass region provides habitat for a remarkable array of creatures, particularly during the summer months. Many species are migratory, traveling great distances to the far north to breed, nest, forage, and raise their young.

In the depths of winter, only a handful of species remain in the Anaktuvuk Pass region, each equipped with extraordinary adaptations to endure the cold. Ptarmigan, for instance, have feathered feet that act like natural snowshoes, allowing them to traverse powdery snow with ease, and they can burrow beneath the surface to escape the biting air above. Caribou and moose retreat to the shelter of the boreal forest, browsing on twigs and digging through snow for hidden forage. Tiny mammals like voles and lemmings spend the season in intricate tunnels beneath the snow, staying active and warm while feeding on stores collected during summer. Some species, such as ground squirrels, enter deep hibernation, while black and grizzly bears spend months in a lighter, torpor-like dormancy inside their dens. Fish become largely dormant in the still depths of rivers and lakes under

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<sup>66</sup> Rausch, "Notes on the Nunamiut Eskimo,"

the ice, and beavers remain snug within their lodges, subsisting on cached vegetation until the thaw.<sup>67</sup>

## Migratory Birds

Spring on the North Slope marks the arrival of migratory birds. The Anaktuvuk Pass area and surrounding lands serve as high-density nesting and staging habitat for many species. Numerous lakes, freshwater ponds, and emergent wetlands provide critical breeding grounds for species such as tundra swans and a variety of geese, as well as important molting and staging areas for a variety of waterfowl. About 145 bird species have been observed in the nearby GAAR, including jaegers, gulls, terns, hawks, eagles, falcons, grouse, ptarmigan, owls, warblers, finches, sparrows, longspurs, and buntings.<sup>68 69</sup>

For residents of Anaktuvuk Pass, migratory birds are an essential food source, supplementing caribou as a primary food source. In Alaska, nearly all birds are federally protected under the Migratory Bird Treaty Act (MBTA) of 1918, which makes it illegal to take, possess, or disturb migratory birds, their feathers, eggs, or nests, except for certain resident game species like grouse and ptarmigan, which do not migrate south for winter and are regulated by the state. Until the year 2000, this meant residents of Anaktuvuk Pass, who are primarily Iñupiat, may be in conflict with the MBTA while practicing traditional subsistence activities. For the last 25 years, Alaska Native representatives have worked collaboratively with the US Fish and Wildlife Service (USFWS) to co-manage the spring and summer migratory bird subsistence harvest season and ensure that traditional subsistence activities are exempted through the Alaska Migratory Bird Co-Management Council<sup>70</sup>.

Some avian migrations are extraordinary in distance. The Arctic Tern, for example, travels roughly 15,000 miles from Antarctica to Alaska's North Slope. The Lapland Longspur also covers thousands of miles, while the Northern Wheatear, a small songbird weighing just 18–30 grams, makes a 9,000-mile journey across Asia from Sub-Saharan Africa and on to the Arctic. American Golden-Plovers make non-stop transoceanic flights from Argentina to the Gulf of Mexico before continuing to the North Slope. Eastern Yellow Wagtails migrate from southeast Asia, crossing deserts and stopping in sparse oases along the way.<sup>71</sup>

These journeys are perilous. Storms, headwinds, habitat loss, hunting, and capture for the exotic pet trade all pose significant challenges. Such hazards underscore the importance of the Anaktuvuk

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<sup>67</sup> National Park Service, "Wildlife," Gates of the Arctic National Park & Preserve, last updated November 2, 2022, <https://www.nps.gov/gaar/learn/nature/wildlife.htm>.

<sup>68</sup> Irving, "Birds of Amchitka and Kiska Islands," 415. (A specific page number, such as 415, would be added here if you were citing a particular point.)

<sup>69</sup> North Slope Borough, Department of Wildlife Management, "Common Birds on the North Slope," Migratory Birds, Studies & Research Projects, accessed October 2, 2025, <https://www.north-slope.org/departments/wildlife-management/studies-research-projects/migratory-birds/common-birds-on-the-north-slope>.

<sup>70</sup> US Fish and Wildlife Service, "Alaska Migratory Bird Co-Management Council", accessed October 2, 2025

<sup>71</sup> National Park Service, "Birds," Gates of the Arctic National Park & Preserve, last modified September 15, 2021, <https://www.nps.gov/gaar/learn/nature/birds.htm>.



Pass region's contiguous habitat where generations of birds have raised their offspring and sustained their species.<sup>72</sup>

**Table 5: Common Bird Species in the Anaktuvuk Pass Area**

Bird Type	Common Name	Habitat Type	Habitat Use
Raptors	Bald eagle, tiŋmiaqpak (golden eagle), osprey, red-tailed hawk, qitŋiq (rough-legged hawk), sharp-shinned hawk, gyrfalcon, kirgaviatchauraq, tiŋmiagrūum kirgavia (merlin), takpiilaagruk (boreal owl), naataq (great gray owl), niaquqtuaḡruk (northern hawk owl)	Cliff faces, rock outcrops, river corridors	Feeding, nesting, breeding, molting
Waterfowl	Ugihiq, kurugaḡnaq (American wigeon), ingiulitiutik (black scoter), bufflehead, iqsraḡutilik (Canada goose), canvasback, common goldeneye, qaqłuktuuq, qaqłupalik (greater scaup), niḡlivik, niḡlivialuk (greater white-fronted goose), qaiŋŋiq, kurukaaluḡusiq (green-winged teal), kurugaqtaq, ivugaq, ukhiukhiuq (mallard), harlequin duck, kurugaq, kurugak, ivugaq (northern pintail), aluuttaq, qailuuttaq (northern shoveler), oldsquaw, aqpaqsruayuuq, paisugruk (red-breasted merganser), kaŋuq, kaŋŋuq (lesser snow goose), aiŋuqtuq, aviŋuqtuq, aviŋuqtaq, tuungaaḡruk (surf scoter), quḡruk, qugruk (tundra swan), white-winged scoter	Alpine areas, riverine/riparian zones, lakes	Feeding, nesting, breeding, molting, staging
Gamefowl	Niksaaktunŋiq (rock ptarmigan), aqargiq (willow ptarmigan)	Willow thicket, higher rocky terrain,	Feeding, nesting, breeding, molting
Shorebirds and Gulls	Tulik, tullik, tuulligłuk (American golden plover), Arctic tern, puvviaqtuuyaaq, nuvaksruk (Baird's sandpiper), tullisugruk, tullivak, tuullikpak (black-bellied plover), Bonaparte's gull, kuukukiaq, saavḡaq (common snipe), glaucus gull, herring gull, least sandpiper, uviŋŋuayuuq (lesser yellowlegs), long-tailed jaeger, mew gull, parasitic jaeger, puvviaqtuuq, aiviqiak (pectoral sandpiper), auksruaq (red phalarope), sanderling, qurraaquraq, kurrakuraq (semipalmated plover), liva, livaqpauraq, nivilivilakpak, livalivaq (semipalmated sandpiper), solitary sandpiper, upland sandpiper, wandering tattler, siituvuk, siituvak (whimbrel)	Arctic and alpine tundra, raised landforms and foothills, wetlands, lakes, marshy areas, coastal	Feeding, nesting, breeding,
Passerine	Alder flycatcher, American pipit, kanayurraq, kuyaqpigaqturuq (American robin), misapsaq (American tree sparrow), bank swallow, black-capped chickadee, blackpoll warbler, bohemian wagwing, cliff swallow, tulugaq (common raven), saksakiq, saksanŋiq, saksanŋiuraq, ukpiksiuvuk (common redpoll), fox sparrow, golden-crowned sparrow, gray jay, gray-cheeked thrush, horned lark, putukiiŋuk, putukiufuk, qupałuk (Lapland longspur), Lincoln's sparrow, myrtle warbler, iriḡi, iraiyayuuq (northern shrike), tiŋmiaqpauraq (northern wheatear), orange-crowned warbler, red-breasted nuthatch, (rusty blackbird), qalḡuusiqsuuq, putukiiŋukpak (smith's longspur), amaułligaaluk, amautliḡaq, avataligauraq, avatalik, qupałupiḡauraq (snow bunting), tree swallow, violet-green swallow, misiqqaaquraq, piuḡaq (yellow wagtail), sunaqpaluŋtunŋiq (yellow warbler)	Tundra, willow thickets, riparian areas	Feeding, nesting, breeding, late summer molting
Diving Birds	Common loon, pacific loon, red-throated loon, yellow-billed loon	Freshwater lakes and ponds	Feeding, molting, staging

<sup>72</sup> National Park Service, "Birds."

## Fish

The waters around Anaktuvuk Pass support several fish species, both anadromous and freshwater. Anadromous species, such as Arctic char/Dolly Varden, whitefish, chum salmon, and sheefish, migrate between freshwater and saltwater. Freshwater species include Arctic grayling, lake trout, northern pike, slimy sculpin, and longnose sucker.<sup>73, 74, 75</sup> These fish are integral to subsistence activities and the broader ecological community.<sup>76</sup>

**Table 6: Fish Species in the Anaktuvuk Pass Area**

Type of Fish	Common Name
Anadromous Fish	aṇayuqaksraq (Arctic char/Dolly Varden), aanaakliq (broad whitefish), qalugruaq (chum salmon), siḡruaq or sii (sheefish)
Freshwater Fish	sulukpaugaq (Arctic grayling), iqaluaqpak (lake trout), siulik or siulik (northern pike), kanayuq (slimy sculpin), siulik or siulik (longnose sucker)

## Mammals

The GAAR and the greater Anaktuvuk Pass region supports a wide variety of mammals. Species such as hare, muskrat, squirrel, marten, marmot, fox, muskox, beaver, porcupine, brown and black bear, moose, Dall sheep, wolf, wolverine, lynx, and caribou either reside in or transit through the area. Of these, caribou are by far the most significant to the Nunamiut people, forming the foundation of local food security and cultural traditions.<sup>77, 78 79</sup>

**Table 7: Mammals in the Anaktuvuk Pass Area**

Type of Mammal	Common Name	
Hoofed	Tuttu (caribou), imnaiq or ipnaiq (Dall's sheep), tuttuvak (moose), umiṇmak (muskox)	
Carnivorous	Iggaḡri (black bear), American marten, tigiganniaq (Arctic fox), akīaq (brown bear), coyote, ermine, gray wolf, land otter, pamiuqtuuq (river otter), naulayuq (least	

<sup>73</sup> National Park Service, "Fishing," Gates of the Arctic National Park & Preserve, last updated May 10, 2023, <https://www.nps.gov/gaar/planyourvisit/fishing.htm>.

<sup>74</sup> Alaska Department of Fish and Game (ADF&G), "Alaska Freshwater Fish Inventory (AFFI)," ArcGIS Experience, accessed October 2, 2025, <https://experience.arcgis.com/experience/1a4eb07b42ff4ebb8c71ba45adaedf0c/page/AFFI/>.

<sup>75</sup> National Park Service, "Park Species Lists," Gates of the Arctic National Park & Preserve, last updated September 16, 2021, <https://www.nps.gov/gaar/learn/nature/park-species-lists.htm>.

<sup>76</sup> North Slope Borough, Department of Wildlife Management, "Common Fish on the North Slope," Fish, Studies & Research Projects, accessed October 2, 2025, <https://www.north-slope.org/departments/wildlife-management/studies-research-projects/fish/common-fish-on-the-north-slope/>.

<sup>77</sup> Alaska Department of Fish and Game, "Gates of the Arctic National Park and Preserve Wildlife Viewing," accessed October 2, 2025, <https://www.adfg.alaska.gov/index.cfm?adfg=viewinglocations.gatesofthearctic>.

<sup>78</sup> National Park Service, "Park Species Lists," Gates of the Arctic National Park & Preserve, last updated September 16, 2021, <https://www.nps.gov/gaar/learn/nature/park-species-lists.htm>.

<sup>79</sup> North Slope Borough, Department of Wildlife Management, "Common Mammals of the North Slope," Other Topics of Interest, accessed October 2, 2025, <https://www.north-slope.org/departments/wildlife-management/other-topics-of-interest/common-mammals-of-the-north-slope/>.

	weasel), niutuiyiq (lynx), mink, kayuqtuq (red fox), qavvik (wolverine)	
Insectivores	Shrews: barren ground, common, dusky, pygmy, tiny, ugruṇṇaq (tundra shrew)	
Hares and Rabbits	Pamiuqtuuq (snowshoe hare)	
Rodents	Siksrikpak (marmot), kigiaq or paḷuktaq (beaver), siksrik (Arctic ground squirrel), avinṇaq or aviñṇaq (brown lemming), meadow vole, kivgaluk (muskrat), northing bog lemming, red-backed vole, qinagluk or ilḷaatqusi (porcupine), red squirrel, tundra vole	

### *Caribou*

Anaktuvuk Pass sits in a key migration corridor, where caribou funnel through the Brooks Range each spring and fall. During these seasons, caribou herds numbering in the tens of thousands follow instinctive migration paths. In spring, they move north from Alaska's interior in smaller groups, dispersing across the land until they reach the Coastal Plain. There, they gather in traditional calving grounds where cows give birth, and herds spend the summer feeding on nutrient-rich lichen and moss to build strength for the long winter. In the fall, caribou regroup into massive herds and travel south through the mountains to their wintering grounds. The North Slope caribou herd ranges are illustrated in Map 3.1.

Caribou population numbers rise and fall with natural cycles, but they are also shaped by weather, predation, hunting pressure, and industrial development. Warm spells or winter rain followed by freezing can lock away forage beneath ice, leaving caribou unable to reach lichens. Deep snow, in turn, makes them more vulnerable to predators such as wolves. The health and survival of these herds is directly linked to the food security of Anaktuvuk Pass and other North Slope communities.

### *Caribou Herds in the Region*

Three primary caribou herds overlap in the Anaktuvuk Pass Area of Influence: the Teshekpuk Caribou Herd (TCH), the Central Arctic Herd (CAH), and the Western Arctic Herd (WAH). While each herd is managed as a separate population, their ranges overlap, and intermingling between herds is common. All are barren-ground caribou, well adapted to life in the Arctic.

Adult males can weigh 300 pounds or more in the fall but lose significant weight during the rut, dropping closer to 220 pounds by November. Females are smaller, averaging about 185 pounds in winter. Caribou are uniquely built for their environment. Their long legs and wide, sharp-edged hooves allow them to travel across muskeg and snow while digging through ice to reach buried lichens. In winter, the pads between their hooves shrink and tufts of hair insulate their feet against frozen ground. Their coats also change with the seasons, dark brown after the summer molt, turning

lighter with hollow guard hairs in fall and winter that insulate against the cold and provide buoyancy while swimming.<sup>80</sup>

### Shifting Herd Numbers

Across the Arctic, caribou populations are experiencing steep declines. Caribou numbers have dropped by 65 percent over the last few decades.<sup>81</sup> While natural boom-and-bust cycles explain part of this change, human influences such as climate change, roads, and industrial development are slowing recovery. Only a few herds, including the Teshekpuk and Porcupine herds, are currently considered stable or increasing. Others, like the Western herd, have suffered dramatic declines, dropping 70 percent since 2003. These population shifts directly affect subsistence hunters, who must adapt to changing migration patterns and smaller herds.<sup>82 83</sup>

Accurate herd counts are difficult in part because caribou herds mix, especially during the fall and winter. In recent years, the amount of mixing seems to be increasing; many caribou that are mingled in the winter migrate with a different herd in spring.<sup>84</sup>

### Teshekpuk Caribou Herd

In 2008, the Teshekpuk herd numbered 68,000, but by 2013 that number had dropped to 32,000 due to poor calf survival, adult female mortality, and low nutrition.<sup>85</sup> Encouragingly, recent surveys show recovery, with 61,500 animals recorded in 2022, leading National Oceanic and Atmospheric Administration (NOAA) to classify the herd as “large and Increasing.”<sup>86 87</sup>

The entire range of the TCH includes most of the North Slope except for the eastern part of the Borough south and east of Kaktovik. The herd’s year-round use of the North Slope makes it unique. Many overwinter between Wainwright, Utqiagvik, and Atkasuk, while others range toward Teshekpuk Lake and Umiat and even as far south as the Brooks Range near Anaktuvuk Pass. In spring, cows migrate toward Teshekpuk Lake to calve, and by summer the herd gathers along the Arctic coast for relief from insects. Its summer range includes an area from Wainwright to an area east of Nuiqsut and south to Umiat. The TCH concentrate in the area west of the Colville River near Teshekpuk Lake with some caribou migrating to the area south of the Brooks Range and east into the Arctic National

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<sup>80</sup> Government of the Northwest Territories, “General Description,” Barren-ground Caribou, accessed October 2, 2025, <https://www.gov.nt.ca/ecc/en/services/barren-ground-caribou/general-description>.

<sup>81</sup> Anne Gunn et al., “Migratory Tundra Caribou in a Warmer Climate,” in Arctic Report Card: Update for 2024, ed. Twila A. Moon, Matthew L. Druckenmiller, and Richard L. Thoman (Washington, D.C.: National Oceanic and Atmospheric Administration, 2024), <https://arctic.noaa.gov/report-card/report-card-2024/migratory-tundra-caribou-in-a-warmer-climate/>.

<sup>82</sup> Gunn et al., “Migratory Tundra Caribou.”

<sup>83</sup> Rebecca Lindsey, “2024 Arctic Report Card: Migratory Arctic Caribou Populations Have Fallen by 65%,” News & Features, NOAA Climate.gov, December 10, 2024, accessed October 2, 2025, <https://www.climate.gov/news-features/featured-images/2024-arctic-report-card-migratory-arctic-caribou-populations-have>.

<sup>84</sup> Lincoln Parrett, Jim Dau, and Meghan Nedwick, “Four North Slope Caribou Herds Counted Behind the Numbers: How are the Caribou,” Alaska Wildlife News (Alaska Department of Fish and Game [ADFG]), published August 2014, accessed October 2, 2025, [http://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view\\_article&articles\\_id=678](http://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view_article&articles_id=678).

<sup>85</sup> Parrett, Dau, and Nedwick, “Four North Slope Caribou Herds.”

<sup>86</sup> Gunn et al., “Migratory Tundra Caribou.”

<sup>87</sup> Rebecca Lindsey, “2024 Arctic Report Card: Migratory Arctic Caribou Populations Have Fallen by 65%,” News & Features, NOAA Climate.gov, December 10, 2024, accessed October 2, 2025, <https://www.climate.gov/news-features/featured-images/2024-arctic-report-card-migratory-arctic-caribou-populations-have>.

Wildlife Refuge (ANWR). In fall, they migrate south again, often moving through river valleys near Anaktuvuk Pass and the Coastal Plain.

The TCH faces ongoing threats. Energy development projects such as ConocoPhillips' Willow project and other oil and gas-related infrastructure in the Prudhoe Bay region and within the National Petroleum Reserve-Alaska (NPR-A) are encroaching on the herd's calving and insect-relief areas. As roads, pipelines, airstrips, gravel pads, and gravel mines continue to expand, the TCH migration will become more disrupted and the habitation quality diminished. Industrial development and climate change are reshaping the landscape, eroding shorelines near Teshekpuk Lake, salinizing freshwater habitats, and degrading critical bird nesting grounds and insect-relief areas essential for caribou health.<sup>88</sup>

### Western Arctic Herd

Once the largest caribou herd in Alaska and North America, the Western herd has seen dramatic decline. In 2003, the herd numbered nearly 490,000 animals. By 2013 it had dropped to 235,000, and by 2023 only 152,000 caribou remained.<sup>89</sup>

Caribou in this herd are now migrating later, staying farther north in fall and winter, and crossing key rivers like the Kobuk less frequently than in the past.<sup>90</sup> These changes reflect both climate shifts, such as warmer falls and deeper snow, and habitat transformations, including the spread of woody shrubs that reduce lichen availability.

The WAH occupies an expansive range that covers much of northwestern Alaska, stretching from the Seward Peninsula and Kotzebue Sound northward to the Chukchi Sea and eastward into the central Brooks Range. In winter, caribou are widely distributed, often ranging in the Nulato Hills, the Kobuk River Valley, and areas south of the Brooks Range. While the WAH range can vary year to year, generally in spring, pregnant cows begin a migration toward calving grounds north of the Brooks Range. In summer, large groups seek insect-relief areas along the Arctic coast, where steady winds and cooler temperatures provide refuge; the foothills, where caribou seek where snow patches also provide insect relief. During the fall, the herd migrates southward again, dispersing once again across a vast winter range.

The WAH is central to the subsistence practices of more than 40 rural communities across northwestern Alaska, including Anaktuvuk Pass.<sup>91</sup> Troublingly, the herd faces mounting threats from climate change and industrial development. Thawing permafrost, changing vegetation, and increased wildfire frequency are altering habitat conditions, while proposed road and mining projects could fragment migration corridors. The WAH Working Group was formed "to work together

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<sup>88</sup> Alaska Wilderness League, "Teshekpuk Lake Special Area," accessed October 2, 2025, <https://alaskawild.org/reserve/teshekpuk-lake-special-area/>.

<sup>89</sup> Yereth Rosen, "Western Arctic Caribou Herd Population Decline Continues, as Does Endorsement of Hunting Limits," Alaska Beacon, December 19, 2023, accessed October 02, 2025, <https://alaskabeacon.com/2023/12/19/western-arctic-caribou-herd-population-decline-continues-as-does-endorsement-of-hunting-limits/>.

<sup>90</sup> Rosen, "Western Arctic Caribou Herd Population Decline."

<sup>91</sup> Riley Woodford, "Alaska's Largest Caribou Herd is Declining," Alaska Fish & Wildlife News, June 2012, [https://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view\\_article&articles\\_id=560](https://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view_article&articles_id=560).



to ensure the long term conservation of the Western Arctic caribou herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.<sup>92</sup> The WAH Working Group maintains one seat for the communities of Anaktuvuk Pass and Nuiqsut combined and meets once per year in December to discuss the herd's current status, declining population, and determine which management level is appropriate per the WAH Cooperative Management Plan (updated 2019). In December 2023 the WAH Working Group designated the herd as "Preservative, Declining", with recommended management actions to limit the harvest of cows, maintain a healthy bull:cow ratio, compile accurate harvest data, and increase understanding of mortality causes, among other actions. The WAH Working Group acknowledged the herd is approaching a Critical Level as defined by the 2019 Management Plan.

### Central Arctic Herd (CAH)

The Central herd, though much smaller than the Western and Teshekpuk herds, plays an important role in subsistence and ecological systems. The herd numbered around 68,000 animals in 2010 but declined significantly over next several years, dropping to about 22,000 by 2016. By 2022, surveys estimated a larger population of 34,000 animals, classifying the herd as "Medium and Increasing."

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The CAH's range is concentrated between the Colville and Canning rivers, with seasonal migrations that take them from the Brooks Range to the Beaufort Sea coast and the Ikpikpuk River eastward to the Hulahula River in the ANWR. The herd typically uses windswept upland areas or areas of lighter snow cover where they can dig through the snow to feed on lichens, reindeer moss and dried sedges. On the north side of their range, they are usually found east of the Dalton Highway in the upper Sagavanirktok River foothills and as far east as the Canning River, but may also be found west of the highway in the uplands of the Itkillik, Kuparuk and Toolik River drainages. Since the mid-1990s, the CAH has wintered on the south side of their range from the Chandalar Shelf to as far east as the Arctic Village area.

In spring, pregnant cows migrate north toward the Arctic Coastal Plain. The CAH's summer range extends from Fish Creek just west of the Colville River, eastward along the coast to the Katakturuk River. During the summer months, the CAH range extends from Fish Creek just west of the Colville River and eastward along the coast to the Katakturuk River. In fall, the herd disperses southward again through the Atigun and Sagavanirktok valleys into the Brooks Range foothills.

Like other herds on the North Slope, the CAH faces significant pressures from oil and gas development, particularly around Prudhoe Bay and the Kuparuk and Alpine oil fields. Roads, pipelines, and other industrial activity can alter migration pathways, displace caribou from insect-relief areas, and fragment calving habitat. While the herd has shown some recovery in recent years,

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<sup>92</sup> Western Arctic Caribou Herd Working Group, "2023 Working group meeting summary", accessed October 2, 2025. <https://westernarcticcaribou.net/the-group/past-meeting-summaries/>

<sup>93</sup> Alaska Department of Fish and Game, Division of Wildlife Conservation, Central Arctic Caribou Herd News, Summer 2020 (Fairbanks, AK: Alaska Department of Fish and Game, 2020), 2, [https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/central\\_arctic\\_herd/cah\\_newsletter\\_summer\\_2020.pdf](https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/central_arctic_herd/cah_newsletter_summer_2020.pdf).

<sup>94</sup> Rosen, "Western Arctic Caribou Herd Population Decline."

future stability will depend on how effectively industrial impacts and climate-driven habitat changes are managed.

### Federally Protected Species

The federal Endangered Species Act (ESA) protects both threatened and endangered species. The Act defines endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range.” The term threatened species is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”<sup>95</sup> Two federal government agencies manage endangered and threatened species in the region: the USFWS within the U.S. Department of the Interior, and the National Marine Fisheries Service (NMFS) within the U.S. Department of Commerce.

The table below presents the threatened and endangered species within the Anaktuvuk Pass Area of Influence. Three migratory bird species are classified as threatened by the Secretary of the Interior under the ESA. The Spectacled eider (listed in 1993) and the Steller’s eider (listed in 1997) are both are medium-sized sea ducks. The Eskimo curlew, believed to be extinct, was listed in 1967. The habitats of all the species in Table 2 are generally believed to be outside of the village of Anaktuvuk Pass.

**Table 8: Threatened and Endangered Species with the Anaktuvuk Pass Area of Influence<sup>96</sup>**

Species		Status
Iñiqauqtuq	Steller’s eider ( <i>Polysticta stelleri</i> )	Threatened
Qavaasuk	Spectacled eider ( <i>Somateria fischeri</i> )	Threatened
Nanuq	Polar Bear ( <i>Ursus maritimus</i> )	Threatened
xx	Eskimo curlew ( <i>Numenius borealis</i> )	Endangered, likely extinct

### A Changing Climate

Climate change is already reshaping the environment and the daily life of Arctic communities. Warmer air and water temperatures, along with thawing permafrost, are speeding up changes that affect local ecosystems, community infrastructure, and traditional ways of living. In inland places like Anaktuvuk Pass, people are seeing more frequent tundra fires and shifts in wildlife migration routes. These changes bring real challenges for subsistence hunting and fishing, reliable transportation, and the stability of homes and public facilities, issues that touch every part of community life. Because rural communities are especially vulnerable to these disruptions, planning for adaptation and resilience is not just important, it is essential for protecting the land, the culture, and the well-being of the people who depend on them.

<sup>95</sup> U.S. Fish & Wildlife Service, “Section 3. Definitions,” Endangered Species Act, last modified February 17, 2023, accessed October 2, 2025, <https://www.fws.gov/laws/endangered-species-act/section-3>.

<sup>96</sup> U.S. Fish and Wildlife Service, “Information for Planning and Consultation (IPaC),” accessed October 2, 2025, <https://ipac.ecosphere.fws.gov/>.

Since 1980, one of the clearest climate signals across the Arctic has been warmer falls.<sup>97</sup> Warmer autumns bring a higher risk of icing on winter ranges, which can make life harder for caribou. The effects of warming also vary depending on the herd. Western coastal herds are seeing earlier, warmer springs, while herds farther inland deal with hotter, drier summers. These dry summers lower adult survival,<sup>98</sup> while Indigenous Knowledge reminds us that caribou tend to do better in cooler, wetter summers.<sup>99</sup> Communities have also observed that the loss of summer snow patches limits the herd's ability to escape insect harassment. People in the region have also noticed that with fewer summer snow patches, caribou have a harder time escaping insects. On especially hot days, caribou eat less, not just because of mosquitoes, but also to keep from overheating as they digest food. Eating less affects cow body weight in the fall, which then impacts pregnancy rates and calf survival.<sup>100</sup>

Looking ahead, scientists expect different outcomes depending on how much the climate warms. In a modest warming scenario, the CAH could grow slightly, about 4% higher. But under more severe warming, that same herd could decline by about 9%.<sup>101</sup> Caribou have always been able to adjust to year-to-year changes in weather, but it's not clear how long they can keep adapting, especially as other pressures like mining, roads, and industrial development.

Across Northwest Alaska where the WAH travels, woody shrubs and even small trees are spreading quickly, a change scientists call browning or "shrubification."<sup>102</sup> On the eastern side of Arctic Alaska, where the TCH ranges, this spread of shrubs has been happening much more slowly. For caribou, these changes in vegetation bring challenges. Caribou rely on tundra plants like lichen and mosses, and as woody shrubs such as alders and willows move in, they push out important food sources.

Vegetation shifts on land are tied to the loss of Arctic sea ice, which is disappearing as the Northern Hemisphere warms. With less ice, more open water adds moisture to the air, bringing heavier snowfall. More snow on the ground acts like insulation, keeping the soil warmer through winter. That warmth encourages shrubs and trees to spread even faster. For caribou, this means not only less access to the tundra plants they depend on, but also more obstacles on the ground that make it harder to move across the land.<sup>103</sup>

These impacts don't look the same everywhere in Arctic Alaska. While the WAH has faced steep population declines, the TCH hasn't been affected in the same way. Still, the WAH's struggles are part of a much larger pattern. Across the circumpolar Arctic, tundra caribou herds have dropped by about 65% over the last two to three decades, and Alaska's WAH has been identified as one of the hardest hit.<sup>104</sup>

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<sup>97</sup> Gunn et al., "Migratory Tundra Caribou."

<sup>98</sup> Gunn et al., "Migratory Tundra Caribou."

<sup>99</sup> Tłı̨chq̓ Government, 2022 Annual Report (Behchok̓, NT: Tłı̨chq̓ Government, 2022), 15.

<sup>100</sup> L. Monica Trondrud et al., "A Summer Heat Wave Reduced Activity, Heart Rate, and Autumn Body Mass in a Cold-Adapted Ungulate," *Physiological and Biochemical Zoology* 96, no. 4 (2023): 285, <https://doi.org/10.1086/725363>.

