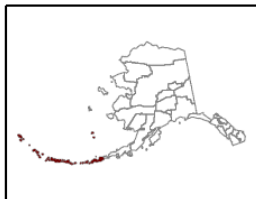


Aleutians West Census Area

- City
- CDP
- Highway
- Road
- Borough/CA



CDP = Census Designated Place
CA = Census Area



Map Prepared by:
Alaska Department of Labor
& Workforce Development

September 2011

Source: US Census
2010 TIGERline

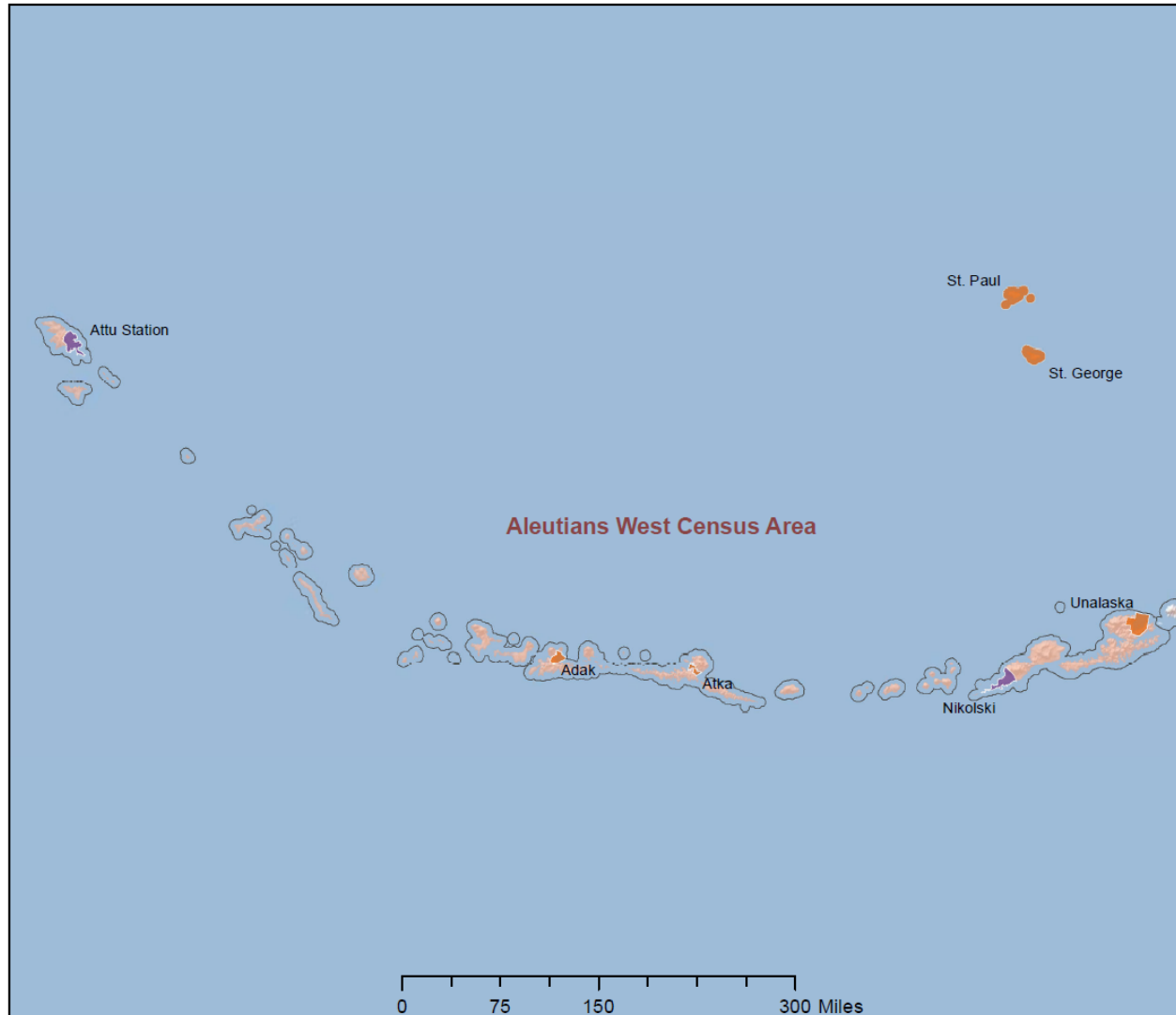


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Regional and Statewide Housing Characteristics

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.

