





Chapter Eleven Housing





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CHAPTER 11: HOUSING

The communities across the North Slope and throughout Alaska struggle with housing issues – safe, sanitary, available, and affordable housing for residents. All of the North Slope villages are experiencing a shortage of housing of all types. A lack of affordable housing is exacerbated by the lack of rental housing and homeownership opportunities in all villages.

Housing is a complex issue across the entire North Slope. It is the convergence of many factors including complex land ownership and the borough’s remote location that contribute to the regions lack of housing availability and affordability as well as the high rates of overcrowding. With high growth, the population is expected to grow by 2,886 people by the year 2035. A low growth rate would result in

approximately 1,262 additional residents. With this anticipated increase, the complexity of housing issues needs to be addressed to comfortably accommodate both the current and future populations.

This chapter identifies and describes the current housing issues and those related to the projected growth. But as the acute lack of housing continues to plague the region, this chapter cannot substitute the need for a study that investigates housing issues in depth and provides an array of potential solutions.

EXISTING CONDITIONS

Housing Inventory

According to the NSB 2015 Economic Profile and Census Report (NSB Census), there are approximately 2,609 total dwelling units throughout the communities of the North Slope, an increase of 244 housing units (10.3 percent) from 2010. The NSB Census reported in 2015 that 48 housing units were under construction in Utqiagvik but did not report any homes under construction in any other village. However, the regional housing authority, Tagiugmiullu Nunamiullu Housing Authority (TNHA), reported constructing 24 homes in North Slope villages between 2013 and 2015.²³⁵

The 2015 housing occupancy rate is 96.9 percent; 3.1 percent of housing units are unoccupied. The largest vacancy rate is in Nuiqsut at 14.8 percent, followed by Atqasuk

North Slope Borough Housing *at-a-glance*

Total dwelling units: 2,576

- ♦ 27% are single person households
- ♦ 18.6% are 2-person households
- ♦ 14.5% are 3-person households
- ♦ 13.1% are 4-person households
- ♦ 14% are 5-person households

Occupancy rate: 97%

Highest vacancy rate: Nuiqsut, 14.8%

Lowest vacancy rate: Kaktovik, 0%

Homeownership rate: 53.5%

Single family homes: 75% of all housing units

Average Single Family Home Size: 1,188 sq ft

Overcrowded Homes: 18%

Severely Overcrowded Homes: 12%

²³⁵ Hagle, Griffin. 2018. Chief Executive Officer. Tagiugmiullu Nunamiullu Housing Authority. Personal Communication.





(14.8 percent); Point Lay (3.9 percent), Wainwright (3.7 percent), Utqiagvik (3.1 percent); Anaktuvuk Pass (1.6 percent); and Point Hope (.04 percent). Kaktovik has the lowest housing vacancy rate at 0 percent.²³⁶

The Alaska Housing Finance Corporation (AHFC) reports a slightly different number of housing units and a higher vacancy rate than presented in the 2015 NSB Census. The AHFC 2017 Alaska Housing Assessment – North Slope Borough Summary indicates that in 2017 there were 2,513 housing units on the North Slope, with an

overall vacancy rate of 4.7 percent.²³⁷ The 2012 – 2016 American Community Survey 5-Year Estimates indicate that the borough has 2,550 housing units.²³⁸ Although there are differences in the estimated number of housing units, all three estimates - from the NSB Census, AHFC, and U.S. ACS 5-Year Estimates - are within 100 housing units of each other. The vacancy rates provided by both the 2015 NSB Census and the AHFC are both low, indicating that there is an unmet for housing across the North Slope and that finding a home for rent or to purchase is difficult.

Table 30: 2015 North Slope Housing Units by Village^{239, 240}

Community	Total Housing Units*	Single Family	Duplex	Multifamily	Under Construction (2015)**
Anaktuvuk Pass	122	104	2	16	4
Atqasuk	81	72	8	1	2
Kaktovik	107	97	2	8	5
Nuiqsut	138	122	0	16	5
Point Hope	230	212	4	14	
Point Lay	74	67	0	7	3
Utqiagvik	1,638	959	246	379	48
Wainwright	186	171	0	15	5

* The total housing units include the number provided by the 2015 NSB Census and the number of Under Construction units provided by TNHA.

** The number of Under Construction homes in Utqiagvik is from the 2015 NSB Census; all other figures were provided by TNHA.

²³⁶ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²³⁷ Alaska Housing Finance Corporation. 2017. *2017 Alaska Housing Assessment North Slope Borough*. [www.ahfc.us/files/4015/1510/4574/Final - North Slope Borough Summary.pdf](http://www.ahfc.us/files/4015/1510/4574/Final%20-%20North%20Slope%20Borough%20Summary.pdf).

²³⁸ U.S. Department of Commerce. U.S. Census Bureau. *2012 – 2016 American Community Survey 5-Year Estimates – North Slope Borough, Alaska State*. <http://factfinder.census.gov>.