<sup>101</sup> Gunn et al., "Migratory Tundra Caribou."

<sup>102</sup> 1. Yereth Rosen, "Caribou Herds in Arctic Alaska Tundra Areas Are on Opposite Trends," *Alaska Beacon*, January 20, 2025, <https://alaskabeacon.com/2025/01/20/caribou-herds-in-arctic-alaska-tundra-areas-are-on-opposite-trends/>.

<sup>103</sup> Rosen, "Caribou Herds in Arctic Alaska Tundra Areas."

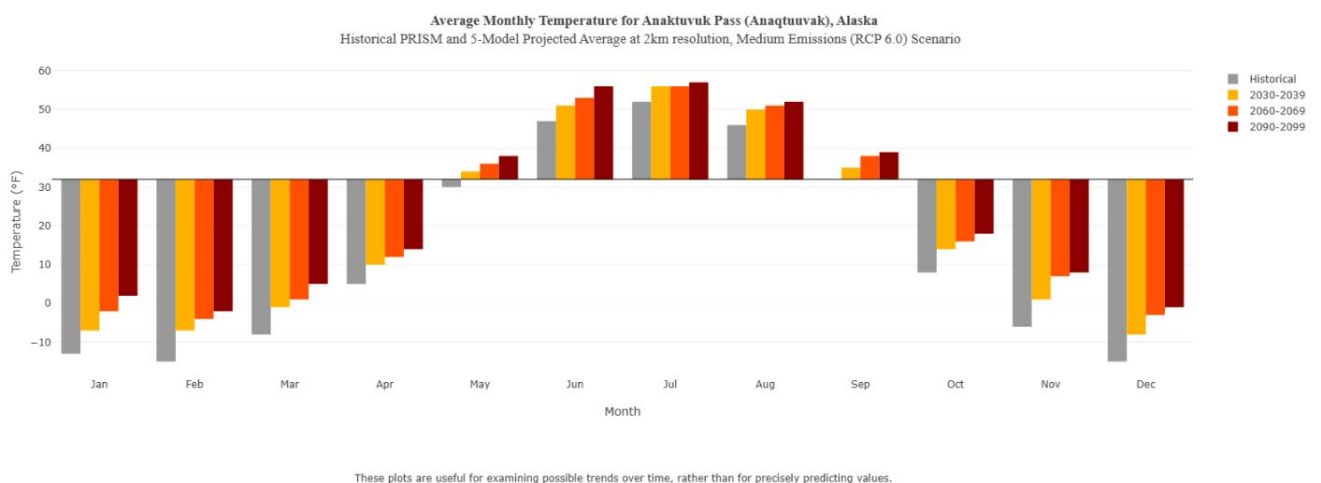
<sup>104</sup> Gunn et al., "Migratory Tundra Caribou."

## Warmer Temperatures

Alaska is warming faster than almost anywhere else in the country, about two to three times the rate of the rest of the U.S. Over the past 50 years, average temperatures have climbed steadily, from 2.2°F in the central Southwest to as much as 6.0°F on the North Slope.<sup>105</sup> That's two to three times higher than the global average.<sup>106</sup> Looking ahead, scientists project Alaska's annual average surface air temperature will rise by 8.1°F to 14.2°F by the end of this century compared to the 1981 – 2010 baseline.

For Anaktuvuk Pass, this means the changes are already close to home. Figures xx and xx show trends in average temperature and precipitation for the community, projecting what the next 75 years could bring.<sup>107</sup> Rising temperatures will not only touch the regional ecosystem, but also nearly every part of community life, including subsistence activities and infrastructure. Precipitation is also expected to increase, with more rain and snowfall shaping everything from the stability of permafrost to the way water resources are managed. Understanding these changes is critical for planning ahead and making sure the community is ready for what's to come.

Figure 12: Average Monthly Temperature Predictions For Anaktuvuk Pass, historical - 2999

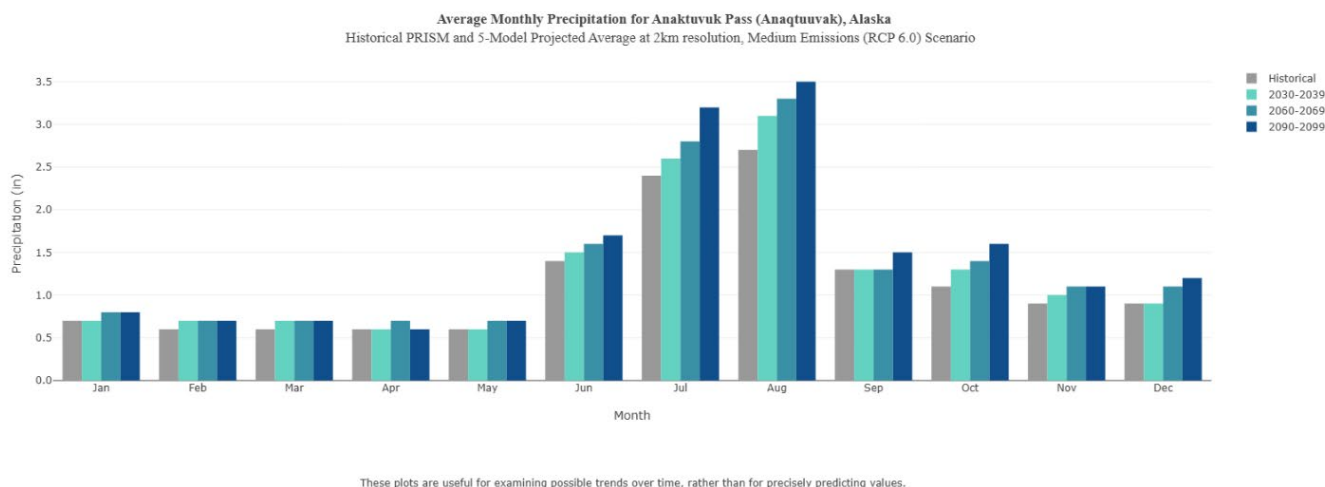


<sup>105</sup> U.S. Department of Agriculture, Northwest Climate Hub, "Alaska and a Changing Climate," last modified 2024, accessed October 2, 2025, <https://www.climatehubs.usda.gov/hubs/northwest/topic/alaska-and-changing-climate>.

<sup>106</sup> USDA, "Alaska and a Changing Climate."

<sup>107</sup> University of Alaska Fairbanks, Scenarios Network for Alaska + Arctic Planning (SNAP), "Community Climate Charts," last modified 2024, accessed October 2, 2025, <https://snap.uaf.edu/tools/community-charts>.

Figure 13: Average Monthly Precipitation Predictions For Anaktuvuk Pass, historical - 2999



## Permafrost Thaw

Permafrost, ground that stays frozen for at least two years in a row, is a defining feature of much of Alaska and especially of the Arctic. Each summer, the vegetated top layer of soil above the permafrost thaws and then refreezes in winter. This “active layer” is usually 1.5 to 2.0 feet deep in undisturbed ground, depending on the plants covering the surface. Where the ground has been disturbed, the thaw goes deeper.

When permafrost contains a lot of ice, it becomes unstable as it melts. In its frozen state, it can hold the weight of buildings and other structures. Once thawed the water-rich soil weakens and the ground can no longer provide support. This is why thawing permafrost creates real risks for homes, roads, and community infrastructure.

Surface disturbance, like building roads or houses, can make thaw worse. Removing plants or compacting the soil strips away the natural insulation, allowing more heat to seep into the ground. As the Arctic warms, the active layer is thickening, threatening the stability of infrastructure while also releasing greenhouse gases like carbon dioxide and methane.

Permafrost also affects the way water moves. Because it doesn’t let water pass through easily, thaw can disrupt drainage and lead to erosion around snow fences, culverts, or plugged streams. Thawing permafrost even contributes to land collapse and erosion along the riverbanks.

Nearly four decades of monitoring, from West Dock in the north to Gulkana in the south, show that permafrost has been warming steadily since the 1980s. Depending on the site, temperatures have increased from 32.9°F to 39.2°F. On the North Slope, permafrost has warmed at a rate of 32.3°F to



33.8°F per decade. This long-term warming is already degrading near-surface permafrost, with serious consequences for ground stability and the safety of infrastructure.<sup>108</sup>

### Tundra Fires

Warming and changes in vegetation are also connected to another growing concern: tundra fires. These fires are no longer rare events in Alaska's Arctic. Across Alaska and Canada's Northwest Territories, the number of lightning-caused fires has increased by 2 to 5 percent each year over the past four decades.<sup>109</sup>

The impact of a fire often depends on the kind of plants and soils it burns through. In tussock tundra, fires are usually less severe because the shallow-rooted plants help hold moisture in the ground. In shrublands, fires tend to burn hotter and deeper, leaving longer-lasting scars on the land. While no major tundra fires have occurred near Anaktuvuk Pass since 2007, other parts of Alaska have seen an uptick, fueled by warmer, drier conditions and vegetation shifts linked to climate change.<sup>110</sup> Although the North Slope has not yet faced the same level of increase, planning for this risk is becoming more important.

One reason tundra fires matter so much is their effect on permafrost. Permanently frozen permafrost worldwide holds more carbon than is already in the atmosphere today. Fires strip away the soil and plant layers that normally insulate frozen ground. When permafrost thaws, it releases stored carbon and methane into the air, creating more warming.<sup>111</sup>

By 2100, scientists project that Alaska's tundra could experience twice as much burned area and up to four times more frequent fires compared to historical records. Some plants, like sedges, tussocks, dwarf shrubs, and liverworts, can regrow relatively quickly. Others, like lichens and moss, which caribou depend on in winter, can take 80 years or more to recover. Research has shown that caribou often avoid burned areas in winter for nearly 30 years after a severe fire.<sup>112</sup>

Wildfires on the tundra don't just change the land, they also leave lasting marks on rivers and fish. In the years right after a burn, extra sediment can lower water quality and put stress on fish. Yet, as the land heals, those same streams can become richer environments. Nutrients from ash, fallen wood, and shifting channels may eventually create new feeding areas that benefit salmon and other fish. The pace of this recovery depends on the intensity of the fire, the types of plants that were lost, and how much rain follows in the seasons ahead. As tundra fires become more common, communities

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<sup>108</sup> Vladimir E. Romanovsky et al., "Warming and Thawing Permafrost in Alaska" (abstract GC55B-02 presented at AGU Fall Meeting, Chicago, IL, December 16, 2022).

<sup>109</sup> Scott Waldman, "Lightning-Caused Fires Rise in Arctic as the Region Warms," *Scientific American*, June 27, 2017, <https://www.scientificamerican.com/article/lightning-caused-fires-rise-in-arctic-as-the-region-warms/>.

<sup>110</sup> Olivia Ebertz and Anna Rose McArthur, "Several Tundra Fires are Threatening Southwest Alaska Communities. A climate specialist says a warming climate has made them spread faster and farther," *KYUK*, June 9, 2022, <https://www.kyuk.org/public-safety/2022-06-09/several-tundra-fires-are-threatening-southwest-alaska-communities-climate-specialist-says-a-warming-climate-has-made-them-spread-faster-and-farther..>

<sup>111</sup> FRAMES, "ACWE 2.0 Cover Image."

<sup>112</sup> FRAMES, "ACWE 2.0 Cover Image."

will likely need to be more diligent in protecting clean water, healthy fish stocks, and strong streamside vegetation.<sup>113</sup>

On the North Slope, the frequency of significant tundra wildfires has tripled in recent years, according to a 2023 study by scientists from the Bureau of Land Management (BLM) and the University of Alaska Fairbanks.<sup>114</sup> The largest event so far remains the 2007 Anaktuvuk River fire, which burned about 256,000 acres. That fire alone caused extensive permafrost thaw and released into the atmosphere an amount of carbon equal to 50 years of storage.

### Rural Community Vulnerability

Life in rural communities like Anaktuvuk Pass is closely tied to the land. The rivers, tundra, and wildlife provide not only food but also shape culture, traditions, and daily routines. Rural communities like Anaktuvuk Pass are heavily dependent on the surrounding ecosystems, making residents particularly vulnerable to the impacts of climate change.<sup>115</sup> Because of this close relationship, the impacts of climate change are felt here in very personal ways.

Residents are already noticing these changes. Subsistence provides the foundation of food and culture here. Warmer temperatures are affecting fish and other subsistence resources that provide that foundation are changing. The high cost of store-bought goods is a burden on families and also lacks the nutritional and cultural impact. Fuel prices and ammunition prices have soared, and

Shifts in weather patterns are influencing when and where animals migrate, making hunting more unpredictable. These changes bring added challenges to the careful balance of subsistence harvesting that has supported the community for generations.

Food security is a concern across northern Alaska, and Anaktuvuk Pass is no exception. Rates of food insecurity are higher here than in much of the rest of the country. When weather becomes harder to predict or migration routes shift, access to traditional foods can decline, placing additional strain on households.

At the same time, the community continues to show resilience. Families share harvests, adjust hunting and fishing practices, and pass on traditional knowledge to younger generations in new ways. Local initiatives and partnerships are also helping the community prepare for the future, showing that while climate change brings real challenges, it also strengthens the commitment of residents to care for one another and protect their way of life.

The effects of climate change are being felt in Anaktuvuk Pass, with serious implications for the community's way of life. Warming temperatures impact fishing and subsistence practices, which are

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<sup>113</sup> FRAMES, "ACWE 2.0 Cover Image."

<sup>114</sup> Miller, Eric A., Benjamin M. Jones, Carson A. Baughman, Randi R. Jandt, Jennifer L. Jenkins, and David A. Yokel. 2023. "Unrecorded Tundra Fires of the Arctic Slope, Alaska USA" Fire 6, no. 3: 101. <https://doi.org/10.3390/fire6030101>

<sup>115</sup> Intergovernmental Panel on Climate Change (IPCC), Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, ed. P. R. Shukla et al. (Geneva: IPCC, 2019), 48.

crucial for supplementing store-bought goods. Changing weather patterns are altering wildlife migration and availability, further complicating subsistence harvesting.<sup>116</sup> Food insecurity is already a significant issue in northern Alaskan communities like Anaktuvuk Pass, where it occurs at much higher rates than in other regions. Less predictable weather patterns, and changing animal migration routes can all contribute to reduced access to traditional food sources.

## Human Health

Climate change is already affecting human health here in Alaska, across the U.S., and around the world. Extreme weather events, like storms, floods, and wildfires, bring immediate risks, including injuries and loss of life. But the impacts do not stop once the storm passes or the floodwaters go down. The aftermath often leaves lasting damage to homes and community infrastructure, all of which affect public health for years.<sup>117</sup>

## Subsistence Activities

On the North Slope, health and well-being are closely tied to activities, such as hunting, fishing, and gathering. These practices are not only about food security; they carry deep cultural meaning and support mental, physical, and social health. For many Alaska Native families, wild foods like caribou, fish, and gathered plants provide essential nutrition and a connection to culture. This connection makes residents of the North Slope particularly vulnerable to climate change.<sup>118</sup>

Rising temperatures, unpredictable storms, and thawing ice are changing the timing and patterns of animal migration. Hunters now face greater challenges reaching caribou and fish, as animals shift where they travel or arrive at different times of year. Warmer waters are altering fish populations, and invasive species threaten plants and animals that have long supported subsistence harvests.

Caribou migrations, in particular, have shifted in ways that disrupt traditional hunting. Families may need to travel farther, or sometimes not be able to harvest at all, limiting access to this critical food source. These changes often force households to rely more on expensive store-bought foods that are also less nutritious.

Since Alaska Native communities depend on wild foods for survival, culture, and identity, vulnerability to these environmental changes is particularly high.<sup>119, 120</sup> Moreover, because subsistence provides more than nutrition, any threat to these practices also threatens health in a broader sense. These issues are explored in more detail in Chapter 5: Subsistence.

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<sup>116</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, ed. Core Writing Team, H. Lee, and J. Romero (Geneva: IPCC, 2023), 20, <https://doi.org/10.59327/IPCC/AR6-9789291691647>.

<sup>117</sup> M. H. Hayden et al., "Human Health," in *Fifth National Climate Assessment (NCA5)*, ed. A. R. Crimmins et al. (Washington, DC: U.S. Global Change Research Program, 2023).

<sup>118</sup> Alan J. Parkinson and Birgitta Evengård, "Climate Change, its Impact on Human Health in the Arctic and the Public Health Response to Threats of Emerging Infectious Diseases," *Global Health Action* 2, no. 1 (2009): Article 2075, doi:10.3402/gha.v2i0.2075.

<sup>119</sup> Ishfaq Hussain Malik and James D. Ford, "Barriers and Limits to Adaptation in the Arctic," *Current Opinion in Environmental Sustainability* 72 (2025): 101519, <https://doi.org/10.1016/j.cosust.2025.101519>.

<sup>120</sup> U.S. Department of Agriculture, Climate Hubs, "Climate Change and Wild Foods in Alaska," last modified 2025, accessed October 2, 2025, USDA Climate Hubs.

### Contaminants and Food Security

Another challenge is the release of harmful substances once locked away in permafrost, glaciers, and sea ice. As the Arctic warms, contaminants such as persistent organic pollutants (POPs), mercury, and other industrial chemicals are re-entering the environment.<sup>121</sup> These pollutants build up in fish, birds, and marine mammals, the very foods many residents rely on for survival.

Research has shown that these toxins can contribute to immune system problems, heart disease, thyroid disorders, and even cancer. In some Inuit populations, high levels of POPs have been linked to neurological and behavioral health concerns.<sup>122</sup> For communities like Anaktuvuk Pass, where subsistence foods remain essential, this creates added health risks layered on top of climate stress. Continued monitoring of food sources and investment in food security programs will be critical to protect health and preserve access to traditional foods.<sup>123</sup>

### Air Quality and Respiratory Illness

Climate change is also changing the air we breathe. Warmer temperatures and thawing permafrost are releasing more pollutants, including black carbon (soot) and fine particles that can lodge deep in the lungs. Black carbon does more than harm health, it also speeds up the melting of snow and ice, which in turn, worsens climate impacts.<sup>124</sup>

These pollutants can make respiratory illnesses such as asthma and chronic obstructive pulmonary disease (COPD) worse. In addition, warmer conditions and higher carbon dioxide levels are increasing airborne allergens. Pollen seasons are becoming longer and more intense, meaning people with allergies or asthma may experience more severe symptoms. Mold growth inside homes, triggered by changes in humidity and precipitation, can further contribute to breathing problems.<sup>125</sup>

### Mental Health

On the North Slope and in other rural Alaska communities, people are experiencing long-term stress and a sense of loss as familiar landscapes change and traditional practices become harder to maintain.

Environmental changes carry emotional weight when they impact food and cultural participation. For Alaska Native communities, these changes are deeply personal, touching on identity, spirituality, and connections to the land. Younger generations in particular are growing up with the burden of witnessing these changes while facing an uncertain future, sometimes leading to feelings of hopelessness or intergenerational trauma.

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<sup>121</sup> Carrie Arnold, "Toxic Trouble as the Arctic Heats Up," Chemical & Engineering News, August 28, 2023, [https://en.wikipedia.org/wiki/Here\\_%282024\\_film%29](https://en.wikipedia.org/wiki/Here_%282024_film%29).

<sup>122</sup> Arnold, "Toxic Trouble."

<sup>123</sup> Arnold, "Toxic Trouble."

<sup>124</sup> J. Schmale et al., "Local Arctic Air Pollution: A Neglected but Serious Problem," *Earth's Future* 6, no. 10 (2018): 1395, 10.1029/2018EF000952.

<sup>125</sup> U.S. Centers for Disease Control and Prevention (CDC), Climate and Health Program, "Allergens and Pollen," last modified 2024, accessed October 2, 2025, <https://www.cdc.gov/climate-health/php/effects/allergens-and-pollen.html>.

Mental health challenges are made more difficult by the isolation of many rural communities, where access to care and resources is limited.<sup>126 127</sup> Addressing these issues requires community-driven solutions that combine modern mental health services with Indigenous Knowledge and cultural practices. Expanding local resources, building resilience, and supporting youth are key steps to strengthening mental health in the face of climate change.

### Vulnerable Infrastructure

In 2019, the Denali Commission performed a statewide assessment on Alaska communities and their risk of damage due to erosion, flooding, and permafrost thaw.<sup>128</sup> The report placed Utqiagvik in erosion severity group 1, defined by the immediate threat of erosion to critical infrastructure and the damage resulting from compounding erosion that would impact community stability, present life safety concerns, affect access to emergency services, and/or require support from outside the region to assist the community in responding to the event. The report placed Kaktovik, Nuiqsut, and Point Hope in erosion severity group 2, where damage could impact operability for a limited period but would not impact the community's sustainability. An extreme event could cause damage to critical infrastructure. The report placed Anaktuvuk Pass, Atkasuk, Point Lay, and Wainwright in erosion severity group 3, where there is low likelihood that a threat will detrimentally impact the community in the near term.

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<sup>126</sup> Jacob Bell et al., "Climate Change and Mental Health: Uncertainty and Vulnerability for Alaska Natives," CCH Bulletin No. 3 (Center for Climate and Health, Alaska Native Tribal Health Consortium, April 15, 2010).

<sup>127</sup> Amy Novotney, "How Does Climate Change Affect Mental Health?," American Psychological Association, last updated April 21, 2023, <https://www.apa.org/topics/climate-change/mental-health-effects>.

<sup>128</sup> University of Alaska Fairbanks Institute of Northern Engineering, U.S. Army Corps of Engineers Alaska District, and U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory, Statewide Threat Assessment: Identification of Threats from Erosion, Flooding, and Thawing Permafrost in Remote Alaska Communities (Report #INE 19.03; Report prepared for the Denali Commission, November 2019), 12, <https://www.denali.gov/wp-content/uploads/2019/11/Statewide-Threat-Assessment-Final-Report-20-November-2019.pdf>.



# Subsistence

Unlike the coastal Inupiat, the Nunamiut traditionally lived inland, where life centered on hunting caribou and sheep rather than on whales, seals, and walrus, which were relied upon by coastal relatives. Caribou have long been the foundation of Nunamiut survival, providing not only meat for food, but also skins for clothing and shelter, tendons for thread and cord, and bones and antlers for tools and implements.

To safeguard this vital subsistence resource, the Nunamiut developed hunting protocols designed to sustain the herds and ensure that caribou would continue migrating through Anaktuvuk Pass. These traditions arose from hard lessons of past food shortages and famine. One key practice is allowing the lead animals, or vanguard, to pass without interference, since the rest of the herd follows them. Disturbing the lead caribou can trigger the release of an odor from scent glands at the base of their ankles, alerting the rest to the herd to impending danger.<sup>129</sup>

Because the community still relies on caribou to sustain daily life, concerns persist about potential disturbances to the population. Pressure from sport hunters, competition for harvest, and disruption of migration routes remain central challenges.

## Subsistence Defined

Practices carried forward from past generations continue to shape life in Anaktuvuk Pass, where subsistence remains at the center of community identity. Elders guide younger hunters in traditional protocols that protect the caribou herds and reinforce values of respect and restraint, ensuring future harvests. While modernization brings new influences, these traditions endure, supported not only by hunting but also by exchanges with coastal relatives for resources such

The seasonal round of subsistence defines not only the calendar of Nunamiut life but the very foundation of our economy, culture, and values. Although best known as a hunting people, we are also trappers of small game and furbearers, fishermen, and gatherers of dozens of edible and useful plants.

To make a living from the land as we do would be impossible without contributions from every member of the community. From when we first learn our family obligations as small children, to the heavy burdens of adulthood, to our roles providing guidance and wisdom as grandparents and senior elders, everyone does his or her part.

It is the elders, our teachers and guides, the irreplaceable holders of Nunamiut knowledge and experience, who anchor our social and family relationships. This is why we give them the bounty of our harvest. As our elders say, "Atquchikun." We are one, together.

*(Simon Paneak Memorial Museum)*

<sup>129</sup> WWF Global Arctic Programme, "Caribou: 13 Facts About One of Canada's Most At-Risk Species," Feature, October 6, 2017, accessed October 2, 2025, <https://www.arcticwwf.org/newsroom/features/caribou-13-facts-about-one-of-canadas-most-at-risk-species/>.

as seal oil, which link inland and coastal communities in mutual reliance. Such exchanges are rooted in historical alliances: the following account describes the importance of trade between North Slope communities.

“In old times, our ancestors needed certain coastal goods to supplement their inland resources. The most important imports from the coast were seal and whale oil; whale bone; baleen, ropes and lines; storage pokes; boots and other clothing made from sealskin; and walrus hide lines and ivory. After commercial whaling came to the Arctic in the mid-1800s, we also traded for Western trade goods such as rifles and ammunition, metal pots and kettles, tea, tobacco, and cloth to protect our fur parkas. Seal and whale oil were so essential to us that Nunamiut traders spent nearly six months away from the mountains traveling to and from the trade fair. Entire families left the mountains by sled in May and reached the trade fair at Nigliq by boat in July. They returned to the mountains by sled by early November. This was a long, hard journey. In exchange for these resources, we provided our coastal cousins with caribou skins for clothing. They especially craved caribou leg skins to make into warm boots. We also traded the hides of mountain sheep, fox, wolf, wolverine, grizzly bear, and marmot. Available in the mountains but not on the coast, we brought flint and pyrite fire starters, sheep horn, and wood products from the forests.”<sup>130</sup>

The central role of subsistence in daily life is reflected not only in tradition but also in law. The passage of the Alaska National Interest Lands Conservation Act (ANILCA) by Congress in 1980 created the federal counterpart to the State of Alaska’s subsistence law. Alaska state subsistence laws apply to subsistence uses on state land while ANILCA applies to federal public lands in Alaska. Lands owned by Alaska Native Corporations (ANCs) are considered private lands and generally require permission for public access. These lands are subject to state and federal regulations, including the Alaska Constitution, the Endangered Species Act, and other applicable environmental and land use laws. ANILCA set aside over 100 million acres of federal land for conservation while also prioritizing subsistence use. It guarantees continued access to public lands for traditional harvest and requires federal agencies to consider how land-use decisions might affect subsistence activities.

Federal subsistence management regulations, like ANILCA and federal law and regulations that govern parks, forests, and public property guide harvest activities on federal lands. These rules set seasons, harvest limits, and methods to ensure hunting and fishing remain sustainable and respect traditional use. ANILCA also set up regional advisory councils (RACs). There are currently ten regions and ten RACs; the North Slope RAC represents the eight communities of the North Slope.<sup>131</sup>

AS 16.05.940[34] and Title VIII of ANILCA section 803 are nearly identical in their definitions of subsistence uses. AS 16.05.940[34] states that subsistence use as *“noncommercial, customary and traditional uses of wild, renewable resources by a resident domiciled in a rural area of the state for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the*

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<sup>130</sup> Simon Paneak Memorial Museum.

<sup>131</sup> U.S. Department of the Interior, “North Slope Region,” Federal Subsistence Management Program, Regional Advisory Councils, accessed October 2, 2025, <https://www.doi.gov/subsistence/regions/ns>.

*making and selling of handicraft articles out of nonedible by-products of fish and wildlife resources taken for personal or family consumption; and for the customary trade, barter, or sharing for personal or family consumption.*"<sup>132</sup> ANILCA Title VIII section 803 reads: the customary and traditional uses by rural Alaska residents of wild renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade.

Federal and state laws differ in who qualifies for participation in subsistence fisheries and hunts. Under federal law, rural Alaska residents qualify for subsistence harvesting. Since 1989, all Alaska residents have qualified under state law.<sup>133</sup> The NSB subsistence definition reflects the understanding that subsistence also includes culture, values, and traditions passed down through generations: *"An activity performed in support of the basic beliefs and nutritional needs of the residents of the Borough and includes hunting, whaling, fishing, trapping, camping, food gathering, and other traditional and cultural activities."*<sup>134</sup>

## Area of Influence

The Anaktuvuk Pass AOI is a designated boundary that extends beyond the community to include the customary and frequently used traditional lands for subsistence activities, developed in consultation with local subsistence hunters. This region reflects the hunting, fishing, and gathering activities that sustain the community and uphold Iñupiat cultural practices. The AOI is not meant to be exclusive, but rather to describe the area where important subsistence resources are harvested and where families continue their traditional uses. It is a large area that changes over time, partly because many subsistence species are migratory. Caribou may migrate thousands of miles, arriving in the AOI at a specific time depending on season and/or age. Migratory birds may spend only a few weeks of their year within the AKP AOI, using changing routes. The community's subsistence areas and practices follow the seasonal availability of resources. Like migratory animals, people also change their routes, sometimes over years, but sometimes within the same season.

One purpose of the AOI is to help safeguard areas that are of cultural importance to Anaktuvuk Pass residents by guiding and regulating permitting activities. As part of the permit process, applicants will work with the appropriate authorities to determine final stipulations and ensure both the preservation of and continued access to these important areas.

The Nunamiut's traditional subsistence range covers a 54,000 square-mile area and is generally bound by the following landmarks, also shown in Map 1.2:

- **South Boundary:** Begins at the Ambler and Kobuk Rivers. Extends east approximately 170 miles to the John and Allen Rivers, then continues another 130 miles east to the Chandalar River and the East Fork of the Chandalar River, forming the southeast corner of the Area of Influence.

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<sup>132</sup> Alaska Statute §16.05.940 (2024), <https://www.akleg.gov/basis/statutes.asp>. Accessed October 2, 2025.

<sup>133</sup> Alaska Department of Fish and Game, "Subsistence in Alaska Overview: Definition, Responsibilities and Management," accessed October 2, 2025, <https://www.adfg.alaska.gov/index.cfm?adfg=subsistence.definition>.

<sup>134</sup> North Slope Borough Municipal Code (NSBMC) §19.20.020

- **East Boundary:** From the Chandalar River, the boundary runs north approximately 180 miles to the northeast corner at the Canning and Kavik Rivers.
- **North Boundary:** Extends west about 50 miles from the Canning River to the Sagavanirktok River. From there, it goes north approximately 25 miles to a point about 10 miles south of Deadhorse. The line continues west for approximately 100 miles, maintaining a border about 10 miles south of Nuiqsut, then turns south for about 25 miles. From this point, the boundary runs west approximately 140 miles to the Meade and Kaksu Rivers, forming the northwest corner.
- **West Boundary:** Runs south approximately 180 miles back to the Ambler and Kobuk Rivers, completing the loop.

