



BERING STRAIT COMMUNITY NEEDS ASSESSMENT

2024 Update

February 2025

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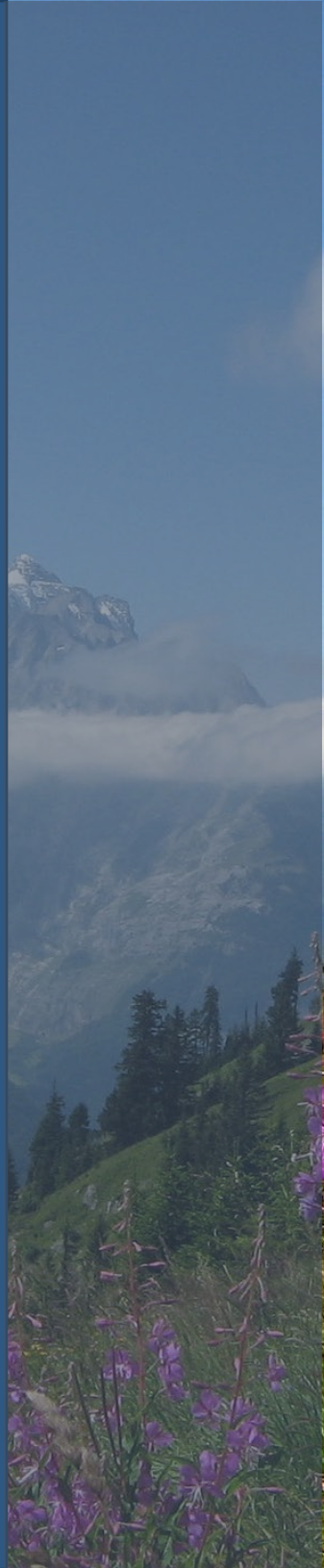
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Executive Summary

Introduction

Kawerak contracted with McKinley Research Group to update the *2022 Bering Strait Community Needs Assessment*. The *Bering Strait Community Needs Assessment – 2024 Update*, and a companion data book, will be released at the end of December 2024.

The assessment update includes the latest available data and information from publicly available sources and recent report on Nome Census Area regional issues.¹ Of note, the original needs assessment was informed by a larger community outreach effort and included a regional survey. The update provides fresh data on issues, including socio-economic, demographics, education, health, public safety, housing, and infrastructure.

This Key Findings document summarized needs assessment results with an overview of the Kawerak Service Area along with regional strengths and challenges.

¹ Kawerak Comprehensive Economic Development Strategy: 2024 Annual Update; University of Alaska Center for Economic Development, Bering Strait Business Resilience Data Report, December 2022; Northwest Planning, LLC. University of

Regional Overview

Demographics

Decreasing Population. The population decreased by 4% since 2020, to 9,628 in 2023. An additional decrease of 3.6% is projected between 2023 and 2050. The population decrease is driven by net migration out of the region.

Aging Population. Median age in the Nome Census Area was 30.9 years in 2023, an increase from 28.4 years in 2015. The median age in 2050 is projected to be 34.8 years.

Large Households. The average regional household size, at 3.4 people, is larger than the statewide average of 2.7. Household sizes average as large as 4.8 people in some communities. The proportion of the population who live in subfamilies within a household owned by someone else is more than one-quarter in many communities.

High Proportion of Children in Households. More than half (54%) of area households include children younger than 18 years of age, higher than statewide (33%). In many communities more than two-thirds of households have children.

Alaska Fairbanks – Northwest Campus. Career Pathways & Training Development Report: Nome Workforce Needs & Career Pathways, July 2024.

Workforce

EMPLOYMENT AND WAGES

Decreasing unemployment rates. Over the past decade, the annual unemployment rate² decreased from 12.1% in 2014 to 7.7% in 2023. This compares to 4.2% unemployment statewide in 2023.

Fewer employers; employment stable. Over the past 10 years, the number of employers in the region decreased from 361 in 2014 to 312 in 2023. Average monthly employment remained relatively stable, at 3,911 in 2014 compared to 3,869 in 2023.

Higher wages. While employment is relatively steady, average monthly wages increased from \$3,773 in 2014 to \$5,712 in 2023.

Prevalent public assistance. The proportion of households that receive cash public assistance or food stamps/SNAP in the region (36%) is higher than Alaska as a whole (13%). This percentage is much higher in some regional communities, ranging from 16% in Nome to more than 70% in Brevig Mission and Savoonga.

WORKFORCE INITIATIVES

A recent project identified regional workforce needs and career pathways to boost workforce readiness and bolster the regional

workforce.³ Findings emphasize a need for **coordination** across agencies and workforce programs; **in-region and community-level** education and training; and **housing and child care** support.

The report identifies three career pathways: trades, technical, and university. For each pathway, four stages are identified starting with youth and extending through senior-level positions.

Economy

NATURAL RESOURCES

Mining and gravel. Mining and extraction in the region include placer mining, onshore mining, offshore suction dredging, and rock mining. The Graphite Creek project hosts the country's largest known high-grade flake graphite deposit.⁴ The Graphite Creek Project, currently in the advanced exploration phase, is projected to generate about 370 production jobs.⁵

Seafood industry. The Bering Strait seafood industry includes salmon, halibut, and crab fisheries, along with seafood processing activity. The region's main fishery, measured by participation is salmon, harvested primarily by gillnet. In 2023, Nome Census Area residents earned \$2.9 million commercial fishing.⁶

² Not seasonally adjusted.

³ Pathways & Training Development Report: Nome Workforce Needs & Career Pathways, July 2024.

⁴ Bering Straits Native Corporation, Graphite One: Development and Protection for the Region, <https://beringstraits.com/graphite-one/>

⁵ Graphite One, Inc., In the Community, <https://www.graphiteoneinc.com/in-the-community/>

⁶ Commercial Fisheries Entry Commission

Reindeer herding. The reindeer industry supplies meat locally and to in-state processors when possible. Herders face challenges with livestock loss to wild caribou herds, availability of USDA-inspected processors, shipping, and remote locations.

INFRASTRUCTURE

Port of Nome. The Port of Nome serves as a critical shipping and transportation hub for western Alaska for a variety of supply and cargo ships, as well as maritime industries, search and rescue, emergency response, research, and natural resource exploration.

Expansion plans for the port, including a deep-water draft port, are under consideration, with funding amounts and sources in review. Local, regional, and statewide leadership, and Alaska's congressional delegation, continue to advocate for port expansion.

ARTS AND CULTURE

The region is home to hundreds of artists, many creating **art based in local cultures**. Arts forms include beading, skin sewing, carving, and performance art, and comprise an important income source for many individuals.

VISITOR INDUSTRY

Cruise ship traffic. In 2025, 11 ships are scheduled to bring 5,700 guests, a 14% increase over 2024. The Nome deep-water port, when complete, is expected to boost Nome tourism traffic.

Visitor industry infrastructure. Accommodation and rental car capacity can limit the number of visitors in Nome during months with

high visitation. Over time, if visitor traffic, including from cruise ships, increases, tour service, transportation, and accommodation infrastructure will need to match visitor needs in affected areas.

Regional Strengths

The Bering Strait region offers a rich environment, with culture, community, and natural resources at the forefront.

Community and Connection

Close-knit communities. Closely connected communities in the Kawerak Service Area create a foundation of safety and support. Children are looked after by communities, Elders serve as culture bearers and vital cultural resources, and community members help those in need.

Multiple **generations** of a family often live within a community, or under one roof, allowing for exchange of information, support, and cultural connections.

Active, healthy organizations work together to move the community forward. These include Kawerak, Norton Sound Health Corporation, Bering Strait Regional Corporation, Sitnasuak Native Corporation, Norton Sound Economic Development Corporation, and others.

Culture and language. About three-quarters of the population is Alaska Native or American Indian and in three main cultural and linguistic groups: Inupiaq, Yup'ik, and St. Lawrence Island Yupik.

Cultural practices, language use and revitalization, and traditional lifestyles are interwoven into regional life.

Lifestyle

Subsistence opportunities. Natural resources available in the region offer an abundance of subsistence opportunities, related cultural activities, and outdoor recreation. Subsistence is an important element of food security and the non-cash economy.

Cultural activities. Many residents of the region participate in a variety of cultural practices, including dance, singing and drumming, skin sewing, carving, and harvesting subsistence resources. A diversity of Indigenous communities enhances cultural richness, and communities are nurturing a resurgence in traditional languages.

Outdoor recreation. The region is home to nationally recognized recreation areas, and local environments offer rivers, beaches, tundra, mountains, and the ocean, with sea ice in the winters. Hiking, fishing, hunting and trapping, bird watching, camping, boating, snowmachining, and many other activities are available.

Work-life balance is supported by employers who often offer subsistence, longevity, and other leave, as well as work-from-home options.

Job opportunities are available in the region's hub, particularly in the healthcare sector and management.

Education System

Robust early education system. Early education programming, whether through Head Start/Early Head Start, public pre-K, or private establishments, is available in most regional communities. Kawerak is working to expand cultural knowledge in early education programming through language immersion classrooms.

Small school environments provide unique learning opportunities. Small classroom sizes and close community connections provide unique learning opportunities.

Education opportunities. Regional entities, including school districts, training programs, and post-secondary education institutions, partner on educational programs and assistance with credentials. Some employers provide on-the-job training or college scholarships when education requirements are not met. Scholarship opportunities abound for young people.

Advances in **internet access** in the region allow for more education access, particularly for post-secondary pursuits.

Healthcare

Well-organized healthcare is available in the region. Individuals have access to an array of healthcare services, particularly in Nome, through Norton Sound Health Corporation, the Nome Public Health Center, and a few private providers. Village clinics and visiting health professionals serve the smaller communities.

The healthcare industry, mainly through Norton Sound Health Corporation, creates **well-paying jobs** for the region.

Resiliency Planning

Natural disaster planning. Kawerak partners with other regional entities to plan for natural disasters. Recent efforts include development of Small Community Emergency Response Plans and the BIA-funded tribal Hazard Mitigation Plans (HMP).

A regional **Resiliency Plan**, approved by the Bering Strait Development Council in 2023, addresses infrastructure, broadband access, food security issues, workforce development, pandemic recovery, and climate issues; Kawerak also commissioned the 2024 Bering Strait Region Priority Climate Action Plan.

Regional Challenges

Basic needs for shelter, sanitation, food security, and income affect all other aspects of life, and are important in addressing regional economic, social, educational, and health challenges.

Insufficient Housing

An acute housing shortage impacts most facets of life in the region. Challenges with housing availability, quality, and affordability create or exacerbate other social and health concerns. Further, housing challenges limit businesses' ability to attract and retain employees, affecting education, healthcare, and the overall economy.

Cost burdens. Housing in the region is expensive. Thirty percent of all area households are considered cost-burdened, defined as spending more than 30% of household income on housing costs.

Low vacancy rates. Homeowner vacancy rates are 0.6% in the region, compared to 1.3% statewide, while rental vacancies are 2.1% compared to 7.8% statewide.

Aging housing stock. Most housing units in the Kawerak Service Area (85%) were built prior to 2000, with 38% built before 1980.

Overcrowding. Thirty-one percent of households in the region are considered overcrowded, with more than one occupant per room, compared to 6% of Alaska households.

Limited Utilities

Incomplete, nonexistent, or aging water and wastewater systems. Diomedes, Shishmaref, Stebbins, Teller, and Wales do not have piped water systems. Few communities in the region meet best practice scores required for State water and sewer upgrade funding.

Incomplete plumbing facilities. Plumbing facilities are incomplete for one-quarter (24%) of housing structures, including most structures in Diomedes, Shishmaref, Stebbins, Teller, and Wales.

Expensive fuel. Heating fuel prices continue to fluctuate and vary across the region. In communities outside of Nome, summer 2024 heating oil prices ranged from \$4.45/gallon in Brevig Mission to \$8.09/gallon in Stebbins. This compares to \$3.83 in Fairbanks and \$6.70 statewide for unsubsidized communities.

Poverty and Unemployment

Unemployment, poverty, and a high cost of living in the region all interact to challenge many families throughout the region.

Unemployment remains high, though decreasing. The 2023 annual unemployment rate of 7.7% in the region is higher than the statewide rate of 4.2%. However, the rate decreased in the region over the past decade from 12.1% in 2014.

Prevalent poverty. Twenty-one percent of regional residents live below the federal poverty line, compared to 11% statewide.

- One-quarter of **children** in the region live below the federal poverty line; with the highest rates in Brevig Mission (63%), Koyuk (51%), Diomed (45%), and Gambell (42%). This compares to 13% of children in Alaska statewide.

High cost of living. The overall cost of living in Nome is 39% higher than Anchorage. Prices in some categories are well above the overall differential. Living costs in outlying communities are typically higher than in Nome.

Workforce Shortages

A **shortage of jobs** exists in many communities.

At the same time, many employers face **difficulties hiring locally**, particularly for technical or higher-level positions that require specialized training or work experience.

Job opportunities don't always align with training. Preparation for a job may take months to years, so that people may not be trained when jobs are available.

Subsistence lifestyles can conflict with paid employment schedules and requirements.

Expensive and Limited Transportation

Transportation challenges hinder construction, access to healthcare, shipments of goods and supplies, and other aspects of life in the region. High transportation costs contribute to the high cost of living. Inclement weather further impacts transportation and shipping, causing isolation and scarcity.

Isolation. No roads connect the region to the rest of Alaska; most communities are isolated at least seasonally.

Expensive and weather-dependent air transportation. Daily jet service from Anchorage is available to Nome and relatively reliable. However, air transportation throughout the rest of the region on smaller planes can be expensive and impacted by weather.

Communication Changes

Historically, limited communications infrastructure impacted most aspects of life in the region, including education, business, and healthcare. Internet and telephone service were slow and unreliable for many individuals and entire communities. Recent federal funding allowed for a rapid improvement in regional telecommunications capacity and infrastructure.

Digital connectivity and reliability in progress. Internet speed and broadband width improved for many residents over the past few years. The number of households without internet decreased from one-in-three in 2017 to less than one-in-five in 2022.

Telecommunications infrastructure investment. Recent undersea cable disruptions underscore the need for multiple sources of internet to back up existing systems. With increases in connectivity, cybersecurity issues emerge.

Educational Attainment

School-age assessment scores show need for more support. AK STAR test results for children in 3rd through 9th grade show one-quarter or fewer students in Nome Public Schools and one-in-ten children in Bering Strait School District are proficient or advanced in science, math, and English language arts. This compares to approximately one-third of children statewide.

Teacher turnover is high in the region, making learning environments inconsistent for students.

Decreasing high school graduation rates. In both regional school districts, as well as statewide, graduation rates decreased between the 2018-2019 school year and 2022-2023. Nome Public School's rate dropped from 78% to 70% and Bering Strait School District from 87% to 75%.

Low post-secondary degree attainment. Forty-three percent of regional adults older than 25 years of age completed high school as

their highest level of education, compared to 29% statewide. Twenty-two percent completed any kind of post-secondary degree (compared to 39% statewide).

Both graduation rates and low post-secondary degree attainment indicate a population of **young adults** with training, education, and employment needs. Kawerak and other organizations are working with school districts to address these needs.

Child Care Needs

Child care shortage. Despite a strong Early Head Start/Head Start program, child care is not available for many families that need it throughout the region. At least 39% of children in need of child care services do not have them. Expensive or unavailable child care impacts a family's ability to participate in the workforce. A limited pool of child care workers further inhibit child care services.

Safety and Community

Child abuse is higher than statewide. The rate of substantiated reports of child maltreatment is more than twice the rate as reported by the Nome OCS Office (27.7 per 1,000 children) compared to Alaska (9.8 per 1,000 children).

Intimate partner violence is higher in the region. Estimated prevalence of lifetime physical intimate partner violence is higher in the Norton Sound Health Corporation service region (35%) compared to Alaska (23%).

Law enforcement recruitment and retention is challenging.

Training, qualification, and recruitment issues often hinder law enforcement, and a shortage of village public safety officers (VPSOs) exists in communities outside of Nome.

Other public safety issues, such as emergency response planning, and adequate fire protection also need attention in some communities.

Health Status

Increasing teen birth rates. Average annual births per 1,000 women 15 to 19 years of age in the region rose from 48 to 58 between 2018-2020 and 2021-2023. The 2021-2023 teen birth rate is higher than the statewide rate of 16 per 1,000.

Higher rates of communicable disease, such as tuberculosis (183 per 100,000 versus 13 statewide), chlamydia (2,857 per 100,000 versus 728 statewide), and gonorrhea (1,230 per 100,000 versus 314 statewide), occur in the region compared to Alaska statewide and the U.S. overall. The Nome Census Area gonorrhea rate more than doubled between 2018 and 2022.

Causes of death unchanged. The top five causes of mortality in the region are unchanged between 2016-2020 and 2019-2023. Top causes include malignant neoplasms (cancer), heart disease, unintentional injuries, intentional self-harm, and chronic lower respiratory disease.

Health impacts from alcohol. Between 2021 and 2023, alcohol-related disorders were the leading causes of visits to the Norton Sound Health Corporation emergency department and by Nome Census Area residents to emergency departments at all other facilities in Alaska.

Prevalent tobacco use. The estimated prevalence of current cigarette, e-cigarette, or smokeless tobacco use is higher in the Norton Sound region (44%) than Alaska (25%).

Mental health issues increased. Prevalence estimates from 2014-2018 to 2019-2023 indicate that the percentage of Norton Sound Health Corporation service region adults experiencing poor mental health for two or more weeks in the past month increased from 6% to 13%.

Transportation issues impact healthcare. Travel between villages and Nome and between Nome and Anchorage can make accessing healthcare difficult and costly.

Historical and individual trauma impacts families and communities in the region. Aside from serious historical trauma that reverberates through generations, sources of trauma vary, though include the prevalence of death and missing persons, alcohol and drug abuse, and crime.

Limited access to healthy food, such as fresh produce, can contribute to health problems in outlying communities.

Elder care options are limited in the villages, making it difficult for Elders to remain in their homes and communities.

Climate Change

Climate change issues impact daily life, traditional practices, and economies in the region.

Homes and infrastructure are threatened and damaged by thawing permafrost and erosion, requiring extensive mitigation, recovery efforts, and community relocation. The loss of coastal sea ice results in further reduced protection from storms and erosion.

Access to subsistence resources is decreasing as ocean and sea ice environments change. This impacts traditional cultural practices, ecology, wildlife populations, communities, and regional businesses, including resource-based artists. Unpredictable harvest conditions also make access particularly challenging for Elders.

Food insecurity is a concern as subsistence harvests become less abundant and less reliable. Challenges include warming oceans and associated decreases in a variety of species, less stable sea ice, and larger storms with increased risk for subsistence activities.

Recent Developments

Increased internet access is one of the most significant developments in the last few years, with Quintillion's fiber optic cable in Nome and Starlink satellite broadband service in outlying communities. The broadband service increased access to education and vocational training, online physical and behavioral health

services, online banking, and allowed improved communication between families living in different communities.

Other recent changes include:

- **Housing infrastructure** improved with new homes in development.
- **More places for the unsheltered** were developed, including Home Plate Apartments, with 15 units in Nome.
- An **infusion of funding** at the federal and state level allowed programs to flourish and meet more people's needs.
- **Increased behavioral health services** are offered by Norton Sound Health Corporation (NSHC).
- **Expanded healthcare services** at NSHC include 12 additional beds in its nursing home, efforts to eliminate bed bugs in homes, providing eye glasses and braces at no cost, increased in-home care, and a program that led to successful weight loss by many in the region.
- Kawerak **improved roads**, provided **vocational training programs**, offered resources and **support to college students**, provided **wellness activities**, and led the region's only major **recycling** effort.
- School systems were impacted by **budget cuts** and **teacher turnover**.

Opportunities and Considerations

Community members noted the following opportunities for growth and improvement of services within the region.

- Nurturing **agency partnerships** could allow organizations to tap into federal funding, coordinate infrastructure investments, and develop more infrastructure and programs.
- **Continued efforts to develop housing** are still strongly needed. This is an area in which partnerships are critical for planning and sharing resources.
- Schools or other organizations could provide more **after- or before-school programs as a child-care option** for school-aged children. Locating care at schools would address transportation barriers and a lack of facilities available for child care. A plan to staff such programs is needed. School rental for child care programs could also provide schools with much needed income to support their academic programs.
- **Pathways for young adults** are needed to draw them into education, vocational training, and the workforce sooner.
- Providing all communities with **access to piped water and sewer, and to broadband internet** remains critical for addressing health concerns, job recruitment barriers, and quality of life. Kawerak has rightly focused on working closely with communities on improving their administrative and technical practices so they qualify for infrastructure funding. Ongoing attention to this is important, as well as technical and advisory support for communities when funding becomes available.
- In a region in which family ties are strong, finding ways to **keep Elders in the communities** as they age is important. NSHC has expanded its in-home care program to address that, though continued work in this area is needed, as are assisted living options within the region.
- Current federal legislation and ongoing funding of **Automated Weather Observing Systems** station maintenance is needed to protect village services.
- Enhanced access to healthy foods and nutrition is particularly needed for some low-income individuals.

1. Introduction

The 2024 *Bering Strait Community Needs Assessment* updates the 2022 community needs assessment. The assessment describes and analyses data to inform strengths, challenges, and needs within the Bering Strait region. This report also summarizes findings from the 2023 Kawerak Head Start Community Needs Assessment Update.

This report provides the most recent data and qualitative information available to support Kawerak's strategic decision making. This report highlights key findings and is accompanied by a comprehensive data book for use in Kawerak program planning, funding applications, grant reporting, and other tasks that require up-to-date information.

Methodology

Data Sources

This study primarily uses quantitative data to identify community strengths, needs, and socioeconomic trends. Information is augmented by literature reviews and interviews with community leaders and Kawerak program managers.

Data for this report were compiled between August and December 2024 from a wide range of local, state and federal sources. Information is presented for individual communities, when possible, though some data are available for the region only. The Nome

Census Area is used as a proxy for the Kawerak Service Area in this report unless otherwise noted.

In this report, Alaska Native refers to Alaska Native and American Indian people in any combination with any other races unless otherwise noted. Following are key data sources used in this study. More detail is available in Appendix C: Sources.

DEMOGRAPHIC AND SOCIOECONOMIC DATA SOURCES

Demographic and socioeconomic data in this report are drawn primarily from the U.S. Census American Community Survey and State of Alaska departments, including the Alaska Department of Labor and Workforce Development Research and Analysis Office; and the Alaska Department of Education and Early Development. Other sources include reports and data specific to economic sectors discussed in the report.

COMMUNITY HEALTH DATA

Health data is compiled from the Alaska Behavioral Risk Factor Surveillance System (BRFSS); the Alaska Childhood Understanding Behaviors Survey (CUBS); the Alaska Department of Health (DOH), Division of Public Health (DPH), Health Analytics and Vital Records Section (HAVRS); the Alaska Office of Children's Services (OCS); the Centers for Disease Control and Prevention (CDC); and the National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention's (NCHHSTP) AtlasPlus system.

OTHER DATA SOURCES

In collaboration with Kawerak, the study team identified a limited number of community leaders and program managers who could provide information and insights on recent trends, developments, and needs within the Bering Strait region. Appendix 2 includes a full list of those interviewed for this study.

Report Organization

This report is divided into the following sections:

Key Findings – A synopsis of key findings in the report.

1. Introduction – A summary of the report's purpose, research methodology, and report organization.

2. Kawerak Overview – A description of Kawerak programs and services, communities and populations served, governing structure, and staff resources.

3. Demographics – A profile of the region's population, household and family characteristics, and population trends.

4. Socioeconomics – An analysis of economic sectors, poverty, and economic indicators.

5. Housing – Housing data, including supply, prices, and affordability.

6. Infrastructure – Documentation of infrastructure data, including sewer, water, and other utilities. Transportation and communication infrastructure is also discussed.

7. Education – An inventory of K-12 enrollment, proficiency scores, graduation and drop-out rates, and postsecondary education participation and completion.

8. Community Health and Safety – An overview of law enforcement, fire and rescue services, healthcare infrastructure and services, community physical and behavioral health indicators, climate change impacts, and emergency preparedness.

9. Cost of Living – Analysis of cost data for housing, utilities, transportation, and household goods, including the geographic cost-of-living differential.

Appendix A. A list of **Bering Strait Region Tribes**

Appendix B. Sources

2. Region Overview

The Bering Strait Region encompasses 2.3 million acres in Northwest Alaska. The region's diverse landscape includes 570 miles of coastline, seasonal sea ice, river deltas, tundra, and mountain ranges.

About 9,600 people live in the region, 76% whom are Alaska Native. Home to Inupiat, Central Yup'ik, and St. Lawrence Island (also called Siberian) Yupik people, 16 year-round communities are located in the region and another four are visited seasonally, often for fish camps and other subsistence uses.

