



Formerly McDowell Group

BERING STRAIT COMMUNITY NEEDS ASSESSMENT

March 2022

PREPARED FOR:

Kawerak, Inc.

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Executive Summary

This 2022 Bering Strait Community Needs Assessment describes and analyzes strengths, challenges, and needs among communities in the Kawerak Service Area. The report includes:

- Regional socioeconomics, demographics, health, housing, and infrastructure
- A profile of education, from early care and learning to post-secondary
- A regional cost of living analysis
- COVID-19 pandemic impacts
- An assessment of child care needs, availability, and infrastructure
- Findings from a regional household survey on community needs, strengths, and challenges, as well as COVID-19 impacts
- Results from interviews with residents in all Kawerak Service Area communities

In this summary, top regional strengths, challenges, and needs are presented for consideration in planning and decision-making.

Top 5 Regional and Community Strengths

| | Bering Strait Region | Nome | Communities Outside Nome |
|----------------------------------|----------------------|------|--------------------------|
| Subsistence opportunities | 80% | 64% | 88% |
| Education system/schools | 45% | 40% | 48% |
| Natural setting | 45% | 47% | 44% |
| Outdoor recreation opportunities | 43% | 61% | 33% |
| Health care resources | 38% | 45% | 34% |

Source: 2021 Bering Strait Region Household Survey, McKinley Research Group.

Top 5 Regional and Community Challenges

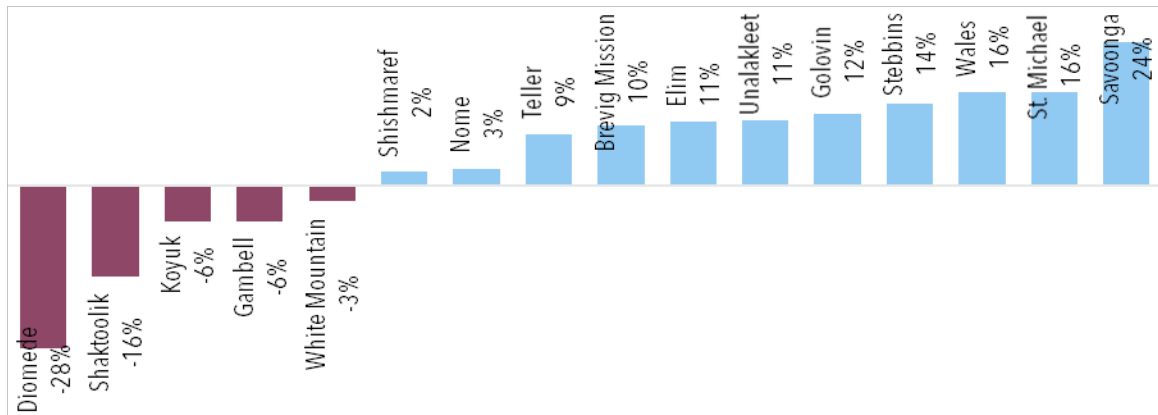
| | Bering Strait Region | Nome | Communities Outside Nome |
|---------------------------|----------------------|------|--------------------------|
| High cost of living | 79% | 85% | 76% |
| Inadequate housing | 78% | 80% | 78% |
| Alcohol or drug misuse | 61% | 74% | 55% |
| Climate change impacts | 54% | 44% | 59% |
| Few safe places for youth | 50% | 43% | 53% |

Source: 2021 Bering Strait Region Household Survey, McKinley Research Group.

Kawerak Service Area Demographics

- The region experienced a **net population gain** of 215 people from 2011 to 2020.
- The Nome Census Area **population is projected to grow by 13%** from 10,046 in 2020 to 11,059 by 2045.
- Population changes within individual communities vary, from increases of 24% in Savoonga and 16% in St. Michael and Wales, to decreases of 28% in Diomedede and 16% in Shaktoolik.

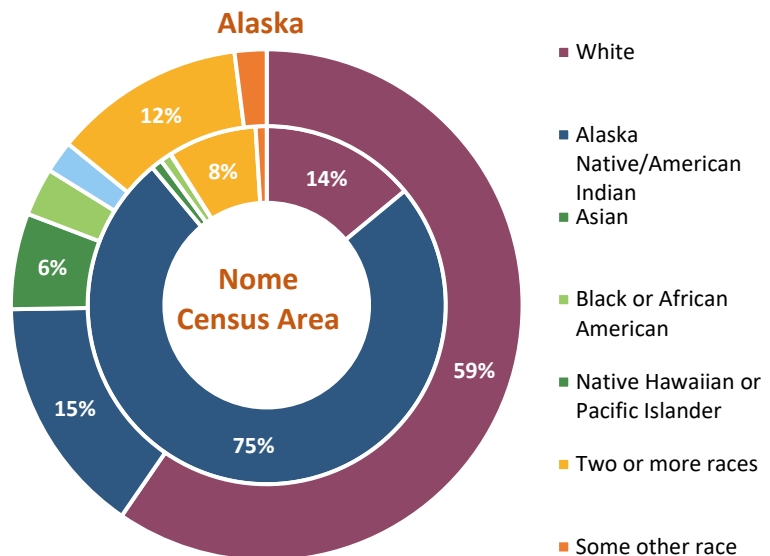
Percent Population Growth, Kawerak Service Area Communities, 2010-2020



Source: US Census Bureau, 2010 and 2020 Decennial Censuses

- **75% of the area population is Alaska Native or American Indian** compared to 15% statewide.
- **Household size is larger than statewide average**, with an average 3.3 people compared to 2.8 in Alaska as a whole.
- **13% of all households in the region include a subfamily**, compared to 3% statewide.

Race and Ethnicity 2020

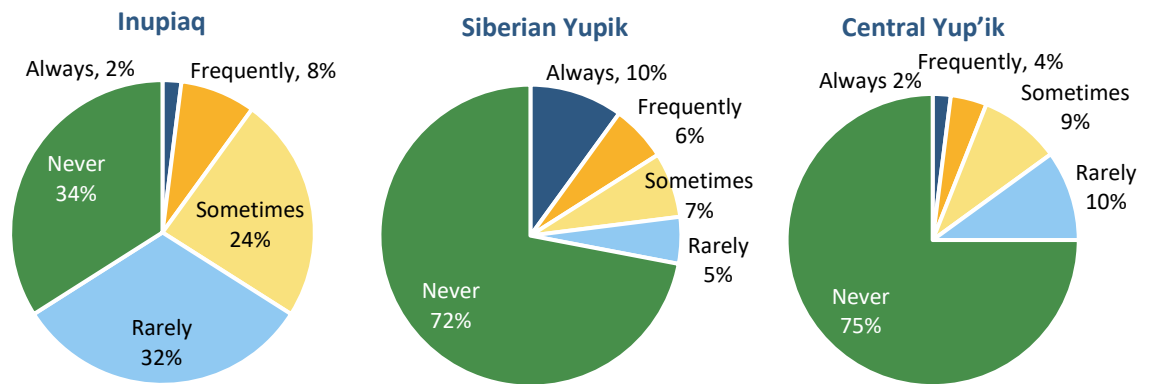


Source: US Census Bureau 2020 Decennial Census.

Language

- English is spoken in 91% of households in the region.
- **31% of the population over 5 years of age speaks a language other than English**, nearly double that of the percent statewide (16%).
- Predominant languages in the region include Inupiaq, Siberian Yupik, and Central Yup'ik.

Percent of Households in Which a Regional Indigenous Language is Spoken



Source: 2021 McKinley Research Group Household Survey.

Affordability of Supplies and Services

- Over one-third of regional survey respondents report someone in their household **not able to afford food (38%), fuel (34%), and/or telephone/cell phone service (34%)**.
- **Nearly one-quarter (24%) report an inability to afford electricity with 21% reporting that housing is unaffordable.**
- Half (48%) of respondents in communities outside Nome report at least someone in their household was **unable to afford internet** in the past year, compared to 37% in Nome.
- Outside Nome, **39% report someone in their household unable to afford food.**
- In most communities, **water and sewer rates represent a high cost burden.**
- 70% report at least 25% of their **annual food resources come from subsistence.**

Cost of Living

Cost of living for Nome households is 39% higher than in Anchorage. Prices are generally higher in communities outside Nome and, thus, cost of living appears to be more than 39% higher than in Anchorage.

By household spending category, utilities represent the biggest difference in prices between the Bering Strait region and Anchorage. Energy costs alone are more than three times higher in

the region for single-family homes. Including electricity and heat, the annual cost to heat a single-family home approximately two times higher in the Nome region (\$6,421) than in Anchorage (\$3,368).¹

The calculated price differential for food is 1.7 times greater in the region than in Anchorage. Air transportation price differentials are 2.4. Housing costs are comparable. The fuel price differential is 1.7. Household goods are 70% higher in the region than Anchorage; gas prices are 50-70% higher as well.

2021 Price Differentials, Bering Strait Region Compared to Anchorage

| Expenditure Category | 2021 Price Differential |
|---|-------------------------|
| Household Goods | |
| Nome | 1.7 |
| Other regional communities | 1.7 |
| Anchorage | 1.0 |
| Utilities | |
| Energy Cost (\$/ft²) | |
| Nome Census Area | 3.7 |
| Anchorage | 1.0 |
| Electricity* | |
| Nome | 1.3 |
| Other regional communities | 1.4 |
| Anchorage | 1.0 |
| Gasoline | |
| Nome | 1.7 |
| Other regional communities | 1.5 |
| Anchorage | 1.0 |
| Housing | |
| Nome Census Area | 1.1 |
| Anchorage | 1.1 |
| Transportation, Airfare | |
| Nome to Anchorage | 1.0 |
| Other regional communities to Anchorage | 2.4 |

Source: MRG Estimates.

Note: "All Other Communities" represents a population-weighted average of prices in the Bering Strait Region excluding Nome. *The electricity price differential uses PCE program rates for Nome and All Other Communities; the price differentials without PCE rates would be 1.9 for Nome and 2.6 for all other Kawerak communities.

¹ Some of this difference in energy costs may be due to oil price spikes over the last several years.

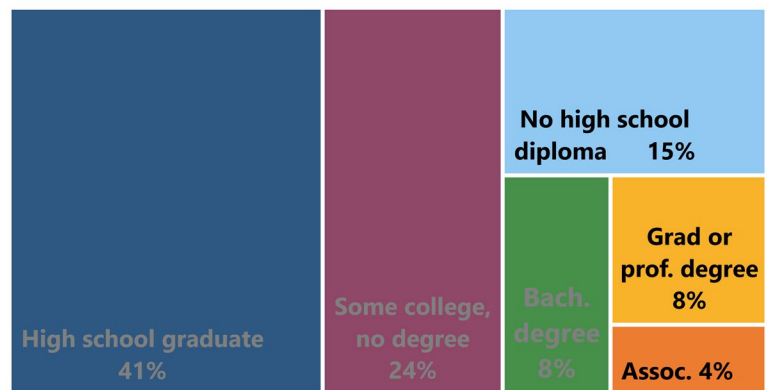
Housing

- **Homeowner vacancy rates are less than 1%**, compared to 2% statewide. Rental vacancy rates are 4%, compared to 7% statewide.
- **The region's housing stock is aging**, with 44% of units built prior to 1980 and another 45% built between 1980 and 1999.
- **23% of occupied housing units lack complete plumbing**, compared to 4% statewide. This includes 100% in Diomedes, 98% in Stebbins, and 96% in Wales.
- **15% percent of units lack complete kitchen facilities**, compared to 3% statewide.

Education

- The 2019-20 Nome Public Schools graduation rate was 83% and Bering Strait School District was 77%. This compares to a 79% statewide rate. Both districts had a 90% attendance rate.
- Bering Strait School District has a **teacher turnover rate of about 35% a year**,² compared to 2% statewide

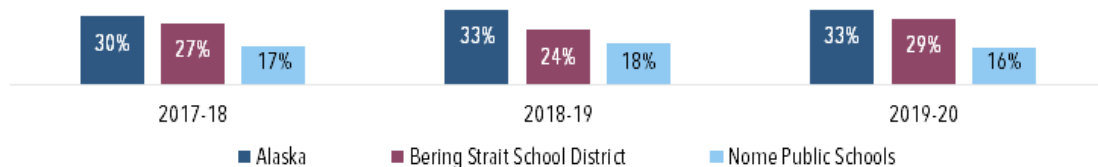
Highest Educational Attainment, Population 25 Years of Age and Older



Source: AK Department of Education and Early Development.

- A high school degree is the highest level of educational attainment for 41% of regional adults. **20% have earned a post-secondary degree.**
- While early care and learning services are available (primarily Head Start) in most communities, **kindergarten readiness assessment scores in Nome Public Schools are about half as high as statewide averages.**

Alaska Developmental Profile Assessment Scores



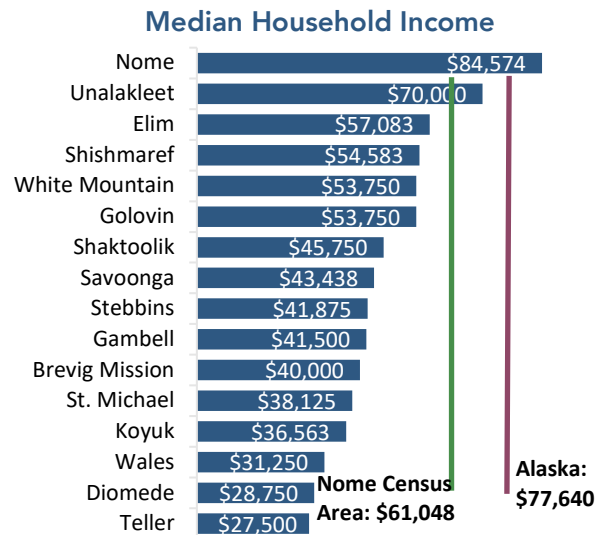
Source: AK Department of Education and Early Development.

Note: Percent consistently demonstrating 11 of 13 developmental goals.

²Bobby Bolen, Bering Strait School District superintendent, phone interview, July 1, 2021.

Economy and Employment

- In 2020, 314 employers operated in the region, down from a peak of 361 in 2014.
- **Self-employment increased over the past decade**, from 439 to 551 establishments.
- Predominant sectors include local government, education and health care services, trades, transportation, and utilities.
- **Unemployment rates in the region are higher than statewide, at 10.5% for 2020** in the, compared to 7.8% for Alaska.
- **Median household income in the region was \$60,000** in 2019, less than the Alaska median income of \$77,600.



Source: ACS 2015-2019 Five-Year Estimates

Poverty and Assistance Programs

- **24% of children in the region live in homes that are below the Alaska federal poverty line**, compared to 10% of children in Alaska.
- The percent of **children living in homes below the poverty line is highest in Diomede, at 74%**, followed by Brevig Mission (62%).

Climate Change

- Climate change increasingly impacts daily life and traditional practices in the region and is rated as a top challenge by the region's residents.
- Thawing permafrost and erosion are damaging infrastructure and homes and driving up costs, and warming oceans are changing subsistence practices and resource availability, impacting food security.
- Communities are responding with climate change adaptation action plans that incorporate traditional knowledge.

COVID-19 Impacts

Economic Impacts

Early impacts of the COVID-19 pandemic were analyzed through use of public data and survey results. Economic impacts of the COVID-19 pandemic, thus far, are mixed.

- The region **lost 6% of its workforce** between 2019 and 2020.
- **Wages increased by 4%** between 2019 and 2020.
- **Total personal income increased 3%** in 2020 from 2019. A 9% increase in transfer payments (payments from government to individuals) drove that increase.
- The Paycheck Protection Program (PPP) grants to Nome Census Area totaled approximately **\$8.3 million to 71 businesses and organizations**.
- **Unemployment insurance (UI) benefits paid to residents more than doubled** from 2019 to 2020. The number of claimants peaked in May of 2020 (557), at three times the number of UI claimants in May 2019 (181). The number of 2021 claimants decreased.

Among many economic considerations, the following factors may impact sectors of the Bering Strait economy.

- Lack of alignment between labor supply and need
- Supply chain barriers and changes
- Use of existing and future relief funds
- A changing tourism landscape
- New consumer habits and communication methods

Household Impacts

In addition to the above-mentioned conditions that impacted households, the most frequently cited COVID-19 household impacts reflected in the 2021 survey follow.

- 29% of respondents report they **did not have enough food** at some point because of the pandemic (35% in communities outside Nome).
- Other impacts include **loneliness due to isolation** (41%), **delayed medical** (35%), **delayed dental** visits (32%), and **mental health issues** (20%).
- More than one-third (36%) report the pandemic allowed their family more **positive time together** and they became closer.

Introduction and Methodology

This 2022 Bering Strait Community Needs Assessment updates the 2019 assessment. This report describes and analyzes strengths, challenges, and needs within the Bering Strait region as a whole and within all individual communities in the Kawerak Service Area.

Findings from the assessment are designed to inform strategic planning and help Kawerak ensure the organization's programs and services address community needs as effectively as possible. The assessment may also be used for other purposes, such as to assist with applications for funding and meet program reporting requirements.

Methodology

This study identifies community strengths and needs through systematic and comprehensive evaluation of public data and input from community members.

This report is a composite of several studies referenced in this community needs assessment. Several of these studies are also presented as with this report as stand-alone documents, as indicated. Findings from all studies are integrated into this needs assessment report.

- A description of the region through publicly available data, including socioeconomic, demographic, education, health, and other information.
- An overview of housing conditions, affordability, and services, and other infrastructure in the Kawerak region.
- A profile of education, from early care and learning to post-secondary, including a focused overview of the Kawerak Head Start program.
- Cost of living analysis for the region (separate report provided).
- An analysis of impacts of the ongoing COVID-19 pandemic in the region.
- A child care needs, availability and infrastructure assessment (separate report also provided).
- A regional household survey on community needs, strengths, and challenges, as well as COVID-19 impacts (separate report also provided).

Data Sources

This report draws on an array of data from local, state, and federal departments, state and national research centers, private data sources, and other organizational data. For all sources, the most currently available data was collected. Due to the COVID-19 pandemic some public data that is typically available is delayed or not available.

Community-level data was obtained wherever possible, while some data is only available at the regional level. Several regions were used as a proxy for Kawerak Service Area data, including the Nome Census Area and the Norton Sound Health Corporation region. In a few cases (where noted), Northern Region data was the only information available, which includes the North Slope Borough, Nome Census Area, and Northwest Arctic Borough.

Data for this report was compiled between July and December 2021. Below is a brief description of key data sources used in this report.

SOCIO-ECONOMIC AND DEMOGRAPHIC DATA SOURCES

The socioeconomic data presented in this report is publicly available, compiled by public agencies or nonprofit organizations. Data in this section is sourced primarily from two locations: the U.S. Census American Community Survey, and the State of Alaska Department of Labor and Workforce Development Research and Analysis Office. Where possible and appropriate, data for the Kawerak Service Area is compared to the statewide average.

Alaska Department of Labor and Workforce Development (ADOLWD) – Research and Analysis Office

The Research and Analysis group within the ADOLWD analyzes and reports population, economics, and employment data for the State of Alaska. The Population and Census unit within the Research and Analysis group estimates current population for every community, borough, census area and other statistical areas in the state. In Alaska, a census area is a U.S. Census Bureau-designated equivalent to a county in the areas within the state's Unorganized Borough.

The primary inputs of the annual population model include decennial census counts, current population estimates from the Census Bureau, and the number of Permanent Fund Dividend filers in the community/area. At the community level, only the total population is estimated. For larger areas, the Population Unit provides gender, race, and age distribution within the area.

The ADOLWD Labor Market Unit reports monthly employment statistics, unemployment rates, wages by occupation, and quarterly census of employment and wages. These figures are reported at the census area level for all of Alaska, as well as statewide.

U.S. Census Bureau – American Community Survey (ACS)

The ACS, administered annually by the U.S. Census Bureau, collects demographic and socioeconomic data through a random mail and online survey process. The ACS is considered the most comprehensive survey of socioeconomic and demographic characteristics in the nation.

At the national, state, and large metropolitan area levels, the ACS reports one-year estimates. Due to the smaller-sized populations in towns and census-designated places (those communities identifiable by name but not within an incorporated place), the sample in these areas is not large enough to produce single-year estimates and instead produces five-year averages. Thus, this report uses five-year estimates when reporting ACS data by community.

The most recent five-year ACS estimates are for the 2015-2019 period. The Census Bureau tries to include responses from each of the sixty months within the five-year period. Where appropriate, the Census Bureau assigns extra weight to more recent responses when finalizing their estimates. Finally, as the ACS is a product of a population sample and not a census of the population, there is some random sampling error associated with the estimates.

Throughout this report, Alaska Native refers to Alaska Native and/or American Indian people in any combination with any other races unless otherwise noted (e.g., Alaska Native alone). These data provide the most accurate picture of the Alaska Native population within the Kawerak Service Area (i.e., Nome Census Area).

COMMUNITY HEALTH DATA

Alaska Behavioral Risk Factor Surveillance System (BRFSS) survey is a national CDC grant-funded telephone survey of randomly selected adults regarding health-related behaviors. There are national questions and optional modules specific to Alaska. BRFSS data were obtained through a special data request submitted to ADHSS. Data are presented for the Norton Sound Health Corporation service area and the rest of Alaska.

Alaska child safety and maltreatment services data are maintained within ADHSS, Office of Children's Services (OCS). McKinley Research Group obtained OCS service data solely specific to Nome OCS office assignments through a special data request submitted to ADHSS. OCS research analysts compiled the data; McKinley Research Group reported data findings. OCS field definitions were obtained via OCS web report.

Communicable disease data specific to Alaska is collected and maintained through ADHSS, Division of Public Health, Section of Epidemiology. McKinley Research Group submitted a special data request to ADHSS to obtain regional tuberculosis data (as per defined public health region). Chlamydia and gonorrhea data, specific to NSHC service area and Alaska statewide, was also obtained through a data request to ADHSS.

Health Facilities Reporting Data (HFRD) is collected by the Alaska Health Facilities Data Reporting Program. HFRD is maintained through ADHSS, Office of Substance Misuse and Addiction Prevention. The program collects inpatient and outpatient discharge data from Alaska health care facilities. HFRD does not include military hospitals. The data collected comprise the Alaska Inpatient Database and the Alaska Outpatient Database. Health facilities discharge data show utilization of health services and provide evidence of the conditions for which people receive treatment. Under 7 AAC 27.660, HFRD includes neonatal abstinence syndrome (NAS) information, specifically associated with neonatal withdrawal symptoms for maternal use of drugs of addiction, as per ICD-10-CM code.

HRSA Uniform Data Systems (UDS) data from Federally Qualified Health Centers (FQHCs) is submitted annually. Health center information includes quality of care indicator data such as childhood immunization status. McKinley Research Group queried HRSA UDS public data sets to obtain annual childhood immunization and chronic disease rates reported by NSHC, a FQHC.

NSHC provided various service utilization, program, community infrastructure and population health data, upon request. Data were compiled and summarized by McKinley Research Group.

Youth Risk Behavior (YRBS) survey is a school-based survey of high school students administered by ADHSS Alaska Youth Risk Behavior Surveillance System (YRBSS) in cooperation with the Department of Education & Early Development. YRBS is a survey administered every other year to all high school students (grades 9 through 12) regarding risk-related behaviors. The anonymous nationwide survey assesses youth risk in a minimum of six areas:

- Behaviors that contribute to unintentional injuries and violence
- Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases including HIV infection
- Alcohol and other drug use
- Tobacco use
- Unhealthy dietary behaviors
- Inadequate physical activity

YRBS data were obtained from the Alaska YRBS Tableau Dashboard. The Dashboard provides estimates for school district or regional prevalence of high school student risk or protective behaviors. The local YRBS dataset includes students in public traditional and alternative high schools. YRBS data specific to the Nome and Bering School Districts was not available either because the district(s) elected not to participate in the 2019 survey, or the response rate was not adequate to weight data. YRBS data reflected in this report is Alaska statewide data collected from students in traditional high schools.

COMMUNITY ENGAGEMENT

Due to the ongoing COVID-19 pandemic, McKinley Research Group was unable to conduct in-person site visits to Kawerak communities and offices. Instead, McKinley Research Group conducted over 50 executive interviews with Kawerak staff and regional residents.

SURVEYS

Kawerak Service Area households were surveyed in an online and mail survey in October through December 2021 about community strengths, challenges, and needs. Individual household needs and impacts of COVID-19 were also assessed. In total, 534 surveys were completed. Detailed results are available in a separate report, *Community Needs and COVID-19 Impacts Survey Results 2022*.

Regional households with children under 13 years of age were also surveyed about child care needs, availability, and infrastructure. The online and in-person survey ran from June through September 2021. In total, 261 households responded. Details on the survey and findings are available in a separate report: *Bering Strait Child Care Needs, Availability, and Infrastructure Analysis*.

Report Organization

This report is divided into the following sections:

- **Executive Summary.** An overview of study findings.
- **Chapter 1: Overview of Kawerak, Inc.** – provides a brief history and description of Kawerak programs and services, the geographic region, and populations Kawerak serves, and Kawerak’s governing structure and staff resources.
- **Chapter 2: Demographic and Socio-economic Profile** – presents population estimates and projections, household and family characteristics, household and family economic indicators, employment and employers, and economic activity and trends.
- **Chapter 3: Housing and Infrastructure** – describes housing and homelessness in the region, including housing statistics, conditions, affordability, and services. Utility, transportation, and communication infrastructure is also documented and analyzed.
- **Chapter 4: Education and Early Care and Learning** – profiles education indicators from birth through post-secondary levels, including child care availability, education attainment, assessment data, enrollment, graduation and drop-out rates, and training opportunities. A summary of results from the child care needs, availability, and infrastructure study is included in this chapter.

- **Chapter 5: Kawerak Head Start Program in Focus** - focuses on Kawerak Head Start data and needs, including attendance, health, and other demographic information for children served, as well as staff resources.
- **Chapter 6: Community Health and Safety** - summarizes health and wellness data for the region, including for youth and families. Social services are also discussed, as is public safety infrastructure and programming.
- **Chapter 7: Cost of Living** - an analysis of the cost of living in Nome and in outlying communities in the region compared to Anchorage.
- **Chapter 8: Community Engagement - Household Questionnaire and Interview Results** - Survey results present responses by region and community. Interview results identify trends and important takeaways from the series of community and parent discussions conducted during the study period.
- **Chapter 9: COVID-19 Impacts** - an assessment of impacts measurable to date from the pandemic.

Chapter 1: Overview of Kawerak, Inc.

Bering Strait Region

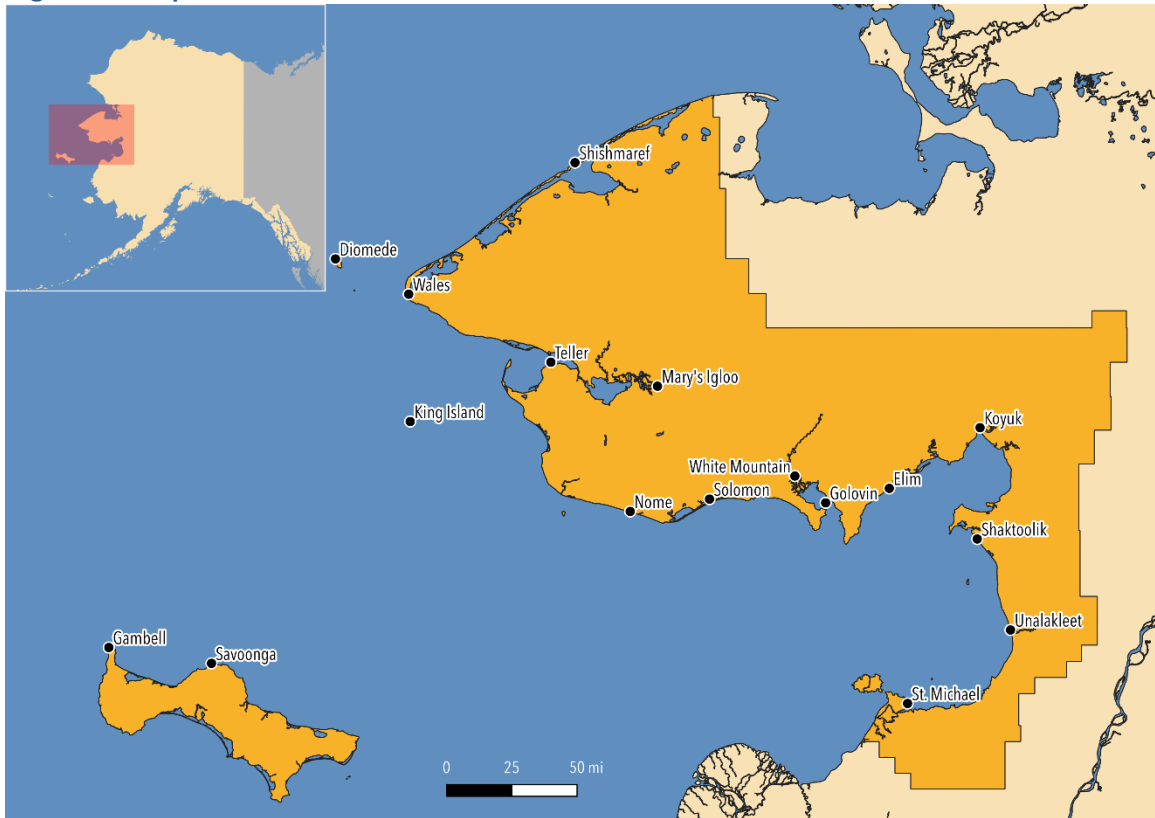
The Bering Strait Region, which overlaps closely with Nome Census Area, in northwestern Alaska covers approximately 2.3 million acres on the Seward Peninsula. The region includes contains 570 miles of coastline, 20 communities, St. Lawrence Island, King Island, Little Diomede Island, and the communities along the eastern and southeastern shores of Norton Sound. This area comprises the Kawerak Service Area and is home to a varied landscape of open ocean, seasonal sea ice, coastal waters, river deltas, tundra, hilly regions, and mountain ranges.

KAWERAK SERVICE AREA

Kawerak, Inc. serves the 20 communities of the Bering Strait Region. Sixteen of the communities are permanently inhabited, while four (*Council*, *King Island*, *Mary's Igloo*, and *Solomon*, in italics above) are visited seasonally, primarily for fish camps or other subsistence uses.

- Brevig Mission
- *Council*
- Diomede
- Elim
- Gambell
- Golovin
- *King Island*
- Koyuk
- *Mary's Igloo*
- Nome
- St. Michael
- Savoonga
- Shaktoolik
- Shishmaref
- *Solomon*
- Stebbins
- Teller
- Unalakleet
- Wales
- White Mountain

Figure 1. Map of Kawerak Service Area



Source: McKinley Research Group and Kawerak Inc.

The region includes Nome, the only first-class city, and fifteen second class cities. Each community includes multiple governmental entities: a municipal government, at least one federally recognized tribal government (Indian Reorganization Act (IRA) or Traditional Council), and at least one Native Corporation.

Three culturally distinct groups live in the Kawerak Service Area: Inupiaq on the Seward Peninsula and Diomedede Islands, Central Yup'ik in the villages south of Unalakleet (generally), and Siberian Yupik on St. Lawrence Island.

Overview of Kawerak

The Bering Straits Native Association (BSNA) formed in 1967 as an association of regional villages. BSNA incorporated Kawerak as a regional non-profit, now a 501(c)(3), in 1973. Kawerak's mission follows.

Kawerak Mission, Vision, and Values

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

Kawerak's vision includes:

- The people have a high quality of life because all self-sufficient villages in the region are adequately resourced with housing, funding, technology and infrastructure, and a healthy economy.
- There is a cultural renaissance with reinvigorated language and traditional ways of life being continued on to future generations.
- There is safety & security, and subsistence resources are protected.
- There is Tribal sovereignty and meaningful collaboration with other government entities.

Kawerak works within a set of values important to provide context to this analysis:

- Teamwork, unity, and achieving positive results in all our work.
- Perseverance, integrity and working hard to overcome challenges to create a better future.
- Upholding our Tribes along with their cultures, language, heritage, and traditional ways of life.
- Engaging with, respecting, and supporting each other.
- Fair healthy relationships based on respect, trust, honesty, persevering together, openness, giving everyone a voice, and agreeing to disagree.
- Spirituality, community, generosity and each individual's purpose and voice.
- Keeping a positive attitude and outlook in all situations and never losing our sense of humor.
- Leadership that listens, is responsible, experienced, capable, and supportive of self-governance. These leaders are role models and give positive advice.
- Education, learning, knowledge, and the use of wisdom in building our people up to serve their communities and villages.

Kawerak Programs and Services

Kawerak serves communities throughout the Bering Strait Region through six main program areas:

Community services: children and families, wellness, transportation, tribal affairs, and VSPO.

Cultural and regional development: community planning and development, Eskimo Heritage Program, and Katirvik Cultural Center.

Educational services: Pre-K to postsecondary education and community education.

Employment services: including employment and training programs for youth and adults.

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

Supportive services: various forms of financial and other assistance.

Kawerak Governance, Structure, and Staffing

All 20 villages in the Kawerak region are represented by a tribal government. Kawerak bylaws require each tribe appoint a village council president or a delegate to the Board of Directors. Additional board members include two Elder representatives and the chair of the Norton Sound Health Corporation Board of Directors.

Of the 20 villages, 16 are currently occupied for most of the year. Aside from government entities located in these 16 villages, governance for the four primarily unoccupied villages is headquartered in other Kawerak communities. The Mary's Igloo Traditional Council is located in Teller, where many traditional Mary's Igloo residents now live. King Island is recognized as a distinct village corporation under the Alaska Native Claims Settlement Act (ANCSA). The King Island Native Community operates an IRA Council based in Nome. Council functions primarily as a fish camp for Nome residents. The Inupiaq Village of Council is now headquartered in Nome, which is connected by road to Council. The Solomon Traditional Council is also headquartered in Nome.

Federally recognized tribes within the Service Area include:

- Native Village of Brevig Mission
- Chinik Eskimo Community (Golovin)
- Native Village of Council (Nome)
- Native Village of Diomedede (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

Land Ownership

Most of the Bering Strait region, including the 2.7 million-acre Bering Land Bridge National Preserve, is managed by the federal government. A Bureau of Land Management (BLM) office is located in Nome. The State of Alaska is the second largest landholder in the region. The Bering Straits Native Corporation (BSNC) is the primary private landowner, with combined surface and subsurface rights equaling about two million acres. Each village corporation holds title to surface lands surrounding the village as determined in the Alaska Native Claims Settlement Act (ANCSA). Elim, Gambell, and Savoonga landownership is different from other villages, with the Elim Native Corporation owning surface and sub-surface rights and Gambell and Savoonga ownership of all of St. Lawrence Island.

Staffing

Kawerak employs over 200 people in the region. In October of 2021, 208 individuals were employed, including 135 (65%) in Nome and 73 (35%) in the other villages in the service area. Each village outside Nome hosts a Kawerak Tribal Coordinator and Tribal Family Coordinator position. Some villages also have VPSO staff, and those with Early Head Start and Head Start (EHS/HS) programs have several staff related to operation of these programs.

Chapter 2: Demographic and Socio-Economic Profile

Population Overview

- According to the 2020 US Census, the population of the Nome Census Area totals 10,046 people, an increase of 554 people (5.8%) between 2010 and 2020.
- Nome, the regional population hub, is home to 37% of people in the census area (3,699 in 2020).
- Outside Nome, the largest communities in the census are include Savoonga (8%), Unalakleet (8%), Gambell (6%), Stebbins (6%), and Shishmaref (6%), each with more than 500 residents.
- Among communities in the area, Savoonga grew the most, by 24%, in the last decade. St. Michael and Wales both grew by 16%. Diomedé's population declined the most of area communities, by 28%, followed by Shaktoolik (16%).

Table 1. Population and Annual Change, Nome Census Area, 2011-2020

| Year | Population | Annual change | Annual % change |
|------|------------|---------------|-----------------|
| 2010 | 9,492 | - | - |
| 2011 | 9,712 | +220 | +2.3% |
| 2012 | 9,847 | +135 | +1.4% |
| 2013 | 9,874 | +27 | +0.3% |
| 2014 | 9,972 | +98 | +1.0% |
| 2015 | 10,030 | +58 | +0.6% |
| 2016 | 10,054 | +24 | +0.2% |
| 2017 | 10,009 | -45 | -0.4% |
| 2018 | 9,970 | -39 | -0.4% |
| 2019 | 9,850 | -120 | -1.2% |
| 2020 | 10,046 | +196 | +2.0% |

Source: 2011-2019 ADOLWD Population Estimates, 2021 unless otherwise noted. 2010 and 2020 figures are from the US Census Bureau, 2010 and 2020 Decennial Censuses.

Table 2. Kawerak Community Population and Percent of Nome Census Area Population, 2020

| Community | Community Population | % Nome Census Area Population |
|----------------|----------------------|-------------------------------|
| Brevig Mission | 428 | 4% |
| Diomedea | 83 | 1% |
| Elim | 366 | 4% |
| Gambell | 640 | 6% |
| Golovin | 175 | 2% |
| Koyuk | 312 | 3% |
| Nome | 3,699 | 37% |
| St. Michael | 465 | 5% |
| Savoonga | 835 | 8% |
| Shaktoolik | 212 | 2% |
| Shishmaref | 576 | 6% |
| Stebbins | 634 | 6% |
| Teller | 249 | 2% |
| Unalakleet | 765 | 8% |
| Wales | 168 | 2% |
| White Mountain | 185 | 2% |

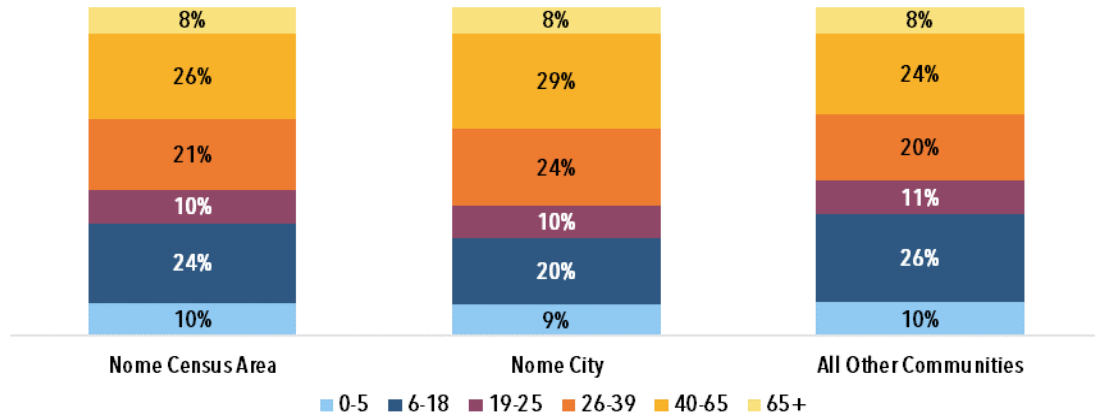
Source: US Census Bureau, 2020 Decennial Census.

Note: The remaining 2% of people in the NCA are those living in Port Clarence or outside any Kawerak communities, or those living in group quarters.

Population by Age Group

- Regionally, the population of 19- to 25-year-olds declined over the last decade by about 5%, while the 65 and older age group increased by 33%.
- In the Nome Census Area, one third (34%) of the population is 18 years of age or younger, 31% are 19 through 39 years of age, 34% are 40 years of age or older.
- In the community of Nome, 29% of the population is 18 years of age or younger, compared to 36% in all other Nome Census Area communities.

Figure 2. Population by Age Group, Percent, Nome Census Area, City of Nome, and All Other Communities, 2020



Source: ADOLWD, 2021 and MRG estimates.

