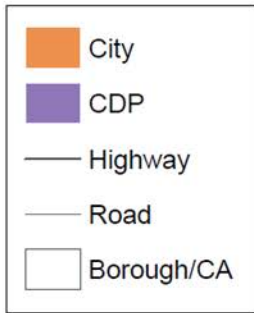


Hoonah-Angoon Census Area



CDP = Census Designated Place
CA = Census Area



Map Prepared by:
Alaska Department of Labor
& Workforce Development

September 2011

Source: US Census
2010 TIGERline

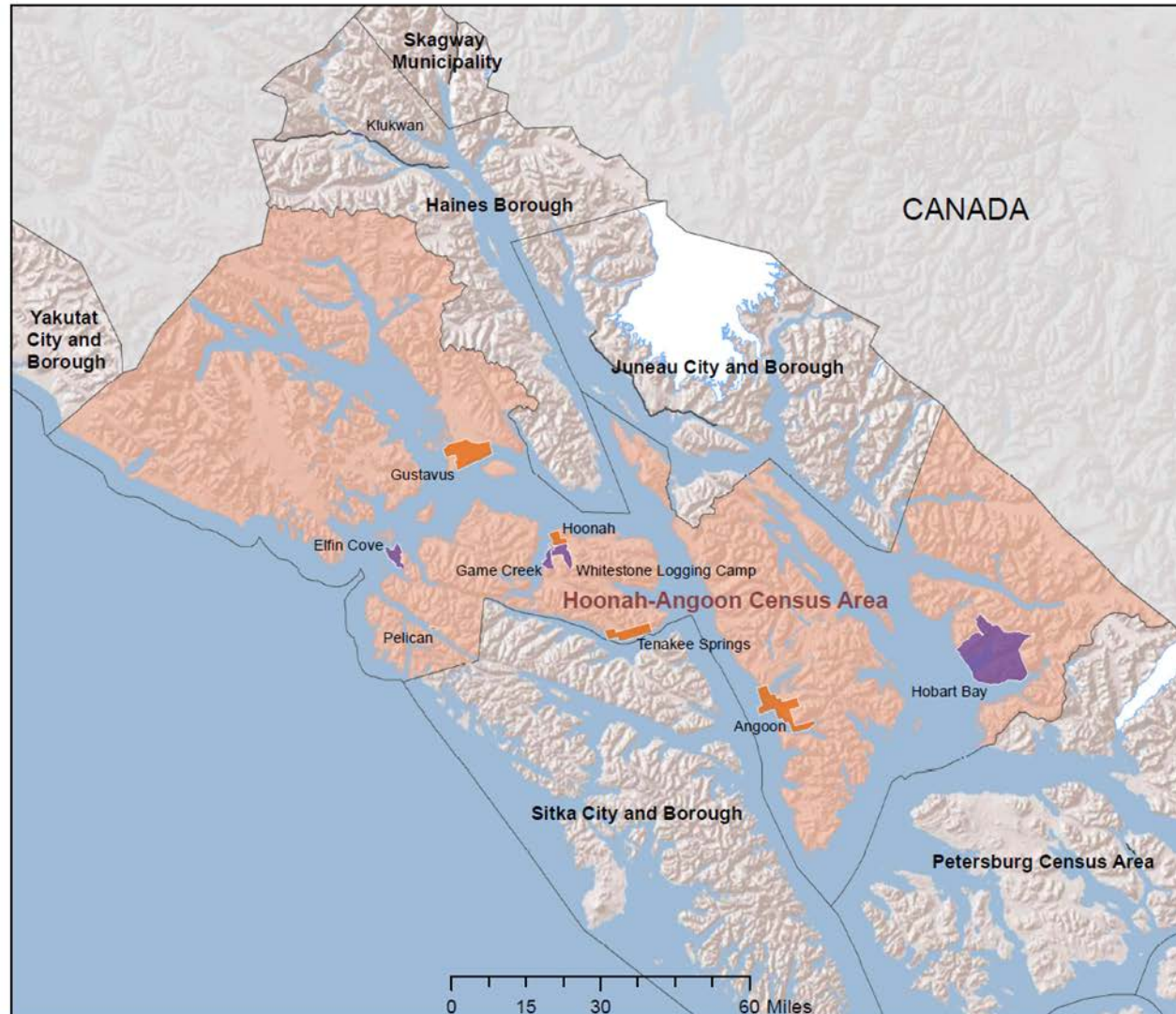


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Regional and Statewide Housing Characteristics

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.

Hoonah-Angoon Census Area Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Hoonah-Angoon census area is 2,178, a decrease of 15 percent from 2000.

Housing Units: There are currently 1,509 housing units in the Hoonah-Angoon census area. Of these, 909 are occupied, 77 are for sale or rent, and the remaining 682 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Hoonah-Angoon census area is 1,260 square feet and uses 154 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 Hoonah-Angoon census area is \$3,961. This is approximately 95 percent of the statewide average and 1.7 times the national average.

Overcrowding: An estimated 23 (3 percent) of occupied units are either overcrowded (1 percent) or severely overcrowded (1 percent). This is approximately the same as the national average, and makes this census area the third least overcrowded census area in the state.

Drafty Homes and Ventilation: Approximately 633 (68 percent) of occupied homes in the Hoonah-Angoon 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 391 occupied housing units (42 percent) in the Hoonah-Angoon 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 210 (23 percent) of households in the Hoonah-Angoon 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 202 beds in senior housing facilities in the Hoonah-Angoon census area. Currently the Alaska Department of Labor and Workforce Development estimates there are 383 seniors in the census area and projects an increase to 621 by 2030.

Housing Issues: There are an estimated 524 homes built before the 1980s in the Hoonah-Angoon census area that have not been retrofitted through a state program in the past 10 years. Approximately 62 (7 percent) homes in the Hoonah-Angoon census area lack complete kitchens and approximately 107 (12 percent) lack complete bathrooms.

Hoonah-Angoon Borough Housing Need Highlights

