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## **Regional and Statewide Housing Characteristics**

This census area summary only includes the highlights of housing characteristics at the census area level. The 2017 Alaska Housing Assessment provides a significant amount of data and analysis at statewide, ANCSA region and census area levels. That assessment provides a statewide analysis of housing characteristics, how they compare to national numbers, and the estimated housing needs. Within the 2017 Alaska Housing Assessment, written summaries are available for each individual ANCSA region and census area, and data profiles are also available characterizing the housing stock from the perspective of community, overcrowding, energy, affordability and need. These different tiers of information and analysis allow researchers, housing authorities, policymakers and others to generate answers to specific questions. For a more detailed discussion of estimating housing need and comparison of methods to previous housing assessments, see Appendix C Selected Methodology in 2017 Alaska Housing Assessment.



### **Nome Census Area Dashboard**

**Population:** The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Nome census area is 10,040, an increase of 9 percent from 2000.

**Housing Units:** There are currently 3,846 housing units in the Nome census area. Of these, 2,839 are occupied, 144 are for sale or rent, and the remaining 1,025 are seasonal or otherwise vacant units.

**Energy and Energy Costs:** The average home in the Nome census area is 1,171 square feet and uses 161 million BTUs of energy annually, compared to the statewide average of 227 million BTUs per year. Using AKWarm estimates, the average annual energy cost for homes in the Nome census area is \$6,420. This is approximately 1.5 times the statewide average and 2.8 times the national average.

**Overcrowding**: An estimated 778 (27 percent) of occupied units are either overcrowded (14 percent) or severely overcrowded (13 percent). This is more than eight times the national average, and makes this census area the fourth most overcrowded census area in the state.

**Drafty Homes and Ventilation:** Approximately 1,353 (48 percent) of occupied homes in the Nome census area are drafty, exceeding seven air changes per hour at 50 Pascals (ACH50). The statewide average is 36 percent. In contrast, there are an estimated 817 occupied housing units (29 percent) in the Nome census area that are relatively airtight and lack a continuous ventilation system. These homes are at higher risk of issues with moisture and indoor air quality.

Affordability: On average, approximately 838 (30 percent) of households in the Nome census area are cost-burdened, spending more than 30 percent of total household income on housing costs, including rent, utilities and energy. Statewide 31 percent of households are cost-burdened.

**Senior Housing:** There are an estimated 39 beds in senior housing facilities in the Nome census area. Currently the Alaska Department of Labor and Workforce Development estimates there are 700 seniors in the census area and projects an increase to 1,269 by 2030.

**Housing Issues:** There are an estimated 1,405 homes built before the 1980s in the Nome census area that have not been retrofitted through a state program in the past 10 years. Approximately 462 (16 percent) homes in the Nome census area lack complete kitchens and approximately 594 (21 percent) lack complete bathrooms.



## **Nome Census Area Housing Need Highlights**

The Nome census area has significant housing needs in each of the areas evaluated in this study: housing gap, affordable housing, senior housing and retrofit needs.

**Housing Gap:** The overcrowding rate in the Nome census area is one of the highest in the state, with an estimated 27 percent of households being overcrowded or severely overcrowded. The authors of the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs point out that overcrowding is often the expression of what is actually homelessness with families taking in relatives who otherwise could not find affordable housing options. <sup>2</sup>

If construction rates continue at their current pace, they will not be able to keep up with projected population demand, further exacerbating overcrowding and affordability issues.

Affordable Housing Need: The region has the second highest fair market rent for a two-bedroom unit.<sup>3</sup> It is estimated that a renting household needs one full-time job paying \$26.46 per hour in order for a two-bedroom rental unit to be affordable. Nome has one of the lowest area median incomes in the state. The income needed to afford a two-bedroom unit at the fair market rent represents 114 percent of the area median income that suggests the typical renter household cannot afford housing in this region.