Table 3. Nome Census Area, Population by Age Group, 2011-2020

| Year | 0-5 | 6-18 | 19-25 | 26-39 | 40-64 | 65+ | Total |
|------|-------|-------|-------|-------|-------|-----|---------|
| 2010 | 1,197 | 2,265 | 1,046 | 1,713 | 2,669 | 603 | 9,492 |
| 2011 | 1,252 | 2,288 | 1,091 | 1,784 | 2,684 | 613 | 9,712 |
| 2012 | 1,272 | 2,261 | 1,138 | 1,824 | 2,716 | 636 | 9,847 |
| 2013 | 1,243 | 2,292 | 1,139 | 1,821 | 2,716 | 664 | 9,875* |
| 2014 | 1,211 | 2,336 | 1,122 | 1,922 | 2,694 | 687 | 9,972 |
| 2015 | 1,199 | 2,379 | 1,082 | 2,025 | 2,645 | 700 | 10,030 |
| 2016 | 1,145 | 2,403 | 1,076 | 2,023 | 2,669 | 739 | 10,055* |
| 2017 | 1,110 | 2,416 | 1,035 | 2,088 | 2,623 | 737 | 10,009 |
| 2018 | 1,112 | 2,400 | 1,021 | 2,089 | 2,609 | 739 | 9,970 |
| 2019 | 1,042 | 2,398 | 978 | 2,076 | 2,570 | 786 | 9,850 |
| 2020 | 1,010 | 2,242 | 1,025 | 2,149 | 2,613 | 825 | 10,046 |

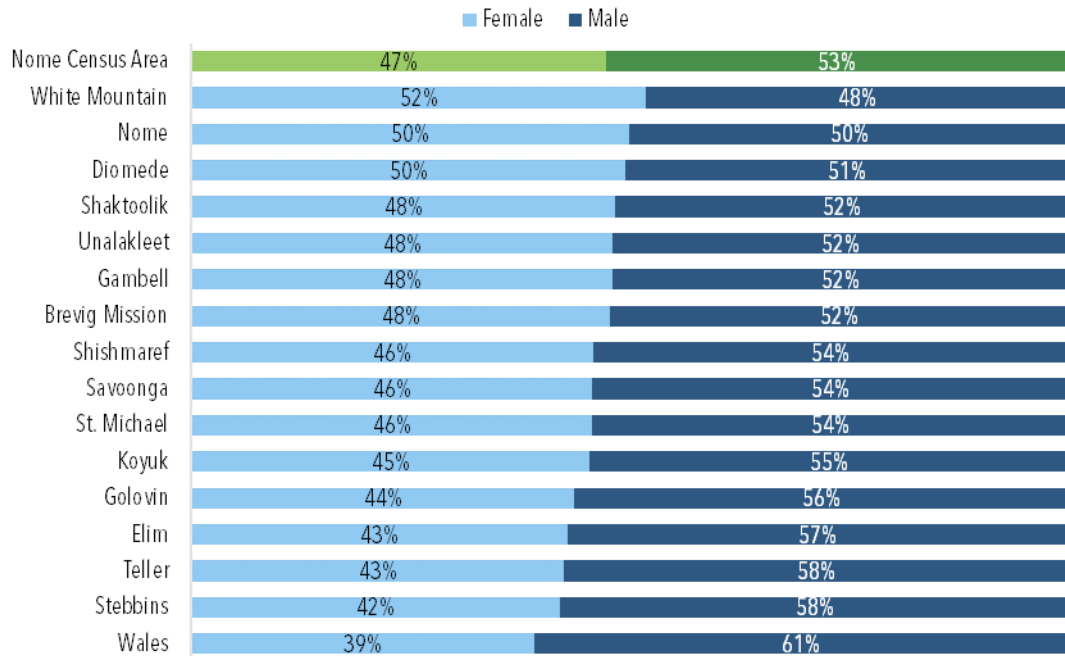
Source: ADOLWD, 2021 and MRG estimates.

Note: * denotes those totals where due to rounding they are different from the annual Nome Census Area population in the table above.

Population by Gender

- Slightly more than half the population of the Nome Census Area is male (53%) with females making up 47%.
- White Mountain, which is 52% female and 48% male, is the only community with a higher proportion of females than males.
- Wales, with a population that includes 61% males, has the highest percentage of male residents. Golovin, Elim, Teller, and Stebbins populations are all more than 55% male.

Figure 3. Gender, Kawerak Communities and Nome Census Area, Percent, 2019



Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Population by Race

- Three-quarters (75%) of the Nome Census Area population identify as Alaska Native or American Indian alone (75%); compared to 15% of the population statewide. White residents make up 14% of the Nome Census Area, compared to 59% statewide.
- Other race/ethnicities in the Nome Census Area include 1% Asian, about 1% Black or African American, and less than 1% Native Hawaiian or Pacific Islanders. 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 Kawerak Service Area communities. The only exceptions are Unalakleet (65%) and Nome (68%). Wales and Diomede populations that are 100% Alaska Native or American Indian either alone or in combination with another race.
- In Shishmaref and Elim, 100% of Alaska Native people identify as Inupiat. More than 90% of Alaska Natives in Brevig Mission, Diomede, Golovin, Koyuk, Shaktoolik, Teller, Wales, and White Mountain identify as Inupiat.
- Stebbins, Savoonga, St. Michael, and Gambell are primarily home to Yupik people, comprising 88% to 99% of the Alaska Native people in these communities.

Table 4. Population by Race and Ethnicity Alone, Nome Census Area and Alaska, 2020

| Race | Nome | | Alaska | |
|----------------------------------|---------------|----------|----------------|----------|
| | Count | % Total | Count | % Total |
| One race alone | 9,205 | 92% | 643,867 | 88% |
| Alaska Native/American Indian | 7,556 | 75% | 111,575 | 15% |
| White | 1,422 | 14% | 435,392 | 59% |
| Asian | 111 | 1% | 44,032 | 6% |
| Black or African American | 55 | 1% | 21,898 | 3% |
| Native Hawaiian/Pacific Islander | 5 | <1% | 12,698 | 2% |
| Some Other Race | 56 | 1% | 18,272 | 2% |
| Two or more races | 841 | 8% | 89,524 | 12% |
| Total | 10,046 | - | 733,391 | - |
| Hispanic Origin (of any Race) | - | 2% | - | 7% |

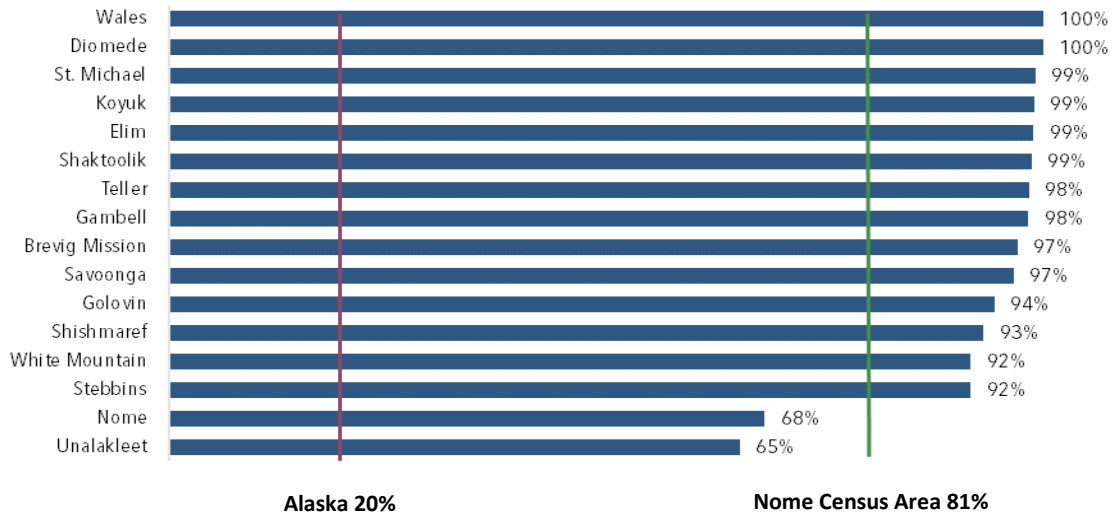
Source: US Census Bureau 2020 Decennial Census.
 Note: Columns may not sum evenly due to rounding.

Table 5. Population by Race Alone, Percent of Total Community Population, Kawerak Communities, 2019 (%)

| Community | Alaska Native/American Indian | White | Black or African American | Asian | Native Hawaiian/Pacific Islander | Some other race alone | Two or more races |
|----------------|-------------------------------|-------|---------------------------|-------|----------------------------------|-----------------------|-------------------|
| Brevig Mission | 91 | 3 | - | - | - | - | 6 |
| Diomede | 100 | - | - | - | - | - | - |
| Elim | 98 | 1 | - | - | - | - | 1 |
| Gambell | 97 | 2 | - | - | <1 | - | 1 |
| Golovin | 92 | 4 | - | - | - | 1 | 2 |
| Koyuk | 97 | 1 | - | <1 | - | - | 2 |
| Nome | 58 | 28 | 2 | 1 | <1 | <1 | 11 |
| St. Michael | 97 | 1 | - | - | - | - | 2 |
| Savoonga | 96 | 3 | <1 | - | - | - | 1 |
| Shaktoolik | 98 | 1 | - | - | - | - | 1 |
| Shishmaref | 91 | 6 | <1 | - | - | - | 2 |
| Stebbins | 89 | 7 | 2 | <1 | - | - | 2 |
| Teller | 95 | - | 2 | - | - | - | 3 |
| Unalakleet | 61 | 17 | - | 17 | - | - | 5 |
| Wales | 99 | - | - | - | - | - | 1 |
| White Mountain | 90 | 8 | - | - | - | - | 1 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Figure 4. Alaska Native Alone or in Combination with Another Race, Percent, Kawerak Communities, 2019



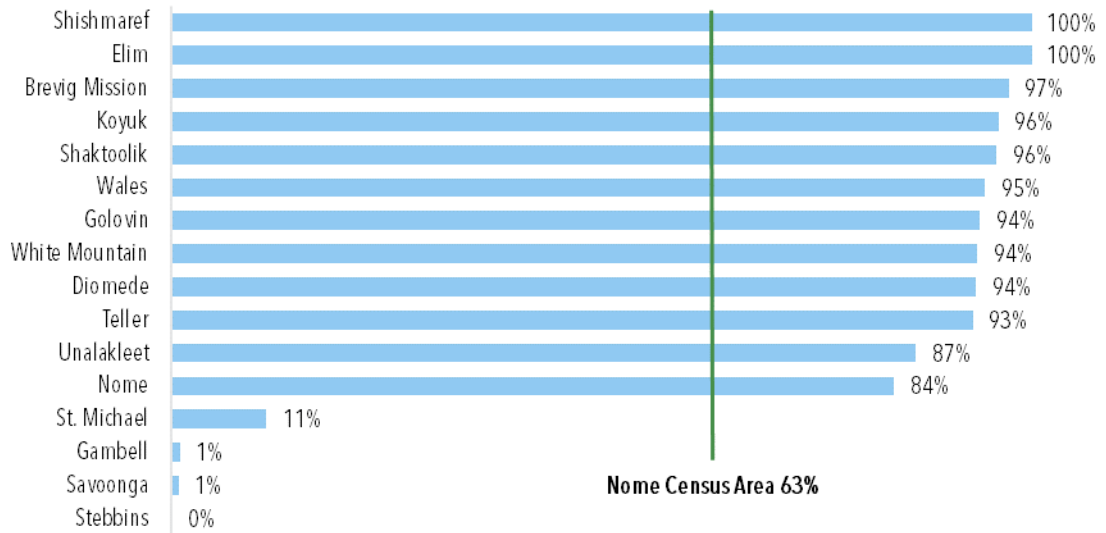
Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Table 6. Percent Identifying with Tribal Group, Kawerak Communities, 2019 (%)

| Community | Inupiat | Central Yup'ik/ Siberian Yupik | Athabascan | Other Alaska Native | American Indian | Not specified |
|------------------|---------|-----------------------------------|------------|------------------------|--------------------|------------------|
| Alaska | 21 | 28 | 14 | 30 | 11 | <1 |
| Nome Census Area | 63 | 33 | 1 | 3 | 1 | <1 |
| Brevig Mission | 97 | 3 | - | 1 | - | - |
| Diomede | 94 | 2 | - | 4 | - | - |
| Elim | 100 | - | - | - | - | - |
| Gambell | 1 | 98 | - | <1 | - | - |
| Golovin | 94 | 1 | - | 4 | 1 | - |
| Koyuk | 96 | 2 | <1 | 1 | - | - |
| Nome | 84 | 7 | 2 | 5 | 3 | <1 |
| St. Michael | 11 | 88 | - | - | - | <1 |
| Savoonga | 1 | 98 | 1 | 1 | - | - |
| Shaktoolik | 96 | 4 | - | <1 | - | - |
| Shishmaref | 100 | - | - | - | - | - |
| Stebbins | <1 | 99 | - | - | - | <1 |
| Teller | 93 | 2 | - | 4 | - | <1 |
| Unalakleet | 87 | 7 | 1 | 7 | - | - |
| Wales | 95 | 3 | - | 2 | - | - |
| White Mountain | 94 | 1 | - | 6 | - | - |

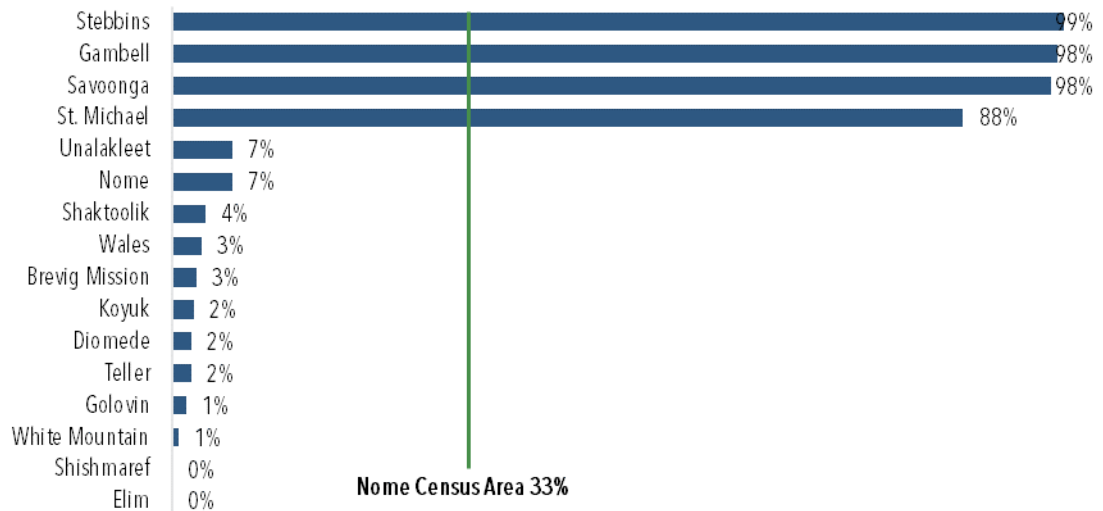
Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Figure 5. Inupiat People as a Percent of Alaska Native or American Indian Population, Kawerak Communities, 2019



Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Figure 6. Yupik People as a Percent of Alaska Native or American Indian Population, Kawerak Communities, 2019



Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Language

- In the Nome Census Area, 69% of people speak English at home. The percentage of people aged five and older who speak a language other than English in the census area, at 31%, is nearly double that of the percent statewide (16%).

- In ten Kawerak communities, more than three-quarters of residents only speak English at home. For four communities, between one-quarter and one-third of residents speak a language other than English at home: Brevig Mission (26%), Wales (28%), Shishmaref (32%), and Unalakleet (35%).
- In Savoonga and Gambell, more than three-quarters of residents speak a language other than English at home, with 77% of people in Savoonga and 80% of people in Gambell speaking another language.
- Siberian Yupik (also called St. Lawrence Island Yupik) is spoken in Gambell and Savoonga. According to the Alaska Native Language Center, many children in Gambell and Savoonga learn Siberian Yupik as the first language of the home.
- In Unalakleet, 20% of people speak an Asian or Pacific Island language at home.
- Overall, 95% of people in the Nome Census Area speak English “very well”, the same as statewide.

Table 7. Percent of English Language Speakers by Language Spoken at Home, Kawerak Communities and Alaska, 2019 (%)

| Community | Speak only English | Speak a language other than English |
|------------------|--------------------|-------------------------------------|
| Alaska | 84 | 16 |
| Nome Census Area | 69 | 31 |
| Brevig Mission | 74 | 26 |
| Diomede | 83 | 17 |
| Elim | 90 | 10 |
| Gambell | 20 | 80 |
| Golovin | 85 | 15 |
| Koyuk | 80 | 20 |
| Nome | 78 | 22 |
| St. Michael | 84 | 16 |
| Savoonga | 23 | 77 |
| Shaktoolik | 79 | 21 |
| Shishmaref | 68 | 32 |
| Stebbins | 75 | 25 |
| Teller | 83 | 17 |
| Unalakleet | 65 | 35 |
| Wales | 72 | 28 |
| White Mountain | 95 | 5 |

Source: US Census Bureau, ACS, 2015-2019 Five-Year Estimates

Note: Language spoken at home is for the population 5 years old and older.

Components of Population Change

Population change occurs through births and deaths, and migration to and from other areas.

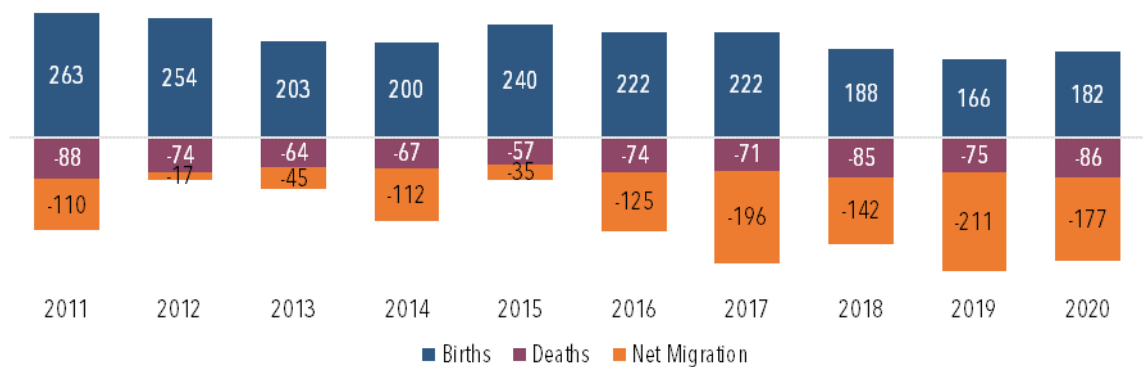
- In the past decade, more people moved away from Nome Census Area than in, resulting in negative net migration. Overall, the area population grew due to a higher number of births than deaths and migration combined.
- There were 2,140 births in the Nome Census Area from 2011-2020, and 741 deaths. Combined with 1,184 people leaving the census area in the same decade, the area experienced a net population gain of 215 people from 2011 to 2020.
- Nome Census Area population is projected to grow by 13% to 11,059 by 2045. In 2025, the population is projected to be 2% higher than in 2020, an increase of 208 people.

Table 8. Population Change and Components, Nome Census Area, 2011-2020

| Year | Births | Deaths | Net Migration | Population Change |
|------------------------|---------------|-------------|---------------|-------------------|
| 2011 | +263 | -88 | -17 | +158 |
| 2012 | +254 | -74 | -45 | +135 |
| 2013 | +203 | -64 | -112 | +27 |
| 2014 | +200 | -67 | -35 | +98 |
| 2015 | +240 | -57 | -125 | +58 |
| 2016 | +222 | -74 | -124 | +24 |
| 2017 | +222 | -71 | -196 | -45 |
| 2018 | +188 | -85 | -142 | -39 |
| 2019 | +166 | -75 | -211 | -120 |
| 2020 | +182 | -86 | -177 | -81 |
| Total 2011-2020 | +2,140 | -741 | -1,184 | 215 |

Source: ADOLWD, 2021.

Figure 7. Components of Population Change, Nome Census Area, 2011-2020



Source: ADOLWD, 2021.

Figure 8. Migration based on PFD Applications, Nome Census Area, 2011-2020

Source: ADOLWD, 2021.

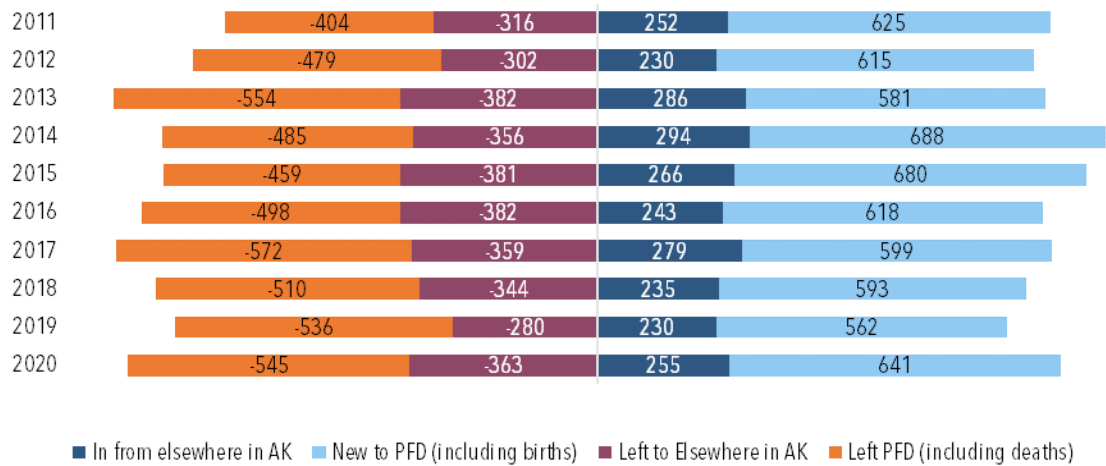
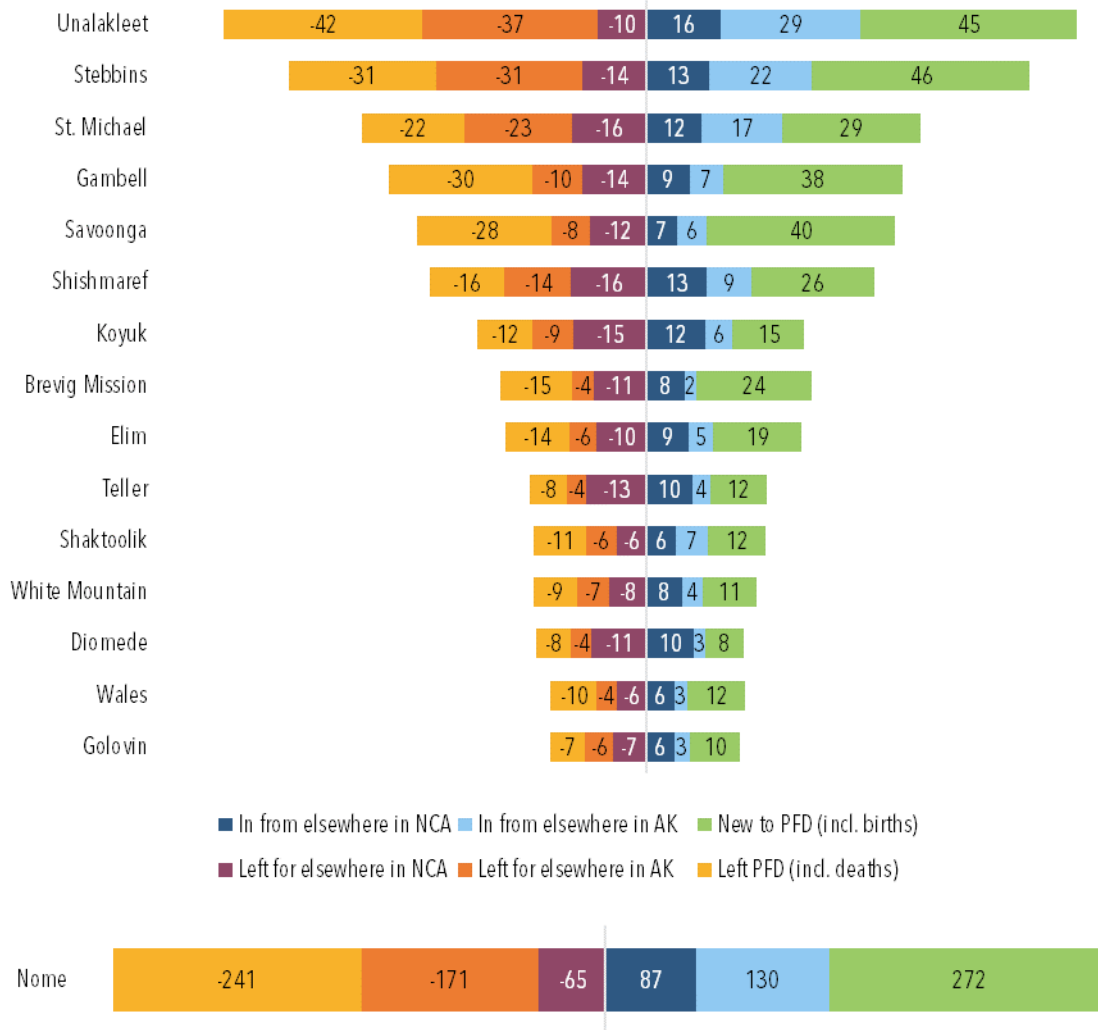


Table 9. Migration by Kawerak Community Based on PFD Applications, 2011-2020, 10-Year Average

| Community | In from... | | | Out to... | | | Net (Annual Avg.) |
|----------------|------------------|----------------|---------------------------|------------------|----------------|-------------------------|-------------------|
| | Elsewhere in NCA | Outside of NCA | New to PFD (incl. births) | Elsewhere in NCA | Outside of NCA | Left PFD (incl. deaths) | |
| Brevig Mission | 8 | 2 | 24 | -11 | -4 | -15 | 4 |
| Diomedede | 10 | 3 | 8 | -11 | -4 | -8 | -3 |
| Elim | 9 | 5 | 19 | -10 | -6 | -14 | 3 |
| Gambell | 9 | 7 | 38 | -14 | -10 | -30 | 0 |
| Golovin | 6 | 3 | 10 | -7 | -6 | -7 | -1 |
| Koyuk | 12 | 6 | 15 | -15 | -9 | -12 | -2 |
| Nome | 87 | 130 | 272 | -65 | -171 | -241 | 11 |
| St. Michael | 12 | 17 | 29 | -16 | -23 | -22 | -2 |
| Savoonga | 7 | 6 | 40 | -12 | -8 | -28 | 4 |
| Shaktolik | 6 | 7 | 12 | -6 | -6 | -11 | 2 |
| Shishmaref | 13 | 9 | 26 | -16 | -14 | -16 | 2 |
| Stebbins | 13 | 22 | 46 | -14 | -31 | -31 | 6 |
| Teller | 10 | 4 | 12 | -13 | -4 | -8 | 1 |
| Unalakleet | 16 | 29 | 45 | -10 | -37 | -42 | 2 |
| Wales | 6 | 3 | 12 | -6 | -4 | -10 | 1 |
| White Mountain | 8 | 4 | 11 | -8 | -7 | -9 | 0 |

Source: ADOLWD, 2021. NCA denotes Nome Census Area.

Figure 9. Migration by Kawerak Community Based on PFD Applications, 2019-2020



Source: ADOLWD, 2021.
 Note: NCA denotes Nome Census Area.

Households and Families

- Average household size in the Nome Census Area totaled 3.3 people from 2015 to 2019. Savoonga had the largest average household size, at 4.9 people, with St. Michael close behind at 4.8. White Mountain averaged the smallest household size at 2.5 people.
- Of the more than 2,800 households in the Nome Census Area, three-quarters (75%) are family households, and one-quarter (25%) are non-family households. Family households include those with two or people related by marriage or by birth.

- For all communities except Diomede, at least 65% of households are family households. In Diomede, just under half of households are family households (47%).
- In the census area, half (50%) of family households are married couple households.
- More than 60% of all non-family households in Nome Census Area communities are people who live alone.

Table 10. Households by Type, Kawerak Communities and Nome Census Area, 2019

| Community | Family Households | | Nonfamily Households | | Total Households |
|------------------|-------------------|-----|----------------------|-----|------------------|
| | Total | % | Total | % | |
| Nome Census Area | 2,128 | 75% | 716 | 25% | 2,844 |
| Brevig Mission | 80 | 83% | 16 | 17% | 96 |
| Diomede | 16 | 47% | 18 | 53% | 34 |
| Elim | 59 | 88% | 8 | 12% | 67 |
| Gambell | 122 | 80% | 30 | 20% | 152 |
| Golovin | 37 | 79% | 10 | 21% | 47 |
| Koyuk | 67 | 75% | 22 | 25% | 89 |
| Nome | 880 | 69% | 394 | 31% | 1,274 |
| St. Michael | 80 | 90% | 9 | 10% | 89 |
| Savoonga | 172 | 86% | 27 | 14% | 199 |
| Shaktoolik | 76 | 89% | 9 | 11% | 85 |
| Shishmaref | 111 | 82% | 25 | 18% | 136 |
| Stebbins | 108 | 83% | 22 | 17% | 130 |
| Teller | 48 | 80% | 12 | 20% | 60 |
| Unalakleet | 132 | 80% | 34 | 20% | 166 |
| Wales | 36 | 65% | 19 | 35% | 55 |
| White Mountain | 41 | 65% | 22 | 35% | 63 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: Family is defined as a household with two or more people related by marriage or birth. Nonfamily households include people living alone or households not related by marriage or birth.

Table 11. Family Households by Type by Kawerak Community and Nome Census Area, Percent of Family Households, 2019 (%)

| Community | Married Couple | Single Male Head of Household | Single Female Head of Household |
|------------------|----------------|-------------------------------|---------------------------------|
| Nome Census Area | 50 | 22 | 28 |
| Brevig Mission | 46 | 14 | 40 |
| Diomedea | 6 | 50 | 44 |
| Elim | 46 | 25 | 29 |
| Gambell | 44 | 25 | 30 |
| Golovin | 51 | 22 | 27 |
| Koyuk | 37 | 22 | 40 |
| Nome | 55 | 19 | 26 |
| St. Michael | 44 | 31 | 25 |
| Savoonga | 40 | 40 | 20 |
| Shaktoolik | 57 | 12 | 32 |
| Shishmaref | 45 | 18 | 37 |
| Stebbins | 44 | 24 | 31 |
| Teller | 23 | 33 | 44 |
| Unalakleet | 57 | 17 | 26 |
| Wales | 31 | 47 | 22 |
| White Mountain | 27 | 15 | 59 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: Family is defined as a household with two or more people related by marriage or birth.

Table 12. Nonfamily Households by Kawerak Community and Nome Census Area, Percent of Nonfamily Households, 2019 (%)

| Community | Living Alone % | Living with Non-Relatives % |
|------------------|----------------|-----------------------------|
| Nome Census Area | 79 | 21 |
| Brevig Mission | 94 | 6 |
| Diomedea | 78 | 22 |
| Elim | 100 | - |
| Gambell | 77 | 23 |
| Golovin | 80 | 20 |
| Koyuk | 73 | 27 |
| Nome | 77 | 23 |
| St. Michael | 67 | 33 |
| Savoonga | 82 | 19 |
| Shaktoolik | 100 | - |
| Shishmaref | 60 | 40 |
| Stebbins | 77 | 23 |
| Teller | 83 | 17 |
| Unalakleet | 79 | 21 |
| Wales | 84 | 16 |
| White Mountain | 86 | 14 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: Nonfamily households include people living alone or households not related by marriage or birth.

Extended Families and Subfamilies

Subfamilies are those families with one or two parents who do not maintain their own household and instead live in the home of someone else. For instance, a young couple that lives in the household of one set of parents would be considered a subfamily; subfamilies do not have to be related to the householder as in the case of roommates.

- About 10% of the Nome Census Area lived in subfamilies within larger households. Of all households in the Nome Census Area, 13% contained a subfamily.
- In Unalakleet, Wales, and White Mountain, less than 10% of households contained a subfamily. In Brevig Mission, 42% of households contained a subfamily.

Table 13. Subfamilies Living Within a Larger Household, Kawerak Communities and Nome Census Area, Percent of Households and Percent of Population, 2019 (%)

| Community | Households with Subfamilies % | Population in Subfamilies % |
|------------------|-------------------------------|-----------------------------|
| Alaska | 3 | 4 |
| Nome Census Area | 13 | 10 |
| Brevig Mission | 20 | 14 |
| Diomedede | 21 | 19 |
| Elim | 18 | 10 |
| Gambell | 18 | 12 |
| Golovin | 11 | 8 |
| Koyuk | 9 | 6 |
| Nome | 6 | 5 |
| St. Michael | 24 | 19 |
| Savoonga | 40 | 31 |
| Shaktoolik | 26 | 18 |
| Shishmaref | 13 | 7 |
| Stebbins | 38 | 23 |
| Teller | 12 | 8 |
| Unalakleet | 12 | 8 |
| Wales | 13 | 14 |
| White Mountain | 3 | 3 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Households with Children

- More than half of all households in the Nome Census Area contain children under 18 (54%) compared to only about one-third of households statewide (34%).
- Fewer than half of the households in Diomedede (35%), Golovin (49%), Nome (45%), Unalakleet (49%), and White Mountain (40%) have children.
- Children under 18 make up more than half the population living in subfamilies (see previous section for definition) in all but two communities; in Golovin, 50% of the subfamily population are children, and in White Mountain also.
- In Brevig Mission (31%), Diomedede (34%), Gambell (28%), St. Michael (28%), Savoonga (37%), Shaktoolik (28%), and Stebbins (40%), more than one-quarter of children live in a subfamily.

- More than half of all children in all communities, with the exception of Savoonga (49%), live in a household with a parent as the householder.
- In Savoonga (45%), Stebbins (44%), Diomed (34%) more than two-thirds of children live in a household headed by a grandparent, though in most households grandparents are not primarily responsible for the children.

Table 14. Households and Subfamilies with Children, Nome Census Area and Kawerak Communities, 2019

| Community | Households with Children | % of Households with Children | Children in Subfamilies | % of Subfamily Population | % of Children in Subfamilies |
|------------------|--------------------------|-------------------------------|-------------------------|---------------------------|------------------------------|
| Alaska | 87,149 | 34% | 12,947 | 44% | 7% |
| Nome Census Area | 1,547 | 54% | 685 | 66% | 20% |
| Brevig Mission | 60 | 63% | 49 | 78% | 31% |
| Diomed | 12 | 35% | 13 | 72% | 34% |
| Elim | 47 | 70% | 24 | 71% | 21% |
| Gambell | 91 | 60% | 55 | 71% | 28% |
| Golovin | 23 | 49% | 6 | 50% | 12% |
| Koyuk | 51 | 57% | 13 | 65% | 12% |
| Nome | 575 | 45% | 93 | 55% | 8% |
| St. Michael | 76 | 85% | 56 | 75% | 28% |
| Savoonga | 158 | 79% | 148 | 65% | 37% |
| Shaktoolik | 64 | 75% | 34 | 69% | 28% |
| Shishmaref | 81 | 60% | 26 | 63% | 13% |
| Stebbins | 95 | 73% | 100 | 70% | 40% |
| Teller | 32 | 53% | 13 | 72% | 17% |
| Unalakleet | 81 | 49% | 36 | 63% | 25% |
| Wales | 31 | 56% | 16 | 76% | 21% |
| White Mountain | 25 | 40% | 3 | 50% | 7% |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Table 15. Child Relationship to Householder, Percent of Children by Kawerak Community and Nome Census Area, 2019

| Community | Parent (%) | Grandparent (%) | Other Relative (%) | Unrelated (%) |
|------------------|------------|-----------------|--------------------|---------------|
| Alaska | 88 | 8 | 2 | 2 |
| Nome Census Area | 70 | 23 | 3 | 3 |
| Brevig Mission | 62 | 32 | 3 | 3 |
| Diomedes | 66 | 34 | - | - |
| Elim | 69 | 18 | 4 | 8 |
| Gambell | 53 | 27 | 12 | 8 |
| Golovin | 75 | 15 | 10 | - |
| Koyuk | 75 | 15 | - | 9 |
| Nome | 85 | 9 | 1 | 5 |
| St. Michael | 67 | 28 | 3 | 2 |
| Savoonga | 49 | 45 | 5 | 1 |
| Shaktoolik | 68 | 28 | 4 | - |
| Shishmaref | 73 | 25 | 1 | 2 |
| Stebbins | 54 | 44 | 2 | - |
| Teller | 67 | 29 | 4 | - |
| Unalakleet | 63 | 28 | 7 | 2 |
| Wales | 62 | 21 | 10 | 6 |
| White Mountain | 83 | 17 | - | - |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Table 16. Children Living with Grandparent, by Grandparent Responsibility, Percent, Kawerak Communities and Nome Census Area, 2019

| Community | Grandparent householder responsible for own grandchildren | | | Grandparent householder not responsible for own grandchildren (%) |
|------------------|---|-----------------------|-----------|---|
| | Parent present (%) | No parent present (%) | Total (%) | |
| Alaska | 36 | 18 | 54 | 46 |
| Nome Census Area | 39 | 9 | 48 | 52 |
| Brevig Mission | 67 | 4 | 71 | 29 |
| Diomede | - | - | - | 100 |
| Elim | 14 | - | 14 | 86 |
| Gambell | 45 | 9 | 55 | 45 |
| Golovin | 63 | 13 | 75 | 25 |
| Koyuk | 71 | - | 71 | 29 |
| Nome | 35 | 3 | 38 | 63 |
| St. Michael | 68 | - | 68 | 32 |
| Savoonga | 36 | 7 | 43 | 57 |
| Shaktoolik | 52 | - | 52 | 48 |
| Shishmaref | 31 | 33 | 63 | 37 |
| Stebbins | 28 | 3 | 30 | 70 |
| Teller | 32 | 55 | 86 | 14 |
| Unalakleet | 30 | 18 | 48 | 53 |
| Wales | 56 | 13 | 69 | 31 |
| White Mountain | - | 57 | 57 | 43 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Economy and Employment

The economy in the Kawerak Service Area includes a combination of wage and salary employment, other income sources, and subsistence practices.

Employers and Employment

- In 2020, 314 employers operated in the Nome Census Area, down from a peak of 361 in 2014; 2020 saw the lowest average monthly employment in the past ten years.
- The largest employers in the region include the Norton Sound Health Corporation (NSHC), Bering Strait and Nome School Districts, Norton Sound Seafood Products, and

Bering Air. Other notable employers include local governments and Native corporations.

- Self-employment increased over the past decade, from 439 establishments in 2008 to 551 in 2018.

Table 17. Employment and Wages, Nome Census Area Employers, 2011-2020

| Year | Employers | Average Monthly Employment | Total Wages (in \$ millions) | Average Monthly Wages |
|------|-----------|----------------------------|------------------------------|-----------------------|
| 2011 | 332 | 3,839 | \$159.8 | \$3,468 |
| 2012 | 350 | 3,971 | \$170.0 | \$3,567 |
| 2013 | 355 | 3,877 | \$173.2 | \$3,722 |
| 2014 | 361 | 3,911 | \$177.1 | \$3,773 |
| 2015 | 345 | 3,991 | \$188.9 | \$3,944 |
| 2016 | 320 | 3,814 | \$180.7 | \$3,947 |
| 2017 | 308 | 3,850 | \$189.0 | \$4,090 |
| 2018 | 312 | 3,914 | \$199.9 | \$4,256 |
| 2019 | 316 | 3,932 | \$211.8 | \$4,488 |
| 2020 | 314 | 3,679 | \$221.3 | \$5,013 |

Source: ADOLWD, Quarterly Census of Employment and Wages, 2011-2020.

Table 18. Self-Employed (Non-Employer) Establishments and Sales (Nominal and Real 2018 Dollars), Nome Census Area, 2009-2018

| Year | Non-Employer Establishments | Gross Receipts (\$Millions) | Gross Receipts (Real \$Millions) |
|------|-----------------------------|-----------------------------|----------------------------------|
| 2009 | 439 | \$12.4 | \$14.2 |
| 2010 | 462 | \$14.8 | \$16.6 |
| 2011 | 515 | \$15.1 | \$16.5 |
| 2012 | 547 | \$17.5 | \$18.6 |
| 2013 | 572 | \$19.8 | \$20.4 |
| 2014 | 523 | \$17.5 | \$17.8 |
| 2015 | 504 | \$15.6 | \$15.8 |
| 2016 | 525 | \$13.9 | \$13.9 |
| 2017 | 528 | \$16.8 | \$16.8 |
| 2018 | 551 | \$15.9 | \$15.4 |

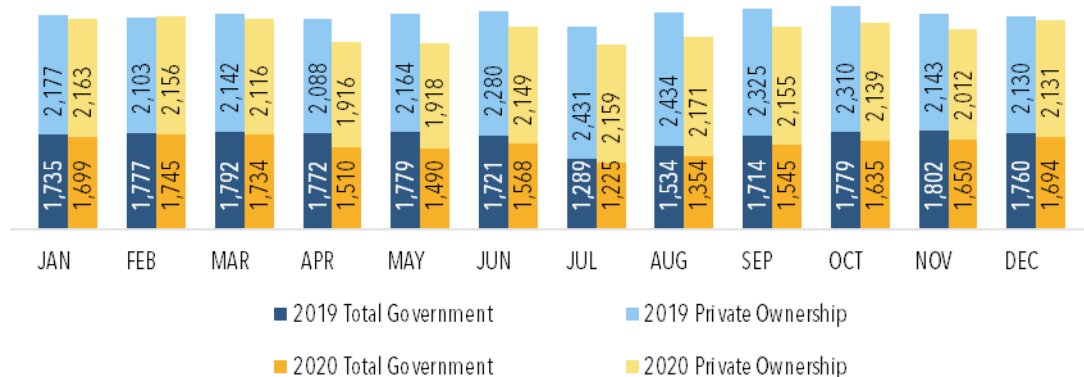
Source: US Census Bureau, Non-Employer Statistics 2009-2018.