The Hoonah-Angoon Borough census area faces two pressing housing issues. First is the need for senior housing. The second-largest need for homes in the census area is for energy efficiency retrofits.

Housing Gap: There are currently 1,509 housing units in the census area, and 54 percent of these units are occupied.¹ Approximately 5 percent of the units are for sale or rent, and remaining units are occupied seasonally or recreationally. An estimated 3 percent of occupied units are overcrowded or severely overcrowded. This is approximately the national average, making the census area one of the least overcrowded in the state.

Affordable Housing Need: The average annual energy cost for homes in the Hoonah-Angoon Borough is \$3,961, which is approximately 1.7 times the national average.² This contributes to the approximately 23 percent of households in the census area that are cost-burdened, meaning they spend more than 30 percent of their income on housing.³ This is lower than the national average of 36 percent of cost-burdened households.

Senior Housing Needs: There are 18 beds in senior housing facilities in the census area. None are dedicated to assisted-care living;⁴ however, the senior population in the area is 383 and is projected to increase to 621 by 2030.⁵ Increasing the amount of available senior housing should ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: Approximately 20 percent of the occupied homes in the Hoonah-Angoon Borough are estimated to be inefficient, using around four times more energy than if they had been built to the level of AHFC's Building Energy Efficiency Standard (BEES).⁶ This is more than triple the statewide average of 6 percent of inefficient homes. Forty-four percent of homes were built before 1980 and have not been retrofitted. These homes are good candidates for retrofit.

¹ U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

² U.S. Energy Information Administration, Independent Statistics and Analysis. (2016). Residential Energy Consumption Survey (RECS): 2009. Retrieved from <https://www.eia.gov/consumption/residential/data/2009/index.php>

³ U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

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

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.