The AOI also overlaps with the areas of influence of neighboring villages, those of Kaktovik, Nuiqsut, Utqiagvik, Atkasuk, and even Wainwright – 360 air miles from AKP – reflecting cultural values of sharing and cooperation in subsistence. The Anaktuvuk Pass AOI overlaps with other North Slope communities, as depicted in Map 1.2. Nuiqsut is the closest community as well as the community with which Anaktuvuk Pass hunters most share hunting grounds.

### **Subsistence Use and Sharing**

While the term subsistence implies the use of natural resources for physical needs, it may not always convey the spiritual, cultural, and community importance of harvest activities. For Alaska Natives of the North Slope, subsistence is a connection to the land and to Iñupiat ancestors who have passed down Traditional Knowledge through the countless generations. It is not only a way of life, but also the joy of living from the gifts that the Creator provides.

In Anaktuvuk Pass, residents depend on a variety of seasonal resources, such as hunting, fishing, and gathering. Subsistence is a vital aspect of life on the North Slope, as it not only nourishes the community but also preserves the community's cultural heritage. Sharing these resources is a long-standing tradition deeply ingrained in Iñupiat values. This act of sharing extends to both family and community members, as well as Elders and those who are unable to participate in hunting or fishing. Both the givers and receivers take pride in this tradition.

Regardless of income level, residents heavily rely on subsistence resources due to the high cost and low availability of store-bought food. As a result, subsistence activities and the sharing of harvests within the community carry immense importance. According to the NSB Census, more than 98 percent of Iñupiat households in Anaktuvuk Pass used subsistence foods in 2019. This high number has been consistent over the twenty-one years of the available data from the NSB Census.<sup>135</sup>

Moreover, 45 percent of Nunamiut households indicated that subsistence foods made up half or more of the diet.<sup>136</sup> Nearly half (49.2 percent) of the Iñupiat households in Anaktuvuk Pass depend

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<sup>135</sup> 2019 Census report

<sup>136</sup> 2019 Census report

on subsistence resources for nearly half of the diet. This is by far the highest proportion of any community in the Borough.<sup>137</sup>

**Table 9: Iñupiat Households Use of Subsistence Foods, 1998 – 2018**

1998	2003	2010	2015	2019
98%	99%	100%	98.6%	98.5%

**Table 10: Iñupiat Households Receiving Half or More of Subsistence Diet from Other Households, 1998 – 2019**

1998	2003	2010	2015	2019
38%	43%	51%	45%	45%

Sharing is a central value of the subsistence economy, where community members generously distribute harvested food among Elders and those unable to participate in the subsistence harvest activities. According to the NSB Census, a lack of income is not a hindrance to the consumption of subsistence foods even given the costs associated with purchasing and maintaining equipment and supplies for successful harvesting. In fact, North Slope communities with the highest proportions of low-income households have the most, if not the vast majority, of households with a very high dependence on subsistence foods.<sup>138</sup>

Interestingly, Anaktuvuk Pass in 2015 had 65 percent of their households that gave less than half (35 percent gave more than half of their subsistence harvest to other households). By 2019, this had decreased to 55 percent (45 percent did give more than half their subsistence diet to other households).<sup>139</sup> Since 1998, NSB Census surveys reveal consistent sharing of subsistence foods to Iñupiat (and other) households throughout the North Slope. Beginning in 2010, there has been a small but statistically significant increase in the proportion of Iñupiat households across the North Slope that depended on other households for the majority of subsistence foods in their households' diet. In the last decade slightly more than 40 percent of NSB Iñupiat households have depended on other households for more than half of the subsistence foods in their diet.<sup>140</sup>

In Anaktuvuk Pass, residents are sharing more with others than in years past. From census years 1998 to 2015, most households were sharing less than half. Yet in 2019, that percentage increased 10 percent – more families are giving away more than half of the household's subsistence diet to others.<sup>141</sup>

**Table 11: Iñupiat Households Giving Less than Half of Subsistence Diet to Other Households, 1998 - 2019**

1998	2003	2010	2015	2019
61%	64%	63%	65%	55%

<sup>137</sup> 2019 Census report

<sup>138</sup> 2019 Census report

<sup>139</sup> 2019 Census report

<sup>140</sup> 2019 Census report

<sup>141</sup> 2019 Census report



Sharing harvested foods is most prevalent in one's own community. In 2019, AKP residents reported sharing most subsistence foods with other members of the community (98 percent). This is the highest rate for all communities that share within their own community.

**Table 12: AKP Subsistence Sharing Within AKP and Between Communities, 1998 - 2019**

Census Year	Within AKP	Other NSB Community	NANA Community	Anchorage	Fairbanks	Other Areas in AK
1998	62%	32%	0%	0%	6%	0%
2003	99%	19%	4%	4%	19%	6%
2010	91%	48%	18%	10%	40%	13%
2015	100%	49%	6%	22%	33%	12%
2019	98%	66%	6%	13%	23%	8%

In 2015, 61 percent of households reported a decrease in land mammal hunting, compared to 39 percent in 2019. Even so, over the five-year period from 2015 to 2019, about four in ten households still reported reduced hunting activity, twice the proportion that had reported a decrease in 1998. Decreases in fishing and gathering are also reported since 2010.<sup>142</sup>

**Table 13: Percent of Iñupiat Households Saying Subsistence Activities Have Decreased During Last 5 Years (2015 – 2019)**

	1998	2003	2010	2015	2019
Hunting Land Mammals	19%	38%	30%	61%	39%
Fishing	Not available	Not available	25%	35%	39%
Gathering	Not available	Not available	25%	41%	34%

Residents reported changes in both the number of subsistence trips and the distance traveled for subsistence activities between 2010 and 2019. Nearly 40 percent of households indicated that the number of trips increased from 2015 to 2019, while 16 percent reported a decrease. Similarly, 36 percent reported traveling farther distances during that period, compared with 10 percent who traveled less. Although both measures declined from the higher levels reported in 2015, the long-term trend since 2010 shows more residents report traveling more often and farther than not.<sup>143</sup>

**Table 14: Percent of Iñupiat Households with Changes in Number of Trips and Distance Traveled for Subsistence Activities, 2010 - 2019**

	2010		2015		2019	
	Increased	Decreased	Increased	Decreased	Increased	Decreased
Changes in Number of Trips	36%	10%	58%	7%	39%	16%
Changes in Distance Traveled	52%	0%	53%	11%	36%	10%

<sup>142</sup> 2019 NSB Census

<sup>143</sup> 2019 NSB Census

## Subsistence Harvest and Seasons

Families in Anaktuvuk Pass plan activities around when animals migrate, fish return, birds nest, and plants ripen. Each resource has its own harvest window, shaped by animal migrations, weather patterns, and environmental change.

Caribou remain at the heart of life in Anaktuvuk Pass. Hunters have always adapted to changes in caribou movement, herd size, and health. Today, many of these changes are linked to climate shifts: warmer temperatures encourage the spread of shrubs that caribou avoid, winter icing makes it difficult for them to access lichen, parasites are on the rise, and tundra fires leave behind vast areas devoid of food that herds will not cross. Despite these challenges, caribou hunting continues to be a central activity, connecting families to the land and to each other.

Fishing in nearby rivers and lakes is another important tradition. While residents fish all year, summer and early fall, when the waters are open, are the busiest times for fishing. Anaktuvuk Pass residents typically fish for paiktuk/iqalukpik (Arctic char/Dolly Varden), iqaluaqpak (lake trout), sulukpaugaq (Arctic grayling), and tipuk (whitefish). Many subsistence harvesters fish for iqaluaqpak throughout the year, with the most activity during the spring and summer months. Iqaluaqpak is commonly found in Chandler and other nearby lakes.

Anaktuvuk Pass residents hunt niglingaq (geese) and tiṇmiagru (duck) during the summer months, with most harvesting activity taking place in May and June. Egg gathering is also a valued spring subsistence activity, providing an important seasonal food source. The hunting season generally extends from April through October, following the migration and nesting cycles of local bird populations.

For families in Anaktuvuk Pass, tuttu are the heart of subsistence life. Historically, large numbers of caribou from the Western Arctic, Central Arctic, and Porcupine herds passed through the foothills of the Brooks Range into Anaktuvuk Pass. Nunamiut are taught by past generations to refrain from hunting in the north to ensure that the migrating caribou come through the Anaktuvuk Pass valley. In years when the migration shifts away, households face real hardship. While caribou are hunted year-round, the caribou are in their prime condition from August through October, so that is the most important time for hunting. The fall migration usually comes through from late August to early November, and the spring migration from mid-March to late May. Both seasons are busy times for hunters and their families. Dall sheep and moose are also important. Because Anaktuvuk Pass is far from the coast, marine mammals have never been a large part of the community's harvest.

For many years, hunters and Elders have shared concerns about activities that disturb caribou or block their movement through traditional hunting areas.<sup>144, 145</sup> Places along the Anaktuvuk, Kanayut, Nanushuk, and Itkillik Rivers, as well as May Creek, are especially important for subsistence use.<sup>146</sup>

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<sup>144</sup> 2025 community meeting

<sup>145</sup> Oil and gas tech report

<sup>146</sup> Oil and gas tech report

Table 15 reflects Nunamiut hunting seasons as described by local hunters. The calendar was first developed in 2010 based entirely on input from community hunters and revised in 2025 for this plan update. Caribou harvests vary from year to year. The hunting seasons are typical but not necessarily successful.

Table 15: Subsistence Calendar

Subsistence Resource	Winter			Spring			Summer			Fall		
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Tuttu Caribou												
Tuttuvak Moose												
Amaguq, Qavvik Wolf, Wolverine												
Imnaiq Dall Sheep												
Akjaq, Iggabri Brown bear, black bear												
Siksrik Squirrel												
Pamiuqtuuq Snowshoe Hare												
Tijmياġru Duck												
Niglingaq Geese												
Niksaaktunġiq, aqargiq Ptarmigan/Willow Ptarmigan												
Iqaluaqpak Lake Trout												
Sulukpaugaq Arctic Grayling												
Aġayuaqsramik Arctic Char												
Tipuk Whitefish												
	Blank = no harvest activity		M = Medium harvest activity									
	L = Low harvest activity		H = High harvest activity									

Dall sheep, brown bear, and moose are also harvested. Birds and fish supplement terrestrial animals, especially when caribou numbers are low. Farther out from the village, Dall sheep, brown bear, and moose are hunted in August, September, and October. Ptarmigans are available year-round and thus are the most important bird species in the area. However, a variety of geese and ducks are also harvested during their brief migration period through the area. Grayling, Arctic char,

lake trout, and whitefish are also important food sources despite being a smaller component of the subsistence diet. The fish populations in Arctic waters have very low growth rates and productivity and therefore are highly susceptible to over-fishing. The open water period for lakes and streams is short. Because of elevation and latitude, ice typically is present from mid-October to late June, preventing access. Trout fishing is best soon after the ice melts while grayling and char fishing peaks in the fall.<sup>147</sup>

Blueberries and salmonberries are the most common plants that residents gather. Harvesting takes place during the brief snow-free season, generally from June through September, when the tundra is most accessible, and plants are at their peak for gathering.

The area north of Anaktuvuk Pass encompassing the Chandler and Anaktuvuk River drainages is important for subsistence activities. Due to the absence of large river systems in the area, residents of Anaktuvuk Pass are unable to boat to resources during the summer. Additionally, summertime off-road vehicle use is limited to areas within the boundaries of the Anaktuvuk Pass Land Exchange. After the park was established in 1980, issues regarding off-road vehicle (ORV) use in the park wilderness needed to be resolved. The Anaktuvuk Pass Land Exchange was crafted between the Nunamiut Corporation, the City of Anaktuvuk Pass, the Arctic Slope Regional Corporation (ASRC), and the NPS. The 1992 Final Legislative Environmental Impact Statement on All-Terrain Vehicles for Subsistence Use in Gates of the Arctic and Record of Decision, ratified by Congress in 1995, authorized an exchange of federal park and wilderness land with Native regional and village corporations. This agreement allows ATV access by Anaktuvuk Pass residents to pursue caribou and other subsistence resources within the Anaktuvuk Pass Land Exchange boundaries and also provides broad public access easements through ASRC and Nunamiut lands. This exchange was completed in 1996, but a complete survey of the lands was only finished recently. To allow for ATV access, the exchange deauthorized some park wilderness and designated new wilderness areas that were formerly ASRC and Nunamiut lands. The ATV as defined by the agreement, is a six or eight wheeled off-road vehicle with low-pressure tires and weighing a maximum 1,200 pounds empty or 2,000 pounds fully loaded. The Argo is a popular brand of ATV used by Anaktuvuk Pass residents.<sup>148,</sup>

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<sup>147</sup> <https://www.nps.gov/gaar/planyourvisit/fishing.htm>

<sup>148</sup> Chakuchin, H. Jobe. NEPA Specialist, Park Planner. National Park Service. Personal communication during public comment period. May 31, 2016.

<sup>149</sup> [https://www.nps.gov/parkhistory/online\\_books/norris1/chap8e.htm](https://www.nps.gov/parkhistory/online_books/norris1/chap8e.htm)



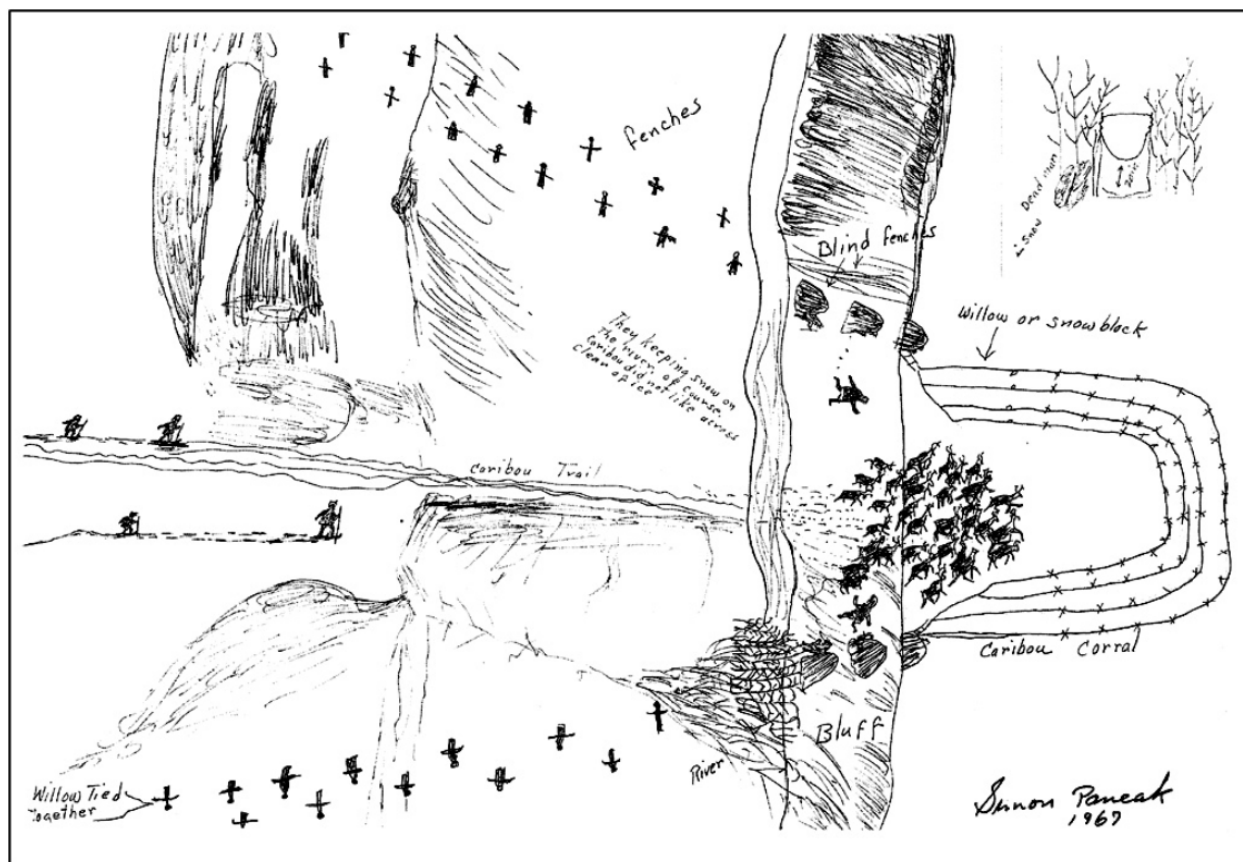


Figure 14: 1967 Simon Paneak illustration of a caribou drive, depicting hunters, iñuksuit, and a caribou herd entering a corral in Gates of the Arctic National Park

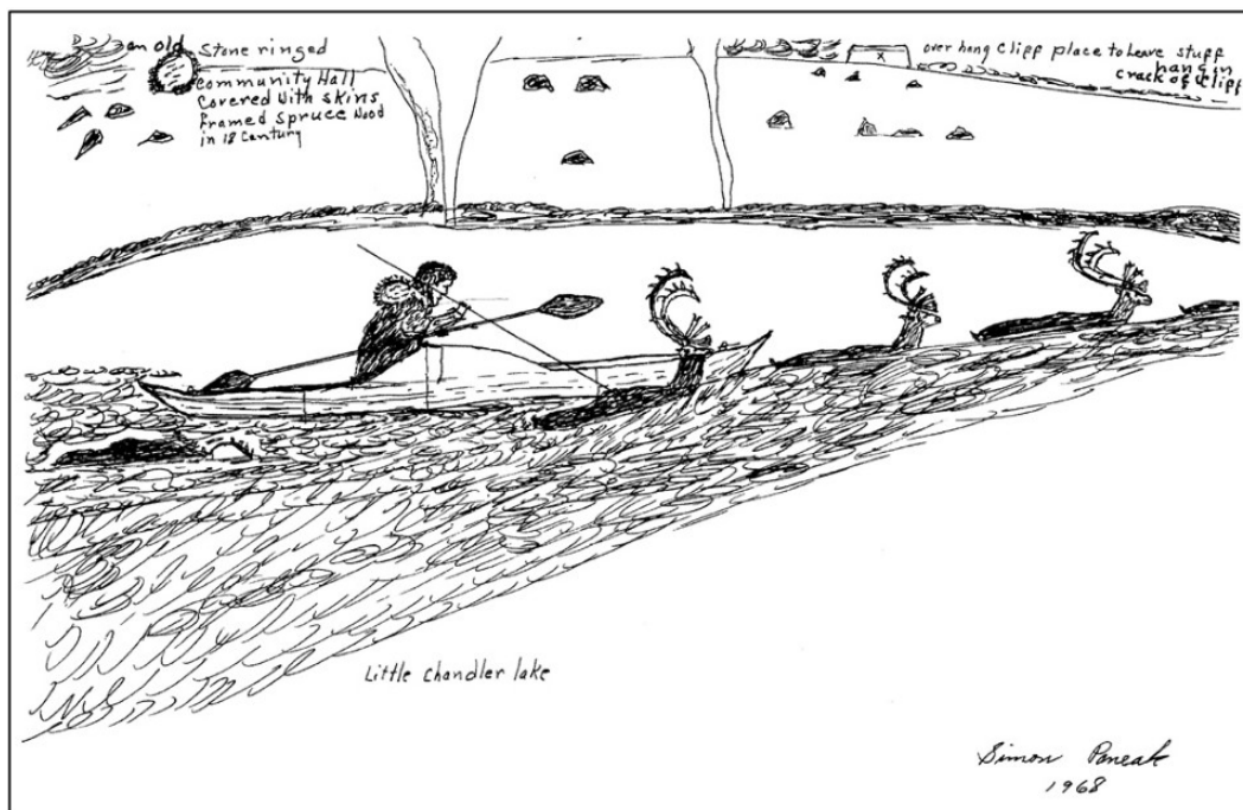


Figure 15: 1967 Simon Paneak illustration of a hunter in a qayaq spearing caribou as they cross a river

### Tradition, Change, and Resilience

The Nunamiut have a tremendous capacity to adapt to change as is evidenced through their response to changes in caribou migratory routes, fur trading, government regulations, tourism, and technology changes. Through all of these changes, the residents have retained their hunting, fishing, gathering and sharing skills and social networks. In the face of new circumstances and vulnerabilities, existing and future village Elders will continue to share with their youth their knowledge of traditional tools and equipment, the variability of ecosystems and weather, wildlife harvesting skills, and environmental stewardship to facilitate the community's adaptation to climate and economic change for generations to come.

It is important to note that change made to a hunting technique does not render the practice no longer traditional. Adapting new technologies is part of what allows a culture to maintain a traditional practice under changing circumstances. An example of this is found in dog harnesses, or anupiat, originally made from hide of the back and legs of caribou.<sup>150</sup> As described in the Anaktuvuk Pass Museum, "Dogteam harnesses evolved over time in both form and material. Nunamiut mushers shifted from caribou skin to cloth, to leather, metal and wood, and most recently to nylon. Residents have adopted new materials only when they were sure the harnesses would hold up to hard wear."

<sup>150</sup> AKP museum

### **Subsistence Vulnerabilities**

Subsistence resources and users within the community's AOI are vulnerable to several activities as well as the effects of climate change. Disturbance to subsistence resources can alter animal migration patterns and cause hunters to travel greater distances, which increases their expenses and exposure to hazards. The availability of subsistence resources in the community's AOI and residents' access to those resources may change due to the impacts of sport hunting, commercial recreation, scientific studies, and road construction within the area, as well as to the effects of climate change, such as tundra fires.

Sport hunters have been known to take the vanguard of the caribou herds. Low flying aircraft can disturb and even harass wildlife. Draining lakes for ice roads can alter wildlife ecosystems and migratory patterns. Late freeze-up can limit snow machine access to the tundra for caribou hunts. Accelerated thawing of the permafrost can release methane gases that can alter food sources for mammals, fish and fowl, which may translate to food scarcity in the long-term. In the future, warmer summers may increase the number of mosquitoes or other pests which harass caribou populations, altering the timing and route of their travels. Melting permafrost may lower the surface level of freshwater lakes. Drier summers may also reduce lake water levels and alter fish habitat. Lastly, loss of wage income related to decreased oil development and revenues on the North Slope, over time, may reduce the ability to afford modern hunting equipment.

The Nunamiut have had, and continue to have, a tremendous capacity to adapt to change and to persevere. Through the comings and goings of wage labor and resource scarcity during the eras of commercial whaling, fur trading, reindeer herding, military installations, and now, oil development, the Nunamiut have retained their hunting, fishing, gathering, and sharing skills and social networks. In the face of new circumstances and vulnerabilities, it is expected that existing and future village Elders will continue to share with their youth their knowledge of tools and equipment, the variability of ecosystems and weather, wildlife harvesting skills, and environmental stewardship to facilitate the community's adaptation to climate and economic change for generations to come.

The United Caribou Association of the Nunamiut (UCAN) was established in 2014 for the Anaktuvuk Pass community to protect their primary source of subsistence foods as a united front. The community hopes that the Association will serve a similar function for Anaktuvuk Pass and other communities that depend on caribou for subsistence in the same way that the Alaska Eskimo Whaling Commission represents coastal arctic communities that rely on the bowhead whale. UCAN is controlled by the tri-lateral committee, made up of representatives from the City of Anaktuvuk Pass, the Naqsrarmiut Tribal Council, and the Nunamiut Corporation. The Association hopes to protect subsistence activities and resources through local coordination and with the federal and state governments.<sup>151</sup>

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<sup>151</sup>[https://scholarworks.alaska.edu/bitstream/handle/11122/6748/Tooyak%20UCAN%20Project%20final\\_to%20Dean%20%282%29.pdf?sequence=1&isAllowed=y](https://scholarworks.alaska.edu/bitstream/handle/11122/6748/Tooyak%20UCAN%20Project%20final_to%20Dean%20%282%29.pdf?sequence=1&isAllowed=y)

**Sport Hunters.** Alaska resident and non-resident sport hunters, many of them bow hunters, access caribou hunting areas from the Dalton Highway. Sport hunters are non-Iñupiat hunters who arrive alone or in groups, with or without a commercial guide. Commercial outfitters or guides require a NSB Commercial Recreation land use permit issued by the NSB Planning and Community Services Department, NPS special use permit, and state and federal licenses. Non-guided hunters do not need a NSB Commercial Recreation land use permit but they are required to have a hunting license. Everyone needs permission to use or cross private lands; Nunamiut Corporation provides permits for using or crossing their land in and around Anaktuvuk Pass.

Low flying aircraft from sport hunters can harass wildlife, particularly caribou. Commercial outfitters have targeted the vanguard of a herd, causing the rest of the animals to scatter. Changing migration patterns causes residents to travel greater distances, at greater expense and risk, to find and harvest caribou. Transporting meat long distances means that there is a greater risk of spoilage. In addition, sport hunters sometimes leave carcasses and meat on the tundra and take only the antlers. This practice is considered disrespectful to the subsistence users who rely on the caribou harvest.

**Gates of the Arctic National Park and Preserve Restrictions.** After the Park was established, NPS officials imposed a ban on ATV use on park lands. Anaktuvuk Pass residents needed access for subsistence hunting but the ban limited travel on traditional lands. Traditional hunting by foot and dog teams no longer provides adequate food for the village as these modes of transportation are slow and unsuited for carrying large quantities of food to share with hunter's families, Elders, residents who are unable hunt, and the community. ATV and snow machine use is restricted to Native allotments that were selected as seasonal camps for subsistence activities. This meant the Nunamiut could not move between their traditional use areas within the Area of Influence, and Elders and those with disabilities could not easily access traditional allotments. This restriction was a threat to the health and well-being of the community that, coupled with the scattering of the caribou by sport hunters and low-flying aircraft, could result in food scarcity in the community.

In response to the need for ATV and snow machine access to subsistence resources within GAAR, in the late 1980s the residents of Anaktuvuk Pass began negotiating an agreement between the NPS, ASRC, the City of Anaktuvuk Pass, and the Nunamiut Corporation for a four way land exchange to establish an area near the community's traditional hunting grounds where motorized vehicles could travel on traditional lands without Anaktuvuk Pass hunters being arrested and their gear and meat being confiscated by NPS officials. This land exchange agreement was ratified by Congress in 1995 and provided ATV use on 126,632 acres of non-wilderness park land in exchange for relinquishing subsurface and surface development rights on 116,435 acres of Nunamiut Corporation lands. The agreement also provided public pedestrian and dog sled access across 148,484 acres of Native lands to reach NPS-administered lands.<sup>152</sup>

All hunters require a hunting license from the Alaska Department of Fish and Game (ADF&G), including residents within GAAR. Licensed sport hunters are allowed to hunt within the Itkilik and

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<sup>152</sup> U.S. Department of the Interior. 1996. U.S. National Park Service. Section 302 of the Omnibus Parks and Public Lands Management Act of 1996. Public Law 104-333.

