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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.



Sitka Borough Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Sitka Borough is 8,929, an increase of 1 percent from 2000.

Housing Units: There are currently 4,307 housing units in the Sitka Borough. Of these, 3,513 are occupied, 225 are for sale or rent, and the remaining 367 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Sitka Borough is 1,689 square feet and uses 159 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 Sitka Borough is \$3,357. This is approximately 80 percent of the statewide average and 1.5 times the national average.

Overcrowding: An estimated 109 (3 percent) of occupied units are either overcrowded (2 percent) or severely overcrowded (1 percent). This is nearly the same as the national average, and makes this census area the fourth least overcrowded census area in the state.

Drafty Homes and Ventilation: Approximately 2,140 (57 percent) of homes in the Sitka Borough are drafty, exceeding seven air changes per hour at 50 Pascals (ACH50). The statewide average is 36 percent. In contrast, there are an estimated 2,178 occupied housing units (58 percent) in the Sitka Borough 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 1,187 (34 percent) of households in the Sitka Borough 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 109 beds in senior housing facilities in the Sitka Borough. Currently the Alaska Department of Labor and Workforce Development estimates there are 1,248 seniors in the census area and projects an increase to 2,013 by 2030.

Housing Issues: There are an estimated 1,515 homes built before the 1980s in the Sitka Borough that have not been retrofitted through a state program in the past 10 years. Approximately 78 (2 percent) homes in the Sitka Borough lack complete kitchens and approximately 34 (1 percent) lack complete bathrooms.



Sitka Borough Housing Need Highlights

Increasing housing affordability for renters and providing energy retrofits are primary housing needs in the Sitka Borough census area. With a low average renter wage and relatively high fair market rents, affordability is difficult for renter households. Retrofitting homes has the potential to increase comfort, reduce energy costs and increase the longevity of buildings.

Housing Gap: Sitka currently has a relatively low overcrowding rate (3 percent), and the population is projected to decline slightly in the coming years.² If the current rate of new construction continues, it will be sufficient to provide one additional unit per currently overcrowded housing unit.

Affordable Housing Needs: An estimated 34 percent of homes in the Sitka Borough are cost-burdened, spending more than 30 percent of their income on housing costs, which is slightly higher than the statewide average. With a relatively low average renter wage and relatively high fair market rents, affordability is particularly difficult for renters. It is estimated that a renter household needs 1.7 full-time jobs paying the average renter wage in order to afford a two-bedroom rental unit at fair market rent.

Senior Housing Needs: The Sitka Borough has a higher ratio of senior housing facilities to seniors than the statewide average; however, the senior population is projected to increase by approximately 61 percent by 2030.⁵ New units will need to be built to maintain the current level of services.

Retrofit Needs: An estimated 52 percent of all occupied homes in the Sitka Borough were built before 1980 and have not had an energy retrofit. Fifty-seven percent of homes are estimated to be drafty based on their measured air-tightness. These statistics suggest opportunities for cost-effective energy retrofit work.

¹ 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 http://nlihc.org/sites/default/files/oor/OOR_2016.pdf

² U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates.*

³ Ibid.

⁴ 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 http://nlihc.org/sites/default/files/oor/OOR 2016.pdf

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

⁶ See Appendix C: Methodology for details.



Sitka Borough Summary

Community

The City and Borough of Sitka census area lies on the Southeast panhandle of Alaska, facing the Gulf of Alaska. It is in the Sealaska Native Corporation ANCSA region. The average home size in the census area is 1,629 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Sitka Borough is lower than the statewide average and lower than the national ratio.⁷ The Sitka Borough 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 higher than the statewide average and lower than the national average. The Sitka Borough region is projected to see the ratio of senior age dependents to working age dependents increase by 1.8 times by 2030.

There are an estimated 109 dedicated beds in senior housing in the Sitka Borough, with 65 of those dedicated to assisted care living.⁸ Currently the Alaska Department of Labor and Workforce Development estimates there are 1,248 seniors in the census area and projects that there will be 2,013 senior citizens by 2030.⁹ In the Sitka Borough 5.2 percent of senior citizens are in assisted care housing. This is higher than the statewide rate of 2.8 percent of senior citizens in assisted care housing. Nationally, approximately 3.5 percent of senior citizens are in senior living facilities.¹⁰

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 Sitka Borough region the primary pressure for new housing over the next 15 years will come from households with elderly people.

⁷ 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 5-year estimates.

⁸ AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from https://www.ahfc.us/senior-support/

⁹ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

¹⁰ 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.