The majority of occupied homes in the census area have indoor air quality issues, with only 5 percent of homes having continuous mechanical ventilation or a heat recovery ventilator. This is the lowest percentage of homes in Alaska's census areas with continuous mechanical ventilation. The remaining homes are classified as either drafty or airtight without mechanical ventilation.

Hoonah-Angoon Census Area Summary

Community

The census area of Hoonah-Angoon is located on the Southeast panhandle of Alaska, to the north and west of the state capital of Juneau. It is in the Sealaska Native Corporation ANCSA region. The average home size in the census area is 1,258 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Hoonah-Angoon census area is higher than the statewide average and lower than the national ratio.⁷ The Hoonah-Angoon 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 higher than the statewide average and higher than the national average. The Hoonah-Angoon census area region is projected to double the ratio of senior age dependents to working age dependents by 2030.

There are an estimated 18 dedicated beds in senior housing in the Hoonah-Angoon census area, with none of those dedicated to assisted care living.⁸ Currently the Alaska Department of Labor and Workforce Development estimates there are 383 seniors in the census area and projects that there will be 621 senior citizens by 2030.⁹ In the Hoonah-Angoon census area no senior citizens are in assisted care housing, whereas statewide 2.8 percent of senior citizens are 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 Hoonah-Angoon census area 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 Five-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.

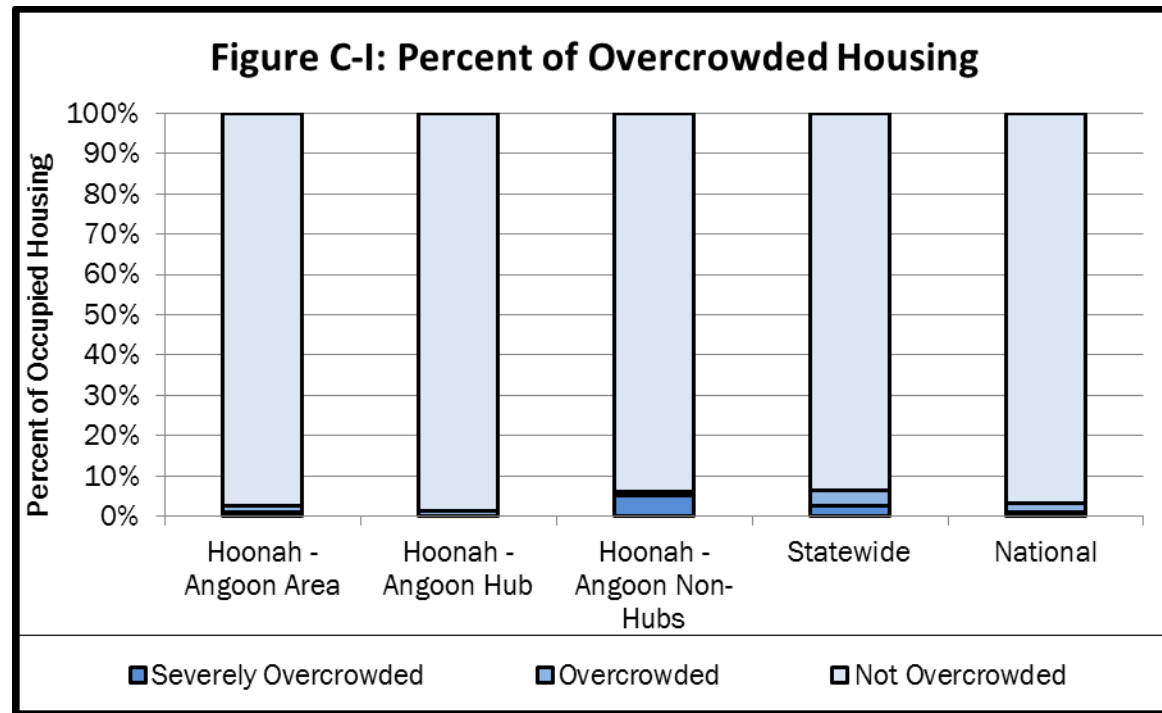
Overcrowding¹¹

The Hoonah-Angoon census area is the third 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 Hoonah-Angoon census area is more than 39 percent of the statewide average (6.4 percent) and approximately 76 percent of 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 Hoonah-Angoon census area average more than four times the overcrowding rate of the hub community, with approximately 6 percent of households overcrowded compared to the hub community's 2 percent.