Note: A nonemployer business is one that has no paid employees, has annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. Nonemployer statistics data originate chiefly from administrative records of the Internal Revenue Service, Bureau of Labor Statistics, and the Social Security Administration.

EMPLOYMENT

- Monthly wage and salary employment in the Nome Census Area averaged 3,932 positions in 2019 and 3,670 in 2020.
- Average wage and salary employment tends to be lower in July and August, peak subsistence season. Seasonal and temporary work is included in monthly employment.
- The workforce includes government (43%, most in local government (36%)), education health care services (21%), and trade, transportation, and utilities (15%).
- Unemployment rates in the region are higher than statewide, at 10.5% for 2020 in the Nome Census Area, compared to 7.8% for Alaska. The rate for Nome Census Area increased by less than one percent over 2019, while the statewide unemployment rate jumped 2.4%. Unemployment rates are generally higher in the communities outside of Nome, though data is not robust enough to report for specific communities.

Figure 10. Number of Wage and Salary Positions by Month, Nome Census Area, 2019 and 2020



Source: ADOLWD, Quarterly Census of Employment and Wages, 2021

Wages and Income

- Monthly wages averaged \$5,013 in 2020, for a total of \$220 million in wages for the Nome Census Area.
- Self-employed workers earned \$15 million in wages during 2018 (last available data).
- Total personal income in the Kawerak Service Area totaled \$554 million in 2020. Fifty-eight percent of personal income came from wages, 31% from transfer receipts (which include government social benefits), and 11% from dividends and investment income.

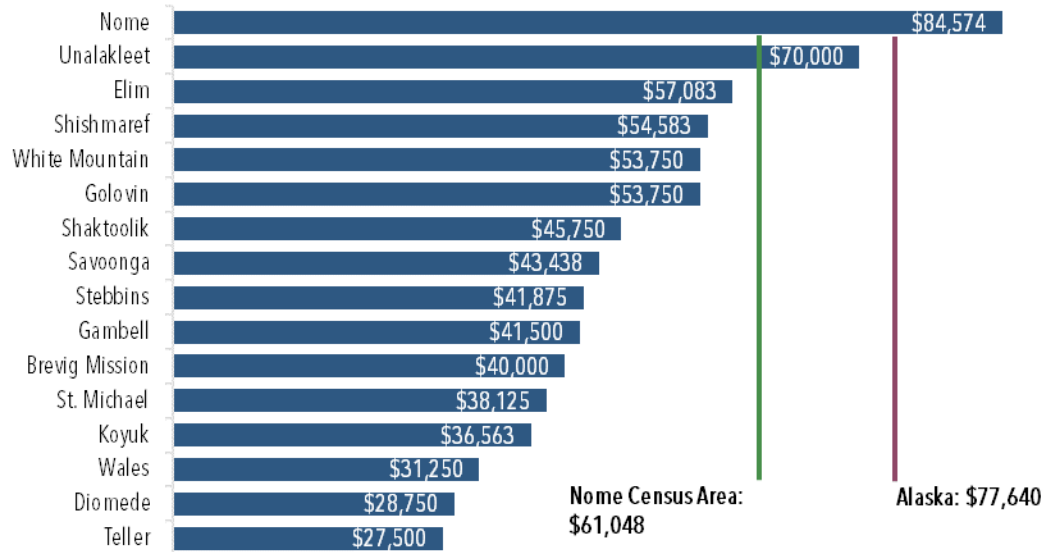
- Household income in the Nome Census Area averaged \$76,581 in 2019. Per-capita income averaged \$23,581.
- Average household income is highest in the City of Nome, at \$101,332, followed by Unalakleet at \$73,116. Average household income is lowest in Teller (\$37,430) and Diomedede (\$36,959).

Table 19. Households with Selected Income Sources (Percent of Households), 2019 (%)

| Community | Wage/Salary Earnings | Social Security | Retirement Income | Supp. Social Security | Cash public assistance or Food Stamps/SNAP |
|------------------|----------------------|-----------------|-------------------|-----------------------|--|
| Alaska | 81 | 23 | 20 | 5 | 13 |
| Nome Census Area | 86 | 23 | 12 | 7 | 35 |
| Brevig Mission | 92 | 24 | 7 | 21 | 73 |
| Diomedede | 91 | 9 | - | - | 59 |
| Elim | 93 | 13 | 12 | 7 | 37 |
| Gambell | 82 | 31 | 15 | 14 | 73 |
| Golovin | 91 | 30 | 6 | 2 | 11 |
| Koyuk | 81 | 22 | 10 | 10 | 54 |
| Nome | 88 | 17 | 14 | 3 | 15 |
| St. Michael | 88 | 10 | 8 | 4 | 55 |
| Savoonga | 84 | 34 | 13 | 19 | 66 |
| Shaktoolik | 92 | 35 | 9 | 11 | 36 |
| Shishmaref | 79 | 32 | 16 | 13 | 56 |
| Stebbins | 81 | 38 | 7 | 18 | 63 |
| Teller | 77 | 27 | 12 | 7 | 70 |
| Unalakleet | 80 | 44 | 19 | 7 | 27 |
| Wales | 87 | 20 | 7 | 9 | 56 |
| White Mountain | 87 | 21 | 10 | 5 | 35 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Figure 11. Median Household Income, Nome Census Area Communities, 2019



Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates

POVERTY AND ASSISTANCE PROGRAMS

- One-third (33%) of children in the Nome Census Area live below the Alaska federal poverty line compared to 19% of children statewide.
- The percent of children below the poverty line is highest in Diomedede, at 74%, followed by Brevig Mission (62%). Golovin is lowest, with 6% of children below the poverty line.
- By source, the proportions of census area households receiving income are similar to statewide, aside from a higher proportion in the Nome Census Area who receive SNAP or other cash assistance benefits, at 35% versus 13% statewide. The proportion of area households receiving retirement income is smaller than statewide, at 12% versus 20%.

Table 20. Percent of Residents, Families and Children Below Alaska Poverty Guideline, Nome Census Area Communities, 2019 (%)

| Community | Percent of <u>residents</u> below poverty line (%) | Percent of <u>families</u> below poverty line (%) | Percent of <u>children</u> below poverty line (%) |
|------------------|--|---|---|
| Alaska | 14 | 10 | 19 |
| Nome Census Area | 27 | 24 | 33 |
| Brevig Mission | 52 | 41 | 62 |
| Diomedes | 62 | 69 | 74 |
| Elim | 32 | 32 | 37 |
| Gambell | 48 | 42 | 55 |
| Golovin | 13 | 14 | 6 |
| Koyuk | 47 | 42 | 55 |
| Nome | 11 | 8 | 14 |
| St. Michael | 30 | 35 | 28 |
| Savoonga | 47 | 47 | 46 |
| Shaktoolik | 22 | 20 | 25 |
| Shishmaref | 44 | 45 | 49 |
| Stebbins | 46 | 46 | 52 |
| Teller | 44 | 35 | 46 |
| Unalakleet | 16 | 20 | 25 |
| Wales | 44 | 47 | 51 |
| White Mountain | 26 | 32 | 33 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: Residents in households with aggregate earnings below the poverty level (as determined annually by the U.S. DHSS) are categorized as living below the poverty line. In 2019, the Alaska poverty line began at \$15,600 for a single-person household and increased by \$5,000 for each additional person in the household. The federal poverty level for Alaska is 125% of the level for the contiguous 48 states and Washington D.C. The table below details the poverty level using 125% as the threshold.

Economic Sectors

Tourism

Tourism in the Kawerak Service Area primarily occurs in Nome. Employment in the Leisure and Hospitality sector represented 3% of all employment in the Nome Census Area in 2020. Tourism employment also occurs in the transportation sector (part of Trade, Transportation, and Utilities; 15%). Businesses catering to Nome’s visitors include accommodations, attractions, bars/restaurants, rental car agencies, taxis, retail shops, and tour providers, among others.

The number of out-of-state visitors to Nome was estimated at 6,000 in summer 2016, the last time traffic was measured.³ Nome also attracts winter visitors, primarily for Iditarod-related activities, which alone accounts for an estimated 1,000 visitors.⁴

While most visitors travel to Nome via air, cruise ships have played an increasing role in the local visitor sector, particularly in 2019. (They are also much easier to track and project.)

Cruise ships calling at Nome have historically been small ships with capacity of less than 300 passengers. While a few ships are on single-day port calls, many use Nome as a turnaround port; that is, passengers begin or end their journey in Nome, allowing them to spend more time (and money) in the community than in most Alaska cruise ports.

Cruise passenger traffic has fluctuated widely over the last decade, ranging from several hundred to several thousand. 2019 represented by far the biggest season at nearly 4,200 passengers and 19 voyages (representing 11 cruise ship visits, as these ships ended and began voyages on consecutive days in port). The 2019 season was boosted by one visit by a large ship, the Maasdam with a capacity of 1,266 passengers, and several visits by mid-size ships with capacities of 400 to 500.

Before the COVID pandemic, the 2020 season was projected to bring nine cruise ship calls and 2,104 passengers to Nome. After two years of zero ships due to the pandemic, 2022 is projected to bring 4,424 cruise passengers to Nome on 21 port calls. The largest capacity ship scheduled is the Roald Amundsen at 530 passengers; all other ships fall into the range of 126 to 296 passengers.

Table 21. Nome Cruise Ship Traffic, 2009-2022

| Year | # Passengers | # of Calls |
|---------------------|--------------|------------|
| 2009 | 949 | 8 |
| 2010 | 308 | 2 |
| 2011 | 528 | 4 |
| 2012 | 522 | 3 |
| 2013 | 1,039 | 8 |
| 2014 | 1,218 | 8 |
| 2015 | 640 | 5 |
| 2016 | 2,079 | 6 |
| 2017 | 1,839 | 6 |
| 2018 | 992 | 7 |
| 2019 | 4,172 | 19 |
| 2020 | 0 | 0 |
| 2021 | 0 | 0 |
| 2022 (proj.) | 4,424 | 21 |

Source: Cruise Line Agencies of Alaska.

³ *Alaska Visitor Statistics Program 7*, prepared by McDowell Group for Alaska Department of Commerce, Community, and Economic Development.

⁴ <https://www.discoverak.com/itarod-nome-finish>.

Table 22. Projected Nome Cruise Ship Traffic, 2022

| Ship Name | Passenger Capacity | # of Calls | Total Passengers |
|----------------------|--------------------|------------|------------------|
| Roald Amundsen | 530 | 2 | 1,060 |
| Silver Wind | 296 | 1 | 296 |
| Le Commandant Charco | 270 | 1 | 270 |
| L’Austral | 260 | 1 | 260 |
| Le Boreal | 260 | 2 | 520 |
| Scenic Eclipse | 228 | 1 | 228 |
| SH Minerva | 152 | 3 | 456 |
| Heritage Adventure | 140 | 4 | 560 |
| Silvia Earle | 132 | 3 | 396 |
| Endurance | 126 | 1 | 126 |
| Resolution | 126 | 2 | 252 |
| Total | n/a | 21 | 4,424 |

Source: Cruise Line Agencies of Alaska; MRG calculations.

Table 23. Nome Air Passenger Enplanements, 2009-2021

| Year | # Passengers | % Change |
|-------------------------|---------------|-------------|
| 2010 | 52,280 | +3% |
| 2011 | 55,277 | +6% |
| 2012 | 56,019 | +1% |
| 2013 | 53,734 | -4% |
| 2014 | 54,738 | +2% |
| 2015 | 55,882 | +2% |
| 2016 | 56,418 | +1% |
| 2017 | 58,057 | +3% |
| 2018 | 60,827 | +5% |
| 2019 | 61,109 | 0% |
| Change 2010-2019 | 8,829 | +17% |
| 2020 | 28,321 | -54% |
| 2020 Jan-Oct | 24,849 | n/a |
| 2021 Jan-Oct | 36,153 | +45% |

Source: Bureau of Transportation Statistics.

Another indicator of visitor traffic is air enplanements at Nome’s airport. While these figures include both resident and non-residents, they still serve as a helpful barometer.

Air enplanements increased, although only slightly, nearly every year in the decade before the pandemic, adding up to a 17% growth between 2010 and 2019. The pandemic caused a 54% decrease in enplanements in 2020.

Last year (2021) shows a strong recovery from 2020, with an increase of 45% in enplanements in the January to October periods (the latest available data for 2021).

There is some tourism industry activity outside of Nome that results from the birdwatching market; special events such as the Iditarod also bring visitors to outlying communities, albeit in small numbers.

OUTLOOK

The outlook for Alaska's visitor industry, and by extension Nome's visitor sector, is largely positive, although COVID has created some uncertainty. Alaska's cruise industry is projected to rebound quickly in 2022, surpassing the state's previous peak volume. Nome's 2022 traffic is projected to be its highest volume on record and is likely to continue to grow based on a large number of planned shipbuilds in the adventure and luxury cruise sectors. In addition, as cruising in the Arctic increases in response to thinning ice, Nome is likely to see some portion of the growth in that market.

The air market is more difficult to predict. While 2022 is likely to represent a strong rebound from the pandemic, some of the growth will reflect the pent-up demand from 2020 and 2021. Alaska does have several advantages compared with other destinations in a post-pandemic environment: it is a domestic destination, without the risks and complications of traveling internationally. Alaska also offers remote destinations and wide-open spaces, which travelers are likely to be seeking to minimize health risks. The ability of the State of Alaska to market the state also plays a role, and this funding has been variable in recent years due to the state's fiscal crisis.

Port of Nome

The Port of Nome serves as a critical transshipment hub for western Alaska communities for a wide array of supplies, including heating oil, gasoline, construction supplies, non-perishable food, gravel, and other cargo. The ice-free months, typically between June and December, are extremely busy for the port. Primary sources of revenue for the port are fuel, freight, and gravel. During summer months, activity at the port increases with the commercial harvest (primarily salmon, halibut, and king crab).

The Port is being modified and upgraded. The Port of Nome Modification and Feasibility Study was published in March 2020. Estimated total cost for the upgrades to the port is \$505,233,000, greater than the initial estimate from the Army Corps of Engineers at \$490 million. The Corps will pay \$379 million, and the city of Nome will pay the rest through working with partners. The port's design phase started in March 2021 and should continue for two years. The planning for this project has been on the table for over a decade. The development of a deep-water port is monumental for the region. Concerns have been raised about the projects' impact on subsistence hunters and fisherman, negative effects on the environment, and costs on the average taxpayer in Nome.

Arts and Crafts

Arts and crafts represent an important income source for people in the Kawerak Service Area. Local artists engage in a wide variety of art forms and use many platforms to sell their work.

In 2018, Kawerak sponsored a survey of 172 artists in the region. The survey results demonstrate the wide variety of arts and crafts produced, as well as the importance of the income derived from sales of artwork, with two thirds of respondents noting they sold their artwork to supplement their monthly income (68%).

The survey asked artists what type of business training they might be interested in; 41% of respondents said pricing, 31% said working with galleries to display work, and 22% said social media marketing and incorporating Alaska Native values into their business practice. When asked what was needed to support sales and distribution of artwork or crafts, nearly half of respondents said access to physical markets (48%), one third said access to electronic markets (31%). Training from other artists and computer skills training were requested by 29% of respondents each, and 19% said business skills training would help. Full survey results will be available on www.kawerak.org.

To address these business development and training needs for artists, Kawerak conducted a two-day virtual artist workshop in coordination with the First Peoples Fund. Led by two Native artists, the workshop covered pricing, marketing, and calendar and planning skills. The course took place in April of 2021; Kawerak planned additional small business workshops in late 2021.

Table 24. Selected Results, Kawerak Arts and Crafts Survey, 2018

| Question | Percent of Total Responses (%) |
|---|--------------------------------|
| Do you sell any of your art/crafts as a way to supplement your monthly income? | |
| Yes | 68 |
| No | 32 |
| Which types of business training would you be interested in? | |
| Pricing your artwork | 41 |
| How to work with galleries/art shows to display your work | 31 |
| How to teach your art/craft to other people | 31 |
| Social media marketing | 22 |
| Incorporating Native values into your business practices | 22 |
| Methods of tracking and communicating with buyers/clients | 21 |
| How to set up PayPal or use Square, for instant electronic payments | 20 |
| Preparing for and displaying at art shows | 20 |
| Advertising (postcards, brochures, business cards, etc.) | 18 |
| How to become certified through the Silver Hand Program | 18 |

| Question | Percent of Total Responses (%) |
|--|--------------------------------|
| How to develop a business plan | 18 |
| How to develop a digital portfolio of your work | 18 |
| How to do your taxes for your art sales | 14 |
| Basic computer and social media skills | 14 |
| Logo/brand development | 13 |
| How to acquire a business license | 13 |
| Other | 3 |
| Which of the following would be most helpful in supporting distribution or sale of your art/crafts? | |
| Access to physical markets | 48 |
| Access to electronic markets (Facebook, Bering Arts & Crafts page, Etsy, etc.) | 32 |
| Computer skills training | 29 |
| Training or mentoring from other artists | 29 |
| Space to interact or collaborate with other artists | 22 |
| Access to business training | 19 |
| Other | 6 |

Source: Arts of the Bering Strait Region, McDowell Group, 2018, prepared for Kawerak, Inc.

Subsistence

The Bering Strait between Russia and the Seward Peninsula experiences a substantial migration of marine mammals, fish, and birds. These resources, in addition to food resources on the land, such as eggs, roots, berries, and greens, are an important source of food security for communities in the region. The seasonality of the Bering Strait environment brings with it changes in abundance in subsistence resources throughout the year. While people traditionally moved as the seasons progressed to harvest species when and where available, most of the population now lives year-round in communities and travels to camps throughout the region to collect subsistence resources.

Nome Census Area residents harvested an estimated 388 pounds per resident of wild food resources in 2017.⁵ By comparison, the estimated per-capita harvest volume for the Municipality of Anchorage was 19 pounds.

⁵Alaska Department of Fish and Game, 2019 (based on 2017 data). "[Estimated Harvests of Fish, Wildlife and Wild Plant Resources by Alaska Region and Census Areas](#)"

Marine mammals (including walrus, seals, and whales) make up the largest share of subsistence diets in the region, followed by salmon and land mammals, such as caribou and moose.

Table 25. Estimated Per Capita Harvest of Wild Food Resources in Nome Census Area, 2017

| Resource | Pounds | % Total |
|----------------------|--------------|-------------|
| Marine mammals | 195.9 | 50% |
| Salmon | 79.5 | 20% |
| Land mammals | 50 | 13% |
| Other fish | 37 | 10% |
| Birds and eggs | 12.9 | 3% |
| Wild plants | 9.8 | 3% |
| Shellfish | 3.2 | 1% |
| All resources | 388.4 | 100% |

Source: Alaska Department of Fish & Game.

The Nome Census Area had the fourth largest per capita wild food harvest volume in the state in 2017, behind the North Slope Borough (452 pounds, 50% marine mammals), the Lake and Peninsula Borough (410 pounds, 62% salmon), and the Lower Kuskokwim Census Subarea (388.6 pounds, 45% salmon).

Warming of the Arctic caused sea ice loss, reduction in ice thickness, and changing ice patterns in the region. These conditions create longer open water seasons, along with weather and sea ice changes that can negatively impact the health of subsistence resources while making traditional hunting practices more difficult and dangerous. The potential for increased vessel traffic and industrialization as the Northwest Passage becomes more navigable is also a concern for subsistence resource users.

Seafood Industry

The seafood industry in the region is modest when compared to other rural coastal Alaska areas, such as Bristol Bay or Bering Sea & Aleutian Islands which host industrial-scale fishery infrastructure. Most fishermen in the region operate from vessels less than 30 feet long and processing capacity is limited.

Note: Researchers observe that subsistence use in the Nome Census Area is particularly difficult to estimate because there is no comprehensive data available for the City of Nome, the region's population center. Regional hubs in Alaska typically have substantially lower harvests than outlying villages.

The City of Nome's harvest was calculated as 32.9% of the harvest in smaller communities in the census area, based on scale of the subsistence salmon harvest among city residents, compared to salmon harvests in smaller Nome Census Area communities.

Salmon is the main fishery in the region (measured by participation) with fish harvested by gillnets as well as a new (2021) test fishery using purse seines. Halibut is harvested by longline (hook and line) and king crab is harvested with pots. The region hosts the only commercial king crab fishery in the state in which pots are dropped through holes in the ice. A small number of herring, tomcod, and Dolly Varden are also harvested, primarily for bait.

Although salmon fisheries continue to have the largest number of participants of any local fishery by a large margin, crab and halibut fisheries also produce significant earnings for Nome Census Area residents. On average since 2016, crab fisheries have produced annual revenues of \$2.8 million to Nome Census Area residents, while salmon fisheries have produced \$2.3 million and halibut fisheries have produced \$600,000.⁶

SEAFOOD PROCESSORS

Norton Sounds Seafood Products (NSSP) is the main buyer of seafood in the region. NSSP is a subsidiary of the Norton Sound Economic Development Corporation (NSEDCC), a Community Development Quota (CDQ) group. The company operates a processing facility in Nome, along with smaller plants in Unalakleet and Savoonga. Fish buying stations are maintained seasonally in Shaktoolik, Golovin, Koyuk and Moses Point (Elim).

In 2021, Seattle-based Icicle Seafoods announced plans to buy pink salmon for canning in the Norton Sound region due to the anticipation of strong runs. The company's plans called for anchoring its Gordon Jensen processing vessel off the coast of Elim to facilitate the purchase of pink salmon.⁷

In 2019, NSSP paid more than \$1.2 million in wages to 201 seasonal processing employees (not including NSSP administration). The company provides a housing stipend to individuals who live in member communities outside of Nome and Unalakleet. NSEDCC operated seven tender vessels in the region in 2019 and hired 25 seasonal employees (paying \$749,527 in crew wages) to purchase product directly from fishermen and transport it to the processing facilities.⁸

The NSEDCC annually distributes funds to its 15 member communities in the region through the Community Benefit Share program. In November 2020, the NSEDCC distributed \$200,000 to each community. Since 1999, the corporation has distributed more than \$38.7 million.⁹

⁶These 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.

⁷ ["Multiple Buyers Turn Norton Sound's Commercial Fishing Season Around,"](#) 2021. KNOM Radio Mission.

⁸ NSEDCC, 2019. ["2019 Annual Report."](#)

⁹ [NSEDCC December 2020 newsletter.](#)

RESIDENT FISHING ACTIVITY

In 2020, preliminary data indicate 145 residents in the Nome Census Area earned \$1.04 million through commercial fishing. Data includes permit holders but not crew and represents participation and earnings in any fishery in Alaska, not just regional fisheries.

Participation was highest among Unalakleet residents, while earnings were highest among Nome residents. Fifty-four Unalakleet residents participated in Alaska commercial fisheries last year, earning an estimated \$82,000. Among Nome residents, 18 permit holders fished in 2020, earning an estimated \$556,000.

Table 26. Commercial Fishing Participation and Earnings in the Nome Census Area, 2020

| Community | Permits Held | Fishermen Who Fished | Total Pounds | Total Earnings |
|------------------------|--------------|----------------------|----------------|--------------------|
| Elim | 35 | 19 | 27,751 | \$31,427 |
| Gambell | 1 | 1 | * | * |
| Golovin | 17 | 9 | 89,376 | \$60,499 |
| Koyuk | 15 | 8 | 5,272 | \$5,716 |
| Nome | 48 | 18 | 344,557 | \$556,384 |
| St. Michael | 7 | 0 | * | * |
| Savoonga | 12 | 11 | 75,471 | \$229,951 |
| Shaktoolik | 49 | 25 | * | * |
| Shishmaref | 1 | 0 | * | * |
| Stebbins | 15 | 0 | * | * |
| Unalakleet | 145 | 54 | 150,574 | \$82,681 |
| White Mountain | 0 | 0 | * | * |
| All Communities | 345 | 145 | 802,304 | \$1,038,721 |

Source: Commercial Fisheries Entry Commission.

Notes: * data suppressed to protect confidentiality

Data is preliminary. Numbers may not sum due to data suppression at local levels.

After trending up between 2011 and 2017, fishery participation among Nome census area residents decreased each year between 2017 and 2020. In 2019, 184 residents fished, down 13% from 2017. Earnings that year totaled \$2.6 million, down 48% from 2017. Earnings and participation numbers were especially low in 2020, but these numbers are preliminary and are likely an aberration because of COVID-19 disruptions to commercial fishing industry and the world seafood market.

Table 27. Commercial Fishing Permits and Earnings in Nome Census Area, 2011-2020

| Year | Permits Held | Fishermen Who Fished | Total Pounds | Total Earnings |
|------|--------------|----------------------|--------------|----------------|
| 2011 | 406 | 178 | 3,284,671 | \$4,165,177 |
| 2012 | 510 | 200 | 1,866,039 | \$4,063,436 |
| 2013 | 475 | 216 | 2,792,756 | \$4,192,798 |
| 2014 | 474 | 187 | 2,691,295 | \$4,432,868 |
| 2015 | 459 | 214 | 3,286,403 | \$4,932,474 |
| 2016 | 461 | 206 | 2,626,420 | \$4,954,733 |
| 2017 | 501 | 213 | 3,446,626 | \$6,644,687 |
| 2018 | 453 | 192 | 4,160,926 | \$6,109,515 |
| 2019 | 401 | 184 | 2,643,577 | \$3,425,759 |
| 2020 | 345 | 145 | 802,304 | \$1,038,721 |

Source: Commercial Fisheries Entry Commission

Note: 2020 data is preliminary.

COMMERCIAL SALMON HARVESTS

Most commercial fishing activity in the Bering Strait Region occurs in the Norton Sound District, an Alaska Department of Fish & Game management area which extends along the Bering Sea coast from just north of the Yukon River Delta to just south of Port Clarence on the Seward Peninsula.

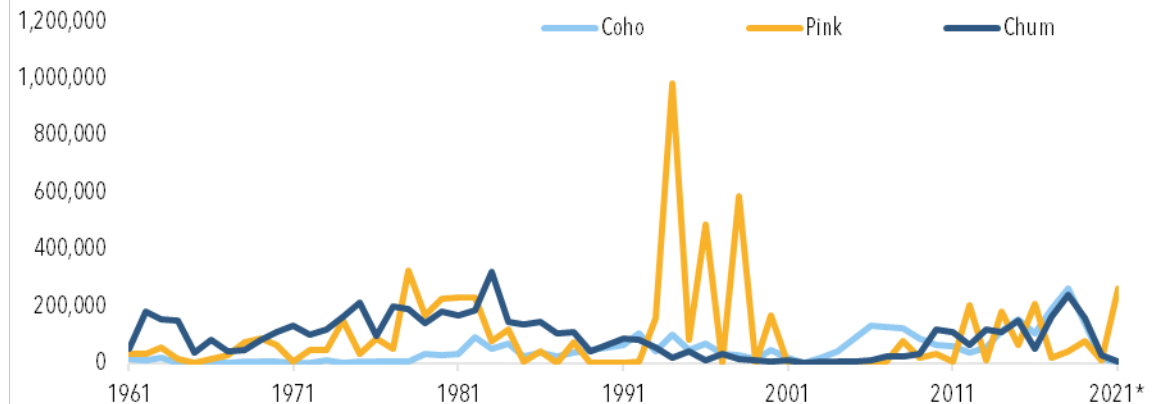
Salmon abundance and interest from fish buyers have together shaped the fluctuating patterns of salmon harvests since commercial fishing began in the Norton Sound District in 1961.

An abundance of pink salmon in the early 1990's led to the region's record salmon harvests in this era. Pink salmon harvests stopped between 2001 and 2006 (and all commercial salmon fishing slowed) because of market conditions and poor salmon returns for many regional main runs.¹⁰ Commercial fishing picked up in the 2010's and in 2018 the harvest of both coho and chum salmon was the largest on record for coho salmon and the largest since 1983 for chum salmon. Chum and coho salmon harvests dropped steeply between 2018 and 2021, though pink salmon harvests rose to more than 250,000 fish in 2021, a harvest level not seen since 1998.

Even at the record levels of salmon harvest in the 1990s, the Norton Sound commercial harvest is very small compared to Alaska's major salmon-producing regions.

¹⁰ Alaska Department of Fish & Game, 2018. ["2018 Annual Management Report Norton Sound, Port Clarence, and Arctic, Kotzebue Areas."](#)

Figure 12. Commercial Salmon Harvest, by Species, Norton Sound District, 1961–2021* (Thousands of Fish)



Source: Alaska Department of Fish & Game.

*2021 data is incomplete

Note: Figure does not include sockeye and Chinook salmon harvests in this area which are very low.

Mining and Gravel

NOME (CAPE NOME) MINING DISTRICT PLACER MINING

Since the Great Nome Gold Rush of 1898, placer mines in the Nome (Cape Nome) mining district have been active, producing over 5 million refined troy ounces of gold.¹¹ This 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 leases¹² and the Nome-ported gold dredge fleet numbered about 42 to 45 vessels, plus about 30 additional support vessels¹³.

CAPE NOME QUARRY

Industrial grade armor stone and rip rap is mined from the Cape Nome quarry, operated by Sound Quarry Inc., a subsidiary of Bering Straits Native Corporation. The rock is crushed in gravel pits around Nome. The product is transported throughout the region and statewide. Demand for quarry products varies with public and other construction projects, such as seawalls, causeways, breakwaters, airport runways, and roads.

¹¹ Athey, J.E. et al. 2021, Alaska's Mineral Industry 2019: Alaska Division of Geological & Geophysical Surveys Special Report 75. <https://doi.org/10.14509/30658>

¹² Alaska Department of Natural Resources, Division of Mining, Land and Water. Nome Offshore Mining. <https://dnr.alaska.gov/mlw/mining/nome>

¹³ 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/>

GRAPHITE CREEK

The advanced-exploration stage Graphite Creek project, about 34 miles north of Nome, hosts the U.S.'s largest large-flake graphite deposit. The deposit was intermittently mined from 1907 and, prior to its current owner, Graphite One Inc., was last explored during the mid-1990s. Since its first drilling program in 2012, Graphite One has continued its exploration program.

In January 2021, the Graphite Creek Project was designated a High-Priority Infrastructure Project by the U.S. Government because of the critical need for high grade coated spherical graphite primarily for the lithium-ion electric vehicle battery market. While still in the preliminary economic assessment stage, once in full production, it is estimated about 370 workers will be employed annually in the mine, processing plant, and manufacturing plant.¹⁴ The project's prefeasibility study is anticipated in late 2021.

Reindeer Herding

Reindeer herding holds promise as an industry in the Kawerak region. The Kawerak Reindeer Herders Association assists operators in the industry. While location creates some challenges, other challenges include processing and business development.

The Seward Peninsula reindeer industry supplies reindeer meat locally and to in-state slaughterhouses when possible. Currently, only field slaughter of reindeer is permitted, limiting the ability to sell smaller cuts of meat as field slaughtered animals can only be sold in quarters. Growth statewide is further limited by a lack of USDA-inspected slaughterhouse availability (there are two in the state of Alaska currently). There is demand for reindeer meat in the state, and possibly beyond, with Nunivak Island selling approximately 200 reindeer a year that are sold in Alaska Commercial grocery stores throughout the state.

The University of Alaska Fairbanks (UAF) conducted research and industry development in the region in conjunction with reindeer herders. Savoonga is currently processing about 20 reindeer a year, with a Kawerak and UAF co-owned mobile processing plant located there. Research on herd tracking was conducted on the peninsula using satellite collars and an invisible fence based on location.

¹⁴ [Graphite One Inc. In the Community](#)

Climate Change

Climate change increasingly impacts daily life and traditional practices in the Kawerak Service Area. Thawing permafrost and erosion are damaging infrastructure and homes, and warming oceans are changing subsistence practices.¹⁵ Communities are responding with climate change adaptation plans.

Warming Oceans

Regional effects of warming oceans will likely continue to impact daily lives, traditional subsistence practices, and economies around Norton Sound and the northern Bering Sea. Warmer oceans contribute to the loss of sea ice, a shortened season of ice pack coverage, ocean acidification, and shifting patterns of sea mammal migration. The loss of shore ice pack and warmer oceans also contribute to coastal erosion and flooding. Die offs of fish, sea birds, and mollusks have occurred from changes in ocean acidity, resulting in starvation for some animals. Migrations of fish species due to warmer waters in the northern Bering Sea and Norton Sound are occurring more frequently, disrupting traditional fish harvests.

Kawerak Service Area communities, including Shishmaref, Shaktoolik, Unalakleet, and Nome (and Nome-area tribal members), have partnered with agencies to develop strategic plans to adapt to the changing climate. Emergency drills, evacuation centers, sea barriers, and infrastructure upgrades along with adaptations of subsistence practices are highlights of these planning documents.^{16,17} These plans highlight the need to use traditional knowledge to develop a better understanding of climate change and its local impacts.

Food Security

More than three-quarters of Bering Strait region residents rely on traditional food sources. Thus, changes in the climate are impacting not only traditional practices but food security. Fish camp access due to erosion, changes in type and quantity of available fish, shifts in marine mammal hunting opportunities, and berry harvests may have substantial impacts.¹⁸

¹⁵ Markon, C. et al. (2018) Chapter 26: Alaska. Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II. U.S. Global Change Research Program. doi:10.7930/NCA4.2018.CH26.

¹⁶ Alaska Division of Community and Regional Affairs, Planning & Land Management: Climate change Impact Mitigation Program.

¹⁷ Kettle, N., J. Martin, and M. Sloan. 2017. Nome Tribal Climate Adaptation Plan. Nome Eskimo Community and The Alaska Center for Climate Assessment and Policy. Fairbanks, AK.

¹⁸ Gadamus, L. (2013) 'Linkages between human health and ocean health: a participatory climate change vulnerability assessment for marine mammal harvesters', *International Journal of Circumpolar Health*, 72(1), p. 20715. doi:[10.3402/ijch.v72i0.20715](https://doi.org/10.3402/ijch.v72i0.20715).

Permafrost and Coastal Erosion

Cost estimates on the impact on public infrastructure from thawing permafrost, erosion, and flooding have been forecast at a possible \$3.6-\$6.1 billion through 2030. These numbers assume agencies adapt future infrastructure projects to changing climate conditions.¹⁹

Thawing permafrost shifts foundations of building across the tundra, leading to infrastructure damage in some communities. In 2017, in St. Michael, water and sewer pipes froze and broke due to ground and foundation shifts, resulting in two months without water or sewer services in the community.²⁰ Water security, already an issue in many communities, will be a continuing issue for communities like St. Michael, from infrastructure damage, and Teller and Golovin, whose groundwater sources are particularly vulnerable to permafrost.²¹

Communities throughout Alaska are facing threats to infrastructure imposed by erosion, flooding, and thawing permafrost. When the impacts of erosion, flooding, and thawing permafrost interact to form a combined threat, it is called *usteq*. The Alaska Statewide Hazard Mitigation Plan used the Yupik word “*usteq*” to describe the compounding effects of such threats. *Usteq* translates as “surface caves in,” and is defined in the Statewide Hazard Mitigation Plan as “a catastrophic form of permafrost thaw collapse that occurs when frozen ground disintegrates under the compounding influences of thawing permafrost, flooding, and erosion.”²²

A 2019 report for the Denali Commission assessed 187 Alaskan communities for risk from flooding, erosion, and thawing permafrost, and assigned a level of risk in each category for each community. These calculated risk ratings factored in uncertainty, time to damage, and an aggregate impact rating that evaluated each category of damage based on community, land, people, and infrastructure-related impacts. These calculations for each community were normalized to account for missing data and differences between areas and populations.

The combined risk ranking for each community in the table below is based on the escalating feedback between the individual category threats. Communities are ranked out of all 187 assessed Alaskan communities from 1 (highest risk) to 115 (lowest, with communities sharing scores ranked the same). This combined ranking serves to identify those communities where

¹⁹ Larsen, P. et al. (2008) ‘Estimating future costs for Alaska public infrastructure at risk from climate change’, *Global Environmental Change*, 18(3), pp. 442-457. doi:[10.1016/j.gloenvcha.2008.03.005](https://doi.org/10.1016/j.gloenvcha.2008.03.005).

²⁰ Alaska Native Tribal Health Consortium. (2017). The community of St. Michael restores water service to key community buildings. [online] Available at: <https://anthc.org/news/the-community-of-st-michael-restores-water-service-to-key-community-buildings/> [Accessed 30 Jul. 2019].

²¹ Chambers, M. et al. (2007) ‘Potential impacts of a changing Arctic on community water sources on the Seward Peninsula, Alaska: A Changing Arctic and Water Resources’, *Journal of Geophysical Research: Biogeosciences*, 112(G4). doi:[10.1029/2006JG000351](https://doi.org/10.1029/2006JG000351).

²² Alaska Division of Homeland Security and Emergency Management, State Hazard Mitigation Plan, 2018.

more detailed investigation and action should be taken to combat threats resulting from erosion, flooding, and permafrost thawing together.

Table 28. Communities at Risk Due to Thawing Permafrost, Flooding and/or Erosion

| Community | 2019 Statewide Threat Assessment Risk Level, by Category | | | Combined Risk Ranking |
|----------------|--|----------|--------------------|-----------------------|
| | Erosion | Flooding | Thawing Permafrost | |
| Brevig Mission | Medium | Medium | High | 55 |
| Diomede | Medium | Medium | Low | 47 |
| Elim | Medium | High | Low | 34 |
| Gambell | Low | High | Medium | 41 |
| Golovin | High | High | Medium | 4 |
| Koyuk | Low | Medium | Medium | 71 |
| Nome | High | High | High | 27 |
| St. Michael | High | Low | High | 18 |
| Savoonga | High | High | High | 9 |
| Shaktoolik | High | High | Low | 1 |
| Shishmaref | High | High | Medium | 2 |
| Stebbins | Low | High | High | 39 |
| Teller | Low | High | Medium | 30 |
| Unalakleet | High | High | Low | 8 |
| Wales | Medium | Low | Low | 65 |
| White Mountain | Low | Low | Low | 90 |

Source: Denali Commission, USACE and UAF: Statewide Threat Assessment: Identification of Threats from Erosion, Flooding, and Thawing Permafrost in Remote Alaska Communities, 2019.

Erosion and flooding ranges: **High risk**, threat is commonly immediate to critical infrastructure; **Medium risk**, threat is not expected to detrimentally impact critical infrastructure in the near term, the community is still vulnerable to threat, where a moderate or extreme flooding event may increase risk; **Low risk**, not enough information available that indicates a threat to critical infrastructure or to viability of a community, or low likelihood a threat will detrimentally impact the community in the near term. Permafrost ranges: **High risk**, risk of damage due to thawing permafrost is high, ice-rich permafrost is prevalent beneath the community, thaw settlement is anticipated to be large, and damage to existing infrastructure as a result of thawing permafrost is likely known; **Medium risk**, risk of damage due to thawing permafrost is moderate, permafrost usually has moderate ice content where thaw settlement is anticipated to be moderate, reported damage due to thawing permafrost is moderate; **Low risk**, risk of damage due to thawing permafrost is low or nonexistent, underlying permafrost is sporadic, no or minor damage has been reported.

Chapter 3: Housing and Infrastructure

Housing

This section details some aspects of the cost of housing in the Bering Straits region. Comparisons of housing costs in the region to the rest of the state are detailed further in Chapter 7 of this report.