**Senior Housing Needs:** The Nome census area has no registered assisted-living housing; whereas, statewide there are beds for an estimated 2.8 percent of seniors on average.<sup>4</sup> The senior population is projected to nearly double by 2030.<sup>5</sup> Increasing the amount of available senior housing should ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: An estimated 44 percent of housing units were built before 1980 and have not had an energy retrofit, and 11 percent of homes in the region were identified as inefficient, meaning they use at least four times more energy than a new home

<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau. (2016). American Community Survey, 2010–2014 American Community Survey Five-year Estimates.

<sup>&</sup>lt;sup>2</sup> Pindus, N., Kngsley, G. T., Biess, J., Levy, D., Simington, J., & Hayes, C. (2017). *Final Report: Housing Needs of American Indians and Alaska Natives*. The Urban Institute. Retrieved from <a href="https://www.huduser.gov/portal/native">https://www.huduser.gov/portal/native</a> american assessment/home.html

<sup>&</sup>lt;sup>3</sup> Yentel, D., Aurand, A., Emmanuel, D., Errico, E., Leong, G. M., & Rodrigues, K. (2016). *Out of Reach 2016*. National Low Income Housing Coalition. Retrieved from <a href="http://nlihc.org/sites/default/files/oor/OOR">http://nlihc.org/sites/default/files/oor/OOR</a> 2016.pdf

<sup>&</sup>lt;sup>4</sup> AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from https://www.ahfc.us/senior-support/

<sup>&</sup>lt;sup>5</sup> Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). Alaska Population Projections 2015 to 2045. Alaska Department of Labor and Workforce Development, Research and Analysis Section.



built to modern energy standards.<sup>6</sup> These homes would likely be the most cost-effective to retrofit. Many homes in the region still lack basic facilities such as complete kitchens (16 percent) and complete bathrooms (21 percent).<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> See Appendix C: Methodology for details.

<sup>&</sup>lt;sup>7</sup> U.S. Census Bureau. (2016). American Community Survey, 2010–2014 American Community Survey Five-year Estimates.



## **Nome Census Area Summary**

### Community

The Nome census area is located on the Western coast of Alaska, and sits between the Yukon-Koyukuk census area and the Bering Sea. It is in the Bering Straits Native Corporation ANCSA region, and the vast majority of its communities are located on the coast. The average home size in the census area is 1,168 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Nome census area is higher than the statewide average and lower than the national ratio.<sup>8</sup> The Nome census area is expected to see an increase in the nonworking age population by 2030.

The ratio of senior age dependents to the working age population is lower than the statewide average and lower than the national average. The Nome census area region is projected to see the ratio of senior age dependents to working age dependents increase by 1.7 times by 2030.

There are an estimated 39 dedicated beds in senior housing in the Nome census area, with none of those dedicated to assisted care living. Currently the Alaska Department of Labor and Workforce Development estimates there are 700 seniors in the census area and projects that there will be 1,269 senior citizens by 2030. In the Nome census area no senior citizens are in assisted care housing, whereas statewide 2.8 percent of senior citizens live in assisted care housing. Nationally, approximately 3.5 percent of senior citizens are in senior living facilities. 11

Comparison of the growth rates in the senior age (65+) segment of the population to the dependent age (0 to 15) population indicate that in the Nome census area region the primary pressure for new housing over the next 15 years will come from households with elderly people.

<sup>&</sup>lt;sup>8</sup> Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

U.S. Census Bureau. (2016). American Community Survey, 2010–2014 American Community Survey Five-year Estimates.