Table 1. Kawerak Service Area Communities

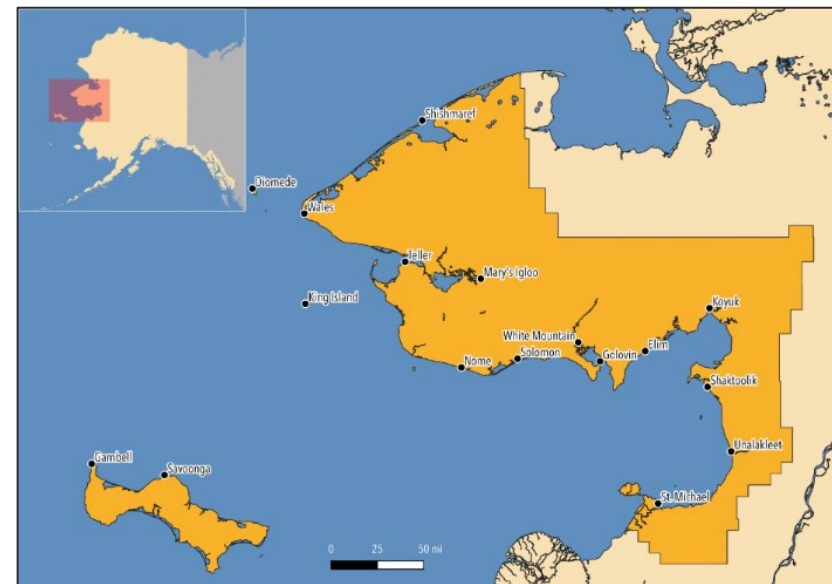
Year-Round Communities		Seasonal Communities
• Brevig Mission	• Shaktoolik	• Council
• Diomedea	• Shishmaref	• King Island
• Elim	• St. Michael	• Mary's Igloo
• Gambell	• Stebbins	• Solomon
• Golovin	• Teller	
• Koyuk	• Unalakleet	
• Nome	• Wales	
• Savoonga	• White Mountain	

Twenty federally recognized tribes operate in the region. Tribal governments are located in each year-round community. Please see Appendix B for a full list of these tribes.

Additionally, the King Island Native Community, the Native Village of Council, and Solomon Traditional Council are headquartered in Nome. Mary's Igloo Traditional Council is in Teller.

Bering Straits Native Association (BSNA), an Alaska Native Claims Settlement Act (ANCSA) regional corporation, operates in the region along with village corporations. Most communities in the region include a village corporation, a city/village government, and a tribal government – often collectively called the tri-org.

Figure 1. Map of Kawerak Service Area



Source: McKinley Research Group and Kawerak Inc.

Land Ownership

The federal government is the largest landowner in the region, including the 2.7-million-acre Bering Land Bridge National Preserve. The second largest landholder is the State of Alaska. Bering Straits Native Corporation (BSNC) is the largest private landowner, with surface and subsurface land rights totaling about 2 million acres. Each village corporation possesses title to surface lands in their respective village. BSNC has title to subsurface rights for most villages. Exceptions are Elim Native Corporation that owns surface and subsurface rights to its land and Gambell and Savoonga that own all of St. Lawrence Island.

Kawerak Inc.

Bering Straits Native Association established Kawerak in 1971 as a regional nonprofit to provide social, education, economic development, and other services to the Bering Strait Region.

Kawerak mission:

- **Advancing the capacity of our People and Tribes for the benefit of the region.**

Kawerak vision:

- **Our people and tribes are thriving.**

Kawerak values:

- **Our traditional culture, Native values, and unity of our tribes empower us.**

Programs and Services

Kawerak oversees the following six program areas.

Community Services: Child Advocacy Center, Children & Family Services, wellness, transportation, tribal affairs, and Village Public Safety Officers (VPSOs).

Cultural and Regional Development: Community planning and development, Eskimo Heritage Program, and Katirvik Cultural Center, and tribal legal services.

Educational Services: Pre-K to postsecondary education and community education, Head Start and Early Head Start, a GED program, ESL courses, and vocational training assistance.

Employment Services: Employment and training programs for youth and adults.

Natural Resources: Environmental and marine programs, social sciences, land management, subsistence resources, Eskimo Walrus Commission, and Reindeer Herders Association.

Supportive Services: Child care services, welfare assistance, and support for the unemployed and underemployed.

Governance and Staffing

Kawerak is governed by a Board of Directors, composed of the council presidents or appointed delegates from each of the region's federally recognized tribes, as well as two Elder representatives and a Norton Sound Health Corporation representative.

PERSONNEL RESOURCES

Kawerak employs approximately 340 people.⁷ Most employees (91%) live in the region; 45% in Nome, 39% in other communities, and 6% in-region working remotely. About 80% of employees are Alaska Native and approximately 80% are female.

Significant vacancies can occur in the region, with Kawerak reporting 48 vacancies in September 2024, 69% of which had been vacant for over 180 days.

Kawerak also operates a summer internship program to provide work experience and leadership education for Alaska Native students. In 2024, the organization hosted 18 interns.

⁷ As of September 2024. Includes full/part-time, temporary, emergency, and on-call employees.

3. Demographics

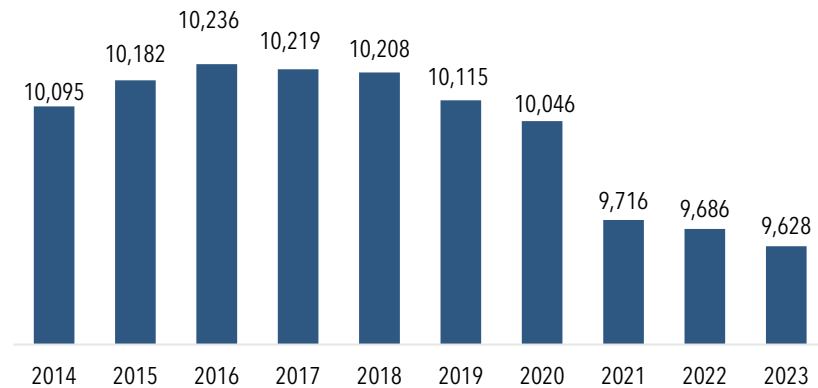
Population Overview

The 2023 Nome Census Area population totaled 9,628, a 4% decrease from 2020, when 10,046 people lived in the area.

One-third (36%) of the population lives in the city of Nome, home to 3,506 in 2023. The population of other communities in the region ranges from 75 in Diomedes to 838 in Savoonga.

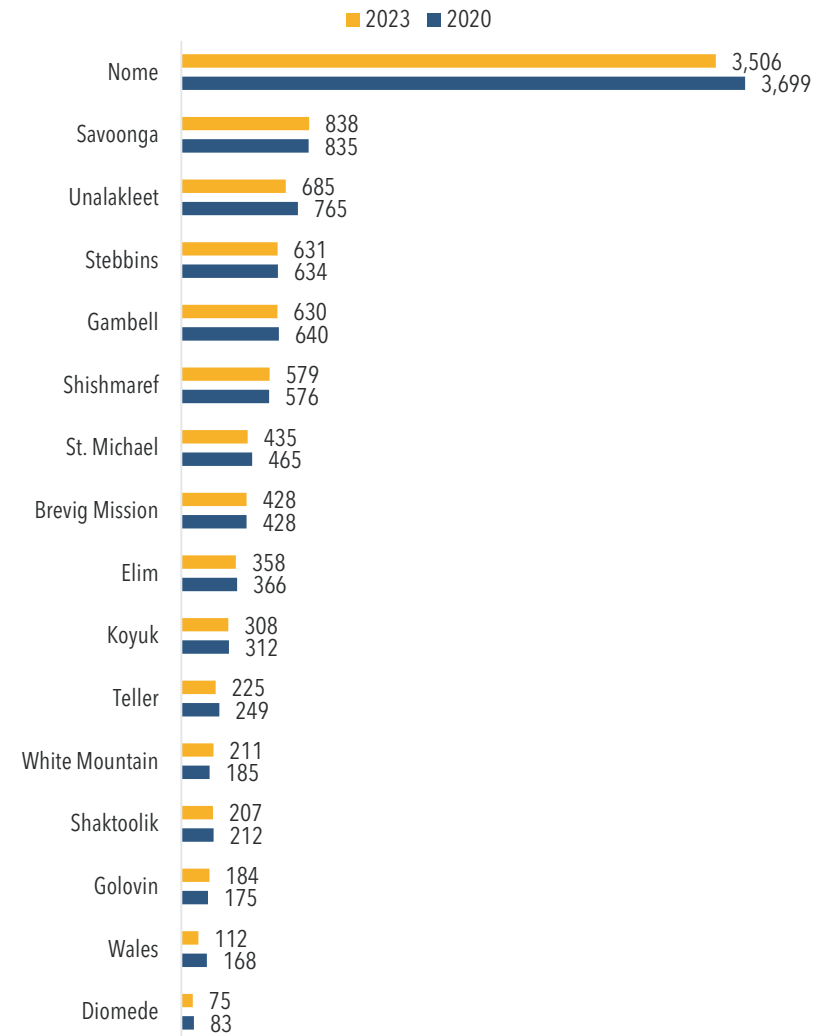
Largest population changes by community between 2020 and 2023 include Wales, at -33%, White Mountain, at +14%, and Diomedes, Teller, and Unalakleet, all at -10%.

Figure 2. Nome Census Area Population, 2014-2023



Source: Alaska Department of Labor and Workforce Development.

Figure 3. Population by Community, 2020 and 2023

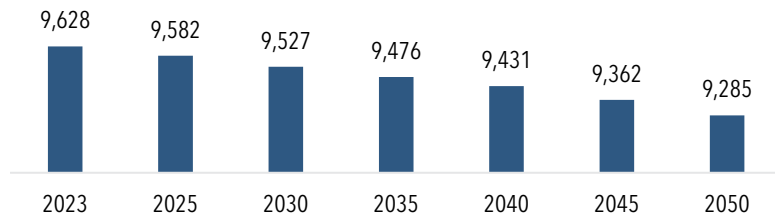


Source: Alaska Department of Labor and Workforce Development.

Population Projections

The Nome Census Area population is projected to decrease between 2023 and 2050 to a total of 9,285. Average annual growth rates during that time are projected between -0.1% and -0.2%.

Figure 4. Nome Census Area Population Projections, 2023-2050

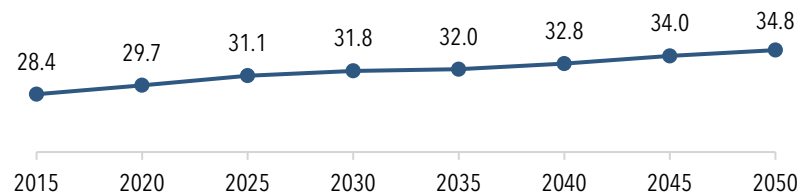


Source: Alaska Department of Labor and Workforce Development estimates and projections.

Population by Age Group

Median age in the Nome Census Area was 30.9 years of age in 2023, an increase from 30.1 years in 2020. The median age increased steadily from 28.4 years of age in 2015 and is projected to continue to increase to 34.8 years in 2050.

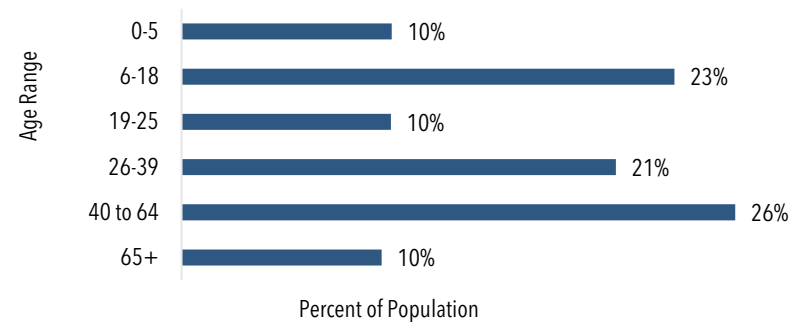
Figure 5. Median Age, Nome Census Area, 2015-2050



Source: Alaska Department of Labor and Workforce Development.

One-third of the population is 18 years of age or younger, 10% are 19-25 years of age, almost half (47%) are 26-64 years of age, and 10% are 65 years of age or older.

Figure 6. Nome Census Area Population by Age Group, 2023

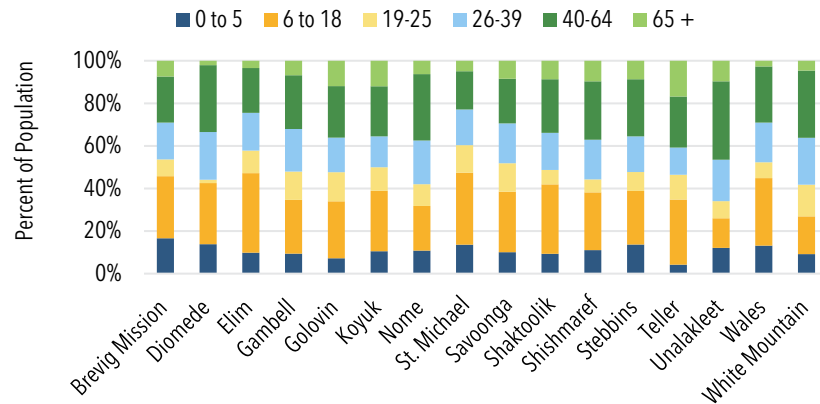


Source: Alaska Department of Labor and Workforce Development.

Population distribution by age group varies by community.

- Brevig Mission and Stebbins are home to the largest proportion of children 5 years of age and younger, at 14% and 12% respectively.
- The largest proportion of children 18 years and younger live in Elim (46%), St. Michael (46%), and Brevig Mission (45%).
- White Mountain (16%) and Golovin (15%) are home to the largest proportion of young adults 19 to 25 years of age, followed by Savoonga, Gambell, and St. Michael, each at 14%.
- Communities with the largest percentage 65 years of age and older population are Teller (17%), Koyuk (12%), and Golovin (12%).

Figure 7. Population Age Distribution, by Community, 2023



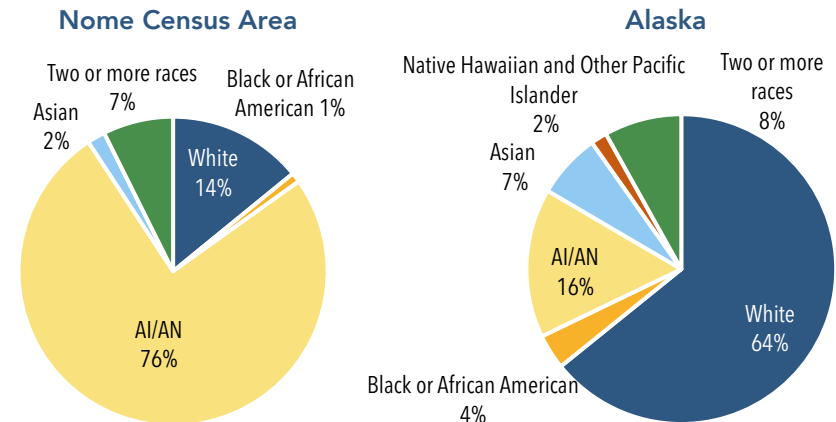
Source: Alaska Department of Labor and Workforce Development and US Census Bureau, American Community Survey 2018-2022 5-year estimates.

Population by Race/Ethnicity

Three-quarters (76%) of the Nome Census Area population are American Indian or Alaska Native (AI/AN) compared to 16% statewide. White residents make up 14% of the Nome Census Area, compared to 64% statewide. Eight percent identify as two or more races and about 2% identify as Hispanic or Latino.

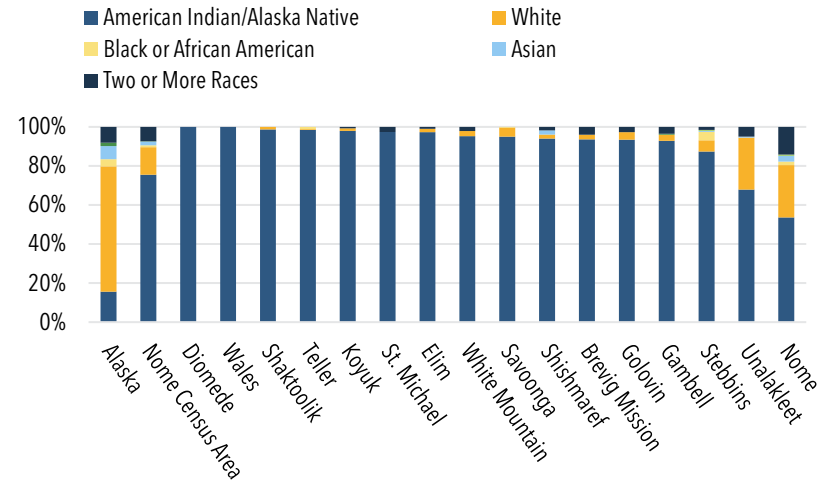
Alaska Native or American Indian residents comprise more than 90% of the population in most Nome Census Area communities, with the exceptions of Stebbins (88% Alaska Native or American Indian), Unalakleet (68%), and Nome (54%).

Figure 8. Population by Race/Ethnicity Alone, 2023



Source: American Community Survey 2018-2022 5-year estimates.

Figure 9. Population by Race/Ethnicity, by Community, 2023

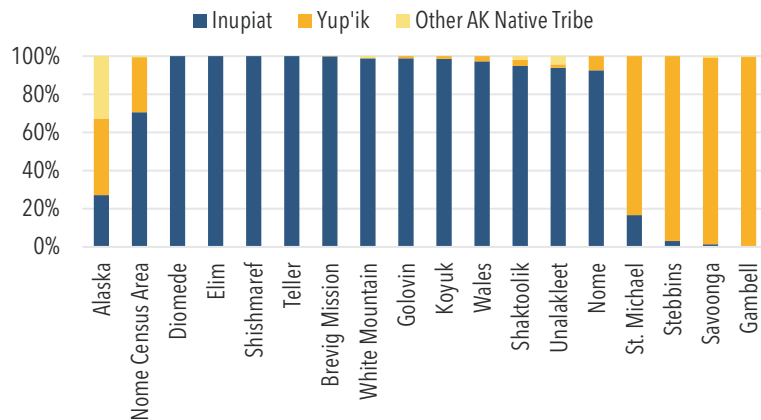


Source: American Community Survey 2018-2022 5-year estimates.
Note: Population by race alone.

Tribal Grouping

Among Alaska Native residents of the Nome Census Area for whom a tribe is specified, 71% are Inupiat and 29% Siberian Yupik or Central Yup'ik. Most communities are home primarily to Inupiat residents, with the exception of St. Michael, Stebbins, Savoonga, and Gambell that are primarily Siberian Yupik or Central Yup'ik.

Figure 10. Alaska Native Tribal Affiliation, by Community, 2023



Source: American Community Survey 2018-2022 5-year estimates.
Note: Tribal groupings are for Alaska Native people for whom a tribe is specified.

Language

In the Nome Census Area, approximately one-quarter (26%) of people 5 years of age and older speak a language other than English at home. On St. Lawrence Island, most people speak a language other than English at home: 74% in Gambell and 65% in

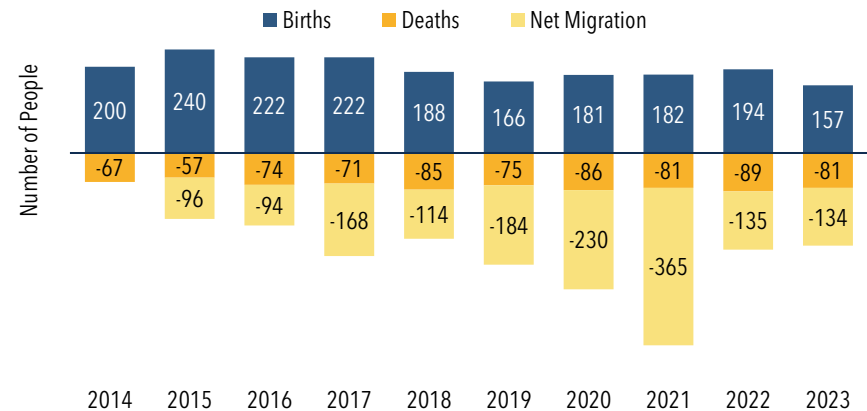
Savoonga. Siberian Yupik is the predominant language spoken on the island.

- About one-third of people in Diomed (36%), Koyuk (32%), and Wales (32%) speak a language other than English at home.

Components of Population Change

Births in the Nome Census Area outnumbered deaths each year of the past decade. Net migration was negative, meaning the number of people who left the region outnumbered those who moved in. This trend resulted in an overall population decrease over the past seven years.

Figure 11. Components of Population Change, Nome Census Area, 2014-2023



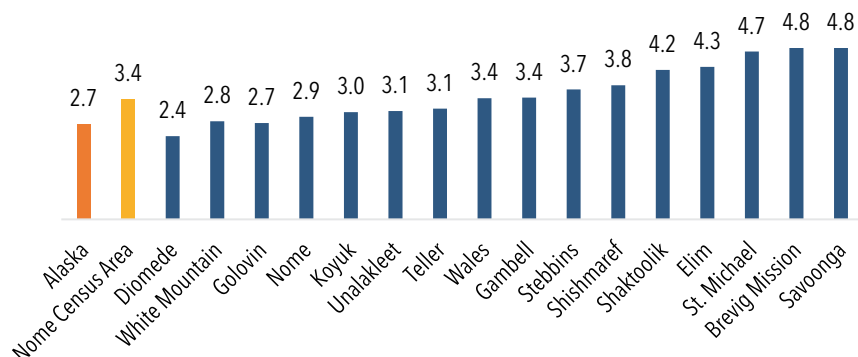
Source: Alaska Department of Labor and Workforce Development.

Households and Families

Average household size in the Nome Census Area is 3.4 people, larger than the statewide average of 2.7.

By community, household size is largest in Savoonga and Brevig Mission, at an average of 4.8 people, followed by St. Michael at 4.7. Diomedede household size is the smallest in the area, averaging 2.4 people.

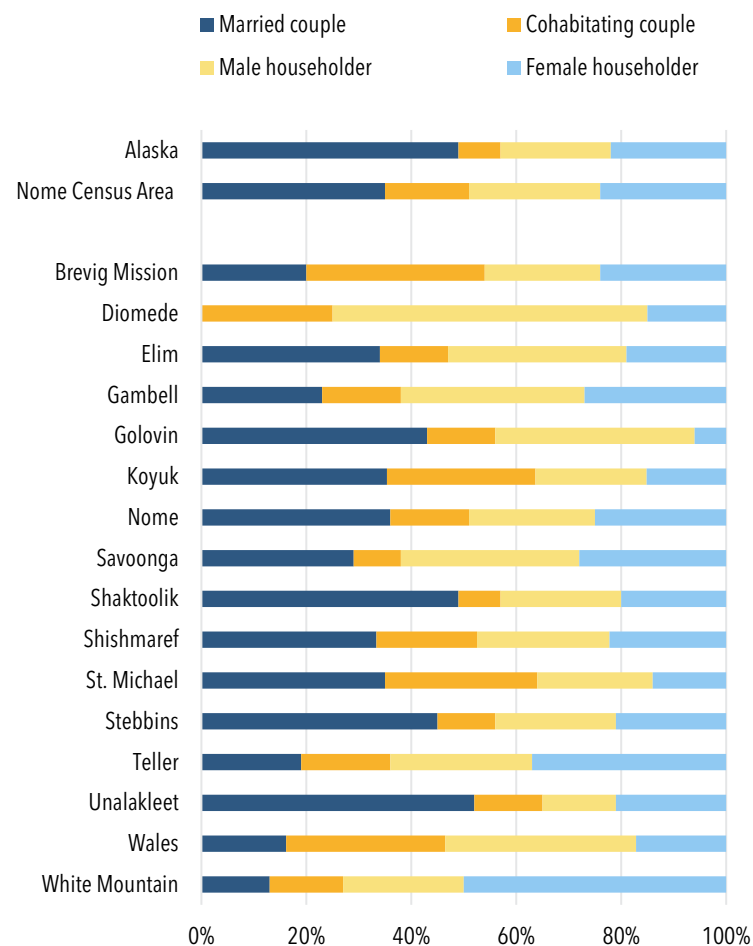
Figure 12. Average Household Size, by Community, 2023



Source: American Community Survey 2018-2022 5-year estimates.

Married couple householders make up 35% of households in the Nome Census Area, while single males make up 25%, single females 24%, and cohabitating couples 16%. In Alaska, half (49%) of households are married couples.

Figure 13. Households by Type, by Community, 2023



Source: American Community Survey 2018-2022 5-year estimates.

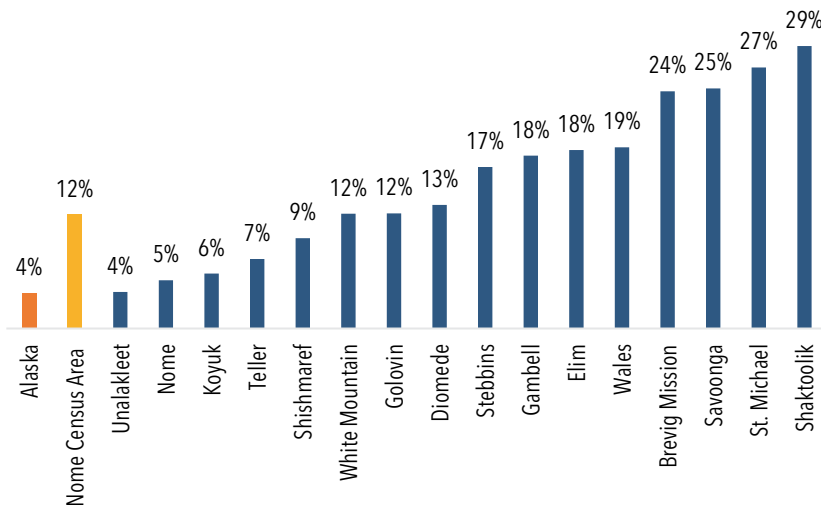
Note: Male and female householders have no spouse/partner present.

Extended Families and Subfamilies

More than one-in-ten people in the Nome Census Area (12%) live in subfamilies, meaning they live in a household owned by someone else. This compares to 4% of the population statewide.

In several regional communities, about one quarter of the population is in subfamilies: Shaktoolik (29%), St. Michael (27%), Savoonga (25%), and Brevig Mission (24%).