²³⁹ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁴⁰ Hagle, Griffin. 2018. Chief Executive Officer. Tagiugmiullu Nunamiullu Housing Authority. Personal Communication.





Housing Type

The majority of North Slope residents in all communities, nearly 75 percent, live in single family homes while 23.6 percent live in multifamily buildings (including duplexes, triplexes, and larger building). Mobile homes were prevalent in most communities in 2003, accounting for 3.5 percent of the living structures in use, as shown in Table 31. In 2010, mobile homes increased by 61 percent to 9 percent of all housing structures. However, by 2015 the number of mobile homes dropped significantly to 0.8 percent. While some mobile homes could have been missed during the 2015 census, possibly due to extreme weather conditions, their use as a type of living structure

has clearly declined in all communities over the last twelve years.²⁴¹ However, the reason for the disappearance of mobile homes given the dire need for housing is unclear.

The North Slope Borough owns and manages one bedroom elder housing five-plexes in several North Slope villages. HUD originally constructed the five-plexes. Due to strict income restrictions, many North Slope residents did not qualify to rent an apartment, even though sometimes a residents' sole income was Native corporation dividends. The NSB subsequently purchased the five-plexes with TNHA providing management services. Since the reestablishment of the NSB Housing Department, the NSB has taken over management of the units.

Table 31: Housing Type, 2003, 2010, 2015²⁴²

Type of Housing	2003	2010	2015
Mobile Home	3.5%	9.0%	0.8%
Single Family Home	72.4%	68.8%	74.9%
Building for 2 families	6.9%	7.6%	9.0%
Building for 3 or 4 families	6.1%	3.6%	*
Building for 5 or more families	9.6%	9.3%	14.6%*
Other	1.5%	1.8%	0.8%

* Building for 3 or 4 families were included in the 5 or more categories in the 2015 survey

Housing Conditions

North Slope residents are concerned about the condition of much of the region's housing stock, including overall condition and age, drafts and ventilation, and type of construction. Residents are concerned that many homes on the North Slope are unsuitable for habitation today and that conditions will be exacerbated in the future

without intervention. Many homes were constructed with a post and pad foundation and may require releveling due to changes to the underlying permafrost from ground thaw. Many homes are also in need of renovations, including air quality assessments and energy efficiency upgrades.

²⁴¹ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁴² Ibid





The 2003 NSB Census does not provide data on the average housing size. However, in 2010 the average square footage of 909 housing units surveyed in the North Slope Borough was 1,139 square feet. In 2015, the average housing unit was 1,188 square feet.²⁴³ The AHFC Housing Assessment for 2017 provides similar average sizes at 1,171 square feet for single family homes and 1,034 square feet for multi-family homes. It is evident that although housing sizes on the North Slope have grown slightly over the five year period, North Slope homes are overall significantly are smaller than both the Alaska and national average.²⁴⁴

Housing construction was a thriving industry on the North Slope during the 1970s and 1980s. Nearly 26 percent of the total housing stock was constructed between 1970 and 1979 and 30 percent between 1980 and 1989. Another 13.4 percent was constructed prior to 1970. Nearly 70 percent of all housing across the North Slope was built at least twenty nine years ago, with some homes as old as 80 years or more. More recently, less than 10 percent of the current housing stock has been constructed over the last 18 years, since 2000. New housing, those built since 2010, accounts for a mere 0.6 percent of all housing across the North Slope.²⁴⁵

The age of the housing stock is evident when examining the inefficiency of older housing. The

AHFC 2017 Alaska Housing Assessment Summary for the North Slope indicates that approximately 93 occupied homes (5 percent) are estimated to have a 1-Star home rating, the least efficient rating. A 1-Star home uses approximately four times more energy than if a home is built to AHFC's Building Energy Efficiency Standard (BEES) which sets building energy use standards for thermal resistance, air leakage, moisture protection, and ventilation.^{246, 247} Older homes built before 1980 that have not been retrofitted are potentially in need of energy efficiency upgrades. Approximately 33 percent of all homes in the North Slope Borough are estimated to need upgrades, lower than the Alaska average of 39 percent.²⁴⁸

Single-family homes on the North Slope Borough consume an average of 189 million British Thermal Units (BTU) per year; multi-family units consume an average of 154 million BTUs annually. For single family homes, the average annual energy consumption is 83 percent of the Alaska average of 227 million BTUs. For multi-family units, the average annual energy consumption is approximately the same as the Alaska average of 156 million BTUs. Both single family and multi-family housing energy consumption is 1.8 times the national average.²⁴⁹

²⁴³ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁴⁴ Alaska Housing Finance Corporation. 2017. *2017 Alaska Housing Assessment North Slope Borough*. [www.ahfc.us/files/4015/1510/4574/Final - North Slope Borough Summary.pdf](http://www.ahfc.us/files/4015/1510/4574/Final%20-%20North%20Slope%20Borough%20Summary.pdf).