Kobuk Preserves, but not in the main part of the Park. Title VIII of ANILCA allows rural Alaskan to pursue subsistence uses on public lands except when the NPS, acting on behalf of the Secretary of the Interior, deems such activity to be limited as necessary for public safety, administration, or to assure the continued viability of a particular fish or wildlife population. Currently, federal subsistence wildlife regulations limits the number and the season for taking moose, caribou, musk ox, sheep, bear, coyote, fox, lynx, wolf, wolverine, and ptarmigan.<sup>153</sup>

**Anaktuvuk Pass Controlled Use Area.** The ADF&G established the Anaktuvuk Pass Controlled Use Area, which encompasses approximately 3,250 square miles to the north, east and west of the community (See Map 5.1). Within the Controlled Use Area, lands are owned by the State of Alaska, ASRC, or the Nunamiut Corporation. The Anaktuvuk Pass Controlled Use Area is closed to the use of aircraft for hunting caribou, including the transport of caribou hunters, their hunting gear, or parts of caribou during August 15 through October 15. However, this provision does not apply to the transport of caribou hunters, their gear or parts of caribou by aircraft between publicly owned airports, such as the Anaktuvuk Pass airport. With permission of private landowners, hunters may land at the Anaktuvuk Pass airport and then trek into preserve lands, state lands, Nunamiut Corporation lands, or ASRC lands. The intent of this designated Controlled Use Area, at least on the part of community residents, is to better control sport hunters' access to caribou herds; to better educate hunters about hunting etiquette and protocols; and to require sport hunters to secure written permission from land owners prior to hunting on their lands. Enforcement of the Controlled Use Area is primarily complaint driven through ADF&G.<sup>154</sup>

**Climate Change.** Changes in the environment that affect the health of subsistence resources or residents' access to them are of great concern to residents. Changes in resource distribution, fluctuation in caribou populations, epidemic disease, and prolonged contact with Euro-Americans have caused major changes in the geographic distribution and life of the Iñupiat, and the viability of the subsistence activities continues to be a critical issue on the North Slope. The impacts of global climate change are more acute in the Arctic than in most regions of the world, and changes to the environment and habitats of the North Slope resulting from climate change are affecting subsistence resources and resource users.<sup>155</sup>

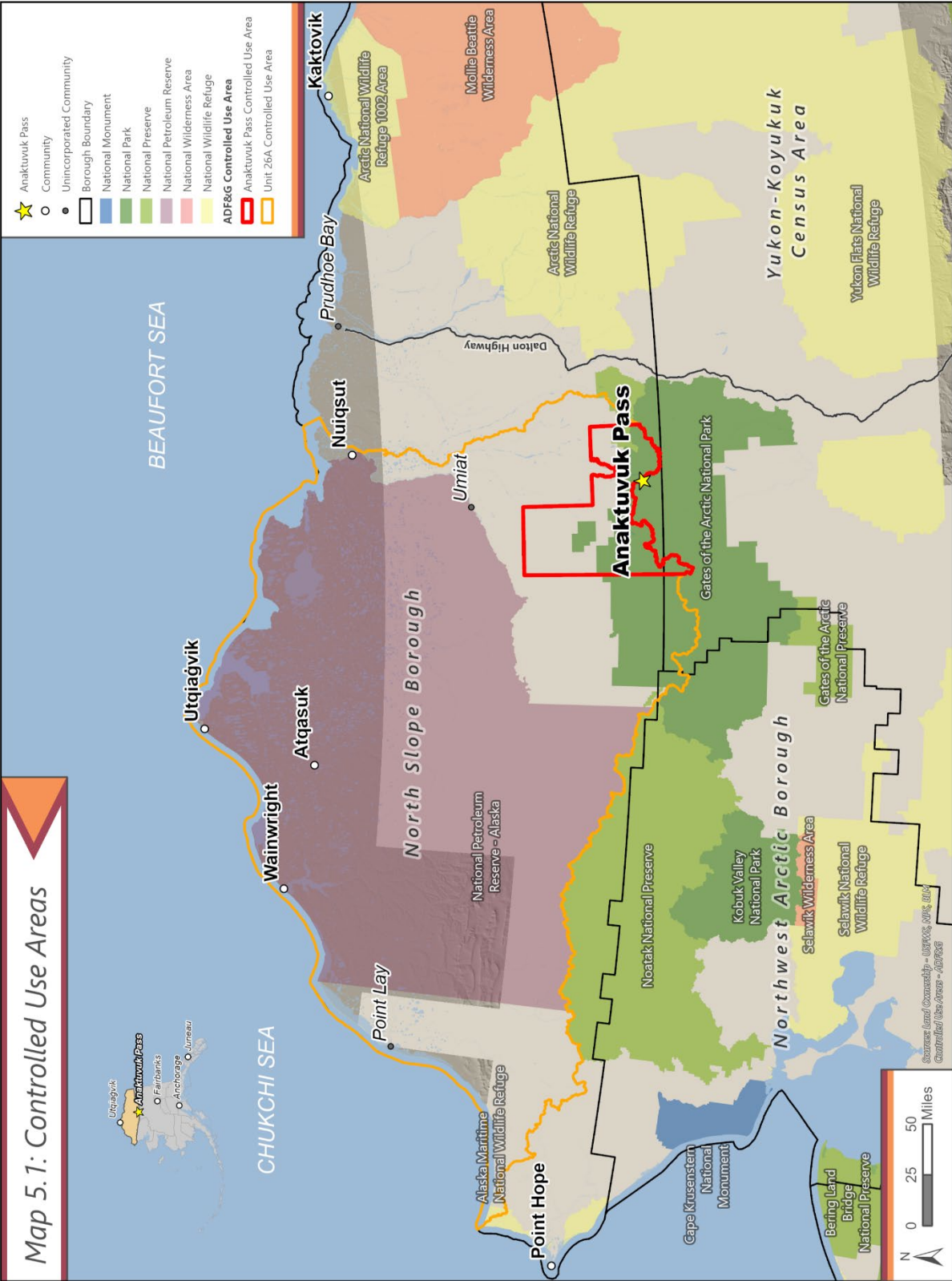
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<sup>153</sup> <https://www.nps.gov/gaar/planyourvisit/hunting.htm>

<sup>154</sup> [https://www.adfg.alaska.gov/index.cfm?adfg=conservationareas.controlleduse&area=CU\\_anaktuvuk](https://www.adfg.alaska.gov/index.cfm?adfg=conservationareas.controlleduse&area=CU_anaktuvuk)

<sup>155</sup> <https://www.climatehubs.usda.gov/hubs/northwest/topic/alaska-and-changing-climate>





**Climate Change, continued.** Communities are adjusting to the impacts, including changes in species diversity, numbers, and distribution of Arctic-adapted species, vegetation coverage and type, and the physical structure of the landscape itself. Generally, communities harvest resources nearest to them, but harvest activities may occur anywhere in the planning area. Subsistence is at the core of Iñupiat kinship systems and social networks, which are shaped by subsistence task groups and the sharing of subsistence foods. This sharing network extends across the North Slope and beyond; it is accepted by the community that Iñupiaq people cannot thrive without subsistence foods. Variety in resources and timing is a critical component of the wider subsistence system, because families and communities share large amounts of what they have most of with family in other communities, especially in times of need. Thus, all communities consume the resources and are invested in the viability of subsistence everywhere on the North Slope.

The most important subsistence foods to the Nunamiut are caribou, waterfowl, and fish, and the subsistence diet is highly nutritious. Subsistence foods are also a critical aspect of economics on the North Slope, where a mixture of subsistence and cash economy continues to be a system that serves families well. A lack of subsistence foods would create serious nutritional and economic shortages for the Iñupiat. Many products available in stores are expensive and much lower in nutritional quality. Recognition of the critical importance of subsistence food is reflected by the preference for a rural priority for subsistence resources in times of need that is protected by federal law and specifically by Section 810 of the ANILCA. Currently, the most serious threats to the viability of subsistence on the North Slope include the removal of access to harvest areas due to industrial development, and the impacts of climate change. Residents of Anaktuvuk Pass are concerned about the long-term effects of climate change on food security, such as:

- Later freeze-up can limit snow machine access to the tundra for caribou hunts, and accelerated thawing of the permafrost can change vegetation patterns, such as increased brush cover, which in turn may affect the species composition and location;
- Thawing permafrost releases methane gas which may alter the taste of tundra vegetation, upon which caribou feed;
- The release of methane gases as permafrost soils thaw could increase the rate of warming;
- Warmer summers may result in a greater number of mosquitoes or other pests that harass caribou and may alter the timing and location of migrations;
- Drier summers may also reduce lake water levels and alter fish habitat;
- Thawing permafrost may result in lowering or drainage of lakes; and
- Earlier break-up of rivers cause erosion of riverbanks resulting in shallower water and increased aquatic plants which restrict boat navigation;
- A decrease in lichen cover on tundra has resulted in a decline in primary caribou forage over the last 24 years and continues to deteriorate due to increased temperatures and, to a lesser extent, to tundra fires;<sup>156</sup> and
- General drying trends could lead to more tundra wildfires resulting in loss of caribou habitat within reach of subsistence hunters.

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<sup>156</sup> Joly, Kyle et al. 2006. Changes in Vegetation Cover or Western Arctic Herd Winter Ranges from 1981 to 2005: Potential Effects of Grazing and Climate Change. [www.fs.fed.us/pnw/pubs/journals/pnw\\_2006\\_joly001.pdf](http://www.fs.fed.us/pnw/pubs/journals/pnw_2006_joly001.pdf).

A commonly observed impact of climate change is an increase in the number of plant, animal and insect species appearing. North Slope residents have reported fish from warmer, southern waters appearing in their fishing nets, and a proliferation of insects, including flies that reportedly make caribou sick. Climate changes may be reducing food sources for caribou and muskoxen, possibly shifting their range away from the communities or reducing their numbers. The same habitat changes may favor moose, which local hunters perceive as less suitable as subsistence staples because they are solitary, require large ranges per animal, and do not predictably move in large numbers to specific areas, making it more difficult and energy intensive to harvest them. Due to their size, moose also require more effort to butcher, transport, and process than caribou and muskoxen.<sup>157</sup>

**Subsistence Access.** Climate change could create harvest disruptions either due to the resource changing its migration schedule or growth schedule or due to weather conditions preventing access. For example, most North Slope hunters attempt to hunt caribou in the fall before the males go into rut. In the past, the ground and smaller rivers and lakes would usually freeze around late September before the males would go into rut, making it feasible to hunt by snow machine. In recent years, hunters are faced with the possibility that the land and water can freeze and thaw out several times before freezing for the winter, making it difficult to travel long distances. For example, a hunter takes a boat and water is frozen outside of the village, or a hunter takes a snow machine or four-wheeler and the water is thawed outside of the village. In general, travel across much of the North Slope is most efficient by snow machine and uncertain travel can be particularly difficult in the fall when people are trying to harvest caribou.

**Water.** Fresh water is a critical resource on the North Slope, and tundra ponds across certain areas of Alaska have been shrinking as a result of increased evaporation and permafrost melting, both of which are projected to continue through the end of this century.<sup>158</sup> Melting permafrost can allow perched water to dissipate, and higher temperatures cause a higher rate of evaporation. The loss of tundra ponds is a loss of fresh drinking water and nesting grounds for migratory birds. At the same time, thermokarst<sup>159</sup> is creating or increasing the size of lakes in parts of the planning area.

**Oil and Gas Activities.** In 2021, 88 Energy Ltd. acquired the two leases with an initial 10-year term for the Umiat oil field. Umiat is located about 80 miles north of Anaktuvuk Pass and about the same distance south of Nuiqsut<sup>160</sup>. The Alaska Department of Transportation and Public Facilities (DOT&PF) at one time proposed a road from Umiat eastward to the Dalton Highway called the Foothills West Transportation Access Project. The purpose of this “Road to Resources (R2R)” project was intended to provide access to coal, oil and gas resources along the northwestern foothills of the Brooks Range as well as within the NPR-A.<sup>161</sup> The road would have provided both exploration and

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<sup>157</sup> Hassol, Susan Joy. 2004. Alaska Climate Impact Assessment. Impacts of a Warming Arctic. University of Alaska, Fairbanks. [www.amap.no/documents/download/1058](http://www.amap.no/documents/download/1058)

<sup>158</sup> U.S. Department of the Interior. 2011. Bureau of Land Management. NPR-A Climate Change Analysis: An Assessment of Climate Change Variables in the National Petroleum Reserve in Alaska. SNAP: Scenarios Network for Alaska and Arctic Planning. University of Alaska. [www.snap.uaf.edu/attachments/NPRA\\_Climate\\_Change\\_Analysis\\_2011.pdf](http://www.snap.uaf.edu/attachments/NPRA_Climate_Change_Analysis_2011.pdf). Accessed December 22, 2015.

<sup>159</sup> Thermokarst is a land surface characterized by very irregular surfaces of marshy hollows and small hummocks formed as ice rich permafrost thaws.

<sup>160</sup> <https://www.ogj.com/general-interest/article/14190113/88-energy-acquires-umiat-oil-field-in-alaska>

<sup>161</sup> <https://dot.alaska.gov/nreg/forum/files/nrf-012-foothills.pdf?>

development opportunities for the area as well as facilitated more economically-feasible development within the NPR-A. Residents of Nuiqsut commented that the road would have opened the door to sport hunters, which would negatively impact subsistence hunting by the communities of Nuiqsut, Anaktuvuk Pass, and Barrow due to the lack of State enforcement of hunting regulations in the area. Residents of Anaktuvuk Pass also oppose development of the nearby Nanushuk coal mine and the Gubik natural gas fields that this road would have facilitated. The Alaska DOT&PF discontinued its plans for the Foothills R2R in October 2014.

While the Nunamiut are adaptable, maintaining healthy subsistence resources is vital to sustaining the local population. If the availability of wildlife for subsistence declines, residents of Anaktuvuk Pass would experience hardship and could potentially see a decline in the population of the community due to out-migration of households. Maintaining a clean and healthy wildlife habitat is the key to sustaining the local population.

### Hunting Regulations

The NPS and the State of Alaska cooperatively manage the wildlife resources of the GAAR. When this vast area was designated in 1980, Congress protected the traditional subsistence rights of local rural residents through the ANILCA. Subsistence use is defined as: Customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade.

To be eligible to hunt, fish, or trap under federal subsistence regulations in GAAR, you must be a rural Alaska resident with a positive customary and traditional use determination for the species and area you wish to hunt, fish, or trap, and live either in a resident zone community or inside the park boundary, or have a 13.440 subsistence use permit. A permit to enter the park is not required. An Alaska State hunting license is required for all hunters aged 16 or older. Bag and possession limits vary by species and by area.

To be eligible to hunt, fish, or trap under federal subsistence regulations in GAAR, you must be a local rural resident. This is any person who maintains their primary permanent home in or near the preserve. To trap wildlife in the park or preserve under federal subsistence regulations, you must have a state trapping license and comply with federal subsistence trapping regulations.

**Table 16: Hunting Restrictions**

Area / Context	Allowed Hunting Type	Key Requirements and Restrictions
Gates of the Arctic National Park (most areas)	Subsistence only	Must be eligible rural resident; Customary and Traditional Use Determination required
National Preserve	Sport and Subsistence	State license needed; follow state and federal rules

Controlled Use Area (Unit 26A)	Sport and Subsistence	No aircraft for hunting (Aug 15–Oct 15); other rules apply
Dall Sheep in Unit 26A (Park portion)	Resident-only quota	Anaktuvuk Pass residents; 60 sheep quota, daily limit 3 (max 1 ewe)
Caribou (Unit 26A)	Sport and Subsistence	Up to 10 per day; cow caribou restricted May 16–June 30
Other Game (Unit 24 general)	Sport and Subsistence	Varies by species (e.g., up to 15 wolves, 2 lynx, etc.)
Private Land Areas, including Nunamiut Corporation lands	Restricted	Must have landowner permission to access

### Caribou Management and Hunting Regulations

The WAH Working Group was established in 1997 to “ensure conservation of the Western Arctic caribou herd, safeguard the spiritual and cultural well-being of Alaska Natives and the interests of all users of the herd, and to integrate indigenous knowledge with Western Science.” This non-regulatory group of 20 individuals includes subsistence users, other Alaskan hunters, reindeer herders, hunting guides, transporters and conservationists. Staff from USFWS, ADF&G, NPS and BLM provide support services to the group. The group identifies concerns, requests information and advocates for actions that will conserve and benefit the herd, including habitat studies or protections from the impacts of development.

The WAH Working Group’s Cooperative Management Plan (CMP) has caribou management recommendations based on four levels of both population size and population trend. While calving rates are slightly higher than the long-term average, adult cow survival is below the 88% necessary for herd growth. The latest available<sup>162</sup> WAH population count of 152,000 caribou in July 2023<sup>163</sup> coupled with the herd’s declining trend over the past two decades puts the herd below the Liberal Management level and into the Preservative Management level where conservation measures are outlined in the Plan. The Plan also includes conservation measures for a continued decline.<sup>164</sup>

Due to population declines in both the Western Arctic and Teshekpuk herds, on July 1, 2024, state and federal regulations took effect based on drastic recommendations made by The Alaska Board of Game. The new regulations limit individual harvest to 15 caribou (only one of which may be a cow) per year) and close all federal lands in Game Management Unit 23 to hunters who are not federally qualified subsistence users.<sup>165</sup> This bag limit is a significant change from the previous five caribou allowed per day, but still more than the originally proposed four caribou per year. Advocacy along with data on traditional caribou harvest and need from the NSB Department of Wildlife Management helped to secure the more adequate limit of fifteen per year. Season dates and bag limits for caribou hunting under state regulations by resident and nonresident hunters are delineated by Game Management Unit.<sup>166</sup>

<sup>162</sup> A census occurred in July of 2025 but the results are not yet available.

<sup>163</sup> [https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/caribou\\_trails/caribou-trails-2025.pdf](https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/caribou_trails/caribou-trails-2025.pdf)

<sup>164</sup> Alaska Department of Fish and Game. 2015. New Caribou Hunting Rules in Effect. Caribou Trails. Summer 2015; Issue 15. [http://westernarcticcaribou.org/wp-content/uploads/2015/07/CT2015-FINAL-06\\_15\\_15\\_lowres-1.pdfxx](http://westernarcticcaribou.org/wp-content/uploads/2015/07/CT2015-FINAL-06_15_15_lowres-1.pdfxx)

<sup>165</sup> [https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/caribou\\_trails/caribou-trails-2025.pdf](https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/caribou_trails/caribou-trails-2025.pdf)

<sup>166</sup> Alaska Department of Fish and Game. 2015. New Caribou Hunting Rules in Effect. Caribou Trails. Summer 2015; Issue 15. [http://westernarcticcaribou.org/wp-content/uploads/2015/07/CT2015-FINAL-06\\_15\\_15\\_lowres-1.pdf](http://westernarcticcaribou.org/wp-content/uploads/2015/07/CT2015-FINAL-06_15_15_lowres-1.pdf)

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# Housing



Safe, reliable housing is a basic necessity that plays a central role in community stability and individual well-being. For the residents of Anaktuvuk Pass, it is critical to have a range of affordable, accessible housing, including options for low-income families and emergency needs. Yet, meeting these needs in rural Alaska comes with persistent obstacles. Remote communities face high shipping costs for construction supplies, aging homes that require expensive repairs or modernization, and energy prices that far exceed those in urban areas. Together, these challenges restrict housing availability and drive-up costs across the North Slope.

Housing concerns in the North Slope Borough are not new: they have persisted for generations. While household structures and demographics have shifted significantly over the last fifty years, the 2019 NSB Census makes clear that securing adequate housing remains a borough-wide issue. The challenges cut across all villages: much of the housing is older, options are limited, single-family dwellings dominate, rental units are scarce, and many households face overcrowding. These long-standing issues underscore the broader problem of housing affordability in the region. Addressing them will require cooperation among many partners, including local governments, the Borough, housing authorities, Native corporations, and both state and federal agencies.

## Current Housing Conditions

Table 17 below provides an overview of past and current housing characteristics in Anaktuvuk Pass as reported by the NSB Census between 2010 and 2019.<sup>167</sup> These are discussed in more detail in this chapter.

### Homes and Households

The housing stock in Anaktuvuk Pass consists primarily of single-family residences (SFR), which account for 108 units, or nearly 87 percent of the total housing supply. The community also includes 16 multifamily residential (MFR) units.

The 2010 NSB Census estimated 118 homes in Anaktuvuk Pass, while in 2014, 122 housing units were recorded. More recently, the 2019 NSB Census reported 124 units, representing a net increase of 6 homes over the past decade.<sup>168</sup>

Between 2015 and 2019, Anaktuvuk Pass experienced a slight increase in the average number of people per Iñupiat household, from 3.70 to 3.73, underscoring the impacts of the ongoing shortage of available and adequate housing.<sup>169</sup>

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<sup>167</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>168</sup> Ibid

<sup>169</sup> Ibid

Table 17: Anaktuvuk Pass Housing At-A-Glance

Housing Characteristic	Number	Percent
Total population	376	100%
Total housing units	124	100%
Renter-Occupied	14	17.9%
Owner-Occupied	64	82.1%
Vacant Units	21	17.0%
Average number of people per household	3.60	
Percent of overcrowding	15.4%	
Percent of severe overcrowding	19.2%	

### Housing Occupancy

Anaktuvuk Pass has an estimated 21 vacant homes, representing about 17 percent of the community's housing stock<sup>170</sup>. It is possible that this figure from the NSB Census reflects inaccuracies, or that some of these homes have fallen into disrepair and are no longer habitable. Despite this vacancy rate, overcrowding remains a significant issue. Residents have repeatedly expressed concerns about the severe shortage of housing and the urgent need for new construction or rehabilitation projects to relieve overcrowding, suggesting that the available vacant homes are not suitable or ready for occupancy.

Table 18: Anaktuvuk Pass Type of Housing

Type of Housing	Number	Percent
Total housing units	124	100%
Single family homes	108	87%
Multifamily homes	16	13%

### Home Ownership

Over the past two decades, homeownership across North Slope communities has steadily increased. Since 2010, the overall rate of owner-occupied housing in the Borough has grown from 46 percent to 60 percent. The proportion of homeowners who own their homes outright has more than doubled since the 2003 NSB Census, rising from 21 percent to 47 percent. Iñupiat households, in particular, have experienced higher rates of homeownership than non-Iñupiat households, with ownership levels rising at a faster pace. During this same period, rental occupancy has declined.

<sup>170</sup> North Slope Borough, 2019 Economic Profile & Census Report.

Today, about 40 percent of housing in the Borough is renter-occupied, down from 54 percent in 2003. The Borough's owner-occupancy rate of 60 percent is comparable to Alaska's statewide rate of 63.7 percent, and aligns closely with other regions, including Anchorage (60.1 percent), the Northwest Arctic Borough (57.1 percent), and the Nome Census Area (60.6 percent).

In Anaktuvuk Pass, the homeownership rate is the highest in the Borough at 82.1 percent. Utqiagvik has the lowest rate of homeownership on the North Slope at 43.7 percent. Among Anaktuvuk Pass homeowners, 78 percent own their homes without a mortgage.

Rental housing in Anaktuvuk Pass averages \$792 per month, second only to Utqiagvik in cost across all North Slope communities. The average monthly mortgage payment in Anaktuvuk Pass is \$571, which is in line with other communities.<sup>171</sup>

**Table 19: Anaktuvuk Pass Housing Ownership**

Renter Occupied			Owner Occupied			
TNHA Rental	NSB Rental	Other	TNHA (Mutual Help)	Owned with Mortgage/Loan	Owned with Low Income Protection Program	Owned Free and Clear
1	7	6	8	6	0	50

## Overcrowding

The U.S. Department of Housing and Urban Development (HUD) defines an overcrowded dwelling as one where more than one person lives per habitable room, and a severely overcrowded dwelling as one with one and a half or more people per habitable room. Habitable rooms are any spaces separated by a partial or complete wall, including kitchens, living rooms, dining rooms, bedrooms, etc., but not including bathrooms, porches, balconies, foyers, halls, or unfinished basements.<sup>172</sup>

In rural Alaska, high costs for construction labor and shipping materials make building new homes prohibitively expensive for most residents. On the North Slope, the burden of addressing these high costs falls to the Borough, the Taġiugmiullu Nunamiullu Housing Authority (TNHA), and local housing authorities. Given that the average Iñupiat household income in 2019 was \$46,064, it is clear that residents of Anaktuvuk Pass would require financial support beyond traditional home loans in order to construct housing.

<sup>171</sup> North Slope Borough, 2019 Economic Profile & Census Report.

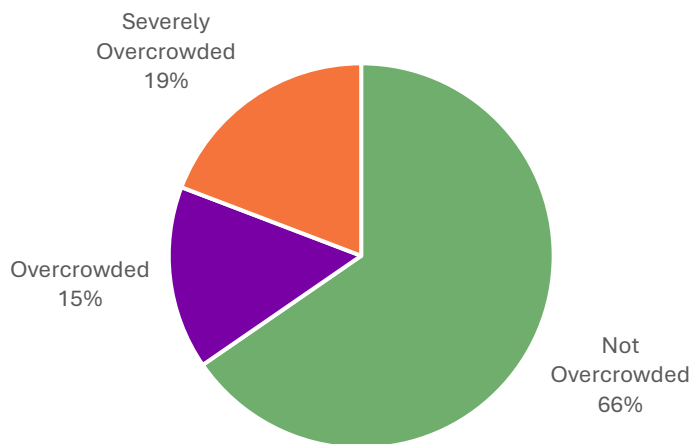
<sup>172</sup> Ibid.



The shortage of housing often forces families, relatives, and friends to share living space. Even where housing is available, the high costs of fuel, rent, utilities, and food make shared living an economic necessity. Overcrowding in rural communities is therefore not only a matter of insufficient housing stock but also a form of homelessness, with extended families often living together to reduce housing costs and provide shelter from harsh weather conditions.<sup>173</sup>

In 2019, about 6.4 percent of Alaska's occupied homes, roughly 16,100 out of 257,000, were overcrowded or severely overcrowded<sup>174</sup>, compared to a national overcrowding rate of 3.4 percent.<sup>175</sup> This means that the proportion of Alaska homes too small for their occupants is more than double the national rate. Overcrowding is most severe in rural areas with predominantly Alaska Native populations, where in some communities nearly half of all households experience overcrowding.<sup>176</sup> According to the 2018 Alaska Housing Assessment, approximately 27 percent of all households on the North Slope lived in overcrowded conditions. Within the seven remote villages of the North Slope, 15 percent of residents lived in overcrowded homes and another 12 percent in severely overcrowded dwellings, a rate more than eight times the national average.<sup>177</sup> These figures have changed little since 2014, when the Alaska Housing Finance Corporation (AHFC) reported that about 26 percent of North Slope households faced overcrowding: 14 percent being overcrowded and 12 percent severely overcrowded.<sup>178</sup> In Anaktuvuk Pass, 15.4 percent of households were overcrowded, with an additional 19.2 percent being severely overcrowded.<sup>179</sup>

Figure 16: Overcrowded Housing in Anaktuvuk Pass, 2019



<sup>173</sup> Alaska Housing Finance Corporation, "Rural Overcrowding: A Different View of Homelessness" (blog post, Alaska Housing Finance Corporation, November 15, 2018), accessed October 13, 2025, <https://www.ahfc.us/blog/posts/rural-overcrowding-different-view-homelessness>.

<sup>174</sup> Alaska Housing Finance Corporation, 2018 Housing Assessment (Anchorage, AK: Alaska Housing Finance Corporation, 2018), [https://www.ahfc.us/application/files/3115/1638/5454/2018\\_Statewide\\_Housing\\_Assessment\\_-\\_Part\\_1\\_-\\_Executive\\_Summary\\_and\\_Housing\\_Needs\\_011718.pdf](https://www.ahfc.us/application/files/3115/1638/5454/2018_Statewide_Housing_Assessment_-_Part_1_-_Executive_Summary_and_Housing_Needs_011718.pdf).

<sup>175</sup> U.S. Census Bureau, American Community Survey, ACS 1-Year Estimates, Table B25014, "Tenure by Occupants per Room" (2018), accessed October 13, 2025, <https://www.census.gov/data/tables.html>.

<sup>176</sup> Alaska Housing Finance Corporation. 2018. *2018 Housing Assessment*.

<sup>177</sup> Ibid

<sup>178</sup> Neal Wiltse et al., 2013 Alaska Housing Assessment (Anchorage, AK: Alaska Housing Finance Corporation, 2014).

<sup>179</sup> North Slope Borough. 2019. 2019 Economic Profile and Census Report



## Homelessness

In many rural areas, the high cost of constructing new homes makes overcrowding one of the few alternatives to homelessness. A 2017 national study by HUD on American Indian/Alaska Native (AI/AN) and Hawaiian housing needs found that overcrowding in tribal communities is often driven by households taking in relatives who would otherwise have no place to live.<sup>180</sup> This dynamic is particularly pronounced on the North Slope, where extreme cold makes shelter essential for survival.

In rural Alaska, strong family ties and a deeply rooted culture of mutual support mean that it is common for households to open their doors to relatives in need rather than turn them away, especially during the long, harsh winter months. For many, the lack of shelter is a matter of life and death. In this context, homelessness and overcrowding are closely linked realities.

## Housing Age and Condition

Homes on the North Slope are generally smaller than the average home size in Alaska and across the United States, where the typical home measures about 1,789 and 1,721 square feet, respectively.<sup>181</sup>

The NSB Assessing Division tracks the age of housing by community and structure type. In Anaktuvuk Pass, records show that the average single-family home was built in 1986. Harsh Arctic conditions, combined with a limited pool of experienced tradespeople and scarce housing maintenance materials, mean that many of these homes are in need of renovation and weatherization upgrades.

Concerns about overcrowding and deteriorating housing conditions have been raised consistently in comprehensive plan workshops across North Slope villages between 2014 and 2023. Recognizing the urgency of the issue, the NSB Assembly has allocated substantial capital funding for housing projects through the annual CIP process. This concern has also led the Borough to take a more active role in housing, beginning in 2011 with the creation of the Housing Solutions Group within the Mayor's Office, and later establishing a dedicated Housing Department in 2018.

According to the 2019 NSB Census, over 59 percent of Anaktuvuk Pass housing is more than 30 years old. New housing construction has been limited, with only about eight percent of the housing stock built between 2009 and 2018. This slow growth is largely due to the challenges of being a remote community without year-round road access.<sup>182</sup>

Anaktuvuk Pass also faces difficulty in securing local licensed contractors or tradespeople for construction, maintenance, and repairs. Skilled carpenters, electricians, plumbers, and other specialists must be flown into the village when projects require their expertise. This lack of local trades capacity contributes to delays in new housing construction and upkeep of existing homes.

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<sup>180</sup> U.S. Department of Housing and Urban Development, Office of Policy Development and Research, *Housing Needs of American Indians and Alaska Natives in Tribal Areas: A Report From the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs* (Washington, DC: U.S. Department of Housing and Urban Development, 2017), <https://www.huduser.gov/portal/publications/HNAIHousingNeeds.html>.

<sup>181</sup> U.S. Census Bureau and U.S. Department of Housing and Urban Development, *American Housing Survey: 2019 National Survey* (Washington, D.C.: U.S. Census Bureau, 2019), <https://www.census.gov/programs-surveys/ahs.html>.

<sup>182</sup> U.S. Census Bureau and HUD, *American Housing Survey*, 5.

## **Affordability**

The HUD defines affordable housing as housing that costs no more than 30 percent of a household's income.<sup>183</sup> While this benchmark is widely used, it has limitations in unique and remote locations such as Anaktuvuk Pass, where high transportation and construction costs make affordability difficult to measure accurately.

In 2019, the average household income for an Iñupiat family in Anaktuvuk Pass was \$69,119. Based on HUD's definition, affordable housing for the average household would cost no more than \$20,736 per year, or roughly \$1,728 per month. At that time, average monthly housing costs were \$570 for homeowners and \$792 for renters, indicating that most households were not technically cost-burdened under HUD's standard.<sup>184</sup> However, residents face additional monthly utility costs averaging \$395 for heating, electricity, and water, which significantly increases the total cost of living. Furthermore, the need for ongoing maintenance and repairs, exacerbated by the harsh climate, adds substantially to homeownership costs.

The expense of building homes in Alaska's Arctic is prohibitive for nearly all residents. TNHA estimates the cost of constructing a two-bedroom home on the North Slope at approximately \$776,000 which is far higher than the average cost elsewhere in the United States. For housing projects that are fully or partially funded by HUD, this disparity requires TNHA to submit detailed justification and obtain written approval via a waiver.<sup>185</sup>

Property taxes can also pose challenges for homeowners, though exemptions are available. Like many Alaska communities, the North Slope Borough offers property tax exemptions that reduce the taxable value of a home rather than altering the tax rate. These include exemptions of \$75,000 for owner-occupied homes (increased from \$50,000 in 2023), \$150,000 for senior citizens and disabled veterans, and between \$10,000 and \$20,000 for volunteer firefighters or emergency medical services providers. Homeowners who qualify for multiple exemptions may significantly reduce or even eliminate their property tax obligations. Additionally, the Borough operates an income-based grant program to assist with property tax debt.<sup>186</sup>

Ultimately, the shortage of housing in Anaktuvuk Pass is driven not only by affordability challenges but also by the limited availability of housing. Overcrowding and severe overcrowding in the community stem largely from this scarcity, rather than solely from the inability to afford existing housing.