Figure 14. Population Living in Subfamilies, by Community, 2023



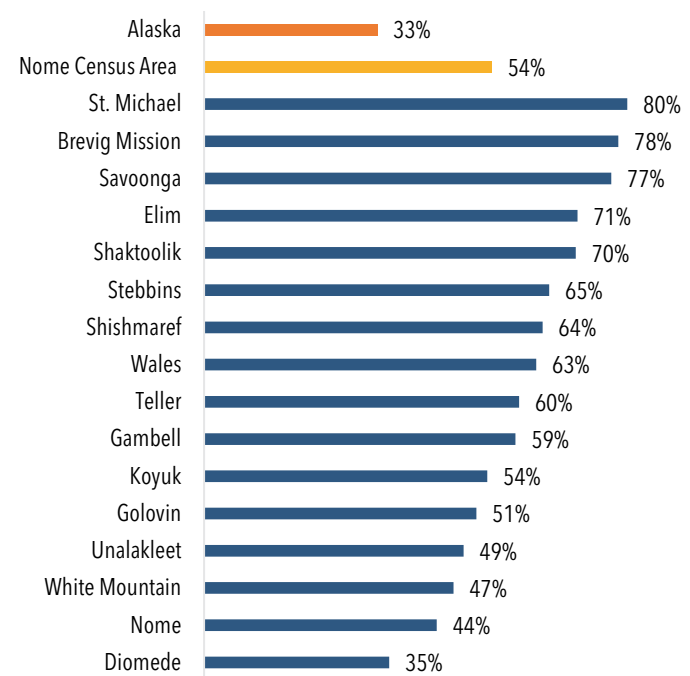
Source: American Community Survey 2018-2022 5-year estimates.

Note: Subfamilies are families that live in the household of someone else.

Households with Children

More than half of households (54%) in the region include children younger than 18 years of age, compared to 33% statewide. In some communities, a much larger proportion of households include children: 77% in Savoonga, 78% in Brevig Mission, and 80% in St. Michael.

Figure 15. Households with Children Younger than 18 Years of Age, by Community, 2023

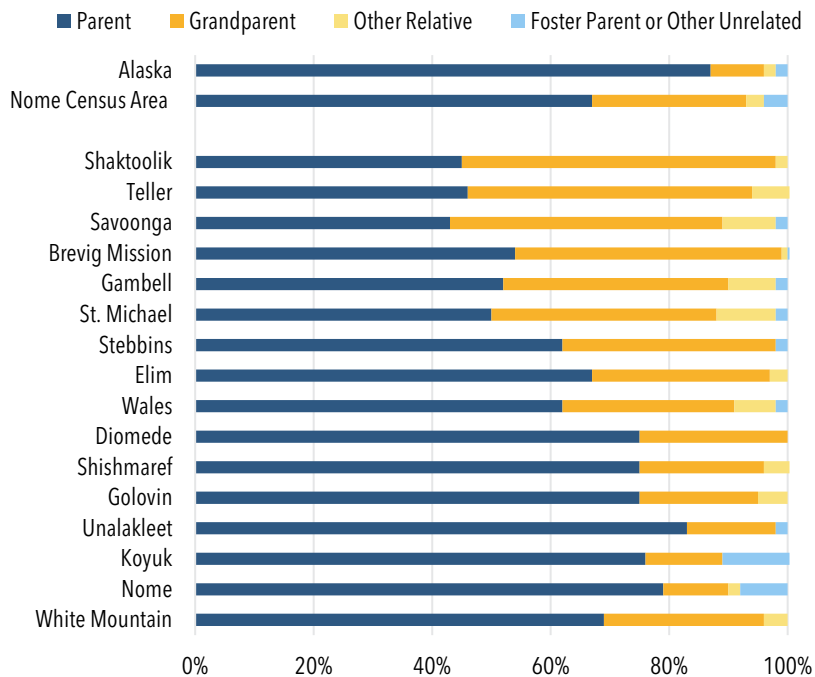


Source: American Community Survey 2018-2022 5-year estimates.

About two-thirds (67%) of children in regional households live with a parent householder. This compares to 87% in Alaska. Grandparents are the householder for 26% of Nome Census Area children, a foster parent/unrelated individual for 4%, and another relative for 3%.

In some communities, about half of children are in households with a grandparent householder, including Shaktoolik (53%), Teller (48%), Savoonga (46%), and Brevig Mission (45%).

Figure 16. Children's Relationship to Householder, by Community, 2023



Source: American Community Survey 2018-2022 5-year estimates.

4. Socioeconomics

This chapter describes employment and wages in the region; poverty rates, impacts, and types of assistance; and an overview of major economic sectors.

Employment

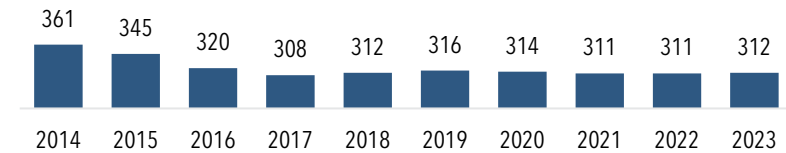
Over 700 businesses and organizations operate in the Nome Census Area. Major employers include the public sector (including school districts), the healthcare sector, and transportation. Among large employers, Norton Sound Health Corporation, with approximately 700 employees, offers services at its main facilities in Nome and clinics in regional communities. The Bering Strait School District and Nome Public Schools combined employ almost 600 people.⁸

The number of employers remained relatively steady since 2018, at 312 in 2023. Overall, average monthly employment remained was also fairly steady, aside from 2020 and 2021. Average monthly employment totaled 3,869 in 2023, down from 3,941 in 2022.

⁸ National Center for Education Statistics, 2024.

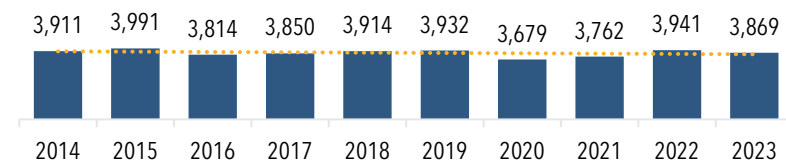
⁹ A non-employer establishment has no paid employees, annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal

Figure 17. Number of Employers, Nome Census Area, 2014-2023



Source: ADOLWD, Quarterly Census of Employment and Wages, 2014-2023.

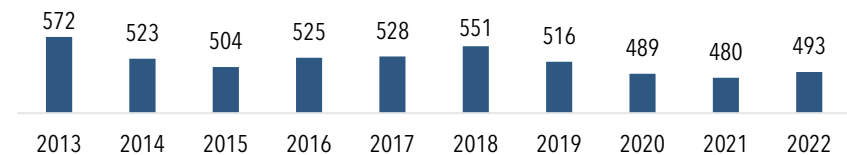
Figure 18. Average Monthly Employment, Nome Census Area, 2014-2023



Source: ADOLWD, Quarterly Census of Employment and Wages, 2014-2023.

Non-employer establishments in the region totaled 493 in 2022, a decrease from 572 establishments a decade ago.⁹

Figure 19. Number of Non-Employer Establishments, Nome Census Area, 2013-2022



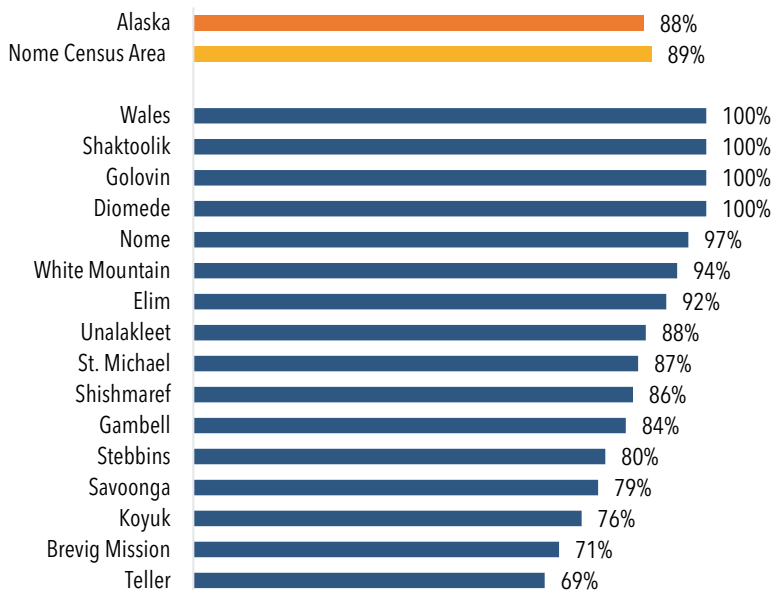
Source: US Census Bureau, Non-Employer Statistics 2013-2022.

income taxes. Non-employer data originate chiefly from the Internal Revenue Service, Bureau of Labor Statistics, and the Social Security Administration.

Work Status

Regionwide, most families (89%) included at least one person in the workforce in the past twelve months. The percentage of families with at least one worker was lowest in Teller (69%), Brevig Mission (71%), and Koyuk (76%), while all families had at least one worker in Diomedes, Golovin, Shaktoolik, and Wales.

Figure 20. Families with at Least One Worker, by Community, 2023

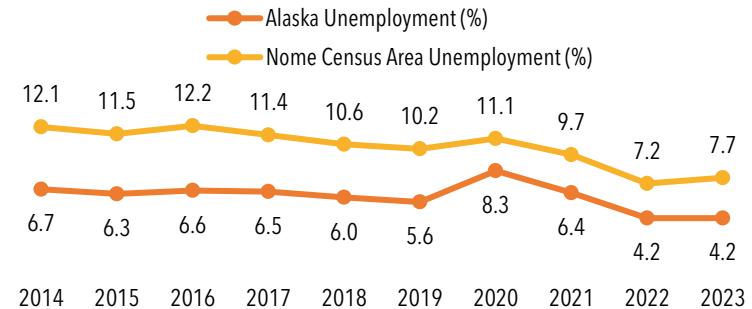


Source: American Community Survey 2018-2022 5-year estimates.

UNEMPLOYMENT

Annual unemployment decreased over the past decade, from 12.1% in 2014 to 7.7% in 2023. This regional rate is higher than statewide, with Alaska's unemployment rate at 4.2% in 2023.

Figure 21. Annual Unemployment Rate, Alaska and Nome Census Area, 2014-2023



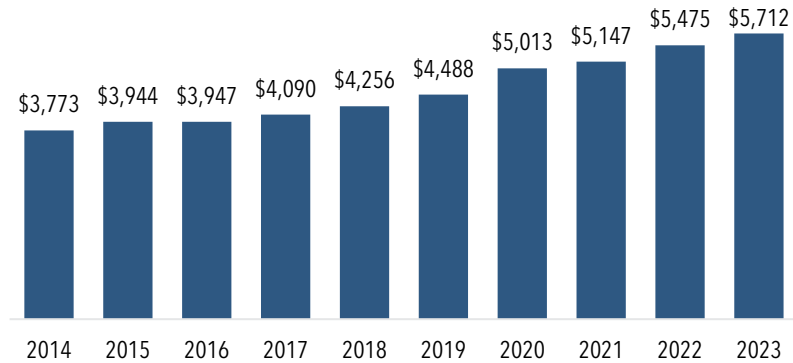
Source: AKDOLWD, non-seasonally adjusted.

Wages and Income

Average monthly wages continue to increase in the region, from \$5,147 in 2021 to \$5,712 in 2023.

Median household income averages \$70,100 in the Nome Census Area, lower than statewide at \$86,400. Median income rose throughout the Nome Census Area, from \$61,000 in 2019.

Figure 22. Average Monthly Wages, Nome Census Area, 2014-2023

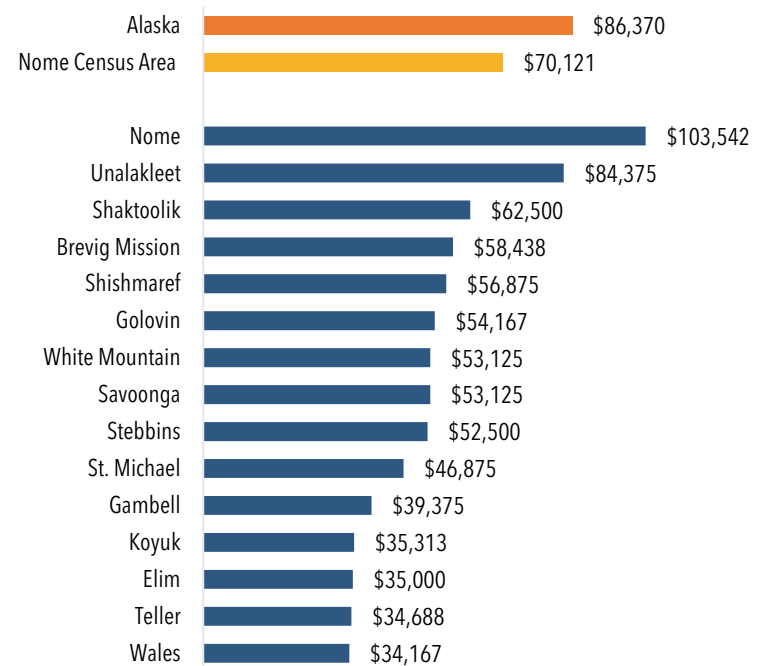


Source: ADOLWD, Quarterly Census of Employment and Wages, 2014-2023.

Regional median income is influenced primarily by incomes in Nome (\$103,500). In other communities, income is lower, ranging from \$34,000 in Wales to \$62,500 in Shaktoolik.

Income sources include wages and salaries, social security and supplemental social security, retirement income, and cash public assistance and Supplemental Nutrition Assistance Program (SNAP), commonly known as food stamps.

Figure 23. Median Household Income, by Community, 2023



Source: American Community Survey 2018-2022 5-year estimates.

Note: 2022 inflation-adjusted dollars.

While the proportion of households with wage/salary earnings and social security income is similar in the Nome Census Area and Alaska, retirement income is lower (12% in the region versus 24% statewide). More than one-third (36%) of regional households receive some income from cash public assistance or SNAP than households statewide, at 13%.

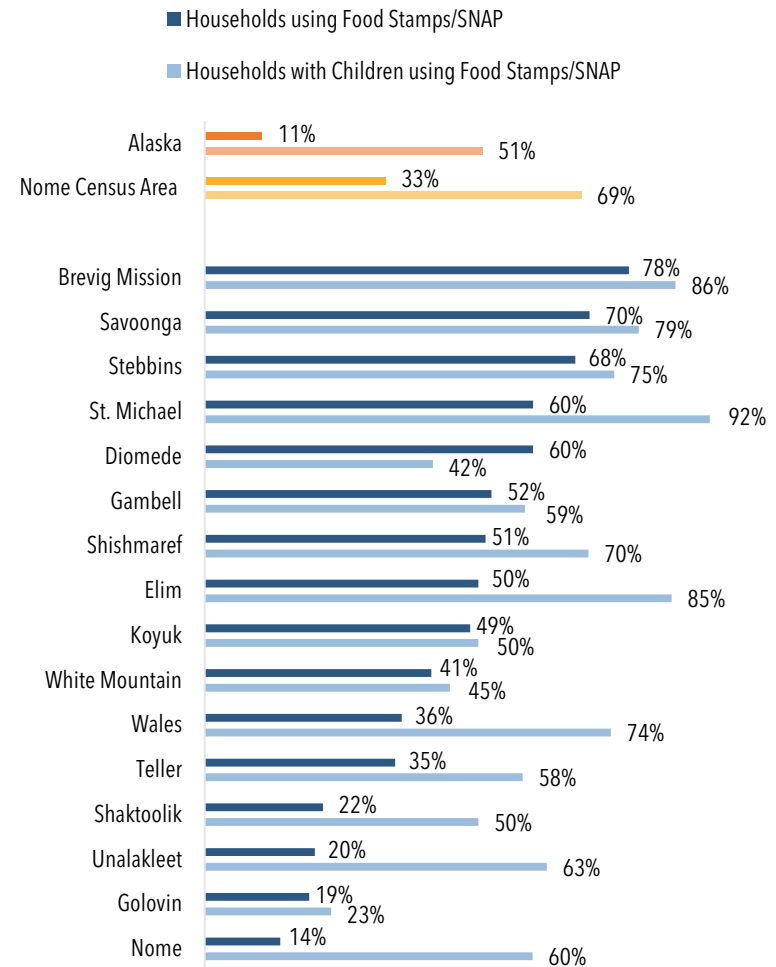
Table 2. Household Sources of Income, Percent, 2023

Community	Wage/ Salary Earnings	Social Security	Retirement Income	Supp. Social Security	SNAP
Alaska	79	25	24	5	13
Nome Census Area	85	23	12	7	36
Brevig Mission	78	26	14	24	79
Diomedede	70	5	0	0	60
Elim	87	16	0	3	50
Gambell	75	30	7	7	56
Golovin	85	28	3	3	22
Koyuk	67	32	8	7	59
Nome	89	15	14	4	16
St. Michael	88	15	9	6	60
Savoonga	79	42	16	13	72
Shaktoolik	95	30	7	8	27
Shishmaref	87	24	12	13	57
Stebbins	73	31	13	15	68
Teller	70	37	10	2	40
Unalakleet	87	33	25	8	26
Wales	93	20	0	7	36
White Mountain	87	26	4	11	44

Source: American Community Survey 2018-2022 5-year estimates.

A greater percentage of households with children use food stamps, including 69% of households with children in-region. Most households with children (92%) in St. Michael use food stamps/SNAP, as well as Brevig Mission (86%), and Elim (85%).

Figure 24. Households using Food Stamps/SNAP, with and without Children, Percent, 2023



Source: American Community Survey 2018-2022 5-year estimates.

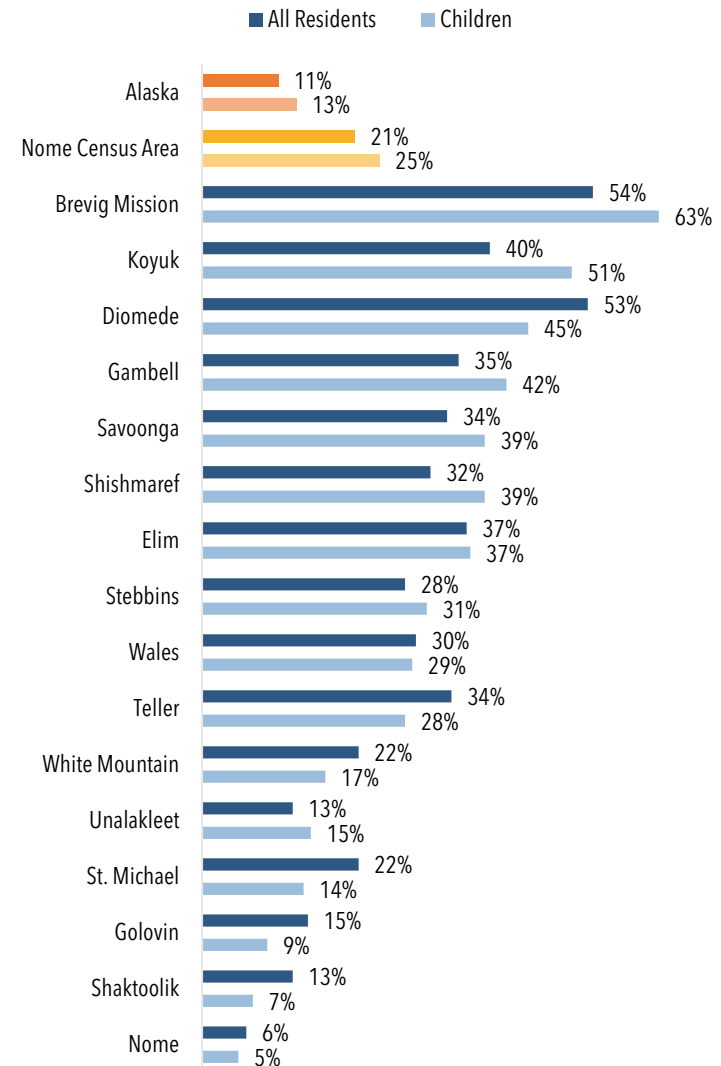
Poverty and Assistance Programs

The proportion of Nome Census Area residents who live below the federal poverty line (21%) is approximately double statewide (11%). More than half (54%) of Brevig Mission residents are below the poverty line, as are Diomed residents (53%). This compares to 6% of residents in Nome and 13% in Unalakleet and Shaktoolik.

In addition to those below the poverty line, 15% of Nome Census Area residents are between 100% and 149% of the poverty line and 64% are at or above 150% of the poverty line.

A larger proportion of children are below the poverty line than residents overall. One-quarter of Nome Census Area children (25%) are below the poverty line, compared to 13% of children statewide. Almost two-thirds (63%) of Brevig Mission children are below the poverty line, the largest proportion in the region.

Figure 25. Residents and Children Below the Poverty Line, 2023



Source: American Community Survey 2018-2022 5-year estimates.

Economic Sectors

Major sectors in the Nome Census Area include government, healthcare, education, fisheries, mining, transportation, and the visitor industry.

Arts and Crafts

Arts and crafts comprise an important income source for individuals from the region. Art forms include beading, skin sewing, carving, and performance art, and sell art in their home communities, online, and at regional and statewide bazaars and craft fairs.

A Kawerak-sponsored 2018 survey of 172 Bering Strait artists demonstrated the importance of arts-related income, with 68% of respondents reporting they sold art to supplement their income.¹⁰

Mining and Gravel

Since gold was discovered in Anvil Creek in 1898, production activity has continued in the Cape Nome District.

The Cape Nome district includes onshore mining and, starting in 1960, offshore (suction dredging) mining in Norton Sound. In 2020, Alaska Department of Natural Resources awarded more than

\$300,000 in Nome offshore leases and the Nome-ported gold dredge fleet numbered over 40 vessels, with 30 additional support vessels.^{11,12} In 2024, there were 56 active applications for Permits to Mine for suction and mechanical mining between Cape Nome and the Sinuk River, and 42 for upland placer gold mining.¹³

CAPE NOME QUARRY

The Cape Nome Quarry lies about 12 miles east of Nome and is operated by Sound Quarry, Inc., a subsidiary of Bering Straits Native Corporation. Industrial grade armor stone and riprap are mined from the quarry and the rock is crushed in gravel pits in and around Nome. The product is transported throughout the region and statewide for a variety of industrial activities such as construction of seawalls, causeways, breakwaters, airport runways, and roads.

In 2022, the Cape Nome Jetty, adjacent to the quarry, sustained significant damage from Typhoon Merbok. The City of Nome is soliciting bids for jetty repairs. In 2024, the City applied for a permit to expand area at the jetty to stage equipment and scales and to expand capacity to sort, weigh, and store rock materials. The City applied for the permit under the assumption the proposed Port of Nome expansion will use armor rock from the quarry.¹⁴

¹⁰ McDowell Group, 2018. *Arts of the Bering Strait Region*. Prepared for Kawerak, Inc.

¹¹ Alaska Department of Natural Resources, Division of Mining, Land and Water. Nome Offshore Mining. <https://dnr.alaska.gov/mlw/mining/nome>

¹² Yereth Rosen, 2021, "For Fortune Hunters Dredging Alaska's Bering Sea Floor for Gold, Old Mining Traditions Blend with New Realities," *ArcticToday*.

<https://www.arctictoday.com/for-fortune-hunters-dredging-alaskas-bering-sea-floor-for-gold-old-mining-traditions-blend-with-new-realities/>

¹³ Colin Warren, "Gold Mining Season Kicks Off In Nome," *The Nome Nugget*, June 14, 2024.

¹⁴ Diana Haecker, "City of Nome seeks permit to expand laydown area at Cape Nome Jetty," *The Nome Nugget*, June 21, 2024.

GRAPHITE ONE

The Graphite Creek project, a proposed open pit mine about 35 miles north of Nome, hosts the country's largest known high-grade flake graphite deposit.¹⁵ The deposit, intermittently mined since 1907, is owned by Graphite One, Inc.

In January 2021, the Graphite Creek Project was designated a High-Priority Infrastructure Project by the U.S. government due to critical need for high-grade coated spherical graphite - primarily for lithium-ion electric vehicle batteries. In 2023, the Department of Defense awarded the company a \$37.5 million grant and Bering Straits Native Corporation invested \$2 million.

Now in advanced exploration, the company is completing a feasibility study and estimates the project will generate about 370 production jobs annually.¹⁶ An access road and employee camps are also planned. Mine developers state they would like to hire locally and plan to partner with BSNC on an internship program.¹⁷

Port of Nome

The Port of Nome is a critical supply hub for western Alaska communities during ice-free months. Supplies that arrive through

the port include heating oil, gasoline, construction materials, gravel, and non-perishable food, as well as resources for search and rescue, emergency response, and natural resource exploration.

Primary sources of revenue for the port are fuel, freight, and gravel. In summer months, activity at the port increases with commercial fisheries activity.

The region's most significant transportation project is a plan to expand the Port of Nome into the first U.S. deepwater Arctic port. A port overhaul would accommodate larger vessels, such as cargo ships, icebreaking ships, fuel-supply vessels, emergency response vessels, and Navy destroyers. The deepwater port would allow for a larger volume of goods and bulk cargo, which could lead to reduced costs from larger economies of scale.¹⁸

The first construction phase of the project is projected to start in 2028 and be complete by 2033.¹⁹ Should the expansion move forward, an estimated 2,938 statewide jobs could be created, with \$498 million in combined income and secondary spending; 818 of those jobs are expected to be within the region, with a regional financial impact of \$178 million.²⁰

¹⁵ Bering Straits Native Corporation, Graphite One: Development and Protection for the Region, <https://beringstraits.com/graphite-one/>
¹⁶ Graphite One Inc. In the Community

¹⁷ Anna Lionas, "Graphite One updates Nome on mine development plans," *The Nome Nugget*, April 25, 2024.