Aleutians West Census Area Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Aleutians West census area is 5,649, an increase of 3 percent from 2000.

Housing Units: There are currently 1,935 housing units in the Aleutians West census area. Of these, 1,105 are occupied, 160 are for sale or rent, and the remaining 676 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Aleutians West census area is 1,130 square feet and uses 148 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 Aleutians West census area is \$5,603. This is approximately 1.3 times the statewide average and 2.4 times the national average.

Overcrowding: An estimated 111 (10 percent) of occupied units are either overcrowded (5 percent) or severely overcrowded (5 percent). This is more than 3 times the national average, and makes this census area the ninth most overcrowded census area in the state.

Drafty Homes and Ventilation: Approximately 535 (40 percent) of occupied homes in the Aleutians West 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 468 occupied housing units (35 percent) in the Aleutians West 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 300 (27 percent) of households in the Aleutians West 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 29 beds in senior housing facilities in the Aleutians West census area. Currently the Alaska Department of Labor and Workforce Development estimates there are 400 seniors in the census area and projects an increase to 767 by 2030.

Housing Issues: There are an estimated 685 homes built before the 1980s in the Aleutians West census area that have not been retrofitted through a state program in the past 10 years. Approximately 31 (3 percent) homes in the Aleutians West census area lack complete kitchens and approximately 34 (3 percent) lack complete bathrooms.

Aleutians West Census Area Housing Need Highlights

The need facing the Aleutians West census area is to retrofit current housing to decrease energy use and reduce high energy costs. The Aleutians West census area has the fourth highest average annual energy cost in the state, at an estimated \$5,600 annually.¹ Many of these homes are aging because 44 percent of the homes were built before the 1980s.

The *Aleutian and Pribilof Islands Regional Energy Plan* reinforces the importance of increasing efficiency of buildings. “Maximizing energy efficiency with a focus on reducing the high cost of space heating” was one recommendation in the report, and potential savings and certainty of those savings was identified as being high in almost every community.²

The Aleutians West census area also has a much higher overcrowding rate than the Alaska average with 10 percent of the population living in overcrowded housing conditions that is nearly twice as high as the Alaska state average, and more than three times as high as the national average.³

Housing Gap: There are currently 2,358 housing units in the census area, and 57 percent of are occupied.⁴ An estimated 10 percent of occupied units in the Aleutians West census area are overcrowded or severely overcrowded. This is three times the national average and makes Aleutians West the 10th most overcrowded census area in the state.

While population is projected to decrease slightly even if the construction rate of recent years continues, it is not projected to provide enough housing to alleviate overcrowding.^{5, 6} Given an estimated 8 percent of housing stock is vacant and for sale or rent, it appears that housing affordability or poor condition of the available housing are likely causes of overcrowding.

¹ See Appendix C: Methodology for details.

² Information Insights, and SWAMC. (2015). *Aleutian & Pribilof Islands Regional Energy Plan: Phase II*. Retrieved from <http://www.akenergyauthority.org/Portals/0/Policy/RegionalPlanning/Documents/AleutianPribilofIslands%20Regional%20Energy%20Plan.pdf?ver=2016-06-22-095050-343>

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

⁴ Ibid.

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 Dusenberry, Nicole. Personal Email Communication with Excel Workbook, 5/9/2016. *2000–2015 New Housing Units Workbook*. Alaska Department of Labor and Workforce Development: Research and Analysis Division.

Affordable Housing Need: The Aleutians West census area requires the highest wage in the state to be able to afford a two-bedroom rental at \$28.90.⁷ This high cost of rental housing is part of why an estimated 26 percent of households in the census area are cost-burdened, meaning they spend more than 30 percent of their income on housing.⁸ High energy costs also likely contribute to this cost-burdening. Addressing the need for retrofits in the census area should reduce energy costs and increase affordability.