Further, 5.2 percent of non-hub community households are severely overcrowded. This is 5.2 times more than the national average.

Approximately 5 percent of housing units in the Hoonah-Angoon census area are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (4 percent) is more than in the hub communities (3 percent). Additionally, 41 percent of housing units in the Hoonah-Angoon census area are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

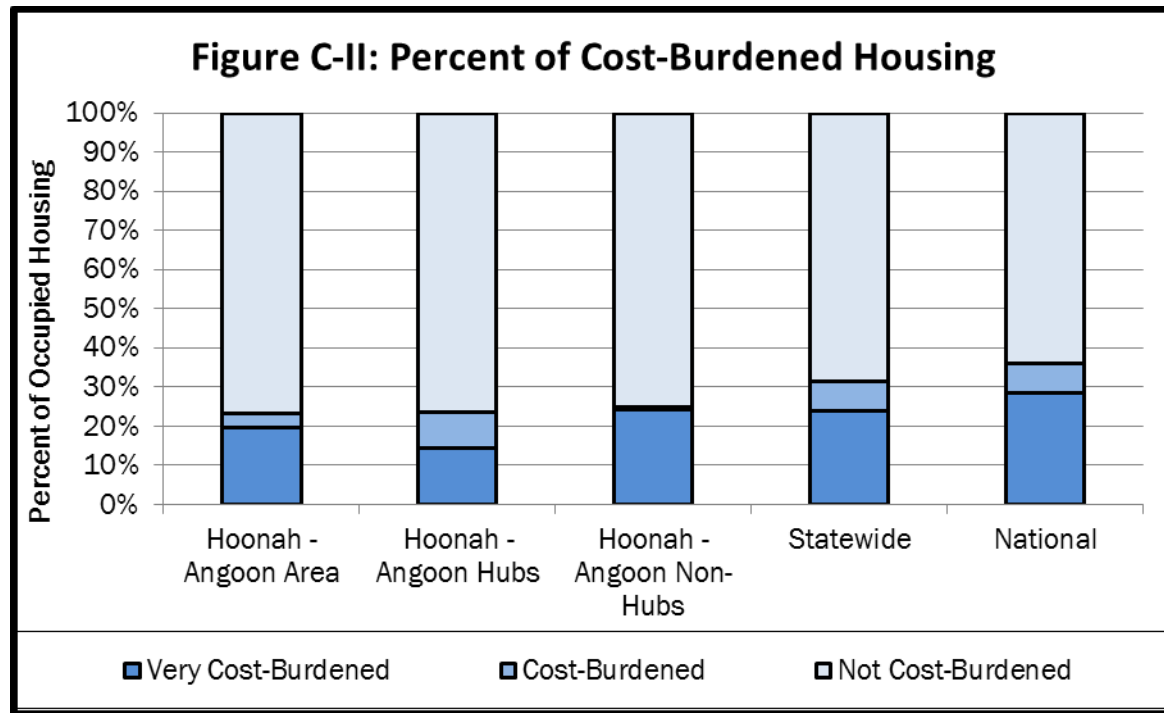


¹¹ U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Affordability¹²

According to estimates from the U.S. Census American Community Survey (ACS), 23 percent of households in the Hoonah-Angoon 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 (25 percent) of households that are cost-burdened than the hub community of Hoonah (23 percent). The rate of cost-burdened households in the Hoonah-Angoon census area is 64 percent of the national average (36 percent).