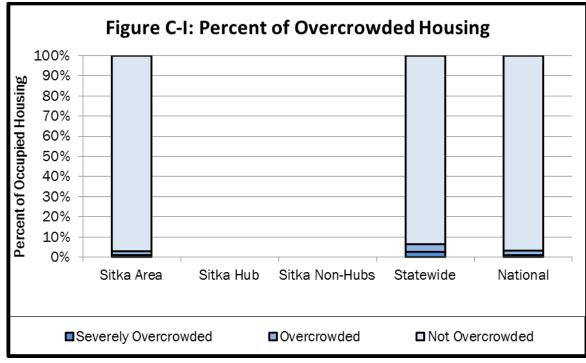


Overcrowding¹¹

The Sitka Borough is the fourth least overcrowded census area in Alaska. Approximately 3 percent of households are overcrowded in the census area as a whole. The rate of overcrowding in the Sitka Borough is more than 48 percent of the statewide average (6.4 percent) and approximately 94 percent of the national average (3.3 percent).

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.

Approximately 5 percent of housing units in the Sitka Borough are available



for sale or rent. Additionally, 9 percent of housing units in the Sitka Borough are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

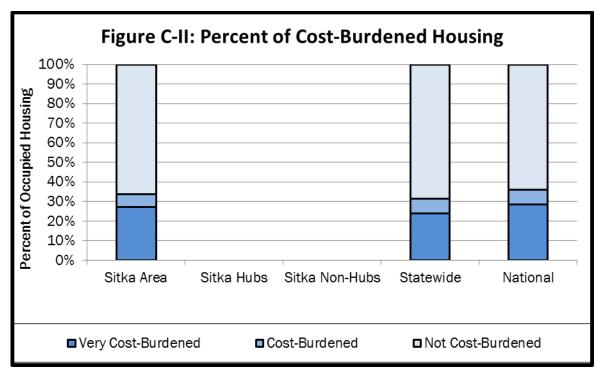
 $^{^{11}}$ U.S. Census Bureau. (2016). American Community Survey, 2010-2014 American Community Survey Five-year Estimates.



Affordability¹²

According to estimates from the U.S. Census American Community Survey (ACS), 34 percent of households in the Sitka Borough are cost-burdened, that is, spend more than 30 percent of their income on housing costs. The rate of cost-burdened households in the Sitka Borough is 94 percent of the national average (36 percent).

The median household income in the Sitka Borough is \$69,635. This is lower than the statewide median of \$71,829. The national median is \$53,482.



¹² U.S. Census Bureau. (2016). American Community Survey, 2010-2014 American Community Survey Five-year Estimates.

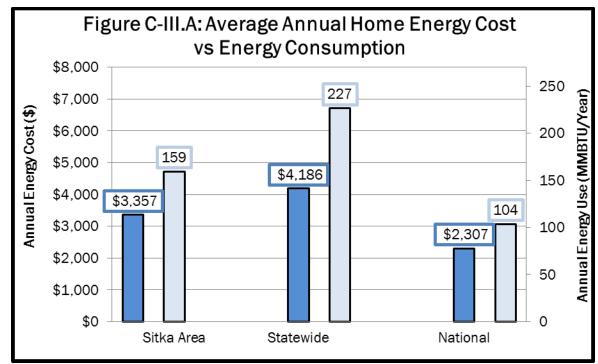


Energy¹³

Single-family Units

Single-family homes in the Sitka Borough consume an average of 159 million BTUs per year, the 12th lowest energy consumption in the state. This average annual energy consumption is 70 percent of the statewide average of 227 million BTUs and 1.5 times the national average.

Energy costs for single-family homes in the Sitka Borough average \$3,357 annually. This is the lowest in the state. Sitka Borough energy costs are 80 percent of the statewide average and 1.5 times the national average.



With an average footprint of 1,689

square feet, single-family homes in the Sitka Borough 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 Sitka Borough averages 104,000 BTUs per square foot, the second lowest in the state. This is 81 percent of the statewide average of 128,000 BTUs per square foot and 2.4 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Sitka Borough averages \$1.99, the third lowest in the state. This is 86 percent of the statewide average of \$2.31 per square foot and 2.1 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Sitka Borough for the average single-family home is 9.54 BTUs/ft²/HDD. This is the 12th highest in the state. The HHI for the Sitka Borough is higher 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 Sitka Borough averages \$20.20, the ninth

¹³ See Appendix C: Methodology for details.



lowest in the state. This is 1.3 times the statewide average of \$15.80 per million BTUs and 91 percent of the national average of \$22.27 per million BTUs.