Senior Housing Needs: There are 29 beds in independent living senior housing facilities in the Aleutians West census area.⁹ There are an estimated 400 seniors in the census area, and the population is projected to nearly double to 767 by 2030.¹⁰ Increasing the amount of available senior housing could ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: The need to retrofit homes in the census area is significant. Homes built before 1980 that have not been retrofit make up 44 percent of homes in the area.¹¹ All have great potential for an energy retrofit to increase comfort and safety while decreasing energy use, with the estimated 8 percent of occupied homes that are 1-star likely being the most cost-effective retrofits.

⁷ 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

⁸ U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

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

¹⁰ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). *Alaska Population Projections 2015 to 2045*. Alaska Department of Labor and Workforce Development, Research and Analysis Section.

¹¹ See Appendix C: Methodology for details.

Aleutians West Census Area Summary

Community

The Aleutians West census area is located off the southwest coast of Alaska. Its seven communities are all in the Aleutian Islands in the Pacific Ocean. The census area is located in the Aleut Native Corporation ANCSA region. The average home size in the census area is 1,130 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Aleutians West census area is lower than the statewide average and lower than the national ratio.¹² The Aleutians West 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 Aleutians West census area region is projected to see the ratio of senior age dependents to working age dependents double by 2030.

There are an estimated 29 dedicated beds in senior housing in the Aleutians West census area, with none of those dedicated to assisted care living.¹³ Currently the Alaska Department of Labor and Workforce Development estimates there are 400 seniors in the census area and projects that there will be 767 senior citizens by 2030.¹⁴ In the Aleutians West census area no senior citizens are in assisted care housing, whereas statewide there are 2.8 percent of senior citizens in assisted care housing. Nationally, approximately 3.5 percent of senior citizens are in senior living facilities.¹⁵

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 Aleutians West census area region the primary pressure for new housing over the next 15 years will come from households with elderly people.

¹² 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*.

¹³AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from <https://www.ahfc.us/senior-support/>

¹⁴ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

¹⁵ 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.