¹⁸ U.S. Army Corps of Engineers, "Nome Harbor Navigation Improvements Appendix D: Economics," <chrome-extension://efaidnbmnnnibpcajpcgicgfindmkaj/https://>

[www.poa.usace.army.mil/Portals/34/docs/civilworks/publicreview/portofnome/No meFinalDraft/AppDEconomicsCombined26MAR2020Final.pdf?ver=2020-04-09-173709-953](http://www.poa.usace.army.mil/Portals/34/docs/civilworks/publicreview/portofnome/No%20meFinalDraft/AppDEconomicsCombined26MAR2020Final.pdf?ver=2020-04-09-173709-953), March 2020.

¹⁹ Joy Baker, Port Director, City of Nome, written interview, December 16, 2024.

²⁰ Amy Newman, "Port Progress: Construction anticipated next year for Nome port," *Associated General Contractors of Alaska Project Update*, Summer 2023.

Reindeer Herding

Reindeer herding continues to be a small, though important industry in the region, home to about 12,000 of the state's estimated 18,000 reindeer.²¹ The Kawerak Reindeer Herders Association assists operators in the industry with processing, shipping, and business development.

The reindeer industry supplies meat locally and to in-state slaughterhouses when possible. Currently, only field slaughter of reindeer, which can only be sold in quarters, is permitted. This limits sales of smaller cuts of meat. Growth statewide is limited by USDA-inspected slaughterhouse availability, with only four in the state.²²

The University of Alaska Fairbanks (UAF) Northwest Campus conducts research and industry development through its High Latitude Range Management program, working in conjunction with reindeer herders across the region.

Seafood Industry

The Bering Strait seafood industry is small in scale compared to other areas in the state that host industrial-scale fishery infrastructure, such as Bristol Bay and the Bering Sea.

Fishermen in the region typically operate from relatively small vessels with limited processing capacity. Salmon, the region's main fishery by participation, is harvested primarily by gillnet, halibut by longline, and king crab with pots. Small volumes of herring, tomcod, and Dolly Varden are also harvested, primarily for bait.

The region hosts the only Alaska commercial king crab fishery in which pots are harvested through sea ice. In 2024, Norton Sound hosted the only commercial red king crab fishery in the state due to closures in other regions.

SEAFOOD PROCESSORS

Norton Sounds Seafood Products, a subsidiary of the Norton Sound Economic Development Corporation, is the main seafood buyer in the region. The company operates a processing facility in Nome, along with seasonal fish buying stations throughout the region.

RESIDENT FISHING ACTIVITY

Nome Census Area residents earned \$2.9 million commercial fishing in 2023 in all Alaska fishery combined, not just regionally.

Participation was highest among Unalakleet residents, with 39 permits fished in 2023 and earnings of about \$370,000. Nome earnings were highest, with 35 permit holders earning \$1.7 million.

²¹ Alaska Department of Fish and Game, Alaska Fish & Wildlife News: Reindeer Herding Holds Great Future for Seward Peninsula, https://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view_article&articles_id=484

²² USDA Food Safety and Inspection Service, FSIS Inspected Establishments, <https://www.fsis.usda.gov/inspection/fsis-inspected-establishments>

Fishery participation among Nome Census Area residents decreased between 2017 and 2023. In 2023, 131 residents fished, earning a total of \$2.9 million.

Table 3. Nome Census Area Fishing Participation and Earnings, 2023

Community	Permits Held	Active Permit Holders	Total Pounds	Total Earnings
Elim	34	14	17,567	\$16,394
Gambell	0	0	0	0
Golovin	20	11	54,880	\$25,244
Koyuk	16	6	527	\$692
Nome	64	35	283,033	\$1,676,566
Saint Michael	7	1	*	*
Savoonga	13	9	*	*
Shaktolik	49	14	12,802	\$12,163
Shishmaref	0	1	*	*
Stebbins	16	0	*	*
Unalakleet	139	39	81,777	\$370,016
White Mountain	2	1	*	*
All Communities	360	131	474,037	\$2,899,115

Source: Commercial Fisheries Entry Commission.

Notes: Data is preliminary; numbers may not sum due to data suppression at local levels. Brevig Mission, Diomedes, and Teller had no registered fisheries permits.

Within regional fisheries, while salmon fisheries have the highest number of participants, crab and halibut fisheries also produce significant earnings for residents. On average since 2017, crab fisheries produced annual revenues of \$1.5 million, while salmon fisheries produced \$1.4 million, and halibut fisheries \$170,000.²³

Subsistence

Subsistence fishing, hunting, and gathering continues to be a significant part of the lifestyle, daily diet, and noncash economy in the region. Wild food harvests in Western Alaska, which includes the Nome Census Area, averaged 379 pounds per person annually, second highest in the state after the Arctic region in 2017. Average annual rural subsistence harvest in the state was 295 pounds per person and average urban harvest was 19 pounds.²⁴

Within Western Alaska communities, 98% of households harvested fish and 100% used fish. Similarly, 70% harvested game and 90% used game, as often hunters provide game to households that do not hunt themselves.²⁵

In a 2018 study, the most recent year for which data is available, fish species combined made up about two-thirds of the harvest in Western Alaska, followed by land mammals, marine mammals, birds and eggs, and wild plants. Salmon made up almost half of the

²³ These averages are based on different years for different fishery types. Data is not available on years with low participation because the Alaska Commercial Fisheries Entry Commission suppresses data to avoid disclosing individual identities.

²⁴ Governor's Task Force on Food Security and Independence, *Alaska Food Security and Independence Task Force 2023 Report*, Alaska Food Policy Council, University of Alaska Fairbanks,

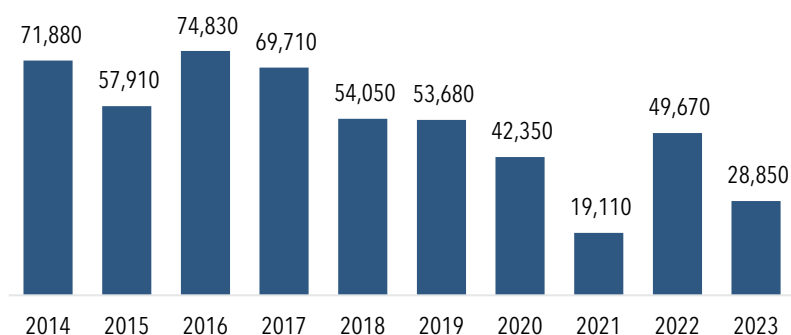
²⁵ *Alaska Food Security and Independence Task Force 2023 Report*.

harvest, by pound. The study found residents obtained about 33% of their daily calories from wild food harvests.²⁶

Subsistence fishing activity decreased over the last five years. The number of subsistence fishing permits for the Norton Sound Area dropped from 1,419 in 2022 to 1,109 in 2024.²⁷

Subsistence salmon harvests in the Norton Sound district decreased by 60% between 2014 and 2023. The subsistence catch totaled 28,850 in 2023.

Figure 26. Subsistence Salmon Harvest in the Norton Sound District, 2014-2023



Source: Alaska Department of Fish and Game.

²⁶ James A. Fall and Marylynn L. Kostick, "Food Security and Wild Resource Harvests in Alaska," Alaska Department of Fish and Game Division of Subsistence, July 2018.

²⁷ Alaska Department of Fish and Game. Permits include Cape Woolley, Elim, Golovin, Nome, Norton Sound Summer Crab, Norton Sound Winter Crab, Pilgrim River, and Port Clarence districts.

Visitor Industry

Tourism in the region generally focuses on nature and recreation, Alaska history, Alaska Native cultures, and gold panning. Key visitor markets include:

- Fans and participants in the Iditarod in March and Iron Dog Snowmobile Race in February.
- Birders travel to the region in the spring and early summer. These visitors tend to travel in small groups, renting vehicles or taking guided trips along the Nome road system or basing out of communities such as Gambell.
- Cruise ship travelers visit between June and early October. Ships are in port for four to eight hours during the day, most starting or ending their journey in Nome.
- Independent travelers come to the region to explore the Nome road system as well as other regional communities.

While it is difficult to track the exact number of visitors over time for each market, visitor volumes and trends can be intuited from cruise ship visitation, air passenger enplanements, bed tax revenues, and visitation to attractions.

ENPLANEMENTS

Air passenger enplanements capture both visitor and resident travel to Nome. Over the past decade, enplanements increased annually in all years except 2020, increasing from 54,738 in 2014 to 78,739 in 2023. The peak month for air passenger visitation is August, with 8,741 enplanements in 2023.

ATTRACTIONS

Visitor attractions include the Carrie M. McLain Memorial Museum, co-located with Kawerak's Katirvik Cultural Center, and Bering Land Bridge National Preserve.

- Carrie M. McLain Memorial Museum and the Katirvik Cultural Center hosted 3,705 visitors in 2023, a 62% increase over 2022.
- Bering Land Bridge National Preserve Visitor Center visitation totaled 1,468 in 2023. Most visitation occurs in March and June through September. The center is closed for renovations and expected to reopen in summer 2025.

Other regional activities and attractions include:

- Hot springs, including Pilgrim Hot Springs located on the road system about 60 miles north of Nome and Serpentine Hot Springs 55 miles by snowmachine from Shishmaref.
- Fishing Lodges and camps with sportfishing opportunities.
- Hiking and backpacking.
- Berry picking.
- Wildlife viewing.

HOSPITALITY INFRASTRUCTURE

Accommodations

As of April 2024, about 90 hotel beds were available in Nome. Additional beds in the community are available in about one dozen bed-and-breakfasts, a lodge about seven miles out of town, and short-term rental accommodations.

Hotels are at capacity during the Iditarod and the end of May through the first half of June. Room availability varies during the rest of the summer with events hosted in the community. Winter months present ample hotel availability.

The City of Nome charges a 6% hotel/motel (bed) tax. Bed tax revenues totaled \$238,600 in 2023, reflecting both resident and non-resident travel. By month, revenues are highest in March and are June through August. June is the peak month for bed taxes, totaling \$36,500 fiscal year (FY) 2023.

Limited accommodations are available in some of the smaller regional communities.

Transportation

At least two companies rent cars to the general public in Nome and vehicles are available to guests at some Nome hotels and bed-and-breakfasts. During the birding season, car rentals are at capacity.

VISITOR INDUSTRY OUTLOOK

Cruise Ships

In 2025, 11 ships are scheduled to bring 5,700 guests, an increase over the estimated 5,000 visitors in 2024. Factors that may influence cruise traffic and regional impacts from that traffic follow.

- Sanctions related to the Russian invasion of Ukraine cancelled Russia stops along several cruise routes that include Nome. If sanctions are lifted, cruise ships may have more flexibility in itineraries within the North Slope, Russian Far East, and Aleutian Islands.
- The Nome deep-water port expansion is expected to boost Nome tourism traffic. Increased harbor depth will allow cruise passengers to disembark without tender vessels and allow larger cruise ships to dock in Nome.²⁸

Accommodations and Transportation

Currently, hotel and rental care capacity can limit the number of visitors in Nome for the Iditarod and summer months. This may impact cruise passengers who seek to extend their stay on either end of their cruise. Over time, if cruise traffic to Nome continues to

increase, tour service, transportation, and accommodation infrastructure will need to match visitor needs.

Hotel rooms may increase: the Nugget Inn, which formerly offered 47 rooms, was damaged by fire in September 2022. More than one dozen rooms were reopened in 2023, with more in 2024.²⁹

²⁸ Mark Thiessen, "Cruising to Nome: the first U.S. deep water port for the Arctic to host cruise ships, military," The Associated Press, June 122, 2023. <https://alaskapublic.org/2023/06/22/cruising-to-nome-the-first-u-s-deep-water-port-for-the-arctic-to-host-cruise-ships-military/#:~:text=The%20problem%20remains%3A%20There's%20no,first%20deep%2Dwater%20Arctic%20port..>

²⁹ Gannon, Megan, "New Owners Hope to See Nugget Inn Reopened Soon," Nome Nugget, March 8, 2024, <http://www.nomenugget.com/news/new-owners-hope-see-nugget-inn-reopened-soon#:~:text=The%20Nugget%20Inn%20and%20the,high%20surf%20and%20stro ng%20winds.>

5. Housing

Housing availability, quality, and cost remain top concerns for residents and businesses.³⁰

Housing Overview

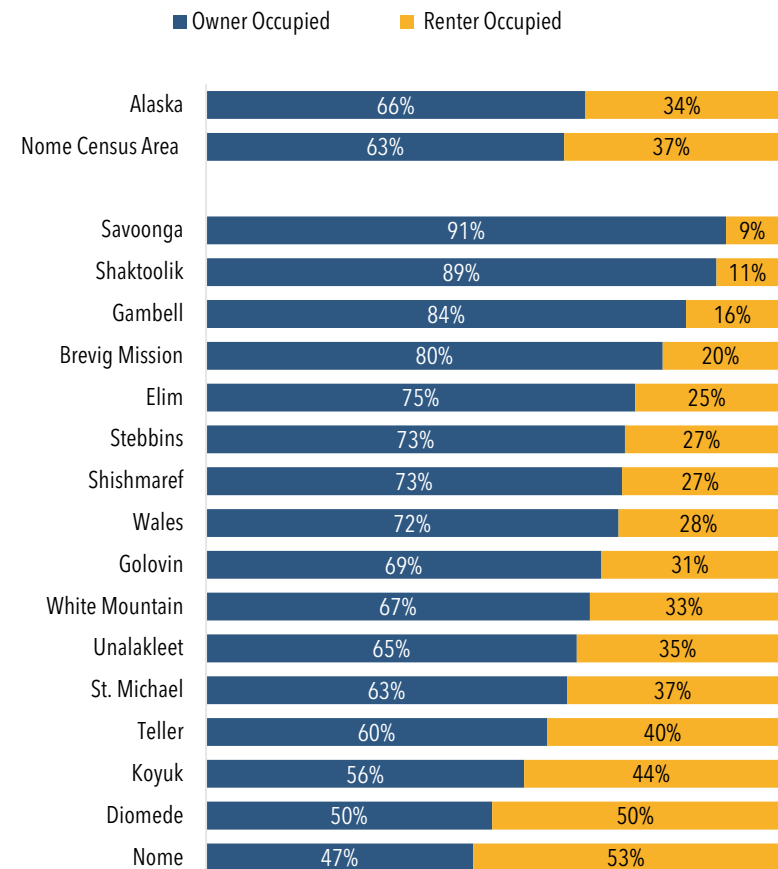
Almost two-thirds (63%) of housing units in the Nome Census Area are owner-occupied, similar to the proportion of units statewide.

Many individual communities in the region contain a higher proportion of owner-occupied units, with 91% owner occupation in Savoonga, 89% in Shaktoolik, and 84% in Gambell. Nome has the smallest proportion of owner-occupied housing units, at 47%.

Vacant Housing Units

Nineteen percent of housing units in Alaska are vacant. This compares to 32% in the Nome Census Area. This higher vacancy reflects, in part, seasonal and recreational uses for housing, including for subsistence. Despite vacant housing data, the overall homeowner vacancy rate for the Nome Census Area is 1%, and the rental vacancy rate is 2%. For comparison, the statewide homeowner vacancy is also 1% and rental rate is 8%.

Figure 27. Owner and Renter Occupied Housing Units, 2023



Source: American Community Survey 2018-2022 5-year estimates.

³⁰ 2024 Comprehensive Economic Development Strategy Update.

Overcrowding

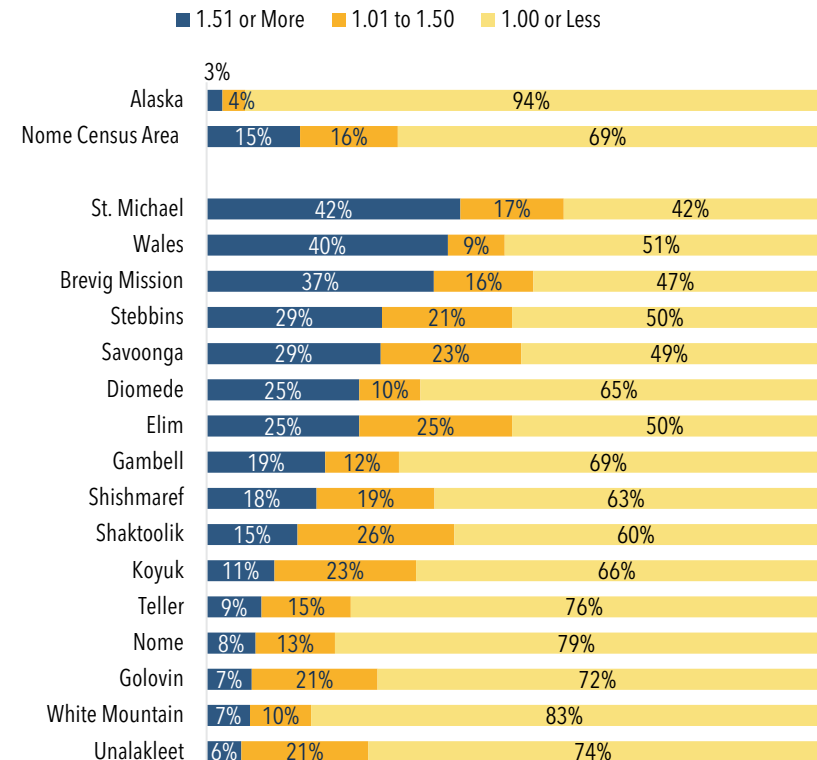
Overcrowding is defined as more than one person per room in occupied housing units.^{31,32} Severe overcrowding is defined as more than 1.5 people per room. While 7% of housing units are overcrowded or severely overcrowded in Alaska, 31% are in the Nome Census Area. Overcrowding, including severe, is highest in St. Michael (58%), Brevig Mission (54%), Savoonga (52%), Elim (50%), and Stebbins (50%). Severe overcrowding is highest in St. Michael (42%), Wales (40%), and Brevig Mission (37%).

Potential causes of overcrowding include small units or units in disrepair, as well as prohibitive housing costs that cause individuals and families to share housing. The high incidence of subfamilies in the region is an indicator of this overcrowding.

Housing Affordability

The cost of housing in the Nome Census Area accounts for at least 30% of household income for more than one-quarter (26%) of Nome Census Area homeowners with a mortgage and 30% of renters.

Figure 28. Number of Occupants per Room, 2023



Source: American Community Survey 2018-2022 5-year estimates.

Note: Rows do not sum due to rounding.

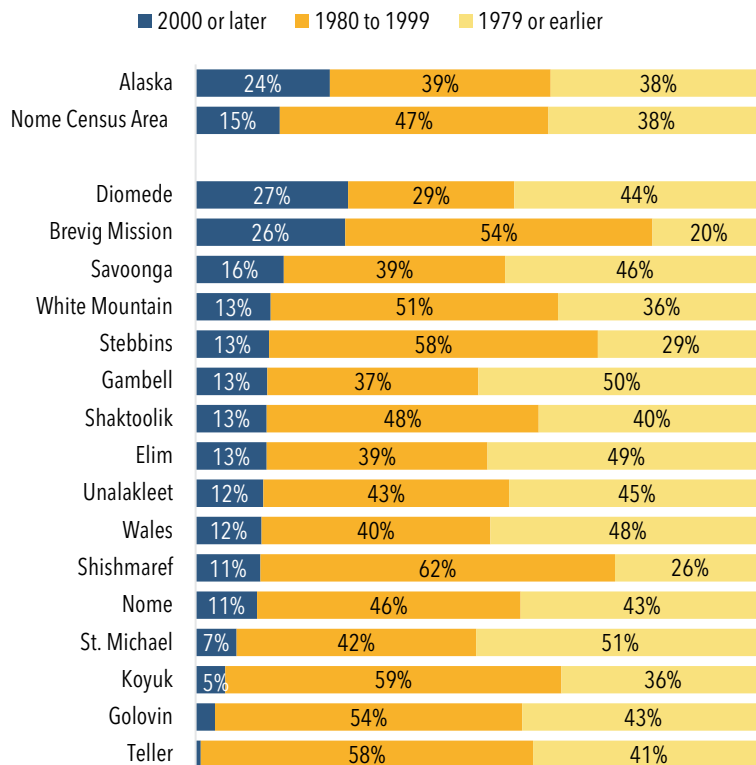
³¹ U.S. Census excludes bathrooms, porches, balconies, foyers, halls, closets, laundry, sun rooms not suitable for year-round use, or half-rooms.

³² U.S. Department of Housing and Urban Development. *Measuring Overcrowding in Housing*. 2007.

Housing Age and Condition

The Nome Census Area housing stock is aging, with only 15% of homes built in 2000 or later. This compares to 24% of homes throughout Alaska. A significant proportion of units were built before 1980, including St. Michael (51%), Gambell (50%), and Elim (49%), Wales (48%), and Savoonga (46%).

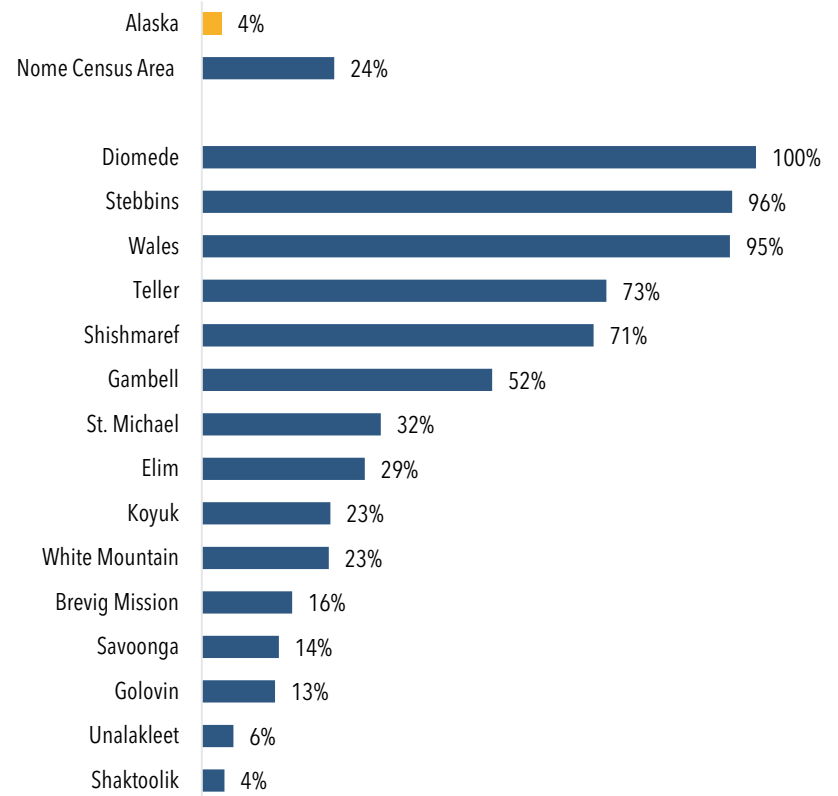
Figure 29. Years in Which Housing Was Built, 2022



Source: American Community Survey 2018-2022 5-year estimates.

About one-quarter (24%) of housing units in the region lack complete plumbing facilities, compared to 4% statewide. Fifteen percent lack complete kitchen facilities, compared to 3% statewide. Inadequate facilities within homes and businesses can exacerbate health concerns, particularly in overcrowded environments.

Figure 30. Structures without Complete Plumbing Facilities, 2022



Source: American Community Survey 2018-2022 5-year estimates.

Housing Initiatives

Efforts to improve housing availability include new development, repair of existing structures, housing subsidies for employees, and housing for homeless individuals. This section described some recent efforts to increase and improve housing in the region.

New Construction

Several new housing developments are underway or planned by regional organizations to help address housing shortages for employees and clients/customers. These include, though are not limited to, the following.

- Norton Sound Health Corporation is actively expanding staff and patient housing in Nome and outlying communities.³³
- Nome Public Schools and public safety officials are working together to obtain funding for a joint housing complex.³⁴
- The University of Alaska is collaborating with several partners to explore 3D printing technology applications in creating affordable, durable housing designed to withstand extreme weather conditions and thawing permafrost.³⁵

³³ Kaniqsirugut News. The Newsletter of Norton Sound Health Corporation. No 75 Spring 2023 and No. 77 Spring 2024.

³⁴ Ben Townsend, "Funding for 18-Unit Housing Complex in Nome Included in Bill, Fate up to Congress," *KNOM*, August 7, 2024.

³⁵ "Did You Know 3D Printing is Shaping the Future of Housing in Alaska?" UA News Center *Did You Know*, August 13, 2024.

Repairs of Existing Structures

In 2022, Typhoon Merbok-related damaged exacerbated an already stressed housing system. The Federal Emergency Management Agency (FEMA) and Alaska Division of Homeland Security and Emergency Management facilitated individual assistance for home repairs as well as funding for community infrastructure projects.³⁶

Housing Stipends

In September 2024, the Norton Sound Health Corporation (NSHC) Board of Directors approved a \$1,500 per month stipend for all full-time employees in Nome, with part-time employees receiving stipends of \$940 to \$1,200 per month, depending on hours worked. Stipends have been paid to village-based NSHC employees for several years.³⁷

Homelessness

In December 2023, a new 15-unit housing complex for those experiencing chronic homelessness was completed and by May 2024, was at full occupancy. Modeled after the "Housing First" philosophy, the complex has no barriers to entry such as enrollment in treatment programs.³⁸

³⁶ Federal Emergency Management Agency. Release DR-4672-AK NR-14. July 12, 2024.

³⁷ Ben Townsend, "NSHC Approves Housing Stipend for Nome-Based Employees," *KNOM*, September 21, 2024.