Housing Overview

- As of 2019, the Nome Census Area contained 4,108 housing units. Of these units, 2,844 were occupied and 1,185 are seasonal or otherwise vacant.
- Regional vacancy rates are lower than the statewide average. Homeowner vacancy rates are less than 1% in the Nome Census Area, compared to 2% statewide. Rental vacancy rates are 4%, compared to 7% statewide.
- Vacancy rates in Kawerak communities are hard to accurately measure given the nature of housing availability, quality, and land-ownership status in these communities. The homeowner vacancy rates reported in table below for individual communities, except the City of Nome, all have margins or errors greater than 10%.
- Sixty-one percent of occupied housing units are owner-occupied, while 41% are occupied by renters. Diomedes and Nome have the lowest percentages of owner-occupied housing, at 41% of housing units in Diomedes and 45% in Nome. Gambell (15%) and Savoonga (12%) have the lowest proportion of renter-occupied housing units.
- Regional housing stock is aging, with 44% of homes built before 1980 and only 11% since 2000 or later.
- Bering Strait Regional Housing Authority (BSRHA), which operates through HUD funding, continues to build homes in the region. Currently, the housing authority has over 400 units in 17 communities. BSRHA has built 106 homes through Native American Housing Assistance and Self-Determination Act (NAHASDA) since 1996.

**Table 29. Housing Inventory and Vacancy Rates,
Kawerak Service Area Communities, 2019**

| Community | Total Housing Units | Homeowner Vacancy Rate (%) | Rental Vacancy Rate (%) |
|------------------|---------------------|----------------------------|-------------------------|
| Alaska | 316,901 | 1.9 | 7.2 |
| Nome Census Area | 4,108 | 0.3 | 3.9 |
| Brevig Mission | 101 | 0.0 | 0.0 |
| Diomedede | 49 | 0.0 | 0.0 |
| Elim | 80 | 0.0 | 0.0 |
| Gambell | 183 | 0.0 | 8.0 |
| Golovin | 70 | 0.0 | 7.7 |
| Koyuk | 103 | 0.0 | 0.0 |
| Nome | 1,550 | 1.0 | 2.9 |
| St. Michael | 107 | 0.0 | 2.7 |
| Savoonga | 238 | 0.0 | 17.2 |
| Shaktoolik | 97 | 0.0 | 0.0 |
| Shishmaref | 146 | 0.0 | 4.2 |
| Stebbins | 134 | 0.0 | 0.0 |
| Teller | 81 | 0.0 | 0.0 |
| Unalakleet | 224 | 0.0 | 18.2 |
| Wales | 73 | 0.0 | 12.5 |
| White Mountain | 83 | 0.0 | 0.0 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: vacancy rates for communities smaller than the city of Nome have large margins of error.

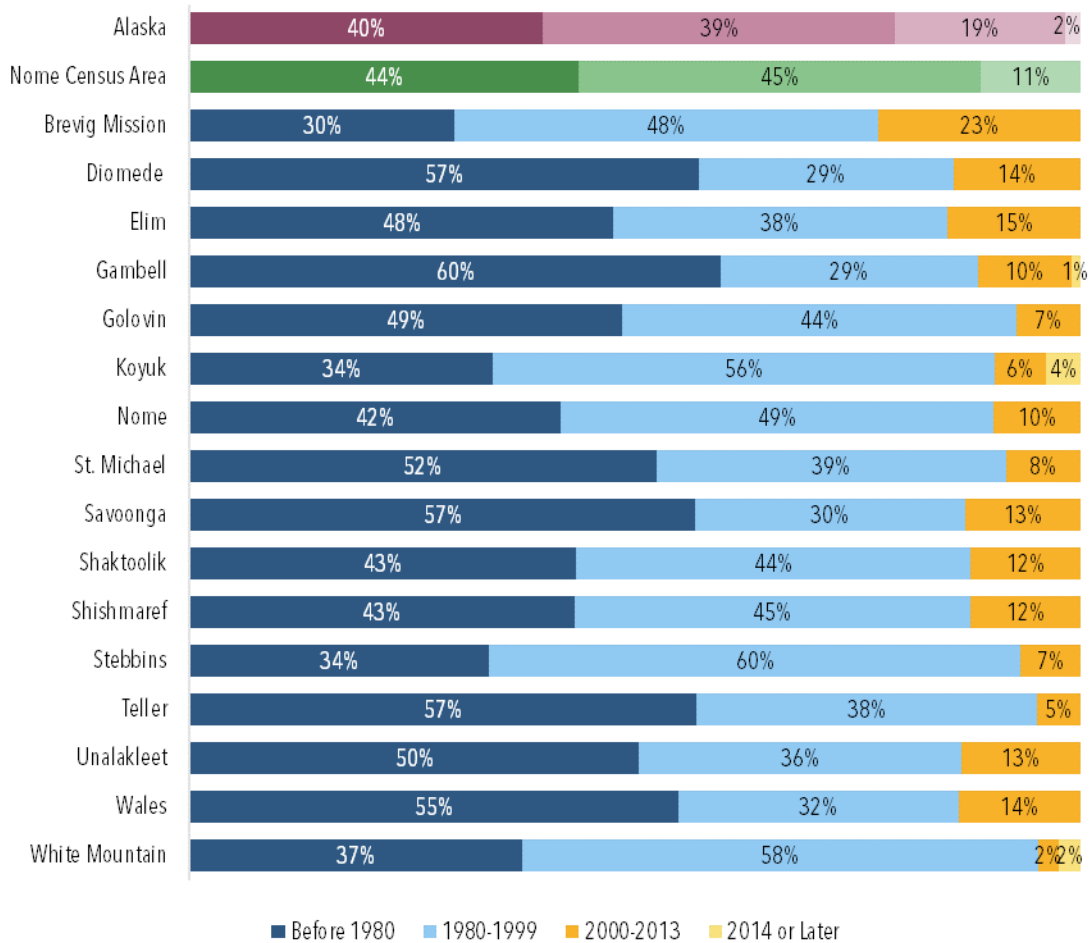
Table 30. Owner- and Renter-Occupied Housing, Kawerak Communities, 2019

| Community | Total Occupied Housing Units | Percent Owner Occupied | Percent Renter Occupied |
|------------------|------------------------------|------------------------|-------------------------|
| Alaska | 253,346 | 64% | 36% |
| Nome Census Area | 2,844 | 61% | 40% |
| Brevig Mission | 96 | 63% | 38% |
| Diomede | 34 | 41% | 59% |
| Elim | 67 | 72% | 28% |
| Gambell | 152 | 86% | 15% |
| Golovin | 47 | 75% | 26% |
| Koyuk | 89 | 60% | 40% |
| Nome | 1,274 | 45% | 55% |
| St. Michael | 89 | 60% | 40% |
| Savoonga | 199 | 88% | 12% |
| Shaktoolik | 85 | 80% | 20% |
| Shishmaref | 136 | 66% | 34% |
| Stebbins | 130 | 72% | 28% |
| Teller | 60 | 65% | 35% |
| Unalakleet | 166 | 68% | 33% |
| Wales | 55 | 75% | 26% |
| White Mountain | 63 | 59% | 41% |

Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Note: rows may not sum to 1005 due to rounding.

Figure 13. Housing Units by Year Built, Kawerak Communities and Nome Census Area, Percent, 2019



Source: US Census Bureau, ACS 2015-2019 Five-Year Estimates.

Housing Services

BERING STRAITS REGIONAL HOUSING AUTHORITY

The Bering Straits Regional Housing Authority (BSRHA), headquartered in Nome, is the primary service provider for housing projects in the region, covering all 17 communities in the region. The organization pools funding provided to federally recognized tribes in the region from Housing and Urban Development (HUD) and uses it where needed.

BSRHA works to build and provide safe, sanitary, and affordable homes for residents in the Bering Strait Region. BSRHA services include construction of new affordable housing units, preservation of existing housing, homebuyer and emergency utility assistance, home repair and weatherization assistance. In addition, BSRHA manages rentals of 86 units in Nome.

ALASKA HOUSING FINANCE CORPORATION

The Alaska Housing Finance Corporation (AHFC) finances housing and provides energy and weatherization, low-income rental assistance, and programs for homelessness throughout the state.

NOME ESKIMO COMMUNITY HOUSING PROGRAM

The Nome Eskimo Community Housing Program provides housing services to tribal members in the City of Nome. The program provides energy efficiency services for weatherization and repairs to lower utility costs, home renovations to upgrade older homes and bring them up to code, rental assistance, and related services.

HOUSING SHELTERS

The Bering Sea Women's Group Shelter for people experiencing domestic violence (not a homeless shelter) and the Nome Emergency Shelter Team (NEST) for winter overnight shelter and meals both operate in Nome. There are no shelters in any of the other Kawerak communities.

Utilities

More information on the cost of utilities in the region is located in Chapter 7 of this report.

- One-quarter of occupied housing units in the Nome Census Area lack complete plumbing, compared to 4% statewide. This includes 100% in Diomedede, 98% in Stebbins, and 96% in Wales.
- Fifteen percent of units lack complete kitchen facilities, compared to 3% statewide.
- Most (92%) housing units are heated by oil, compared to only 29% of homes statewide.

Table 31. Percent Occupied Housing Units with Selected Characteristics, Kawerak Service Area Communities, 2019 (%)

| | Lacking Complete Plumbing | Lacking Complete Kitchen Facilities | No Telephone Service Available | Heating Fuel | | | |
|------------------|---------------------------|-------------------------------------|--------------------------------|--------------------------|------|-------------|-------|
| | | | | Fuel Oil, Kerosene, Etc. | Wood | Electricity | Other |
| Alaska | 4 | 3 | 10 | 29 | 6 | 12 | 52 |
| Nome Census Area | 23 | 15 | 4 | 92 | 6 | 2 | - |
| Brevig Mission | 23 | 23 | 6 | 99 | 1 | - | - |
| Diomedes | 100 | 74 | 3 | 68 | - | 32 | - |
| Elim | 18 | 13 | 5 | 64 | 36 | - | - |
| Gambell | 46 | 38 | 15 | 97 | 3 | - | - |
| Golovin | 26 | 15 | 4 | 87 | 11 | 2 | - |
| Koyuk | 26 | 19 | 12 | 92 | 8 | - | - |
| Nome | 1 | 1 | - | 94 | 3 | 3 | - |
| St. Michael | 73 | 22 | 6 | 92 | 7 | 2 | - |
| Savoonga | 42 | 18 | 3 | 91 | 9 | - | - |
| Shaktoolik | 22 | 33 | 7 | 99 | 1 | - | - |
| Shishmaref | 2 | 2 | 1 | 87 | 13 | - | - |
| Stebbins | 98 | 52 | 9 | 89 | 11 | - | - |
| Teller | 85 | 47 | 8 | 97 | 0 | 3 | - |
| Unalakleet | 8 | 1 | 1 | 86 | 13 | - | 2 |
| Wales | 96 | 69 | 7 | 100 | - | - | - |
| White Mountain | 19 | 16 | 10 | 86 | 11 | 3 | - |

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates.

Note: Heating Fuel rows may not sum to 100% due to rounding.

WATER AND SEWER

Sanitation Status

Approximately two thirds of communities outside of Nome have piped water in their homes, with some sort of sewer system. In the five communities without piped water, where one must haul water for home use, rely on a community “washateria” to clean clothes and bathe in some cases, wastewater and sewage disposal is typically handled by manually hauling it to a dump spot in the community.

Table 32. Sanitation Status, By Community 2021

| Community | Sanitation Lead | Sanitation Status |
|----------------|-----------------|---|
| Brevig Mission | ANTHC | Piped; circulating water; gravity sewer |
| Diomedea | ANTHC | Unserved; washeteria and self-haul |
| Elim | ANTHC | Piped; circulating water; gravity sewer |
| Gambell | VSW | Piped; circulating water; gravity sewer |
| Golovin | ANTHC | Piped; circulating water; gravity sewer |
| Koyuk | ANTHC | Piped; circulating water; gravity sewer |
| St. Michael | ANTHC | Piped; circulating water; vacuum sewer |
| Savoonga | ANTHC | Piped; circulating water; vacuum sewer |
| Shaktoolik | VSW | Piped; circulating water; gravity sewer |
| Shishmaref | ANTHC | Unserved; washeteria & self-haul; approximately 35 homes with flush tank & haul |
| Stebbins | ANTHC | Unserved; washeteria and self-haul |
| Teller | VSW | Unserved; washeteria and self-haul |
| Unalakleet | VSW | Piped; circulating water; gravity sewer |
| Wales | VSW | Unserved; washeteria and self-haul |
| White Mountain | ANTHC | Piped; circulating water; gravity sewer |

Source: Kawerak, Inc. 2018 Federal Priorities.

The table below details the rates of water and sewer prices in select Bering Straits communities. With few exceptions, Savoonga and Shaktoolik, the cost of these services places a high burden on households. Comparing these costs in the Kawerak region with those in Anchorage and other communities is further discussed in Chapter 7 of this report.

Table 33. Affordability of Water and Sewer Household Rates, by Community, 2021

| Community | Combined Water & Sewer Rate | Indicator Score |
|----------------|-----------------------------|-----------------|
| Brevig Mission | \$100 | High Burden |
| Elim | \$95 | High Burden |
| Gambell | \$106 | High Burden |
| Golovin | \$110 | High Burden |
| Koyuk | \$70 | High Burden |
| St. Michael | \$162.50 | High Burden |
| Savoonga | \$85 | Low Burden |
| Shaktoolik | \$60 | Medium Burden |
| Unalakleet | \$90 | High Burden |
| White Mountain | \$105 | High Burden |

Source: ADEC, Division of Water, 2021. Note: This affordability indicator is for use in determining whether users can afford annual operation, maintenance, repair, equipment and capital replacement costs of water, wastewater, or solid waste facilities. Some Kawerak Service Area communities are not included in this analysis.

Operations and Maintenance Best Practices

The Operations and Maintenance Best Practices is a scoring program used by the Alaska Department of Environmental Conservation's Division of Water that determines eligibility and prioritization for community sanitation projects. Scores are broken into three categories: Technical, Financial, and Managerial. Scores are published twice per year, in Spring and Fall. Scores for the technical category includes operator certification, preventive maintenance plan, and compliance. Scores for managerial includes utility management training and meetings of the governing body. Financial scores include budget, revenue, worker's compensation insurance, and payroll liability compliance. The maximum number of points possible is 100.

Table 34. Operations and Maintenance Best Practices Scores by Community by Year

| Community | Fall 2019 | Spring 2019 | Fall 2020 | Spring 2020 | Fall 2021 | Spring 2021 |
|----------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Brevig Mission | 52 | 34 | 34 | 37 | 40 | 45 |
| Diomedea | 60 | 60 | 37 | 30 | 60 | 42 |
| Elim | 57 | 64 | 70 | 57 | 65 | 70 |
| Gambell | 30 | 33 | 35 | 35 | 19 | 19 |
| Golovin | 60 | 68 | 65 | 62 | 65 | 60 |
| Koyuk | 42 | 32 | 40 | 34 | 45 | 50 |
| Nome | 60 | 65 | 50 | 55 | 40 | 40 |
| St. Michaels | 57 | 62 | 58 | 65 | 72 | 60 |
| Savoonga | 72 | 79 | 57 | 82 | 55 | 85 |
| Shaktoolik | 75 | 80 | 55 | 68 | 50 | 33 |
| Shishmaref | 40 | 68 | 30 | 45 | 50 | 40 |
| Stebbins | 50 | 73 | 22 | 55 | 58 | 48 |
| Teller | 70 | 67 | 55 | 65 | 49 | 60 |
| Unalakleet | 77 | 77 | 72 | 87 | 67 | 75 |
| Wales | 40 | 52 | 47 | 57 | 45 | 65 |
| White Mountain | 85 | 85 | 62 | 80 | 50 | 42 |

Source: Alaska Department of Environmental Conservation's Division of Water. Possible high score 100.

Table 35. Operations and Maintenance Best Practices Scores by Category, Spring 2021

| Community | Technical Score | Managerial Score | Financial Score |
|----------------|-----------------|------------------|-----------------|
| Brevig Mission | 35 | 5 | 5 |
| Diomedea | 15 | 7 | 20 |
| Elim | 30 | 10 | 30 |
| Gambell | 15 | 2 | 2 |
| Golovin | 20 | 5 | 35 |
| Koyuk | 35 | 5 | 10 |
| Nome | 30 | 5 | 5 |
| St. Michaels | 20 | 5 | 30 |
| Savoonga | 45 | 5 | 35 |
| Shaktoolik | 18 | 10 | 5 |
| Shishmaref | 18 | 2 | 20 |
| Stebbins | 28 | 10 | 10 |
| Teller | 40 | 10 | 10 |
| Unalakleet | 32 | 10 | 33 |
| Wales | 35 | 10 | 20 |
| White Mountain | 25 | 2 | 15 |

HEATING

Further comparison and discussion of heating fuel prices is located in Chapter 7 of this report. Winter prices used in the table below tend to be higher than summer prices when winter transportation difficulties arise. These prices are collected in January each year.

Table 36. Heating Fuel Prices for Selected Communities, Winter 2017-2021

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|----------------|---------|---------|---------|---------|--------|
| Alaska | - | - | \$4.68 | \$5.16 | \$4.28 |
| Brevig Mission | \$ 3.75 | \$ 4.00 | \$ 4.35 | \$ 3.96 | \$3.67 |
| Gambell | \$ 4.65 | \$ 4.25 | \$ 4.58 | \$ 4.45 | \$4.58 |
| Golovin | \$ 4.00 | \$ 3.70 | \$ 3.70 | \$4.25 | \$3.10 |
| Koyuk | \$ 4.71 | \$ 4.71 | \$ 4.74 | \$ 4.85 | \$4.85 |
| Nome* | \$ 4.38 | \$ 4.42 | \$ 4.45 | \$4.49 | \$4.53 |
| St. Michael | \$ 5.88 | - | \$ 4.63 | \$ 4.50 | \$4.00 |
| Savoonga | \$ 4.50 | \$ 4.25 | \$ 4.45 | \$ 5.65 | \$5.51 |
| Shishmaref | \$ 4.00 | - | \$ 4.42 | \$ 4.38 | \$3.11 |
| Stebbins | \$ 5.52 | \$ 4.52 | \$ 4.55 | \$ 5.04 | \$5.04 |
| Teller | \$ 5.96 | \$ 5.46 | \$ 5.31 | \$ 5.93 | \$5.73 |
| Unalakleet | \$ 3.94 | \$ 3.94 | \$ 5.25 | \$ 5.24 | \$3.99 |

| | | | | | |
|----------------|---------|---------|---------|---------|--------|
| Wales | \$ 7.21 | \$ 6.25 | \$ 6.44 | \$ 6.44 | \$4.64 |
| White Mountain | \$ 3.50 | \$ 3.50 | \$ 4.42 | \$ 4.29 | \$3.03 |

Source: DCRA, 2021. Average retail price of heating fuel, typically, this is for heating fuel #1. Nome does not report prices to DRCA, and North Slope communities are excluded from the statewide average due to subsidies.

ELECTRICITY

The state's Power Cost Equalization program subsidizes high electric costs in remote areas of the state. Community PCE rates are on average \$0.26 cheaper than non-subsidized rates. For more information and comparison, see Chapter 7: Cost of Living, in this report.

Table 37. Household Electrical Payments per kWh, 2020 Rates

| Community | PCE Rate | Non-PCE Eligible |
|----------------|----------|------------------|
| Brevig Mission | \$0.26 | \$0.55 |
| Diomedea | \$0.42 | \$0.65 |
| Elim | \$0.26 | \$0.55 |
| Gambell | \$0.29 | \$0.59 |
| Golovin | \$0.29 | \$0.44 |
| Koyuk | \$0.26 | \$0.58 |
| Nome | \$0.24 | \$0.36 |
| St. Michaels | \$0.26 | \$0.56 |
| Savoonga | \$0.27 | \$0.54 |
| Shaktoolik | \$0.29 | \$0.56 |
| Shishmaref | \$0.26 | \$0.55 |
| Stebbins | \$0.26 | \$0.54 |
| Teller | \$0.26 | \$0.57 |
| Unalakleet | \$0.31 | \$0.46 |
| Wales | \$0.27 | \$0.61 |
| White Mountain | \$0.28 | \$0.55 |

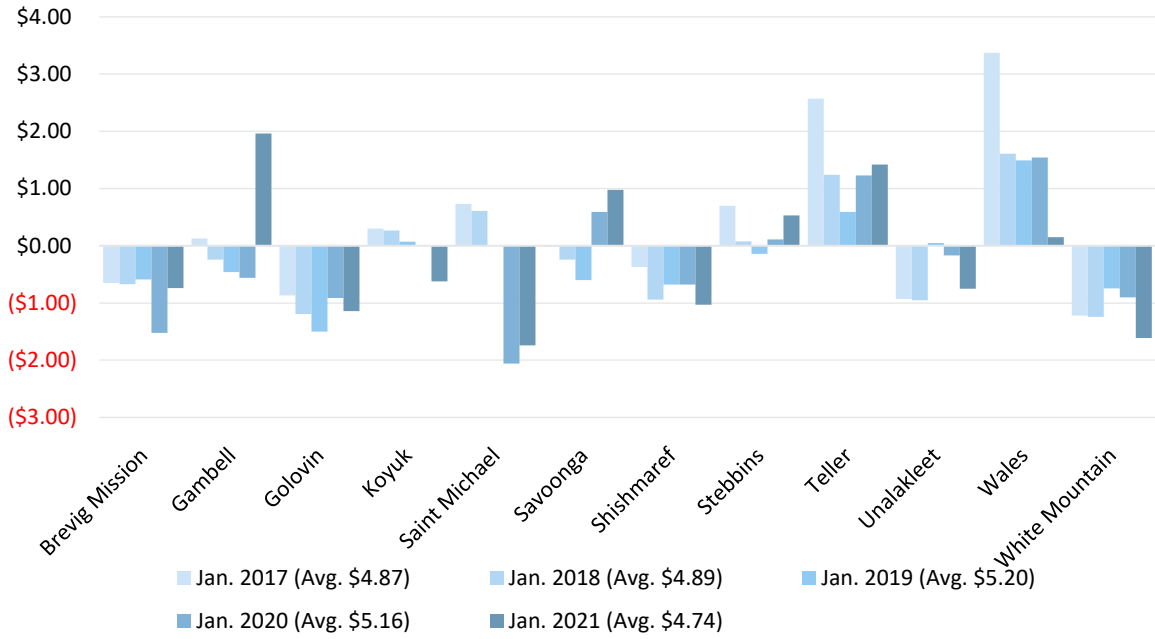
Source: Power Cost Equalization Survey.

^Statewide fuel price survey average excludes Northern Region (due to subsidies).

GASOLINE

Gas prices in Wales tend to be higher than the statewide average, while prices in Brevig Mission, Golovin, Shishmaref and White Mountain tend to be lower than the statewide rates. Further comparison and discussion on costs of living related to gasoline prices is located in Chapter 7 of this report.

Figure 14. Gasoline Prices, Difference from State Average, Selected Communities, 2017 - 2021



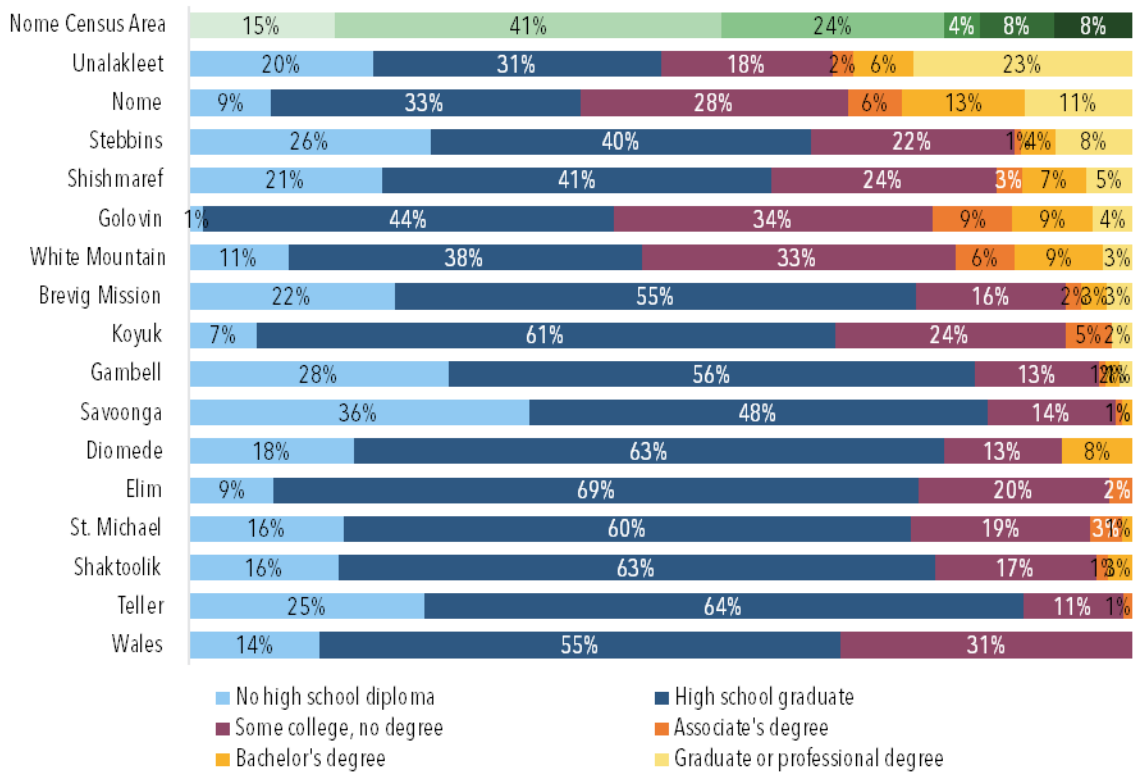
Chapter 4: Education and Early Care and Learning

Educational Attainment

Among adults 25 years and older in the Nome Census Area, 85% graduate from high school or earn an equivalency diploma and 44% spend at least some time at college. A high school degree or the equivalent is the highest level of education attained by 41% of these adults, and another 24% attend some college but receive no degree. Eight percent complete a bachelor's degree, and another 8% receive a graduate or professional degree, with 4% earning an associate degree.

Unalakleet has the highest percentage of adults 25 and older with a graduate or professional degree (23%), followed by Nome (11%), Stebbins (8%), and Shishmaref (5%). This compares to 8% for the Nome Census Area. At 13%, Nome has the highest proportion of adults 25 and older whose highest educational level is a bachelor's degree, followed by White Mountain and Golovin (both 9%), and Diomedes (8%), with 8% for the region. Golovin has the largest proportion of adults 25 and older with an associate degree (9%), followed by White Mountain and Nome (6%), and Koyuk (5%), with 4% for the region.

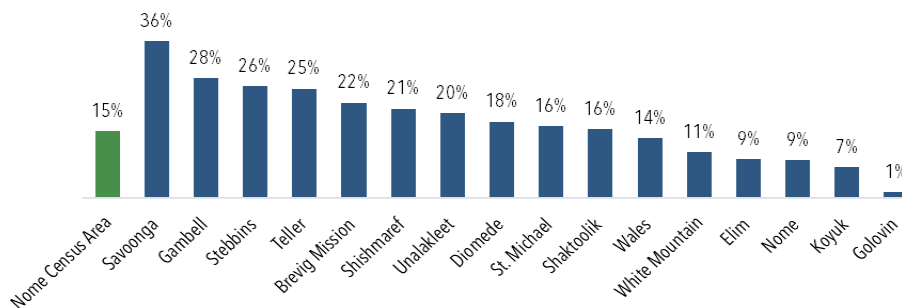
Figure 15. Highest Level of Educational Attainment, by Percentage, by Community



Source: ACS, 2015-2019 Five-Year Estimates.

About 15% of the region’s adults 25 years and older do not have a high school diploma. More than a third (36%) of the adults in this age group in Savoonga have not graduated from school, followed by Gambell (28%), Stebbins (26%), Teller (25%), and Brevig Mission (22%). The communities with the fewest number of adults 25 and older without a high school diploma are Golovin (1%), Koyuk (7%), Nome and Elim (both 9%), and White Mountain (11%).

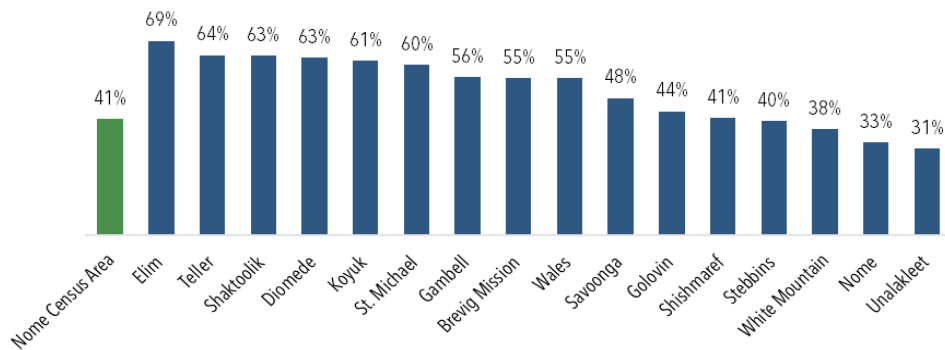
Figure 16. Adults 25 Years and Older Without a High School Diploma, by Community, 2019



Source: ACS, 2015-2019 Five-Year Estimates.

Those who completed their education with a high school diploma make up the largest proportion (41%) of adults 25 and older in the Nome Census Area. A high school diploma is the highest level of educational attainment for the majority of the adult population in nine of the region's 16 communities. At more than two-thirds (69%), Elim has the greatest proportion of adults 25 years and older who completed their education with a high school diploma, followed by Teller (64%), Shaktoolik and Diomedede (both 63%), and Koyuk (61%). The communities with the smallest proportion of the adult population completing their education with a high school diploma are Unalakleet (31%), Nome (33%), White Mountain (33%), Stebbins (40%), and Shishmaref (41%).

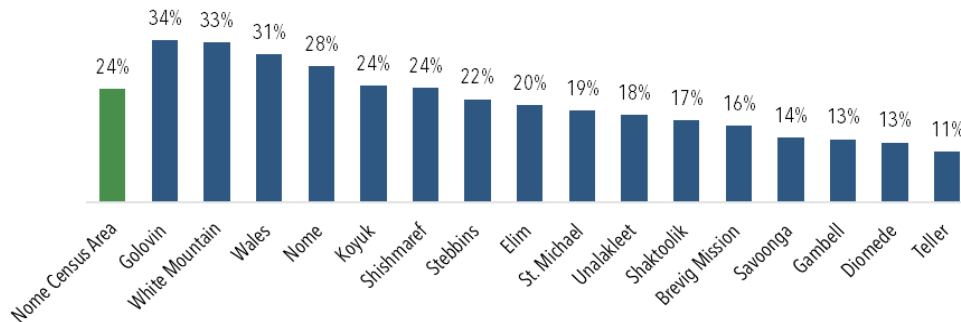
Figure 17. Adults 25 Years and Older Who Completed Their Education with a High School Diploma, by Community, 2019



Source: ACS, 2015-2019 Five-Year Estimates.

About a quarter (24%) of the region's adults 25 and older attended some college but did not earn a degree. Golovin has the highest proportion of adults who completed their education at college without obtaining a degree (34%), followed by those in White Mountain (33%), Wales (31%), Nome (28%), and Koyuk (24%). Among the communities that had the smallest proportions with this level of educational attainment are Teller (11%), Diomedede and Gambell (both 13%), Savoonga (14%), and Brevig Mission (16%).

Figure 18. Adults 25 Years and Older Who Attended Some College and Have No Degree, by Community, 2019



Source: ACS, 2015-2019 Five-Year Estimates.

Early Care and Learning

The Nome Census Area has about 3,434 children under 18 years, with 3,404 of those children living in households. Among those in households, 1,155 children (34%) are younger than 6 years; 1,212 (36%) are 6 to 11 years old; and 1,037 (30%) are 12 and older.

Table 38. Children Under 18 Years of Age, Count by Community, 2019

| | Children Living in Households | | | | Total Under 18 Years |
|------------------|-------------------------------|---------------|------------------|---------------------|----------------------|
| | Under 6 Years | 6 to 11 Years | 12 Years & Older | Total in Households | |
| Alaska | 63,996 | 61,925 | 57,825 | 183,746 | 184,394 |
| Nome Census Area | 1,155 | 1,212 | 1,037 | 3,404 | 3,434 |
| Brevig Mission | 46 | 69 | 43 | 158 | 158 |
| Diomedes | 11 | 20 | 7 | 38 | 38 |
| Elim | 28 | 52 | 34 | 114 | 114 |
| Gambell | 51 | 76 | 70 | 197 | 197 |
| Golovin | 18 | 16 | 18 | 52 | 52 |
| Koyuk | 52 | 32 | 26 | 110 | 110 |
| Nome | 437 | 327 | 344 | 1,108 | 1,118 |
| St. Michael | 56 | 78 | 71 | 205 | 205 |
| Savoonga | 121 | 159 | 122 | 402 | 402 |
| Shaktoolik | 49 | 42 | 29 | 120 | 120 |
| Shishmaref | 57 | 73 | 67 | 197 | 197 |
| Stebbins | 79 | 92 | 82 | 253 | 253 |
| Teller | 14 | 34 | 28 | 76 | 76 |
| Unalakleet | 50 | 55 | 40 | 145 | 165 |
| Wales | 21 | 33 | 23 | 77 | 77 |
| White Mountain | 17 | 15 | 10 | 42 | 42 |

Source: ACS, 2015-2019 Five-Year Estimates.

Communities with the highest proportion of children under 6 years old: Koyuk (47%), Shaktoolik (41%), and White Mountain (40%). Communities with the highest proportion of children 6 to 11 years old: Diomedes (53%), Elim (46%), and Teller (45%). Communities with the highest proportion of youth 12 years and older: Teller (37%), Gambell (36%), and St. Michael (35%).

Table 39. Children Under 18 Years of Age in Households, Percentage by Age Group and Community, 2019 (%)

| | Under 6 Years | 6 to 11 Years | 12 Years & Older | Total in Households |
|------------------|---------------|---------------|------------------|---------------------|
| Alaska | 35% | 34% | 31% | 183,746 |
| Nome Census Area | 34% | 36% | 30% | 3,404 |
| Brevig Mission | 29% | 44% | 27% | 158 |
| Diomedede | 29% | 53% | 18% | 38 |
| Elim | 25% | 46% | 30% | 114 |
| Gambell | 26% | 39% | 36% | 197 |
| Golovin | 35% | 31% | 35% | 52 |
| Koyuk | 47% | 29% | 24% | 110 |
| Nome | 39% | 30% | 31% | 1,108 |
| St. Michael | 27% | 38% | 35% | 205 |
| Savoonga | 30% | 40% | 30% | 402 |
| Shaktoolik | 41% | 35% | 24% | 120 |
| Shishmaref | 29% | 37% | 34% | 197 |
| Stebbins | 31% | 36% | 32% | 253 |
| Teller | 18% | 45% | 37% | 76 |
| Unalakleet | 34% | 38% | 28% | 145 |
| Wales | 27% | 43% | 30% | 77 |
| White Mountain | 40% | 36% | 24% | 42 |

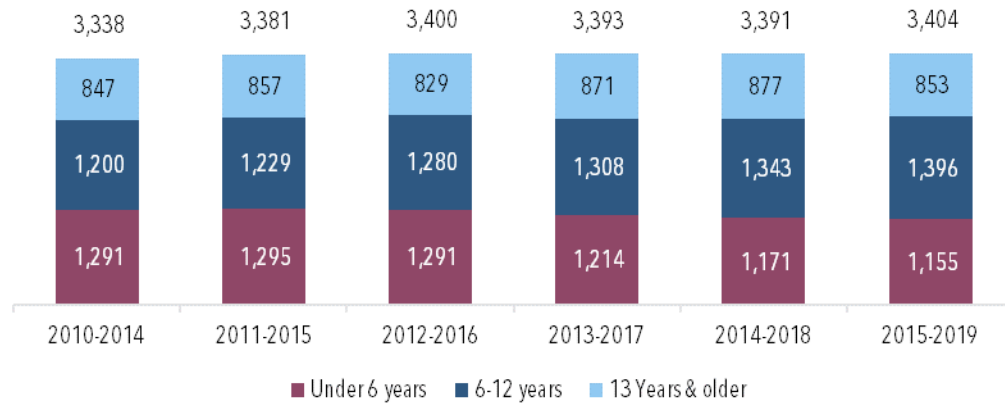
Source: ACS, 2015-2019 Five-Year Estimates.

Most children (70%) in the Nome Census Area live with a parent, while almost a quarter (23%) live with a grandparent as the primary householder. About 3% live with a relative other than a grandparent as the primary householder, and another 3% live with an unrelated adult.

Child Population

Between 2010 and 2019, the Nome Census Area’s child population has remained relatively static overall and within age groups, with the total child population rising by about 2%, from 3,338 to 3,404 children. Population numbers are based on five-year averages.

Figure 19. Nome Census Area Child Population, by Age Group, 2010-2019



Source: ACS, 2015-2019 Five-Year Estimates.

CHILD POPULATION BY COMMUNITY

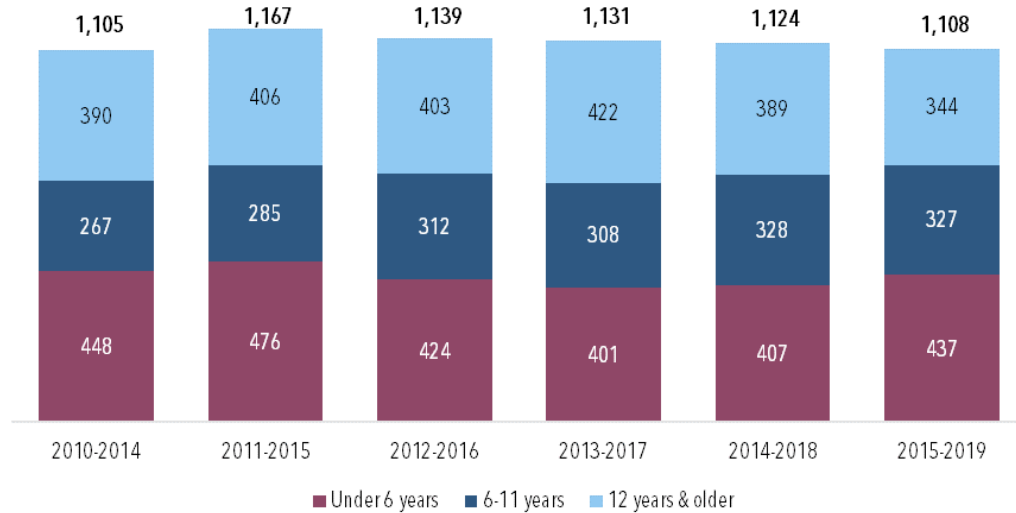
Table 40. Children Under 18 Years of Age, Increase or Decrease

| | Under 6 Years | 6 to 11 Years | 12 Years & Older | Total Child Population |
|----------------|---------------|---------------|------------------|------------------------|
| Brevig Mission | -49%↓ | +38%↑ | -4%↓ | -15%↓ |
| Diomedea | -35%↓ | +23%↑ | +12%↓ | +23%↑ |
| Elim | -39%↓ | +49%↑ | +21%↑ | +5%↑ |
| Gambell | -29%↓ | +4%↑ | -14%↓ | -13%↓ |
| Golovin | +50%↑ | +23%↑ | +12%↑ | +27%↑ |
| Koyuk | +108%↑ | -37%↓ | -40%↓ | -8%↓ |
| Nome | -2%↓ | +22%↑ | -12%↓ | +<1%↑ |
| St. Michael | -23%↓ | +2%↑ | +97%↑ | +13%↑ |
| Savoonga | -9%↓ | +42%↑ | +33%↑ | +19%↑ |
| Shaktoolik | +75%↑ | +100%↑ | +107%↑ | +90%↑ |
| Shishmaref | -44%↓ | -31%↓ | +5%↑ | -27%↓ |
| Stebbins | -7%↓ | +17%↑ | +12%↑ | +7%↑ |
| Teller | -18%↓ | +112%↑ | +4%↑ | +27%↑ |
| Unalakleet | -12%↓ | -18%↓ | -42%↓ | -25%↓ |
| Wales | -36%↓ | +175%↑ | +475%↑ | +57%↑ |
| White Mountain | -15%↓ | -6%↓ | -23%↓ | -14%↓ |

While the child population in Nome rose slightly (3-5%) in the middle of the last decade, the five-year average for population is roughly the same at the end of the decade as it was in the beginning. The number of 6- to 11-year-olds has increased by 22% over the decade, while the

number of children under 6 has fallen by 2% and the number of children 12 years and older has dropped by 12%.