²⁴⁵ U.S. Department of Commerce. U.S. Census Bureau. 2012 – 2016 *American Community Survey 5-Year Estimates – North Slope Borough, Alaska State*. <http://factfinder.census.gov>.

²⁴⁶ Alaska Housing Finance Corporation. 2017. *2017 Alaska Housing Assessment North Slope Borough*. [www.ahfc.us/files/4015/1510/4574/Final - North Slope Borough Summary.pdf](http://www.ahfc.us/files/4015/1510/4574/Final%20-%20North%20Slope%20Borough%20Summary.pdf).

²⁴⁷ Alaska Housing Finance Corporation. 2018. *Building Energy Efficiency Standard*. www.ahfc.us/pros/builders/building-energy-efficiency-standard/.

²⁴⁸ Alaska Housing Finance Corporation. 2017. *2017 Alaska Housing Assessment North Slope Borough*. [www.ahfc.us/files/4015/1510/4574/Final - North Slope Borough Summary.pdf](http://www.ahfc.us/files/4015/1510/4574/Final%20-%20North%20Slope%20Borough%20Summary.pdf).

²⁴⁹ Ibid





Energy costs for single-family homes average \$4,088 annually, which are 98 percent of the Alaska average and 1.8 times the U.S. average while energy costs for multi-family housing units is \$2,048 annually, 71 percent of the Alaska average and 1.6 times the U.S. average.²⁵⁰ Energy usage and costs for both single family homes and multi-family units are below average, even if only slightly, than the Alaskan average. But compared to the U.S. averages, both usage and cost are significantly higher for both types of housing on the North Slope. The extreme weather conditions are likely the reason for much of the increase, although the lack of energy efficient housing could also account for increased usage.²⁵¹

weather. Rooted in a close-knit culture and deep familial links, many families prefer to house people in need, and live in severe overcrowding, rather than let individuals risk certain death if they are unsheltered... Overcrowded housing and the lack of housing are interchangeable conditions in rural Alaska. The lack of safe, sanitary and affordable housing threatens the survival of Native cultures and the villages and towns many Alaska Natives call home. For American Indians and Alaska Natives, overcrowded housing is a manifestation of what would be unsheltered homelessness in other parts of the country.”²⁵²

Overcrowding

The rate of overcrowding is a frequently used indicator to assess housing affordability, economic health, and the quality of life within a community. A commonly accepted definition of overcrowding and one used by the United States Census Bureau is more than one person per room; severe overcrowding is defined as one and a half people per room.

In rural Alaska, however, homes often become overcrowded because they absorb friends or family members that would otherwise be homeless. As the president/CEO of the Bering Straits Regional Housing Authority, Christopher Klolerok, points out during a 2018 housing forum held in Savoonga, “...unsheltered homelessness would lead to death during the fierce winter

²⁵⁰ The AHFC Assessment methodology reports that energy cost data was obtained from the 2014 AHFC Assessment completed by the Cold Climate Housing Research Center and from the Alaska Retrofit Information System (ARIS) database. Neither of these sources indicate whether or not energy costs include NSB subsidies. This plan assumes that since the NSB was not included as a reference, the energy costs presented do not consider NSB subsidies.

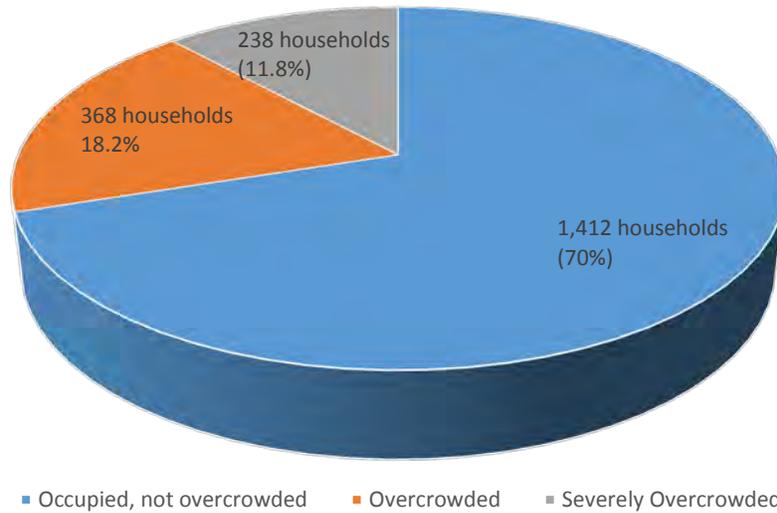
²⁵¹ Alaska Housing Finance Corporation. 2017. *2017 Alaska Housing Assessment North Slope Borough*. www.ahfc.us/files/4015/1510/4574/Final - North Slope Borough Summary.pdf.

²⁵² Krenzien, Angela. 2018. *Panel Discusses Overcrowded Rural Housing in Alaska*. KTVA: The Voice of Alaska. www.ktva.com/story/38970679/hearing-discusses-overcrowded-rural-housing-in-ak. August 27, 2018.