³⁸ Nome Community Center website. Accessed 12/17/2024.

6. Infrastructure

This chapter describes water and sewer, heating and power, transportation, and communications infrastructure in the region.

Water and Sewer

Most or all homes and facilities in five communities in the Nome Census Area are not served by piped, running water or sewer systems: Diomedes, Shishmaref, Stebbins, Teller, and Wales. The community water systems are self-haul from community watering points or untreated water sources. Water sources may contain unsafe levels of contaminants, such as nitrates and arsenic. Sewer systems, such as honey bucket haul systems, in the communities, result in waste disposal in open areas, such as local beaches or on sea ice.

According to a recent engineering report for Diomedes, the wastewater system “leads to a high risk of contact with human waste in homes and throughout the community.”³⁹ In Wales, the community run washeteria provides two working showers for about 200 people. Other communities have water and sewage systems that are up to 40 to 60 years old and in dire need of maintenance.⁴⁰

Piped water and sewer systems can be expensive to construct and maintain; high energy costs for system heating, aging infrastructure, and other factors often result in high household water and sewer rates.

OPERATIONS AND MAINTENANCE BEST PRACTICES

To receive state funding for water and sewer installation and upgrades, communities are required to have a minimum best practices score of 60, indicating a community’s technical, managerial, and financial ability to maintain utility systems. Communities with higher scores are prioritized for state funding.⁴¹

Kawerak’s Tribal Affairs Program works with communities to improve scores through training and coordination with city and tribal councils. Five communities - Golovin, St. Michael, Savoonga, Wales, and White Mountain - meet the 60-point threshold, with Wales making the greatest recent improvement (from 32 to 67 points). This scoring system can also make communities eligible for telecommunications infrastructure funding.

³⁹ 95% First Service Water & Sewer Diomedes, Alaska REV1 Enhanced Preliminary Engineering Report. DOWL. March 2024.

⁴⁰ Cheri McConnell, Tribal Affairs Program Director, Kawerak, interview December 9, 2024.

⁴¹ Alaska Department of Environmental Conservation, “Alaska Capacity Development Interim Strategy: State of Alaska’s Interim Strategy for Improving the Technical, Managerial, and Financial Capacity of Public Drinking Water System,” Updated May 2020.

Table 4. Best Practices Scores for Regional Water Systems 2024

Community	Fall 2023	Spring 2024	60 Points +	Change
Brevig Mission	15	25		↑
Diomedes	40	40		↔
Elim	50	55		↑
Gambell	43	35		↓
Golovin	68	62	✓	↓
Koyuk	37	42		↑
St. Michael	65	70	✓	↑
Savoonga	80	85	✓	↑
Shaktoolik	50	53		↑
Shishmaref	58	55		↓
Stebbins	52	45		↓
Teller	52	44		↓
Unalakleet	43	43		↔
Wales	32	67	✓	↑
White Mountain	78	85	✓	↑

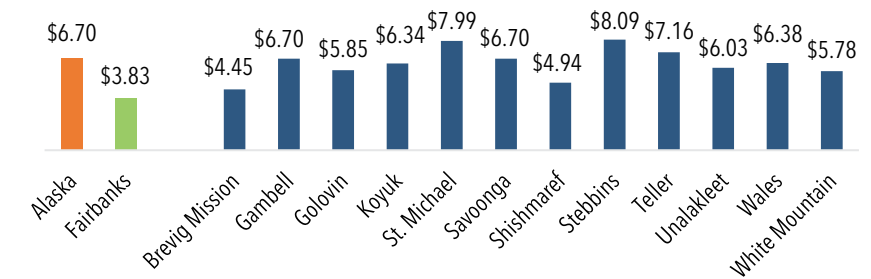
Source: Alaska Department of Environmental Conservation, Division of Water.

Heating

Most regional households (92%) use fuel oil for heat, compared to 28% of households in Alaska.⁴² In 2024, the price per gallon of

heating oil averaged \$6.37 for regional households, \$3.83 for Fairbanks, and \$6.62 for the state.

Figure 31. Heating Oil Prices per Gallon, Summer 2024



Source: All regional communities except Nome: Alaska Fuel Price Survey, Alaska Division of Community and Regional Affairs (DRCA).

Note: Statewide fuel price average excludes Northern Region due to subsidies.

Electricity

Electricity in rural Alaska, typically produced using diesel generators in standalone microgrids, costs more than in urban areas with more extensive infrastructure. The Alaska Power Cost Equalization (PCE) program seeks to equalize rural and urban electric rates. According to the PCE Survey, regional PCE rates in summer 2023 were close to \$0.25/kWh, with the exception of \$0.32/kWh in Unalakleet, \$0.33/kWh in Golovin, and \$0.56/kWh in Koyuk.⁴³ Another source for up-to-date electricity rates can be accessed for some service area communities at Alaska Village Electric Cooperative.

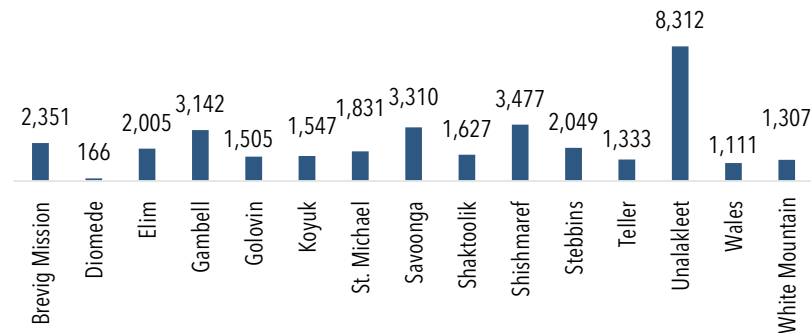
⁴² American Community Survey, 2018-2022 5-year estimates.

Transportation

Travel into and out of the Nome Census Area occurs by plane or boat, with no road connections to communities outside the region. Within the region, people travel via small air carriers, snow machines during the winter, boats when waterways are ice-free, and along three gravel highways, each about 70 to 85 miles. These roads run to Teller, Council, and Pilgrim Hot Springs.

Alaska Airlines and Nome-based Bering Air service Nome Airport, which had 66,883 passenger boardings in 2023. Bering Air, based in Nome, also transports passengers and cargo to surrounding communities.⁴⁴ Enplanements in other regional communities in 2023 ranged from 166 in Diomedé to 8,312 in Unalakleet.

Figure 32. Enplanements at Airports, by Community, 2023



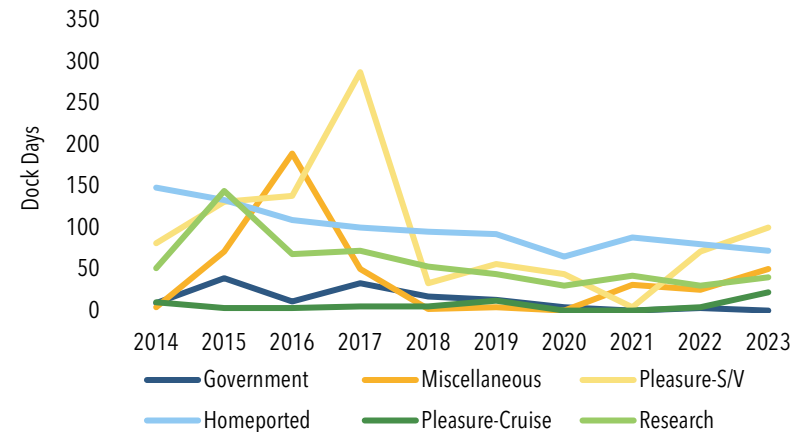
Source: Federal Aviation Administration.

⁴⁴ Federal Aviation Administration.

Port Traffic

The Port of Nome serves a mix of home-ported, government, research, cruise, pleasure, and other vessels.

Figure 33. Port of Nome Dock Days by Vessel Type, 2014-23

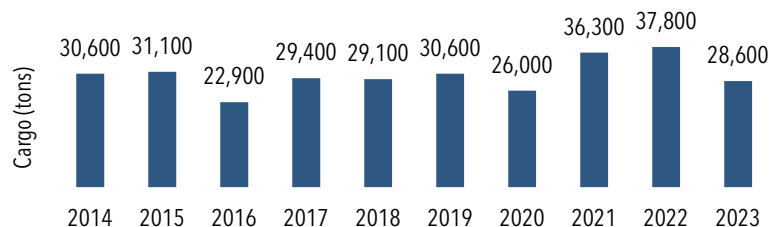


Source: Port of Nome.

Shipping

About 23,000 to 38,000 tons of cargo moved through the Port of Nome annually from 2013 to 2023. Installation of Quintillion's fiber optic cable, starting in 2017, contributed to influxes in shipments, as will shipment of materials needed for the port expansion and Graphite One.

Figure 34. Port of Nome Cargo Tonnage, 2014-23

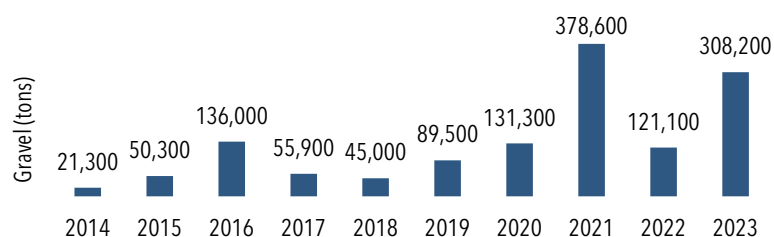


Source: Port of Nome.

Total fuel shipments ranged from 8 million to 11 million gallons annually from 2014 to 2023, with transient transient-vessel calls and development projects spurring variations.

Gravel shipments through the Port of Nome trended upward in the last half of the decade. The port experienced a significant increase in exports of rock, sand, and gravel in 2021 due to development projects, such as the Cape Blossom Road project in Kotzebue.⁴⁵

Figure 35. Port of Nome Gravel Tonnage, 2013-23



Source: Port of Nome.

⁴⁵ Diana Haecker, "Port Commission Discusses New Gravel Export Tariffs," *The Nome Nugget*, January 27, 2022.

⁴⁶ Kawerak, *US DOT Takes Huge Step for Tribal Sovereignty within Transportation*, June 5, 2020.

Tribal Self-Governance

For decades, Kawerak partnered with state and federal agencies to design, build, and maintain roads in a service area the size of West Virginia. In June 2020, a tribal compact created Kawerak's Tribal Transportation Self-Governance Program. This compact gives Kawerak more autonomy over the region's transportation infrastructure.⁴⁶

Transportation Projects

Aside from Port of Nome expansion plans, Kawerak's Transportation Improvement Program (TIP) for FY2023-27 includes \$56 million for road and harbor projects, as well as maintenance, planning, and administration.⁴⁷

Table 5. Major Projects in Kawerak Transportation Improvement Program, 2023-27

Project	Total Cost (millions)	Construction Year
Wales to Tin City Road	\$16.15	2024
White Mountain Community Streets	\$8.15	2023
Teller Community Streets	\$7.28	2027
Shaktoolik Community Streets	\$6.95	2024
Wales Community Streets	\$6.15	2023

Source: Kawerak Transportation Improvement Program Draft FFY 2023-27.

⁴⁷ Kawerak, *Kawerak Transportation Improvement Program: FFY 2023-27*, <https://kawerak.org/community-services/transportation/>

Savoonga has a \$4.8 million transportation plan of its own for FY2021-25. The largest of its projects is improvements to Savoonga Harbor at a cost of \$2.6 million.⁴⁸

Telecommunications

Historically, Bering Strait region residents dealt with unreliable internet at high prices, primarily due to difficulty installing physical infrastructure in remote areas. Telephone service was also intermittent in many areas.

High-speed internet came to the Bering Strait region relatively late compared to most of the country. Contributing factors to this delay include challenging logistics related to the area's remoteness and short construction season high construction costs.

Area tribes, Kawerak, and other organizations tapped into a rare influx of federal funding related to the American Rescue Plan Act (APRA) of 2021 to increase the region's telecommunications infrastructure and capacity. This increase led to rapid change in telecommunications in the region and in the many facets of life impacted by communication links and speeds. This section provides a point-in-time snapshot of the telecommunications landscape in the region as the sector continues to evolve at a fast pace.

Household Internet Access

The number of Bering Strait region households with internet access increased considerably in recent years. Almost one in three homes did not have internet in 2017, whereas in 2022, less than one in five homes lacked internet. The greatest changes between 2017 and 2022 took place in Shishmaref, where the number of households lacking internet fell from 53% to 13%, followed by Savoonga, Stebbins, St. Michael, and Golovin, where the number of homes without internet declined by 30-34% in five years. In 2022, the percentage of homes in the region without internet (17%) remained above the statewide percentage (10%).

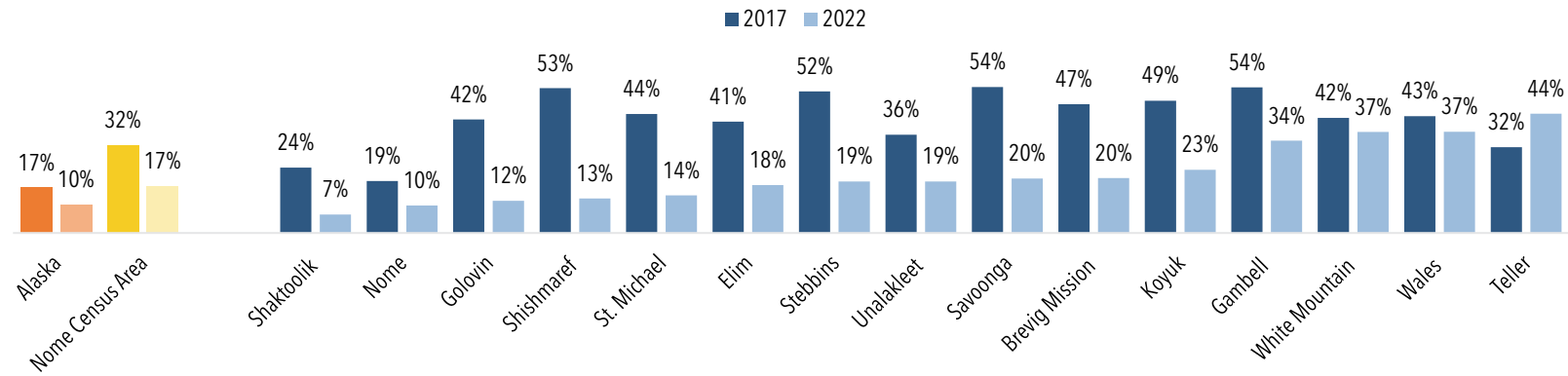
The percentage of Alaska households with land-based broadband - via fiber, cable, or DSL - remained at 69% from 2017 to 2022. In the Nome Census Area, however, that percentage fell from 45% to 34% in the same period. This correlates with an increase in satellite service during this time.

Internet satellite use remained relatively constant throughout the state between 2017 and 2022, rising from 5% to 6%. In the Bering Strait region, that percentage increased from 8% to 13%.⁴⁹ The number of satellite internet users grew considerably since 2022 due to the introduction of Starlink, although data is not yet available for this time period.

⁴⁸ Kawerak, Savoonga Transportation Improvement Program: FFY 2021-25, file:///C:/Users/LThomson/Downloads/Savoonga-2021-2025-TIP-DRAFT-Consolidated-Report%20(3).pdf/

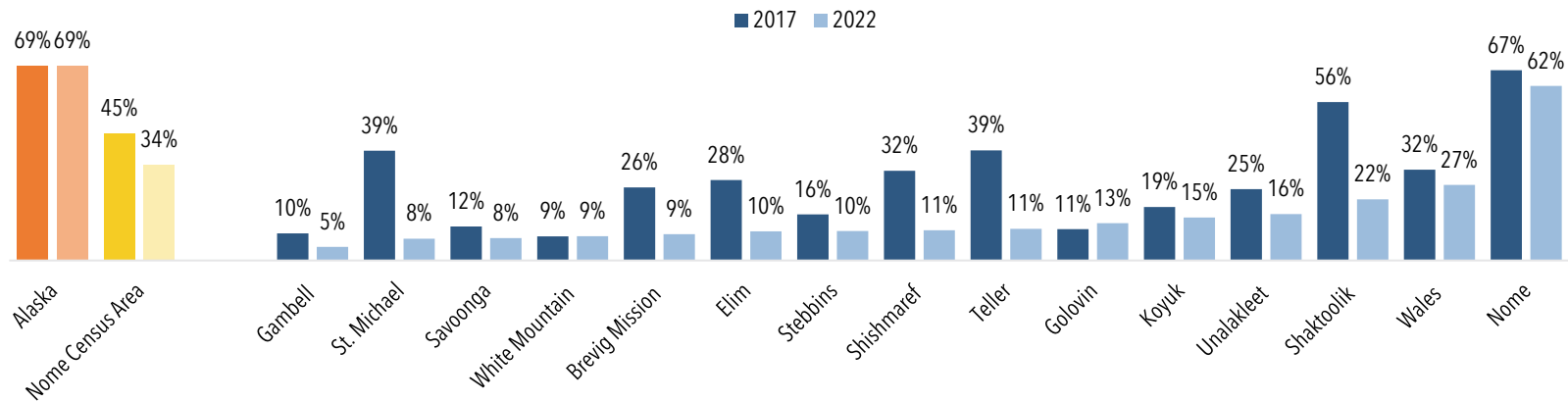
⁴⁹ American Community Survey, 2013-2017 and 2018-2022 5-Year Estimates.

Figure 36. Households without Internet Access



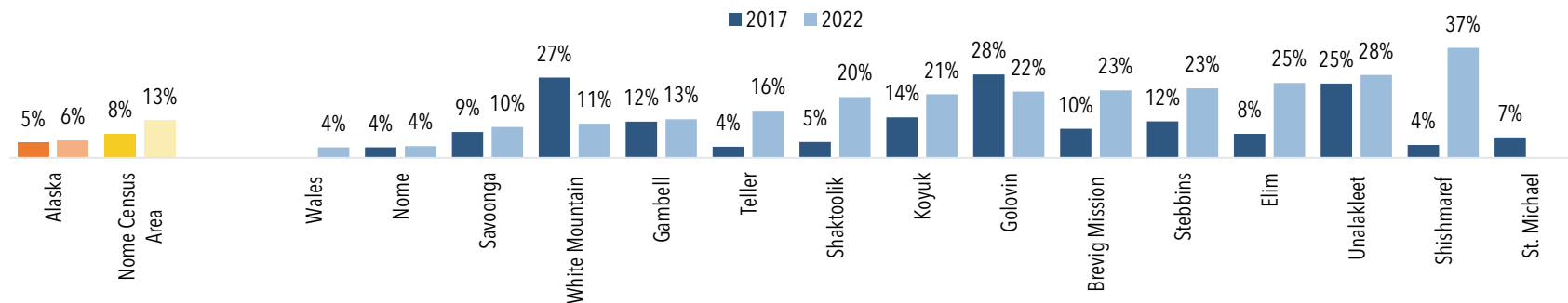
Source: American Community Survey, 2013-2017 and 2018-2022 5-year estimates.

Figure 37. Households with Terrestrial Broadband



Source: American Community Survey, 2013-2017 and 2018-2022 5-year estimates.

Figure 38. Households with Satellite Internet Service



Source: American Community Survey, 2013-2017 and 2018-2022 5-year estimates

Communications Infrastructure

GCI AND QUINTILLION

GCI Communication Corp., the state's largest telecommunications company, was the primary provider of internet, television, and phone service in the region for decades. The Anchorage-based company provides television, wireless, cable modem and phone service to Nome, as well as wireless service and sometimes long distance phone service to outlying communities. Rural broadband is also available in Unalakleet through GCI.⁵⁰

In 2021, GCI partnered with Quintillion to provide fiber-optic broadband to Nome and Kotzebue. Quintillion is an Anchorage-based telecommunications operator that built a 1,200-mile subsea and 500-mile terrestrial fiber optic network to serve the Northwest and North Slope Arctic regions of Alaska.⁵¹ The GCI-Quintillion partnership brought 1-gigabit internet speeds to Nome for the first time, significantly improving internet connectivity.⁵²

In June 2023, sea ice severed Quintillion's subsea fiber optic cable in the Arctic Ocean, disrupting internet and cellular service for several months.⁵³ A second lesser break causing much less

⁵⁰ GCI, "GCI Products By Community," <https://www.gci.com/about/gci-products-by-community>, accessed December 3, 2024.

⁵¹ Quintillion, "About Quintillion," <https://www.quintillionglobal.com/about/>, accessed December 11, 2024.

⁵² GCI, "Quintillion and GCI announce partnership to bring improved services to Nome and Kotzebue," <https://news.gci.com/news-releases/gci-and-quintillion-partnership-announcement>, January 25, 2021.

⁵³ Alena Naiden, "Severed cable off Arctic Alaska repaired, restoring internet and cellular service," *Anchorage Daily News*, September 20, 2023.

disruption occurred in April 2024.⁵⁴ These disruptions underscore need for sources of internet to provide backup when needed.

Fastwyre offers DSL internet, delivered through telephone lines, in Nome and Golovin, as well as phone and cellular service in Nome and outlying communities.⁵⁵

STARLINK

In late 2022, Starlink, owned by SpaceX, launched satellite internet services in rural Alaska, providing more reliable, affordable internet to residents in the Bering Strait region. This service reaches rural communities via low-orbit satellites; the system provides speeds of more than 100 megabits per second (Mbps).⁵⁶ The average cost of unlimited internet in the villages fell from \$450 to about \$100 per month with Starlink.⁵⁷

Broadband Funding

KAWERAK INITIATIVES

Efforts to expand and improve regional telecommunications continue. Kawerak, in partnership with Quintillion, is seeking federal

funding to extend Quintillion's subsea fiber network from Nome to St. Lawrence Island.

Kawerak is also applying for State of Alaska Broadband Equity, Access, and Deployment (BEAD) funding for fiber broadband for Shishmaref.

Project Remote

From 2021 to 2024, Kawerak's Project REMOTE (which stands for Regional Educational Model for Online Technology Engagement) provided internet to 620 tribal members, over 20% of Nome Census Area households, who were previously not connected.⁵⁸

The program allowed students in remote areas to complete high school diplomas; gain practical skills through online videos; use online banking; regularly Zoom relatives in other villages; and join online fitness classes.⁵⁹

Kawerak applied for a \$19 million National Telecommunications and Information Administration (NTIA) grant to make internet service available to more households and provide reliable broadband internet to all 20 of the region's tribal affairs offices.⁶⁰

⁵⁴ Alena Naiden, "Another break in fiber network causes temporary internet and cell service outage in Arctic Alaska," *Anchorage Daily News*, April 23, 2024.

⁵⁵ TelAlaska, "Cellular TelAlaska," <https://telalaska.com/ak/cellular/>, accessed December 3, 2024.

⁵⁶ Jenna Kunze, "Satellite internet has disrupted the market in Alaska – and transformed everyday life for many," *Anchorage Daily News*, August 18, 2024.

⁵⁷ Pam Cushman, Kawerak Community Education Department Director, interview on December 4, 2024.

⁵⁸ Cushman, interview.

⁵⁹ Cushman, interview.

⁶⁰ Pam Cushman, Kawerak Community Education Department Director, interview on December 4, 2024.

Ongoing Needs

Additional communications needs within the region include:

- Continuing to increase digital connectivity for regional residents with technology, equipment, and reliable internet service.
- Providing access to and education about digital technology for those new to the resource.
- Offering digital literacy training to identify reliable and unreliable information, protect identity and finances, and avoid fraud.
- Assisting high school students in using technology to transition from high school to post-secondary education or vocational training.
- Updating the region's 20 tribal offices with digital infrastructure, equipment, and cybersecurity.

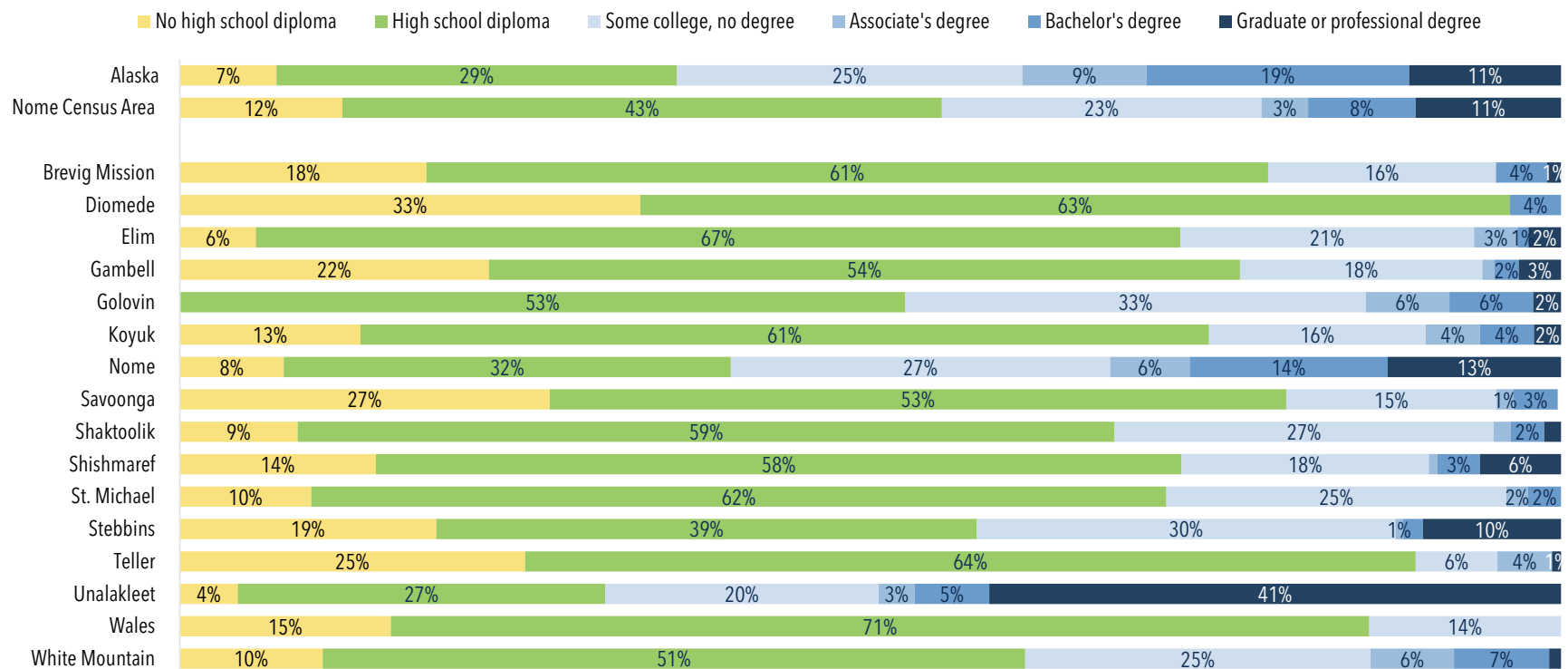
7. Education

Educational Attainment

Most Nome Census Area adults 25 years and older (88%) graduated from high school or earned an equivalency diploma, compared to

93% statewide. About 45% spent at least some time at college, compared to 64% statewide; and 22% graduated with some kind of college degree, compared to 39% statewide.