<sup>&</sup>lt;sup>9</sup> AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from <a href="https://www.ahfc.us/senior-support/">https://www.ahfc.us/senior-support/</a>

<sup>&</sup>lt;sup>10</sup> Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

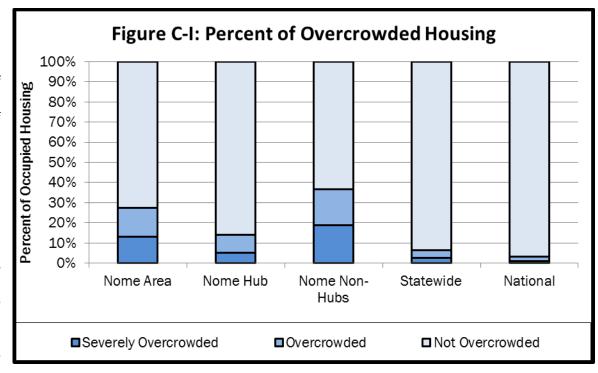
<sup>&</sup>lt;sup>11</sup> Ribbe, M., Ljunggren, G., Steel, K., Topinkova, E., Hawes, C., Ikegami, N., ... Jonnson, P. (1997). "Nursing Homes in 10 Nations: A Comparison Between Countries and Settings." *Age and Ageing.* 26(S2), 3-12.



## Overcrowding<sup>12</sup>

The Nome census area is the fourth most overcrowded census area in Alaska. Approximately 27 percent of households are overcrowded in the census area as a whole. The rate of overcrowding in the Nome census area is more than 4.3 times the statewide average (6.4 percent) and approximately 8.3 times more than the national average (3.3 percent).

Overcrowding in the non-hub communities is more prevalent than that found in the hub community. Overcrowding is defined as households with more than 1 person per room. Severe overcrowding is defined as households with more than 1.5 persons per room. Non-hub communities in the



Nome census area average nearly three times the overcrowding rate of the hub community, with approximately 37 percent of households overcrowded compared to the hub community's 14 percent. Further, 18.8 percent of non-hub community households are severely overcrowded. This is 18.8 times more than the national average.

Approximately 4 percent of housing units in the Nome census area are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (2 percent) is less than in the hub communities (6 percent). Additionally, 26 percent of housing units in the Nome census area are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

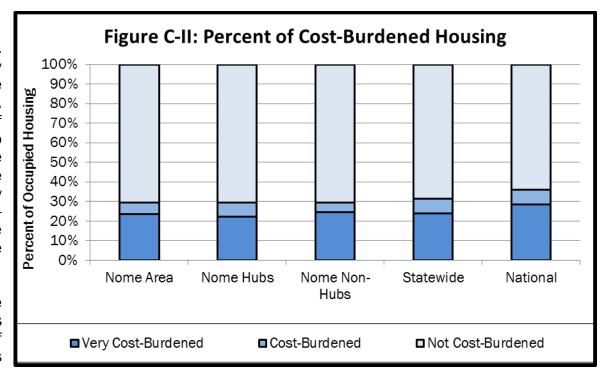
<sup>&</sup>lt;sup>12</sup> U.S. Census Bureau. (2016). American Community Survey, 2010-2014 American Community Survey Five-year Estimates.



## Affordability<sup>13</sup>

According to estimates from the U.S. Census American Community Survey (ACS), 30 percent of households in the Nome census area are cost-burdened, that is, spend more than 30 percent of their income on housing costs. Non-hub communities have a higher percentage (30 percent) of households that are cost-burdened than the hub community of Nome (29 percent). The rate of cost-burdened households in the Nome census area is 82 percent of the national average (36 percent).

The median household income in the Nome census area is \$47,579. This is lower than the statewide median of \$71,829. The national median is \$53,482.



<sup>&</sup>lt;sup>13</sup> U.S. Census Bureau. (2016). American Community Survey, 2010-2014 American Community Survey Five-year Estimates.

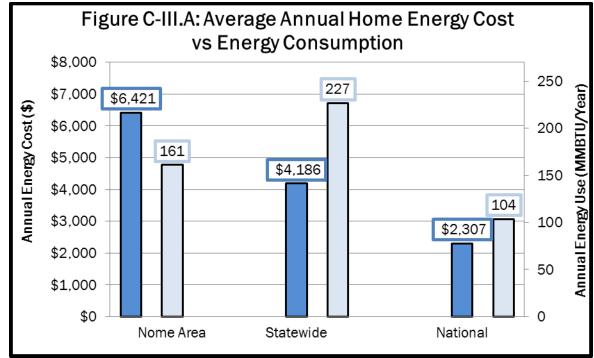


## Energy<sup>14</sup>

#### Single-family Units

Single-family homes in the Nome census area consume an average of 161 million BTUs per year, the 13th lowest energy consumption in the state. This average annual energy consumption is 71 percent of the statewide average of 227 million BTUs and 1.6 times the national average.