Figure 14: Rate of Overcrowding ²⁵³



The 2015 average household size on the North Slope was 3.63. Among Iñupiat households, the average size was 3.93, 4.17 for Filipinos, and 2.11 for Caucasians. The community with the largest Iñupiat household size is Point Hope at 4.2 people per household, followed closely by Nuiqsut at 4.1. The lowest average Iñupiat household size was Point Lay, at 3 people per household.²⁵⁴

Despite the 2015 NSB Census data on household size presenting moderate average household sizes, the number of people residing in one home has increased over the last two decades. Across the North Slope, the number of households with nine or more occupants has increased from 13 in 1998 to 28 in 2003; to 47 in 2010; and finally to an extrapolated 49 in 2015.²⁵⁵ Several factors may explain the reasons for the increase in this

category of household size, among them the lack of available housing on the market and thus overcrowding in some units.

The most significant changes in household size since 2010 have occurred in Utqiagvik. The percentage of those living in households with four or fewer residents has dropped from three-fourths to 69 percent. The average number of people in Iñupiat households has increased from 3.59 to 3.94 per household, while Caucasian households have decreased from an average of 2.41 people in 2010 to 2.27 people in 2015. The average number of people in Filipino households has increased from 3.66 to 4.24²⁵⁶ and the average for all ethnicities has increased from 3.3 to 3.62.²⁵⁷

²⁵³ Total of households does not match total number due to sample size

²⁵⁴ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁵⁵ Ibid

²⁵⁶ A major reason is in part is a 20-person Filipino household in 2015 in Utqiagvik.

²⁵⁷ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.





The 2012 - 2016 American Community Survey 5-Year Estimates indicate that 18.2 percent of North Slope Borough households are overcrowded and 11.8 percent are severely overcrowded. By comparison, the national average for overcrowding and severe overcrowding is 2.3 percent and 1 percent, respectively.²⁵⁸ In 2014, TNHA conducted a study on North Slope housing issues. The study reported that 665 families in the seven outlying villages were living in overcrowded conditions.²⁵⁹ At community meetings during for village comprehensive planning, residents have consistently voiced concern about the lack of housing availability for rent or purchase and the prevalence of two and three generations living together in one home. Overcrowding rates are shown in Figure 14.

Low vacancy rates, data from the AHFC and both the U.S. and NSB census, and anecdotal evidence suggests that the housing market is tight and that more homes need to be constructed or rehabilitated to ease the pressure.

Housing Affordability

HUD defines affordable as housing that costs no more than 30 percent of a household's monthly income. The median household income estimated by the 2012-2016 ACS 5-Year Estimate is \$72,027.²⁶⁰ Based on HUD's 30 percent affordability threshold, the average family should not spend more than approximately \$21,608 annually or \$1,801 monthly on housing,

including rent or mortgage and utilities. The median monthly homeowner costs are estimated at \$1,196 and the median gross rent is estimated at \$1,087.²⁶¹ The NSB Census does not provide information on the percentage of households that are housing cost burdened. However, the American Community Survey 5-Year Estimates indicates that 24.6 percent of renters and 14.6 percent of homeowners pay more than 30 percent of their income in housing costs. Interestingly, over 7.8 percent of those homeowners without a mortgage are still housing cost-burdened, meaning they pay more than 30 percent of their income on housing expenses. A comparison of home affordability is provided in Figure 15. This chart indicates that there is greater percentage of households that are cost burdened in Alaska and the United States than in the North Slope. U.S. Census figures indicate there are few cost-burdened households across the North Slope, the Census does not consider the great expense required to maintain older homes in the Arctic, including the expense of shipping materials and hiring qualified tradespeople to provide repairs. Additionally, overcrowded households may report a higher income because there are more workers under the same roof. Eliminating overcrowding may reveal that households are significantly more cost burdened than the U.S. Census figures illustrate.

In 2015, Iñupiat households have experienced an increase in homeownership over the last twelve

²⁵⁸ U.S. Department of Commerce. U.S. Census Bureau. *2012 – 2016 American Community Survey 5-Year Estimates – North Slope Borough, Alaska State*. <http://factfinder.census.gov>.

²⁵⁹ Tagiugmiullu Nunamiullu Housing Authority. 2014. *North Slope Borough Housing: A Brief Analysis of Issues and Options with Budgetary Quotes*. Unpublished white paper.

²⁶⁰ North Slope Borough. 2015. *North Slope Borough 2015 Economic Profile and Census Report Volume XI*. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁶¹ U.S. Department of Commerce. U.S. Census Bureau. *2011 – 2015 American Community Survey 5-Year Estimates – North Slope Borough, Alaska State*. <http://factfinder.census.gov>.