The median household income in the Hoonah-Angoon census area is \$50,268. This is lower than the statewide median of \$71,829. The national median is \$53,482.



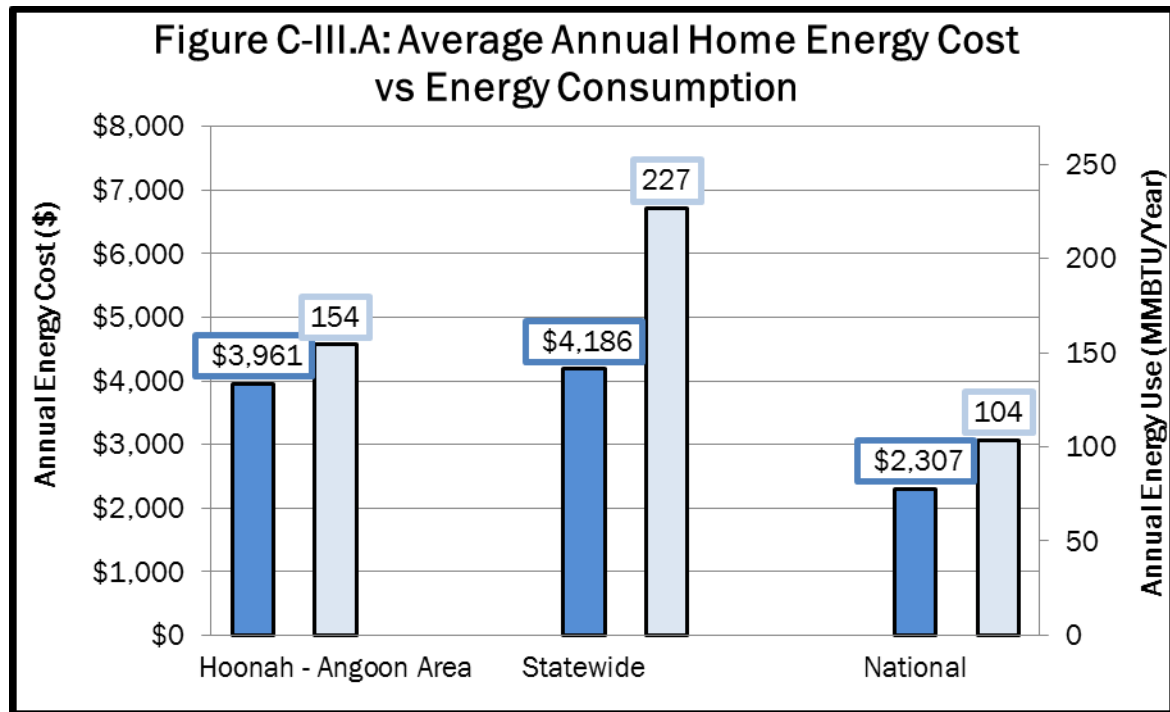
¹² U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Energy¹³

Single-family Units

Single-family homes in the Hoonah-Angoon census area consume an average of 154 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 227 million BTUs and 1.5 times the national average.

Energy costs for single-family homes in the Hoonah-Angoon census area average \$3,961 annually. This is the seventh lowest in the state. Hoonah-Angoon census area energy costs are 95 percent of the statewide average and 1.7 times the national average.