Figure 39. Highest Level of Educational Attainment, by Community, 2023



Source: ACS, 2018-2022 5-year estimates.

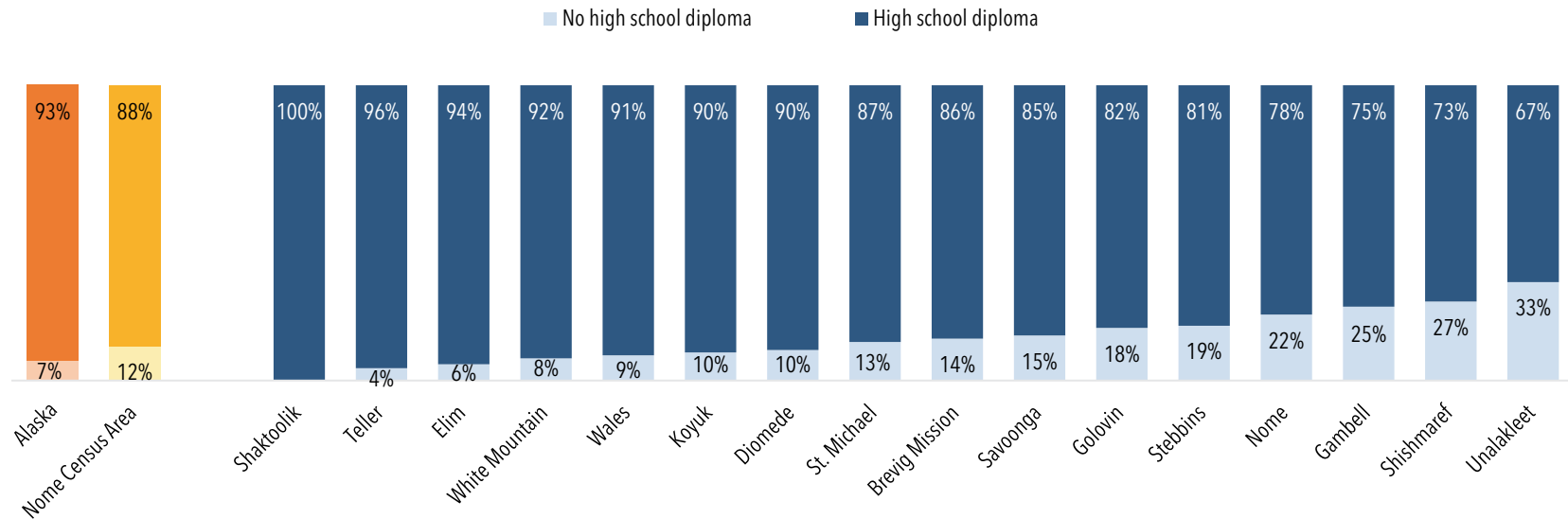
High School Diplomas

Those who completed their formal education with a high school diploma make up the largest proportion (43%) of the region's adult population, 25 years and older. This compares to 29% statewide.

In 2023, 88% of the region's adults had a high school diploma, a slight increase from 85% in 2019. The proportion of adults in the region with a high school diploma is 5 percentage points below the statewide proportion of 93%.

All adults in Shaktoolik older than 24 years of age have a high school diploma, followed by Teller (96%), Elim (94%), and White Mountain (92%). Unalakleet, which has the highest proportion of graduate or professional degrees, also has the highest percentage of adults without a high school diploma (33%), followed by Shishmaref (27%), Gambell (25%), and Nome (22%).

Figure 40. Adults with/without a High School Diploma, 2023



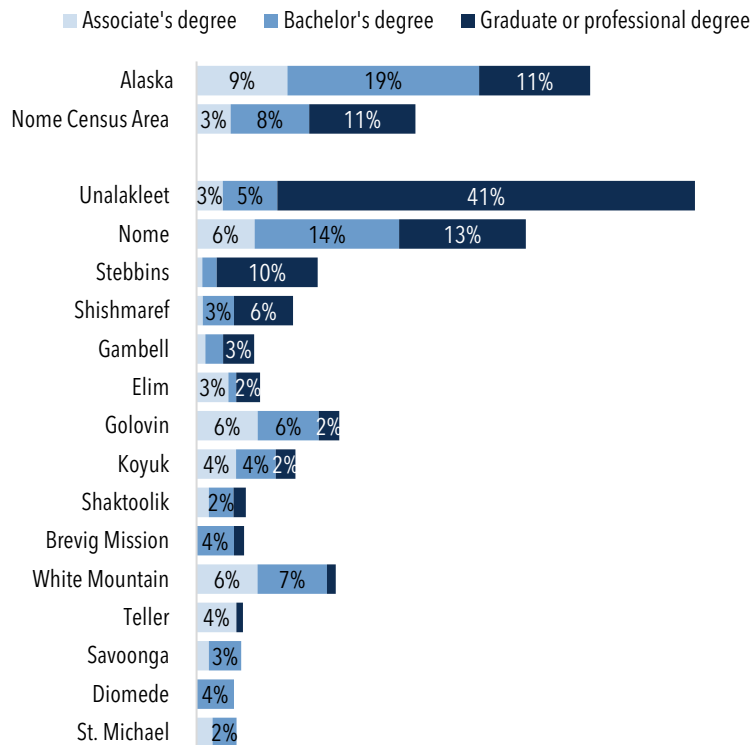
Source: ACS, 2018-2022 5-year estimates. Note: Adults refers to 25 years and older.

College Degrees

About one quarter (23%) of Nome Census Area adults 25 years of age and older spent some time at college and did not get a degree, as did 25% statewide.

Communities with the largest proportion of adults with a college degree (ranging from associate to graduate or professional degrees) are Unalakleet (49%) and Nome (33%).

Figure 41. Adults with a College Degree, by Type, 2023



Source: ACS, 2018-2022 5-year estimates. Note: Adults refers to 25 years and older.

Pre-K to Secondary Education

Bering Strait School District (BSSD) serves K-12 school programs in 15 communities. Nome Public Schools (NPS) includes an elementary school, middle/high school, charter school, and correspondence program.

Pre-Kindergarten

Preschool programs are available for 3- and 4-year-olds in all regional communities except for Diomedes, which does not have a preschool population large enough to maintain a program.

Early Head Start is available for children 3 years of age and younger in Brevig Mission, Elim, Nome, and Shishmaref.

Kawerak partners with BSSD to provide Head Start programs in 10 communities. BSSD provides its own preschool, using Head Start materials, in Unalakleet and Wales. RurAL CAP collaborates with BSSD to offer Head Start in Savoonga and Stebbins.

Education options are available to most pre-K children in Nome:

- **Kawerak Head Start/Early Head Start** - for families who meet low-income requirements.
- **Nome Preschool Association** - a private preschool, with no income restrictions and some scholarships available.
- **The Migrant Education Program** - covers preschool costs for children who accompany their families on subsistence activities and commercial fishing.

Table 6. Educational Services for Preschool Children, By Community

Community	Kawerak HS/BSSD or NPS	RurAL CAP HS/BSSD	BSSD Preschool	EHS	Private Preschool
Brevig Mission	✓			✓	
Diomedes					
Elim	✓			✓	
Gambell	✓				
Golovin	✓				
Koyuk	✓				
Nome	✓			✓	✓
St. Michael	✓				
Savoonga		✓			
Shaktolik	✓				
Shishmaref	✓			✓	
Stebbins		✓			
Teller	✓				
Unalakleet			✓		
Wales			✓		
White Mountain	✓				

Source: Kawerak Head Start, MRG interviews.

School Enrollment

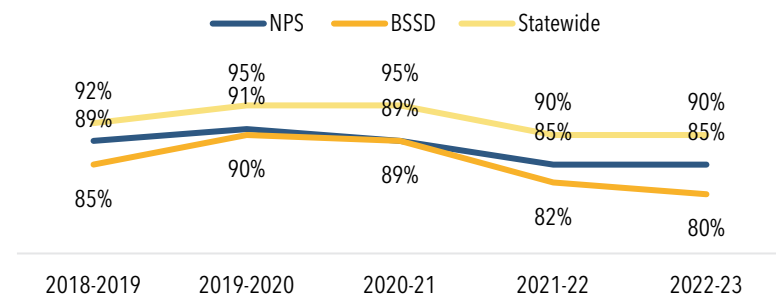
Between 2013-14 and 2022-23, enrollment decreased slightly, by 4%, in Bering Strait School District to 1,831 students, while decreasing by 3% in Nome Public Schools to 720 students.

Attendance

From 2018-19 to 2022-23, school attendance rates for K-12 at Nome Public Schools and Bering Strait School District declined by 4-5%, while declining statewide by 2%. NPS attendance rates dropped from 89% to 85%, and BSSD rates dropped from 85% to 80%.

Attendance rates among Alaska Native students were slightly lower than those of the entire school population at 83% in NPS, compared to 85% for all students; at 80%, compared to 83% in BSSD; and at 85%, compared to 90% for all students statewide in 2022-23.

Figure 42. Attendance Rates K-12 for NPS, BSSD, and Alaska, All Students, 2018-19 to 2022-23



Source: Alaska DEED.

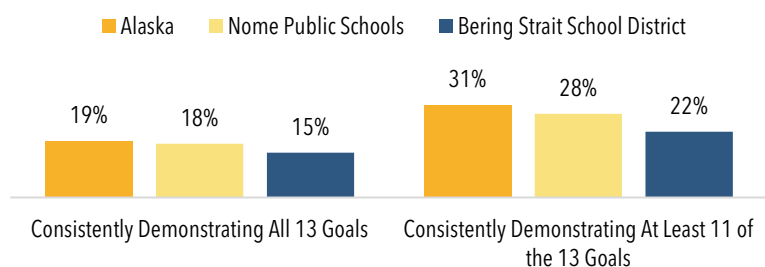
Kindergarten Readiness

Kindergarten students are assessed at the beginning of the school year using the Alaska Department of Education and Early Development's Alaska Developmental Profile (ADP) tool.

Statewide, about one in five kindergarten students (19%) met all 13 developmental goals and one-third (31%) met 11 of the 13 goals. Assessment results are difficult to track for individual communities

because of low sample sizes. For the region overall, results were relatively close to statewide percentages in both school districts.

Figure 43. Kindergarten Students Who Met Alaska Developmental Goals, 2024-25



Source: Alaska Department of Education and Early Development.

School Support Designations

The State of Alaska Systems for Schools Success categorizes schools by the level of support they need, based on several indicators. These indicators include academic achievement, graduation rates, English learner progress, and absenteeism. The three rating levels are:

- **Comprehensive Support and Improvement (CSI):** schools within the lowest 5% of overall index values for Title I schools, with graduation rates below two-thirds of 12th grade and/or schools with TSI designation for a subgroup of students for three consecutive years.
- **Targeted Support and Improvement (TSI):** schools with one or more subgroup below the targeted annual performance threshold for overall index value.
- **Universal Support:** schools that perform above criteria for CSI or TSI designation.

Table 7. Kindergarten Students Who Met Alaska Developmental Profile Goals, by Community, 2024-25

	Student Count	Met all 13 Goals	Met 11 of 13 Goals
Alaska	7,831	19%	31%
Nome Public Schools	39	18%	28%
Bering Strait School District	87	15%	22%
Brevig Mission	7	<=40%	<=40%
Diomedede	1	*	*
Elim	4	*	*
Gambell	12	<=20%	<=20%
Golovin	2	*	*
Koyuk	Not available	Not available	Not available
Savoonga	10	<=20%	<=20%
Shaktoolik	5	<=40%	>=60%
Shishmaref	8	<=25%	<=25%
St. Michael	8	<=25%	<=25%
Stebbins	12	<=20%	<=20%
Teller	1	*	*
Unalakleet	12	58%	67%
Teller	1	*	*
Wales	3	*	*
White Mountain	2	*	*

Source: Alaska Department of Education and Early Development.

Note: Students who "consistently met" a goal were able to demonstrate that skill or behavior 80% or more of the time. *Sample size too small to report results.

Nine schools in BSSD qualify for universal support, two for targeted support and improvement, and five for comprehensive support.

In Nome Public Schools, three are designated for universal support and one for comprehensive support.

Table 8. BSSD System for School Success Results, 2023-24

School Name	Location	Index	Designation
Brevig Mission School	Brevig Mission	6.09	Comprehensive Support
Diomedes School	Diomedes	18.33	Comprehensive Support
Aniguiin School	Elim	13.93	Universal Support
John Apangalook School	Gambell	16.76	Targeted Support
Martin L. Olson School	Golovin	15.54	Universal Support
Koyuk-Malimiut School	Koyuk	22.06	Universal Support
Hogarth Kingeekuk Sr. Memorial School	Savoonga	26.75	Universal Support
Paul F. Asicksik School	Shaktolik	14.85	Universal Support
Shishmaref School	Shishmaref	19.08	Universal Support
Anthony A. Andrews School	St. Michael	25.09	Targeted Support
Tukurngailnguq School	Stebbins	9.84	Comprehensive Support
James C. Isabell School	Teller	13.3	Universal Support
Unalakleet School	Unalakleet	34.18	Universal Support
Kingikmiut School	Wales	2.53	Comprehensive Support
White Mountain School	White Mountain	23.83	Universal Support

Source: Alaska Department of Education and Early Development.

Table 9. NPS System for School Success Results, 2023-24

School Name	Location	Index	Designation
Anvil Science Academy	Nome	53.39	Universal Support
Extensions Correspondence	Nome	NA	Universal Support
Nome Elementary	Nome	17.46	Comprehensive Support
Nome-Beltz Middle/High	Nome	32.97	Universal Support

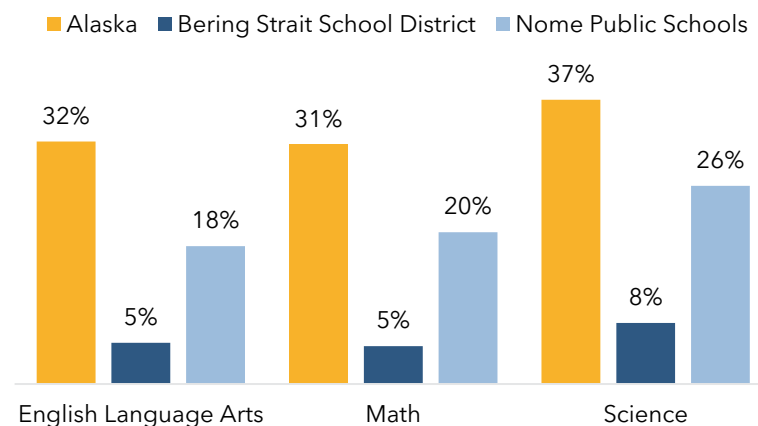
Source: Alaska Department of Education and Early Development.

Grade School Assessments

On average, Nome Census Area students scored below statewide averages in 2023-24 proficiency tests, a continuing trend over the past five years.

More than three-quarters of NPS students scored below proficiency levels in all three subject areas (English language arts, math, and science). In the BSSD, 92-95% of students scored below proficiency.

Figure 44. Student Assessment Scores by Proficiency Level, Grades 3-9, 2023-24

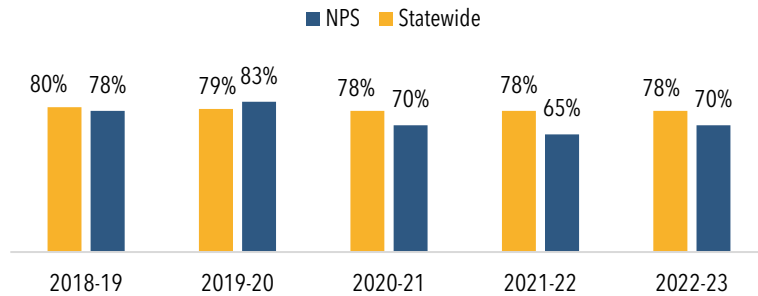


Source: Alaska Department of Education and Early Development.

Graduation Rates

Graduation rates decreased 8% in Nome Public Schools between 2018-19 and 2022-23. The 2022-2023 graduation rate in the district was 70%, compared to 78% statewide.

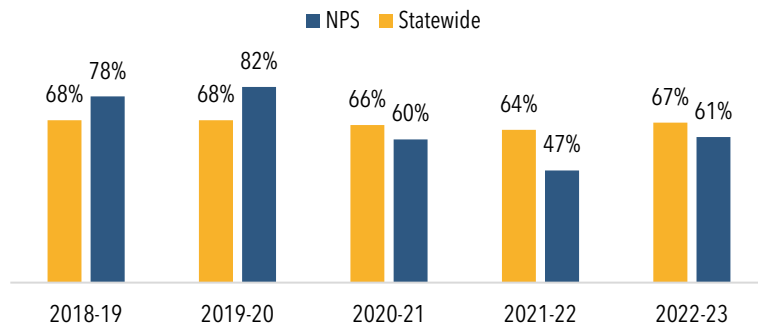
Figure 45. NPS and Statewide Graduation Rates, All Students, 2018-2023



Source: Alaska Department of Education and Early Development.

The graduation rate for NPS Alaska Native students decreased from 78% in 2018-2019 to 61% in 2022-2023.

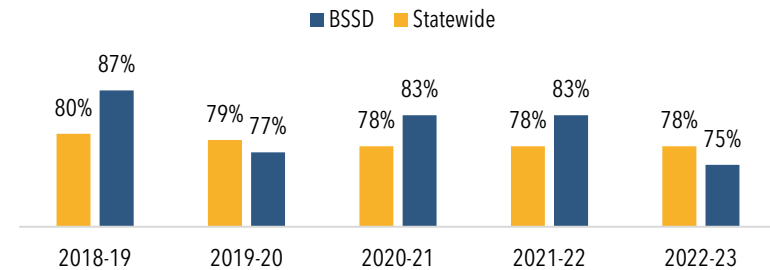
Figure 46. NPS and Statewide Graduation Rates, Alaska Native Students, 2018-2023



Source: Alaska Department of Education and Early Development.

In three of five years, BSSD overall graduation rates exceeded statewide graduation rates by 5 to 7%. In the other years BSSD graduation rates for all students trailed statewide rates by 2 to 3%.

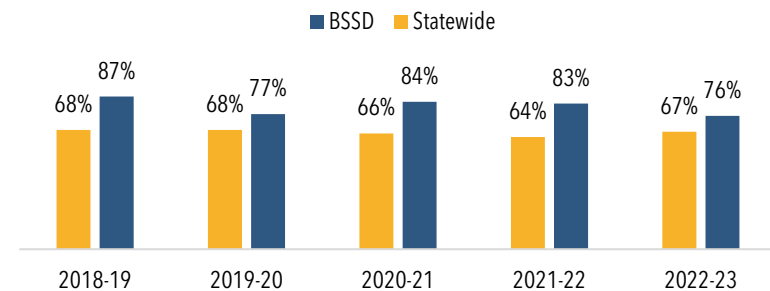
Figure 47. BSSD and Statewide Graduation Rates, All Students, 2018-2023



Source: Alaska Department of Education and Early Development.

Graduation rates for BSSD Alaska Native students consistently exceeded statewide Alaska Native graduation rates in all five years by 9 to 19%.

Figure 48. BSSD and Statewide Graduation Rates, Alaska Native Students, 2018-2023

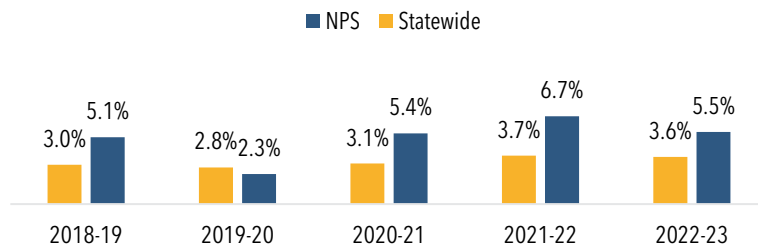


Source: Alaska Department of Education and Early Development.

Dropout Rates

NPS dropout rates were 2 to 3% higher than those statewide in four out of the past five years (between 2018-19 and 2022-23 school years). The 2021-22 school year marked NPS's highest dropout rate during the period, at 6.7%.

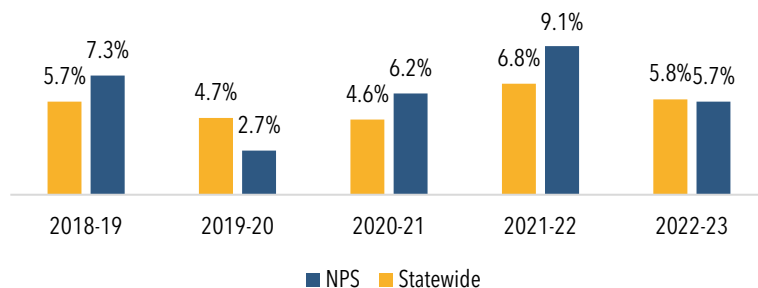
Figure 49. NPS and Statewide Dropout Rates, All Students, 2018-2023



Source: Alaska Department of Education and Early Development.

The NPS Alaska Native student dropout rate declined considerably between 2021-22 and 2022-23, from 9.1% to 5.7%.

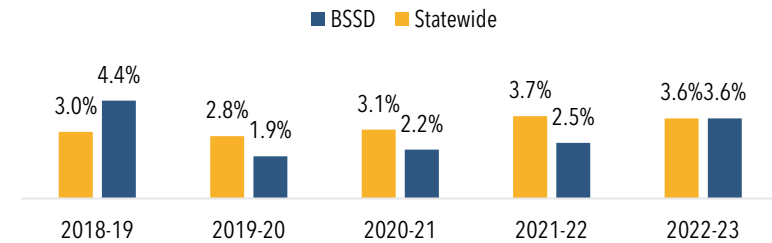
Figure 50. NPS and Statewide Dropout Rates, Alaska Native Students, 2018-2023



Source: Alaska Department of Education and Early Development.

In 2022-23, BSSD's dropout rate of 3.6% was identical to the statewide rate.

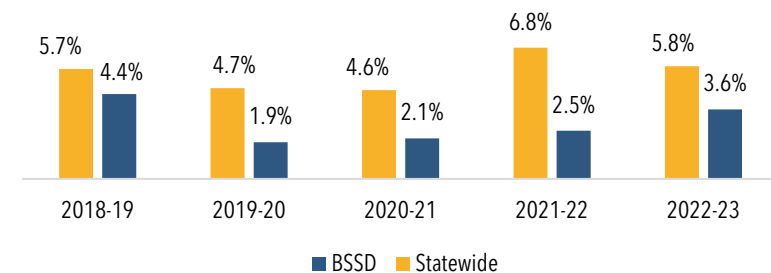
Figure 51. BSSD and Statewide Dropout Rates, All Students, 2018-2023



Source: Alaska Department of Education and Early Development.

Dropout rates for BSSD Alaska Native students were lower than those for Alaska Native students statewide in all five years between 2018-19 to 2022-23, and less than half of statewide rates in three of those years.

Figure 52. BSSD and Statewide Dropout Rates, Alaska Native Students, 2018-2023



Source: Alaska Department of Education and Early Development.

Students with Disabilities

In 2022-23, 87 students with disabilities, or 12% of the student population, were enrolled in NPS; 203 students with disabilities, or 11% of the student population, were enrolled in BSSD. The graduation rate for students with disabilities was 50% in NPS and 64% in BSSD, compared to 57% statewide. The dropout rate for students with disabilities was 3% in NPS and 9% in BSSD, compared to 5% statewide.

Teacher Quality and Retention

In 2022-23, NPS and BSSD had lower rates of inexperienced teachers, at 4% and 3% respectively, than Alaska schools did statewide, at 6%.⁶¹ The proportion of teachers teaching outside their field was 20% in NPS and 25% in BSSD, compared to 22% statewide.