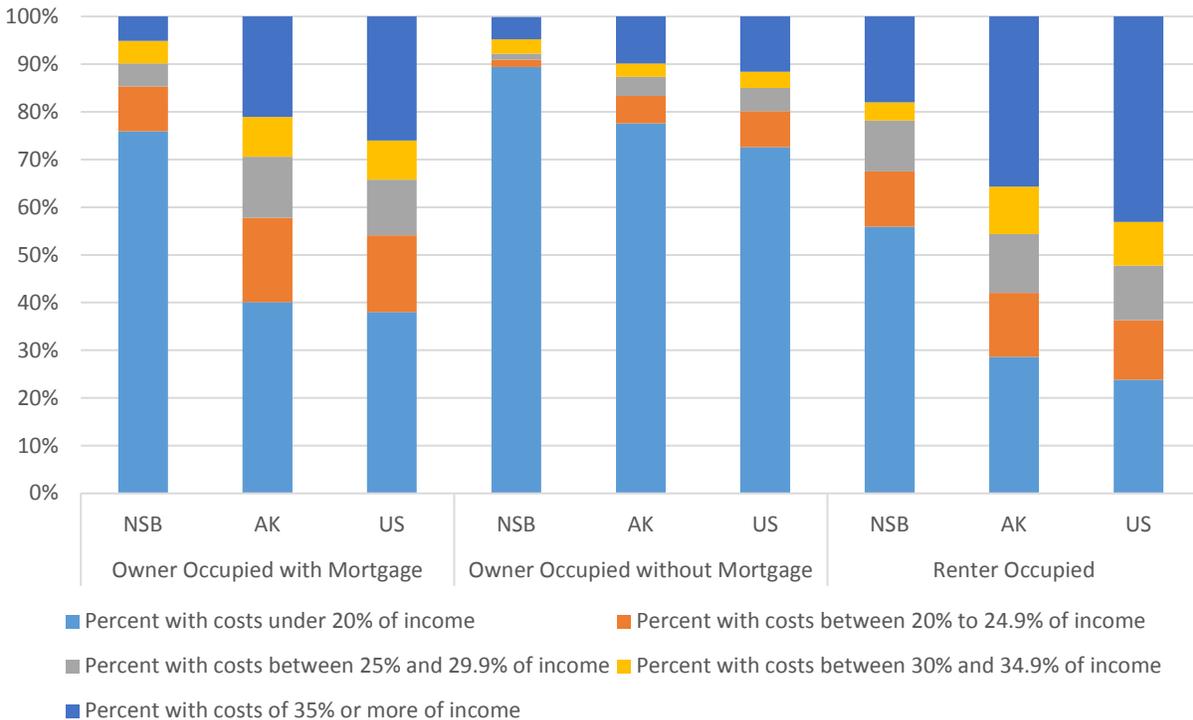




years.²⁶² In 2003, 58 percent of Iñupiat households owned homes; by 2015, that percentage had increased to nearly 67 percent. For non-Iñupiat households, the homeownership rate remained steady over the twelve year period: 27 percent in 2003 and 26.9 percent in 2015. Free and clear homeownership has increased for both Iñupiat and non-Iñupiat

households over the same time period; in 2003, 29.5 percent of Iñupiat households owned their homes outright, increasing significantly to 47.5 percent in 2015. Non-Iñupiat free and clear homeownership rates increased over the same period – from 8 percent to 11.8 percent over the same time period.²⁶³

Figure 15: Housing Costs as a Percent of Income²⁶⁴



²⁶² North Slope Borough. 2015. North Slope Borough 2015 Economic Profile and Census Report Volume XI. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁶³ North Slope Borough. 2015. North Slope Borough 2015 Economic Profile and Census Report Volume XI. Prepared by Circumpolar Research Associates Shepro, C., Maas, C. and D. Gallaway and edited by Jason Bergerson for the North Slope Borough. www.north-slope.org/your-government/nsb-2015-economic-profile-census-report.

²⁶⁴ U.S. Department of Commerce. U.S. Census Bureau. 2011 – 2015 American Community Survey 5-Year Estimates – North Slope Borough, Alaska State. <http://factfinder.census.gov>.





HOUSING AUTHORITIES

Tagiugmiullu Nunamiullu Housing Authority

TNHA offers housing assistance across the North Slope. It is a Tribally Designated Housing Entity (TDHE), established in 1974 by state statute to address housing needs of Tribal citizens and other residents of the North Slope. The TDHE designation allows TNHA to receive federal grant funds and provide housing assistance under Native American Housing Assistance and Self-Determination Act (NAHASDA). The passage of this 1996 legislation reorganized housing assistance provided by HUD by replacing separate housing assistance program with one block grant program.