Energy costs for single-family homes in the Nome census area average \$6,420 annually. This is the highest in the state. Nome census area energy costs are 1.5 times the statewide average and 2.8 times the national average.



With an average footprint of 1,171

square feet, single-family homes in the Nome census area are smaller than the statewide average of 1,955 square feet. Nationally the average house size is 2,425 square feet.

The energy use intensity (EUI), or annual energy used per square foot, for a single-family home in the Nome census area averages 150,000 BTUs per square foot, the sixth highest in the state. This is 1.2 times the statewide average of 128,000 BTUs per square foot and 3.5 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Nome census area averages \$5.48, the third highest in the state. This is 2.4 times the statewide average of \$2.31 per square foot and 5.8 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Nome census area for the average single-family home is 7.63 BTUs/ft²/HDD. This is the fifth lowest in the state. The HHI for the Nome census area is lower than the statewide average of 8.83 BTU/ft²/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a single-family home in the Nome census area averages \$37.48, the

<sup>&</sup>lt;sup>14</sup> See Appendix C: Methodology for details.



second highest in the state. This is 2.4 times the statewide average of \$15.80 per million BTUs and 1.7 times the national average of \$22.27 per million BTUs.



#### **Multifamily Units**

Multifamily housing units in the Nome census area consume an average of 105 million BTUs per year, the 10th lowest energy consumption in the state. This average annual energy consumption is 68 percent of the statewide average of 156 million BTUs and 1.6 times the national average.

Energy costs for multifamily housing units in the Nome census area average \$4,683 annually. This is the third highest in the state. Nome census area energy costs are 1.6 times the statewide average and 3.6 times the national average.

With an average footprint of 1,043 square feet, multifamily housing units in

Figure C-III.B: Average Annual Home Energy Cost vs Energy Consumption \$8.000 Annual Energy Use (MMBTU/Year) \$7,000 Annual Energy Cost (\$) 200 \$6,000 156 \$5,000 \$4,683 150 \$4,000 105 \$2.905 100 \$3,000 56 \$2,000 \$1,290 50 \$1.000 \$0 Nome Area Statewide National

the Nome census area are smaller than the statewide average of 1,284 square feet. Nationally the average unit in multifamily housing is 930 square feet.

The energy use intensity (EUI), or annual energy used per square foot, for a multifamily housing unit in the Nome census area averages 103,000 BTUs per square foot, the 13th lowest in the state. This is 80 percent of the statewide average of 128,000 BTUs per square foot and 1.7 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Nome census area averages \$4.49, the third highest in the state. This is twice the statewide average of \$2.27 per square foot and 3.2 times the national average of \$1.39 per square foot.

The home heating index (HHI) in the Nome census area for the average multifamily housing unit is 4.46 BTUs/ft²/HDD. This is the seventh lowest in the state. The HHI for the Nome census area is lower than the statewide average of 8.28 BTU/ft²/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a unit in multifamily housing in the Nome census area averages



\$38.98, the third highest in the state. This is three times the statewide average of \$12.79 per million BTUs and 1.7 times the national average of \$23.12 per million BTUs.