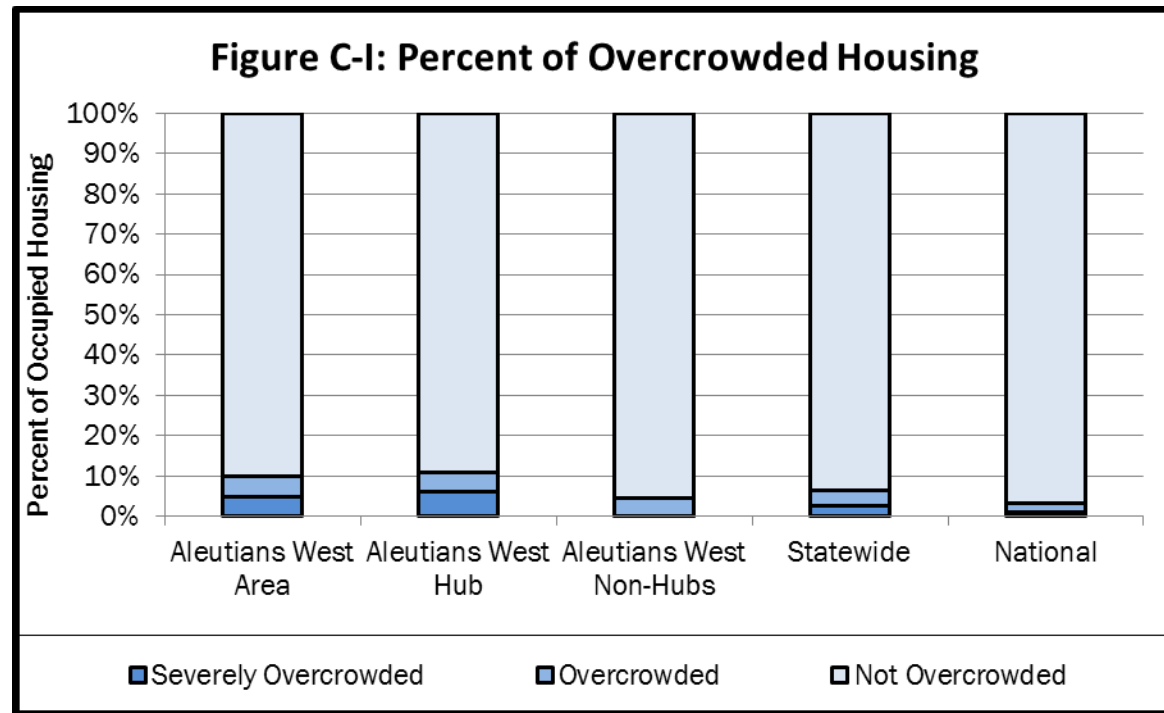
Overcrowding¹⁶

The Aleutians West census area is the ninth most overcrowded census area in Alaska. Approximately 10 percent of households are overcrowded in the census area as a whole. The rate of overcrowding in the Aleutians West census area is nearly 1.6 times the statewide average (6.4 percent) and approximately three times more than the national average (3.3 percent).

Overcrowding in the non-hub communities is less 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 Aleutians West census area on average have an overcrowding rate that is less than half that of the hub community, with approximately 5 percent of households overcrowded compared to the hub community's 11 percent. Further, 0.1 percent of non-hub community households are severely overcrowded. This is 10 percent of the national average.

Approximately 8 percent of housing units in the Aleutians West census area are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (1 percent) is less than in the hub communities (6 percent). Additionally, 35 percent of housing units in the Aleutians West census area are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

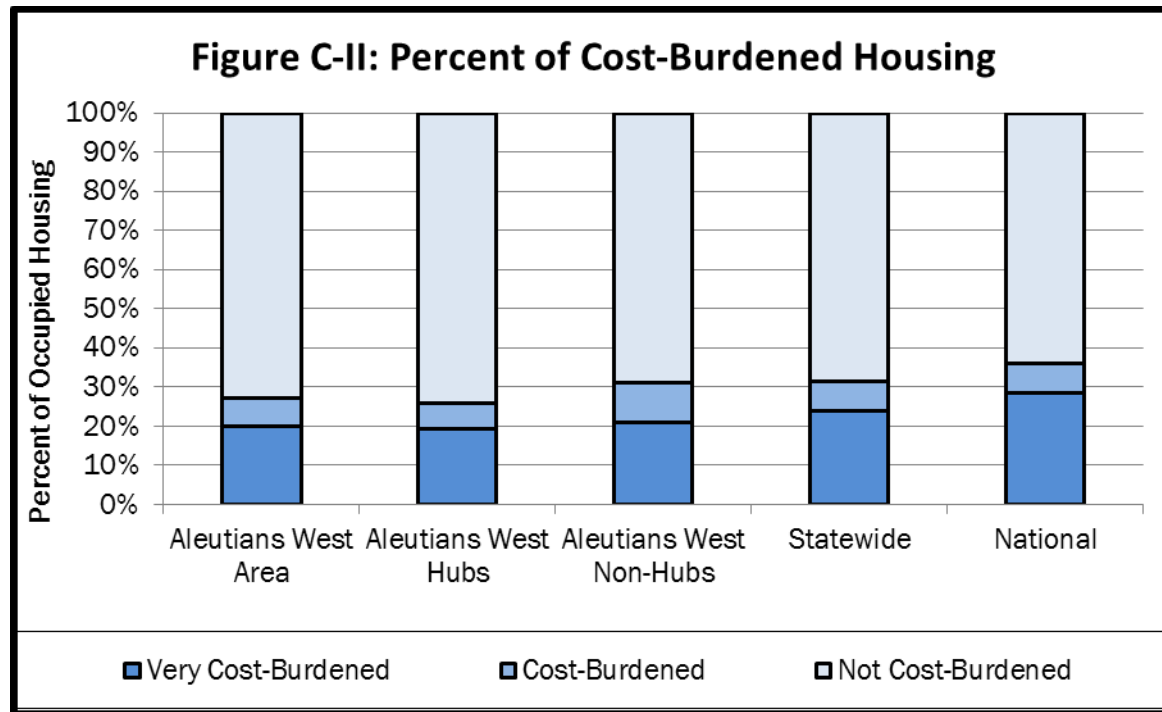


¹⁶ U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Affordability¹⁷

According to estimates from the U.S. Census American Community Survey (ACS), 27 percent of households in the Aleutians West 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 (31 percent) of households that are cost-burdened than the hub community of Unalaska (26 percent). The rate of cost-burdened households in the Aleutians West census area is 80 percent of the national average (36 percent).