Hiring teachers in the region has become increasingly difficult in recent years. NPS hired five international teachers in 2023-24 to address teacher shortages, and one-third of the BSSD staff are from the Philippines.⁶² The 2023-24 school year was the first in which NPS sought international teachers, whereas BSSD began hiring internationally in 2020.⁶³

K-12 Infrastructure

The following capital projects for each district in the Bering Strait region have been submitted to the Alaska Legislature for funding:

Table 10. Anticipated K-12 School Capital Projects, FY21-26

Project	Amount
Bering Strait School District	
Brevig Mission K-12 School Renovation/Addition	\$234,433,139
Brevig Mission K-12 School Addition	\$160,921,342
Stebbins K-12 School Replacement	\$250,036,858
Brevig Mission K-12 School Renovation/Addition	\$338,164,703
Nome Public Schools	
Nome Beltz Jr/Sr High School Generator and Electrical Replacement	\$30,530,703
Nome Beltz Jr/Sr High School Roof Replacement, Supplemental	\$47,037,911
Nome Elementary School Fire Alarm Replacement	\$116,971,425
Nome Beltz Jr/Sr High and Nome Elementary Secure Access and ADA Improvements	\$167,933,213
Nome Beltz Jr/Sr High School Generator Replacement	\$40,014,600
Nome Elementary School Fire Alarm Replacement	\$80,501,646
Nome Beltz Jr/Sr High and Nome Elementary Schools Secure Access and ADA Improvements	\$119,277,227
Nome Beltz Jr/Sr High School Boiler Replacement	\$59,926,205
Anvil City Charter School Restroom Renovation	\$60,184,756
Nome Beltz Jr/Sr High School Generator	\$69,972,256
Nome Elementary School Fire Alarm Replacement	\$118,812,310
Anvil City Charter School Restroom Renovation	\$64,134,354
Nome Schools DDC Control Upgrades	\$73,901,449
Nome Elementary School Fire Alarm	\$97,167,469
Nome Beltz Jr/Sr High School Generator Replacement	\$102,391,033
Anvil City Charter School Restroom Renovations	\$59,700,453

⁶¹ Alaska Department of Education and Early Development.

⁶² Anna Lionas, "International Teachers' Winding Road to Nome's Schools," *The Nome Nugget*, November 24, 2023.

⁶³ Lisa Phu, "Weeks from restarting, schools across Alaska are struggling to find teachers," *Alaska Beacon*, July 21, 2022.

Nome Schools DDC Control Upgrades	\$62,911,163
Nome Beltz Jr/Sr High School Generator Replacement	\$86,689,838
Nome Elementary School Fire Alarm Replacement	\$117,596,344
Anvil City Charter School Restroom Renovations	\$59,700,453

Source: Alaska Department of Education and Early Development.

Post-Secondary Education

Program Overview

UNIVERSITY OF ALASKA FAIRBANKS NORTHWEST CAMPUS

The University of Alaska Fairbanks Northwest Campus (NWC) offers in-person and online courses for students seeking a degree, vocational training, or general-interest classes. NWC also offers programs and courses in regional topics, such as reindeer management, Inupiaq language, and cultural training for K-12 teachers. High school students can take dual-credit classes to earn credits for both high school and college.

NWC programs include High Latitude Range Management, information technology, teaching, health fields, and applied business. For University of Alaska classes not available at NWC, students can enroll in distance learning.

In 2022-23, 548 students enrolled at NWC, with 85% enrolled part-time and 15% full-time. Among enrollees, 95% were from Alaska,

60% were younger than 30 years of age, and 62% were Indigenous.⁶⁴

CAREER AND TECHNICAL EDUCATION

Northwestern Alaska Career and Technical Center (NACTEC)

Northwestern Alaska Career and Technical Center (NACTEC) was developed by the Bering Strait School District and Nome Public Schools to provide Bering Strait residents a vocational training center. More than 2,000 students have learned job skills at NACTEC since it opened in Nome in 2003. Programs include small engine repair, heavy equipment operation, aviation, and healthcare.

In 2023-24, 219 of the 674 students enrolled, or 32%, were from the region. NACTEC has a dropout rate of less than 1%.⁶⁵

Kawerak Training and Employment Assistance

Kawerak offers support for education and employment, including:

Community Education Program (CEP) offers adult education, General Educational Development (GED), English as a Second Language (ESL), tutoring, remedial instruction, workforce development skills, and supportive services.

Scholarships are available for tribal members seeking higher education.

⁶⁴ University of Alaska Fairbanks, Northwest Campus: Community Campus Profile, Academic Year 2023.

⁶⁵ Doug Walrath, Director, Northwestern Alaska Career and Technical Center (NACTEC), emailed data, December 23, 2024.

Vocational Training Program offers financial assistance to applicants pursuing vocational training or trade school.

Adult Employment Services includes a work experience program, coaching, mentoring, and job training opportunities.

Summer Internship Program is open to high school graduates and college students.

Kawerak Native Employment Work Services provides volunteer work for clients so they can gain job skills and improve work habits.

Norton Sound Health Corp. Training

Norton Sound Health Corporation (NSHC) offers training opportunities as follows.

NSHC houses one of four basic training centers in the state for the Community Health Aide Program (CHAP). The Nome-based **Health Aide Training Center** trains statewide residents to become health aides or maintain their existing community health aide skills.

NSHC supports regional youth in pursuing higher education and health-care careers through its **Tribal Training and Development Program**. NSHC also partners with NWC on its **College JumpStart Program**, allowing high school students to enroll in college classes, and healthcare training programs.

Anvil Mountain Correctional Center

The Anvil Mountain Correctional Center (AMCC) houses up to 128 male and female inmates, most who have not yet been sentenced. AMCC offers inmates a variety of training programs, including adult basic education, general equivalency diploma (GED), small business

basics, carpentry, heater maintenance and repair, commercial driver licensing, typing, and life and job skills.

Nome Eskimo Community

Nome Eskimo Community (NEC) offers financial assistance for vocational training and college scholarships. NEC also provides a tutoring program for grades 6-12, a high school after-school program focused on Native arts and culture, a literacy program for second and third-graders, and year-round youth cultural learning.

Training Needs

The Denali Commission launched a 12-month initiative, *Nome Workforce Needs and Career Pathways Project* (CPP), to review Nome's workforce needs.

The project identified barriers to people obtaining training:

- Limited awareness of training programs, resources, and career pathways.
- Unrealistic workforce expectations.
- Insufficient training funding and equipment.
- Lack of housing, costly housing, and lack of child care

The following training needs and opportunities were described:

- Adult trade school or vocational-technical training center.
- Regional mentorships and apprenticeships that lead to journeyman-level certifications.
- Positions that allow employees to gain job experience.
- Culturally relevant education and training.

The CPP noted trainees need support to guide them into high-impact career pathways, as well as housing, child care, and dependable broadband service. The project report recommended strengthening coordination and communication between workforce development partners.

8. Community Health and Safety

This chapter describes community safety and health factors that influence communities in the region.

Community Safety

Fire and rescue, law enforcement, and emergency response services combine to offer security to Nome Census Area communities.

Fire and Rescue Services

Nome operates a fire department that also serves Teller. In the rest of the region, fire protection and search and rescue operations are conducted by volunteer teams in many communities, while some communities have no formally trained volunteers, so community members assist when there is an emergency.

Typically, emergency medical response is coordinated by village community health aides with assistance from AST/VPSO and other volunteers as available and necessary.

Table 11. Fire and Rescue Services by Community, 2021-2023

Community and Fire Department	Total Fires	Rescue Calls	Total Calls
Brevig Mission FD	0	0	0
Diomedea VFD	-	-	-
Elim VFD	-	-	-
Gambell VFD	2	0	2
Golovin: Chinik VFD	1	0	1
Koyuk VFD	1	0	1
Nome FD	58	157	306
St. Michael	1	0	1
Savoonga VFD	6	0	6
Shaktolik	2	0	2
Shishmaref	3	0	3
Stebbins	2	0	1
Teller	-	-	-
Unalakleet	3	0	3
Wales	-	-	-
White Mountain	-	-	-

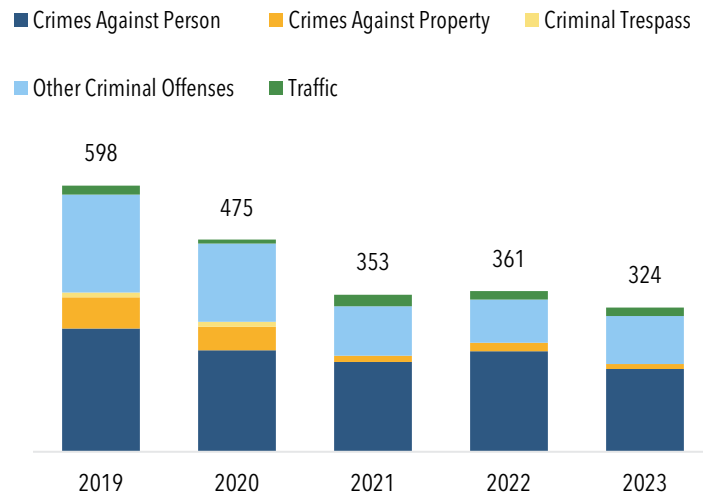
Source: Alaska Department of Public Safety, Fire Department Registration Status and Reports of Fire Department Experiences.

Total calls include all calls, including for non-fire or -rescue calls, and is not the sum of fire and rescue calls.

Law Enforcement

Criminal arrests in the Nome Census Area decreased over the past five years, from almost 600 in 2019 to 324 in 2023. Over half of all arrests in the region are categorized as Crimes Against Person, primarily assaults.

Figure 53. Nome Census Area, Criminal Arrests, 2019-2023



Source: Department of Public Safety.

Both Nome and Unalakleet operate police departments and host Alaska State Trooper posts, while other regional communities are served by Village Public Safety Officers (VPSOs). The Nome Police Department includes about 12 police and community service officers and an investigator.

VILLAGE PUBLIC SAFETY OFFICERS

A shortage of VPSOs is an ongoing problem for the region's smaller communities. Kawerak, which operates the VPSO program, faces multiple challenges in maintaining a regional VPSO staff. These challenges include limited housing, communities with no piped water and sewer, need for public safety buildings or repairs to existing buildings, and qualification barriers that can include applicants with drug or criminal histories, no high school diploma, and physical fitness limitations.

Kawerak increased wages by nearly 30 percent from 2018 to 2023 to attract VPSOs.

Table 12. VPSO Staffing and Challenges, by Community 2024

Geography	Number of VPSOs	Lack of Housing	Lack of water/ sewer	Inadequate or no public safety office
Brevig Mission	1	✓	✓	✓
Diomedes	0	✓	✓	✓
Elim	0			✓
Gambell	0			✓
Golovin	1			
Koyuk	1			
St. Michael	0			✓
Savoonga	1			
Shaktolik	0			✓
Shishmaref	1			
Stebbins	0		✓	✓
Teller	0	✓	✓	
Unalakleet	0	✓		
Wales	0	✓	✓	✓
White Mountain	1			

Source: Kawerak Village Public Safety Program Report, September 23, 2024.

Emergency Preparedness

Entities in the Bering Strait region, including Kawerak, operate up-to-date emergency response plans, as feasible. These include Small Community Emergency Response Plans (SCERPs) and BIA-funded Tribal Hazard Mitigation Plans (HMPs). The HMPs are designed to protect tribal infrastructure and community assets from natural hazards.

Kawerak operates an emergency assistance and disaster recovery program that operates a website with resources. The organization also developed a regional Resiliency Plan, approved by the Bering Strait Development Council in 2023. The plan addresses infrastructure, broadband access, food security issues, workforce development, pandemic recovery and resiliency, and climate issues.

Kawerak also commissioned the 2024 Bering Strait Region Priority Climate Action Plan, with the second phase Comprehensive Climate Action Plan due in 2025

Most community SCERPs and HMPs are complete or in the process of being updated.⁶⁶

Community Health

While a few private healthcare providers operate in the region, most care occurs through Norton Sound Health Corporation and Nome Public Health Center.

NORTON SOUND HEALTH CORPORATION

Norton Sound Health Corporation (NSHC), a tribally owned and operated healthcare organization, provides primary health services infrastructure within the Nome Census Area. NSHC delivers services through Norton Sound Regional Hospital in Nome and 15 village clinics.

The hospital is an 18-bed critical access hospital. Outpatient and ancillary services are also available at the facility. Village clinics provide emergent, acute, and chronic care. They are staffed by residents trained as community health aides or practitioners, and larger village clinics include a physician assistant or nurse practitioner and dental health aides.

Patients requiring care outside NSHC's capacity often travel to Anchorage for services.

NOME PUBLIC HEALTH CENTER

The State of Alaska Department of Health operates the Nome Public Health Center, which provides public health nursing services. Traveling public health nurses support the communities outside of Nome.

⁶⁶ Bering Strait Comprehensive Economic Development Strategy: 2024 Annual Update.

Physical Health

Health information for the Nome Census Area is compared between two date ranges: 2018-2020 and 2021-2023 unless otherwise stated. As data on health indicators in the region is extensive, Nome Census Area data is presented in this chapter and compared to Alaska data overall. Community level data is discussed when trends differ from overall regional trends. Otherwise, community level data is available in the databook that accompanies this report. Some information is presented by Norton Sound region as publicly available data is reported in that format.

BIRTH AND EARLY CHILDHOOD

Teen and Fertility Birth

Teen births increased by about 22% in the Nome Census Area between 2021 and 2023, compared to 2018 and 2020. Statewide, the number of teen births decreased.

Table 13. Teen and Fertility Birth, by Rate, 2018-20 and 2021-23

Geography	Age Group			
	Average Annual Teen Birth Rate per 1,000 (ages 15-19)		Average Annual Fertility Birth Rate per 1,000 (ages 15-44)	
	2018-2020	2021-2023	2018-2020	2021-2023
Alaska	17.4	15.7	67.3	63.8
Nome Census Area	48.0	58.4	88.8	88.7

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section. Note: McKinley Research Group calculated the teen and fertility birth rates per 1,000 using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska female population.

Births among women 15 to 44 years of age decreased slightly (by 3%) in the Nome Census Area. In total, 523 births occurred in the region in 2021-2023.

Table 14. Teen and Fertility Birth, by Count, 2018-20 and 2021-23

Geography	Age Group			
	Teen Birth Count (ages 15-19)		Fertility Birth Count (ages 15-44)	
	2018-2020	2021-2023	2018-2020	2021-2023
Alaska	1,194	1,086	29,350	27,741
Nome Census Area	54	66	542	523

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section. *Data is suppressed as it does not meet the reporting threshold (<6).

Preterm Birth and Normal Gestation

Births with preterm gestation periods (less than 37 weeks) decreased by about 13% from 2018-2020 to 2021-2023. This number also decreased statewide.

Table 15. Preterm Birth and Normal Gestation, by Count, 2018-20 and 2021-23

Geography	Gestation			
	Less than 37 weeks		37 or more weeks	
	2018-2020	2021-2023	2018-2020	2021-2023
Alaska	2,184	2,821	26,542	24,930
Nome Census Area	70	61	473	461

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section. Notes: Obstetric estimate of gestational age. Excludes unknown gestational age. *Data is suppressed as it does not meet the reporting threshold (<6).

Birthweight

Most babies born in the Nome Census Area are of normal weight.

From 2018-2020 to 2021-2023, the number of babies born in the Nome Census Area with low or very low birthweight decreased by about 13%. Comparatively, there was a slight increase (3%) in the number of babies born with low or very low birth weights in Alaska.

Table 16. Birthweight, by Count, 2021-23

Geography	Birthweight					
	Low or Very Low		Normal		Overweight	
	2018-2020	2021-2023	2018-2020	2021-2023	2018-2020	2021-2023
Alaska	1,842	1,904	23,857	22,554	4,116	3,321
Nome Census Area	45	39	416	403	96	80

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.
Notes: Low or very low: < 2,500 grams. Normal: 2,500-3,999 grams. Overweight: 4,000+ grams. Excludes unknown infant birthweight.

Prenatal Care

Most women in the Nome Census Area receive adequate or adequate plus prenatal care.

The number of women in the Nome Census Area receiving inadequate prenatal care increased by 18% from 2018-2020 to 2021-2023 compared to 3% statewide. The number of women receiving adequate plus prenatal care decreased by about 29% (264 to 188).

Well-Child Checkup

Between 2020 and 2022, 81% of three-year-olds in the region received a well-child check-up in the past year.

Table 17. Mothers Reporting Their Child Had a Well-Child Checkup in the Last 12 Months, 2020-22

	Percent % (95% Confidence Interval)	
	Nome Census Area	Alaska
	2020-2022	2020-2022
Percentage of mothers reporting a well-child check up	80.5* (64.5-90.4)	82.0 (79.0-84.7)

Source: Alaska Department of Health, Division of Public Health, Section of Women's, Children's, and Family Health. Alaska Childhood Understanding Behaviors Survey.

*The prevalence estimate is statistically unreliable due to a small sample size and should be interpreted with caution.

HEALTHCARE ACCESS AND COVERAGE

From 2019-2023, a lower percentage of adults in the Norton Sound region reported having unmet medical needs due to cost in the past year than adults in Alaska (6% compared to 12%).

Table 18. Unmet Medical Needs Due to Cost in Past Year, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Unmet medical needs - cost	10.0 (6.0-16.4)	5.6 (3.7-8.3)	13.1 (12.3-14.0)	11.5 (10.9-12.2)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

HEALTHCARE UTILIZATION

Hospitalization

Leading causes of hospitalization among Nome Census Area residents at Norton Sound Regional Hospital from 2021-2023 include three associated with pregnancy and childbirth (liveborn infant, complications during childbirth, and high blood pressure associated with pregnancy and childbirth). Another three are related to behavioral health (alcohol-related disorders, depressive disorders, schizophrenia, and other psychotic disorders).

The most common cause of hospitalization between 2021 and 2023 for Nome Census Area residents at all other facilities across the state was for the birth of a child (liveborn infant).

Among Nome Census Area residents, just under half (47%) of liveborn infants delivered at an Alaska healthcare facility between 2021-2023 were born at Norton Sound Regional Hospital.

Table 19. Nome Census Area Resident Hospitalizations by Principal Diagnosis and Facility, 2018-20 and 2021-23

Cause	Hospitalizations			
	Norton Sound Regional Hospital		All Other Facilities	
	2018-2020	2021-2023	2018-2020	2021-2023
Alcohol-related disorders	211	351	16	10
Liveborn infant	204	225	293	258
Depressive disorders	119	148	35	57
Schizophrenia spectrum and other psychotic disorders	122	130	30	52
Heart failure	71	114	19	27
Complications specified during childbirth	88	102	69	55
Hypertension and hypertensive-related conditions complicating pregnancy; childbirth; and the puerperium	16	37	73	62
Septicemia	27	23	81	63
Cerebral infarction	10	13	24	14
Spondylopathies/spondyloarthropathy (including infective)	8	10	14	22
All Causes	3,775	3,724	1,915	1,737

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.

Note: Top 10 principal diagnosis Clinical Classification Software Refined (CCSR) categories by statewide discharges in 2023

Emergency Department

Between 2021 and 2023, alcohol-related disorders were the leading causes of visits to the NSHC emergency department and to emergency departments at all other facilities for Nome Census Area residents.

Visits to the NSHC emergency department for alcohol-related disorders decreased by 35% from 2018-2020 to 2021-2023 and visits for all causes decreased by 24% from 2018-2020 to 2021-2023.

Table 20. Nome Census Area Resident Emergency Department Visits by Principal Diagnosis and Facility, 2018-20 and 2021-23

Cause	Emergency Department Visits			
	Norton Sound Health Corporation		All Other Facilities	
	2018-2020	2021-2023	2018-2020	2021-2023
Alcohol-related disorders	2,798	1,812	172	154
Superficial injury; contusion, initial encounter	686	566	85	75
Abdominal pain and other digestive/abdomen signs and symptoms	550	487	146	95
Sprains and strains, initial encounter	468	413	39	43
Musculoskeletal pain, not low back pain	426	380	109	96
Skin and subcutaneous tissue infections	358	375	95	48
Other specified upper respiratory infections	1,320	362	157	81
Open wounds to limbs, initial encounter	410	347	33	31
Nonspecific chest pain	345	248	94	71
Respiratory signs and symptoms	301	235	113	63
All Causes	18,097	13,675	2,980	2,482

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.

Note: Top 10 principal diagnosis Clinical Classification Software Refined (CCSR) categories by statewide discharges in 2023.

HEALTHY LIFESTYLES

Tobacco or Electronic Vapor Product Use

Comparing data from 2019-2023, the estimated prevalence of current cigarette, e-cigarette, or smokeless tobacco use is higher in the Norton Sound region (43.9%) compared to Alaska (24.8%).

Table 21. Current Cigarette, E-Cigarette, or Smokeless Tobacco Use, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Current tobacco use – any type	57.5* (47.3-67.0)	43.9 (36.8-51.1)	27.3* (26.0-28.7)	24.8 (24.0-25.7)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

*Prevalence estimate based on 2015, 2016, 2017, and 2018 surveys

Nutrition and Physical Activity

Prevalence estimates of nutrition and physical activity indicators for the region are statistically unreliable due to small sample sizes and should be interpreted with caution. They are provided here as a signal of nutrition and physical activity status.

Table 22. Nutrition and Physical Activity Indicators, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Met aerobic and strengthening recommendations per week	17.5* (7.8-34.6)	26.7†¶ (18.3-37.3)	23.1* (21.4-25.0)	31.4† (29.9-32.9)
Consume five or more servings of fruits and vegetables per day	18.8*¶ (8.3-37.2)	17.0§¶ (7.3-34.9)	19.0* (17.4-20.8)	16.0§ (14.7-17.3)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

*Prevalence estimate based on 2015 and 2017 surveys

†Prevalence estimate based on 2019 and 2023 surveys

§Prevalence estimate based on 2019 and 2021 surveys

¶The prevalence estimate is statistically unreliable due to a small sample size and should be interpreted with caution.

CHRONIC DISEASE

Based on a comparison of confidence intervals, there were no statistically significant increases or decreases in chronic health indicators for the region from 2014-2018 to 2019-2023.

On most indicators of chronic disease, the estimated prevalence for the Norton Sound Health Corporation service region is similar to that for Alaska.

Comparing data from 2019-2023, the estimated prevalence of asthma is lower in the Norton Sound region (10.9%) compared to Alaska (15.6%).

Table 23. Chronic Disease, Five Year Estimate by Percent, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Angina / Coronary Heart Disease	1.5* (0.7-3.2)	6.0* (2.9-12.3)	2.7 (2.4-3.0)	3.3 (3.1-3.6)
Arthritis, Gout, Fibromyalgia	22.8 (16.4-30.8)	19.3 (14.5-25.3)	22.8 (21.9-23.7)	23.4 (22.7-24.2)
Asthma	6.6 (3.8-11.2)	10.9 (7.9-14.9)	13.5 (12.7-14.4)	15.6 (14.9-16.3)
COPD	11.1 (6.2-19.2)	7.8 (5.3-11.3)	5.1 (4.6-5.6)	5.8 (5.4-6.2)
Diabetes	26.5† (18.1-37.1)	23.8§ (18.0-30.8)	33.0† (31.5-34.4)	27.4§ (26.4-28.5)
High Blood Pressure	25.6 (19.1-33.5)	27.0¶ (21.7-33.1)	29.1 (28.1-30.2)	32.2¶ (31.2-33.2)
High Blood Cholesterol	26.5† (18.1-37.1)	23.8§ (18.0-30.8)	33.0† (31.5-34.4)	27.4§ (26.4-28.5)
Kidney Disease	1.5* (0.6-3.6)	2.8 (1.9-4.2)	2.0 (1.8-2.4)	2.3 (2.1-2.6)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

*The prevalence estimate is statistically unreliable due to a small sample size and should be interpreted with caution.

†Prevalence estimate based on 2013, 2015, and 2017 surveys.

§Prevalence estimate based on 2019, 2021, and 2023 surveys.

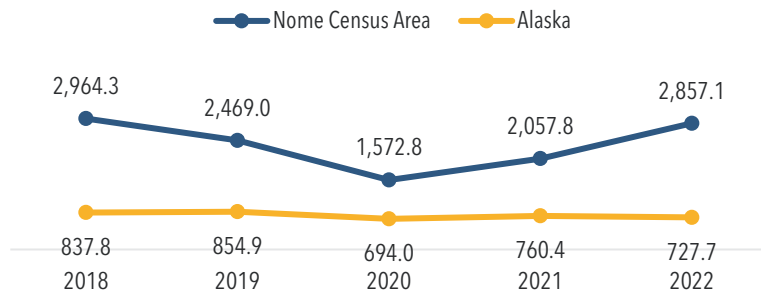
¶Prevalence estimate based on 2019, 2020, 2021, and 2023 surveys.

COMMUNICABLE DISEASE

Chlamydia

The chlamydia rate for the Nome Census Area decreased in 2020. From 2020 to 2022, the rate increased to 2,857 per 100,000.

Figure 54. Chlamydia, Rate per 100,000, 2018-22



Source: AtlasPlus.

Between 2018 and 2022, the chlamydia case rate was about three times the statewide rate.

Table 24. Chlamydia Cases, Count and Rate, 2018-22

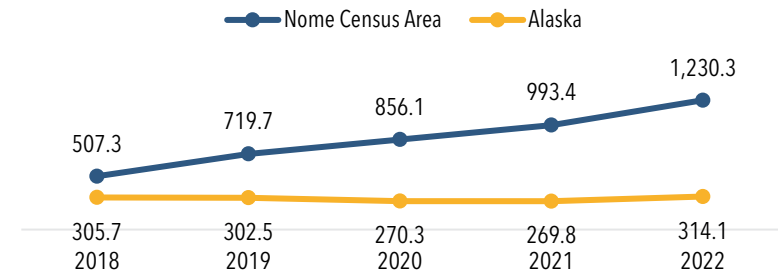
	Nome Census Area		Alaska	
	Count	Rate per 100,000	Count	Rate per 100,000
2018	298	2,964.3	6,159.0	837.8
2019	247	2,469.0	6,254.0	854.9
2020	158	1,572.8	5,090.0	694
2021	203	2,057.8	5,571.0	760.4
2022	281	2,857.1	5,338.0	727.7
Five-Year Annual Average	237	2,384.2	5,682	774.96

Source: AtlasPlus.