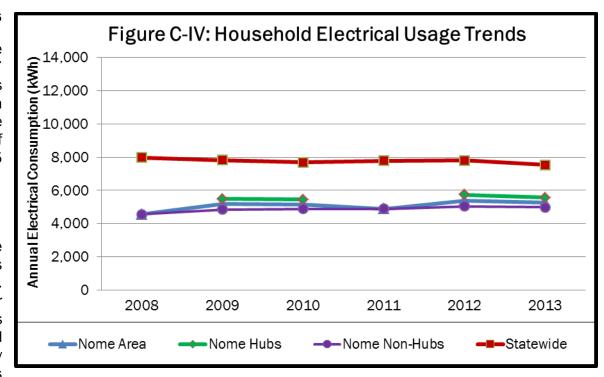


#### Historical Household Electricity Usage<sup>15</sup>

In 2013 the average household in the Nome census area consumed 5,277 kWh of electricity annually. This is approximately 16 percent more than in 2008. Statewide, the average household consumed 7,540 kWh of electricity in 2013, a decrease of 5 percent since 2008.

#### Inefficient and Older Homes<sup>16</sup>

Approximately 318 (11 percent) of the occupied homes in the Nome census area are estimated to be 1-star homes. A 1-star home uses approximately four times more energy than if built to AHFC's Building Energy Efficiency Standard (BEES). Statewide, approximately 14,600 (6 percent) of occupied homes are estimated to be 1-star homes.



Older homes built before 1980 that have not been retrofitted are potentially homes in need. Approximately 44 percent of all homes in the Nome census area fit these two criteria, higher than the statewide average of 39 percent.

<sup>&</sup>lt;sup>15</sup> Fay, G., Villalobos Melendez, A. & West. C. (2014). *Alaska Energy Statistics:* 1960-2011. UAA Institute of Social and Economic Research. Retrieved from <a href="http://iser.uaa.alaska.edu/Publications/2013\_12-AlaskaEnergyStatistics2011Report\_Final\_2014-04-30.pdf">http://iser.uaa.alaska.edu/Publications/2013\_12-AlaskaEnergyStatistics2011Report\_Final\_2014-04-30.pdf</a>

<sup>&</sup>lt;sup>16</sup> See Appendix C: Methodology for details.



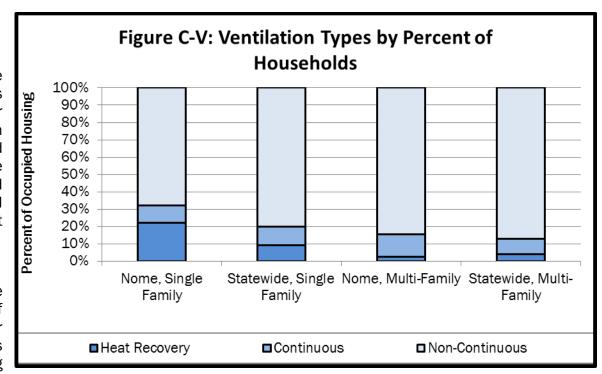
## Housing Condition<sup>17</sup>

#### Ventilation

Approximately 32 percent of the occupied homes in the Nome census area region have heat recovery or continuous mechanical ventilation systems installed. This is the third highest in the state. Statewide approximately 20 percent of occupied homes have continuous mechanical ventilation systems, with or without heat recovery.

#### **Indoor Air Quality**

A tight home with no or inadequate ventilation has an increased risk of issues with indoor air quality or moisture. The Nome census area has the fifth lowest percentage of housing



units in the state that are both relatively airtight and lack continuous mechanical ventilation. Approximately 596 (21 percent) of the occupied homes in the Nome census area are estimated to be at moderate risk, with 224 (8 percent) estimated to be at high risk. Statewide, approximately 30 percent of occupied homes are estimated to be at moderate risk and 26 percent at high risk.

#### **Draftiness**

To quantify drafty homes, the following definitions were used. Drafty homes will see test results of between 7 and 12 air changes per hour at 50 Pascals (ACH50) when subjected to a blower door test. Very drafty homes will see test results of greater than 12 ACH50. Approximately 854 (30 percent) of the occupied homes in the Nome census area are estimated to be drafty, with 509 (18 percent) estimated to be very drafty. Statewide approximately 24 percent of occupied homes are estimated to be drafty and 12 percent are estimated to be very drafty.

<sup>&</sup>lt;sup>17</sup> See Appendix C: Methodology for details.