With an average footprint of 1,260 square feet, single-family homes in the Hoonah-Angoon 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 Hoonah-Angoon census area averages 135,000 BTUs per square foot, the 13th highest in the state. This is 1.1 times the statewide average of 128,000 BTUs per square foot and 3.2 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Hoonah-Angoon census area averages \$3.14, the 13th highest in the state. This is 1.4 times the statewide average of \$2.31 per square foot and 3.3 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Hoonah-Angoon census area for the average single-family home is 11.6 BTUs/ft²/HDD. This is the third highest in the state. The HHI for the Hoonah-Angoon census area 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 Hoonah-Angoon

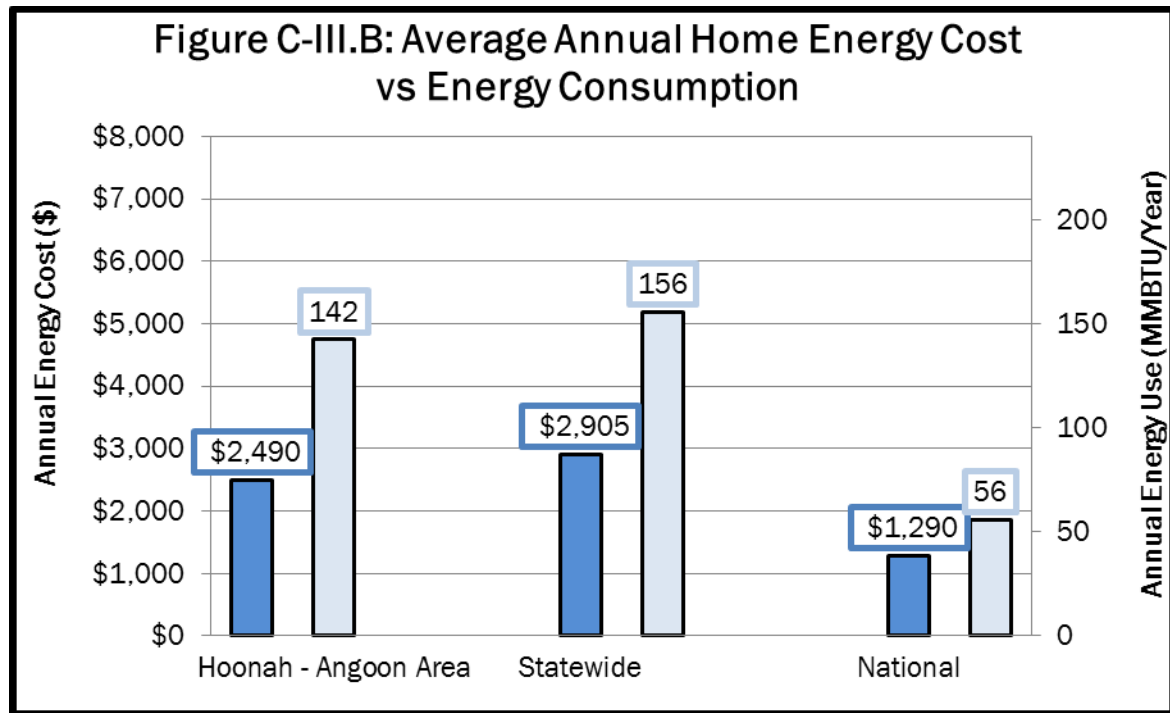
¹³ See Appendix C: Methodology for details.

census area averages \$23.21, the 12th highest in the state. This is 1.5 times the statewide average of \$15.80 per million BTUs and approximately equivalent to the national average of \$22.27 per million BTUs.

Multifamily Units

Multifamily housing units in the Hoonah-Angoon census area consume an average of 142 million BTUs per year, the seventh highest energy consumption in the state. This average annual energy consumption is 92 percent of the statewide average of 156 million BTUs and 1.5 times the national average.

Energy costs for multifamily housing units in the Hoonah-Angoon census area average \$2,490 annually. This is the fifth lowest in the state. Hoonah-Angoon census area energy costs are 86 percent of the statewide average and 1.9 times the national average.



With an average footprint of 979 square feet, multifamily housing units in the Hoonah-Angoon census area are smaller than the statewide average of 1,284 square feet. Nationally the average unit in multifamily housing is 930 square feet.