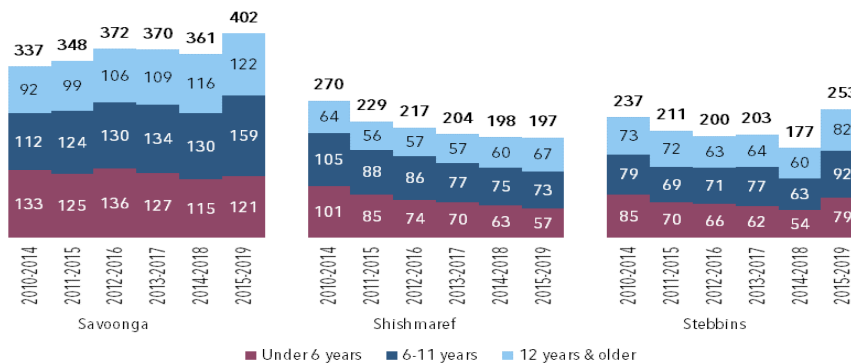
Figure 20. Nome Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

Savoonga’s child population rose 19% between 2010 and 2019, with increases of 42% among 6- to 11-year-olds and 33% among those 12 years and older. The number of children under 6 years declined by 9%. Shishmaref’s total child population steadily declined over this period by 27%, while Stebbins population in all age groups of children fell between 2010 and 2018, but rose during the 2015-2019 period, with the total child population increasing since 2010 by 7%.

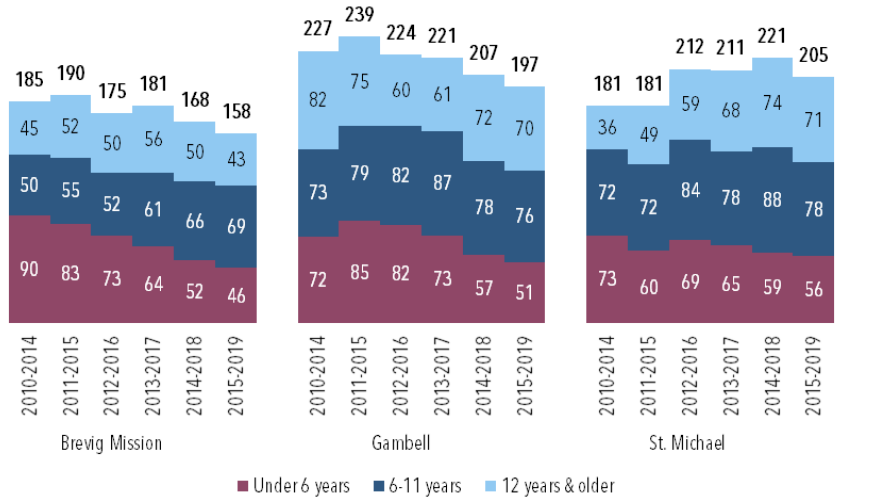
Figure 21. Savoonga, Shishmaref, and Stebbins Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

Brevig Mission’s and Gambell’s total child population fell between 2010 and 2019 by 15% and 13% respectively. In contrast, St. Michael’s total population of children rose in the same period by 13%.

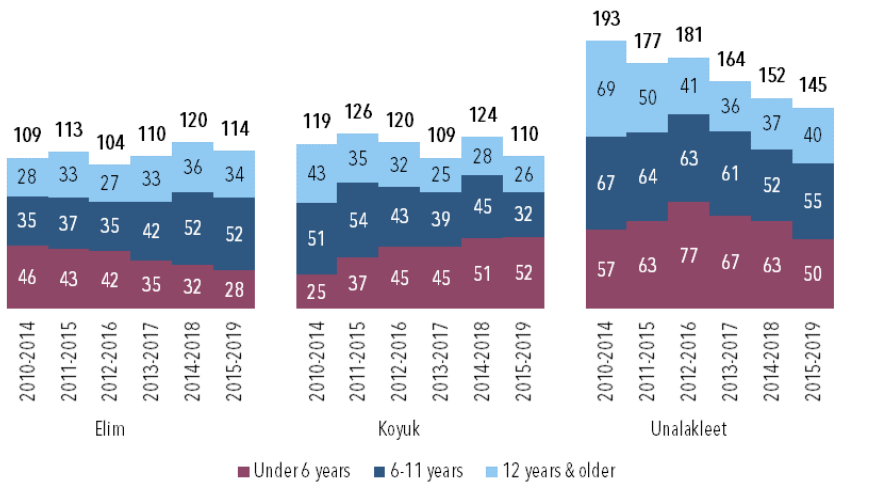
Figure 22. Brevig Mission, Gambell, and St. Michael Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

Between 2010 and 2019, Elim’s total child population rose by 5% while Koyuk’s declined by 8% and Unalakleet’s fell by 25%. Despite overall declines in Koyuk, the number of children under 6 years more than doubled during this period, increasing 108%.

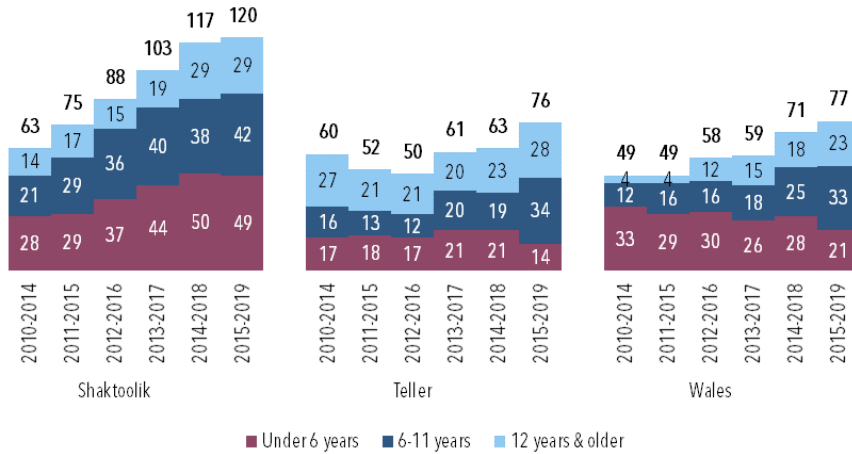
Figure 23. Elim, Koyuk, and Unalakleet Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

During the 2010-2019 period, the child population rose in Shatkoolik by 90%, in Teller by 27%, and in Wales by 57%.

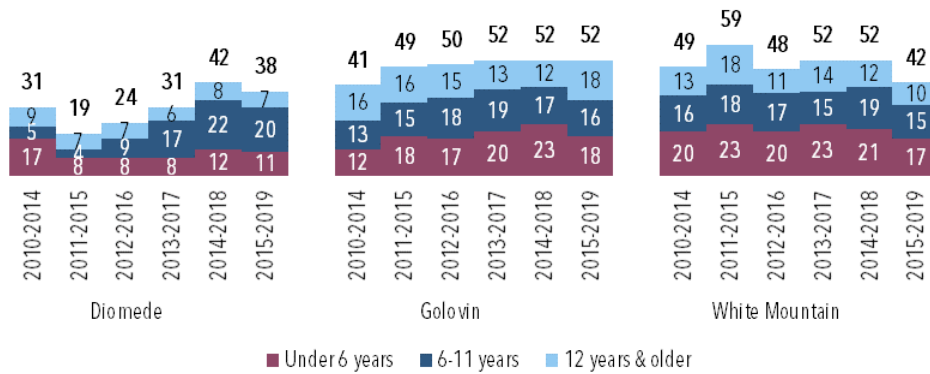
Figure 24. Shatkoolik, Teller, and Wales Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

Between 2010 and 2019, Diomedé’s child population increased by 23% and Golovin’s rose by 27%, while White Mountain’s dropped by 14%. Due to the small populations in these towns, even minor fluctuations in numbers result in larger percentage changes than in more populous communities.

Figure 25. Diomedé, Golovin, and White Mountain Child Population, by Age Group, 2010-2019



Source: ACS, 2010-2019 Five-Year Estimates.

Household Composition

Almost three-quarters (70%) of those under 18 years of age in the region live with at least one parent, compared to 88% statewide. About a quarter (23%) live with a grandparent, in comparison to 8% statewide. Three percent live with another relative as the primary householder and another 3% live with an unrelated primary householder, compared to 2% for each statewide.

Table 41. Relationship to Householder for Children Under 18 Years of Age, Percentage by Community, 2019 (%)

| | Parent | Grandparent | Other Relative | Unrelated |
|------------------|--------|-------------|----------------|-----------|
| Alaska | 88 | 8 | 2 | 2 |
| Nome Census Area | 70 | 23 | 3 | 3 |
| Brevig Mission | 62 | 32 | 3 | 3 |
| Diomedes | 66 | 34 | - | - |
| Elim | 69 | 18 | 4 | 8 |
| Gambell | 53 | 27 | 12 | 8 |
| Golovin | 75 | 15 | 10 | - |
| Koyuk | 75 | 15 | - | 9 |
| Nome | 85 | 9 | 1 | 5 |
| St. Michael | 67 | 28 | 3 | 2 |
| Savoonga | 49 | 45 | 5 | 1 |
| Shaktoolik | 68 | 28 | 4 | - |
| Shishmaref | 73 | 25 | 1 | 2 |
| Stebbins | 54 | 44 | 2 | - |
| Teller | 67 | 29 | 4 | - |
| Unalakleet | 63 | 28 | 7 | 2 |
| Wales | 62 | 21 | 10 | 6 |
| White Mountain | 83 | 17 | - | - |

Source: ACS, 2015-2019 Five-Year Estimates.

Note: The parent category includes biological and adoptive parents, as well as stepparents.

Among children living with parents in the Nome Census Area, about 60% live with two parents and about 40% live with one parent. Among the total number of children living with parents, 13% live only with their father, who is working, and 16% live only with their mother, who is working. About 35% of all children live with both parents who are working, while 9% of all children live in a two-parent home in which only the father is working and 10% live in a two-parent home in which only the mother is working. A greater proportion of one-parent households have no working adult. Eleven percent of all children live with one parent who has no job, while 6% of all children live with two parents who are not working.

Less than two-thirds (60%) of all children in the Nome Census Area live with two parents, compared to almost three-quarters (74%) statewide. The proportion of children living with parents who do not work is higher in the Nome Census Area at 17%, compared to 8% statewide. More than a third (35%) of all children in the Nome Census Area live with two working parents, compared to almost half (45%) of children statewide.

Pre-K to Secondary Education

Pre-K

Early Head Start is available for children 3 years and under in four communities in the region: Brevig Mission, Elim, Nome, and Shishmaref. Preschool programs for 3- and 4-year-olds are available in all Bering Strait communities, except for Diomedede, which lacks a sufficient preschool population for a program.

NOME

In Nome, several options make preschool education available to most of the prekindergarten population:

- **Kawerak Head Start/Early Head Start** operates in Nome independently of Nome Public Schools. The Nome Head Start and Early Head Start programs are available to children whose families meet low-income requirements. Head Start runs from 7:45 a.m. to 2:15 p.m. and child care is available for participants from 2:15 to 5:15 p.m. at the Uiviilat Play and Learn Center.
- **The Nome Preschool Association** offers a private preschool, with no income restrictions and some scholarships available. The preschool provides a morning class for 4-year-olds from 8 to 11:30 a.m. Tuesday through Friday and an afternoon class for 3-year-olds from 1 to 3:30 p.m. Tuesday through Thursday.
- **The Migrant Education Program** covers preschool costs for children who qualify for the program, which offers services to children who accompany their families in travel for subsistence activities and commercial fishing. Children are able to attend the Nome Preschool Association through this program.

The number of children who do not qualify for income-based or migrant education (about five to seven annually) has not been great enough for the district to create a separate program,

according to district administration. In addition, in recent years, the district has not had predictable pre-K funding, which is subjective annually to legislative approval.²³

BERING STRAIT REGION

In 12 communities outside of Nome, Bering Strait School District (BSSD) partners with either Kawerak Head Start/Early Head Start or RurAL CAP Head Start to provide a pre-kindergarten program. Kawerak operates Head Start in Brevig Mission, Elim, Gambell, Golovin, Koyuk, St. Michael, Shaktoolik, Shishmaref, Teller, and White Mountain, and Early Head Start operates in Brevig Mission, Elim, and Shishmaref. For a detailed description of Kawerak’s Head Start and Early Head Start programs, please see Chapter 5.

RurAL CAP oversees Head Start in Savoonga and Stebbins. Twenty preschoolers were enrolled in the program in each community during the 2020-21 school year.

In Unalakleet and Wales, BSSD runs preschool programs on its own, using the same materials as Head Start. In FY21, 18 3- and 4-year-olds were enrolled in Unalakleet and six were enrolled in Wales. No preschool program is offered in Diomedede at this time due to a lack of children in this age group.

No income restrictions exist for Head Start and Early Head Start enrollees in these communities. The school district provides funding for certified pre-K teachers and some supplies, while Kawerak and RurAL CAP pay for building, supply, and other costs. Funding for certified teachers has been consistently covered in the BSSD budget through grants or the general fund for the last eight to 10 years.²⁴

Table 42. Educational Services for Preschool Children, By Community

| Community | Kawerak Head Start/BSSD | RurAL CAP Head Start/BSSD | BSSD Preschool | Early Head Start | Private Preschool |
|----------------|-------------------------|---------------------------|----------------|------------------|-------------------|
| Brevig Mission | ✓ | | | ✓ | |
| Elim | ✓ | | | ✓ | |
| Gambell | ✓ | | | | |
| Golovin | ✓ | | | | |
| Koyuk | ✓ | | | | |
| Nome | ✓ | | | ✓ | ✓ |
| St. Michael | ✓ | | | | |

²³ Jamie Burgess, Nome Public School superintendent, Zoom interview, July 14, 2021.

²⁴ Bobby Bolen, Bering Strait School District superintendent, phone interview, July 1, 2021.

| Community | Kawerak Head Start/BSSD | RurAL CAP Head Start/BSSD | BSSD Preschool | Early Head Start | Private Preschool |
|----------------|-------------------------|---------------------------|----------------|------------------|-------------------|
| Savoonga | | ✓ | | | |
| Shaktoolik | ✓ | | | | |
| Shishmaref | ✓ | | | ✓ | |
| Stebbins | | ✓ | | | |
| Teller | ✓ | | | | |
| Unalakleet | | | ✓ | | |
| Wales | | | ✓ | | |
| White Mountain | ✓ | | | | |

Source: Kawerak Head Start, MRG interviews.

WAITLISTS

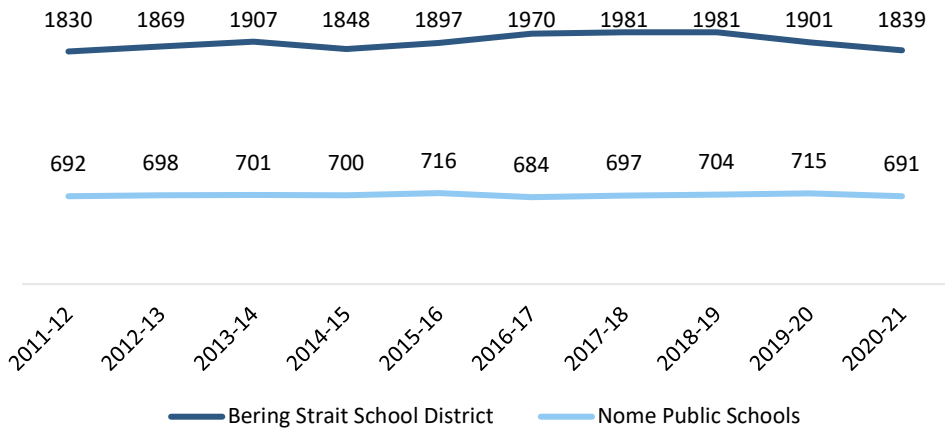
The Nome Preschool Association reports having eight children on its waitlist for 4-year-olds and three children on its waitlist for 3-year-olds in Fall 2021. This number is lower than usual because more children are getting into Kawerak's program. Kawerak reports four families are on the Fall 2021 waitlist for Nome Head Start and five families are on the waitlist for village Head Start programs, pending documentation. Eleven children in Nome were on the waitlist for Kawerak Head Start in the 2020-21 school year, while none were wait-listed in other communities. Nome is typically the community that has the longest waitlist, with as many as 10 to 22 families waiting in previous years. No children were reported on the waitlist for Kawerak Early Head Start in the 2020-21 school year.

School Enrollment

Two school districts operate in the Kawerak Service Area: Nome Public Schools in the City of Nome and Bering Strait School District (BSSD) in the rest of the region.

- Overall, enrollment in both districts has been relatively flat over the last decade.
- While BSSD enrollment rose to a high of 1,981 students in 2017-18 and 2018-19, the number of students dropped in the last two years. In 2020-21, 1,839 students were enrolled, close to the 2011-12 enrollment total of 1,830.
- Enrollment for Nome Public Schools has ranged from 684 to 716 students in the last decade, with the 2020-21 total of 691 students almost identical to that of 2011-12, when 692 were enrolled.

Figure 26. School Enrollment in Pre-K through 12th Grade, by District, 2011-12 to 2020-21



Source: Alaska DEED.

For preschool through eighth grade, the number of students in 2020-21 totaled 516 in Nome Public Schools and 1,409 in Bering Strait School District. The total number of students, from preschool through 12th grade, was 704 in Nome Public Schools and 2,002 in BSSD.

In Nome, 42% of the district’s students in 2020-21 attended Nome Elementary School, followed by 41% at Nome-Beltz Middle/High School, 9% at Extensions Correspondence, and 8% at the Anvil Science Academy. Enrollment in Extensions was triple normal levels due to families switching to homeschooling during the COVID-19 pandemic. Nome Youth Facility, formerly part of the district, is no longer in operation.

Children with Disabilities

In 2019-20, 200 Bering Strait School District students (11%) are reported to have disabilities. Seventeen of these were ages 3 to 5, while 183 were 6 to 21 years old. Among these students, 44% graduated and 2.3% dropped out.

Among Nome Public Schools students in the same year, 80 students (11%) are reported having disabilities. Seven of these children were ages 3 to 5, while 73 were 6 to 21. The graduation rate for these students was 67% and the dropout rate was 2.8%.

Drop Out and Graduation Rates

In 2019-20, Nome Public Schools had a graduation rate of 83%, slightly higher than the statewide rate of 79%. Bering Strait School District’s graduation rate was 77%. Both districts had an attendance rate of 90%.

In the same year, Nome Public School's dropout rate was 1.9%, while BSSD's was 2.3 %. No statewide number was available from DEED.

Assessments

The Alaska Department of Education and Early Development (DEED) uses the Alaska Developmental Profile (ADP) as an observational tool at the beginning of the school year to identify whether young children are kindergarten ready. The ADP involves assessing whether a child consistently demonstrate 13 skills or behaviors needed for school. Statewide in 2019-20, about a third of the children entering kindergarten consistently demonstrated 11 of 13 ADP goals.

That proportion was somewhat less for students entering the Bering Strait School District (29%) in the same year and about half the statewide percentage for students entering Nome Public Schools (16%). Four communities in the region had relatively high ADP scores. Two-thirds (67%) of the kindergarten students in Brevig Mission consistently demonstrated at least 11 of 13 ADP goals, and half the students in St. Michael, Teller, and Unalakleet met this standard. These are followed by Koyuk (<=40%), Savoonga (27%), and Elim, Gambell, Shishmaref, and Stebbins (<=20%). Golovin, Shaktoolik, Wales, and White Mountain have too few students to report statistically significant results.

Table 43. Kindergarten Students Who Consistently Demonstrate at Least 11 of 13 Alaska Developmental Profile Goals, 2019-2020

| | Student Count | Percentage of Students Who Consistently Demonstrated at Least 11 of 13 ADP Goals |
|-------------------------------|---------------|--|
| Alaska | 9,401 | 33% |
| Bering Strait School District | 137 | 29% |
| Nome Public Schools | 55 | 16% |
| Brevig Mission | 9 | 67% |
| Elim | 11 | <=20% |
| Gambell | 15 | <=20% |
| Golovin | 3 | * |
| Koyuk | 6 | <=40% |
| Nome | 55 | 16% |
| St. Michael | 10 | 50% |
| Savoonga | 15 | 27% |
| Shaktoolik | 3 | * |
| Shishmaref | 14 | <=20% |
| Stebbins | 17 | <=20% |
| Teller | 10 | 50% |
| Unalakleet | 18 | 50% |
| Wales | 3 | * |
| White Mountain | 3 | * |

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.

The 13 goals are divided into five domains: physical, well-being, health, and motor development; social and emotional development; approaches to learning; cognition and general knowledge; and communication, language, and literacy. About one-fifth of all kindergarten students statewide were able to meet all of these goals, while 17% in Bering Strait School District met all 13, and about 5% or less in Nome Public Schools. In BSSD, the percentage of students able to meet the physical well-being, health, and motor development goals was relatively high, at 72% for demonstrating strength and coordination of large motor muscles, and 66% for demonstrating strength and coordination of small motor muscles.

Table 44. Percent of Kindergarten Students Who Consistently Met Alaska Developmental Profile Goals, 2019-2020

| Category | Alaska | Bering Strait School District | Nome Public Schools |
|--|--------------|-------------------------------|---------------------|
| Count of Students with Ratings | 9,401 | 137 | 55 |
| Consistently Demonstrating All 13 Goals | 20% | 17% | <=5% |
| Consistently Demonstrating At Least 11 of the 13 Goals | 33% | 29% | 16% |
| Physical Well-Being, Health, and Motor Development | | | |
| Goal 1: Demonstrates strength and coordination of large motor muscles | 66% | 72% | 13% |
| Goal 2: Demonstrates strength and coordination of small motor muscles | 58% | 66% | 27% |
| Social and Emotional Development | | | |
| Goal 3: Participates positively in group activities | 53% | 56% | 25% |
| Goal 4: Regulates their feelings and impulses. | 49% | 46% | 38% |
| Approaches to Learning | | | |
| Goal 5: Shows curiosity and interest in learning new things and having new experiences | 54% | 50% | 24% |
| Goal 6: Sustains attention to tasks and persists when facing challenges. | 49% | 45% | 24% |
| Cognition and General Knowledge | | | |
| Goal 7: Demonstrates knowledge of numbers and counting | 57% | 55% | 44% |
| Goal 8: Sorts, Classifies, and organizes objects | 50% | 44% | 20% |
| Communication, Language and Literacy | | | |
| Goal 9: Uses receptive communication skills | 58% | 57% | 35% |
| Goal 10: Uses expressive communication skills. | 54% | 55% | 29% |
| Goal 11: Demonstrates phonological awareness | 41% | 34% | 35% |
| Goal 12: Demonstrates awareness of print concepts. | 47% | 43% | 35% |
| Goal 13: Demonstrates knowledge of letters and symbols (alphabet knowledge) | 48% | 51% | 49% |

Source: Alaska Department of Education and Early Development.

The proportion of kindergarten students who consistently demonstrate 11 of 13 ADP goals has risen statewide from 30% to 33% over the last three school years for which scores are available. In the Bering Strait School District, that figure has fluctuated between 24% and 29%. The proportion for Nome Public School has been roughly half that for the state, ranging between 16% and 18%.

K-12 School Infrastructure

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

The following capital projects are in order of priority for each school district, as submitted to the Alaska Legislature.

Table 45. Anticipated K-12 School Capital Projects, FY21 – FY25

| Project | Amount |
|---|--------------|
| Bering Strait School District | |
| Districtwide LED Upgrades | \$750,000 |
| District Office HVAC & Controls Replacement & Upgrades | \$125,000 |
| Gambell K-12 School Commons & Corridors Flooring Replacement | \$180,000 |
| Wales K-12 School Roof Replacement | \$470,000 |
| Unalakleet K-MS Window Replacement | \$105,000 |
| Gambell K-12 School Window Replacement | \$245,000 |
| Brevig Mission K-12 School Addition | \$19,000,000 |
| Stebbins K-12 School Addition | \$19,500,000 |
| Nome Public Schools | |
| Nome Elementary School Exterior Envelope Replacement | \$6,000,000 |
| Building A Primary Electrical Service | \$250,000 |
| Nome Beltz Jr/Sr High School Exterior/Interior Renovations | \$500,000 |
| Beltz High School HVAC Control Systems | \$200,000 |
| Districtwide Exterior Lighting Upgrades | \$40,000 |
| Nome Beltz Jr/Sr High School Boiler Replacement & Mechanical Upgrades | TBD |
| Maintenance Building Siding & Roof Replacement | \$225,000 |
| Quonset Hut Siding Replacement | \$120,000 |
| Building D Mechanical Update & Control Automation for Air Handlers | TBD |
| Districtwide Carpet Replacement | \$375,000 |

Source: Alaska Department of Education and Early Development.

K-12 School Assessments

The State Systems for Schools Success categorizes schools by the level of support they need, based on several indicators. The three 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 the twelfth 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.

Nine schools in the Bering Strait School District are designated as universal support, while four (Teller, Koyuk, Brevig Mission, and Stebbins) are designated targeted support and improvement and two (Diomedes and Wales) for comprehensive support. All Nome Public Schools are designated universal support, except Nome Elementary, (designated comprehensive support).

Table 46. 2018-19 System for School Success Report Results

| School Name | Location | Index Value | Designation |
|---------------------------------------|----------------|-------------|----------------------------------|
| Bering Strait School District | | | |
| Unalakleet School | Unalakleet | 46.67 | Universal Support |
| Anthony A. Andrews School | St. Michael | 31.26 | Universal Support |
| Paul F. Asicksik School | Shaktoolik | 26.88 | Universal Support |
| Aniguiin School | Elim | 26.25 | Universal Support |
| White Mountain School | White Mountain | 23.98 | Universal Support |
| Shishmaref School | Shishmaref | 23.49 | Universal Support |
| John Apangalook School | Gambell | 20.96 | Universal Support |
| Martin L. Olson School | Golovin | 20.81 | Universal Support |
| Hogarth Kingeekuk Sr. Memorial School | Savoonga | 19.36 | Universal Support |
| James C. Isabell School | Teller | 18.56 | Targeted Support and Improvement |
| Koyuk-Malimiut School | Koyuk | 15.89 | Targeted Support and Improvement |
| Brevig Mission School | Brevig Mission | 15.25 | Targeted Support and Improvement |
| Tukurngailnguq School | Stebbins | 15.14 | Targeted Support and Improvement |
| Diomedes School | Diomedes | 12.85 | Comprehensive Support |
| Kingikmiut School | Wales | 11.48 | Comprehensive Support |

| School Name | Location | Index Value | Designation |
|----------------------------|----------|-------------|--|
| Nome Public Schools | | | |
| Anvil Science Academy | Nome | 63.28 | Universal Support |
| Extensions Correspondence | Nome | 21.72 | Universal Support |
| Nome Elementary | Nome | 18.21 | Comprehensive Support |
| Nome Youth Facility | Nome | n/a | Universal Support (Small School Review) |
| Nome-Beltz Middle/High | Nome | 41.92 | Universal Support |

Source: Alaska Department of Education and Early Development.

In 2020-21, students in the Bering Strait region scored below statewide averages for proficiency in English language arts and math on the annual Performance Evaluation for Alaska's Schools (PEAKS). In English language arts in Spring 2021, 7% of students in all grades tested in the Bering Strait School District and 21% in Nome Public Schools were proficient or advanced, compared to 40% statewide. In math in the same year, 7% in BSSD and 19% in Nome Public Schools were proficient or advanced, compared to 33% statewide.

Table 47. Student Assessment Scores by Proficiency Level, Kawerak Service Area and Statewide, All Grades, 2020-21

| | Alaska | Bering Strait School District | Nome Public Schools |
|------------------------------|--------|-------------------------------|---------------------|
| English Language Arts | | | |
| Advanced | 12% | 1% | 3% |
| Proficient | 28% | 5% | 18% |
| Below proficient | 24% | 15% | 22% |
| Far below proficient | 37% | 78% | 57% |
| Math | | | |
| Advanced | 7% | 1% | 1% |
| Proficient | 26% | 6% | 18% |
| Below proficient | 39% | 34% | 42% |
| Far below proficient | 29% | 60% | 38% |

Source: Alaska Department of Education and Early Development.

TEACHER QUALITY INDICATORS

While the proportion of inexperienced teachers in Bering Strait villages was greater than the statewide average, the proportion of those teaching outside their field was lower in the region than statewide. In 2019-20, 8% of the teachers in the Bering Strait School District were inexperienced, compared to the statewide average of 4%. Fourteen percent of the teachers in

BSSD were teaching outside of their field, compared to the statewide average of 20%. This information is not available for Nome Public Schools.

TEACHER TURNOVER

The Bering Strait School District has a teacher turnover rate of about 35% a year,²⁵ higher than the statewide average of 20% cited in a 2017 University of Alaska study. Staff who stay the longest are those who become involved in activities and clubs, according to BSSD administration. An April 2021 State survey on teacher retention found that the top five factors determining whether a teacher remains in a position are salary, workplace conditions, personal connections with students, retirement benefits, and health-care benefits. The Alaska Department of Education and Early Development declared teacher retention a top priority, particularly for rural Alaska, and in September 2021 launched an effort to recruit a director to lead a statewide effort to reduce teacher turnover.

Post-Secondary and other Education Programs

University of Alaska Fairbanks Northwest Campus

The University of Alaska Fairbanks Northwest Campus is in Nome, offering classes in-person and online. Besides local classes, students have the option of participating in courses at one of the university's other six campuses. In Fall 2021, 178 students were enrolled at the Northwest Campus at the beginning of the semester. (This number is likely to increase over the semester with late enrollment and is significantly lower than pre-COVID enrollment numbers of 335 and 405 students in Fall 2018 and Fall 2019, respectively.)

Students may earn associate degrees in arts, various health fields, applied business, information technology, early childhood education, and rural human services, among others. Bachelor's degrees are available in elementary education, rural development, and other fields. The campus offers a master's degree in rural development, as well as in other fields through distance learning.

The Northwest Campus also partners with organizations to customize vocational and educational programs for Bering Strait businesses, schools, and agencies. The university offers job-specific training in nursing skills, boiler maintenance, OSHA requirements, constructions technology, and computer skills, among others. These courses are offered at the Nome campus and in villages across the region.

²⁵Bobby Bolen, Bering Strait School District superintendent, phone interview, July 1, 2021.

Career and Technical Education

ARCTIC ACCESS

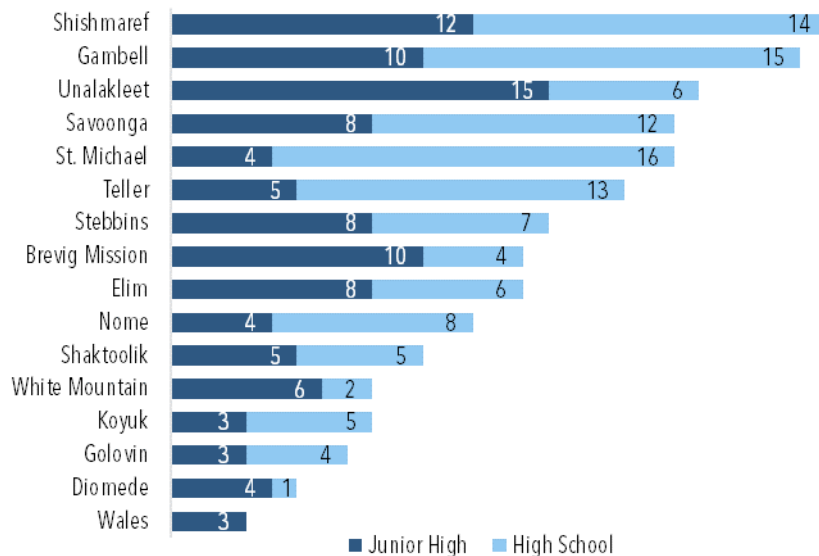
Based in Nome, Arctic Access Inc. is a center for independent living that offers opportunities for youth with disabilities to gain job skills and earn income. Arctic Access provides a summer jobs program that annually employs 25 to 35 youth, ages 14 to 21. Participants complete job applications, receive job training, and work 146 hours at local businesses or agencies. During the school year, youth with disabilities may apply for work-study positions, many of which are through the school district, but some of which are at private businesses or organizations. Five young people are participating in the work-study program in Fall 2021.

NORTHWESTERN ALASKA CAREER AND TECHNICAL CENTER (NACTEC)

The Bering Strait School District and Nome Public Schools developed the Northwestern Alaska Career and Technical Center (NACTEC) to provide middle and high school students with career and technical skills needed to obtain employment. Programs include small engine repair, heavy equipment operator, aviation, health. Working with business and industry partners, NACTEC has provided more than 2,000 students with training since 2003. The Nome-based program also receives with support from the Alaska Department of Labor and Workforce Development.

In FY20, 226 students across the region enrolled in NACTEC courses. About 48% were in junior high and 52% were in high school. Due to the pandemic, only 16 of 21 planned training programs were delivered. Student numbers are significantly lower than in pre-pandemic years, with FY20 enrollment two-thirds (69%) of FY19 and less than two-thirds (59%) of FY18 figures. Junior high enrollment increased, from 32% of enrollees in FY19 to almost half (48%) in FY20.

Figure 27. NACTEC Residential Enrollment, by Site, FY20



KAWERAK TRAINING AND EMPLOYMENT ASSISTANCE

Kawerak provides a range of educational and career training opportunities:

- **Adult education:** Kawerak offers instruction and counseling for participants in Adult Education (AE), General Education Development (GED), and English as a Second Language (ESL).
- **Scholarships:** The Caleb Scholarship offers \$5,000 per semester to outstanding Alaska Native students who are pursuing marine conservation-related careers; the Higher Education Scholarship Program provides \$1,500/semester or \$1,000/quarter to eligible tribal members for part-time and full-time enrollment in accredited colleges and universities.
- **Vocational Training Assistance:** Financial assistance is provided to eligible tribal members pursuing a certificate or degree from a vocational training or trade school program. Assistance may include travel, room and board, a monthly stipend for food and essentials, and other costs associated with training.
- **Career pathways grant:** In August 2021, Kawerak was awarded a five-year Native American Career and Technical Education Program (NACTEP) grant, which provides \$550,000 annually to develop technical skills in the Bering Strait region. Starting in middle school, students will explore career plans and can follow one of six pathways that represent in-demand occupations in the region: Business and tribal governance; construction trade; health care; early childhood development; maritime careers; and aviation careers. Students on these pathways may take secondary courses and obtain dual credits. The program will provide transitions from high school to post-secondary education, as well as work-based learning and additional training opportunities. The program is designed to train more than 1,300 students over five years.

NORTON SOUND HEALTH CORP. HEALTH AIDE TRAINING CENTER

Norton Sound Health Corp. runs the Nome-based Health Aide Training Center, one of four in the state. The center offers classroom and hands-on training to village residents who already are or want to become community health aides/practitioners (CHA/Ps). Basic training involves four classroom sessions three to four weeks long before providing patient care. The Community Health Aide Program (CHAP) is a network of about 550 CHA/Ps, who assess and refer community members seeking medical care. These aides and practitioners are the frontline of healthcare in their communities.

ANVIL MOUNTAIN CORRECTIONAL CENTER

The Anvil Mountain Correctional Center (AMCC) in Nome provides a variety of education, life skills, and re-entry programs for its male and female inmates, who are there for pretrial and short-term sentenced incarceration. Its training programs include adult basic education (ABE), general equivalency diploma (GED), parenting, Mavis Beacon typing, drivers' education, Microsoft Office, carpentry core curriculum, first aid, marine survival, conducting emergency drills on commercial fishing boats, Monitor heater maintenance and repair, small business basics, commercial driving, and pre-release skills.

NOME ESKIMO COMMUNITY

The Nome Eskimo Community provides culture and education programs to tribally enrolled youth including tutoring for grades 6-12, an after-school Native arts and culture program, a literacy program for grades 2 and 3, a summer reading program, a one-week program during spring break teaching traditional fishing jiggers and ice fishing.

Chapter 5: Kawerak Head Start in Focus

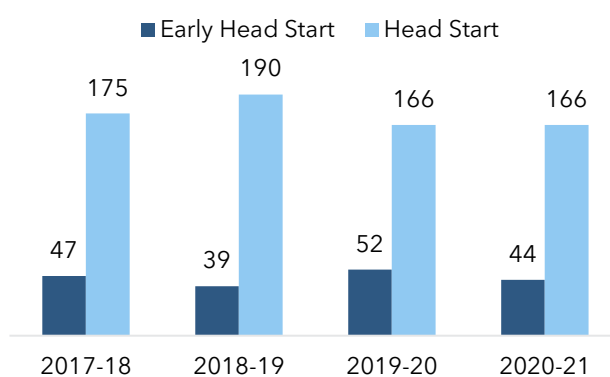
Kawerak has offered Head Start (HS) services to families in the Bering Strait Region since 1979, adding Early Head Start in 2010 which was expanded to Early Head Start/Child Care Partnership services in 2015. Head Start promotes social competence and prepares 3- and 4-year-olds for school. Early Head Start also nurtures social skills and provides structure for children from birth to 3 years of age. The Child Care Partnership provides additional funding and resources to EHS to improve child care worker compensation, purchase equipment and supplies, provide staff training, and offer additional services families, such as developmental screenings, provision of diapers and formula, home visits, parent activities, and family support workers.

Enrollment

In school year 2020-21, 166 children enrolled in Kawerak Head Start, the same number as the previous year. This is a 13% decrease from 2018-19, when 190 children were enrolled. While the cause of the decline since 2018-19 is not clear, the drop in enrollment corresponds with the onset of the COVID pandemic.

Forty-four children enrolled in Early Head Start in 2020-21, a 15% decline from the previous year. Enrollees increased, however, from 39 children in 2018-19 to 52 children in 2020-21.

Figure 28. Kawerak Head Start Total Enrollment, by Year, 2017-18 to 2020-21*



*Data for the first two years was labeled FY18 and FY19, while data for the last two years was labeled school years 2019-20 and 2020-21.

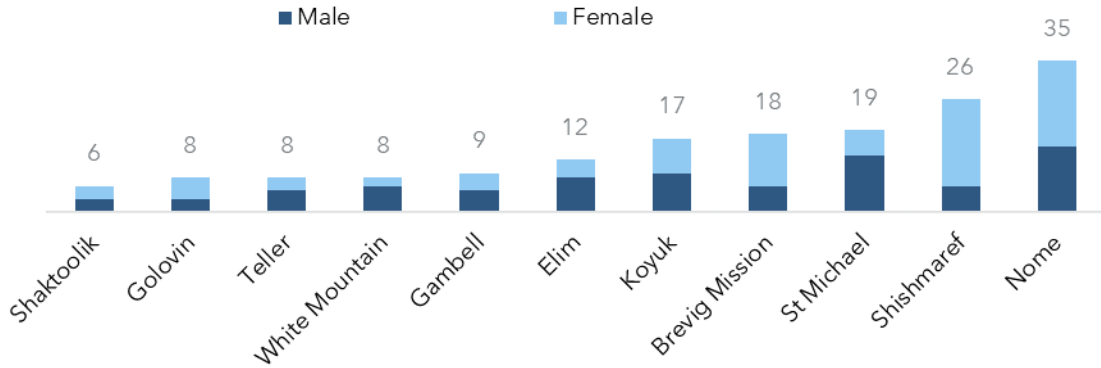
Source: Kawerak Head Start.

Head Start

- Half (52%) the Head Start enrollees in 2020-21 were female and 48% male.
- Twenty-one percent of Head Start enrollees are in Nome, with 16% in Shishmaref, 11% each in Brevig Mission and St. Michael, and 10% in Koyuk. All other communities make up less than 10% enrollment in each location.
- Most enrollees (96%) are Alaska Native or American Indian, with 2% multiracial, 1% black or African American, and 1% white.

- All enrollees in Golovin, Shaktoolik, Shishmaref, Teller, and White Mountain are Alaska Native or American Indian.
- Six regionwide Head Start enrollees were in foster care in 2020-21 and seven were homeless. In FY19, eight were in foster care and 10 were homeless.

Figure 29. Kawerak Head Start Enrollment, by Community, 2020-21

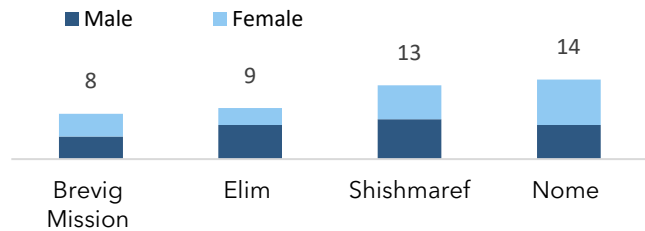


Source: Kawerak Head Start.