The median household income in the Aleutians West census area is \$82,284. This is higher than the statewide median of \$71,829. The national median is \$53,482.



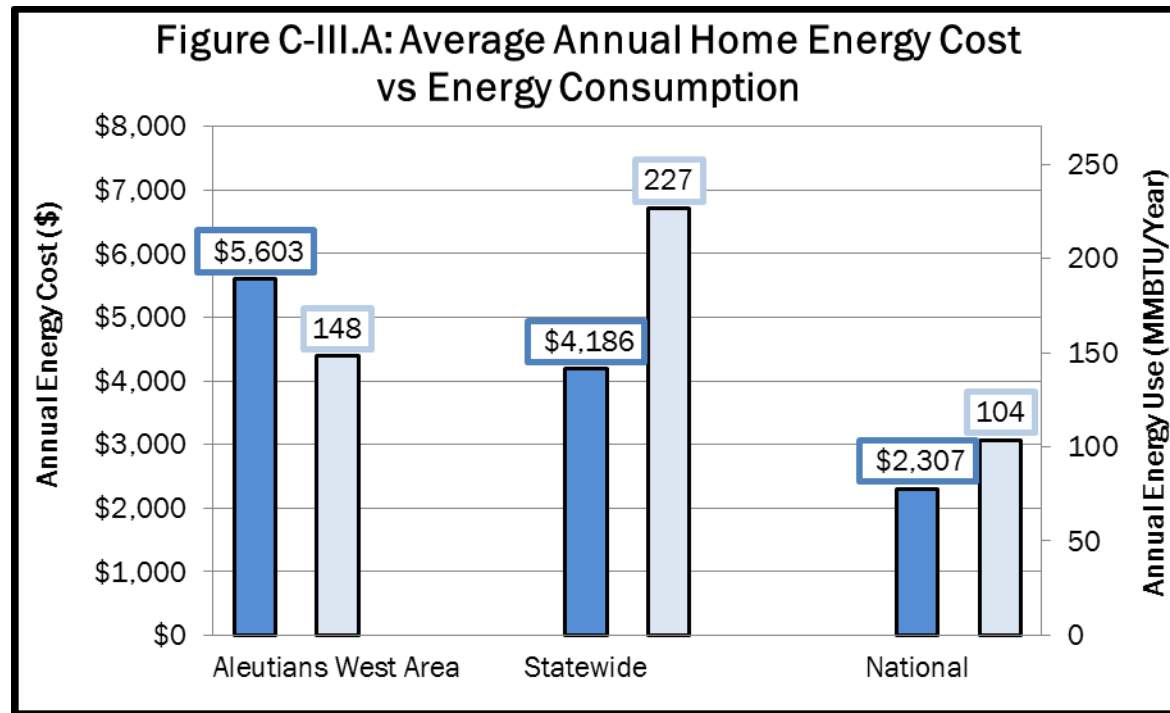
¹⁷ U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Energy¹⁸

Single-family Units

Single-family homes in the Aleutians West census area consume an average of 148 million BTUs per year, the ninth lowest energy consumption in the state. This average annual energy consumption is 65 percent of the statewide average of 227 million BTUs and 1.4 times the national average.

Energy costs for single-family homes in the Aleutians West census area average \$5,603 annually. This is the fourth highest in the state. Aleutians West census area energy costs are 1.3 times the statewide average and 2.4 times the national average.