TNHA currently has three housing programs:

1. TNHA Fair Market Rental (FMR) Program. Rent schedules are established and subject to change with market values. These rentals are available to all residents subject to availability.
2. TNHA Low-Rent Housing Program. Provides affordable housing to qualified low-income Alaska Native/Indian families at a cost within their means. Non-Indian families may receive this assistance if they are “essential to the well-being of Indian families” in the community. HUD sets income limits that determine eligibility for assisted housing programs based on Median Family Income estimates and Fair Market Rent area definitions for different areas of the country. HUD’s 2018 income

limits for a family of four are set at: \$66,550 for low income (80 percent of the Area Median Family Income); \$41,600 for very low (50 percent of the Area Median Family Income); and \$31,380 for extremely low (30 percent Area Median Family Income).²⁶⁵

3. TNHA Mutual Help NAHASDA Lease-Purchase Homeownership Program. Provides homeownership opportunities for qualified lower income Alaska Native/Indian families at a cost within their means.

In order to address the need for affordable, sustainable, energy efficient homes, the Cold Climate Housing Research Center (CCHRC), in partnership with the TNHA, designed a prototype home for construction in Anaktuvuk Pass. CCHRC is a nonprofit corporation that facilitates the use of energy-efficient and cost-effective building technologies for the circumpolar regions. The home was designed to utilize lightweight materials and energy efficient plumbing and heating systems to significantly reduce energy costs. The Anaktuvuk Pass home was constructed in 2009. TNHA has built homes

TNHA / CCHRC Prototype Home In Anaktuvuk Pass
Photo courtesy of TNHA



²⁶⁵ U.S. Department of Housing and Urban Development. 2018. *FY 2018 Income Limits Summary*. www.huduser.gov/portal/datasets/il/il2018/2018summary.odn.





in nearly every community across the North Slope. Indian Housing funds were used to construct the CCHRC homes in the villages.

TNHA’s recently constructed homes are designed with a post-on-pad foundation that

TNHA Homes In Anaktuvuk Pass
Photos courtesy of TNHA



rests on the ground that isolates the house from the soil to prevent heat from accelerating permafrost thaw. These TNHA homes have also been designed to be easily relocated if needed, such in the case of flood or subsidence. The foundation has sliding steel posts attached to pads that can be adjusted up to eight feet in height to accommodate tundra movement. Beams that act as skids enable the home to be towed to a new location if needed. The home’s design also includes adequate ventilation to ensure healthy indoor air quality, which is often a challenge in very cold climates because humid indoor air tries to escape through the building envelope and condenses on cold surfaces inside the wall, potentially leading to mold and rot.²⁶⁶

While new housing is needed in all North Slope communities, there are some concerns with the new CCHRC homes. Many residents do not qualify for a home purchase because of the stringent low income requirements imposed by HUD. Wage work and dividends will often bring a household’s annual earning above the maximum income limits to purchase a home. Additionally, some residents and the NSB are concerned the use of independent wastewater treatment systems, which discharge effluent is discharged directly onto tundra, often causing environmental issues like odor, erosion, and permafrost thaw.

Native Village of Barrow

Like TNHA and NVPHO, the Native Village of Barrow (NVB) is a TDHE that administers a NAHASDA program. The NVB has three housing programs: new construction, housing renovations, and emergency repairs. There is currently a waiting list to purchase a new homes

²⁶⁶ Cold Climate Housing Research Center. n.d. *TNHA Resilient Housing for the North Slope of Alaska*. www.cchrc.org/sites/default/files/docs/TNHA_ResilientHousing.pdf.





or have renovations through this program. The emergency repair program is on a first-come first-serve basis. Many of the homes that have been repaired by NVB were deteriorated, often with little to no insulation, dated electric systems and single pane windows.

Native Village of Point Hope

The Native Village of Point Hope (NVPH) also administers housing programs within the Point Hope community using Indian Housing Block Grant (IHBG), a formula based grant program; and the Title VI Loan Guarantee, that provides financing guarantees to Indian tribes for private market loans to develop affordable housing, both offered through HUD’s NAHASDA program.²⁶⁷

Point Hope Home
Photo courtesy of TNHA



NSB Housing Department

The North Slope Borough created the Housing Solutions Group in 2011 after concerns were raised by both the NSB Assembly and citizens regarding short-term and long-term housing issues region-wide. The Housing Solutions Group

provided financial and outreach services as well as collaboration and coordination with housing providers to assist residents in purchasing or constructing a home.²⁶⁸

In a more recent response to the housing crisis, NSB resurrected the Housing Department in 2017. When the housing department closed a decade ago, its responsibilities were moved to TNHA. Now the two entities are coordinating the best way to align their funding and programs to have the most benefit for North Slope residents. The functions and activities of the Housing Solutions Group are being transferred to the Housing Department to streamline housing activities within the borough.

The Housing Department seeks to develop, maintain, and make available affordable housing options for all residents. The Department offers assistance with renovations and upgrades, often ones that are necessary to make a housing unit habitable; managing rental properties; and purchasing or building housing units that can house residents.²⁶⁹

CURRENT AND FUTURE HOUSING NEEDS

There is a housing shortage across the North Slope that often results in multiple generations and families residing in the same household in overcrowded conditions.

The North Slope’s anticipated population growth will result in more households and an increased

²⁶⁷ U.S. Department of Housing and Urban Development. 2018. NAHASDA.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/ih/codetalk/nahasda.