Early Head Start

- Early Head Start were half (52%) male and half (48%) female in 2020-21.
- One-third (32%) of 2020-2021 enrollees were in Nome, followed 30% in Shishmaref, 20% in Elim, and 18% in Brevig Mission. This is a shift since FY19, when Shishmaref did not have an Early Head Start and two-thirds (67%) of enrollment was in Nome.

Figure 30. Kawerak Early Head Start Enrollment, by Community, 2020-21



Source: Kawerak Head Start.

- Almost all enrollees (98%) were Alaska Native or American Indian, with 2% reported were white.
- All enrollees in Brevig Mission, Elim, and Shishmaref were Alaska Native or American Indian.
- One enrollee in 2020-21 was in foster care and one child was homeless. In FY19, four children were in foster care and two were homeless.

Households

The majority of Head Start and Early Head Start enrollees live in homes with two parents, and with at least three to five people living in the household. The majority also live in households with incomes at or below federal poverty levels.

Household Type

Among 2020-2021 Head Start enrollees:

- About two-thirds (65%) live in a two-parent household, while about one third (35%) live in a single-parent home.
- More than a third (36%) live in a home with six or more people, while a quarter (24%) live in a four-person household, 19% in a three-person household, 18% in a five-person household, and 3% in a two-person household.

Among 2020-2021 Early Head Start enrollees:

- Three-fourths (76%) live in a two-parent home, while one quarter (24%) live in a single-parent household.
- One-third (32%) live in a household with six or more people, 27% in a three-person household, 24% in a five-person household, 15% in a four-person household, and 2% in a two-person household.

Table 48. Kawerak Head Start and Early Head Start Household Type, by Percentage and Community, 2020-21

| | Household Type | | Number of People in Household | | |
|-------------------|----------------|---------------|-------------------------------|------------|-------------|
| | Two-Parent | Single Parent | Two | Three-Five | Six or More |
| Head Start | | | | | |
| Brevig Mission | 69% | 31% | 6% | 38% | 56% |
| Elim | 58% | 42% | 0% | 58% | 42% |
| Gambell | 88% | 13% | 0% | 75% | 25% |
| Golovin | 57% | 43% | 0% | 57% | 43% |
| Koyuk | 73% | 27% | 7% | 47% | 47% |
| Nome | 44% | 56% | 6% | 74% | 21% |
| St. Michael | 74% | 26% | 5% | 47% | 47% |
| Shaktoolik | 33% | 67% | 0% | 67% | 33% |
| Shishmaref | 76% | 24% | 0% | 56% | 44% |
| Teller | 100% | 0% | 0% | 75% | 25% |

| | Household Type | | Number of People in Household | | |
|-------------------------|----------------|---------------|-------------------------------|------------|-------------|
| | Two-Parent | Single Parent | Two | Three-Five | Six or More |
| White Mountain | 63% | 38% | 0% | 100% | 0% |
| Early Head Start | | | | | |
| Brevig Mission | 75% | 25% | 0% | 38% | 63% |
| Elim | 57% | 43% | 7% | 93% | 0% |
| Nome | 88% | 13% | 0% | 75% | 25% |
| Shishmaref | 91% | 9% | 0% | 45% | 55% |

Source: Kawerak Head Start.

Household Income

Among 2020-2021 Head Start enrollee households:

- More than half (58%) have incomes that are at or below U.S. Department of Health and Human Services (HHS) poverty guidelines. Taking a closer look at the degree of poverty, 43% of all Head Start households have incomes that are 50% or less of the HHS guidelines, while 15% of all households have incomes 51% to 100% of the guidelines.
- Twenty-six percent are at 101% to 200% of the guidelines, and 16% are above 200%.
- The proportion of households at or below HHS poverty guidelines has declined since FY19, when two-thirds (65%) had incomes at or below poverty guidelines.

Among 2020-2021 Early Head Start enrollee households:

- Thirty-nine percent have incomes that are 50% or less of the guidelines and 15% have incomes at 51% to 100% of the guidelines, for a total of more than half (54%) of the households existing in poverty.
- Twenty-two percent have incomes at 101% to 200% of the guidelines, and 24% are at 201% or more.
- The proportion of enrollee households with incomes at or below HHS poverty guidelines is higher than in FY19, when 48% of households had incomes at or below the guidelines.

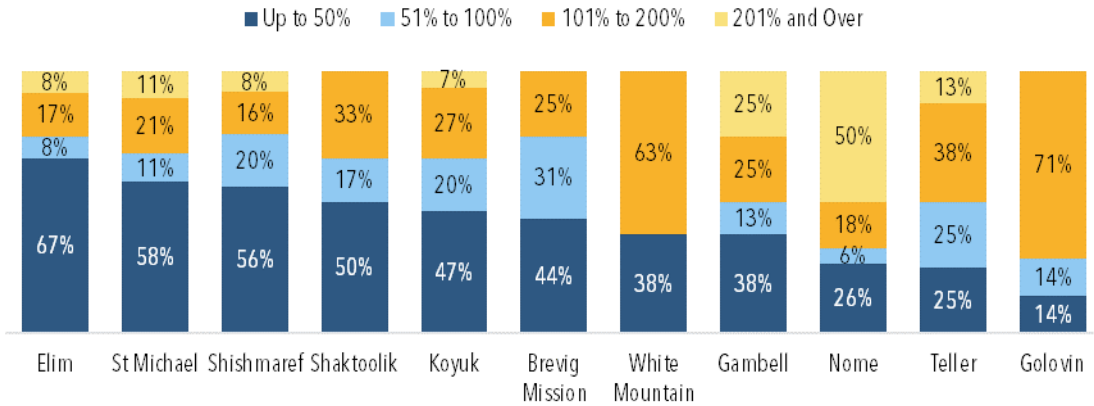
Table 49. Kawerak Head Start and Early Head Start Household Income Relative to Poverty Guidelines, Count by Community, 2020-21

| | Up to 50% | 51% to 100% | 101% to 200% | 201% and Over |
|-------------------------|-----------|-------------|--------------|---------------|
| Head Start | | | | |
| Brevig Mission | 7 | 5 | 4 | 0 |
| Elim | 8 | 1 | 2 | 1 |
| Gambell | 3 | 1 | 2 | 2 |
| Golovin | 1 | 1 | 5 | 0 |
| Koyuk | 7 | 3 | 4 | 1 |
| Nome | 9 | 2 | 6 | 17 |
| St. Michael | 11 | 2 | 4 | 2 |
| Shaktoolik | 3 | 1 | 2 | 0 |
| Shishmaref | 14 | 5 | 4 | 2 |
| Teller | 2 | 2 | 3 | 1 |
| White Mountain | 3 | 0 | 5 | 0 |
| Early Head Start | | | | |
| Brevig Mission | 5 | 0 | 2 | 1 |
| Elim | 3 | 1 | 6 | 4 |
| Nome | 6 | 1 | 0 | 1 |
| Shishmaref | 2 | 4 | 1 | 4 |

Source: Kawerak Head Start

In all but three communities with Head Start, 50% or more of the Head Start households have incomes at or below HHS poverty guidelines. Shishmaref has the highest percentage of households (76%) with incomes at or below federal poverty levels. Fifty-six percent of Shishmaref’s Head Start households have incomes at 50% or below HHS poverty guidelines and another 20% have incomes 51% to 100% of the guidelines. Shishmaref is followed by Elim and Brevig Mission, both with 75% of their Head Start households at or below federal poverty levels. The communities with the lowest levels of poverty are Golovin, with 29% of its households having incomes at or below HHS poverty guidelines, Nome (32%), and White Mountain (38%).

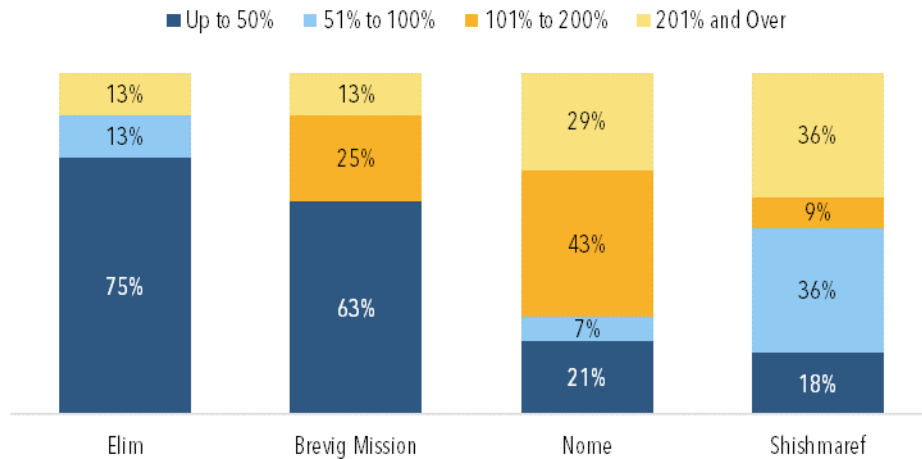
Figure 31. Kawerak Head Start Household Income Relative to Poverty Guidelines, Percent by Community, 2020-21



Source: Kawerak Head Start

Among communities with Early Head Start, Elim has the highest proportion (88%) of households that are at or below federal poverty levels, with 75% of households having incomes that are 50% or below HHS poverty guidelines and another 13% that are 51% to 100% of the poverty guidelines. Brevig Mission has the next highest proportion of households at or below poverty levels (63%), followed by Shishmaref (55%), and Nome (29%).

Figure 32. Kawerak Early Head Start Household Income Relative to Poverty Guidelines, Percent by Community, 2020-21

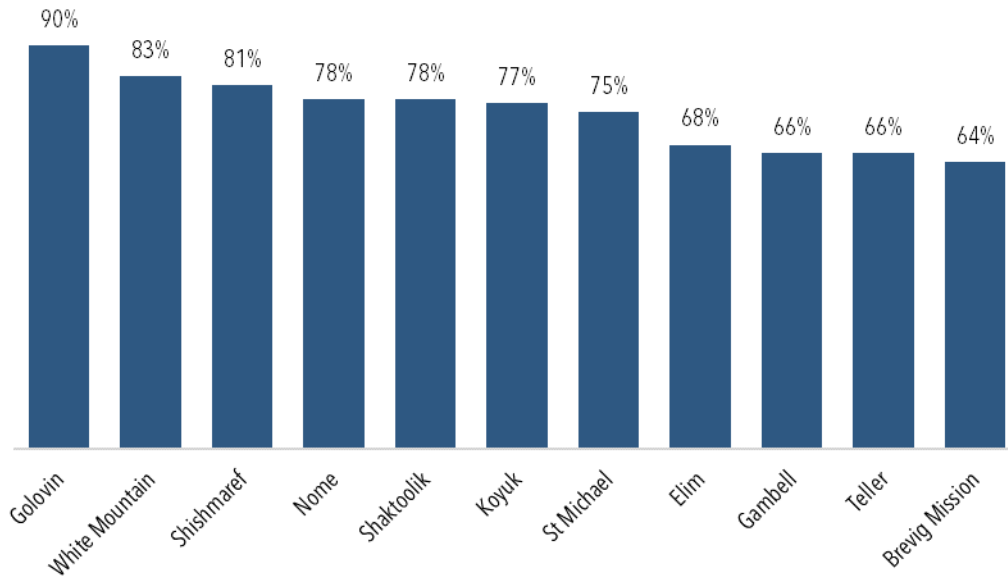


Source: Kawerak Head Start

Attendance

Among communities with Kawerak Head Start programs in 2020-21, Golovin has the highest attendance rate, at 90%, followed by White Mountain (83%), Shishmaref (81%), and Nome (78%). The lowest attendance rates are in Brevig Mission (64%), and Teller and Gambell (both 66%).

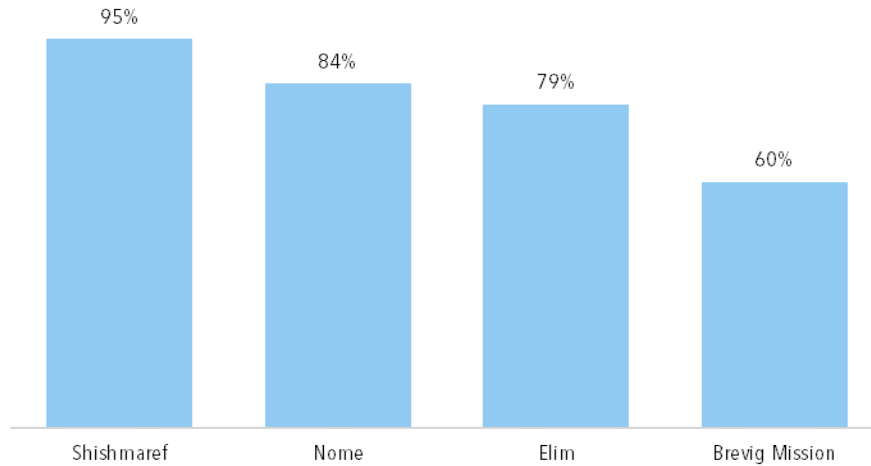
Figure 33. Kawerak Head Start Average Attendance, by Community, 2020-21



Source: Kawerak Head Start

Shishmaref, at 95%, has the highest attendance rate among Kawerak Early Head Start programs, followed by Nome (84%), Elim (79%), and Brevig Mission (60%).

Figure 34. Kawerak Early Head Start Average Attendance, by Community, 2020-21



Source: Kawerak Head Start

Enrollee Health

Health Insurance

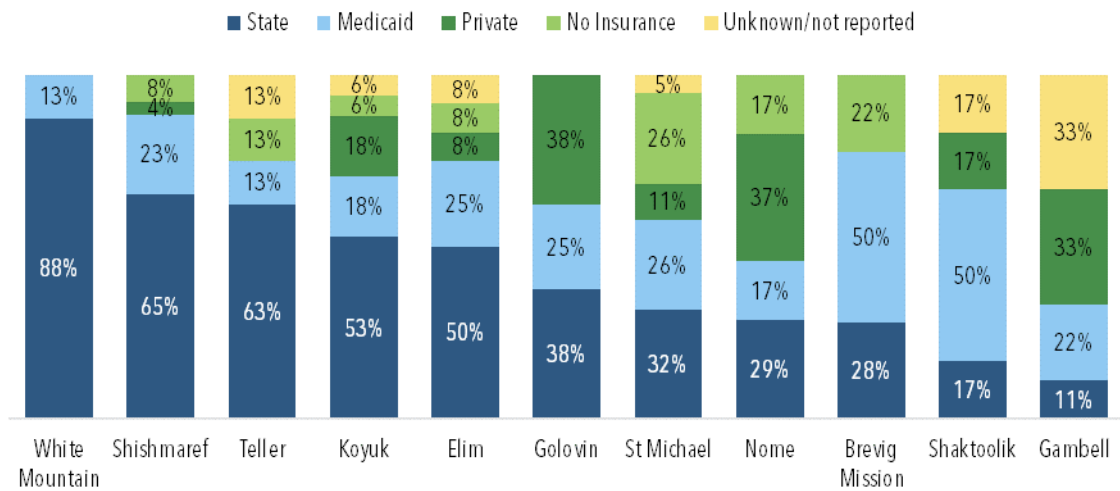
State insurance is the primary form of health insurance among families of Head Start and Early Head Start enrollees, with Medicaid the second most commonly used.

- Among Head Start enrollees, the highest proportion of State insurance users is in White Mountain (88%), and at least half or more families in Shishmaref, Teller, Koyuk, and Elim are also insured by the State.
- In FY19, Medicaid was the primary form of health insurance for most households, with the highest proportion in Shishmaref (88%). Half or more enrollees were insured through Medicaid in all other communities except White Mountain, Shaktoolik, and Nome.
- Among Early Head Start enrollees, Elim has the highest proportion of enrollees on State insurance, (78%), followed by Nome (29%), and Brevig Mission (13%). In Shishmaref, half (50%) of enrollees are on Medicaid and the other half did not report or have insurance.

Table 50. Type of Head Start and Early Head Start Enrollee Health Insurance, Count by Community, 2020-21

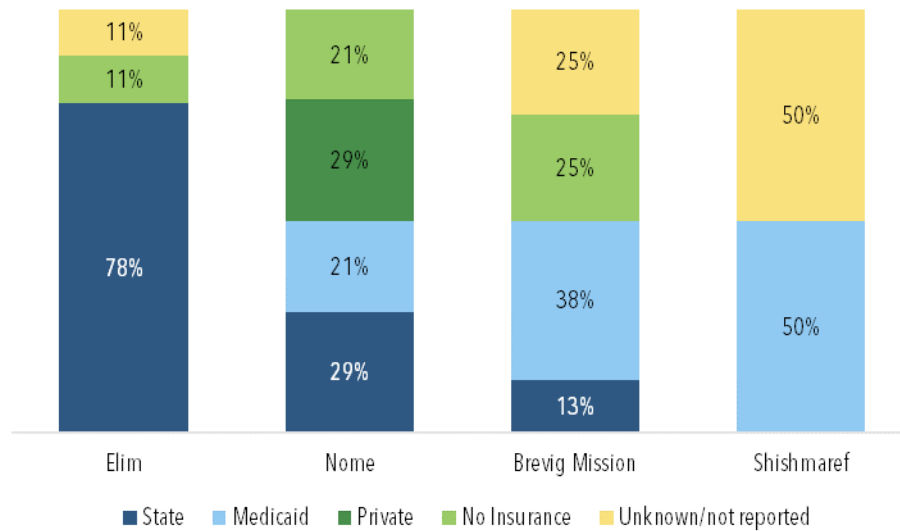
| | State | Medicaid | Private | No Insurance | Unknown/N ot Reported |
|-------------------------|-------|----------|---------|--------------|-----------------------|
| Head Start | | | | | |
| Shishmaref | 17 | 6 | 1 | 2 | 0 |
| Nome | 10 | 6 | 13 | 6 | 0 |
| Koyuk | 9 | 3 | 3 | 1 | 1 |
| White Mountain | 7 | 1 | 0 | 0 | 0 |
| St Michael | 6 | 5 | 2 | 5 | 1 |
| Elim | 6 | 3 | 1 | 1 | 1 |
| Brevig Mission | 5 | 9 | 0 | 4 | 0 |
| Teller | 5 | 1 | 0 | 1 | 1 |
| Golovin | 3 | 2 | 3 | 0 | 0 |
| Shaktoolik | 1 | 3 | 1 | 0 | 1 |
| Gambell | 1 | 2 | 3 | 0 | 3 |
| Early Head Start | | | | | |
| Elim | 7 | 0 | 0 | 1 | 1 |
| Nome | 4 | 3 | 4 | 3 | 0 |
| Brevig Mission | 1 | 3 | 0 | 2 | 2 |
| Shishmaref | 0 | 1 | 0 | 0 | 1 |

Figure 35. Kawerak Head Start Enrollee Health Insurance, Percentage by Community, 2020-21



Source: Kawerak Head Start.

Figure 36. Kawerak Early Head Start Enrollee Health Insurance, Percent by Community



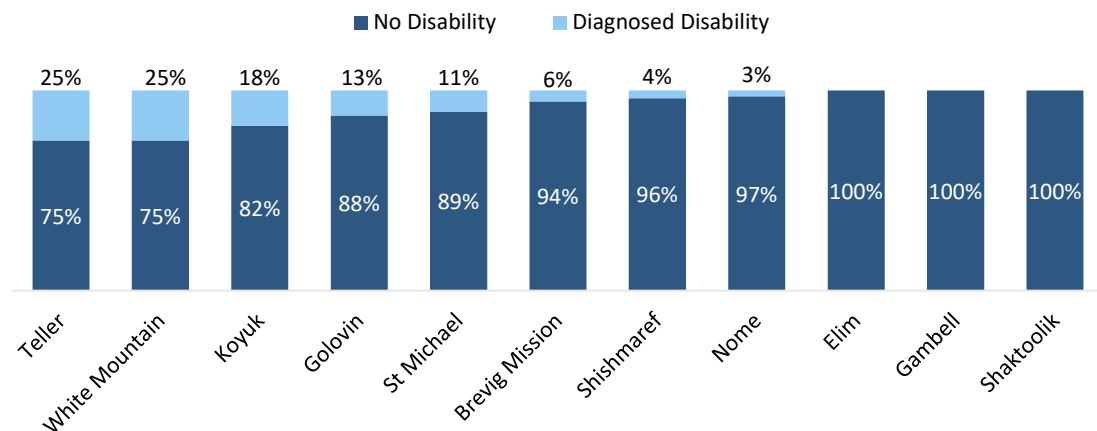
Source: Kawerak Head Start.

Disabilities

In eight of the 11 communities with 2020-2021 Kawerak Head Start programs, one to three enrollees are diagnosed with a disability. In Teller and White Mountain, 25% of the eight children enrolled in each community have a disability, followed by Koyuk (18% with a disability), Golovin (13%), St. Michael (11%), Brevig Mission (6%), Shishmaref (4%), and Nome (3%).

No children in the Early Head Start program are diagnosed with a disability.

Figure 37. Head Start Enrollees Diagnosed with A Disability, by Community, 2020-21



Source: Kawerak Head Start.

Assistance and Services

In 2020-21, among Head Start enrollee households:

- Indian Health Services (IHS) are most commonly used for assistance, with 44% to 89% of enrollee households receiving IHS benefits in each community. The communities with the highest proportion of households receiving IHS are Nome (89%), Golovin (88%), and White Mountain (88%) and the communities with the smallest proportion of households receiving them are Gambell (44%), Koyuk (47%), and St. Michael (47%).
- The next most prevalent service in most communities is Women, Infants, and Children (WIC), which is received by 43% of households in Nome (the smallest proportion of all the communities) and 77% in Shishmaref (the largest proportion in the communities).
- Eleven percent to 53% of households in each community receive Supplemental Nutrition Assistance Program (SNAP) benefits, with the highest proportions in Koyuk (53%), Shishmaref (50%), White Mountain (50%), and Teller (50%) and the lowest proportions in Nome, (11%), Gambell (11%), and Golovin (13%).
- Temporary Assistance for Needy Families (TANF) benefits are received by households in six communities: Brevig Mission (28%), Elim and Shaktoolik (17% each), Shishmaref (12%), Gambell (11%), and St. Michael (5%).
- Enrollee households in three communities receive Supplemental Security Income (SSI) benefits for disabled adults and children who have limited income and resources: Elim (8% of HS households), Brevig Mission (6%), and Shishmaref (4%).

Among 2020-21 Early Head Start enrollee households:

- IHS benefits are most prevalent benefit, from 38% of Brevig Mission EHS households receiving them up to 93% of those in Nome.
- WIC is received by half to three-quarters of households in each of the communities, ranging from 50% in Nome to 75% in Brevig Mission.
- SNAP benefits are received by 56% of EHS households in Elim, followed by 54% in Shishmaref, and 25% in Brevig Mission. None are received in Nome.
- TANF benefits are received by 13% in Brevig Mission and 11% of in Elim.
- SSI benefits are received only in Nome (7% of the households).

Table 51. Type of Services Head Start and Early Head Start Households Receive, Percent by Community, 2020-21

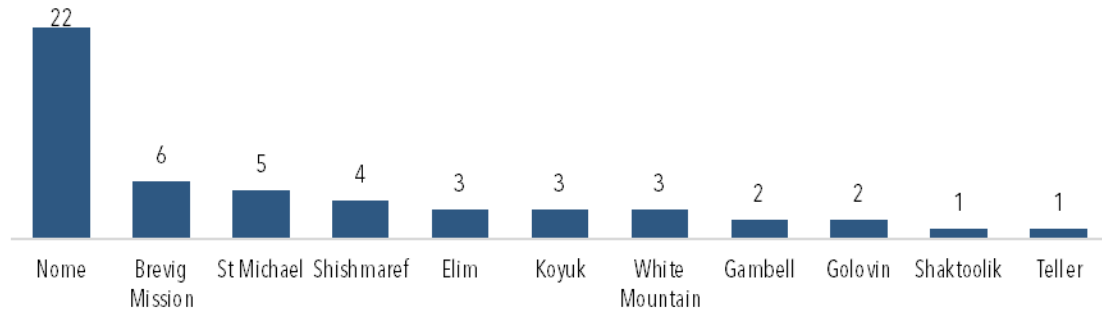
| | IHS | WIC | SNAP | TANF | SSI |
|-------------------------|-----|-----|------|------|-----|
| Head Start | | | | | |
| Nome | 89% | 43% | 11% | 0% | 0% |
| Golovin | 88% | 63% | 13% | 0% | 0% |
| White Mountain | 88% | 50% | 50% | 0% | 0% |
| Shishmaref | 77% | 77% | 50% | 12% | 4% |
| Elim | 67% | 75% | 50% | 17% | 8% |
| Shaktoolik | 67% | 50% | 17% | 17% | 0% |
| Brevig Mission | 61% | 67% | 22% | 28% | 6% |
| Teller | 50% | 50% | 50% | 0% | 0% |
| St Michael | 47% | 63% | 42% | 5% | 0% |
| Koyuk | 47% | 71% | 53% | 0% | 0% |
| Gambell | 44% | 44% | 11% | 11% | 0% |
| Early Head Start | | | | | |
| Nome | 93% | 50% | 0% | 0% | 7% |
| Elim | 78% | 67% | 56% | 11% | 0% |
| Shishmaref | 77% | 62% | 54% | 0% | 0% |
| Brevig Mission | 38% | 75% | 25% | 13% | 0% |

Source: Kawerak Head Start.

HEAD START STAFF

In 2020-21, Kawerak Head Start staff totaled 52, with the greatest number in Nome (22). The number of staff in outlying communities ranged from six in Brevig Mission and five in St. Michael to one each in Shaktoolik and Teller. Staff numbers are the same as in FY19.

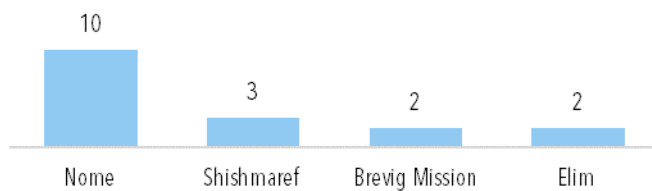
Figure 38. Number of Kawerak Head Start Staff, Count by Community, 2020-21



Source: Kawerak Head Start.

Early Head Start staff totaled 17 in 2020-21, a 42% increase since FY19. The number of staff in Nome has grown from six to 10 in the last two years, while the number in Brevig has dropped from four to two. The number of Elim staff has remained the same, at two, with three in Shishmaref at the new Early Head Start site.

Figure 39. Number of Kawerak Early Head Start Staff, Count by Community, 2020-21



Source: Kawerak Head Start.

Educational Attainment

A high school degree is the highest level of educational attainment for almost half (46%) of Kawerak Head Start staff. About a quarter (27%) have an Associate of Arts degree, 13% have earned a child development associate credential, and another 8% have a family development credential. Four percent have a Master of Arts degree and 2% have a Bachelor of Arts degree.

The highest level of educational attainment for almost three-quarters (71%) of Early Head Start is a high school degree. Eighteen percent have a child development associate credential, while 6% have a family development credential and another 6% have an Associate of Arts degree.

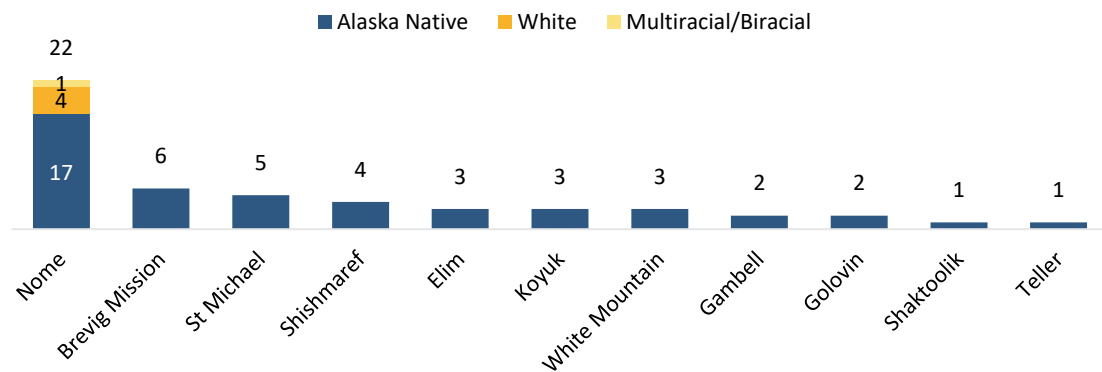
Languages Spoken

Most (94%) of Kawerak Head Start staff speak only English, while two staff members in Gambell and one in Nome speak an Alaska Native language. All Early Head Start staff speak only English.

Racial and Ethnic Composition

The Kawerak Head Start staff is 100% Alaska Native, with the exception of staff in Nome, where 77% are Alaska Native, 18% white, and 5% biracial or multiracial. Overall including Nome, 90% of Kawerak Head Start staff are Alaska Native, 8% white, and 2% multiracial or biracial. The proportion of Alaska Natives has increased since 2019, when 69% were reported as American Indian or Alaska Native, 21% as white, and 8% as multiracial or biracial

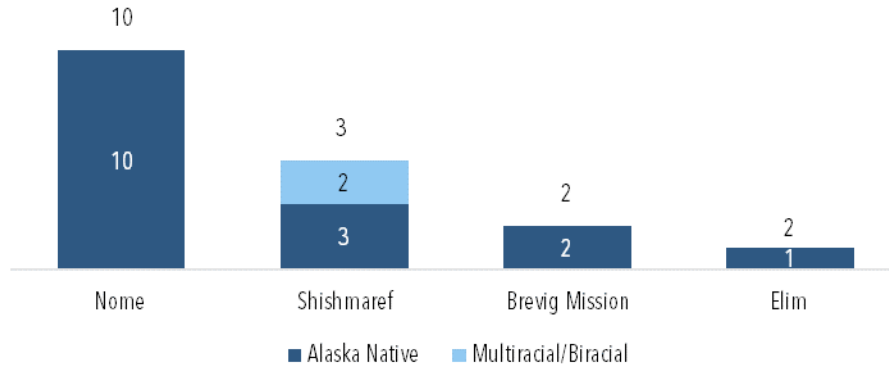
Figure 40. Total Number of Kawerak Head Start Staff and Racial and Ethnic Composition, Count by Community, 2020-21



Source: Kawerak Head Start.
 Note: Number of staff includes core staff.

A majority (94%) of the Early Head Start staff are reported as Alaska Native, and 12% are reported as multiracial.

Figure 41. Total Number of Kawerak Early Head Start Staff and Racial and Ethnic Composition, Count by Community, 2020-21



Source: Kawerak Head Start.

Note: Racial and ethnic identity are reported for only one of two Elim staff members.

Chapter 6: Community Health and Safety

Community Safety Profile

This section describes the presence of law enforcement and emergency response availability in the Bering Straits region, including state troopers and public safety officers.

LAW ENFORCEMENT

- While the City of Nome operates a police department, other Kawerak villages are served by Village Public Safety officers (VPSOs).
- Nome and Unalakleet are home to Alaska State Trooper posts.
- The number of arrests in the region fell by nearly 100 from 2018 to 2020 (576 to 477).

Table 52. Nome Census Area, Public Safety Reported Criminal Arrests, 2018-2020

| Incident | 2018 | 2019 | 2020 | Average |
|--------------------------------|------------|------------|------------|------------|
| Crimes Against Person | 306 | 277 | 228 | 270 |
| Assaults | 243 | 206 | 171 | 207 |
| Harassment | 7 | 17 | 13 | 12 |
| Homicides | 2 | - | 1 | 1 |
| Offenses Against Minors | 1 | 1 | 2 | 1 |
| Other Sexual Offenses | - | 2 | - | 1 |
| Sexual Assaults | 32 | 22 | 23 | 26 |
| Sexual Assaults of Minor | 21 | 29 | 18 | 23 |
| Crimes Against Property | 50 | 70 | 53 | 58 |
| Burglary | 15 | 35 | 28 | 26 |
| Financial Crimes | - | 3 | 2 | 2 |
| Robbery | 3 | 1 | - | 1 |
| Theft-Auto | 12 | 14 | 5 | 10 |

| Incident | 2018 | 2019 | 2020 | Average |
|---|------------|------------|------------|------------|
| Theft-Larceny | 20 | 17 | 18 | 18 |
| Crimes Against Society-Criminal Trespass | 5 | 11 | 11 | 9 |
| Other Criminal Offenses | 189 | 220 | 176 | 195 |
| Alcohol | 54 | 94 | 50 | 66 |
| Criminal Mischief | 31 | 39 | 21 | 30 |
| Cruelty to Animals | 2 | 1 | 1 | 1 |
| Drugs | 16 | 38 | 43 | 32 |
| Other Criminal Offense | 46 | 13 | 26 | 28 |
| Public Administrative Order | 7 | 11 | 19 | 12 |
| Terrorist Threatening | - | 2 | - | 1 |
| Unlawful Contact | - | 1 | 1 | 1 |
| Violate Condition of Release | 18 | 14 | 6 | 13 |
| Violate Domestic Violence Protective Order | 8 | 3 | 4 | 5 |
| Weapons | 6 | 4 | 3 | 4 |
| Traffic | 26 | 20 | 9 | 18 |
| Driving Under the Influence | 24 | 20 | 7 | 17 |
| Leaving Scene | 1 | - | - | <1 |
| Other Traffic Infractions | 1 | - | 2 | 1 |
| Total | 576 | 598 | 477 | 550 |

Source: Alaska State Troopers, C Detachment.
*Vandalism

Village Public Safety Officers

- Village Public Safety Officers (VPSOs) may provide other community safety services alongside law enforcement duties, including fire prevention, emergency medical services, and monitoring probation and parole.
- As of December 2021, six of the region's 15 villages have a VPSO. Ideally, each village would have two VPSOs for a total of 30.
- Barriers to hiring more VPSOs include limited or no public safety building which ideally includes holding cells and space for visiting Alaska State Troopers, housing shortages, and applicant issues qualifying for the position due to qualification barriers, such as a drug or criminal history, lack of a high school diploma or equivalent, and physical fitness.

- Issues finding qualified applicants are compounded by recruitment issues, including the high cost of living and travel in the region, general lack of knowledge about a VPSO's role, and no running water and sewer services in some communities.
- Retention for VPSOs is strong, with most of those on staff having worked as an officer for 10 to 28 years.
- At least five communities do not have a public safety building or have one that does not meet law enforcement needs: Diomedé, Gambell, Savoonga, Wales, and St. Michael (building is being remodeled). Lack of funding is the biggest obstacle to more buildings.
- Funding is not always available for annual training needed by VPSOs on staff.

Table 53. Communities with Village Public Safety Officers

| Community | Status of VPSO Position |
|----------------|--------------------------|
| Brevig Mission | Filled |
| Diomedé | Vacant at time of report |
| Elim | Vacant at time of report |
| Gambell | Vacant at time of report |
| Golovin | Filled |
| Koyuk | Vacant at time of report |
| St. Michael | Vacant at time of report |
| Savoonga | Filled |
| Shaktoolik | Vacant at time of report |
| Shishmaref | Filled |
| Stebbins | Vacant at time of report |
| Teller | Filled |
| Unalakleet | Filled |
| Wales | Vacant at time of report |
| White Mountain | Filled |

Source: Kawerak Inc.

Re-Entry

A Nome Community Reentry Coalition Community Assessment Report from June 2019. identifies needs for people returning from jail/prison. These needs include substance abuse treatment (98%), employment and job skills training (96%), and housing assistance (92%).

Table 54. Importance of Specific Programs or Services for Individuals Re-Entering Communities After Incarceration, 2019, Percent

| Program or Service | Very Important | Somewhat Important | Not Important |
|------------------------------------|----------------|--------------------|---------------|
| Substance abuse treatment | 98 | 2 | - |
| Employment/job skills and training | 96 | 4 | - |
| Housing assistance | 92 | 8 | - |
| Mental health services | 85 | 13 | - |
| Support for families | 83 | 15 | - |
| Education support | 68 | 32 | - |
| Transportation assistance | 42 | 50 | 6 |

Source: Nome Community Reentry Coalition, Community Assessment Report, June 2019. Clover Educational Consulting Group.

Note: The assessment is based on a non-representative sample of 49 Nome residents contacted through surveys and focus groups.

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.
- Disaster, hazardous materials, and other emergency planning is coordinated in Alaska through Local Emergency Planning Committees (LEPCs) within 21 Local Emergency Planning Districts (LEPDs). The Bering Straits LEPD covers the Kawerak Service Area, headquartered in Nome.
- Typically, emergency medical response is coordinated by village community health aides with assistance from AST/VPSO and other volunteers as available and necessary.

Table 55. Fire and Rescue Services and Calls by Community, 2018-2020

| Community and Fire Department | Current Registration* | Total Fires 2018-2020 | Rescue Calls 2018-2020 | Total Calls 2018-2020 |
|-------------------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Brevig Mission FD | Yes | 2 | 0 | 2 |
| Diomed VFD | No (2014) | 1 | 0 | 1 |
| Elim VFD | No (2020) | 1 | 0 | 1 |
| Gambell VFD | No (2014) | - | - | - |
| Golovin: Chinik VFD | Yes | 2 | 0 | 2 |
| Koyuk VFD | No (2009) | - | - | - |
| Nome FD | Yes | 45 | 210 | 327 |
| St. Michael | None | - | - | - |

| Community and Fire Department | Current Registration* | Total Fires 2018-2020 | Rescue Calls 2018-2020 | Total Calls 2018-2020 |
|-------------------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Savoonga VFD | No (2010) | 1 | 0 | 1 |
| Shaktoolik | No (2010) | 1 | 0 | 1 |
| Shishmaref | No (2020) | 11 | 0 | 11 |
| Stebbins | No (2006) | 2 | 0 | 2 |
| Teller | Assisted by Nome FD | - | - | - |
| Unalakleet | Yes | 8 | 0 | 8 |
| Wales | No (2009) | - | - | - |
| White Mountain | No (2014) | 2 | 0 | 2 |

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

*Registration is as of time of report writing.

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

Community Health Profile

Healthcare Infrastructure Overview

NORTON SOUND HEALTH CORPORATION

Norton Sound Health Corporation (NSHC) provides the primary health services infrastructure within the Kawerak Service Area, delivering services through the Norton Sound Regional Hospital (NSRH) in Nome and 15 village clinics which it manages. NSHC's multiple services and programs are offered through its organizational divisions which include Community Health Services, Hospital Services, Human Resources, Finance, and Engineering and Environmental Health.

Community Health Services

Community health is provided through Village Health Services, Behavioral Health Services, and Health Aide Training. Village Health Services manages village clinic staff, including Community Health Aides and Clinic Travel Clerks. Behavioral Health Services includes staff in Nome and village-based counseling.

Local community health aides staff the clinics, providing basic health services. Larger clinics in Brevig Mission, Savoonga, Gambell, Shishmaref, Elim, Saint Michael, and Unalakleet also employ a physician assistant or nurse practitioner and may provide limited laboratory, pharmacy, and radiology services. Provider teams travel to villages on rotating schedules to

provide ancillary services, such as optometry, physical therapy, and audiology. Dental health aides are employed at the Shishmaref and Savoonga clinics.

NSHC's Liitfik Wellness and Training Center opened in May 2021. The Center houses Behavioral Health Services, Tribal Healing, Chronic Care Active Management Prevention (CAMP), EMS Training, and Health Aide Training programs.

Hospital Services

Norton Sound Regional Hospital is an 18-bed Critical Access Hospital, which also includes outpatient and ancillary services. Hospital Services includes Laboratory, Medical Staff, Dental, Audiology, Physical Therapy, Emergency Medical Services, Radiology, Respiratory Therapy, Pharmacy, Infant Learning Program, Eye Care, Nutritional Services, Security, Environmental Services, Social Services, Nursing, and the Wellness Division. Individuals requiring more advanced level of care (i.e., including the need for advanced diagnostics, surgery, and/or intensive care) travel to Anchorage.

Social Services operates the Patient Hostel/Pre-Maternal Home in Nome and manages the Patient Advocate program, as well as Developmental Disabilities programs. The Wellness Division includes Tribal Healers, Women, Infant, and Children program, and Chronic Care Active Management and Prevention (CAMP). A Chief Nursing Officer oversees the Emergency Department, SART, Infection Control/Employee Health, Quyanna Care Center, Acute Care, and Primary Care (which includes Maternal Child Health and Sterile Processing).