Gonorrhea

The Nome Census Area gonorrhea rate per 100,000 more than doubled between 2018 and 2022.

Figure 55. Gonorrhea, Rate per 100,000, 2018-2022



Source AtlasPlus.

Across all years, the rate was higher in the region compared to Alaska, with the difference growing each year.

Table 25. Gonorrhea, Count and Rate per 100,000, 2018-22

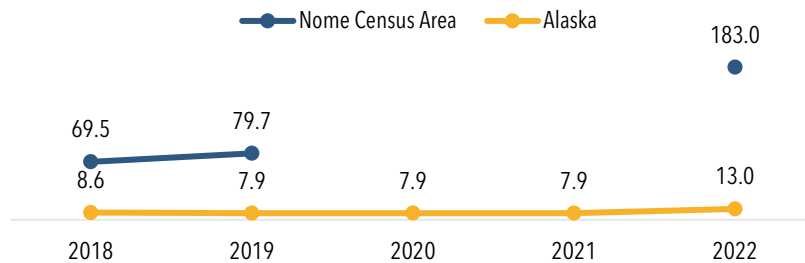
	Nome Census Area		Alaska	
	Count	Rate per 100,000	Count	Rate per 100,000
2018	51	507.3	2,247	305.7
2019	72	719.7	2,213	302.5
2020	86	856.1	1,982	270.3
2021	98	993.4	1,977	269.8
2022	121	1,230.3	2,304	314.1
Five-Year Annual Average	86	861.4	2,145	292.5

Source: AtlasPlus.

Tuberculosis

For all years for which data are available, the rate of tuberculosis cases was higher in the region compared to Alaska. In 2022, the most recent year for which data are available, the Nome Census Area rate (183.0 per 100,000) was more than ten times the rate for Alaska (13.0 per 100,000).

Figure 56. Tuberculosis, Rate per 100,000, 2018-22



Source: AtlasPlus.

Note: Data for Nome Census Area are suppressed for 2020 and 2021.

Table 26. Tuberculosis, Count and Rate, 2018-22

	Nome Census Area		Alaska	
	Count	Rate per 100,000	Count	Rate per 100,000
2018	7	69.5	63	8.6
2019	8	79.7	58	7.9
2020	*	*	58	7.9
2021	*	*	58	7.9
2022	18	183.0	95	13.0
Five-Year Annual Average	11[†]	110.7[†]	66	9.1

Source: AtlasPlus.

*Data suppressed to protect confidentiality.

†Average for the three years for which data are not suppressed

MORTALITY

Leading Causes of Death

The top five causes of mortality in the Nome Census Area are unchanged from 2016-2020 and 2019-2023. These include malignant neoplasms (cancer), heart disease, unintentional injuries, intentional self-harm, and chronic lower respiratory disease.

From 2019-2023, heart disease was the leading cause of death in the Nome Census Area; it was the second leading cause of death in Alaska, with cancer as the leading cause of death statewide.

Comparing 2016-2020 and 2019-2023, Nome Census Area deaths from malignant neoplasms and chronic lower respiratory diseases decreased by 9% and 17%, respectively.

In the Nome Census Area, there was no change in the number of deaths caused by unintentional injury between 2016-2020 and 2019-2023 (54 deaths). Statewide, the number of unintentional injury deaths increased by 25%.

Compared to Alaska, the Nome Census Area had a higher crude rate of deaths from heart disease, unintentional injury, intentional self-harm, and chronic lower respiratory diseases from 2019-2023.

From 2016-2020 to 2019-2023, the number of deaths from intentional self-harm in the Nome Census Area increased by about 33%; the number increased by 4% statewide.

Table 27. Leading Causes of Mortality, 2016-20 and 2019-23

Indicator	Estimated Annual Mortality Rate (Crude Rate Per 1,000)*			
	Nome Census Area		Alaska	
	2016-2020	2019-2023	2016-2020	2019-2023
Diseases of the heart	1.5	1.7	1.1	1.3
Malignant neoplasms	1.5	1.4	1.3	1.4
Unintentional injuries	1.1	1.1	0.6	0.7
Intentional self-harm	0.7	1.0	0.3	0.3
Chronic lower respiratory diseases	0.7	†	0.3	0.3
All causes	7.9	8.5	6.3	7.4

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.
Notes: Leading causes of death based on top underlying cause of death categories for statewide deaths in 2023. Cancer deaths include trachea, bronchus, and lung; breast (female only); colon, rectum, and anus; and other malignant neoplasms.

*McKinley Research Group calculated the crude rate per 1,000 using AKDOLWD population estimates for the Nome Census Area and Alaska.

†Data is suppressed as it does not meet reporting thresholds.

Behavioral Health

GENERAL MENTAL HEALTH

Between 2019 and 2023, a similar percentage of adults in the region were estimated to have been diagnosed with depressive disorder in their lifetime or experienced poor mental health in the past month.

Comparing the estimates from 2014-2018 to 2019-2023, the percentage of regional adults experiencing poor mental health for two or more weeks in the past month increased from 6% to 13%.

During the same time period, the percentage adults in the region experiencing poor mental health for five or more days in the past month increased from 14% to 28%.

Table 28. Mental Health, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Depressive disorder	10.0 (5.9-16.4)	15.7 (10.3-23.3)	17.0 (16.1-17.9)	19.7 (19.0-20.5)
Poor mental health - 2+ weeks	5.8 (3.5-9.5)	13.4 (9.2-19.2)	10.4 (9.6-11.2)	14.1 (13.4-14.8)
Poor mental health - 5+ days	13.6 (9.1-19.9)	27.8 (21.4-35.2)	20.2 (19.2-21.2)	26.2 (25.3-27.0)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

SUICIDE

Between 2019 and 2023, the estimated annual rate of death by suicide was higher in the Nome Census Area (1.0 per 1,000) than in Alaska (0.3 per 1,000).

Table 29. Intentional Injury Deaths, by Count and Estimated Annual Rate, 2019-23

	Nome Census Area		Alaska	
	Count 2019-2023	Estimated Annual Rate per 1,000*	Count 2019-2023	Estimated Annual Rate per 1,000*
Suicide	48	1.0	1,038	0.3

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.

*McKinley Research Group calculated the crude rate per 1,000 by using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska.

ALCOHOL AND DRUG-INDUCED MORTALITY

From 2019-2023, there were 17 alcohol-induced deaths and eight drug-induced deaths in the Nome Census Area.

Table 30. Alcohol and Drug-Induced Mortality, 2019-23

	Nome Census Area		Alaska	
	Count 2019-2023	Estimated Annual Rate per 1,000*	Count 2019-2023	Estimated Annual Rate per 1,000*
Alcohol-induced mortality	17	†	1,286	0.3
Drug-induced mortality	8	†	1,244	0.3

Source: Alaska Division of Public Health, Health Analytics and Vital Records Section.

*McKinley Research Group calculated the crude rate per 1,000 using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska.

†Data is suppressed as it does not meet reporting thresholds.

Interpersonal Violence

CHILD WELFARE SYSTEM INVOLVEMENT

Children in Out of Home Care

Out-of-home care includes placements in a relative's home and in licensed foster homes. Between 2019 and 2023, the region had a higher rate of children in out-of-home care each year than Alaska.

Table 31. Children Out of Home, 2019-2023

	Nome OCS Office*		All Alaska OCS Offices	
	Out of Home	Rate per 1,000 children†	Out of Home	Rate per 1,000 children†
2019	109	32.7	4,440	24.4
2020	139	42.3	4,291	23.9
2021	112	35.4	4,256	23.8
2022	126	40.3	4,004	22.4
2023	108	35.2	3,732	21.1
Five-Year Annual Average	119	37.2	4,145	23.1

Sources: Alaska Department of Family and Community Services, Office of Children's Services, and the Alaska Department of Labor and Workforce Development.

*The Nome Office of Children's Services (OCS) office serves Brevig Mission, Council, Diomed, Elim, Gambell, Golovin, King Island, Koyuk, Little Diomed, Mary's Igloo, Nome, Savoonga, Shaktoolik, Shishmaref, Solomon, St. Michaels, Stebbins, Teller, Unalakleet, Wales and White Mountain.

†Rate per 1,000 children calculated by McKinley Research Group using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska.

Children Removed from Home

Between 2019 and 2023, the region had a higher rate of children removed from home than Alaska.

Table 32. Children Removed from Home, 2019-2023

	Nome OCS Office*		All Alaska OCS Offices	
	Removed	Rate per 1,000 children†	Removed	Rate per 1,000 children†
2019	33	9.9	1,621	8.9
2020	52	15.8	1,274	7.1
2021	14	4.4	1,315	7.3
2022	56	17.9	1,126	6.3
2023	17	5.5	1,066	6.0
Five-Year Annual Average	34	10.8	1,280	7.1

Sources: Alaska Department of Family and Community Services, Office of Children's Services, and the Alaska Department of Labor and Workforce Development.

*The Nome Office of Children's Services (OCS) office serves Brevig Mission, Council, Diomede, Elim, Gambell, Golovin, King Island, Koyuk, Little Diomede, Mary's Igloo, Nome, Savoonga, Shaktoolik, Shishmaref, Solomon, St. Michaels, Stebbins, Teller, Unalakleet, Wales and White Mountain.

†Rate per 1,000 children calculated by McKinley Research Group using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska.

Reports of Abuse

For all types of abuse, between 2019 and 2023, reports of child maltreatment were made to OCS and screened at a higher rate in the Nome region compared to Alaska.

The rate of substantiated reports of child maltreatment is more than twice the rate in the Nome region (27.7 per 1,000 children) compared to Alaska (9.8 per 1,000 children).

See table next page.

Table 33. Average Annual Reports of Child Maltreatment, 2019-2023

	Nome OCS Office*		All Alaska OCS Offices	
	Average Annual Count	Rate per 1,000 Children†	Average Annual Count	Rate per 1,000 Children†
Reports Containing Physical Abuse				
All Reports	138	43.2	4,595	25.7
Screened In Reports	76	23.7	2,152	12.0
Substantiated Reports	18	5.8	429	2.4
Reports Containing Sexual Abuse				
All Reports	174	54.6	3,361	18.8
Screened In Reports	39	12.2	862	4.8
Substantiated Reports	9	2.8	156	0.9
Reports Containing Mental Injury				
All Reports	189	59.0	4,595	25.6
Screened In Reports	118	37.1	2,482	13.9
Substantiated Reports	25	7.9	479	2.7
Reports Containing Neglect				
All Reports	608	190.3	13,161	73.5
Screened In Reports	266	83.3	5,743	32.1
Substantiated Reports	63	19.6	1,305	7.3
Reports Containing All Maltreatment Types§				
All Reports	888	277.9	20,184	112.7
Screened In Reports	347	108.6	7,835	43.7
Substantiated Reports	89	27.7	1,764	9.8

Sources: Alaska Department of Family and Community Services, Office of Children's Services, and the Alaska Department of Labor and Workforce Development.

*The Nome Office of Children's Services (OCS) office serves Brevig Mission, Council, Diomed, Elim, Gambell, Golovin, King Island, Koyuk, Little Diomed, Mary's Igloo, Nome, Savoonga, Shaktoolik, Shishmaref, Solomon, St. Michaels, Stebbins, Teller, Unalakleet, Wales and White Mountain.

†Rate per 1,000 children calculated by McKinley Research Group using Alaska Department of Labor and Workforce Development population estimates for the Nome Census Area and Alaska.

§Reports can include multiple maltreatment types; therefore, the total count will exceed the number of unique reports.

EXPERIENCE OF VIOLENCE AMONG ADULTS

Estimated prevalence of lifetime physical intimate partner violence is higher in the region (35%) compared to Alaska (23%).

Estimated prevalence of childhood exposure to intimate partner violence is higher in the region (33%) compared to Alaska (21%).

Estimated prevalence of intimate partner violence or fear for safety in the past year is higher in the region (7%) compared to Alaska (3%); however, the prevalence estimate for the Norton Sound region is statistically unreliable, and the finding should be interpreted with caution.

Table 34. Interpersonal Violence, 2014-18 and 2019-23

Indicator	Percent % (95% Confidence Interval)			
	Norton Sound		Alaska	
	2014-2018	2019-2023	2014-2018	2019-2023
Lifetime physical intimate partner violence	-	35.0 [†] (27.2-43.8)	25.4 [§] (22.6-28.4)	23.2 [†] (22.0-24.5)
Lifetime sexual assault	-	31.7 [†] (24.0-40.6)	18.0 [§] (15.7-20.6)	24.4 [†] (23.1-25.8)
Childhood exposure to intimate partner violence	37.5 ^{*§} (12.4-71.8)	32.8 [†] (24.9-41.8)	22.7 [§] (19.8-25.8)	21.4 [†] (20.1-22.7)
Intimate partner violence or fear for safety in past year	-	7.4 ^{*†} (3.9-13.3)	-	3.2 [†] (2.6-3.8)

Source: Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Alaska Behavioral Risk Factor Surveillance System.

Notes: 2014-2018 data not available for lifetime physical intimate partner violence or lifetime sexual assault in the Norton Sound Health Corporation service region for 2014-2018. Data are not available for intimate partner violence or fear for safety in the past year for the Norton Sound Health Corporation service region or Alaska for 2014-2018.

*The prevalence estimate is statistically unreliable due to a small sample size and should be interpreted with caution.

†Prevalence estimate based on 2020 and 2023 surveys

§Prevalence estimate based on 2017 survey

Climate Change

The Kawerak region faces many climate-related impacts including erosion, flooding, thawing permafrost, storm surges, and warming ocean temperatures. These climate-related issues pose a growing risk to infrastructure, subsistence harvests, cultural practices, and community health.

Environmental Impacts

Melting ice and seasonal changes led to additional commercial and industrial activity in the region, including increased vessel traffic, offshore drilling, and tourism.⁶⁷ Sea ice loss is linked to changing weather patterns, coastal erosion, species declines and unusual mortality events, toxic algal blooms, and industrial changes.⁶⁸

Permafrost Thaws, Flooding, and Erosion

More than 70 of 200 Alaska Native communities now face significant erosion, flooding, or thawing permafrost. Several threatened communities are located in the Kawerak region.⁶⁹

Loss of coastal sea ice reduces protection from storms, which can erode coastlines. Sea ice coverage in the Bering Sea decreased by up to 26% each decade since 1980, forming later than it did in the 1970s, and contributing to increased storm surges.⁷⁰ These increased storm surges and large waves produce erosion rates up to 73 ft. per year in the region.⁷¹

Food Security

Storms and flooding affect fishing, hunting, and harvesting.⁷² Decreases in red king crab, ice seals, walrus, fish, and other species that are key to subsistence harvests threatens food security of subsistence-dependent communities. Less stable sea ice makes subsistence harvest less reliable and increases risk for subsistence activities. Cultural loss related to loss of subsistence opportunities continues to be a concern in the region. Unpredictable harvest conditions make access challenging for community members, particularly for Elders.⁷³

⁶⁷ US Climate Resilience Toolkit, *Arctic Peoples and Ecosystems*, <https://toolkit.climate.gov/regions/alaska-and-arctic/arctic-peoples-and-ecosystems>

⁶⁸ Overland, J. E., et al., 2024. Transformative Ecological and Human Impacts from Diminished Sea Ice in the Northern Bering Sea, *Weather, Climate, and Society*, Volume 16, Issue 2, 303-313, <https://doi.org/10.1175/WCAS-D-23-0029.1>

⁶⁹ US Government Accountability Office, *Alaska Native Issues: Federal Agencies Could Enhance Support for Native Village Efforts to Address Environmental Threats*, May 18, 2022, <https://www.gao.gov/products/gao-22-104241>

⁷⁰ USDA Climate Hubs, *A Storm is Brewing: Climate Change and Coastal Storms in Western Alaska*, <https://www.climatehubs.usda.gov/hubs/northwest/topic/storm-brewing-climate-change-and-coastal-storms-western-alaska>

⁷¹ Department of Natural Resources, Geological and Geophysical Sciences, *Shoreline Change at Alaska Coastal Communities*, <https://dggs.alaska.gov/pubs/id/30552>

⁷² Erickson, K. R. S., et al., 2022. Increased Prevalence of Open Water During Winter in the Bering Sea: Cultural Consequences in Unalakleet, Alaska, 2022, *Oceanography*, Volume 35, No. 3-4, 180-188. <https://doi.org/10.5670/oceanog.2022.135>

⁷³ Erickson, K. R. S., et al., 2022. Increased Prevalence of Open Water During Winter in the Bering Sea: Cultural Consequences in Unalakleet, Alaska, 2022, *Oceanography*, Volume 35, No. 3-4, 180-188. <https://doi.org/10.5670/oceanog.2022.135>

9. Cost of Living

This chapter updates a comparison of City of Nome prices to the Municipality of Anchorage. Information was first thoroughly documented in 2008, during the Alaska Geographic Differential Study, and much of it was updated for the Bering Strait Community Needs Assessment in 2022.⁷⁴

This update, which includes new publicly available information reaffirms that the cost of living in Nome is almost 40% higher than in Anchorage. Costs in outlying communities are even higher.

The following table shows the differential between Nome and Anchorage by expenditure category. This includes transportation, which is 60% more expensive in Nome than in Anchorage, and food, which is 51% higher.

Table 35. Nome - Anchorage, Geographic Cost Differential

Expenditure Category	Price Differential
Housing	1.24
Shelter	0.96
Utilities	2.60
Food	1.51
Meats, poultry, and fish	1.32
Cereals and breads	1.44
Dairy products	1.60
Fruits and vegetables	1.75

Expenditure Category	Price Differential
Other food items	1.56
Food away from home	1.53
Transportation	1.60
Fuel	1.49
Car/truck ownership	1.11
Other vehicle ownership	1.39
Auto insurance	0.88
Vehicle maintenance	2.25
Interstate air travel	1.89
In-state air/ferry travel	2.72
Clothing	1.27
Medical	1.05
Medical Services	1.12
Medical Insurance	1.00
Other	1.40
Household furnishings/appliances	1.66
Communications	1.05
Recreation and education	1.33
Personal care and other	1.37
Overall Geographic Cost of Living Differential	1.39

Source: Alaska Geographic Cost Differential Study, McDowell Group, 2008
 Note: Columns may not add to totals/subtotals due to rounding. The housing category differential is not the simple sum of subcategory components.

⁷⁴ McDowell Group. Alaska Geographic Differential Study, 2009. Conducted for the State of Alaska Department of Administration.

Appendix A. Bering Strait Region Tribes

The 20 federally recognized tribes within the Bering Strait Region are:

- Native Village of Brevig Mission
- Chinik Eskimo Community (Golovin)
- Native Village of Council (Nome)
- Native Village of Diomede (Inalik)
- Native Village of Elim
- Native Village of Gambell
- King Island Native Community (Nome)
- Native Village of Koyuk
- Native Village of Mary's Igloo (Teller)
- Nome Eskimo Community
- Native Village of Savoonga
- Native Village of Saint Michael
- Native Village of Shaktoolik
- Native Village of Shishmaref
- Village of Solomon
- Stebbins Community Association
- Native Village of Teller
- Native Village of Unalakleet
- Native Village of Wales
- Native Village of White Mountain

Appendix B. Sources

Interviewees and Sources

- **Angie Gorn**, Chief Executive Officer, Norton Sound Health Corporation
- **Brooks Chandler**, Interim City Manager, City of Nome
- **Cheri McConnell**, Tribal Affairs Program Director, Kawerak
- **Doug Walrath**, Director, Northwest Alaska Career and Technical Center
- **Jenefer Bell**, Area Research Biologist, Nome, Alaska Department Fish and Game
- **Joy Baker**, Port Director, City of Nome
- **Kendra Nichols**, Employment Training Director, Kawerak
- **Megan Onders**, Assistant City Manager, City of Nome
- **Pam Cushman**, Community Education Department Director, Kawerak

Data Sources

DEMOGRAPHIC AND SOCIOECONOMIC DATA

Alaska Department of Labor and Workforce Development – Research and Analysis Office

The Alaska Department of Labor and Workforce Development (ADOLWD) Research and Analysis Office estimates the population for every community, borough, census area, and economic region in the state. In areas that do not have organized boroughs, a census area, designated by the U.S. Census Bureau, is equivalent to a

county. Only total population is estimated for communities of less than 1,000. For communities of 1,000 or more, the State also provides gender, races, and age distribution.

Annual population estimates are based on decennial census counts, current Census Bureau population estimates, and the number of Permanent Fund Dividend filers.

The Department's Labor Market Unit reports monthly employment and unemployment statistics, wages by occupation, and a quarterly census of employment and wages (how is that different from what we just said for the month?).

U.S. Census Bureau – American Community Survey

The U.S. Census Bureau gathers data through a random mail and online survey for its American Community Survey (ACS), which is the nation's most comprehensive socioeconomic and demographic survey.

The ACS reports one-year demographic estimates at the national, state, and large-metropolitan-area level. In smaller communities, however, the population is not large enough to provide an adequate sample size for a single-year estimate, so the Census Bureau provides five-year averages instead. As a result, this report uses ACS five-year averages for Kawerak Service Area communities. The most recent five-year estimates are for 2018-2022. The Census Bureau assigns extra weight to more recent data. Some random sampling error is associated with the estimates as they are based on a population sample and not a census.

Visitor Industry Data

The study team used passenger enplanement data from the Bureau of Transportation Statistics, cruise visitation data from the Cruise Line Agencies of Alaska, and visitor volume estimates from individual attractions and Destination Analysts to describe Nome's visitor industry. Other data was collected directly from the City of Nome and visitor industry establishments in the community.

COMMUNITY HEALTH DATA

Alaska Behavioral Risk Factor Surveillance System

Data about adult health, including healthcare access, healthy lifestyles, chronic disease, and mental health, was sourced from the Alaska Behavioral Risk Factor Surveillance System (BRFSS). Data were queried from the Alaska BRFSS data center in fall 2024.

The BRFSS is part of a data collection system established and coordinated by the Centers for Disease Control and Prevention. BRFSS collects information about the health of adults, including health-related behaviors, chronic health conditions, and the use of preventive services. BRFSS is a telephone-based survey that is conducted annually. The Alaska BRFSS sample includes Alaska residents 18 years of age or older. Alaska BRFSS uses a stratified random sampling design based on combinations of geographically grouped census areas and boroughs. This design over-samples rural regions of Alaska. Alaska BRFSS data are weighted to account for differences between the survey respondents and the general population of Alaska adults they represent.

Statistical differences were assessed where confidence intervals for two prevalence estimates did not overlap. This is a conservative method for assessing statistical differences. When two prevalence

estimates have non-overlapping confidence intervals, they are certainly significantly different; however, it is not necessarily true that the prevalence estimates are not significantly different if they have overlapping confidence intervals.

Childhood Understanding Behaviors Survey

Data on well-child visits were sourced from the Alaska Childhood Understanding Behaviors Survey (CUBS), which was provided on request by the Alaska Department of Health, Division of Public Health, Section of Women's Children's & Family Health in September 2024. The CUBS survey is a survey of mothers of three-year-olds and is designed to collect information about the health and early childhood experiences of young children and their mothers.

Health Analytics and Vital Records

The Alaska Department of Health (DOH), Division of Public Health (DPH), Health Analytics and Vital Records Section (HAVRS) tracks information about Alaska resident births, deaths, and fetal deaths. These data can be used to: monitor trends in the number and rate of births, and the characteristics of parents and infants; assess changes in maternal and infant health; monitor trends in the number and rate of deaths, and the characteristics of decedents; and assess changes in the types of disease and injury that result in death. The Alaska DOH provided HAVRS data to McKinley Research Group in October 2024.

Using population estimates from the Alaska Department of Labor and Workforce Development for the Nome Census Area and Alaska, McKinley Research Group calculated the crude mortality rate per 1,000 residents.

Health Facilities Discharge Reporting Program

The Alaska Department of Health, through its Health Facilities Discharge Reporting Program (HFDR), collects data on health conditions and charges from various healthcare facilities, including public and private hospitals. This data encompasses inpatient and outpatient discharges, including emergency department visits. Health facilities must submit this information quarterly. The HFDR data is utilized for public health planning, disease surveillance, quality improvement, community health assessments, and policy decisions, allowing for trend monitoring and comparisons to national benchmarks. The Alaska DOH provided HFDR data to McKinley Research Group in October 2024.

Office of Children's Services

The Alaska Office of Children's Services (OCS) collects data on children and families referred for child protective services and on providers for out-of-home services. McKinley Research Group requested data for the number of protective service reports, screened-in reports, and substantiated reports handled by the Nome OCS office and all Alaska OCS offices. McKinley Research Group also requested data on the number of children in out-of-home care, the number of children removed from home, and the percentage of repeated substantiated child maltreatment within the last twelve months. Using population estimates from the Alaska Department of Labor and Workforce Development, McKinley Research Group calculated the rate of reports per 1,000 children.

AtlasPlus

Data for infectious diseases were sourced from the Centers for Disease Control and Prevention (CDC) and the National Center for

HIV, Viral Hepatitis, STD, and Tuberculosis Prevention's (NCHHSTP) AtlasPlus system. This interactive tool allows users to create customized tables, maps, and charts using nearly 20 years of CDC surveillance data on HIV, viral hepatitis, STD, and TB. Nome Census Area and Alaska data were downloaded from the AtlasPlus tool in October 2024.