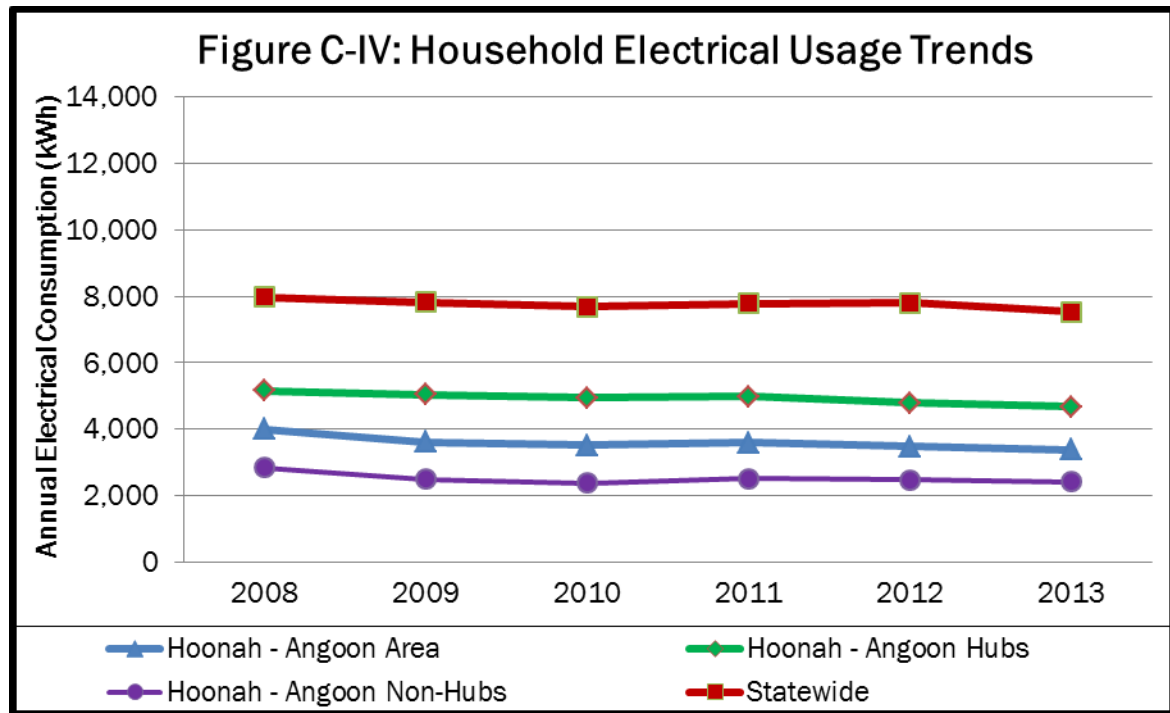
The energy use intensity (EUI), or annual energy used per square foot, for a multifamily housing unit in the Hoonah-Angoon census area averages 144,000 BTUs per square foot, the third highest in the state. This is 1.1 times the statewide average of 128,000 BTUs per square foot and 2.4 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Hoonah-Angoon census area averages \$2.54, the 11th lowest in the state. This is 1.1 times the statewide average of \$2.27 per square foot and 1.8 times the national average of \$1.39 per square foot.

The home heating index (HHI) in the Hoonah-Angoon census area for the average multifamily housing unit is 11.8 BTUs/ft²/HDD. This is the second highest in the state. The HHI for the Hoonah-Angoon census area is higher 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 Hoonah-

Angoon census area averages \$11.50, the fourth lowest in the state. This is 90 percent of the statewide average of \$12.79 per million BTUs and 50 percent of the national average of \$23.12 per million BTUs.

Historical Household Electricity Usage¹⁴

In 2013 the average household in the Hoonah-Angoon census area consumed 3,375 kWh of electricity annually. This is approximately 15 percent less than in 2008. Hub communities in the census area averaged 4,674 kWh per year. This is a decrease of 9 percent over the same period. In contrast, non-hub communities averaged 2,412 kWh in 2013, a decrease of 15 percent since 2008. Statewide, the average household consumed 7,540 kWh of electricity in 2013, a decrease of 5 percent since 2008.