Multifamily Units

Multifamily housing units in the Sitka Borough consume an average of 130 million BTUs per year, the ninth highest energy consumption in the state. This average annual energy consumption is 83 percent of the statewide average of 156 million BTUs and 1.5 times the national average.

Energy costs for multifamily housing units in the Sitka Borough average \$3,048 annually. This is the 15th highest in the state. Sitka Borough energy costs are approximately the same as the statewide average and 2.4 times the national average.

With an average footprint of 1,296 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 \$5,000 150 130 \$4.000 \$3,048 \$2,905 100 \$3,000 56 \$2,000 \$1,290 50 \$1.000 \$0 Sitka Area Statewide National

the Sitka Borough are approximately the same as 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 Sitka Borough averages 99,000 BTUs per square foot, the eighth lowest in the state. This is 77 percent of the statewide average of 128,000 BTUs per square foot and 1.6 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Sitka Borough averages \$2.35, the seventh lowest in the state. This is approximately the same as the statewide average of \$2.27 per square foot and 1.7 times the national average of \$1.39 per square foot.

The home heating index (HHI) in the Sitka Borough for the average multifamily housing unit is 8.33 BTUs/ft²/HDD. This is the ninth highest in the state. The HHI for the Sitka Borough is approximately the same as 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 Sitka Borough averages



\$18.99, the ninth lowest in the state. This is 1.5 times the statewide average of \$12.79 per million BTUs and 82 percent of the national average of \$23.12 per million BTUs.

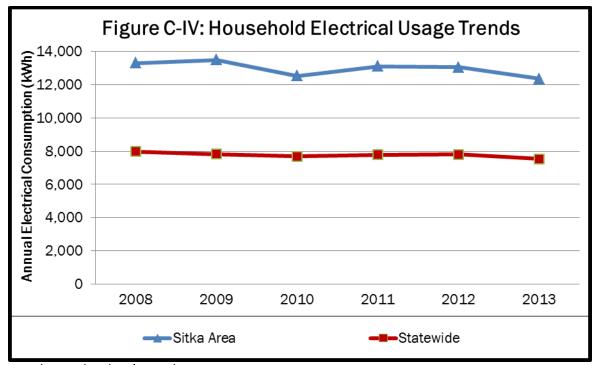


Historical Household Electricity Usage¹⁴

In 2013 the average household in the Sitka Borough consumed 12,363 kWh of electricity annually. This is approximately 7 percent less than in 2009. Statewide, the average household consumed 7,540 kWh of electricity in 2013, a decrease of 5 percent since 2008.

Inefficient and Older Homes¹⁵

Approximately 453 (13 percent) of the occupied homes in the Sitka Borough 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 52 percent of all homes in the Sitka Borough fit these two criteria, higher than the statewide average of 39 percent.

¹⁴ Fay, G., Villalobos Melendez, A. & West. C. (2014). *Alaska Energy Statistics:* 1960-2011. UAA Institute of Social and Economic Research. Retrieved from: http://iser.uaa.alaska.edu/Publications/2013 12-Alaska Energy Statistics 2011Report Final 2014-04-30.pdf

¹⁵ See Appendix C: Methodology for details.



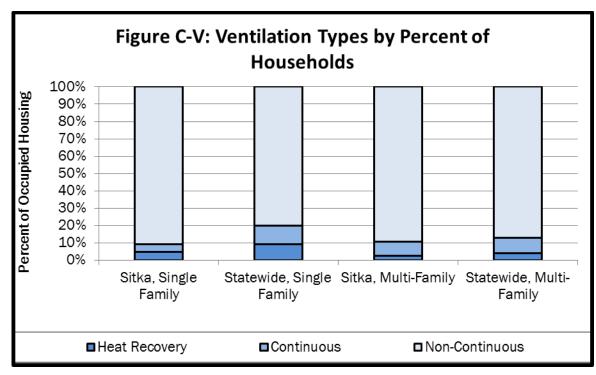
Housing Condition ¹⁶

Ventilation

Approximately 9 percent of the occupied homes in the Sitka Borough region have heat recovery or continuous mechanical ventilation systems installed. This is the fifth lowest 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 Sitka Borough has the fifth highest percentage of housing units in the state that are both relatively



airtight and lack continuous mechanical ventilation. Approximately 1,058 (30 percent) of the occupied homes in the Sitka Borough are estimated to be at moderate risk, with 971 (28 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 1,063 (30 percent) of the occupied homes in the Sitka Borough are estimated to be drafty, with 954 (27 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.

¹⁶ See Appendix C: Methodology for details.