²⁶⁸ North Slope Borough. 2018. *Housing Solutions Group*. www.north-slope.org/departments/administration-finance/housing-solution-group.

²⁶⁹ North Slope Borough. 2018. *Department of Housing and Property Development 2018-19 Budget*. www.north-slope.org/assets/images/uploads/Housing_Section_J_FY_18-19.pdf.





demand for housing in addition to an already critical need for extra housing. The need and demand for housing, both present and in the future, relies on population projects presented in Chapter 4 and housing vacancy and overcrowding rates.

In 2015, there was a combined estimated shortfall of housing in the seven villages of 331 homes.²⁷⁰ Utqiagvik also had unmet housing need of approximately 306 homes,²⁷¹ with a

total unmet need for the North Slope Borough of 637 housing units.

Without additional housing construction, the cumulative unmet regional need for housing will total between 753 - 891 homes in 2020 and between 1,104 and 1,704 in 2035, depending on the population growth rate. The growth rate in all communities may be hampered by the inability to find a place to live. Table 32 and 33 present future housing needs for high and low population growth rates.

²⁷⁰ Tagiugmiullu Nunamiullu Housing Authority. 2014. *North Slope Borough Housing: A Brief Analysis of Issues and Options with Budgetary Quotes*. Unpublished white paper.

²⁷¹ North Slope Borough. 2015. *Soaring to the Future: Barrow Comprehensive Plan 2015 - 2035*. www.north-slope.org/assets/images/uploads/Barrow_Comp_Plan_March_2015_FINAL.pdf.





Table 32: High Growth Housing Need Forecast

Location	Base Year Estimates 2015		5 Year Forecast 2020			10 Year Forecast 2025			20 Year Forecast 2035		
	Population	Housing need	Population	Additional homes needed	Cumulative homes needed 2015, 2020	Population	Additional homes needed	Cumulative homes needed 2015, 2020, 2025	Population	Additional homes needed	Cumulative homes needed 2015, 2020, 2025, 2035
Villages	2,882	331	2,955	27	358	3,029	27	385	3,184	57	443
Utqiagvik	4,825	306	5,065	89	395	5,305	89	484	5,785	178	661
Total	7,707	637	8,020	116	753	8,334	116	869	8,969	235	1,104

Table 33: Low Growth Housing Need Forecast

Location	Base Year Estimates 2015		5 Year Forecast 2020			10 Year Forecast 2025			20 Year Forecast 2035		
	Population	Housing need	Population	Additional homes needed	Cumulative homes needed 2015, 2020	Population	Additional homes needed	Cumulative homes needed 2015, 2020, 2025	Population	Additional homes needed	Cumulative homes needed 2015, 2020, 2025, 2035
Villages	2,882	331	3,029	54	385	3,183	57	442	3,608	157	600
Utqiagvik	4,825	306	5,365	200	506	5,905	200	706	6,985	400	1,105
Total	7,707	637	8,394	254	891	9,088	257	1,148	10,593	557	1,705





COMMUNITY INPUT, FINDINGS, NEEDS, AND CHALLENGES

All North Slope communities are experiencing housing-related issues. The primary issue is the lack of housing. Vacancy rates are low, often resulting in several households living in one home. Housing is also not always affordable; the lack of steady employment opportunities, especially in the villages, makes renting or buying a home, if there is one available, financially out of reach for many residents. The cost to construct even a modest home can cost well over \$500,000. TNHA reports the total development cost per square foot cost can range from \$448 (in Nuiqsut) to \$660 (in Point Lay) or even more; a 1,500 square foot home can cost between \$672,000 to \$990,000, depending on the village. These issues, coupled with generally poor housing conditions due to both the age of the housing stock, the expense of maintaining homes in such a remote and harsh environment, and the lack of qualified tradespeople to make repairs, have all contributed to the region's crippling housing market.

Housing issues and concerns identified by workshop participants are provided in Chapter 2 and listed below:

- Funding for homes and renovations on Native restricted lots is difficult
- It is expensive to construct roads to lots and connect homes to services
- Probate issues limit use of many Native restricted lots
- Federal housing subsidies are inadequate for the need
- Overcrowding
- Dilapidated housing conditions
- The North Slope is one of the few regions in state that does not have a coalition established to address housing and homelessness issues
- Limited collaboration amongst organizations
- Overdependency on the North Slope Borough
- Building design standards for the Arctic are yet to be implemented and enforced
- There is not a regional coalition to address homelessness
- Dilapidated housing conditions
- NSB titles 17, 18, 19 could incorporate building standards and/or a building official
- Storefront for equipment and tools loans and technical assistance for making repairs
- Create a Alaska Native Homeownership Coalition creation for a one-stop shop for grant and loan opportunities for homeownership
- Utilize existing vacant or underutilized lots that already have road access and proximity to piped water/sewer
- Construct modular homes on the North Slope that are easier to transport
- North Slope Borough Municipal Code could be amended to have a two tier sales process for lower income and middle/higher incomes for home purchases
- Provide education on the costs of building and maintaining homes
- Incentivize private developers to invest in housing
- Road connections to the villages could lower material costs





- Condos or zero lot line homes for those that wish to purchase a starter/less expensive home
- More rental properties
- Asbestos and lead paint contamination in older homes
- Alaska State Legislature perceives that there is not a homeless issue on the North Slope
- Current housing situation is having severe negative social, health, and mental health impact on communities

Findings

The low rate of housing availability contributes to the region’s high rate of lack of housing and overcrowding and puts a strain on many households.