The Quyanna Care Center, a long-term care facility located adjacent to NSRH, can accommodate 18 elders, allowing them to stay in the region. It was the first tribal nursing home in the state of Alaska and one of only 14 tribal nursing homes in the nation.

Finance and Human Resources

Finance is comprised of Patient Financial Services, Health Information Management (Medical Records), Information Systems, Materials Management, and Accounting. Human Resources includes Benefits Administration, Recruitment, Employee Relations, Education and Training, and Corporate Housing.

Engineering and Environmental Health

The Engineering and Environmental Health division includes Plant Operations, the Office of Environmental Health (OEH), Village Improvement Program, and Fleet Management. OEH works with the people and organizations of the Bering Strait Region to identify, evaluate, control, and ultimately prevent environmental health concerns, including those related to drinking water and wastewater, environmental planning, rabies control and prevention, integrated pest management, outbreak investigations, and emerging environmental health threats.

NOME PUBLIC HEALTH CENTER

Nome Public Health Center is staffed by public health nurses and an office assistant. The center provides multiple services are provided in the region's villages, including but not limited to infectious disease surveillance, tuberculosis screening and treatment, health education, school screening, emergency preparedness, etc.

PRIVATE HEALTH SERVICES

Private health services are limited throughout the region. Chiropractic and dental services are available in Nome.

Health Facilities Reporting Data (HFRD) is collected by the Alaska Health Facilities Data Reporting Program. HFRD is maintained through ADHSS, Office of Substance Misuse and

Community Health Information

Data descriptions and terminology may be found in table notations throughout this section

BIRTHS

- Overall, the number of teen and fertility births declined in the Nome Census Area during 2018-2020, as compared to 2015-2017. Statewide, the number of teen and fertility births also declined.
- The number of 2015-2017 teen births fell about 23% as compared to 2018-2020 (76 and 54, respectively). The number of 2015-2017 fertility births fell about 17%, as compared to 2018-2020 (651 and 542, respectively).
- Births with pre-term gestation periods (under 37 weeks) declined by about 10% from 2015-2012, as compared to 2018-2020 (80 and 70, respectively).
- The number of babies born in the Nome Census Area with low or very low birth weight increased by about 28% from 2015-2017, as compared to 2018-2020 (35 and 45, respectively). Comparatively, Alaska as a whole had a 35% decrease in the number of babies born with low or very low birth weights.
- Most babies born in the region are of normal weight.

Table 56. Teen and Fertility Birth, by Count, Nome Census Area Communities and Alaska, 2015-2017 and 2018-2020

| Community | Age ^a | | | |
|-------------------------------|-------------------------|--------------------|------------------------------|--------------------|
| | Teen Birth (Ages 15-19) | | Fertility Birth (Ages 15-44) | |
| | Count 2015-2017 | Count 2018-2020 | Count 2015-2017 | Count 2018-2020 |
| Alaska | 1,654 | 1,194 | 32,308 | 29,350 |
| Nome Census Area ^b | 76 | 54 | 651 | 542 |
| Brevig Mission | * | 5 | 43 | 33 |
| Diomedede | * | * | 7 | 8 |
| Elim | * | * | 28 | 15 |
| Gambell | * | 5 | 30 | 39 |
| Golovin | * | * | 11 | 7 |
| Koyuk | * | * | 28 | 20 |
| Nome | 21 | 6 | 206 | 167 |
| St. Michael | * | 7 | 41 | 31 |
| Savoonga | 7 | 5 | 52 | 54 |
| Shaktoolik | * | * | 11 | 7 |
| Shishmaref | 6 | * | 35 | 29 |
| Stebbins | 10 | 16 | 72 | 66 |
| Teller | * | * | 14 | 10 |
| Unalakleet | * | * | 48 | 36 |
| Wales | * | * | 12 | 9 |
| White Mountain | * | * | 13 | 11 |

Source: HAVRS Vital Records. *Denotes data censored when fewer than five counts recorded. Census area and Alaska totals include censored counts.

a. Excludes unknown age.

b. Excludes Council, Mary's Igloo, King Island, Solomon, and Port Clarence; these villages without permanent residence since 2012.

Table 57. Preterm Birth and Normal Gestation, by Count, Nome Census Area Communities and Alaska, 2015-2017 and 2018-2020

| Community | Gestation ^a | | | |
|-------------------------------|------------------------|--------------------|--------------------|--------------------|
| | Less than 37 weeks | | 37 or more weeks | |
| | Count 2015-2017 | Count 2018-2020 | Count 2015-2017 | Count 2018-2020 |
| Alaska | 3,383 | 2,184 | 32,275 | 26,542 |
| Nome Census Area ^b | 80 | 70 | 649 | 473 |
| Brevig Mission | 6 | * | 37 | 30 |
| Diomedea | * | * | * | 8 |
| Elim | * | 6 | * | 9 |
| Gambell | * | 6 | * | 32 |
| Golovin | * | * | * | 6 |
| Koyuk | * | * | * | 18 |
| Nome | 24 | 17 | 182 | 150 |
| St. Michael | * | 5 | * | 27 |
| Savoonga | 6 | * | 45 | 50 |
| Shaktolik | * | * | * | 7 |
| Shishmaref | 6 | * | 29 | 26 |
| Stebbins | 14 | 14 | 58 | 52 |
| Teller | * | * | * | 6 |
| Unalakleet | * | * | * | 33 |
| Wales | * | * | * | 9 |
| White Mountain | * | * | * | 10 |

Source: HAVRS Vital Records.

Notes:

a. Obstetric estimate of gestational age. Excludes unknown gestational age.

b. Excludes Council, Mary's Igloo, King Island, Solomon, and Port Clarence; these villages without permanent residence since 2012.

* Denotes data censored when fewer than five counts recorded. Census area and Alaska totals include censored counts.

Table 58. Birthweight, by Count, Nome Census Area Community and Alaska, 2015-2017 and 2018-2020

| Community | Birthweight ^a | | | | | |
|-------------------------------|--------------------------------|-----------------|------------------------------------|-----------------|---------------------------|-----------------|
| | Low or Very Low (<2,500 grams) | | Normal (2,500 grams - 4,000 grams) | | Overweight (>4,000 grams) | |
| | Count 2015-2017 | Count 2018-2020 | Count 2015-2017 | Count 2018-2020 | Count 2015-2017 | Count 2018-2020 |
| Alaska | 1,931 | 1,842 | 26,243 | 23,857 | 4,116 | 3,685 |
| Nome Census Area ^b | 35 | 45 | 518 | 416 | 96 | 81 |
| Brevig Mission | * | * | 40 | 27 | * | * |
| Diomedea | * | * | 7 | 8 | * | * |
| Elim | * | * | 25 | 10 | * | * |
| Gambell | * | * | * | 27 | * | 8 |
| Golovin | * | * | 9 | 7 | * | * |
| Koyuk | * | * | * | 15 | * | * |
| Nome | 11 | 14 | 166 | 131 | 29 | 22 |
| St. Michael | * | * | * | 23 | * | 5 |
| Savoonga | * | * | * | 45 | * | 6 |
| Shaktoolik | * | * | 9 | 5 | * | * |
| Shishmaref | * | * | 28 | 22 | * | 5 |
| Stebbins | 8 | 8 | 54 | 47 | 10 | 11 |
| Teller | * | * | 12 | 10 | * | * |
| Unalakleet | * | * | * | 23 | * | 11 |
| Wales | * | * | 9 | 8 | * | * |
| White Mountain | * | * | 10 | 8 | * | * |

Source: HAVRS Vital Records.

Notes:

a. Excludes unknown birthweight.

b. Excludes Council, Mary's Igloo, King Island, Solomon, and Port Clarence; these villages without permanent residence since 2012.

* Data censored when fewer than five counts recorded. Census area and Rest of Alaska totals include censored counts.

PRENATAL CARE

- Most women in the region receive adequate and adequate plus prenatal care.
- The number of women receiving inadequate prenatal care stayed about the same from 2015-2017, as compared to 2018-2020 (84 and 82, respectively). Statewide, Alaska reported an increase of about 9% in the number of women receiving inadequate care.

- Comparing 2015-2017 and 2018-2020, the number of women in the Nome Census Area receiving intermediate prenatal care fell by about 46% (98 and 51, respectively); respectively Alaska fell by about 34%.
- Comparing 2015-2017 and 2018-2020, the number of women receiving adequate prenatal care fell by about 18% (151 to 123); the rest of Alaska fell by 14%.
- While the number of women in the Nome Census Area receiving adequate plus prenatal care 2015-2017 and 2018-2020 fell by about 8% (287 to 264), adequate plus prenatal care statewide increased by about 15%.

Table 59. Adequacy of Prenatal Care, by Count, 2015-2017 and 2018-2020

| Community | Inadequate ^b | | Intermediate ^b | | Adequate ^b | | Adequate Plus ^b | |
|------------------|-------------------------------------|------------------------|---------------------------|------------------------|------------------------|------------------------|----------------------------|------------------------|
| | Count ^c 2015- 2017 | Count 2018- 2020 | Count 2015- 2017 | Count 2018- 2020 | Count 2015- 2017 | Count 2018- 2020 | Count 2015- 2017 | Count 2018- 2020 |
| Alaska | 4,627 | 5,041 | 6,433 | 4,075 | 12,203 | 10,452 | 7,481 | 8,629 |
| Nome Census Area | 85 | 83 | 98 | 51 | 151 | 123 | 287 | 264 |
| Brevig Mission | * | 5 | * | * | 11 | 6 | 26 | 21 |
| Diomedea | * | * | * | * | * | * | * | 5 |
| Elim | * | * | * | * | 7 | * | 12 | 12 |
| Gambell | 6 | 9 | * | * | 9 | 10 | 11 | 15 |
| Golovin | * | * | * | * | * | * | * | * |
| Koyuk | * | 5 | * | * | * | * | 14 | 10 |
| Nome | 27 | 23 | 38 | 20 | 61 | 44 | 66 | 67 |
| St. Michael | * | * | 6 | * | 9 | 8 | 18 | 18 |
| Savoonga | 9 | 13 | 6 | 5 | * | 13 | 30 | 21 |
| Shaktoolik | * | * | * | * | * | * | 9 | 6 |
| Shishmaref | * | * | * | * | 6 | * | 21 | 16 |
| Stebbins | 8 | 12 | 10 | 6 | 12 | 16 | 38 | 31 |
| Teller | * | * | * | * | * | * | * | 9 |
| Unalakleet | * | * | 11 | 6 | 12 | 9 | 19 | 16 |
| Wales | * | * | * | * | * | * | * | 7 |
| White Mountain | * | * | * | * | * | * | 7 | 7 |

Source: HAVRS Vital Records. * Data censored when fewer than five counts recorded. Census area and Alaska totals include censored counts.

a. Excludes Council, Mary's Igloo, King Island, and Solomon that are without permanent residence since 2012.

b. To classify the adequacy of received services, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the American College of Obstetricians and Gynecologists prenatal care standards for uncomplicated pregnancies and is adjusted for the gestational age when care began and for the gestational age at delivery. A ratio of observed to expected visits is calculated and grouped into four categories: Inadequate (received less than 50% of expected visits), Intermediate (50%-79%), Adequate (80%-109%), Adequate Plus (110% or more). c. Excludes births with missing information.

MORTALITY

- The top five causes of mortality in the Nome Census Area were unchanged from 2013-2017 to 2016-2020. These include malignant neoplasms (cancerous tumors), heart disease, unintentional injuries, intentional self-harm, and chronic lower respiratory disease.
- The number of deaths from unintentional injuries has increased within the region. Comparing 2015-2017 and 2018-2020, the number of unintentional injuries in the Nome Census Area increased by about 45% (38 and 54); Alaska experienced an increase of about 12%.
- The number of deaths from intentional self-harm increased in the Nome Census Area. Comparing 2015-2017 and 2018-2020, the number of unintentional injuries increased by 80% (20 and 36, respectively); Alaska experienced an increase of about 12%.
- The number of infant deaths in the Nome Census Area fell by about 30% from 2013-2017 to 2016-2020 (7 and 5, respectively); infant deaths statewide decreased by about 14%.
- Comparing 2015-2017 and 2018-2020, the number deaths under age 5 in the Nome Census Area has decreased by about 19% (13 and 11, respectively); under age 5 deaths statewide also fell by about 15%.

Table 60. Leading Five Causes of Mortality, by Count Nome Census Area and Alaska, 2013-2017 and 2016-2020

| Cause of Death | Nome Census Area ^a | | Alaska | |
|-----------------------------------|-------------------------------|--------------------|--------------------|--------------------|
| | Count 2013-2017 | Count 2016-2020 | Count 2013-2017 | Count 2016-2020 |
| Malignant neoplasms | 75 | 75 | 4,757 | 4,947 |
| Diseases of the heart | 67 | 75 | 3,870 | 4,226 |
| Unintentional injuries | 38 | 54 | 1,940 | 2,178 |
| Intentional self-harm (suicide) | 20 | 36 | 888 | 994 |
| Chronic lower respiratory disease | 34 | 35 | 1,013 | 1,071 |
| All deaths | 346 | 402 | 21,055 | 23,174 |

Sources: HAVRS Vital Records.

Notes:

a. Excludes Council, Mary's Igloo, King Island, Solomon, and Port Clarence; these villages without permanent residence since 2012.

Table 61. Counts for the Leading Five Causes of Mortality, by Count, Nome Census Area Community, 2016-2020

| Community | Malignant Neoplasms | Diseases of the Heart | Unintentional Injuries | Intentional Self-Harm (Suicide) | Chronic Lower Respiratory Diseases | All Causes of Mortality |
|-------------------|---------------------|-----------------------|------------------------|---------------------------------|------------------------------------|-------------------------|
| Brevig Mission | * | * | * | * | * | 11 |
| Diomede | * | * | * | * | * | * |
| Elim | * | * | * | * | * | 11 |
| Gambell | 9 | * | 6 | 6 | * | 38 |
| Golovin | * | * | * | * | * | 9 |
| Koyuk | * | * | * | * | * | 13 |
| Nome | 26 | 32 | 14 | 9 | 9 | 150 |
| St. Michael | * | * | * | * | * | 11 |
| Savoonga | 5 | 7 | 5 | * | 8 | 36 |
| Shaktoolik | * | * | 5 | * | * | 12 |
| Shishmaref | 5 | 6 | * | * | * | 21 |
| Stebbins | * | * | * | * | * | 15 |
| Teller | * | * | * | * | * | 12 |
| Unalakleet | 12 | 6 | 7 | 5 | * | 45 |
| Wales | * | * | * | * | * | 10 |
| White Mountain | * | * | * | * | * | 7 |
| All Deaths | 75 | 75 | 54 | 36 | 35 | 402 |

Sources: HAVRS Vital Records.

Notes:

a. Excludes Council, Mary's Igloo, King Island, and Solomon as these villages have been without permanent residence since 2012.

* Data censored when fewer than five counts recorded. Census area totals include censored counts.

Table 62. Mortality by Malignant Neoplasm Type, by Count, Nome Census Area and Alaska, 2016-2020

| Malignant Neoplasm Type | Nome Census Area ^a Count | Alaska Count |
|-----------------------------|--|-----------------|
| Trachea, bronchus, and lung | 22 | 1,108 |
| Breast cancer (female only) | 5 | 314 |
| Colon, rectum, and anus | 13 | 505 |

Sources: HAVRS Vital Records.

Notes: Excludes Council, Mary's Igloo, King Island, and Solomon.

Table 63. Infant and Under Age 5 Mortality, by Count, Nome Census Area and Alaska, 2013-2017 and 2016-2020

| | Nome Census Area ^a | | Alaska | |
|-------------------|-------------------------------|--------------------|--------------------|--------------------|
| | Count 2013-2017 | Count 2016-2020 | Count 2013-2017 | Count 2016-2020 |
| Infant mortality | 7 | 5 | 328 | 282 |
| Under 5 mortality | 13 | 11 | 424 | 362 |

Sources: HAVRS Vital Records.

Notes:

a. Excludes Council, Mary's Igloo, King Island, and Solomon as these villages have been without permanent residence since 2012.

GENERAL HEALTH STATUS

Chronic Disease

- Among measured chronic diseases 2015-2019, arthritis remains the most prevalent among NSHC service region adults at 19%, a rate which is slightly less than Alaska as a whole (23%).
- 2015-2019 regional prevalence rates for asthma (7%) and diabetes (4%) are lower than statewide (15% and 8%, respectively).
- The percentage of adults in the NSHC service region with cardiovascular disease (8%) and coronary heart disease (4%) is slightly higher than statewide (6% and 3%). Regional prevalence rates for heart attack are similar to Alaska's population.
- The region's prevalence for chronic obstructive pulmonary disease (10%) is twice that of the whole state (5%).

Table 64. Chronic Diseases, Five Year Estimates by Percent, NSHC Service Region and Alaska, 2013-2017 and 2015-2019

| Chronic Disease | 2013-2017 (95% Confidence Interval) | 2015-2019 (95% Confidence Interval) |
|--|--|--|
| Arthritis | | |
| NSHC Service Region | 22.3 (16.4-28.1) | 19.2 (21.9-23.8) |
| Alaska | 22.6 (21.7-23.5) | 22.9 (21.9-23.8) |
| Asthma | | |
| NSHC Service Region | 8.7 (5.0-12.4) | 7.2 (13.6-15.4) |
| Alaska | 13.8 (12.9-14.6) | 14.5 (4.0-10.3) |
| Cardiovascular disease | | |
| NSHC Service Region | 3.3 (1.0-5.5) | 7.9 (3.6-12.2) |
| Alaska | 4.3 (3.9-4.7) | 6.2 (5.7-6.7) |
| Chronic obstructive pulmonary disease | | |
| NSHC Service Region | 8.5 (3.1-13.8) | 10.4 (5.0-15.9) |
| Alaska | 5.2 (4.7-5.7) | 5.2 (4.6-5.7) |
| Coronary heart disease | | |
| NSHC Service Region | 2.4 (1.8-2.9) | 3.6 (0.2-6.9) |
| Alaska | 2.7 (2.4-2.9) | 2.7 (2.4-3.0) |
| Diabetes mellitus | | |
| NSHC Service Region | 4.8 (2.6-7.0) | 4.0 (2.0-6.0) |
| Alaska | 7.6 (7.2-8.0) | 7.9 (7.3-8.5) |
| Heart attack | | |
| NSHC Service Region | 3.5 (0.8-6.2) | 3.2 (0.6-5.7) |

Chapter 7: Cost of Living

The primary goal of this chapter is to describe the cost of living in the Kawerak Service Area, by recording prices in Nome and in the outlying villages and comparing the cost of essential goods and services with the nearest urban hub, which is Anchorage, Alaska.

Definition Cost of Living Differential

For this study, a price differential is the difference in prices between a base location (typically Anchorage for this study unless otherwise noted) and prices in communities in the Kawerak Service Area. Price differentials for specific items or services are calculated by dividing the average price of an item in a particular community by the average price of the same item in the base location. Cost differential refers to the difference in the cost of items without a single price or a price that is the sum of number of different items, such as housing and airfare. Both price and cost differentials are calculated the same way.

2008 Geographic Differential Study

Alaska generally has a higher cost of living than other states. Based on the most recent *Alaska Geographic Differential Study*, published in 2008, the cost of living in Nome was, on average, 39% higher than Anchorage. Prices in Nome were 60% higher for transportation, 51% higher for food, 40% for miscellaneous household expenses, and 24% higher for housing.

The cost of living differential takes into account differences in spending patterns and the portion of typical household expenses. In the 2008 report, price differentials were not calculated for other Bering Strait region communities. The following table describes results for Nome from the 2008 study. This 2021 cost of living study reviews and updates findings from 2008.

Table 65. Nome, Geographic Cost Differential, 2008

| Expenditure Category | Expenditure Weights | Price Differential | Cost of Living Differential |
|---|----------------------------|---------------------------|------------------------------------|
| Housing | 0.32 | 1.24 | 0.40 |
| Shelter | 0.20 | 0.96 | |
| Utilities | 0.12 | 2.60 | |
| Food | 0.17 | 1.51 | 0.25 |
| Meats, poultry, and fish | 0.05 | 1.32 | |
| Cereals and breads | 0.02 | 1.44 | |
| Dairy products | 0.02 | 1.60 | |
| Fruits and vegetables | 0.03 | 1.75 | |
| Other food items | 0.03 | 1.56 | |
| Food away from home | 0.02 | 1.53 | |
| Transportation | 0.16 | 1.60 | 0.25 |
| Fuel | 0.05 | 1.49 | |
| Car/truck ownership | 0.03 | 1.11 | |
| Other vehicle ownership | 0.01 | 1.39 | |
| Auto insurance | 0.02 | 0.88 | |
| Vehicle maintenance | 0.02 | 2.25 | |
| Interstate air travel | 0.02 | 1.89 | |
| In-state air/ferry travel | 0.02 | 2.72 | |
| Clothing | 0.01 | 1.27 | 0.01 |
| Medical | 0.03 | 1.05 | 0.03 |
| Medical Services | 0.01 | 1.12 | |
| Medical Insurance | 0.02 | 1.00 | |
| Other | 0.32 | 1.40 | 0.45 |
| Household furnishings/appliances | 0.10 | 1.66 | |
| Communications | 0.04 | 1.05 | |
| Recreation and education | 0.10 | 1.33 | |
| Personal care and other | 0.07 | 1.37 | |
| 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. Expenditure weights reported as 0.00 indicate weights of less than 0.5% of the household budget, but not zero. The housing category differential is not the simple sum of subcategory components.

2021 Cost of Living in the Bering Strait Region

The section describes typical living expenses for residents of Bering Strait communities. Expenses are categorized into housing, utilities, gasoline, household goods, and transportation.

Housing

Households that spend more than 30%-35% of their household income on housing costs are considered cost burdened. Households with housing costs at more than 35% of their income are considered very cost burdened. Household costs include rent (or mortgage payments), insurance, taxes, energy, utilities, and any applicable subsidies. In the Nome Census Area, 30% of all households are considered burdened, compared to 34% in Anchorage and 32% statewide.

Table 66. Cost Burdened Households, Nome Census Area and Comparisons, 2018

| Region | Cost Burdened (30-35% of household income) | Very Cost Burdened (more than 35% of household income) | Total Percent with Any Cost Burden |
|----------------------|--|--|---------------------------------------|
| Nome Census Area | 6% | 24% | 30% |
| Nome (hub community) | 7% | 22% | 29% |
| Non-hub communities* | 5% | 25% | 30% |
| Anchorage | 9% | 25% | 34% |
| Alaska | 8% | 24% | 32% |

Source: Alaska Housing Finance Corporation, 2018 Housing Assessment.

Note: Household costs include rent (or mortgage payments), insurance, taxes, energy, utilities, and any applicable subsidies.

*Non-hub communities are all communities in the Kawerak Service Area outside of Nome.

In Nome Census Area, households need to earn 114% of median family income to afford a two-bedroom unit at the prevailing market rate. Median family income, as it differs from household income, is for a family unit (all individuals 15 years or older living in a household) related by birth, marriage, or adoption. Related subfamily members are included in this definition.

In Anchorage, Fairbanks, and statewide the median family income required to rent a 2-bedroom unit is less than half that required in the Nome Census Area. The hourly wage needed for this type of housing in Nome Census Area communities is more than twice the state minimum wage.

Table 67. Percent Median Family Income and Wages per Hour Needed to Afford Fair Market Rent for a 2-Bedroom Unit, Nome Census Area and Comparisons, 2018

| Region | % Median Income | Full-time Wage per Hour Needed for 2-bedroom unit | Wage Differential (Alaska Base) |
|------------------|-----------------|---|---------------------------------|
| Nome Census Area | 114% | \$26.46 | 1.13 |
| Anchorage | 56% | \$25.09 | 1.08 |
| Fairbanks | 52% | \$23.86 | 1.03 |
| Alaska | 52% | \$23.25 | 1.00 |

Alaska Housing Finance Corporation, 2018 Housing Assessment, and MRG estimates.

The table below lists the median monthly gross rent (including utilities) for individual Kawerak Service Area communities and calculates a differential compared to Nome. Rental costs in Kawerak villages are often impacted by limited housing stock, in which many homes are overcrowded, and tribe-subsidized housing.

Table 68. Median Gross Rent, Kawerak Service Area Communities, and Comparisons and Cost Differential, Anchorage Base, 2019

| Community | All Units | All Units Differential | 2-Bedroom Unit | 2-Bedroom Differential |
|------------------|-----------|------------------------|----------------|------------------------|
| Brevig Mission | \$706 | 0.5 | \$925 | 0.7 |
| Elim | \$738 | 0.6 | \$775 | 0.6 |
| Gambell | \$1,025 | 0.8 | \$950 | 0.7 |
| Koyuk | \$610 | 0.5 | \$608 | 0.5 |
| Nome | \$1,500 | 1.1 | \$1,588 | 1.2 |
| St. Michael | \$1,125 | 0.9 | \$1,375 | 1.1 |
| Savoonga | \$950 | 0.7 | - | - |
| Shaktoolik | \$950 | 0.7 | - | - |
| Shishmaref | \$843 | 0.6 | \$688 | 0.5 |
| Stebbins | \$450 | 0.3 | \$525 | 0.4 |
| Teller | \$440 | 0.3 | - | - |
| Unalakleet | \$1,188 | 0.9 | \$1,229 | 1.0 |
| White Mountain | \$881 | 0.7 | \$869 | 0.7 |
| Nome Census Area | \$1,287 | 1.0 | \$1,372 | 1.1 |
| Anchorage | \$1,320 | 1.0 | \$1,288 | 1.0 |
| Alaska | \$1,244 | 0.9 | \$1,244 | 1.0 |

Source: US Census Bureau, ACS 2015-2019 Five-Year Average.

Utilities

Utility rates, including heating oil, electricity, and water and sewer rates often contribute to a higher cost of living in rural Alaska compared to urban Alaska and the Lower 48.

HEATING OIL

Heating oil is the primary source of building heat in rural Alaska, including the Bering Strait region. For this study, Fairbanks was used as the base price for heating oil comparisons, as Anchorage relies primarily on natural gas for heating fuel. Average price per gallon of heating oil in the Kawerak Service Area is consistently higher than the statewide average. The average Winter 2021 price in the Bering Strait Region is \$4.45 per gallon versus \$2.75 in Fairbanks. Most recently (Spring 2021), Teller had the highest fuel oil price in the region, at \$6.11 per gallon, and White Mountain the lowest at \$3.03.

Table 69. Heating Oil Price per Gallon, Nome Census Area Communities and Comparisons, 2020-2021

| Expenditure Category | Winter 2020 | Summer 2020 | Winter 2021 | Summer 2021 |
|-------------------------------|-------------|-------------|-------------|-------------|
| Brevig Mission | \$3.96 | \$3.96 | \$3.67 | \$3.78 |
| Gambell | \$4.45 | \$4.59 | \$4.58 | \$4.65 |
| Golovin | \$4.25 | \$3.10 | \$3.10 | \$3.10 |
| Koyuk | \$4.85 | \$4.85 | \$4.85 | \$4.85 |
| Nome* | \$4.49 | \$4.27 | \$4.53 | \$4.54 |
| St. Michael | \$4.50 | \$3.75 | \$4.00 | \$4.00 |
| Savoonga | \$5.65 | \$5.65 | \$5.51 | \$5.51 |
| Shishmaref | \$4.38 | \$4.42 | \$3.11 | \$3.11 |
| Stebbins | \$5.04 | \$5.04 | \$5.04 | \$5.07 |
| Teller | \$5.93 | \$6.11 | \$5.73 | \$6.11 |
| Unalakleet | \$5.24 | \$4.19 | \$3.99 | \$4.19 |
| Wales | \$6.44 | \$6.44 | \$4.64 | \$4.64 |
| White Mountain | \$4.29 | \$3.03 | \$3.03 | \$3.03 |
| Regional Average [†] | \$4.74 | \$4.71 | \$4.45 | \$4.49 |
| Alaska Average [^] | \$4.74 | \$4.45 | \$4.28 | - |
| Fairbanks | \$2.79 | \$2.69 | \$2.75 | \$3.75 |

Source: All Kawerak communities except Nome: Alaska Fuel Price Survey, Alaska Division of Community and Regional Affairs (DRCA). *Nome source: Crowley Fuel, Nome Office.

[†]Regional average is population weighted.

[^]Statewide fuel price survey average excludes Northern Region (due to subsidies).

The difference between heating oil prices in Fairbanks and Kawerak Service Area communities was calculated for Summer and Winter 2020 and 2021. The winter price differential for both years is 1.6, while summer prices varied more widely, potentially due to COVID-19 impacts in

2020. The Summer 2021 differential between Fairbanks and all regional communities combined was 1.4.

Heating fuel price differentials vary by community, with Teller (2.1) and Shishmaref (2.0) at the highest differentials in Winter 2021. Golovin, St. Michael, and White Mountain were the lowest, all at 1.1. Nome's price differential from Fairbanks is 1.7 in Winter 2021.

Table 70. Seasonal Heating Oil Price Differentials, Kawerak Service Area Communities and Fairbanks Comparisons, 2020-2021

| | Summer 2020 | Winter 2020 | Summer 2021 | Winter 2021 |
|---|-------------|-------------|-------------|-------------|
| Brevig Mission | 1.7 | 1.3 | 1.2 | 1.3 |
| Gambell | 2.0 | 1.5 | 1.4 | 1.7 |
| Golovin | 1.3 | 1.4 | 1.0 | 1.1 |
| Koyuk | 2.1 | 1.6 | 1.5 | 1.8 |
| Nome* | 1.8 | 1.5 | 1.4 | 1.7 |
| Savoonga | 1.6 | 1.5 | 1.2 | 1.5 |
| Shishmaref | 2.4 | 1.9 | 1.7 | 2.0 |
| St. Michael | 1.9 | 1.5 | 1.0 | 1.1 |
| Stebbins | 2.2 | 1.7 | 1.6 | 1.8 |
| Teller | 2.6 | 2.0 | 1.9 | 2.1 |
| Unalakleet | 1.8 | 1.8 | 1.3 | 1.5 |
| Wales | 2.8 | 2.2 | 1.4 | 1.7 |
| White Mountain | 1.3 | 1.4 | 0.9 | 1.1 |
| Regional Price Differential Compared to Fairbanks | 2.0 | 1.6 | 1.4 | 1.6 |
| Fairbanks | 1.0 | 1.0 | 1.0 | 1.0 |

Source: McKinley Research Group estimates.

Note: Fairbanks is used as the base rate for heating oil as Anchorage uses natural gas, not fuel oil. The regional price differential is population weighted.

ELECTRICITY

Electricity in rural Alaska is typically produced using diesel generators in standalone microgrids. Costs of providing diesel generated power in remote areas are greater than in urban areas of the state that benefit from access to greater infrastructure. The State of Alaska's Power Cost Equalization (PCE) program was established to equalize rural electric rates with urban areas. PCE rates apply to the first 500-kWh consumed per month per ratepayer.

Anchorage does not qualify for PCE subsidies. The price differential of electricity prices, including PCE subsidy rates, is 40% higher in the Kawerak Service Area than in Anchorage. Non-subsidized electric rates are two to three times higher than the Anchorage unsubsidized rate.

Table 71. Electricity Rates (per kWh) in Kawerak Service Area Communities and Comparisons, 2021, Anchorage as Base Rate

| Expenditure Category | PCE Rate | PCE Differential | Non-PCE Adjusted Rate | Non- PCE Differential |
|----------------------|----------|------------------|-----------------------|-----------------------|
| Brevig Mission | \$0.26 | 1.4 | \$0.55 | 3.0 |
| Diomedea | \$0.42 | 2.3 | \$0.65 | 3.5 |
| Elim | \$0.26 | 1.4 | \$0.55 | 3.0 |
| Gambell | \$0.29 | 1.6 | \$0.59 | 3.2 |
| Golovin | \$0.29 | 1.6 | \$0.44 | 2.4 |
| Koyuk | \$0.26 | 1.4 | \$0.58 | 3.1 |
| Nome | \$0.24 | 1.3 | \$0.36 | 1.9 |
| St. Michael | \$0.26 | 1.4 | \$0.54 | 2.9 |
| Savoonga | \$0.27 | 1.5 | \$0.56 | 3.0 |
| Shaktoolik | \$0.29 | 1.6 | \$0.55 | 3.0 |
| Shishmaref | \$0.26 | 1.4 | \$0.56 | 3.0 |
| Stebbins | \$0.26 | 1.4 | \$0.54 | 2.9 |
| Teller | \$0.26 | 1.4 | \$0.57 | 3.1 |
| Unalakleet | \$0.31 | 1.7 | \$0.46 | 2.5 |
| Wales | \$0.27 | 1.5 | \$0.61 | 3.3 |
| White Mountain | \$0.28 | 1.5 | \$0.55 | 3.0 |
| Regional Average | \$0.26 | 1.4 | \$0.48 | 2.6 |
| Anchorage | - | 1.0 | \$0.19 | 1.0 |

Source: Power Cost Equalization Survey, Anchorage rates from Chugach Electric Association. Regional Average is weighted by population.

^Statewide fuel price survey average excludes Northern Region (due to subsidies).

ANNUAL ENERGY COST

Including electricity and heat, the average annual energy cost for a single-family home in the Nome Census Area is more than three times higher, at \$6,421, than in Anchorage, at \$3,368. For multi-family units, energy costs are almost double in the Nome Census Area, at \$4,683 per year, compared to Anchorage at \$2,560.

On a square foot basis, the annual energy cost for a single-family home in the Nome Census Area averages \$5.49 per square foot, compared to \$1.49 per square foot in Anchorage and \$2.31 statewide.

Table 72. Energy Costs: Total Annual and Cost Per Square Foot Per Year, Nome Census Area and Comparisons, 2018

| Region | Single Family Unit | \$ Per Square Foot-Single Family | Multifamily Unit | \$ Per Square Foot-Multifamily |
|------------------|--------------------|----------------------------------|------------------|--------------------------------|
| Nome Census Area | \$6,421 | \$5.49 | \$4,683 | \$4.49 |
| Fairbanks | \$5,292 | \$2.60 | \$3,970 | \$3.02 |
| Anchorage | \$3,368 | \$1.49 | \$2,560 | \$1.95 |
| Statewide | \$4,186 | \$2.31 | \$2,905 | \$2.27 |

Source: Alaska Housing Finance Corporation, 2018 Housing Assessment.

Home Heating Index

The Home Heating index (HHI) is a measure of energy used for heating a space that controls for home size and climate. It allows comparison of energy efficiency in homes across different regions. Higher HHI scores indicate lower energy efficiency.

According to the HHI, Nome Census Area homes are more efficient on average than homes in Anchorage or statewide. Normalizing the index by price per BTU, however, indicates the cost to heat homes is much greater in Nome than comparison areas.

Table 73. Home Heating Index (HHI): BTUs per Square Foot per Heating Degree Days, Nome Census Area and Comparisons, 2018

| Region | Single Family Unit HHI BTUs/ft ² /HDD | Single Family HHI Normalized \$/million BTUs | Multifamily Unit HHI BTUs/ft ² /HDD | Multifamily HHI Normalized \$/million BTUs |
|------------------|---|--|---|--|
| Nome Census Area | 7.6 | \$37.48 | 4.5 | \$38.98 |
| Fairbanks | 7.3 | \$18.87 | 6.6 | \$19.17 |
| Anchorage | 9.1 | \$9.90 | 8.8 | \$10.37 |
| Alaska | 8.8 | \$15.80 | 8.3 | \$12.79 |

Source: Alaska Housing Finance Corporation, 2018 Housing Assessment.

Note: The Home Heating Index is the average energy used to heat a home, normalized by the square footage of the home and the climate, allowing for comparison between areas with different climates and different average-sized homes. Home heating index: the annual space heating energy consumption in BTUs divided by the structure's conditioned square feet and by the location's heating degree days. Thermal HHI is often expressed in BTUs per square foot per degree day per year or BTU/SF/HDD/YR.

Space Heating Costs

Nome Census Area space heating costs per square foot for a single-family home are more than three times higher than costs in Anchorage and more than double those in Fairbanks. For multifamily homes the differences are less, with Nome Census Area cost per square foot more than double that of Anchorage and slightly higher than Fairbanks.

Table 74. Space Heating Costs: Total Annual and Cost Per Square Foot Per Year, Nome Census Area and Comparisons, 2018

| Region | Single Family Unit | \$ Per Square Foot- Single Family | Multifamily Unit | \$ Per Square Foot- Multifamily |
|------------------|--------------------|-----------------------------------|------------------|---------------------------------|
| Nome Census Area | \$4,227 | \$3.89 | \$2,423 | \$2.39 |
| Fairbanks | \$3,490 | \$1.91 | \$2,146 | \$1.76 |
| Anchorage | \$1,984 | \$0.96 | \$1,190 | \$0.98 |

Source: Alaska Housing Finance Corporation, 2018 Housing Assessment and MRG estimates.

WATER AND SEWER

Communities with piped water and sewer infrastructure in rural Alaska face high energy costs due to high system heating demands, aging infrastructure, and other factors. These high costs often result in high household water and sewer rates. The table below shows the level of financial burden faced by households from water and sewer rates. The financial burden is calculated by the Alaska Village Safe Water Program based on each communities' median household income.

Table 75. Household Financial Burden of Water and Sewer Rates, 2021

| Community | Combined Water & Sewer Rate | Indicator Score | Price Differential |
|----------------|-----------------------------|-------------------------|--------------------|
| Brevig Mission | \$100 | High financial burden | 0.9 |
| Elim* | \$95 | High financial burden | 0.9 |
| Gambell | \$106 | High financial burden | 1.0 |
| Golovin | \$110 | High financial burden | 1.0 |
| Koyuk | \$70 | High financial burden | 0.6 |
| St. Michael | \$163 | High financial burden | 1.5 |
| Savoonga | \$85 | Low financial burden | 0.8 |
| Shaktoolik* | \$60 | Medium financial burden | 0.6 |
| Unalakleet* | \$90 | High financial burden | 0.8 |
| White Mountain | \$105 | High financial burden | 1.0 |
| Nome* | \$108 | ^ | 1.0 |
| Anchorage* | \$109 | ^ | 1.0 |

Source: State of Alaska Department of Environmental Conservation, Division of Water, 2020 and McKinley Research Group estimates.

*Denotes communities with complete water and sewer systems.

^Nome rates come from Nome Joint Utility System; Anchorage Rates are from Anchorage Water & Wastewater Utility; neither are assessed for affordability by the ADEC.

Note: This affordability indicator, developed by ADEC, is for use in determining whether users can afford annual operation, maintenance, repair, equipment and capital replacement costs of water, waste water, or solid waste facilities. Kawerak Service Area communities without developed systems are not included in this analysis.

Communities in the Kawerak Service Area enjoy varying levels of water and wastewater treatment infrastructure, including above-ground piped systems, individual water tank systems, central wastewater disposal, or a common "washeteria."

Household Goods

Kawerak employees and contacts conducted grocery price surveys in Summer 2021. The surveys, based on a common shopping list of typical grocery items, including bread, milk, eggs, fruit, vegetables, and dry goods.

Grocery prices were only collected for items in stock. Given the nature of shipping to rural Alaska, including time and weather delays, items are frequently not available. This is particularly the case for fresh food that is prone to spoilage. This survey did not account for groceries ordered from online sources like Amazon, Full Circle Farms, or other out-of-town entities.

The difference between the collective grocery list prices in Anchorage and Kawerak Service Area communities, termed the cost differential, is displayed below. Koyuk has the highest differential, at double the cost of Anchorage. Teller and Brevig Mission are the lowest.

Table 76. Household Goods Cost Differentials, Kawerak Service Area Communities, 2021

| Community | Anchorage-Base Differential |
|-----------------------|-----------------------------|
| Brevig Mission | 1.3 |
| Diomede | 1.8 |
| Elim | 1.8 |
| Gambell | 1.8 |
| Golovin | 1.8 |
| Koyuk | 2.0 |
| Nome | 1.7 |
| Savoonga | 1.7 |
| Shaktoolik | 1.5 |
| Shishmaref | 1.8 |
| Teller | 1.3 |
| Wales | 1.6 |
| White Mountain | 1.8 |
| Region Average | 1.8 |
| Anchorage | 1.0 |

Source: McKinley Research Group Calculations and Grocery Survey.

Chapter 8: Community Engagement – Survey and Interview Results

Interview Results

McKinley Research Group interviewed 54 community leaders from June through November 2021 about community strengths and needs in the Kawerak service area. Interviewees included tribal coordinators, tribal family coordinators, administrators of nonprofit organizations, school administrators, and Kawerak administrators overseeing community and social services, cultural and regional development, public safety, and other services. Interviews were conducted primarily by phone, with some Zoom sessions.