## **Heating and Plumbing**

All homes in Anaktuvuk Pass rely on diesel oil for heating, with fuel delivered annually from off the North Slope. Roughly 90 percent of homes have indoor plumbing. Of these, approximately 79 percent are equipped with piped water directly into the house, while 19 percent use holding tanks.

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<sup>183</sup> U.S. Department of Housing and Urban Development, Programs of HUD (Washington, DC: U.S. Department of Housing and Urban Development, 2016), <https://www.huduser.gov/portal/publications/Programs-of-HUD-2016.html>.

<sup>184</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>185</sup> Hagle, Griffin, Chief Executive Officer. TNHA. 2023. Personal communication with Kayla Scheimreif, October 3, 2025.

<sup>186</sup> Moore, Mari, Assessor, North Slope Borough. 2023. Personal communication with Kayla Scheimreif, October 3, 2025.

The remaining two percent fall into other categories. The average monthly cost for heating, electricity, and water is \$395.<sup>187</sup>

## New Construction

The NSB Housing Department constructed a 10-plex in October 2024, which now houses over 40 residents. However, even with this substantial increase in housing availability, Anaktuvuk Pass is still in severe need of additional safe housing.<sup>188</sup>

## Housing Roles

Housing authorities are independent entities established under state law that utilize funding provided by the HUD. While HUD sets certain requirements for their operations, housing authorities are managed locally, with their own boards, leadership, and policies. Daily operations are typically directed by an executive director.

Unlike most communities in the United States, Anaktuvuk Pass does not have a private housing development industry. In the absence of this sector, responsibility for planning and delivering housing falls to public institutions including the North Slope Borough, the regional housing authority, the City of Anaktuvuk Pass, and community members.

### NSB Housing Department

The NSB Housing Department was established in 2018 to respond to the pressing housing challenges faced throughout the North Slope. Its mission is twofold: to maintain and improve the existing housing stock while also advocating for the development of new homes to meet community needs.

The department provides repair assistance for critical issues such as heat loss, water service problems, and electrical hazards, with priority given to households with young children, Elders, individuals with disabilities, and families with limited income. In addition, the department administers a No-Interest Home Loan Program designed to expand the number of safe, livable owner-occupied homes through new construction and major renovations. The NSB Housing Department also manages multiplex housing units in a few communities.

### Tagiugmiullu Nunamiullu Housing Authority

The TNHA serves as the regional housing authority for the North Slope. Six tribal governments have designated TNHA as their Tribally Designated Housing Entity (TDHE): the Native Villages of Atkasuk, Kaktovik, Nuiqsut, and Point Lay, along with the Naqsrarmiut Tribal Council of Anaktuvuk Pass and the Village of Wainwright. In this role, TNHA oversees housing initiatives and administers block grant funding provided under the Native American Housing Assistance and Self-Determination Act (NAHASDA), as well as through additional state and federal programs. Services include support for

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<sup>187</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>188</sup> Benson, Barbara, North Slope Borough Housing Department. 2025. Personal communication with Kayla Scheimreif, October 3, 2025.

homeownership, such as admissions and occupancy, housing counseling, property inspections, and fulfillment of maintenance work orders.

TNHA continues to pursue new housing development across the North Slope. To address the region's high construction costs, TNHA is exploring innovative approaches to reduce expenses. These efforts include coordinating with the U.S. Department of Defense Innovative Readiness Training program to lower the cost of transporting construction materials and equipment, and adopting durable, cost-efficient building technologies such as structural insulated panels.<sup>189</sup>

### **Land Availability and Infill Development**

In Anaktuvuk Pass, the opportunity for infill development is highly constrained by the limited available land that is suitable for new housing, the absence of a private development industry, and the high costs and logistical challenges of Arctic construction. The community is not served by a conventional real estate market, so new development must be led by public and tribal entities that can coordinate land selection, permitting, infrastructure extension, and build-out. Because many existing parcels are already developed or constrained by site conditions (permafrost, drainage, slope, access), infill projects must carefully balance density increases with structural viability and community character. Infill is further complicated by regulatory and logistical obstacles: parcel consolidation, utility extension, environmental constraints, and high mobilization costs for construction crews and materials all raise the cost and complexity of adding housing in-place. As a result, incremental infill is likely to be slow and expensive, making new subdivisions or off-site expansion (where land, grading, and infrastructure can be platted from scratch) a more practical—but also more resource-intensive—option for the community.

### **Housing Needs**

The community faces a pressing housing deficit driven by overcrowding, aging housing stock, and rising household size. Many families are doubled up or share living quarters, which reveals housing insecurity even where walls exist. The housing inventory has grown only modestly over the past decade (from 118 units in 2010 to 124 in 2019), despite increases in population and household size. Many homes are more than 30 years old, and with limited local trades capacity and high logistical costs, rehabilitation is difficult. Affordability, too, is stretched: though mortgage and rent levels may technically fall under HUD's "affordable" benchmark for the median household, high utility, repair, and transportation costs push total housing burden well above sustainable levels. Given the estimated cost of constructing a modest two-bedroom home—\$776,000 on the North Slope—only supplemental funding, waiver-based subsidies, or innovative technology and construction methods can make new housing feasible. In short, the community needs more units (particularly modest-family and larger homes), resilient and energy-efficient upgrades to existing stock, and financial models that reflect the harsh local cost structure.

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<sup>189</sup> Hagle, Griffin, Chief Executive Officer. TNHA. 2023. Personal communication with Kayla Scheimreif, October 3, 2025.







# Public Facilities and Services





Public facilities are the backbone of daily life in Anaktuvuk Pass. Clean water, reliable power, safe roads and airstrips, emergency services, and places for people to come together all support the health and vitality of the community (see Map 7.1). In most towns these systems are taken for granted, but in the Brooks Range their importance is magnified. Harsh winters, permafrost, and remoteness mean that every pipe, generator, and building must be designed and maintained with care. A failure in one part of the system can ripple across the whole community.

The Borough plays a central role in building and operating this infrastructure. Through the Department of Public Works, the Borough manages day-to-day services while also funding new projects and upgrades through its capital improvement program. This investment helps to ensure that Anaktuvuk Pass has the facilities it needs not only to meet current demands but also to adapt to future challenges, from a changing climate to population shifts.

## Public Works Shop

In February 2018, a fire completely destroyed the NSB Public Works facility in Anaktuvuk Pass. The NSB repurposed the washeteria to serve as office space during construction of a new facility.<sup>190</sup> Since the fire, crews have been clearing the site and remediating contaminated soils left by the fire. A new public works facility is underway, expected to be completed in July 2026 with a total replacement cost of \$32.4 million.

The new facility is a pre-engineered metal building with six garage bays for light- and heavy-duty equipment as well as a two-story indoor storage facility and administrative wing with five offices and a conference room. The building is designed for cold climate durability and community-specific operational needs.<sup>191</sup>

## Water

Water resources play a vital role in supporting daily life and public health in rural communities like Anaktuvuk Pass.

### Water and Wastewater Connections

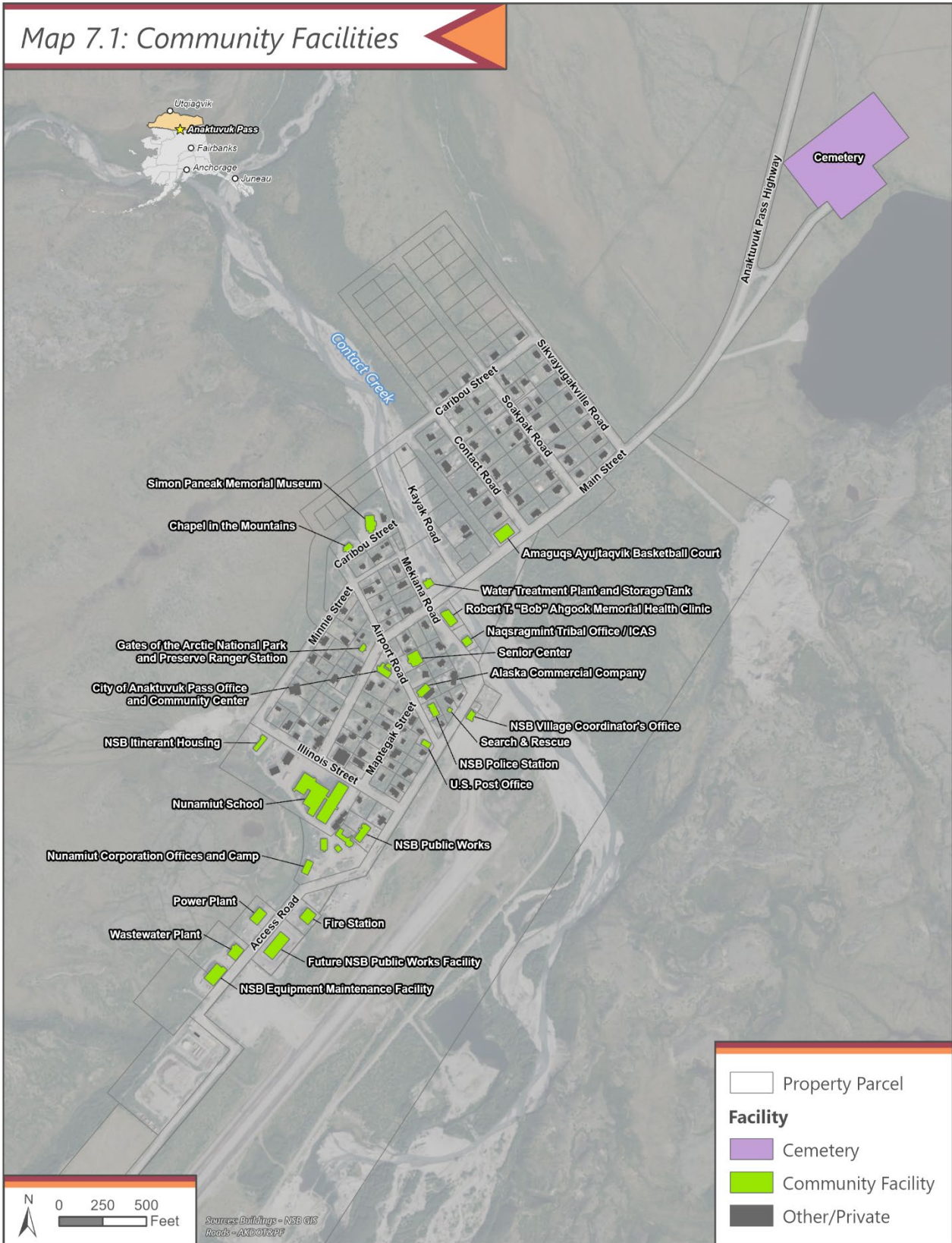
Until recently, the NSB Anaktuvuk Pass water and wastewater system has remained largely unchanged since the original construction was completed in 1996. In 2025, the NSB used its own capital funds as well as grants from the NPR-A Impact Mitigation Grant Program, and Indian Health Service (IHS) through the Alaska Native Tribal Health Consortium (ANTHC) to extend the piped water and sewer system to additional homes and facilities within the community (see Map 7.2).

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<sup>190</sup> ASRC Construction, "Anaktuvuk Pass New Public Works Shop," accessed October 2, 2025, <https://asrcconstruction.com/project/anaktuvuk-pass-new-public-works-shop/>.

<sup>191</sup> ASRC Construction, "Anaktuvuk Pass New Public Works Shop."

Map 7.1: Community Facilities



Until 2025, the water/wastewater system served 105 residences and businesses.<sup>192</sup> New connections constructed during the summer of 2025 added an additional 25 homes including the Senior Center 5-plex, the NSB itinerant camp, and the planned bed and breakfast on Kayak Street (see Map 7.3).<sup>193</sup> The approximate cost to extend service was \$17 million.<sup>194</sup>

There are four TNHA)homes still utilizing holding tanks that replaced Lifewater residential sewage treatment plant tanks that had performed poorly in the community. There hasn't been a determination on connecting these homes. These homes are serviced through truck water haul service or vacuum sewage truck service provided by the NSB.

### **Water Source**

Two water wells provide water year-round to the community. A third, decommissioned water well is located at the corner of Main Street and Airport Street, which has been permanently capped off.

The first well was drilled and installed in 1994. It is adjacent to Contact Creek and draws water from the thawed aquifer below Contact Creek. The aquifer is seasonally recharged from the creek and the upstream valley. After the creek freezes each year and open channel flow ceases, recharge is anticipated to be severely limited until the next thaw season. During winter months the groundwater level is reported to drop up to 50 feet as the aquifer drains to downstream areas to the south. The aquifer is at a high contamination risk as determined by the Alaska Department of Environmental Conservation (ADEC). Petroleum spills and glycol spills have occurred in the village and fortunately have not (to date) resulted in contamination of the village's groundwater well. With only one 300,000-gallon water storage tank, any upset to the well water production or aquifer contamination would leave the community with only approximately 20 to 30 days of water before the well production must be reestablished or an alternative source of water must be provided. During that time, any fire-fighting reserve would be seriously depleted.<sup>195</sup>

The 1994 well was drilled to 165 feet in depth and had casing<sup>196</sup> set to 130.2 feet. Well casing is the water-tight, protective tube that lines the inside of a well, preventing dirt, sediment, and contaminants from entering the well and mixing with the drinking water. It serves as structural support for the wellbore, controlling the flow of water into the well from the aquifer. Casings are made from durable materials like PVC, steel, or fiberglass and are installed during well construction.

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<sup>192</sup> North Slope Borough Public Works Monthly Status Report Village Water/Sewer, Summary of August 1, 2025 – August 31, 2025.

<sup>193</sup> Travis Holmes, Principal Engineer, UMIAQ Design, personal communication with author, 2024.

<sup>194</sup> Holmes, personal communication, 2024.

<sup>195</sup> Timothy P. Brabets, Kevin W. Petrik, and Robert L. Glass, Water Quality and Ground-Water/Surface-Water Interactions along the John River near Anaktuvuk Pass, Alaska, 2002–2003 (Scientific Investigations Report 2005-5229. Reston, VA: U.S. Geological Survey, 2005).

<sup>196</sup> A well casing is the water-tight, protective tube that lines the inside of a well, preventing dirt, sediment, and contaminants from entering the well and mixing with the drinking water. It serves as structural support for the wellbore, controlling the flow of water into the well from the aquifer. Casings are made from durable materials like PVC, steel, or fiberglass and are installed during well construction.



Map 7.2: Water Utilities





According to the well log kept during installation, groundwater is confined below a seasonally frozen zone with free water through the depth of the boring. A static water level of 13.6 feet below ground was observed. The well was tested then at 100 gallons per minute (gpm), but the total depth of the aquifer was unknown. The water well pumps between 35-45 gpm, or approximately 50,600 gal per day.<sup>197</sup>

To reduce the risk for potential water supply disruption due to mechanical issues, electrical distribution, or groundwater contamination, a secondary well was drilled during the summer of 2025. The 2025 well was financed by NSB capital funds, costing \$176,000 per the Borough's 2023–2028 Six-Year Capital Plan. A six-inch test well was drilled to a depth of 139 feet below ground surface (bgs). It is located off Contact Road near the intersection with Caribou Street.<sup>198</sup> Prior to drilling the 2025 well, when the pump went down or needed maintenance, the community was unable to continue to pump water and had to shut down pumping operations. As recently as Christmas Day, 2024, water leaks were discovered in the system which surpassed the community's ability to make potable water, and the system was shut down to keep water in the storage tank. To keep the lines from freezing, the system was flushed just twice a day, with the Borough's Mayor Patkoak noting in a January 3<sup>rd</sup>, 2025 press release that, "Leaving the system in circulation, always on, would run us dry in less than half a day,".<sup>199</sup> With the construction of the secondary 2025 well, there is now a continuous source even during periods when one well is not operating.

The raw water well pump house is located on the north side of Contact Creek near the intersection of right-of-way for Caribou Street and Kayak Street. Raw water is pumped from the well house directly to the water treatment plant, transferred by a buried 2-inch water line directly into the reservoir tank, then into the treatment plant, where all of the water is treated before being distributed into the community.

### **Water Treatment Plant and Water Tank**

The water treatment plant treats and distributes water through pressurized water mains to individual services. The plant uses a chlorine disinfection system. For water sources that originate subsurface in an aquifer and have not been under the influence of surface waters, minimal treatment is needed. This is the case in Anaktuvuk Pass, where generally the only treatment needed is a disinfection.<sup>200</sup>

There are two 6-inch water main loops that supply water throughout the community. Both start and terminate at the water treatment plant. The water system is a recirculating loop design, comprised of two circulating water loops of insulated arctic pipe.<sup>201</sup> The insulated pipe protects the water mains from freezing. The water treatment plant also supports trucked water haul through the fill station located on the south side of the building.

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<sup>197</sup> Andrew Roby, Facility Operations Manager with UIC Municipal Services LCC, personal communication with Author Erika Green, September 11, 2025.

<sup>198</sup> Brabets, Petrik, and Glass, Water Quality and Ground-Water/Surface-Water Interactions.

<sup>199</sup> NSB Office of the Mayor, "Public Service Announcement: Anaktuvuk Pass Water and Sewer"

<sup>200</sup> Roby, personal communication, September 11, 2025.

<sup>201</sup> Roby, personal communication, September 11, 2025.

Map 7.3: Wastewater Utilities



The community has one water tank reservoir with a capacity of 300,000 gal. The tank is approximately 40 feet in diameter and 30 feet tall and adjacent to the water treatment plant, on the north side of the building. It is filled year-round by the two water wells and provides both water for community use as well as water storage for fire protection should there be issues with one or both wells.

Anaktuvuk Pass is the only North Slope community with just one water tank. Without a redundant tank to provide water storage during cleaning and maintenance, or to serve as a back-up for a failure of the existing tank, the community is at risk. Having only one tank can limit the community's response to fires. The NSB Fire Department reported that they let the NSB Public Works facility fire burn itself out so that it would not deplete the community's only water storage faster than it could be recharged.<sup>202</sup>

### **Current and Forecasted Water Usage**

Borough data indicates the average water usage for the community is 22,600 gallons per day (gpd), or, based on an estimated 2024 population of 365, an average of 57 gallons per day per capita (gpdpc). Actual usage per person is likely slightly higher as this average water usage rate is historical and does not reflect the addition 25 new service connections in 2025.

With an average household size of 3.6 people, an additional 90 people have been connected to the water/wastewater system. That means that 275 people used 22,600 gpd, or 82 gpdpc. Additional water usage increases with more connections; more time is needed to understand the new daily water usage, but it could increase to 33,575 gpd. Unexpected and dramatic increases in water usage often indicates that there are water leaks in the system.

The gpd water usage average of 22,600 gallons is within the capacity water treatment maximum amount that is treated by the plant on a daily basis. The capacity of the treatment plant is capped at what is pumped daily from the water well. Annual estimated treated water available is 8,249,000 gal at the current well pumping rate.

Water haul is regulated in part by Alaska's Drinking Water Regulations (10 AAC 80) which impose standards for water quality. There is a certification requirement for drivers of water-haul trucks, to ensure those hauling potable water are trained and follow sanitary protocols.

Using the highest population growth rate anticipated in Anaktuvuk Pass, one percent a year, would result in a population increase 419 individuals in 2030, 441 in 2035, 463 in 2040, and 487 in 2045. Even calculating available water usage using this highest rate of growth, available water in the village will exceed the demand anticipated because water supply is limited only by the amount that can be pumped from the water wells. Table 20 provides anticipated usage to 2045.

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<sup>202</sup> Anchorage Daily News, "Fire Rages Through Alaska Village Public Works Building," YouTube, March 15, 2024, video, 1:45, <https://www.youtube.com/example-video-url>.

Table 20: Estimated Future Water Usage, Growth Rate of 1%

Forecast Year	Population Count	Anticipated Daily Usage (gallons per day)	Anticipated Usage (gallons per year)
2025	368	20,976	7,656,240
2030	419	23,883	8,717,295
2035	441	25,137	9,175,005
2040	463	26,391	9,632,715
2045	487	27,759	10,132,035

## Wastewater

Wastewater is collected by gravity mains draining to the wastewater treatment plant, which is located on Access Road, north of the Anaktuvuk Pass airport and adjacent to the power plant building. The gravity collection piping provides service to 130 homes, public organizations, and businesses. Gravity sewers are installed on slope so that wastewater flows through the pipe without assistance from mechanical or electrical devices. Buildings drain into service barrels, which in turn drain into sewer mains. There are 43 cleanouts located throughout the distribution system to allow for cleaning and access to the main lines. Collection piping is heat-traced arctic pipe to prevent freezing of the mains and prevent thawing of the surrounding permafrost trenches. There are currently no sewer force mains or lift stations in the buried portion of the system in Anaktuvuk Pass.<sup>203</sup>

The buried wastewater collection system contains one lift station within the wastewater treatment plant. Wastewater flow from sewer mains collects at the lift station in the wastewater plant. When sufficient wastewater is collected, the lift station pumps wastewater through a force main to the wastewater treatment skid.

There are currently at least 9 homes that use honey buckets or sewage holding tanks. Waste is pumped at each home and hauled directly to a single cell lagoon located at the landfill, approximately two miles from the community. The lagoon is used to settle sewage solids and provide treatment prior to seasonal effluent discharge. The existing lagoon is undersized to support the existing tank truck volume, and overflow has occurred during breakup. The volume of wastewater disposed in the lagoon needs to be reduced, or the lagoon upsized to support the community's truck hauled volume.

With the addition of the 25 new service connections, the volume of waste disposal will decrease. In addition, a design for two new lagoon cells has been completed, and the Borough plans to construct them as soon as funds are available. With the connection of the new sewer services and the expansion of the new sewage cells, the overflow problem will be solved. The new sewage cells are designed to accommodate 22 households short-term or 10 households long-term with 3.67 persons per household. The wastewater treatment plant does not process wastewater from tank trucks nor honey buckets.

<sup>203</sup> Andrew Roby, Facility Operations Manager with UIC Municipal Services LCC, personal communication with Author Erika Green, September 11, 2025.

The larger of the two new cells will serve as the primary treatment cell, and the smaller new cell and existing cell will become secondary storage cells, providing for a second year of treatment before discharge onto the tundra. The discharge occurs on a yearly basis, and sludge removal is necessary in the existing cell to increase room for storage. Removed sludge is bagged and placed in the landfill.

Only the homes connected to the wastewater system are included in the total average wastewater flow. The total average gpd of wastewater is approximately 8,344, indicating 27 gpdpc. The estimated portion of the population that has been on the piped system before the additional connections in 2025 was 305 people. The population of Anaktuvuk Pass is approximately 395 people. If all were connected to the system, the daily wastewater flow would increase to 10,665 gpd. With the additional connections, there is anticipated increase of 2,321 gpd. The new connections will not increase the wastewater plant inflows above the permitted level. The daily amount of treated wastewater is between 8,500-9,000 gpd. Peak community flows appear to be 13,500 gpd indicating a daily peaking factor of 1.6 and with the new connections will grow to an expected 16,223 gpd. The average and peak flows are based on graphical interpretation to remove unusually high flows due to leaks or ground water infiltration.

The wastewater plant has two treatment trains. Revisions to the process in 2012 increased the permitted flow from 11,000 GPD to 20,000 gpd. Two trains allow for one to be shut down for annual or emergency maintenance activities. The average flow allows for the train maintenance by using one process train and turning the second off for the duration of maintenance.

There is an 85% removal of effluent before discharge from the plant and all treated effluent is discharged into the leech field, located at the south end of Access Road. Considering no external system changes and only wastewater plant modifications, the 20,000 gpd permit level has been exceeded 4 times during the same period, or 0.002%. 150 A Notice of Violation has not been issued for this plant to date.

After comparing the same high growth rate to 2025 and 2035, the wastewater treatment plant will be nearing capacity rates during peak flow periods. The estimated wastewater usage per capita is 25.8 GPDPC as discussed earlier in this section. With a peak factor calculated at 1.6 times the average daily flow equates to 16,223 gpd, which is well under the wastewater plant capacity of 20,000 gpd.

## Power

The current Anaktuvuk Pass power plant was originally constructed in 1994 and is located on the south side of town on Access Road. The building is solely used for power generation and is owned, operated, and maintained by the NSB. The power plant was upgraded in 2003 with the decommissioning of an existing 3406 Caterpillar generator and the addition of two new 3512 Caterpillar generators. In 2013, the NSB Public Works department submitted a CIP Project Analysis Report Request (PARR) to investigate the plant controls and switchgear, because they were considered obsolete and outdated. There are other deficiencies noted in the request such as cranes,



radiators and pumps, but the plant does not need a major re-build. An upgrade was included in the NSB 6-Year Plan for 2015, with construction occurring in 2018 and 2019. The upgrade involved the replacement of radiators and heat exchangers. These improvements were designed to increase energy efficiency and reduce operating costs. There is another power plant upgrade included in the NSB 6-year Plan for 2023. The work will likely include repair and upgrade to controls and switchgear and other upgrades to infrastructure within the plant itself. The scope will become more defined once the Project Analysis Report (PAR) is complete.

The Anaktuvuk Power Plant operates using the five generator units listed below:

**Table 21: Power Generators**

Unit	Make/Model	Capacity	Serial Number	Installation Date
1	Caterpillar 3412	330 kilowatt (kW)	81Z15588	1994
2	Caterpillar 3412	330 kW	81Z15583	1994
3	Caterpillar 3412	330 kW	81Z15586	1994
	<i>Caterpillar 3406</i>	<i>170 kW</i>	<i>Decommissioned</i>	
4	Caterpillar 3512	910 kW	67Z2043	2003
5	Caterpillar 3512	910 kW	02042	2003

Generator units 1 through 4 are in good working order. Unit 5 has been down for two years; plans to repair or replace it are unclear. With the current demand loads, the power plant is able to supply and meet community needs by running one or both Caterpillar 3512 generators during the winter months. The 3512 generator has a maximum output capacity of 910 kilowatt hours (kWh). During the summer months, two 3412s are used. The current normal peak winter load is about 800 kWh without overtaxing either unit. During summer months the demand drops to 350 kWh per day. During this non-peak season, two 3412 generators are run.

A 3512 generator is run continuously for about 40 days. After 40 continuous days of operation, the non-operating 3512 generator is started to allow the operating one to be shut down and serviced. With regular and continuous maintenance and recommended intermittent major overhauls, the generator life of the 3512 is expected to be well over 100,000 hours of operation. There are 8,760 hours in one year, and it could be estimated that each generator is available to operate for over 11 years. The generators were installed in 2003, and with both expected to operate a total of 22 years. All generators should be evaluated for overhaul or replacement as soon as possible.

**Table 22: Forecast of Future Peak Power Usage**

Forecast Year	Population Count	Daily Peak Usage (kW per day)	Anticipated Winter Usage (kW per day)
2025	395	700	550
2030	419	754	587
2035	441	794	617
2040	463	833	648
2045	487	877	682

For purposes of forecasting future peak use with future anticipated population growth, a rate of 1.8 kW per person/per day is used. This rate of usage was calculated from the estimated peak usage in winter at 700 kW and a population count today of 395. For average winter load calculations, we have used 550 kW, and the population count for today, for a rate of 1.4 kW per person/per day.

With a reserve of generators in Anaktuvuk Pass, other power options would be available. For example, with higher demands two smaller units could be run concurrently or during summer months, just run one. Power and Light has reported though, that the smaller 3412 generators use more fuel than the larger 3512, and running two 3412s will only yield about 300 kW. Power and Light personnel speculated that a preferred alternative to the low demands in the summer months past 2025, would be the purchase of a new 500 kW generator to provide the continuous, range of demands prevalent in Anaktuvuk Pass. The cost of fuel, now and likely in the future, warrants an analysis of the potential for local, renewable energy sources for electric power generation, such as wind power.

## Energy

Anaktuvuk Pass relies on on-site diesel generators to provide power for the community (see Map 7.4). According to most recent data, the powerplant's capacity is approximately 2.7 MW, and is sufficient for the current population.<sup>204</sup> A buried fuel line supplies the power plant with fuel from the tank farm located near the north end of the runway. The fuel is first delivered to an exterior 10,000-gallon storage tank adjacent to the power plant, then transferred through another fuel line to a 500-gallon day tank inside the facility, which feeds the generators. In a typical year the community purchases and consumes between 450,000 and 500,000 gallons of diesel fuel to supply heat and electric power to municipal buildings and homes. The power plant uses approximately 300,000 gallons per year, leaving approximately 200,000 needed for home fuel needs.<sup>205</sup>

Anaktuvuk Pass was one of the 184 Alaskan communities that participated in the Alaska Energy Authority's (AEA) Power Cost Equalization (PCE) program in 2014. The goal of the program is to provide economic assistance to customers in rural areas of Alaska where the kilowatt-hour charge for electricity can be three to five times higher than the charge in more urban areas of the state. The PCE subsidizes 30 percent of each customer's electric utility cost. In Anaktuvuk Pass, electricity costs a flat rate of \$15 for up to 100kWh, for 101 to 600 kWh the cost is an additional 15 cents per kWh, and 35 cents per kWh for use over 600 kWh. Elders and disabled residents only pay full costs when usage exceeds 600 kWh.