Complex land ownership and the borough’s remote location that contribute to the regions lack of housing availability and affordability as well as the high rates of overcrowding and homelessness.

Many homes in the North Slope Borough are constructed of post and pad foundations which require releveling periodically due to shifting permafrost.

Nearly 70 percent of the total housing stock was constructed almost 30 years ago; less than 10 percent has been constructed over the last 18 years.

Aging housing stock requires increase maintenance, are not as energy efficient as newer produced homes which creates increased energy costs.

Older homes built before 1980 that have not been retrofitted are potentially in need of energy efficiency upgrades.

It is costly to maintain older homes in the Arctic, primarily due to the expense of shipping materials and hiring qualified tradespeople to provide repairs.

At least 1,705 additional homes will be needed across the North Slope by 2035 to alleviate the current housing shortage and accommodate new residents. (low growth projection).

Needs & Challenges

In some villages, shifting permafrost and building foundations require additional work that must be performed to make homes habitable.

Independent wastewater treatment systems, which discharge effluent is discharged directly onto tundra, often causing environmental issues like odor, erosion, and permafrost thaw.

The North Slope’s anticipated population growth will result in more households and an increased demand for housing in addition to an already critical need for extra housing.

Remedying probate issues will help in developing more housing on currently unused and under used lots.





PRIMARY HOUSING GOAL

Goal Three: Develop a housing program to address dilapidated infrastructure and housing shortage.

Objective 1: Develop a policy on the borough's role in public and private housing.

- 3.1.1. Establish a coalition to address housing and homelessness issues on the North Slope to coordinate programs and initiatives.

Objective 2: Promote development of new public and private housing.

- 3.2.1. Encourage duplexes, triplexes, and larger multi-family house to provide more affordable housing options.
- 3.2.2. Amend the zoning ordinance to allow condominiums and zero lot line homes to increase the range of affordability options.
- 3.2.3. Identify and explore the applicability of housing alternatives that allow for accessory dwelling units and smaller housing units to meet the demand for smaller and more affordable housing.
- 3.2.4. Encourage the use of existing public infrastructure by focusing housing development on infill, vacant, and underdeveloped land.
- 3.2.5. Extend roads and utilities to lots to facilitate more housing development when and where feasible.
- 3.2.6. Seek alternative funding sources for constructing homes on Native restricted lots.
- 3.2.7. Investigate the feasibility of constructing modular or 3-D printed homes on the North Slope that are easy to transport to villages and to lots.
- 3.2.8. Research incentivizes for private developers to invest in housing on the North Slope.
- 3.2.9. Work with housing authorities to construct additional rental housing to expand housing choice.
- 3.2.10. Seek solutions to village senior housing five-plexes that are not being fully utilized.





Objective 3: Create programs to address dilapidated housing conditions, weatherization upgrades, air quality and general home repairs.

- 3.3.1. Support programs that help with weatherization and sustainability measures to reduce home operating costs for water and energy usage.
- 3.3.2. Seek and/or allocate funding for home maintenance assistance to benefit low-income, disabled residents, and Elders with ongoing maintenance needs.
- 3.3.3. Seek funding to help provide repairs to the most critical homes needing repairs and air quality improvements to make them healthy for habitation.
- 3.3.4. Work closely with Tribal, city, and Native corporations to establish village storefronts to loan equipment and tools and offer home repair technical assistance.

Objective 4: Assist residents in obtaining financing and resolving probate issues.

- 3.4.1. Support financial education and financial management programs that help residents understand the true costs of homeownership and assist in navigating the process of buying, maintaining, and keeping homes.
- 3.4.2. Create an Alaska Native Homeownership Coalition for a one-stop shop for grant and loan opportunities for homeownership.
- 3.4.3. Advocate state congressional representatives in the United States to seek exceptions to the income limit for federal housing subsidies for rural Alaska.
- 3.4.4. Offer guidance and assistance in remedying restricted property probate issues to better utilize existing lots, including parcel research and assistance in obtaining consensus with multiple heirs.

Objective 5: Create programs to address homelessness.

- 3.5.1. Investigate the costs and feasibility of establishing homeless shelters in Utqiagvik and the villages.
- 3.5.2. Support transitional homes for families that have experience a fire, flood, or other emergency that does not allow them to live in their home.