One to three people were interviewed from each of the region's outlying 15 communities; while about one-third (35%) of interviewees were based in Nome, most of those people worked or supervised systems across the region and discussed regionwide conditions. Questions focused on health care, mental health services, financial and economic systems, public safety, child care, education, and infrastructure, as well as the needs of specific age groups from children to Elders.

Community Strengths

A strong sense of community and **subsistence lifestyles** were most frequently mentioned when interviewees were asked about their community's strengths. This sense of community included:

- **Willingness to work together** and help each other out.
- **Partnerships between organizations and political entities**, such as tribes, Alaska Native corporations, and city government.
- **Friendliness.**
- **Acceptance of others.**
- Supporting each other by **sharing subsistence food.**

Communities in which local organizations work together indicated a greater sense of collective well-being than those in which inter-organizational cooperation was not present. This was especially evident in one community that is undergoing major housing and infrastructure improvements and experiencing a sense of revitalization as a result of tribal, Native corporation, and city leaders joining forces.

Statements from across the region included:

- *Even though we have different last names, we are all extended family.*
- *A really big strength is that our community can work with the three organizations for the future, setting a good example for the children. The Native corporation, the tribe, and the city all work together well.*
- *For Nome, organizations and businesses work together in a lot of different ways; partnerships are key and paramount to providing services.*
- *We have a lot of nonprofits that provide assistance to people, like the women's shelter, the food bank, the teen center, the recreation facility, and basketball is big in the winter.*
- *We work together to better our community. If they see our kids doing something wrong, they say, "No, you're not supposed to do that."*
- *Hunters share their subsistence food. This is a very caring community.*
- *There's a lot of funding for students, too, to further education or work experience.*

UNDERUSED ASSETS

Bering Strait leaders reported the following as existing community assets that are being underused:

1. **Elders' leadership and knowledge** - "They have so much information about what life used to be like and so much indigenous knowledge. We ask them which way to have these houses face. You put the doors facing this way because the wind always comes from there. So much that ties the culture together is being lost."
2. **Elders who could work as volunteers** or assistants in the schools.
3. **A subsistence lifestyle**, including use of existing food caches, and tools such as drying racks and fermenting barrels.
4. **COVID-related funding** for education and training, as well as employment opportunities.
5. **Money available for small businesses** for planning and marketing, supplies, or hiring an apprentice.

COMMUNITY CHALLENGES

- The high cost of living, regional housing shortage, limited of vocational training, and lack of hope among many young people are among the region's largest challenges, according to interviewees. A shortage of jobs and housing are the primary reasons cited for people leaving communities or the region. Challenges are categorized for four age groups (children, young adults, adults and working families, and elders) and then by primary challenges (health care, behavioral health care, economic and financial needs, public safety, and infrastructure).

Challenges by Age Group

Children

Interviewees reported the primary challenges related to children in the Bering Strait region are:

- Lack of skills in **reading, writing, and math.**
- Living in homes with **substance abuse and domestic violence.**
- Unavailable and expensive **child care.**
- **High cost of daily supplies**, such as diapers and formula.
- **Shortage of healthy activities.**
- Need for **a safe place to socialize.**
- **Strained relationships** with adults and others, sometimes involving bullying.

Solutions

Interviewees suggested the following to improve education and better prepare children for adult life:

1. **Better grounding in traditional culture.**
2. **More traditional Native language classes.**
3. **Elders in the classroom** to teach values such as respect.
4. **Afterschool programs** designed to keep children active, gain skills, and socialize, while providing adult supervision and guidance.
5. A safe place to go, such as **an activity center.**
6. **Child care centers**, including space individual licensed providers might offer services.

Statements by interviewees include:

- *Our kids don't know what it means to be a tribal member or a (Native corporation) shareholder. They learn about it when they get to be a senior in high school because of scholarships. We need to bring that information to them sooner.*
- *We still have too many kids in foster care and too much substance abuse and domestic violence.*
- *Even just getting diapers is hard. You can see when people are running out of diapers or formula. I've seen posts on Facebook, "I need formula."*
- *Our traditions have to be kept up. We have two classes of Inupiaq immersion. It was a tough battle to get that far.*
- *Parents need to get involved with everything, with their school, their church, activities, the city, and tribal government.*

Young Adults (Ages 18-25)

Limited job opportunities are the biggest problem facing young adults, almost every interviewee reported. This problem is compounded by the following challenges:

- **Criminal records** preventing them from being hired.
- **Lack of training** for trades and jobs needed in outlying communities.
- **Hopelessness and lack of motivation**, which was reported to be greater in young men than in women.
- **Shortage of housing**, including a lack of space for young adults within their family's homes.

Solutions

Community leaders suggested the following solutions to address young adult needs.⁸

1. **Create a jobs program for young people with a court record.** This could counter the hopelessness when criminal records prevent people from getting hired.
2. Increase **opportunities for vocational training.**
3. Improve **communication about existing training opportunities.**
 - **Create a support system in Nome and Anchorage for young people** who are there from remote communities for vocational training.
 - **Provide a place to repair cars and four-wheelers.** Make this a place where young people can gain vehicle-repair skills.
 - Create **more work permits and on-the-job training for those under 18** so they can gain job skills to be used as young adults.

Interviewees' comments about young adults include the following:

- *Not enough of us are saying to our kids, be proud of who you are. You are a Native person. Be proud of that. Some of them don't know how to hunt, or go out seining, or preserve fish.*
- *None of the students here go to college. I think it's really important now. I wouldn't have said that 30 years back.*
- *Even here in Nome, the jobs are limited. So we have a lot of kids who graduate from high school and they're at a loss of what to do with their lives. They can't get technical training without leaving the village. We see a lot of kids who chill at their mom's house and don't have a real sense of direction in their lives.*
- *If each village had a mini-apartment building with studio or one-bedroom apartments, and then be really strict about it. There's so much that it does for your mind, having your own place.*

Adults and Working Families

Interviewees reported the following challenges for adults and working families. They are listed in order of the frequency mentioned:

- **Housing**
- **Lack of jobs**
- **High cost of living**
- **Child care**
- **Addiction** to alcohol, other drugs, and gambling.
- **Lack of running water** in five communities: Wales, Teller, Stebbins, Diomedes, and Shishmaref.
- **Lack of cell phones**, making it harder to apply for jobs

Solutions

These challenges are complex and complicated by the remoteness of Bering Strait communities. Community leaders suggested the following:

1. Tap into more **funding sources to build and renovate homes**. Seek funding opportunities used by other agencies, such as Cook Inlet Housing Authority, to build additional housing.
2. **Develop apartment buildings** so residents have affordable options.
3. **Provide communication stations** with access to internet, and computers, allowing local residents to apply for jobs only available through online applications.

Further housing recommendations are presented on this chapter's section titled *Infrastructure*. Child care issues are discussed in detail in the *Kawerak Child Care Survey Report*.

Elders

Elders in the Bering Strait region face the following challenges, according to interviewees:

- **Lack of personal care attendants (PCAs)**
- **Shortage of respite care**
- **Lack of help with daily chores** and errands
- **High cost of living**
- **Access to healthy food**
- **Lack of fuel delivery** in some villages
- **Absence of dementia care**

Solutions

1. Provide **opportunities in which young people can do chores for Elders.**
2. Create **a system to provide fuel deliveries** for Elders.
3. **Provide PCAs** to Elders in villages.
4. Provide **more Elder case management**, including help applying for Social Security.
 - Establish **a system in which young people help Elders meet their subsistence needs.**
 - Create a program in villages so **Elders are a key part of community decision-making** and **provide their expertise on traditional practices.** This would include **stipends for Elders' time.**
 - Establish **skilled nursing facilities.**
 - **Provide trustees to manage Elders' money.**

Comments about elders included the following:

- *We treat our elders very respectfully. Our Elders are high on the list. They are the ones who have expertise and knowledge and teach us what they have to know.*
- *If we have someone with Alzheimer's who needs 24 hours of care, we don't have those services. They're sent to Anchorage. It's horrible for the families.*
- *It would be nice for Elders to have someone help them with chores, like wood chopping, getting water, house cleaning.*
- *If we had people to manage money for some of the elders that would be very helpful. I hear reports of elder abuse and younger family members. And we need more elder activities.*
- *Sometimes the city hires people to help Elders, but they don't seem to last too long. More funding might help.*

COMMUNITY NEEDS

Health Care

Overall, interviewees reported health care as fairly good in the region, with needs better met in Nome than in outlying communities, where health professionals are not always available. Norton Sound Health Corporation received high marks for its services and staff.

Some service gaps in remote communities include:

- Insufficient number of **health aides.**
- **Inability to have mammograms** due to a lack of personnel.
- A need for **more wellness activities.**

Mental Health

Interviewees described mental health care services in the community as neutral to very poor, with an overall average of somewhat poor. A new behavioral health facility in Nome was acknowledged as a step forward toward improved care. Village-based counselors (VBCs) are sometimes available in outlying communities, but residents are not always willing to confide in VBCs who are relatives or neighbors. Professionals make infrequent visits to villages and COVID further limited their travel.

The biggest problems with behavioral health care are:

- **Too few trained professionals** in villages.
- **A need to leave the region for mental health care** due to lack of local services.
- **Professionals who lack an understanding of Alaska Native culture** because they are from outside the region or Alaska.

Community leaders' comments included:

- *Maybe a clinician comes out once a year to talk to individuals. Students get one visit a year. We'd like to see that program improve.*
- *They're mostly post-docs interns who are here temporarily so they don't know the region. They do behavioral health consulting through an iPad. If you're a 13-year-old girl in a village who has to talk with a white guy who's somewhere else, it's set up to fail.*
- *Best practices aren't determined on our population. Cognitive behavioral therapy might work with middle-class white people, but might not work with people we have.*
- *We don't have a local place for care so people have to go to Anchorage or Utah. One guy spent the first six months figuring out what it was like living in Utah. He was scared of getting in the elevator to go to breakfast. How can you do your therapy if you're scared to get in the elevator?*

Interviewees recommended the following to improve mental health care:

- **A residential treatment facility for youth in the region** so they are closer to home and in a culturally appropriate environment.
- More in-region alcohol treatment and **mental health centers for adults**.
- **A safe home in each community** so family ties are not completely severed; children can see parents when removed temporarily from their homes, and parents retain connections that improve chances for recovery.
- **More mental health professionals in villages** and grounded in Alaska Native culture.
- **Native men in behavioral health positions** so they address needs of the region's male population.

- Create a regional program similar to Southcentral Foundation’s **Family Wellness Warriors** to address addictions, domestic abuse, and neglect.
- **More school counselors** to help students deal with difficult domestic situations.

Economic and Financial Needs

Community leaders reported that economic opportunities are fair in Nome, but inadequate in most of the outlying communities. **Lack of jobs and training** for the jobs that exist are the key reasons for high poverty rates in many of the villages. In Nome, many of the high-paying positions go to transient outsiders who are not always invested in the community. One interviewee noted regional artists are also struggling due to a federal ban on African ivory, which has significantly reduced income from legal walrus ivory art sales.

Norton Sound Economic Development Corporation was reported to be a helpful partner to communities and residents, offering \$500 per household to assist with utilities. The corporation has given \$150,000 to three businesses a year for small-business initiatives and \$100,000 per community for infrastructure or utility projects.

Solutions

Recommendations for potential economic solutions follow.

1. Use the influx of Coronavirus Aid, Relief, and Economic Security (**CARES Act funds**) given to tribes and corporations to stimulate local businesses and the regional economy.
2. **Develop an economic project management program** that helps communities upgrade aging infrastructure, bring in project managers and design crews, assist with land management, and train people in bidding and other development processes.
3. Provide training and short-term loans to help residents **launch cottage industries and small businesses.**
4. Offer **short-term vocational courses** in accounting, weatherization, small-engine repair, home loans, Excel, and other areas.
5. Provide **classes in traditional Native arts**, such as beading and carving, for which a market exists.
6. Work with state and federal agencies so bans on African ivory do not continue to hurt the **market for legal walrus ivory.**

Public Safety

Opinion on public safety varied with about a third of interviewees reporting it is satisfactory, a third saying it is somewhat poor, and another third reporting it is good or excellent. Problems with alcohol, domestic violence, and sexual assault rise and fall within individual communities throughout the year. A chronic shortage of village public safety officers (VPSOs) exists, with only

six of the 30 positions in 15 villages filled. Alaska State Troopers also serve Nome and Unalakleet, and sometimes travel to outlying communities.

Interviewees noted the following could improve public safety.

- **VPSOs enforce curfews and minor-consuming laws** with fines and penalties.
- Develop an **accreditation system for Nome City police** to attract a higher caliber of law-enforcement officers.
- Provide **ongoing training** for law-enforcement officials.
- Offer **housing for VPSOs**.
- Provide **more incentives to keep VPSOs in their positions**.

For a more in-depth discussion of challenges facing public safety officials, please see the section on *Village Public Safety Officers* in *Chapter 6: Community Health and Safety*.

Infrastructure

Infrastructure is one of the region's most pressing problems, according to interviewees. They report infrastructure is fair in Nome, though typically poor to very poor in remote communities. The biggest problems include the following:

- **A shortage of 1,386 homes** in the region, resulting in:
 - Overcrowded homes.
 - People living in homes that should be destroyed due to a lack of options.
- Lack of running water and sewer in five communities, and parts of other communities, with a total of **465 homes in the region without access to water and sewer**.
- **Six communities have aging water plants** that need to be replaced.
- **Inadequate roads** in some villages.

Community leaders suggested the following as ways to tackle these problems:

- Designate a Kawerak professional to **work with Native corporations and cities to transfer corporate lands** that can then be available for housing and other construction. Local leaders often do not understand the legal process, preventing development for years.
- **Develop apartment buildings** to provide affordable housing to more people.
- **Assist communities to improved Best Practices scores**, or Rural utility Business Advisor (RUBA) scores, which are needed to obtain federal funding for improved infrastructure.
- **Promote cooperation between tribal, corporation, and city leadership** because infrastructure development is unlikely without local entities working together.

COVID Impacts

Interviewees reported the COVID-19 pandemic affected the following aspects of their communities the most:

- **Mental health** - Isolation exacerbated existing behavioral problems and mental health services were reduced due to travel limitations and shutdowns to prevent infection.
- **Cost of living** - Already high prices increased, placing a hardship on families.
- **Economy** - Some small businesses closed, unable to survive a loss of revenue.
- **Sense of community** - Traditional gatherings, particularly on holidays, were canceled, leaving residents feeling more disconnected.

The influx of COVID relief funds has helped communities with infrastructure, such as improved internet and telecommunication, and other improvements. An additional impact on education occurred as some families returned to their villages during the pandemic for their children's education because village schools were less likely to be shut down than those in Nome and Anchorage.

Household Survey Results

Households in the Kawerak Service Area were surveyed in Fall 2021 about community and household strengths, challenges, and needs. Impacts of the ongoing COVID-19 pandemic were also assessed. In total, 534 respondents completed the survey covering all communities in the region. A summary of survey findings follows.

Regional Strengths

When asked to identify their community's greatest strengths, 80% of survey respondents cited subsistence opportunities. Other frequently reported strengths include the education system/schools and natural setting (45% of respondents for each element) outdoor recreation opportunities (43%), health care resources (38%), Elders (36%), strong families (34%), and community involvement (33%).

There are differences in strengths between Nome and outlying communities. Significant differences include 88% of respondents from communities outside Nome citing subsistence, compared to 64% in Nome; 61% of Nome respondents cite outdoor recreation opportunities compared to 33% in other communities.

Table 77. Top Regional and Community Strengths

| | Bering Strait Region n=528 | Nome n=175 | Communities Outside Nome n=353 |
|----------------------------------|-------------------------------|---------------|--------------------------------------|
| Subsistence opportunities | 80% | 64% | 88% |
| Education system/schools | 45% | 40% | 48% |
| Natural setting | 45% | 47% | 44% |
| Outdoor recreation opportunities | 43% | 61% | 33% |
| Health care resources | 38% | 45% | 34% |
| Elders | 36% | 26% | 41% |
| Strong families | 34% | 30% | 37% |
| Community involvement | 33% | 40% | 30% |
| Culture and language activities | 25% | 27% | 24% |
| Economic opportunities | 25% | 41% | 17% |
| Public safety/law enforcement | 22% | 26% | 20% |

Regional Challenges

Across the region, respondents most frequently cite the high cost of living (79%) and inadequate housing as challenges. Half or more respondents also cite alcohol or drug misuse (61%), climate change impacts (54%), and few safe places for youth (50%).

Other top challenges in Nome include domestic violence (49%) and limited child care options (45%). In communities outside Nome, other top challenges include few safe places for children (53%), limited economic opportunities (41%), limited telephone/internet (39%), lack of culture-based activities (38%), and sanitation/waste disposal (38%).

Table 78. Top Regional and Community Challenges

| | Bering Strait Region n=533 | Nome n=176 | Communities Outside Nome n=357 |
|----------------------------------|-------------------------------|---------------|--------------------------------------|
| High cost of living | 79% | 85% | 76% |
| Inadequate housing | 78% | 80% | 78% |
| Alcohol or drug misuse | 61% | 74% | 55% |
| Climate change impacts | 54% | 44% | 59% |
| Few safe places for youth | 50% | 43% | 53% |
| Limited child care options | 39% | 45% | 36% |
| Domestic violence | 35% | 49% | 28% |
| Lack of culture-based activities | 33% | 24% | 38% |

| | Bering Strait Region n=533 | Nome n=176 | Communities Outside Nome n=357 |
|----------------------------------|-------------------------------|---------------|--------------------------------------|
| Limited economic opportunities | 32% | 14% | 41% |
| Limited recreation options | 31% | 22% | 35% |
| Limited telephone/internet | 31% | 15% | 39% |
| Limited recreation opportunities | 29% | 19% | 33% |
| Limited access to healthy foods | 28% | 16% | 33% |
| Limited mental health services | 28% | 21% | 31% |
| Sanitation/waste disposal | 27% | 5% | 38% |

Note: Columns may not sum to 100% due to multiple responses.

Table 79. What are the most important issues facing children in your community? (%)

| | Bering Strait Region n=526 | Nome n=175 | Communities Outside Nome n=351 |
|---------------------------------------|-------------------------------|---------------|--------------------------------------|
| Safe places to go outside from school | 57% | 51% | 60% |
| Stable housing | 50% | 55% | 47% |
| Bullying | 49% | 48% | 49% |
| Child care | 47% | 58% | 41% |
| Cultural and language education | 40% | 35% | 42% |
| Abuse and neglect | 37% | 51% | 29% |
| Social connection | 37% | 35% | 38% |
| Nutrition | 36% | 29% | 40% |
| Recreation | 34% | 27% | 37% |
| Education | 29% | 32% | 28% |
| Mental health | 27% | 29% | 26% |
| Medical care | 13% | 11% | 15% |
| Other | 4% | 5% | 4% |

Note: Columns may not sum to 100% due to multiple responses.

Table 80. What are the most important issues facing young adults (age 18 to 25) in your community? (%)

| | Bering Strait Region n=530 | Nome n=173 | Communities Outside Nome n=357 |
|-----------------------------------|-------------------------------|---------------|-----------------------------------|
| Alcohol or drug misuse | 66% | 71% | 64% |
| Job training | 63% | 53% | 68% |
| Education after high school | 60% | 49% | 65% |
| Places to socialize | 58% | 50% | 62% |
| Local employment opportunities | 57% | 31% | 69% |
| Stable housing | 53% | 49% | 54% |
| Community involvement | 34% | 29% | 37% |
| Cultural connection | 32% | 31% | 32% |
| Mental health | 32% | 34% | 31% |
| High school graduation/equivalent | 31% | 31% | 31% |
| Bullying | 27% | 24% | 28% |
| Other | 3% | 3% | 4% |

Note: Columns may not sum to 100% due to multiple responses.

Table 81. What are the most important facing elders in your community? (%)

| | Bering Strait Region n=531 | Nome n=174 | Communities Outside Nome n=357 |
|-----------------------------------|-------------------------------|---------------|-----------------------------------|
| Low income | 60% | 61% | 59% |
| Help with household tasks | 56% | 54% | 58% |
| In-home personal care | 56% | 58% | 56% |
| Transportation | 54% | 45% | 58% |
| Social connection | 43% | 45% | 42% |
| Exercise/recreation | 42% | 40% | 43% |
| Nutrition | 37% | 30% | 41% |
| Home safety equipment | 33% | 29% | 35% |
| Access to/signing up for benefits | 31% | 28% | 32% |
| Access to health care | 27% | 23% | 29% |
| Abuse/neglect | 23% | 29% | 20% |
| Other | 5% | 6% | 4% |

Note: Columns may not sum to 100% due to multiple responses.

Table 82. At any time in the past year, did any member of your household experience the following...? (%)

| | Bering Strait Region n=512 | Nome n=167 | Communities Outside Nome n=345 |
|--|-------------------------------|---------------|--------------------------------------|
| Unreliable internet | 65% | 58% | 68% |
| Lack of employment or reliable income | 48% | 33% | 55% |
| Unreliable telephone service | 47% | 40% | 50% |
| Not able to get needed supplies or to travel due to transportation issues | 43% | 25% | 51% |
| Trouble accessing subsistence resources | 38% | 32% | 41% |
| Not enough food | 31% | 24% | 35% |
| Lack of heat | 27% | 14% | 34% |
| Lack of housing | 27% | 18% | 31% |
| Lack of public safety services (police, VPSO, fire, emergency) when needed | 26% | 7% | 35% |
| Lack of sewer service | 26% | 5% | 36% |
| Lack of clean water | 25% | 5% | 35% |
| Negative impacts from alcohol or drug use | 25% | 23% | 26% |
| Unable to access needed health care | 22% | 22% | 22% |
| Too many people living in the house | 19% | 10% | 23% |
| Lack of access to needed treatment for alcohol or drug misuse | 15% | 8% | 18% |
| Unable to access needed disability services | 14% | 6% | 18% |
| Unable to access needed mental health services | 13% | 12% | 14% |
| Lack of electricity | 12% | 7% | 14% |
| Violence, or threats of violence, between household members | 10% | 9% | 10% |

Note: Columns may not sum to 100% due to multiple responses.

Table 83. If you could make one change to improve the overall health of your household members in the next year, what change would you make? (%)

| | Bering Strait Region n=511 | Nome n=166 | Communities Outside Nome n=345 |
|--|-------------------------------|---------------|-----------------------------------|
| Increase in employment/income | 21% | 15% | 24% |
| Healthier living conditions in the home | 18% | 9% | 22% |
| More exercise/recreation | 15% | 24% | 10% |
| Access to healthier food | 14% | 13% | 14% |
| Improved education opportunities | 7% | 4% | 8% |
| Better access to health care | 5% | 8% | 4% |
| Better access to child care | 4% | 7% | 3% |
| Better access to substance use treatment | 4% | 4% | 4% |
| Improved housing | 3% | 3% | 2% |
| Better access to mental health services | 2% | 3% | 2% |
| Water and sewer | 1% | 1% | 2% |
| Other | 3% | 4% | 3% |

Language and Culture

Table 84. What languages are spoken by at least one household member, and how frequently are they spoken? (%) English

| | Bering Strait Region n=508 | Nome n=166 | Communities Outside Nome n=342 |
|------------|-------------------------------|---------------|-----------------------------------|
| Always | 91% | 92% | 90% |
| Frequently | 8% | 7% | 8% |
| Sometimes | 1% | 1% | 2% |
| Rarely | - | - | - |
| Never | - | - | - |

Table 85. What languages are spoken by at least one household member, and how frequently are they spoken? (%) Inupiaq

| | Bering Strait Region n=358 | Nome n=126 | Communities Outside Nome n=232 |
|------------|-------------------------------|---------------|-----------------------------------|
| Always | 2% | 2% | 2% |
| Frequently | 8% | 8% | 8% |
| Sometimes | 24% | 22% | 26% |
| Rarely | 32% | 33% | 31% |
| Never | 34% | 35% | 33% |

Table 86. What languages are spoken by at least one household member, and how frequently are they spoken? (%) Y'upik (Central Yupik)

| | Bering Strait Region n=292 | Nome n=102 | Communities Outside Nome n=190 |
|------------|-------------------------------|---------------|-----------------------------------|
| Always | 2% | 1% | 2% |
| Frequently | 4% | 1% | 5% |
| Sometimes | 9% | 3% | 12% |
| Rarely | 10% | 11% | 11% |
| Never | 75% | 84% | 70% |

Table 87. What languages are spoken by at least one household member, and how frequently are they spoken? (%) St. Lawrence Island (SLI) Yupik

| | Bering Strait Region n=318 | Nome n=108 | Communities Outside Nome n=210 |
|------------|-------------------------------|---------------|-----------------------------------|
| Always | 10% | 3% | 14% |
| Frequently | 6% | 4% | 7% |
| Sometimes | 7% | 8% | 6% |
| Rarely | 5% | 7% | 4% |
| Never | 72% | 78% | 69% |

Table 88. How interested are members of your household in learning or improving knowledge of regional indigenous language? (%)

| | Bering Strait Region n=519 | Nome n=169 | Communities Outside Nome n=350 |
|---------------------|-------------------------------|---------------|--------------------------------------|
| Very Interested | 32% | 36% | 29% |
| Somewhat interested | 45% | 43% | 47% |
| Not interested | 11% | 14% | 10% |
| Already fluent | 2% | 1% | 3% |
| Don't know | 10% | 6% | 11% |

Education

Table 89. For reasons other than COVID-19, in the past 3 years, have any children in your household stopped going to school for a month or more? (%)

| | Bering Strait Region n=300 | Nome n=94 | Communities Outside Nome n=206 |
|-----|-------------------------------|--------------|--------------------------------------|
| Yes | 13% | 16% | 12% |
| No | 87% | 84% | 88% |

Table 90. If yes, why did the child stop going to school? (%)

Base: Respondents whose children stopped going to school for a month or more in the past three years.

| | Bering Strait Region n=43 | Nome n=16 | Communities Outside Nome n=27 |
|--|------------------------------|--------------|-------------------------------------|
| Bullying | 26% | 19% | 30% |
| Home school | 23% | 50% | 7% |
| Illness | 21% | 13% | 26% |
| Subsistence activities | 19% | 19% | 19% |
| Mental health | 16% | 19% | 15% |
| To care for a sibling or other family member | 12% | 25% | 4% |
| Difficulty getting to school | 9% | 13% | 7% |
| Alcohol or drug misuse | 5% | 6% | 4% |
| To earn money | 2% | 6% | - |
| Violence in the home | 2% | 6% | - |
| Other | 21% | 19% | 22% |

Note: Columns may not sum to 100% due to multiple responses.

Migration

Table 91. Someone in household moved out of the region in the past 5 years? (%)

| | Bering Strait Region n=519 | Nome n=170 | Communities Outside Nome n=349 |
|-----|-------------------------------|---------------|--------------------------------------|
| Yes | 17% | 15% | 18% |
| No | 83% | 85% | 82% |

Table 92. If yes, why did they leave? (%)

| | Bering Strait Region n=91 | Nome n=26 | Communities Outside Nome n=65 |
|------------------------------|------------------------------|--------------|-------------------------------------|
| Education | 45% | 42% | 46% |
| Seeking employment | 38% | 27% | 43% |
| Housing issues | 21% | 19% | 22% |
| To live with/care for family | 20% | 19% | 20% |
| Job training | 18% | 8% | 22% |
| Cost of living too high | 16% | 19% | 15% |
| Illness | 7% | 4% | 8% |
| Personal safety | 2% | 4% | 2% |
| Other | 19% | 23% | 17% |

Cost of Living and Food Resources

Table 93. In the past year was anyone in your household unable to afford the following...? (%)

| | Bering Strait Region n=461 | Nome n=150 | Communities Outside Nome n=311 |
|------------------------------|-------------------------------|---------------|--------------------------------------|
| Internet | 44% | 37% | 48% |
| Food | 38% | 35% | 39% |
| Fuel | 34% | 26% | 39% |
| Telephone/cell phone service | 34% | 25% | 39% |
| Electricity | 24% | 24% | 24% |
| Housing | 21% | 23% | 20% |
| Medicine | 7% | 7% | 7% |
| Air and other transportation | 2% | 2% | 1% |
| Other | 4% | 3% | 5% |
| Don't know | 3% | 3% | 3% |

Table 94. What percentage of your annual household food resources come from subsistence? (%)

| | Bering Strait Region n=522 | Nome n=171 | Communities Outside Nome n=351 |
|---------------|---|-----------------------|---|
| None | 5% | 8% | 3% |
| Less than 25% | 23% | 36% | 17% |
| 25% to 49% | 33% | 37% | 31% |
| 50% to 74% | 23% | 14% | 28% |
| 75% to 100% | 14% | 4% | 18% |
| Don't know | 2% | 1% | 3% |

Survey impacts are available in the separate Community Needs Assessment Survey report.

Chapter 9: COVID-19 Impacts

As the COVID-19 pandemic continues to impact the Kawerak Service Area, impacts in 2020 and the first half of 2021 were analyzed as feasible for this report. While all impacts from this period are likely not immediately apparent, public data and survey results do show some significant impacts in the region on employment, wages, income, as well on household health and social and emotional well-being.

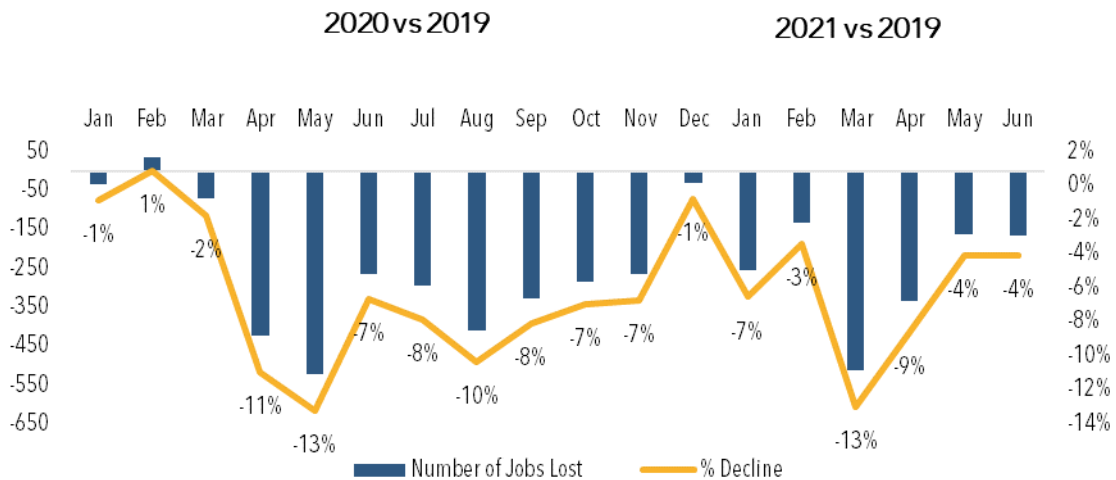
Economic Impacts

Employment and Wages

The Nome Census Area lost 6% of its employment base, or 250 jobs, between 2019 and 2020.

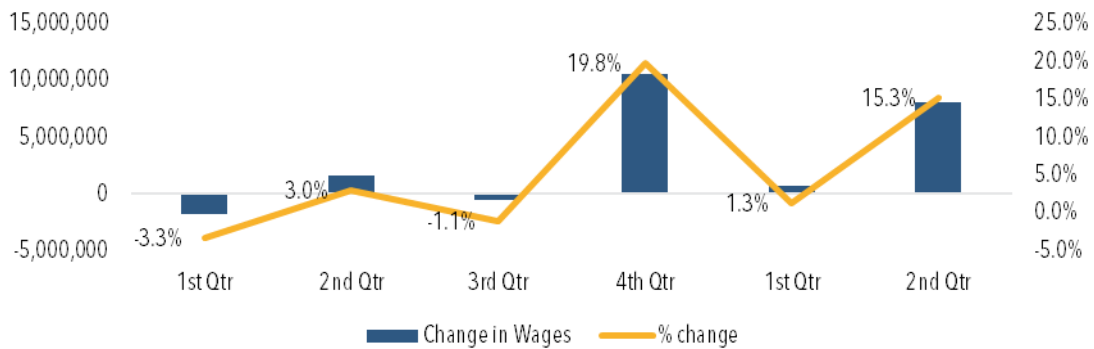
- 2020 employment in the Nome Census Area averaged 3,690 jobs, with \$222 million in total annual wages. In 2019, employment averaged 3,932 jobs, and \$212 million in total annual wages. Employment from January - June of 2021 averaged 3,661 jobs. Total annual wage data for 2021 is not yet available.
- Wages increased by 4% between 2019 and 2020, at approximately \$10 million.
- May saw the worst job losses of 2020, at a loss of 13% or 522 jobs. March of 2021 saw a similar decrease, at 13% or 513 jobs.

Figure 42. Job Losses in Nome Census Area, 2020/2021 vs 2019



Source: Alaska Department of Labor Quarterly Census of Employment and Wages.

Figure 43. Change in Wages Paid in Nome Census Area, 2020/2021 vs 2019



Source: Alaska Department of Labor Quarterly Census of Employment and Wages.

Personal Income

The Nome Census Area realized a 3% increase in total personal income in 2020 from the 2019 total of \$537 million. A 9% increase in transfer payments (payments from government to individuals) drove that increase. Transfer payments totaled \$173 million in 2020.

Unemployment Insurance Payments

Unemployment insurance (UI) benefits paid to residents of the Nome Census Area totaled about \$1.3 million in 2019. In 2020, UI benefits totaled \$3.7 million. The number of claimants peaked in May of 2020, at 557, more than three times the number of UI claimants in May 2019 (181).

In 2021, UI claimants have decreased. In November, the most recent month of data available, 167 UI claimants received a total of \$97,000 in benefits. This is far below the November 2020 total of \$318,000 of benefits distributed to 381 claimants, and similar to the November 2019 total of \$99,000 of benefits distributed to 145 claimants.

Federal and Other Relief Funds

- The Paycheck Protection Program (PPP) grants to Nome Census Area totaled approximately \$8.3 million. This includes 71 businesses and organizations.
- A total of \$7.6 million was dispersed in 2020 in the form of PPP loans, and \$687,000 in 2021 in the form of PPS loans.
- The average PPP award under \$150,000 was \$31,752. The average for awards over \$150,000 was \$1,551,702.
- The Nome Census Area received 0.4% of the \$2.05 billion in total PPP loans statewide.

Economic Considerations

While economic impacts from the pandemic are yet to fully realized or documented, several factors may arise as challenges in the coming years. Among many considerations, the following may impact sectors of the Bering Strait economy.

- Lack of alignment between labor supply and need.
- Supply chain barriers and changes.
- Use of existing and future relief funds.
- A changing tourism landscape.
- New consumer habits and communication methods.

COVID-19 Impacts on Households

In the 2021 *Community Needs and COVID-19 Impacts Survey*, respondents were asked to about the impacts of COVID-19 pandemic on their household.

Survey respondents report both beneficial financial impacts and negative ones. Half (48%) benefited from COVID-19 relief funding. One-quarter (25%) did not earn typical income because of pandemic-related child care needs and 23% were laid-off temporarily or furloughed.

Table 95. If your household finances were impacted, please specify if any household member experienced any of the following due to the COVID-19 pandemic. (%)

Base: Respondents whose finances were impacted by COVID-19.

| | Bering Strait Region n=305 | Nome n=107 | Communities Outside Nome n=198 |
|---|-------------------------------|---------------|-----------------------------------|
| Benefited from COVID-19-related relief funding | 49% | 58% | 44% |
| Did not earn typical income due to caring for children | 25% | 32% | 22% |
| Laid-off temporarily/furloughed | 23% | 24% | 22% |
| Did not earn typical income due to COVID-19 illness | 20% | 18% | 21% |
| Benefited from increased work opportunities | 8% | 5% | 10% |
| Financial concerns: Decreased income/reduced employment/increased costs | 8% | 8% | 8% |
| Laid-off permanently | 7% | 5% | 8% |
| Health issues/concerns | 2% | 1% | 2% |
| Other | 5% | 3% | 6% |

Twenty-nine percent of respondents report their household did not have enough food at some point because of the pandemic. This was the case for 35% in communities outside Nome.

Table 96. Did any member of your household not have enough food at any point since the beginning of 2020 because of the COVID-19 pandemic? (%)

| | Bering Strait Region n=516 | Nome n=168 | Communities Outside Nome n=348 |
|------------|-------------------------------|---------------|-----------------------------------|
| Yes | 29% | 17% | 35% |
| No | 64% | 79% | 56% |
| Don't know | 7% | 4% | 9% |

Most respondents did not lose housing during the pandemic, however 7% did.

Table 97. Did any member of your household lose housing at any point since the beginning of 2020 because of the COVID-19 pandemic? (%)

| | Bering Strait Region n=513 | Nome n=167 | Communities Outside Nome n=346 |
|------------|-------------------------------|---------------|-----------------------------------|
| Yes | 7% | 3% | 8% |
| No | 88% | 92% | 87% |
| Don't know | 5% | 5% | 5% |

Other impacts include loneliness due to isolation (41%), delayed medical (35%), delayed dental visits (32%), and mental health issues (20%).

Table 98. Has any member of your household experienced the following during the COVID-19 pandemic? (%)

| | Bering Strait Region n=511 | Nome n=167 | Communities Outside Nome n=344 |
|-----------------------------------|-------------------------------|---------------|-----------------------------------|
| Loneliness due to isolation | 41% | 50% | 37% |
| Delayed medical visits | 35% | 36% | 35% |
| Delayed dental visits | 32% | 38% | 29% |
| Mental health issues | 20% | 29% | 15% |
| Unhealthy living conditions | 10% | 8% | 11% |
| Unhealthy substance use | 10% | 12% | 9% |
| Self-harm or suicide | 4% | 4% | 3% |
| Victim of increased abuse/neglect | 4% | 4% | 3% |
| None of the above | 28% | 24% | 31% |

Note: Columns may not sum to 100% due to multiple responses.

Half (47%) of respondents with children in their household report that children’s learning was impacted by the pandemic. The most frequently cited reason for this impact is inconsistent learning/frequent school closures.

Table 99. If there are children in your household, do you feel their learning was impacted by the COVID-19 pandemic? (%)

Base: Respondents who have children.

| | Bering Strait Region n=427 | Nome n=140 | Communities Outside Nome n=287 |
|------------|-------------------------------|---------------|-----------------------------------|
| Yes | 47% | 44% | 48% |
| No | 36% | 43% | 32% |
| Don’t know | 17% | 13% | 20% |

Table 100. If there are children in your household, how was their learning impacted by the COVID-19 pandemic? (%)

| | Bering Strait Region n=192 | Nome n=59 | Communities Outside Nome n=133 |
|--|-------------------------------|--------------|-----------------------------------|
| Inconsistent learning/frequent school closures/school closed | 41% | 27% | 47% |
| Distance learning/home school options not adequate/hard to keep kids motivated | 18% | 27% | 14% |
| Lack of socializing/peer interaction | 11% | 17% | 9% |
| Lack of interaction with teachers/needed face-to-face contact | 10% | 7% | 12% |
| Adults in house unable/not equipped to help with schooling | 8% | 14% | 5% |
| School closures | 8% | 8% | 8% |
| No internet access or internet access difficult (work packets sent home) | 6% | 3% | 7% |
| Other | 2% | - | 2% |

Note: Columns may not sum to 100% due to multiple responses.

Most frequently reported positive impacts from the pandemic include more time together with family and becoming closer with family (36%) and extra income, primarily from tribes and the CARES Act (28%). Seven percent benefited from food as a positive impact.

Table 101. Please describe any positive impacts the COVID-19 pandemic has had on your household. (%)

| | Bering Strait Region n=255 | Nome n=81 | Communities Outside Nome n=174 |
|--|-------------------------------|--------------|--------------------------------------|
| More time together with family/closer with family | 36% | 42% | 33% |
| Extra income/bills covered (tribes and CARES Act particularly) | 28% | 27% | 28% |
| Food | 7% | 6% | 8% |
| Cleaner home | 4% | 1% | 6% |
| Healthier due to social distancing | 3% | 2% | 3% |
| More access to online events, medicine, and learning | 3% | 7% | 1% |
| More time for subsistence | 2% | 1% | 3% |
| Other | 27% | 22% | 29% |

Note: Columns may not sum to 100% due to multiple responses.