In recent years, administrators and energy planners at the NSB have looked for ways to reduce reliance on diesel for economic and environmental reasons. Anaktuvuk pass has been found to have some potential for hydroelectric power, though to date it has been found not to be cost-effective. The potential for solar energy is also high, though additional feasibility studies may be required.<sup>206</sup>

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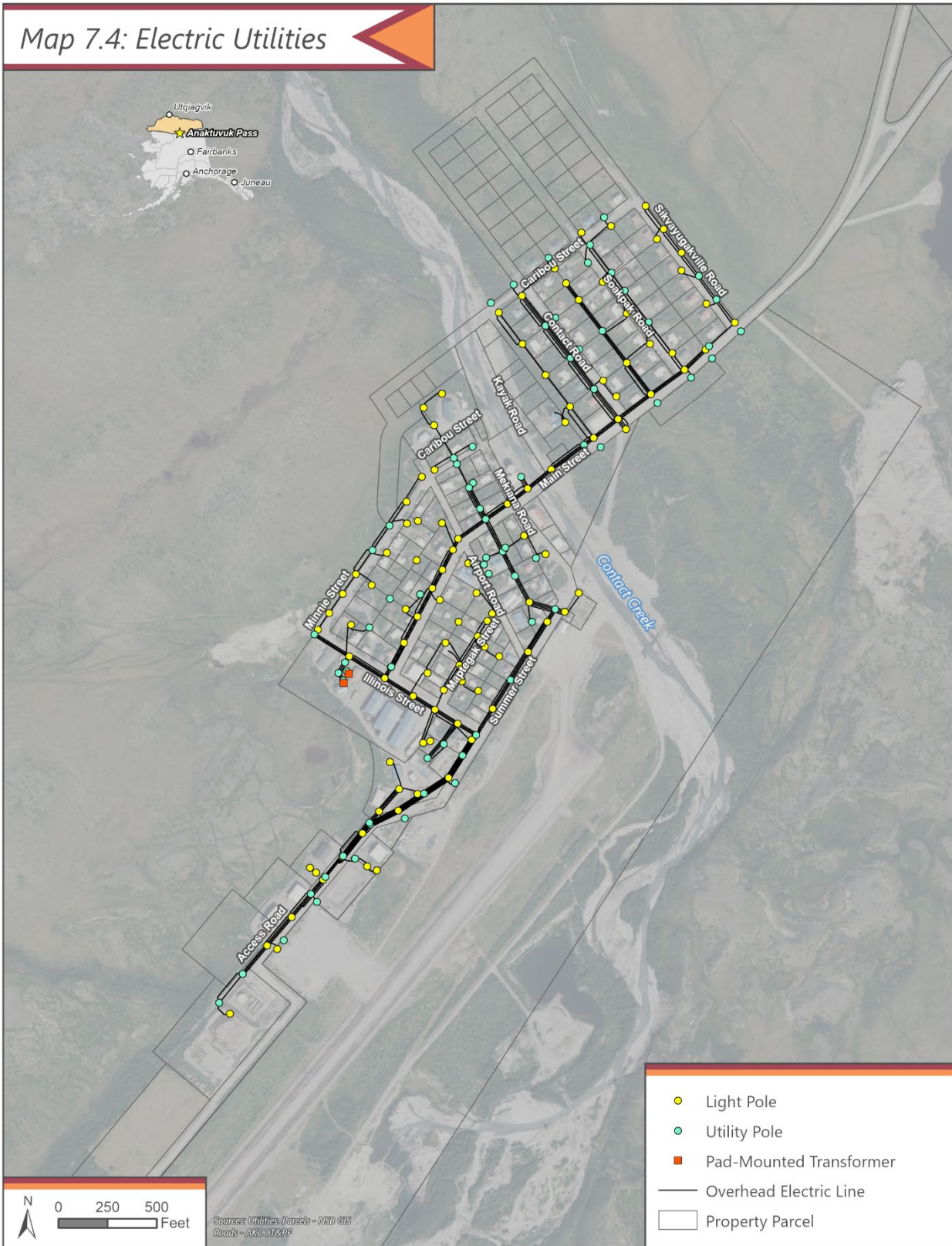
<sup>204</sup> Alaska Energy Gateway, "Anaktuvuk Pass" Accessed October 15, 2025.

<https://akenergygateway.alaska.edu/explore/communities/anaktuvuk-pass>

<sup>205</sup> Cid Nay, NSB Assistant Village Supervisor, Personal Communication. Oct. 15, 2025

<sup>206</sup> North Slope Borough, 2019 Economic Profile & Census Report.

Map 7.4: Electric Utilities



## Fuel Storage

Anaktuvuk Pass maintains a total fuel storage capacity of approximately 280,000 gallons distributed across 24 tanks throughout the community. The primary bulk fuel tank alone holds 150,000 gallons. During the summer of 2025, this main tank had to be completely drained to allow for maintenance and inspection, resulting in community fuel reserves dropping to emergency levels of less than 30,000 gallons. In response, aerial fuel deliveries were prioritized to replenish supplies. Normally, fuel is delivered once per week by Everts Air; however, delivery frequency has been temporarily increased to twice daily until storage levels return to normal. Each flight typically carries about 4,400 gallons.<sup>207</sup> There are two gasoline tanks in the community: one bulk tank and one dispensing tank. Both are located near the fuel station at the southern end of the airport runway. They are 30,000 gallons and 7,000 gallons respectively. Historically, propane was delivered by Brooks Aviation on an as-needed basis, but this service has been discontinued. Propane is no longer available in Anaktuvuk Pass.

**Table 23: 2025 Utility Costs**

Utility	Rate
<b>Fuel</b>	
Residential heating fuel delivery cost	\$1.50/gallon
Commercial Diesel cost	\$7.62/gallon
Gasoline	\$9.97/gallon
<b>Seniors (60+) and Residents with Disabilities</b>	
Residential heating fuel delivery cost	\$1.00/gallon
Commercial Diesel cost	\$6.86/gallon
Gasoline	\$8.97/gallon
<b>Electricity</b>	
<b>Residential</b>	
0 – 100 kWh	\$15 minimum
0 – 600 kWh	\$0.15 per kWh
601+ kWh	\$0.35 per kWh
<b>Seniors (60+) and Residents with Disabilities</b>	
0 – 600 kWh	No charge
601 kWh+	\$0.35 per kWh
<b>Commercial</b>	
0 – 75 kWh	\$15 minimum
0 – 1,000 kWh	\$0.20 per kWh
1,001 – 10,000 kWh	\$0.30 per kWh
10,000+ kWh	\$0.35 per kWh
<b>Water/Wastewater Piped or Delivered (Commercial and Residential)</b>	
0 – 3,000 gallons per month (residential)	\$69.00 flat rate
0 – 3,000 gallons per month (seniors)	\$15.00 flat rate
Additional fee after first 3,000 gallons per month	\$0.02 per gallon
Commercial	\$0.08 per gallon
Wastewater	No charge

\* As of October 2025

<sup>207</sup> Cid Nay, NSB Assistant Village Supervisor, Personal Communication. Oct. 15, 2025

## Solid Waste and Recycling

The landfill in Anaktuvuk Pass, located approximately two miles northeast of the community at the terminus of the landfill access road, is categorized as a Class III landfill and is owned and maintained by the NSB. It is permitted under the State of Alaska 18 AAC 60 regulations. A class III community landfill is not connected by road to a Class I landfill or is more than 50 road miles from a Class I landfill and must not accept more than an annual average of 5 tons of municipal solid waste per day. The Anaktuvuk Pass landfill was constructed in 2003/2004, but did not start receiving waste until 2005. Since 2005, the landfill has served as the disposal site for municipal wastes, septage, and dried sewage solids for Anaktuvuk Pass. The landfill then received about 0.75 ton per day of solid wastes based on per capita waste generation rates from the 1996 NSB Solid Waste Management Plan<sup>208</sup>. This amount has increased to approximately 1 ton per day<sup>209</sup>.

The landfill is currently permitted by the ADEC under the Regional Solid Waste General Permit for NSB Class III Landfills, with an expiration date of October 17th, 2026. Current permit conditions stipulate access control, waste acceptance, waste processing, operational controls, burning of solid waste, sewage sludge management, monitoring and reporting, and landfill closure.

The landfill is surrounded by security fencing and access gates, and the gates are locked when NSB personnel are not on site to prevent public access. The landfill is not attended with regular hours and dumpsters are provided in the village for use by the public for day to day disposal needs. In Anaktuvuk Pass, the following municipal waste is permitted for disposal:

- Municipal Solid Waste
- Inert or Construction & Demolition (C&D) Waste
- Non-Regulated Asbestos Containing Material (non-RACM)
- Honey Bucket Waste or septage

A burn cage on site is also permitted for use. Waste material is separated prior to burning; batteries are shipped out of the community for recycling. Fluids are removed from discarded vehicles. All waste streams prohibit the placement of hazardous wastes, and commercial demolition must provide statements to NSB Public Works that the wastes being disposed of are inert in nature, friable asbestos and lead as part of the coordination for access to use the landfill. The burns are controlled and sporadic as needed. Residents have expressed concern about impacts on the incineration during caribou migration.

Solid waste disposal in a remote Alaskan village such as Anaktuvuk Pass is estimated at about 5 pounds of refuse per person per day. At this rate, calculated using the high growth rate of 1% per year, Anaktuvuk Pass will generate about 750,000 pounds of garbage per year or about 1 ton per day. In addition to the increased amount of waste generated by the growing population, solid waste will be generated through construction projects and refuse from additional businesses and public

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<sup>208</sup> North Slope Borough, North Slope Borough Solid Waste Management Plan (Barrow, AK: North Slope Borough, 1996).

<sup>209</sup> North Slope Borough, North Slope Borough Comprehensive Hazardous Material, Solid Waste, Hazardous Waste, and Used Oil Management Plan (Utqiagvik, AK: North Slope Borough, 2023).



services. This waste stream has not been included in the area calculations to estimate landfill capacity.

The landfill capacity calculations include the following assumptions:

- The High Growth Population Rate of 1% annual increase established in this plan is used.
- A five (5) pound garbage generation rate per person per day is used.
- Two trash hauls are completed each week from the village to the landfill.
- Each trash haul carries one half of the total trash generated in the village per week.
- A reduction factor of thirty (30) per cent is included to compensate for burning of burnable trash deposited.
- A rate of ten (10) per cent of area and volume is included for gravel cover used. Gravel cover is used after compaction and consolidation of each two foot lifts of trash, using a minimum of three (3) inches to maximum six (6) inches of cover between lifts.

**Table 24: Estimated Future Solid Waste Disposal, High Growth Rate 1%**

<b>Year</b>	<b>Pop.</b>	<b>Tons/day</b>	<b>Tons/Pickup</b>	<b>Yards/Pickup (CY)</b>	<b>30% Burn Reduce (CY)</b>	<b>10% Cover (CY)</b>	<b>x 27 (CF)</b>	<b>Length/Pickup (FT)</b>	<b>Cell Length/Year (FT)</b>
<b>2025</b>	434	1.11	3.87	12	3.58	3.93	106.22	1.77	92
<b>2030</b>	456	1.16	4.07	13	3.76	4.13	111.64	1.86	97
<b>2035</b>	480	1.22	4.28	13	3.95	4.35	117.33	1.96	102

The calculations support the assumption that the landfill will meet the disposal needs of the village through 2035, even at a high growth rate of 1 per cent per year. The landfill is expected to require expansion beyond 2035.

## Gravel

The village of Anaktuvuk Pass is located on the continental divide in the Brooks Range and is the only village within the Borough with an adequate source of construction-grade gravel. One material source has been developed, located on the north side of the village, as illustrated in Map 7.1. The material site is owned by the Nunamuit Corporation and continues to be the primary source of gravel needed in the area.

A Material Sale Agreement between the Nunamuit Corporation and the Borough, allowing the NSB to extract and mine up to 80,000 cubic yards of material, expired in 2016 and has not been renewed. A new contract with the village corporation will be needed prior to material sales.

A stockpile currently contains a minimal supply, but there is an adequate amount of material in situ to support maintenance and small projects through the plan period. In 2019, \$2.7 million was funded to facilitate increased stockpiling and to provide a new rock crusher. The site continues to produce 3-inch-minus construction gravel, with some sand and silt.

## Transportation

### Airport

The Anaktuvuk Pass airport is owned and maintained by the Borough and provides year-round access to the community via one 100-foot by 4,800-foot gravel runway. Scheduled flights, charter services, and air freight bring in passengers, freight, mail, and supplies, making the airport the lifeline for much of the community's connection to Fairbanks and other regional hubs (see Map 7.5).

The airport includes one windsock with a segmented circle, Visual Approach Slope Indicator (VASI)s on runways, medium intensity runway and taxiway lights, a rotating beacon, and a parking apron on the northwest side of the runway that offers aircraft passenger and freight loading and unloading. A July 2023 airport inspection report completed for the Alaska DOT&PF notes the runway is uneven and potentially very soft in Spring and during periods of heavy precipitation, and lists safety concerns of wildlife and migratory waterfowl in the vicinity, as well as pedestrians, vehicles, and ATV traffic on the airport property<sup>210</sup>. The gravel runway is a contributor of dust in the community, dust management being a primary city council priority in 2023<sup>211</sup>.

### Community Roads

Anaktuvuk Pass contains approximately eight miles of developed, gravel roads used for local traffic, utilities, and access to residential areas and public facilities. Because of permafrost, soil instability, and seasonal freeze-thaw cycles, maintenance is difficult, and road standards are generally informal. There are no paved public roads—not even within the village—and no permanent overland highways connecting to other communities. Freight transport off-road occurs seasonally (for example via ice roads in winter), but such routes are temporary and heavily dependent on weather and ice conditions<sup>212</sup>.

### ASTAR

The Arctic Strategic Transportation and Resources (ASTAR) project is a collaborative effort initiated by the Department of Natural Resources (DNR) in partnership with the North Slope Borough. The planning area includes the entire North Slope region, including State lands, the NPR-A and ANWR. The goal of the ASTAR project is to prioritize community needs and identify infrastructure opportunities that offer the most cumulative benefit and best enhance the quality of life for the region.

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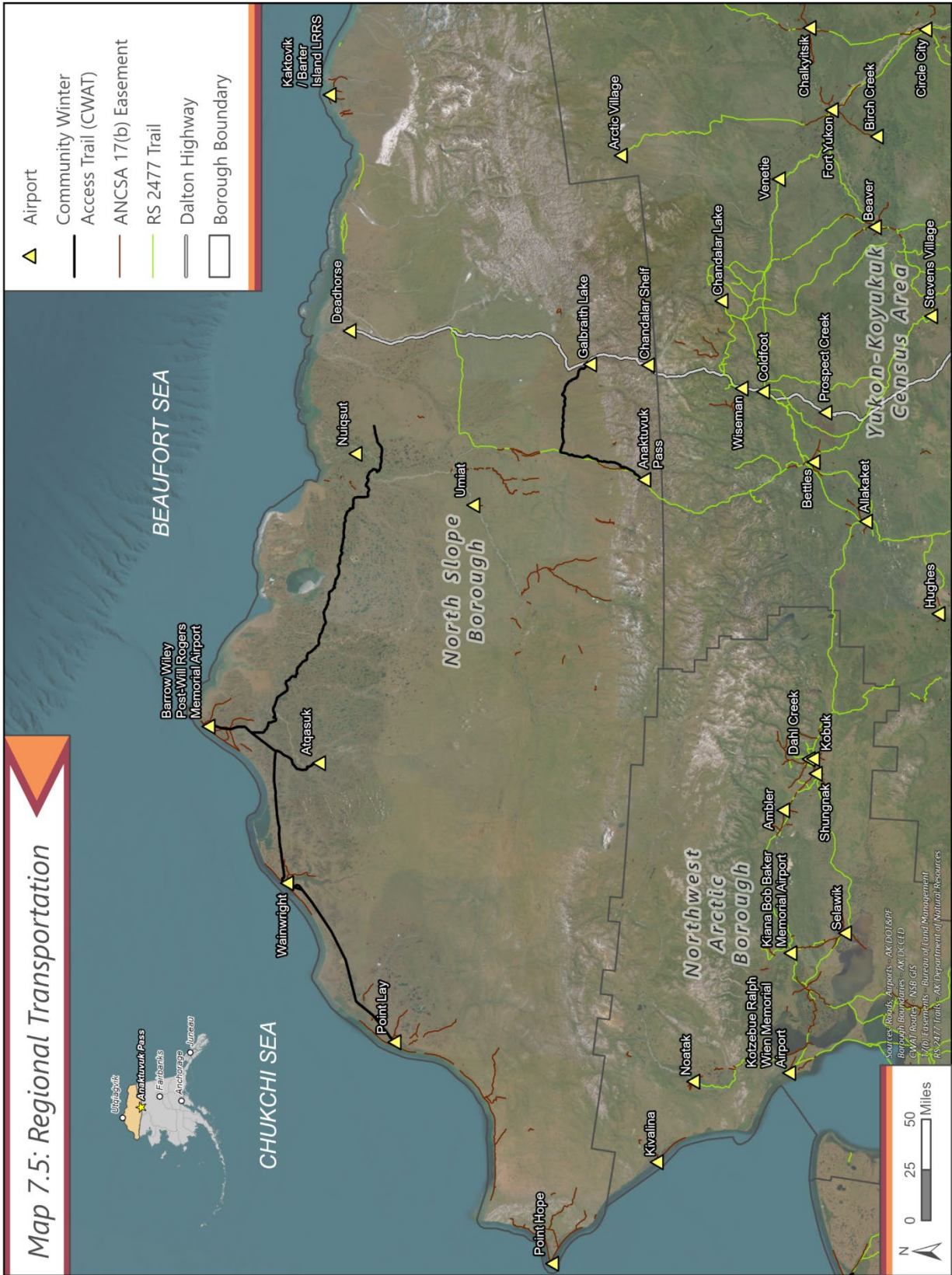
<sup>210</sup> ADOT&PF, "AKP Inspection Report July 2023" accessed October 2, 2025

[https://internal.alaskaasp.com/Facilities/Default.aspx?tab=documents&id=16&siteid=50032.\\*A](https://internal.alaskaasp.com/Facilities/Default.aspx?tab=documents&id=16&siteid=50032.*A)

<sup>211</sup> NSB, "2023-2028 Six Year Capital Plan" Accessed October 16, 2025 <https://www.north-slope.org/information/2020-2025-nsb-six-year-plan/>

<sup>212</sup> Alaska DNR, "North Slope Areawide Oil and Gas Lease Sales" April 18, 2018.

[https://dog.dnr.alaska.gov/Documents/Leasing/BestInterestFindings/20180418\\_NS\\_Final\\_BIF\\_Signed.pdf?](https://dog.dnr.alaska.gov/Documents/Leasing/BestInterestFindings/20180418_NS_Final_BIF_Signed.pdf?)



In recent years, ASTAR has published reports concerning the ‘Triangle Road’ project – a roadway proposed connecting Utqiagvik with Wainwright and Atkasuk. ASTAR is completing environmental and hydrological monitoring along a proposed roadway corridor and has surveyed soil electrical properties to determine subsurface materials<sup>213</sup>. ASTAR has also completed fieldwork and a report in support of sand and gravel resource development near the Inigok Airport and in the Teskekpuk Lake region<sup>214</sup>.

### **Pedestrian Travel, Trails, and Paths**

Pedestrian travel, trails, and specialized rough paths are vital to day-to-day mobility in Anaktuvuk Pass. With limited networked roads and no formal sidewalks, residents frequently use footpaths, ATV tracks, and informal trails for travel within the village as well as to nearby areas for subsistence, recreation, and cultural activities. There are approximately three miles of trails leading north of the village into the subsistence/recreation areas. All-terrain vehicles provide access to subsistence areas and transportation within the community. In winter, snowmachines extend mobility when snow cover allows, but in summer, wet tundra and seasonal thaw complicate walking and trail passage. Environmental sensitivities, such as tundra damage from off-road vehicle use, also shape how trails are used and maintained.

### **Community Winter Access Trail (CWAT)**

The CWAT is a seasonal over-land snow-trail corridor designed to provide Anaktuvuk Pass with an alternative to air transport for moving freight, large equipment, and building materials, during winter frozen conditions. The route, when possible, begins near Galbraith Lake along the Dalton Highway and traverses westward across the foothills of the Brooks Range to reach Anaktuvuk Pass. Construction of the trail involves compacting snow, building and maintaining ramps at creek and river crossings, installing trail markers and signage, and escorting caravans of private and permitted commercial vehicles during a limited winter window<sup>215</sup>. The CWAT is permitted via a five-year right-of-way under cooperation between the North Slope Borough, Bureau of Land Management, and the State of Alaska. The route to Anaktuvuk Pass requires but does not always receive sufficient snow and ice cover to construct, and some years no CWAT trail is constructed.

## **Communications**

**Mail delivery** in Anaktuvuk Pass is provided exclusively by air. The U.S. Postal Service operates through a local contract post office located within the village, with mail and packages flown in and out via regularly scheduled passenger and cargo flights from Fairbanks. Deliveries typically occur several times per week, though service frequency can vary with weather, flight availability, and aircraft capacity. Because freight and mail share the same small aircraft, larger or heavy parcels may be delayed, particularly during periods of high cargo volume or poor flying conditions. Residents rely heavily on air mail for essential goods, medication, and correspondence, as it remains the

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<sup>213</sup> Alaska DNR, "Arctic Strategic Transportation and Resources - Publications" Accessed October 2, 2025 <https://dggs.alaska.gov/pubs/project/1557>

<sup>214</sup> Alaska DNR, "Arctic Strategic Transportation and Resources - Publications" Accessed October 2, 2025 <https://dggs.alaska.gov/pubs/project/1557>

<sup>215</sup> Alaska Business Magazine, "The Community Winter Access Trail" Accessed October 14, 2025 <https://digital.akbizmag.com/issue/may-2024/the-community-winter-access-trail/>



community's primary link to statewide and national shipping networks. Seasonal closures of the CWAT can further increase dependence on air delivery, making reliable air service critical to maintaining supply continuity in Anaktuvuk Pass.

**Telecommunications.** Anaktuvuk Pass has historically relied heavily on satellite, copper-based, and Digital Subscriber Line (DSL) infrastructure for telephone and internet services, with limited broadband capacity, notable latency, and generally constrained speeds. Recent investments are underway to improve that situation: in 2022, the Arctic Slope Telephone Association Cooperative (ASTAC) was awarded a US Department of Agriculture (USDA) ReConnect grant to build out high-speed broadband into Anaktuvuk Pass, replacing existing copper plant with fiber-optic cable, and linking the community via terrestrial middle-mile infrastructure connected through the Dalton Highway network<sup>216</sup>.

## Recreational Facilities

Some recreational facilities in the village include an outdoor basketball court, a community playground, and the school's gymnasium, pool, and library. These facilities are open to the public at designated hours, but many of the spaces are shared across different events and activities.

The gymnasium and pool are only open during the school year; they are closed during the summer for maintenance. A concern has been raised about the lack of recreational activities available for young people when these spaces are closed or occupied by other community events.

A properly equipped, dedicated facility that provides adequate space for activities outside regular school hours and on weekends - along with a safe place for youth to gather - has been long sought by the community. While other facilities have been used to offer youth activities, limited space and availability have been barriers to consistent programming.

## Cemetery

The cemetery is located approximately half a mile northeast of the community, along the landfill access road in Section 17, Township 15S, Range 2E, Umiat Meridian. The community has acknowledged that the cemetery requires both improvement and expansion; however, funding for capital projects is limited and must compete with other priorities.

Remaining space in the current cemetery is limited, and nearby creeks pose challenges to expansion. Following an ASTAR stakeholder engagement meeting in 2018, new areas with suitable ground were identified for a future cemetery site. However, progress on this initiative is currently unknown.

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<sup>216</sup> Arctic Slope Telephone Association Cooperative, "ASTAC Awarded \$30,970,030 in USDA ReConnect Funding for North Slope Middle Mile Projects" September 22, 2022. <https://www.astac.net/astac-awarded-30970030-in-usda-reconnect-funding-for-north-slope-middle-mile-projects/>



## Hazards

Anaktuvuk Pass faces a range of natural hazards that can impact both life and infrastructure, including severe Arctic storms, high winds, extreme cold, flooding from snowmelt or river ice jams, permafrost thaw, erosion, and seismic events. Erosion along the Anaktuvuk River is a significant concern, threatening critical infrastructure such as the bulk fuel tank farm, water treatment facilities, and the airport. The community has identified the need to create defensible space around the bulk fuel tank farm and to build a protective fence to enhance safety and reduce vulnerability to erosion and potential spills. Additionally, the community is working to expand and improve its hazard mitigation authorities, policies, programs, and resources to better address these challenges.

According to the 2023 NSB Multi-Jurisdictional Hazard Mitigation Plan, the 2015 NSB Local All-Hazard Mitigation Plan, and 2005 Anaktuvuk Pass Local All Hazards Mitigation Plan, the hazards that pose the greatest risks to the community include riverine erosion, flooding, permafrost thaw, heavy snow, snow drifts, severe winter storms and tundra fires. Weather related hazards pose some of the most significant threats, as does the impacts of climate change. Unless otherwise noted, the information in this section was obtained from these three hazard plans.

**Earthquakes:** The U.S. Geological Survey (USGS) Earthquake Center lists five earthquakes greater than M 2.5 within 50 miles of Anaktuvuk Pass since 2015. The largest occurred in 2015, 23 miles west southwest of Anaktuvuk Pass and was an M3.9.

The peak ground acceleration (PGA) for each community is shown on Figure 2. The seismic PGA for each community has a 5% probability of strong shaking in the next 50 years. Based on these data, there is a 5% chance of an earthquake that exceeds the following PGAs in the next 50 years:

- |                              |                           |
|------------------------------|---------------------------|
| • 9.47 PGA in Anaktuvuk Pass | • 2.64 PGA in Point Lay   |
| • 2.11 PGA in Atkasuk        | • 6.96 PGA in Prudhoe Bay |
| • 4.17 PGA in Kaktovik       | • 0.5 PGA in Utqiagvik    |
| • 3.65 PGA in Nuiqsut        | • 1.35 PGA in Wainwright  |
| • 5.3 PGA in Point Hope      |                           |

**Contact Creek Erosion.** Anaktuvuk Pass has experienced yearly riverine erosion since before 1979. In 2012, the NSB deepened and widened the channel of Contact Creek, lined the riverbanks with riprap to reduce the impacts of erosion, and replaced the bridge. The channel continues to be monitored and repairs to the areas impacted by erosion are made annually.

**Permafrost Thaw:** Subsidence, or ground failure due to the thawing of the upper layer of permafrost, is becoming prominent within the Borough. Subsidence due to permafrost thaw from higher temperatures is a significant risk to Anaktuvuk Pass. In addition to threats to homes, thawing permafrost can impact public buildings, utilities and roads. During the summer of 2004, village residents reported subsidence throughout the community, including areas along Main Street that dropped two feet while some buildings became uneven. Some residents had to place gravel under their stairways, as subsidence caused the steps to sag and tilt. The floors of homes and businesses were also reported to sag unevenly.

In 2019, the Denali Commission performed a statewide assessment on Alaska communities and their risk of damage due to erosion, flooding, and permafrost thaw. The report placed Utqiagvik in erosion severity group 1, defined by the immediate threat of erosion to critical infrastructure and the damage resulting from compounding erosion that would impact community stability, present life safety concerns, affect access to emergency services, and/or require support from outside the region to assist the community in responding to the event. The report placed Kaktovik, Nuiqsut, and Point Hope in erosion severity group 2, where damage could impact operability for a limited period but would not impact the community's sustainability. An extreme event could cause damage to critical infrastructure. The report placed Anaktuvuk Pass, Atqasuk, Point Lay, and Wainwright in erosion severity group 3, where there is low likelihood that a threat will detrimentally impact the community in the near term. If communities in group 3 experience threats, they should notify officials and collect data to support understanding the impacts.

**Subsidence and Erosion:** Areas in the village where subsidence has been observed include Main Street and nearby residential areas. Residents have observed some homes have begun to sag unevenly. In 2019, the Denali Commission performed a statewide assessment on Alaska communities and their risk of damage due to erosion, flooding, and permafrost thaw. The report placed Atqasuk, Kaktovik, Nuiqsut, Point Lay, Utqiagvik, and Wainwright in permafrost severity group 1, where the risk of damage due to thawing permafrost is high and thaw settlement is anticipated to be large. Damage to existing infrastructure as a result of thawing permafrost may be extremely high even in the areas with cold permafrost if large near-surface bodies of ground ice are affected or may be affected in the future by thermokarst and/or thermal erosion. The report placed Anaktuvuk Pass and Point Hope in permafrost severity group 2, where the risk of damage due to thawing permafrost is moderate. Permafrost usually has moderate ice content where thaw settlement is anticipated to be moderate. Reported damage due to thawing permafrost is moderate.

**Riverine Erosion:** Riverine erosion is the wearing away of riverbanks and riverbeds over time. This type of erosion has been an issue in Anaktuvuk Pass. In 2012, Contact Creek Bridge was replaced to address this issue. Additionally, sacrificial gravel is placed outside existing gabions annually as an erosion control measure to protect the riverbank.

**Snowmelt Flooding:** Although the water level of the Contact Creek rises during the spring melt-off, the river has not crested its banks in the community since it was channelized in the 1980s. Little Contact Creek, which runs north of the community, floods every spring. While there have not been recent reports of damage to homes or property, a year with exceptionally heavy snowfall in the surrounding Brooks Range could result in flooding at Little Contract Creek.

**Alluvial Fan Flooding:** Alluvial fans are areas of eroded rock and soil deposited by rivers. When various forms of debris fill the existing river channels on the alluvial fan, the water overflows and is forced to cut a new channel. Fast, debris filled water causes erosion and flooding problems over large areas. This type of flooding is an annual event on the Little Contact Creek, which runs north of the community. Water from the Little Contact Creek washes over the banks and runs onto the tundra

near Poker Hill Road and then the floodwaters submerge Main Street, until they eventually drain through culverts under the road. There has not been any damage reported from this type of flooding.

**Wind:** Although less frequent than in coastal areas, high winds that exceed 60 mph pose a moderate threat. Wind chills of down to -45 ° F are common and can threaten human life. Windstorms can also damage buildings and infrastructure, especially above-ground utility lines and reduce air quality, which can affect subsistence foods.