With an average footprint of 1,130 square feet, single-family homes in the Aleutians West 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 Aleutians West census area averages 141,000 BTUs per square foot, the 10th highest in the state. This is 1.1 times the statewide average of 128,000 BTUs per square foot and 3.3 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Aleutians West census area averages \$4.96, the fourth highest in the state. This is 2.1 times the statewide average of \$2.31 per square foot and 5.2 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Aleutians West census area for the average single-family home is 9.94 BTUs/ft²/HDD. This is the 10th highest in the state. The HHI for the Aleutians West 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 Aleutians West

¹⁸ See Appendix C: Methodology for details.

census area averages \$33.60, the third highest in the state. This is 2.1 times the statewide average of \$15.80 per million BTUs and 1.5 times the national average of \$22.27 per million BTUs.

Multifamily Units

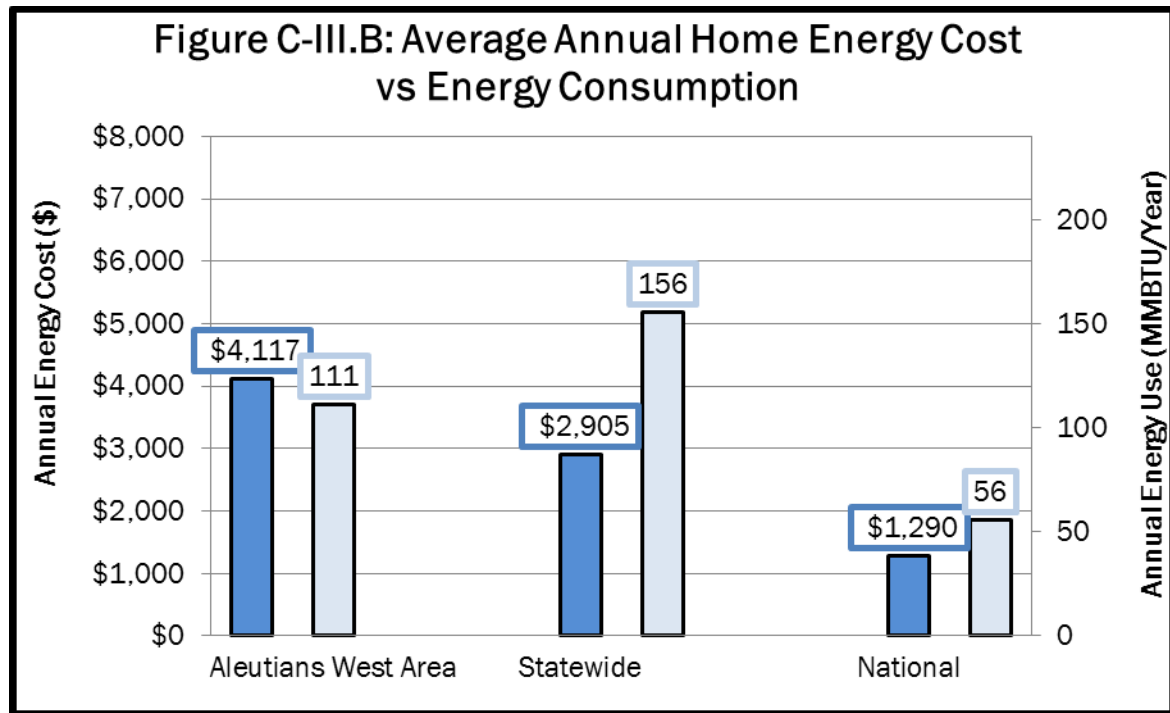
Multifamily housing units in the Aleutians West census area consume an average of 111 million BTUs per year, the 12th lowest energy consumption in the state. This average annual energy consumption is 72 percent of the statewide average of 156 million BTUs and 1.4 times the national average.

Energy costs for multifamily housing units in the Aleutians West census area average \$4,117 annually. This is the fourth highest in the state. Aleutians West census area energy costs are 1.4 times the statewide average and 3.2 times the national average.

With an average footprint of 1,068 square feet, multifamily housing units in the Aleutians West 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 Aleutians West census area averages 108,000 BTUs per square foot, the 15th highest in the state. This is 84 percent of the statewide average of 128,000 BTUs per square foot and 1.8 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Aleutians West census area averages \$3.86, the fifth highest in the state. This is 1.7 times the statewide average of \$2.27 per square foot and 2.8 times the national average of \$1.39 per square foot.