Inefficient and Older Homes¹⁵

Approximately 182 (20 percent) of the occupied homes in the Hoonah-Angoon 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 Hoonah-Angoon census area 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-AlaskaEnergyStatistics2011Report_Final_2014-04-30.pdf

¹⁵ See Appendix C: Methodology for details.

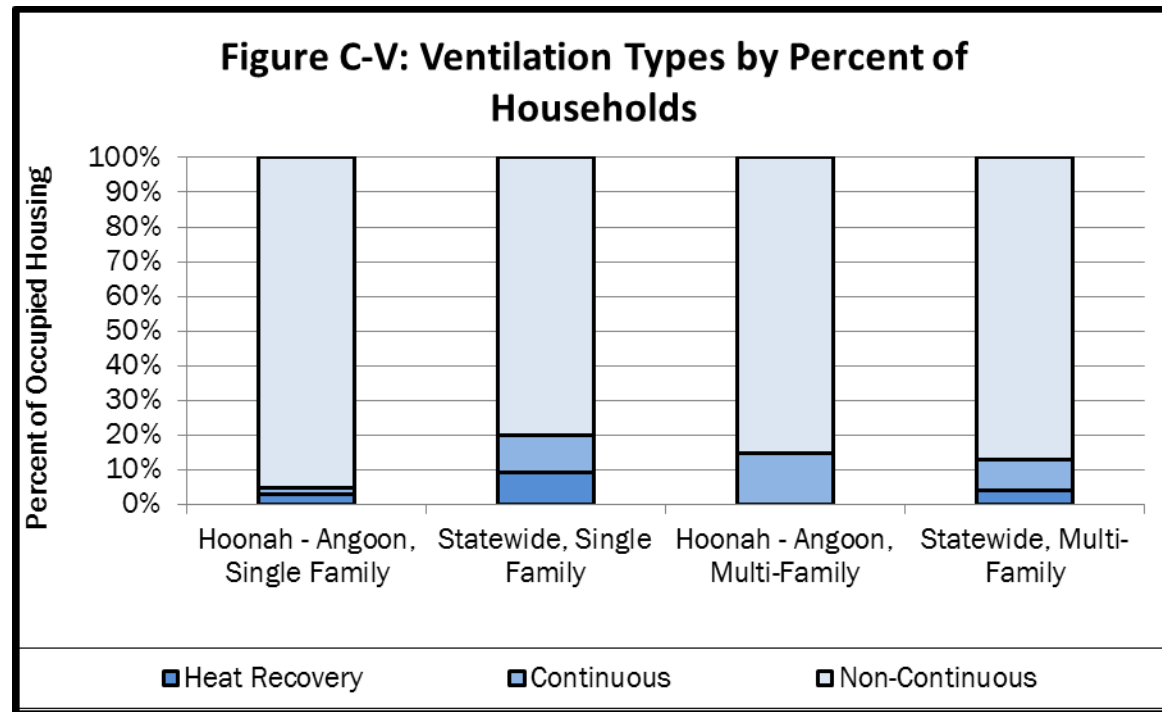
Housing Condition¹⁶

Ventilation

Approximately 5 percent of the occupied homes in the Hoonah-Angoon census area region have heat recovery or continuous mechanical ventilation systems installed. This is the 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 Hoonah-Angoon census area has the 15th highest percentage of housing units in the state that are both relatively airtight and lack continuous mechanical ventilation. Approximately 256 (28 percent) of the occupied homes in the Hoonah-Angoon census area are estimated to be at moderate risk, with 127 (14 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 346 (38 percent) of the occupied homes in the Hoonah-Angoon census area are estimated to be drafty, with 273 (30 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.