**Heavy Snow and Snow Drifts:** Heavy snow, generally more than 12 inches of accumulation in less than 24 hours, can immobilize a community. Accumulation of snow can cause roofs to collapse, knock down power lines and halt transportation, both on air and ground travel. In the mountains surrounding Anaktuvuk Pass, heavy snow can lead to avalanches, although no history of such an event threatening the community has been discovered. While heavy snow is a rare occurrence, drifting snow inhibits operation of aircraft and vehicles, including school buses and emergency response vehicles.

**Extreme Cold:** Extreme cold can halt air traffic due to ice fog. In addition, fuel can congeal leading to power outages which can in turn result in freezing water and sewer pipes.

**Thunderstorms:** Thunderstorms pose a low risk with an average of one storm per year. However, in 2007 a severe tundra wildfire was started by a lightning strike.

**Tundra Fire:** Climate change is believed to increase the occurrence of tundra fires. Tundra fires are rare in the North Slope, the occurrence of such fires are predicted to increase as a result of higher temperatures, drying tundra, low summer rains and increased lightning strikes due to climate change. A 2007 fire along the Anaktuvuk River, started by a lightning strike, burned 256,000 acres over a period from July through the end of September. The fire was so severe that it burned wetlands that usually prevent its spread across the tundra. A high percentage of caribou winter diet in the area is lichens. Since lichens are absent for some years post-fire, the fire reduced forage availability for caribou and altered their migration routes away from the area. Drought in the organic mat of the tundra and sustained southerly winds during late summer when vegetation had started to die off appeared to be factors in the unusually large fire. The drought conditions were coincident with record low Arctic Ocean pack ice adjacent to the coast that could have resulted in warmer, dryer conditions and an unusual number of thunderstorms.

**Landslide:** In 1997, a landslide occurred near the John River, 14 miles southeast of Anaktuvuk Pass; another occurred on Ingstand Mountain, five miles east of Anaktuvuk Pass. Debris did not reach the community from either landslide. The 2005 NSB Hazard Mitigation Plan, updated in 2015 and again in 2023, indicates that landslides are a minimal risk to the community.

**Emergency Preparedness:** Anaktuvuk Pass faces several key hazards that require focused attention and action. The NSB Risk Management Division is responsible for emergency management and disaster coordination within the Borough. The 2023 NSB Multi-Jurisdictional Hazard Mitigation

Plan noted hazards that pose the greatest risks to the community, which include riverine erosion, flooding, permafrost thaw, heavy snow, snow drifts, severe winter storms and tundra fires. To effectively mitigate these hazards, the community may prioritize assessing vulnerable infrastructure—such as the airport, housing, water and sewer systems, and community buildings—to ensure they are resilient to these hazards. Emergency preparedness planning is critical, including establishing evacuation protocols, communication strategies, and supply caches for extended isolation periods. Anaktuvuk Pass would benefit from ongoing monitoring of river channels, ice conditions, and erosion-prone areas, combined with public awareness campaigns about climate impacts and safety measures. Coordination with the North Slope Borough and state agencies is essential for accessing funding, technical support, and training for hazard mitigation projects. Key mitigation actions could include reinforcing or relocating critical structures, improving stormwater and drainage systems, and maintaining accessible winter trails for emergency transport. Long-term planning should integrate climate change projections, especially for permafrost degradation and changing snow and ice patterns, to ensure sustainable community resilience.

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# Education, Health, and Economy



## Education

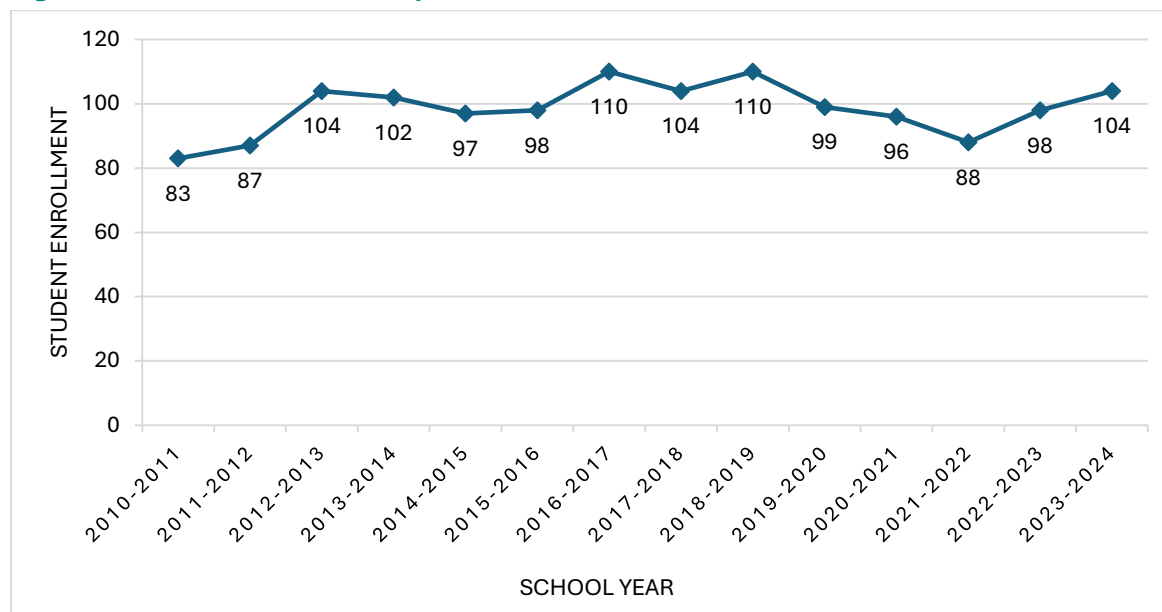
The NSB School District operates Nunamiut School, which is the only school in Anaktuvuk Pass and provides education from early childhood through grade 12. Nunamiut School is located at 114 Illinois street near the intersections of Maptegak Street and Main Street.

In addition to providing education services for children in Anaktuvuk Pass, the School District provides a number of services, including:

- Sports programs for students, including basketball, volleyball, cross country and swimming lessons;
- Academic and extracurricular clubs and activities, including an astronomy club, shop classes, sewing and language classes through the IHLC and a student advisory council (SAC);
- Bus services for students;
- An early childhood education program for three- and four-year old children that operates five hours each workday;
- Iñupiaq classes and a focus on the community's unique culture; and
- A culture camp each fall.

In line with recent North Slope population trends, student enrollment at Nunamiut school has increased since 2010. The 2010-2011 school year had an enrollment of 83 students while the 2023-2024 school year saw 104 students enrolled. The 2021-2022 school year had a relatively small enrollment of 88 students, similar to enrollment levels in 2011-2012, but enrollment size increased in the following years to the current level of 104 students.

Figure 17: Student Enrollment by Year, 2010-2024



From the 2023-2024 school year, Nunamiut School had an attendance rate of 74.72%, a graduation rate of 66.67%, and a dropout rate of 7.14%. Nunamiut School’s rates are comparable to those of the NSBSD, for which in the 2023-2024 school year had an attendance rate of 75.04%, a graduation rate of 67.54%, and a dropout rate of 6.49%.

Table 25: Attendance, Graduation, and Dropout Rates Comparison<sup>217</sup>

	Nunamiut School	North Slope Borough School District	Alaska Public Schools
Attendance	74.72%	75.04%	90.47%
Graduation	66.67%	67.57%	78.31%
Dropout	7.14%	6.49%	3.56%

Iłisaġvik College maintains a satellite computer station at the NSB Village Coordinator’s Office that offers a variety of online courses for community residents<sup>218</sup>. Through a partnership between the NSBSD and Iłisaġvik College, eligible high school juniors and seniors are able to earn dual credits for their courses, allowing them to earn secondary education credits for their high school coursework.<sup>219</sup>

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# Health

The well-being of Anaktuvuk Pass rests on more than just medical care, it is shaped by the places people live, the opportunities available to them, and the strength of their connections to one another and the land. Good health grows from having safe and affordable homes, reliable income, strong schools, and meaningful opportunities for recreation, culture, and community. It also depends on access to healthy food, reliable infrastructure, a clean environment, and a sense of safety and belonging.

This section looks at the various elements that contribute to the health of the community - personal health, community health, and environmental health. Other chapters in this plan focus on related issues such as housing, infrastructure, and public facilities, which all play a part in overall well-being.

A primary source of information about local health conditions comes from NSB Census. These reports include community health surveys designed to better understand the challenges residents face, support local efforts to address them, and guide policy decisions that shape daily life. Health data are gathered through self-reported surveys from household heads, a method that the borough has used for more than three decades. This approach provides valuable long-term insight into health trends within Anaktuvuk Pass and across the North Slope.

## Personal Health

<sup>217</sup> AK DEED Report Card to the Public <https://education.alaska.gov/compass/report-card>

<sup>218</sup> North Slope Borough, Anaktuvuk Pass 2016–2036 Comprehensive Plan.

<sup>219</sup> Iłisaġvik College, "Dual Credit – North Slope Residents," last modified 2025, accessed October 15, 2025, <https://www.ilisagvik.edu/dual-credit-north-slope-residents/>.

<sup>220</sup> NSB School District Website <https://www.ilisagvik.edu/dual-credit-north-slope-residents/>

In 2019, a greater percentage of Nunamiut self-assessed as having Poor/Fair health than in 2010, from five percent to 16 percent. The percentage of those rating their own health as Good also decreased between these two census years – from 65 percent in 2010 to 37 percent in 2019. But that is not all bad news - In 2010, 33 percent of Anaktuvuk Pass Iñupiat residents reported themselves to be in Very Good or Excellent health; that percent increased significantly between 2010 and 2019 to 47 percent. In fact, 83.8 percent of Iñupiat residents consider themselves to be in Good, Very Good/Excellent Health. Anaktuvuk Pass is unique amongst the Borough communities in that the proportion of poor health increased as did its proportion of excellent health between 2010 and 2019.<sup>221</sup>

One significant health issue that is prevalent across the North Slope is smoking. On average, nearly 50 percent of NSB Iñupiat individuals over the age of 16 smoke. In 2019, 56 percent of Nunamiut 16 and older smoked. Only Kaktovik (72 percent), Nuiqsut, and Wainwright had a greater percentage of 16+ residents smoking.<sup>222</sup>

The percentage of smoking in Anaktuvuk Pass is higher, on average 56 percent in 2019, down from 2010 (65 percent). Although the rate of smoking has decreased between 2010 and 2019, it is still significantly higher than the 2019 statewide average of 19.1 percent.<sup>223</sup>

Anaktuvuk Pass has by far the highest proportion of adults at a healthy weight. Much of the high proportion of a healthy weight for Anaktuvuk Pass is caused by the fact that more than half (53 percent) the men maintain a healthy weight. The NSB Census does not provide specific health issues by community, it does provide an overall glimpse and common health issues across the Slope. Diabetes, high blood pressure, high cholesterol, and heart disease are common across the North Slope. Of all the illnesses measured between 2010 and 2019 by the NSB Census, only diabetes has increased. While the proportion of Iñupiat individuals with heart disease and breathing problems has remained stable, all the other measures, including high blood pressure, high cholesterol, frequent pain, and smoking have declined.<sup>224</sup>

**Table 26: Heath Indicator Comparison**

Health Indicator	Anaktuvuk Pass			NSB		
	2010	2015	2019	2010	2015	2019
Very Good or Excellent General Health	32	39	47	46%	54%	49%
Good Health		21	37	38%	30%	39%
Fair to Poor General Health		18	16	16%	16%	12%
Tobacco Use				50%	50%	31%
Obesity – Heads of Household				40%	45%	46%

<sup>221</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>222</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>223</sup> 1. United Health Foundation, "State Summaries Alaska," in America's Health Rankings 2019 Annual Report (Minnetonka, MN: United Health Foundation, 2019), <https://www.americashealthrankings.org/learn/reports/2019-annual-report/state-summaries-alaska>.

<sup>224</sup> North Slope Borough, 2019 Economic Profile & Census Report.



## Maternal and Child Health

In 2020, the State of Alaska's Division of Public Health carried out a Maternal, Infant, and Early Childhood Home Visiting Program Needs Assessment. This assessment found that the NSB as a whole faces higher risks for challenges around healthy pregnancies, early childhood health, and child maltreatment. Across the region, rates of preterm births, low birth weight, and mothers not receiving prenatal care during the first trimester were all higher than the state averages.<sup>225</sup> Although the report did not provide data specific to Anaktuvuk Pass, communities across the North Slope share many of the same challenges with healthcare access and transportation. Because of this, it's likely that families here experience similar conditions and barriers to care.

Even as the region faces these health challenges, the assessment also highlighted important strengths. Crime rates on the North Slope were lower than the state average, 19.6 reports per 1,000 residents compared to 35.0 statewide, and reported rates of rape were also lower (1.1 per 1,000 residents compared to 1.4 statewide).<sup>226</sup>

## Access to Healthcare

The Robert Ahgook Memorial Health Clinic is staffed by two health aides and two administrative assistants. It is open from 8:00AM – 5:00PM weekdays; however, there is constantly a staff member on call in case of after-hours emergencies. The facility has 2x beds in the emergency room and 2x treatment rooms. Community Health Representatives (CHRs) live and work in the community, while Health Aids work a rotational schedule based out of Anchorage and Nome. Health Aids are certified through the Community Health Aid Program (CHAP) prior to serving at the clinic. The Fire Department operates an ambulance that serves the clinic, and there is a MEDEVAC aircraft available for patients requiring a higher level of care. Eye doctors come to the village twice a year, typically May and July, or as requested based on community requirements. Dentists and medical providers visit the village every three weeks for a one-week stay. Anaktuvuk Pass health services are provided by three different organizations: NSB Health and Social Services Department, the ICAS, and Tanana Chiefs Conference (TCC).<sup>7</sup>

### NSB Health & Social Services Department services:

- Village health clinic facility and community health aide;
- Eye clinic;
- Arctic Women In Crisis assistance;
- Women, Infant & Children Program;
- Children & Youth Services;
- Senior Services;
- Public Health Office/Veterinary Clinic Services.

### TCC Services:

- Primary health care;
- Dental services;
- Medical travel;
- Screening For Life Services;

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<sup>225</sup> Alaska Division of Public Health, Alaska Maternal, Infant, and Early Childhood Home Visiting Program Needs Assessment Report 2020 (Grant No. X10MC33564. Anchorage, AK: All Alaska Pediatric Partnership, 2020), 18, accessed October 1, 2025, <https://a2p2.org/wp-content/uploads/2025/05/Alaska-MIECHV-Needs-Assessment-Report-2020-FINAL-9-1-20-1.pdf>.

<sup>226</sup> Alaska Division of Public Health, MIECHV Needs Assessment Report.

<sup>7</sup> Robert Ahgook Memorial Health Clinic .Personal Communication. Oct. 10, 2025

- Office visits
- Mammograms and clinical breast exams
- Pap tests
- Prostate cancer screening tests
- Colorectal cancer screening tests
- Lung cancer screening tests
- Health education
- Help with coordinating associated care
- Behavioral health services

#### ASNA Services:

- Medical, travel and funeral assistance
- Medical housing
- Funeral Assistance
- Funeral Travel

Anaktuvuk Pass residents continue to express the need for assistance with the cost of airfare for medical travel as well as meals and lodging expenses while in Fairbanks. Residents have also stated that there is a need for dedicated housing for Anaktuvuk Pass residents when traveling to Fairbanks for medical services. The current hostel in Fairbanks, operated by TCC, is often full. Additionally, having an Iñupiaq-speaking employee that can assist in facilitating health care needs and providing translation services is a much-needed service, as has been available at the Chief Andrew Isaac facility in the past. While ASNA does offer some travel assistance for medical needs, many residents do not qualify due to income limits that are based on family size. Residents have also expressed the need for a 24-hour medical hotline to address health care needs. Additionally, residents feel that appropriate procedures need to be implemented so that hotline attendants communicate more effectively with other attendants to ensure patient concerns are addressed.

Many health resources are located in Utqiagvik or beyond in Anchorage or Fairbanks and not available in-person to Anaktuvuk Pass residents. Some online resources are available, such as online counseling and telemedicine. However, residents have expressed the need for additional resources, such as mental health training and intervention, additional veterinary visits, assistance with vital records (such as getting social security cards and birth certificates), and intervention for drug and alcohol use and abuse.

#### **Nutrition and Physical Activity**

Access to healthy food plays a vital role in helping people build and maintain a nutritious diet. Eating well supports the overall well-being of the community and lowers the risk of chronic conditions like diabetes, hypertension, and obesity. The U.S. Department of Health and Human Services' (HHS) Office of Disease Prevention and Health Promotion notes that combining healthy eating with regular physical activity not only helps people stay healthy but also reduces the risk of chronic disease. The 2020–2025 Dietary Guidelines outline four key recommendations that encourage healthy eating at every stage of life.<sup>8</sup>

Staying active is just as important as eating healthy foods. Regular physical activity helps maintain a healthy weight and reduces the risk of high blood pressure, type 2 diabetes, heart attack, and stroke.

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<sup>8</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2020-2025*, 9th ed. (Washington, D.C.: U.S. Government Publishing Office, 2020).

Communities can support active lifestyles by creating safe spaces to walk, bike, and play, and by providing welcoming places like parks, playgrounds, swimming pools, gyms, and other recreational facilities where people of all ages can move and connect.

Nunamiut School provides a gymnasium, pool, and playground for community use outside of school hours. Still, residents have expressed concern about the lack of recreational space for all community members: children, teenagers, those in middle age, and elders, all of which have different needs and interests. There is also frustration that open gym at Alak School is only 1 ½ hours, which is not sufficient for all the residents that want to utilize it and is not always a convenient time. While other facilities have been used to offer youth activities, limited space and availability have been barriers to consistent programming.

Harvesting local subsistence food has been central to the culture of many Alaska communities, including Anaktuvuk Pass. The evolution to partial cash economy, however, often means greater reliance on store-bought food. In Anaktuvuk Pass, like much of rural Alaska, the quality and availability of store-bought food is subject to fluctuations outside the control of local residents. Access is dependent on the schedule of the barge or flight, the weather, as well as a person's ability to pay high prices that can be twice as much or more than the cost of food in Fairbanks or Anchorage. Options are limited to what is available on the shelves, often shelf-stable foods. Fresh fruits and vegetables are not always available in rural Alaska. Perhaps most importantly, store-bought foods do not fulfill the important roles that traditional foods play. Generally, local harvested foods are not only more affordable than store-bought foods but also more nutritious. The NSB Wildlife Management Department regularly tests samples of harvested wildlife to monitor the overall health of subsistence animals and their ability to provide nutrients and dietary health to Borough residents. Anaktuvuk Pass is a dry community, meaning that the sale, importation, and possession of alcohol is banned, although drugs and alcohol are smuggled illegally into the community. In 2019, twenty-eight percent of households across the North Slope stated that a member had been hurt by drugs or alcohol within the past 12 months either Sometimes or Often. A staggering 87 percent of North Slope residents reported in 2019 that the community has been hurt by drugs or alcohol either Sometimes or Often.

### **Food Security**

According to the 2019 NSB Census, one-third of Anaktuvuk Pass households reported that there were times they did not have enough to eat during the past 12 months. This is 6-7 times higher than the national average and may result in families skipping meals and/or eating less than they should. There are numerous reasons why more than a third of households report these high levels of "very low food insecurity"; but we begin with the fact that 78% of the household report that they rely on subsistence foods for more than half of their diet.

In Anaktuvuk Pass, caribou provide 90% of the wildlife subsistence diet. Because the community is so heavily dependent on one species, the community suffers when the herd decreases. Biologists and hunters acknowledge that the herd has decreased due to impacts from climate change and outside hunting pressure. The hypotheses linking climate change and caribou decline include:

- Increasing temperatures in some areas bring an expansion of less nutritious shrubs.
- Increase of parasitic infections.
- Increased frequency of winter icing (making access to lichen much more difficult).
- Increased tundra fires create vast areas that caribou tend to avoid.

In addition to “natural” fluctuations and the complex impacts of climate change, there are contingent social and economic factors. For example, caribou herds accessed by Anaktuvuk Pass sometimes come under substantial pressures from non-local hunters, who ignore traditional hunting practices and access the herd through “outfitters” that fly them in, drop them off and return to pick them up. <sup>9</sup>

Anaktuvuk Pass also ranks second in having difficulty in obtaining healthy meals (“low food insecurity”). With 36% of the households in the community citing this as a problem. Of those Iñupiat households that have “low” food insecurity a full seventy percent name the inability to obtain store bought food as the major problem. The major reason given for this inability to obtain store bought foods was “not being able to afford the purchase of food”. <sup>9</sup> This remains a community concern as inflation and recent tariffs continue to raise prices.

## Economy

Residents of Anaktuvuk Pass rely on a mixed economy which includes 1) harvested local foods; 2) food bartered for services; 3) food and services shared with Elders, those who cannot participate in harvest activities, and the community at-large; 4) Nunamiut Corporation and ASRC Regional Corporation dividend incomes; 5) Alaska Permanent Fund dividend income; and 6) wage labor. While currency is a significant part of the local economy, to the Anaktuvuk Pass individual and family, harvesting of area wildlife is necessary for food, clothing, and trade as well as cultural identity.

### Subsistence Economy

Today the Nunamiut rely on an economy based on subsistence supplemented by wage earnings and dividends. In 2010, Anaktuvuk Pass had a high dependency ratio: just under 34 percent of the population was under the age of 17 and nearly 3 percent was over the age of 64<sup>227</sup>, with both groups being dependent upon able adults for subsistence hunting and sharing. Subsistence activities require substantial finances to purchase costly transport (snow machines, ATVs, boats, sleds, parts and fuel), tools (ammunition, firearms, and nets), and food preparation and storage materials (knives, smokers, freezers, vacuum sealers, pots and pans). Dividend income and local employment provide the means to purchase tools, equipment and supplies that make traditional subsistence harvest activities more time efficient. The Anaktuvuk Pass community lacks the marine hunting opportunities that other NSB communities have. This may put them at a disadvantage in comparison

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<sup>9</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>9</sup> North Slope Borough, 2019 Economic Profile & Census Report.

<sup>227</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.

to other communities which are not relying on one main subsistence source, as Anaktuvuk Pass does with caribou.

Subsistence activities are not oriented toward sales or profits but rather, are focused on meeting the nutritional and clothing needs of their families and other village residents. Some parts of the harvest are used for clothing, food for dogs, and handicrafts for sale. The combination of wage employment, dividend income, and subsistence activities sustains the community and is the economic basis for the subsistence way of life so highly valued in the village. The fishing and hunting areas of Anaktuvuk Pass residents cover an approximately 25,600 square mile area. Hunters must cover considerable ground to harvest terrestrial animals. As such, snow machines, as well as money to purchase them, fund their maintenance and repair, and fuel, along with rifles and ammunition, are a requirement for subsistence living. Often, a hunter must work in wage employment during the weekdays and hunt and fish in the summer evenings or on the weekends; this emphasizes the need for a speedy land or watercraft to make efficient use of this limited time for hunting and harvesting. The NSB Census revealed that the average subsistence household spent about \$3,752 on supplies and tools for this activity in 2010 and \$6,435 in 2015.<sup>228</sup>

Trade and sharing of resources has always been a cornerstone of the Nunamiut way of life. Pre-Western contact, the people traded with the coastal Iñupiat at Nigliq and Barrow and with the Athabaskans to the south. The coastal Iñupiat provided seal oil and ugruk skins and guns and other goods. Eventually, the Nunamiut began trading for guns and other Western goods provided by whalers even before outsiders visited the Anaktuvuk Pass area.

The Iñupiat share their subsistence resources with others in the community and often with other communities within the North Slope Borough and elsewhere in Alaska when the need arises. In years past, the villages of Nuiqsut and Barrow have shared food supplies with Anaktuvuk Pass when the caribou did not arrive.

## **Employment**

Employment opportunities mainly consist of jobs in local government, the school district, and village corporations. The labor force in Anaktuvuk Pass includes all individuals aged 16 – 64. Between 2003 and 2019, the size of the labor force has fluctuated slightly, from a high of 64.9 percent of the population in 2010 to 59.4 percent in 2019.<sup>229</sup>

While the percent of residents employed in a full-time permanent position has nearly doubled between 2003 and 2019, the unemployment rate in Anaktuvuk Pass nearly tripled. This is due in part to ten percent fewer residents working in temporary and part-time work, but it may also be attributed to a change in how employment types were categorized in the NSB Economic Profile and Census Reports. In 2019, the unemployment rate in Anaktuvuk Pass was over 9 times higher than the national unemployment rate of 3.9 percent.<sup>230</sup>

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<sup>228</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.

<sup>229</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.

<sup>230</sup> Ibid



## Income

The average annual household income for Iñupiat households in Anaktuvuk Pass in 2019 was \$68,057 with a per capita income of \$18,114.<sup>231</sup> Both the Iñupiat household income and per capita income have increased since 2015, which estimated the average Iñupiat household income at \$58,188 and the per capita income of \$15,151.<sup>232</sup>

There are three primary sources of income for Iñupiat households in the North Slope Borough: wage income, Native corporation dividends, and PFD dividends. Fifty-two percent of Anaktuvuk Pass' total Iñupiat household income is derived from dividend payments, primarily from ASRC, Nunamiut Corporation, and the Alaska PFD.<sup>233</sup> Other sources of income in Anaktuvuk Pass include social security/pension/ retirement income and food stamps/child support income.<sup>234</sup>

The Alaska Permanent Fund provides an annual dividend to each qualifying resident. The PFD was created to allow Alaskans to share in a portion of the State's nonrenewable minerals revenue, which benefits present and future generations. The dividend amount varies each fiscal year depending on annual oil investment revenues, and equal payments are generated annually to qualifying Alaska residents. Between 2018 and 2022, the PFD was between \$1,022 and \$2,622.

As in Wainwright, Point Lay, Nuiqsut, and Atkasuk, dividend income in Anaktuvuk Pass makes up over half of total Iñupiaq household income. Iñupiat residents of Anaktuvuk Pass also face a high proportion of food insecurity, which can be attributed to new challenges arising in harvesting sufficient caribou.<sup>235</sup>

## Employers

The major employers in Anaktuvuk Pass for Iñupiat residents have been the North Slope Borough (38.7 percent), the North Slope Borough School District (21 percent), and the City of Anaktuvuk Pass (25.8 percent).<sup>236</sup> Employment at the North Slope Borough and North Slope Borough School Department has been relatively constant between 2003 and 2019. Nunamiut Corporation also provides employment, through administrative roles as well as opportunities at the corporation-owned store and restaurant.

For non-Iñupiat residents, the North Slope Borough School District (NSBSD) has historically been the primary employer, while in 2019, over half of non-Iñupiat residents were employed by the North Slope Borough.<sup>237</sup>

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<sup>231</sup> Weighted

<sup>232</sup> Per capita income in 2019 is estimated using survey income information from 88 percent of Iñupiat individuals.

<sup>233</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.

<sup>234</sup> Ibid

<sup>235</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.

<sup>236</sup> Ibid

<sup>237</sup> Ibid

### **Private Industry and Businesses**

According to the Alaska Department of Commerce, Community, and Economic Development, there are six active business licenses in Anaktuvuk Pass licensed by the State of Alaska:<sup>238</sup>

- Nunamiut Corporation Store
- Tuffstuff'd
- Nunamiut Restaurant
- Chief Gordon's Pizzeria
- Pie Nay Enterprises
- Arctic Chateau

### **Employment Perceptions**

Residents have expressed ongoing concerns about high unemployment rates and the need for increased job opportunities within the community. Seasonal and temporary employment holds particular importance in NSB communities, as it provides flexibility for residents to balance participation in traditional subsistence activities with engagement in the wage economy. Many of these jobs are in the construction sector, which aligns well with the seasonal nature of both subsistence and building work. However, the availability of seasonal and temporary jobs has declined over time: 10 percent fewer residents reported working in these types of positions in 2019 compared to 2003.<sup>239</sup>

A common concern arises when new construction projects for community facilities or infrastructure are initiated. Residents have observed that workers from outside the community often fill these positions, even when qualified locals are available and interested. To address this issue, community members have consistently advocated for contractors to prioritize the hiring of qualified local workers whenever possible.

In addition to local hiring preferences, residents emphasize the importance of training and apprenticeship opportunities that allow community members to develop and maintain essential trade skills. Building local expertise is viewed as critical to reducing reliance on outside contractors and ensuring long-term sustainability in maintaining community infrastructure.

Overall, Anaktuvuk Pass residents strongly support increasing local job opportunities, expanding seasonal employment, and establishing training programs that enhance the local workforce while supporting the continuation of subsistence lifestyles.

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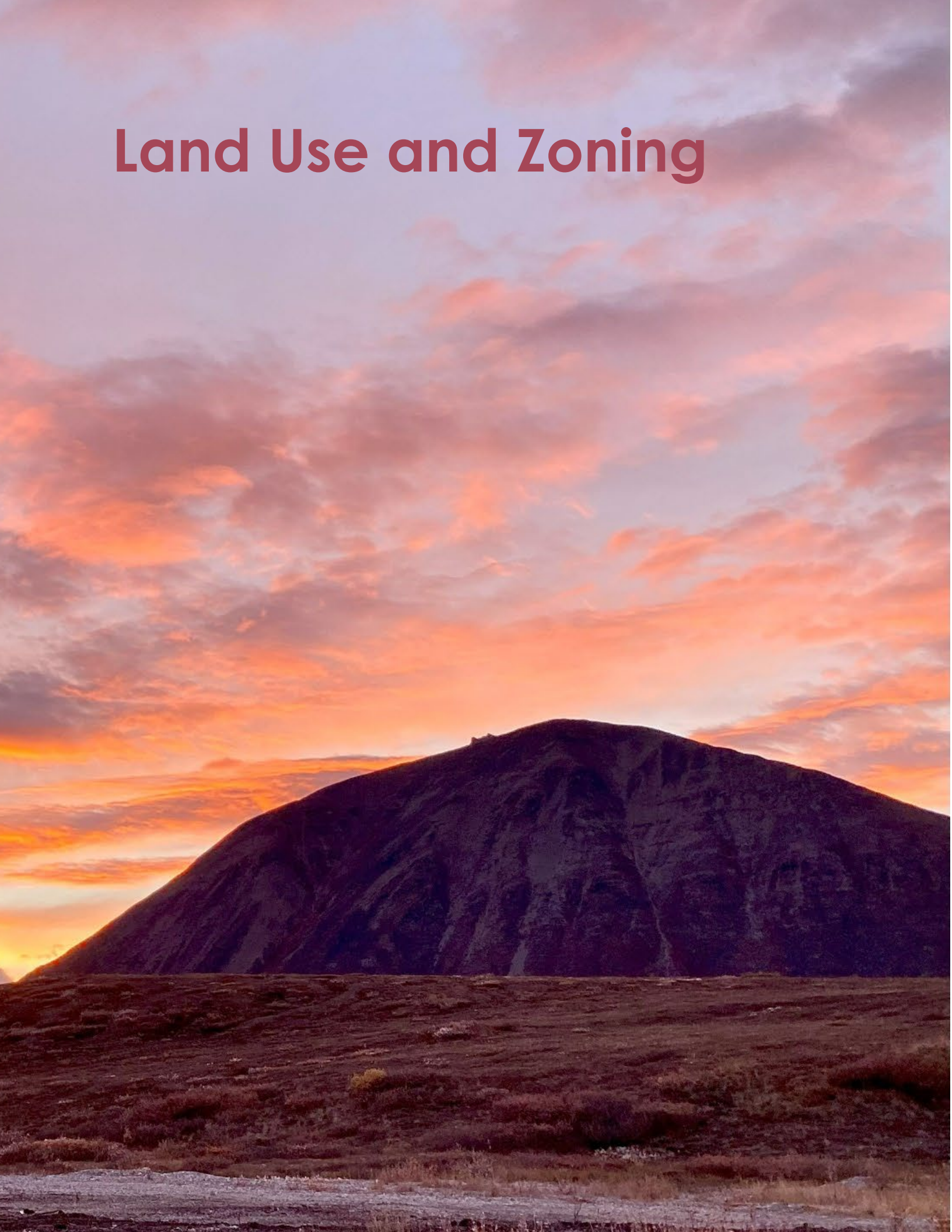
<sup>238</sup> Alaska Department of Commerce, Community and Economic Development. *Community Database Online*.

<sup>239</sup> North Slope Borough. 2019. *2019 Economic Profile and Census Report*.





# Land Use and Zoning



The idea of owning land in the Western sense is fairly new on the North Slope. For countless generations, the Iñupiat have lived on and with the land, relying on it for food, materials, and survival. Around Anaktuvuk Pass, much of the surrounding land is federally managed. Privately owned land is limited, held mostly by individual landowners or the Nunamiut Corporation, with most of it located in and around the village itself.

Within the community people have adapted to the concept of land ownership, however when it comes to subsistence lands the relationship is different. These lands are not so much “owned” as they are shared: a place where families continue long traditions of hunting, fishing, and gathering.

Because the land is so central to daily life, the way it is managed involves many voices and layers: local, regional, and federal. Decisions about land use and ownership are not just about boundaries or paperwork; they shape the future of the community itself (see Map 9.1 and Map 9.2). With subsistence so deeply tied to the health of the environment, careful planning and stewardship are needed to protect both the natural resources and the cultural values that define life in this region.

## Native Restricted Land

For Alaska Natives, two categories of land fall under “restricted” status: Native allotments and restricted townsite parcels. Such lands are considered inalienable, meaning they cannot be sold, leased, or transferred (including inherited shares) without prior authorization from the Bureau of Indian Affairs (BIA). These lands are generally exempt from state and local authority, including zoning or other land use laws. They also typically carry tax-exempt status, unless Congress modifies the law or the BIA formally lifts restrictions.<sup>240</sup>

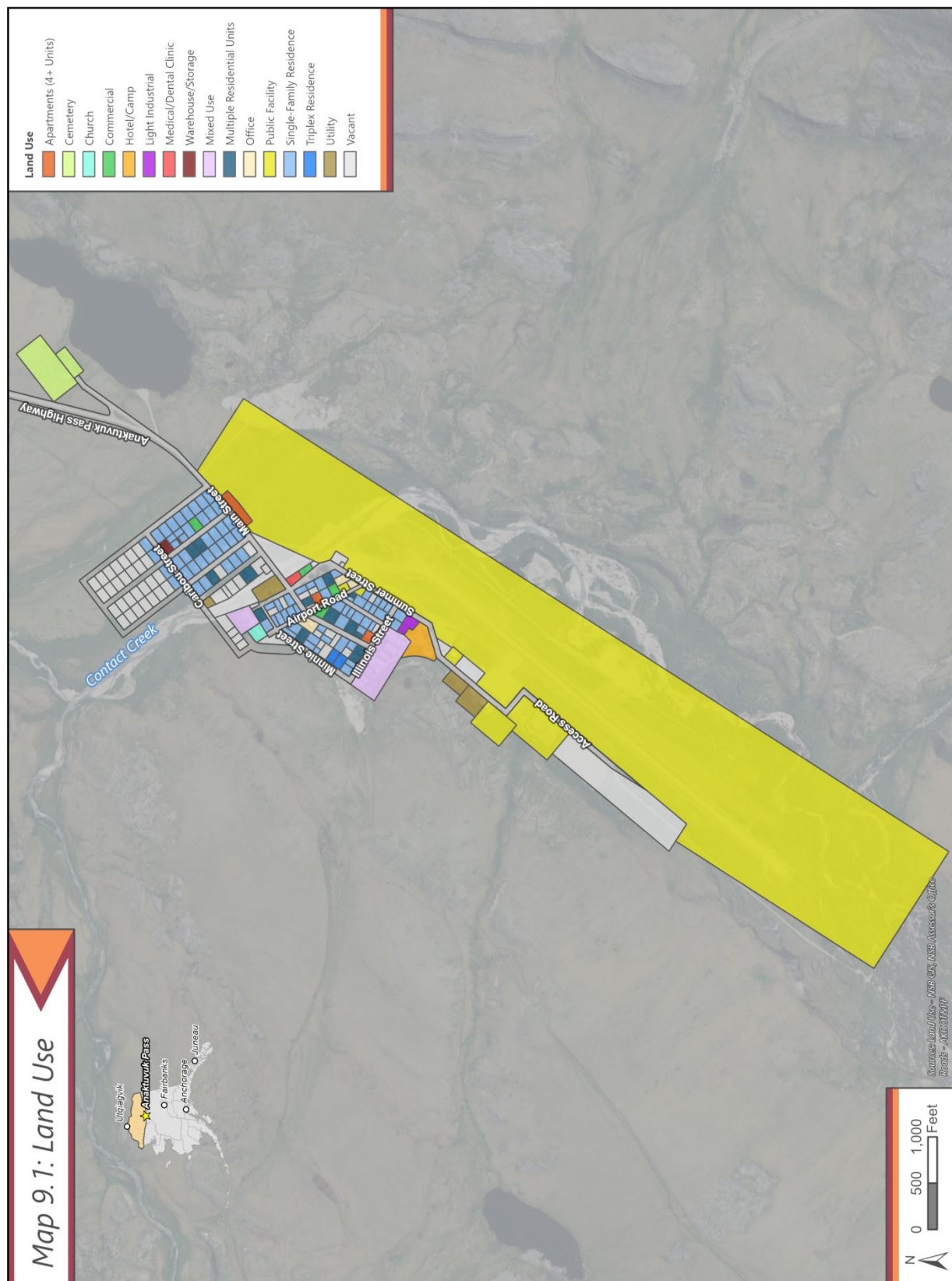
Restricted ownership largely stems from two pieces of federal legislation: the Alaska Native Allotment Act of 1906 and the Alaska Native Townsite Act of 1926. The 1906 Allotment Act allowed individual Alaska Natives to acquire vacant, non-mineral public land by demonstrating historic use. Most allotments were established near villages and situated close to rivers, lakes, streams, or coastal areas. To date, the BLM has conveyed more than 17,000 parcels, with about 251 still pending<sup>241</sup>.

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<sup>240</sup> David Case et al., *Native American Land Base* (Anchorage: Alaska Bar Association, June 2007).

<sup>241</sup> U.S. Bureau of Land Management, “Alaska Native Allotment Act Entitlements” (Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management, 2023), accessed October 3, 2025, [https://www.blm.gov/programs/lands-and-realty/regional-information/alaska/land\\_transfer/ak-native-allotment-act](https://www.blm.gov/programs/lands-and-realty/regional-information/alaska/land_transfer/ak-native-allotment-act).





In 1998, Congress enacted the Alaska Native Vietnam Veterans Allotment Act. This measure gave Vietnam-era Alaska Native veterans, who had been unable to apply for allotments due to active-duty service, the opportunity to claim up to 160 acres. Unlike earlier allotments, the law removed the requirement of proving prior use and allowed heirs of eligible but deceased veterans to apply. The program remains open until December 29, 2025<sup>242</sup>. However, no available parcels are located near Anaktuvuk Pass; the only available lots on the North Slope are in Point Hope<sup>243</sup>.

Earlier laws also recognized Native land rights. The 1884 Organic Act created a civil government for Alaska and declared that Indigenous peoples should not be disturbed in their possession of lands they used or claimed. Still, clear legal title was not secured until the passage of the ANCSA in 1971.

The 1926 Townsite Act was aimed at granting land within villages for Alaskan Natives to build homes. Though the Federal Land Policy and Management Act (FLPMA) repealed townsite laws in 1976, properties already designated as Native restricted under the Townsite Act retained their restricted status. Today, deeds to these lots are still managed by the federal government. Owners face limits on sales and transfers, but the land is exempt from property tax, foreclosure, and local zoning.

Restricted lands are not always permanent. Once restrictions are removed, parcels may be taxed or sold without oversight by the BIA. If a restricted property passes to a non-Native heir, the land automatically becomes unrestricted. Native owners can also establish a life estate in their wills, allowing a non-Native heir to use the land during their lifetime, after which the property reverts to a Native beneficiary, restoring restricted status.<sup>244</sup>

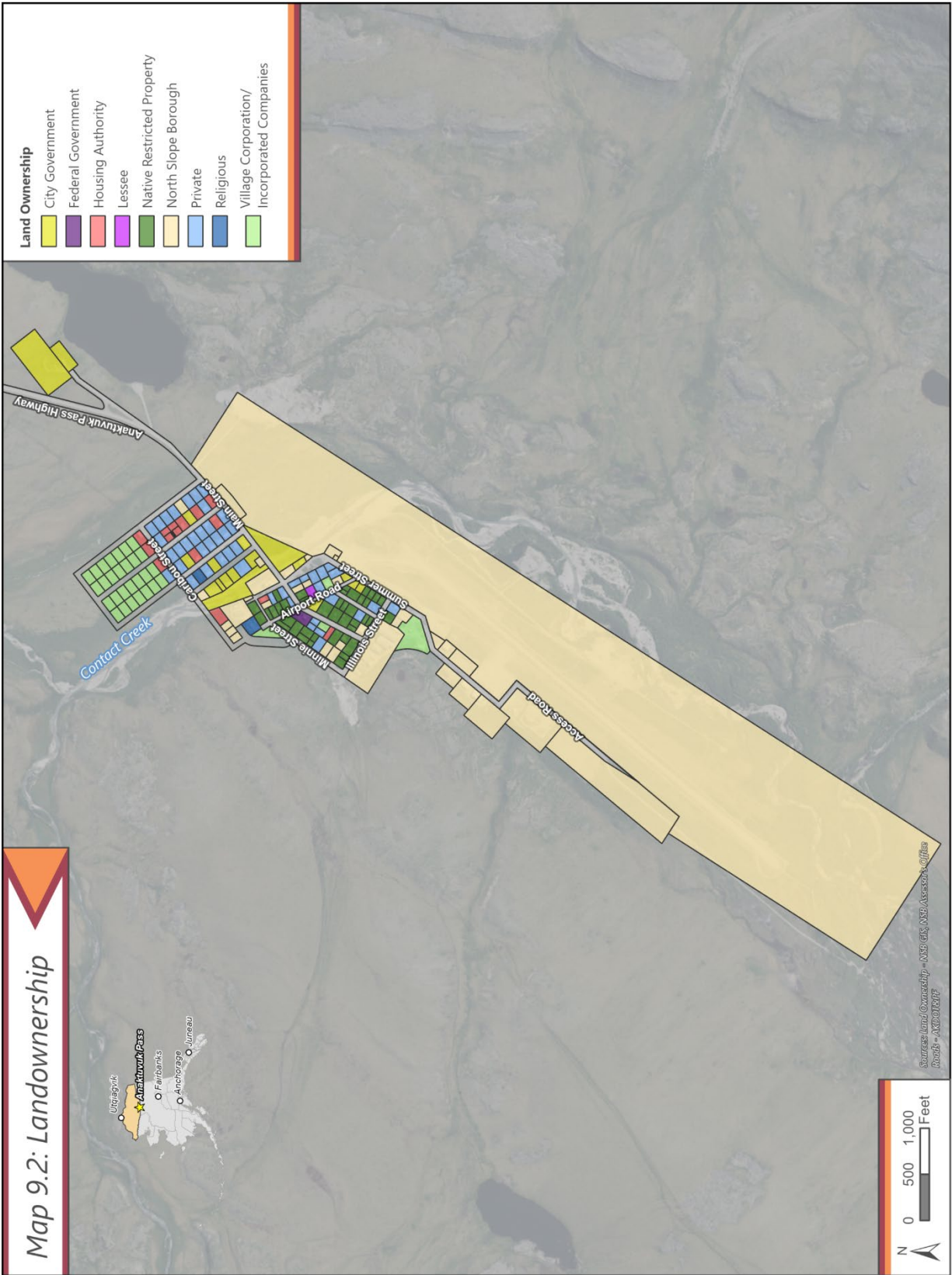
In 2014, the U.S. Department of the Interior extended the option for Alaska tribes to place tribally owned lands into federal trust, a mechanism long available to tribes in the lower 48. Trust status opens eligibility for federal programs supporting tribal governance, housing, healthcare, infrastructure, economic development, and energy projects. Trust lands are also free from local zoning, land use rules, and taxes. At the same time, challenges exist. Local authorities cannot require remediation if unsafe structures arise on trust lands, and fractionalized ownership (caused by property interests being divided among many heirs over generations) can complicate decisions about land use.

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<sup>242</sup> U.S. Bureau of Land Management, "Alaska Native Vietnam-era Veterans Land Allotment Program of 2019" (Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management, 2023), accessed October 3, 2025, <https://www.blm.gov/programs/lands-and-realty/regional-information/alaska/land-transfer/ak-native-allotment-act/alaska-native-vietnam-veterans-land-allotment>.

<sup>243</sup> U.S. Bureau of Land Management, "Alaska Native Vietnam-era Veterans Land Allotment Program of 2019: Available Lands Map," Geospatial Data (Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management, 2023), accessed October 3, 2025, <https://storymaps.arcgis.com/stories/ad98b203776f4625a0c6f327c208a539>.

<sup>244</sup> Maniilaq Association, "Probates and Estate Services," 2014, accessed October 3, 2025, [www.maniilaq.org/Probates%20&%20Estate%20Services.doc](http://www.maniilaq.org/Probates%20&%20Estate%20Services.doc).



## Alaska Native Claims Settlement Act

ANCSA was passed in 1971 to resolve longstanding land claims in Alaska and to formally establish ownership of the state's lands and resources. Through this legislation, Alaska Natives were recognized as having rights to portions of the lands they had traditionally occupied for millennia. ANCSA created both regional and village corporations, allocated land to these entities, and included a monetary settlement of \$962.5 million to compensate for lands that were relinquished.

Under the terms of ANCSA, village corporations received title to the surface estate of lands in and around their communities. Regional corporations, meanwhile, were granted authority to select larger tracts of land within their designated regions. Importantly, regional corporations also gained ownership of the subsurface estate beneath much of their chosen lands. As a result, these corporations approached land selections strategically, choosing areas of cultural or subsistence importance while also targeting lands with potential for economic development and resource extraction.<sup>245</sup>

### Nunamiut Corporation

Nunamiut Corporation, ANCSA corporation for Anaktuvuk Pass, has received 92,160 acres as a result of the Act. Under Section 12(a) of ANCSA, each village corporation is entitled to select the entire township in which any part of the village is located, along with additional lands sufficient to meet the total acreage entitlement granted to the village. Section 12(b) provides for further land distribution from the regional corporation to the village corporations, with allocations based on factors such as historic use, subsistence needs, and population.<sup>246</sup>

Section 14(c)(3) of ANCSA requires each village corporation to convey land to a municipal corporation (city). Where no city exists, as in Point Lay, the land is conveyed to the State of Alaska in trust for community use. These lands are intended to support present and future community needs, such as expansion areas, rights-of-way, and other public purposes.<sup>247, 248</sup> Because the transfer originates from the village corporation, the municipality receives only the surface estate.

The key element in determining which lands are conveyed is the agreement between the village corporation and the city regarding the location and purpose of the transfer. For Anaktuvuk Pass, this process has been completed: Nunamiut Corporation has conveyed the required lands pursuant to Section 14(c).

### Arctic Slope Regional Corporation

ASRC, among the largest private landowners in Alaska, possesses close to five million acres on the North Slope. These holdings are situated in locations that either contain proven resources or hold

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<sup>245</sup> ANCSA Regional Association, "About the Alaska Native Claims Settlement Act," accessed October 3, 2025, <https://ancsaregional.com/about-ancsa/>.

<sup>246</sup> Native Land Selections. 43 U.S.C. § 1611 (2024).

<sup>247</sup> Alaska Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs, "Planning and Land Management," accessed October 3, 2025, <https://www.commerce.alaska.gov/dcra/admin/PlanMgmt?menuLibraryTypeID=2>.

<sup>248</sup> Alaska Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs, Getting Started on 14(c)(3): A Basic Guide for City and Village Councils (Juneau, AK: Alaska Department of Commerce, Community, and Economic Development, 2004), accessed October 3, 2025, [www.commerce.alaska.gov/web/Portals/4/pub/14c3Getting%20Started2004.pdf](http://www.commerce.alaska.gov/web/Portals/4/pub/14c3Getting%20Started2004.pdf).



strong potential for discoveries of oil, gas, coal, and base metal sulfides. The corporation has secured most of the lands it is entitled to under the ANCSA.

### **17(b) Easements**

ANCSA also created what are known as 17(b) easements, which are reserved rights of way held by the U.S. government. These easements are typically located between villages, near airports, along docks, and adjacent to the marine shoreline. Their main purpose is to ensure public access across private lands so people can reach public lands and important waterways. Recreational uses, such as hunting or fishing, are not allowed on 17(b) easements, as the land itself remains under private ownership. These easements are generally designated as 60-foot-wide roadways, 25- or 50-foot trails, or one-acre sites intended for short-term use. It is important to note that 17(b) easements do not extend across public lands.

## **Land Ownership**

### **Private Land**

Private land consists of lots within the locality of Anaktuvuk Pass. Approximately 50 lots are in private ownership in the community.

### **North Slope Borough**

Within the Borough, the State of Alaska holds ownership of both land and water areas, including submerged lands. Under the federal Submerged Lands Act of 1953, states were granted title to submerged, navigable lands within their borders as of the date of statehood. This encompasses onshore navigable waterways as well as offshore marine areas extending three nautical miles from the coastline. The state's largest landholding in the region lies between the NPR-A and ANWR, encompassing the Prudhoe Bay area.

### **State of Alaska**

The State of Alaska manages waters and some lands within the Borough, including submerged areas. Under the federal Submerged Lands Act of 1953, states received title to submerged and navigable lands within their boundaries as of statehood. In Alaska, this includes inland navigable rivers and lakes as well as offshore waters extending three nautical miles from the coastline. The State's largest concentration of lands on the North Slope lies between the NPR-A and ANWR, encompassing the Prudhoe Bay oil fields and surrounding region.

### **Federal**

More than half of the land within the North Slope Borough is owned by the federal government. These federal holdings include areas such as the ANWR, NPR-A, parts of GAAR, the Noatak National Preserve, the Alaska Maritime National Wildlife Refuge, and federal waters of the Outer Continental Shelf (OCS). In addition, the federal government retains numerous DEW Line sites along the coastline, among other properties. Federal land around Anaktuvuk Pass consists almost entirely of GAAR.



## **Nunamiut Corporation**

Nunamiut Corporation holds several parcels at the north end of Anaktuvuk Pass, as well as a parcel to the south of town, bordering Summer Street and Borough property.

## **Gates of the Arctic National Park and Preserve**

Anaktuvuk Pass lies completely within GAAR, a federal park established in 1980. GAAR was created to protect the ecological integrity of Alaska's central Brooks Range, while also supporting opportunities for wilderness recreation and traditional subsistence practices.<sup>249</sup> The park and preserve extend roughly 200 miles north of the Arctic Circle, covering 8.4 million acres across the Brooks Range. Of this area, approximately 7.1 million acres are designated as Wilderness, making GAAR one of the largest protected wilderness landscapes in the nation.

GAAR contains six rivers which are recognized under the federal Wild and Scenic Rivers System: the Alatna, John, Kobuk, Noatak, North Fork Koyukuk, and Tinayguk. These waterways link mountains, valleys, and communities across the region. To the west, GAAR connects with the 6.4-million-acre Noatak National Preserve, and to the south, with the 1.7-million-acre Kobuk Valley National Park. Together, these three NPS units form a vast and continuous protected landscape of ecological and cultural significance, extending from the Dalton Highway in the east nearly to the Chukchi Sea in the west.<sup>250</sup>

## **Zoning and Land Use Regulations**

Zoning organizes land into designated districts and regulates the types of activities and uses permitted within those areas. Districts are intended to support both current and future land uses on public and private property. Within the Borough, platting and zoning are managed under NSBMC Title 19, as authorized by the State of Alaska, with the Borough acting on behalf of its residents. Every portion of the Borough falls within a designated zoning district, as shown on the official zoning map. Aside from categories specific to Utqiagvik, there are five primary districts: Village, Conservation, Scientific Research, Resource Development, and Transportation Corridor. Changes to zoning require approval by the NSB Assembly following a recommendation from the NSB Planning Commission.

Chapter 19.40 of NSBMC Title 19 describes the intent of each zoning district and specifies which activities require administrative approval, a development permit, or conditional development (approval required by the NSB Planning Commission). Beyond district-specific rules, Title 19 also directs project reviews according to broader policies, including Economic Development Policies (§19.70.030), Offshore Development Policies (§19.70.040), Coastal Management Policies (§19.70.050), and Transportation Corridor Policies (§19.70.060). Notably, the NSB's Coastal Management Policies remain in effect despite the discontinuation of the statewide program in 2011. Title 19 also contains provisions for safeguarding traditional land uses.

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<sup>249</sup> National Park Service, "Foundation Statement: Gates of the Arctic National Park and Preserve" (U.S. Department of the Interior, National Park Service, 2014), accessed October 3, 2025, [www.nps.gov/gaar/learn/management/upload/GAAR-Foundation-Statement-2014-508.pdf](http://www.nps.gov/gaar/learn/management/upload/GAAR-Foundation-Statement-2014-508.pdf).

<sup>250</sup> Alaska Geographic, "Alaska National Interest Lands," Alaska Geographic Society Magazine 8, no. 4 (1981)

The NSB Planning & Community Services Department is considering the establishment of village zoning commissions modeled on the Utqiagvik Zoning Commission. Such commissions would be responsible for implementing each village's Comprehensive Development Plan, supporting fire prevention efforts, and aiding in the delivery of emergency medical services. If a village wishes to establish a zoning commission, it would require close collaboration between local leadership and the Borough.

### **Village Zoning District (§19.40.060)**

The entirety of the city of Anaktuvuk Pass is contained within the Village District. The surrounding area outside of the municipal boundaries is within the Conservation District.<sup>251</sup>

The Village District is described in the NSBMC Title 19 (§19.40.060). The intent of the Village District is to accommodate uses which:

- Reinforce traditional values and lifestyles;
- Are in accord with the North Slope Borough Comprehensive Plan, Capital Improvements Program and Comprehensive Development Plan for the village; and
- Are in accord with the desires of the residents of the village.

The land uses that are permitted in the Village District include:

*For Administrative Approval.* The following can be administratively approved by the Borough's Land Administrator (also known as the Director of the Planning & Community Services Department) without public notice:

1. Placement of fill in a wetland in accordance with the Army Corps of Engineers general permit.

*For a Development Permit.* The following may be permitted upon approval by the Land Administrator after public review:

1. Public facilities;
2. Commercial development; and
3. Any use or structure within the watershed that provides the community's drinking water.

*For a Conditional Use Permit.* The following are conditional and may be established upon approval of the NSB Planning Commission:

1. Resource extraction; and
2. Any use "elevated" by the Land Administrator for Commission review by the NSB Land Administrator, pursuant to § 19.50.020.

Under NSBMC §19.50.020, the Land Administrator (Planning Department Director) may elevate an administrative approval or a development permit decision to that of a conditional use process, and the permit application for a proposal would then be considered for approval by the NSB

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<sup>251</sup> North Slope Borough, AK, Code of Ordinances, Title 19, "Planning and Zoning," Chap. 19.40, "Zoning Districts," § 19.40.060–19.40.070, MuniCode, [https://library.municode.com/ak/north\\_slope\\_borough/codes/code\\_of\\_ordinances](https://library.municode.com/ak/north_slope_borough/codes/code_of_ordinances).

Planning Commission based on written findings that the elevation decision satisfied specific criteria notes in Title 19.

Also, within Title 19 (§19.70.020) are Village Policies that are intended to guide the approval of development and uses in the Village District:

1. Development and uses will not be allowed which grossly violate guidelines on the rate or amount of growth adopted by a village as a part of its Comprehensive Development Plan;
2. Development and uses in a village are required to be consistent with the relevant adopted village Comprehensive Development Plan;
3. Development and uses are encouraged which provide or materially contribute to lower-cost fuel or power; and
4. Development and uses are encouraged which provide local employment in the villages.

### **Conservation Zoning District (§19.40.070)**

This district generally encompasses the undeveloped areas of the Borough and is intended to conserve the natural ecosystem for all the various plants and animals upon which Borough residents depend for subsistence. Subject to this overall intent, land within this district be used for limited resource exploration and development.<sup>252</sup> Major resource development project areas must be rezoned to the Resource Development District (RDD).

Land uses permitted within a Conservation District include:

*For Administrative Approval.* The following can be administratively approved by the NSB Land Administrator without public notice:

1. Temporary use (including fuel storage) of existing gravel airstrips in support of pre-exploration activities;
2. Archaeological surveys;
3. Tundra travel; and
4. Minor alterations to existing development.

*For a Development Permit.* The following may be permitted upon approval by the Land Administrator after public review:

1. Commercial recreation;
2. Ice roads and ice pads;
3. Exploration, prospecting, or limited development in anticipation of resource extraction; and
4. Offshore development in compliance with the policies of §19.70.040.

*For a Conditional Permit.* The following may be established upon approval of the Planning Commission:

1. All conditional and other development permit applications elevated by the Land Administrator under §19.50.020.

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<sup>252</sup> North Slope Borough, North Slope Borough Municipal Code of Ordinances, title 19, "Zoning," chap. 19.40, "Zoning Districts" (1990).

Although the NSB regulates zoning and land use throughout the region, many Native corporations also require separate permits for access to their lands. Researchers and hunters frequently apply for such permission.

## **Contaminated Sites and Hazardous Materials**

The ADEC defines a contaminated site as “a location where hazardous substances, including petroleum products, have been improperly disposed.” Contaminated sites that have not been cleaned up have the potential to threaten public health or the environment and can potentially cause economic hardship to people and communities. As of 2025, ADEC has identified about 14 contaminated sites in the Anaktuvuk Pass area. The majority of these sites are related to the Trans Alaska Pipeline System. The only contaminated sites identified by the State of Alaska within the Anaktuvuk Pass city boundary are the Anaktuvuk Pass Power Plant (cleanup complete), NSB Anaktuvuk Pass Pumphouse (active), the NSB Public Works Shop (active), and the NSB Anaktuvuk Pass Former Drum Storage and Stockpile (active). Additional information on these contaminated sites including closure details and cleanup chronology can be found on the ADEC Contaminated Sites Program website.<sup>253</sup>

### **Active Sites**

Active sites have confirmed contamination above action levels and require additional characterization, monitoring, or cleanup before a closure decision can be made. There are 3 active sites within the village of Anaktuvuk Pass.

### **Cleanup Complete Sites**

The Anaktuvuk Pass Tri-lateral Committee has indicated that although the ADEC indicates that the former Anaktuvuk Pass Power Plant clean-up is complete, the small creek that runs adjacent to the plant appears contaminated and that the former power plant, now abandoned, should be demolished. The Tri-lateral Committee also identified a surplus of power poles located on the former power plant site as a safety hazard, especially for children that are known to play in the area.

Additionally, a former teacher duplex, located between Nunamiut School and Nunamiut Corporation has not been used in many years and should be demolished and the site remediated as needed. The Tri-lateral has expressed concern over two other sites at Chandler Lake. The Anaktuvuk Pass Native American Land Environmental Mitigation Program (NALEMP) Chandler Lakes Research Camp, Hazard ID number 25980, has been cleaned up, according to the Tri-lateral committee. The barrels that were removed from the site, however, are now stored in front of the Tribal office. Reportedly, funding was exhausted before the barrels were disposed of properly. Also, the committee reports that satellite images show clusters of barrels on the west shore of Chandler Lake, at the NPS Anaktuvuk Pass Chandler Lakes Research Camp, Hazard ID number 26265.

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<sup>253</sup> Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, "The Contaminated Sites Program," accessed October 15, 2025, <https://dec.alaska.gov/spar/csp/>.

## **Current Land Use**

Privately held land and residential lots in Anaktuvuk Pass are primarily clustered in the northern part of the community, between Caribou Street and Main Street, although they are also scattered around the southern part of the community, near public facilities and commercial services such as utilities, the post office, church, and clinic. Newer subdivision lots in the northern end of the village are uniform in size while many of the other residential lots in the southern part of the community are variable in size and shape.

## **Future Land Use**

In the northwesternmost corner of the community are approximately 28 vacant private lots available for expansion.



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# Appendix