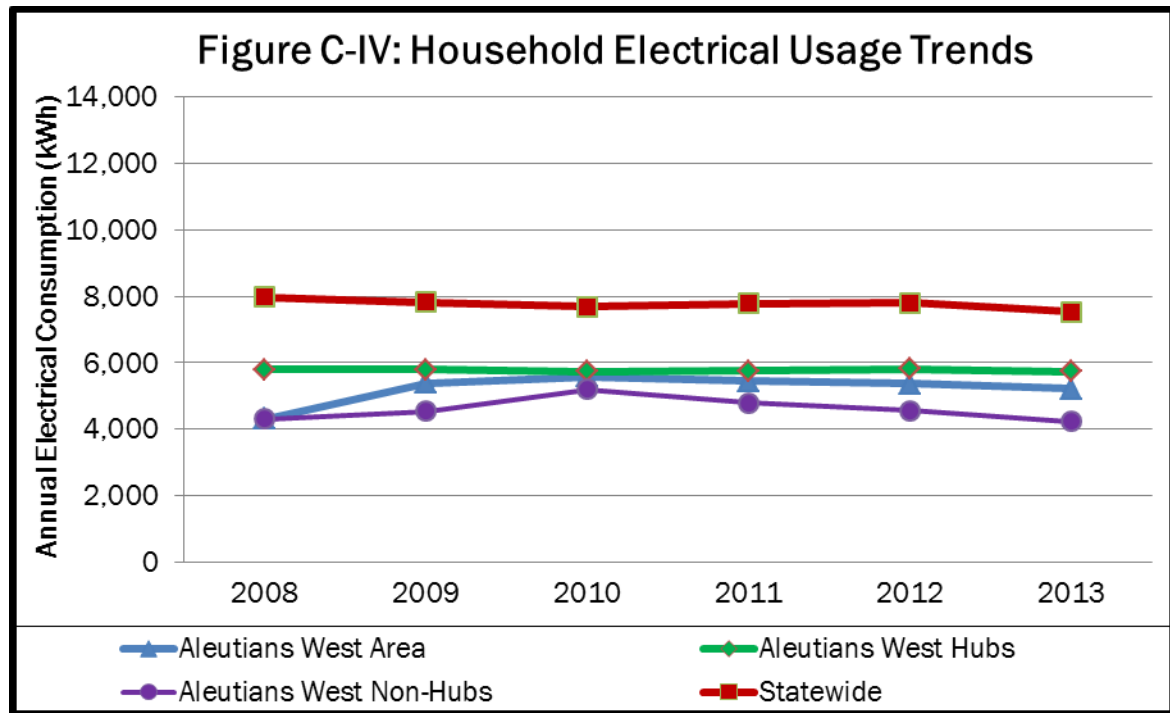
The home heating index (HHI) in the Aleutians West census area for the average multifamily housing unit is 6.86 BTUs/ft²/HDD. This is the 14th lowest in the state. The HHI for the Aleutians West census area is lower than the statewide average of 8.28 BTU/ft²/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a unit in multifamily housing in the Aleutians



West census area averages \$31.99, the sixth highest in the state. This is 2.5 times the statewide average of \$12.79 per million BTUs and 1.4 times the national average of \$23.12 per million BTUs.

Historical Household Electricity Usage¹⁹

In 2013 the average household in the Aleutians West census area consumed 5,215 kWh of electricity annually. This is approximately 21 percent more than in 2009. Hub communities in the census area averaged 5,739 kWh per year. This remains approximately the same over the same period. In contrast, non-hub communities averaged 4,223 kWh in 2013, a decrease of 2 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 Homes²⁰

Approximately 103 (8 percent) of the occupied homes in the Aleutians West 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 Aleutians West census area fit these two criteria, higher than the statewide average of 39 percent.

¹⁹ 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

²⁰ See Appendix C: Methodology for details.

Housing Condition ²¹

Ventilation

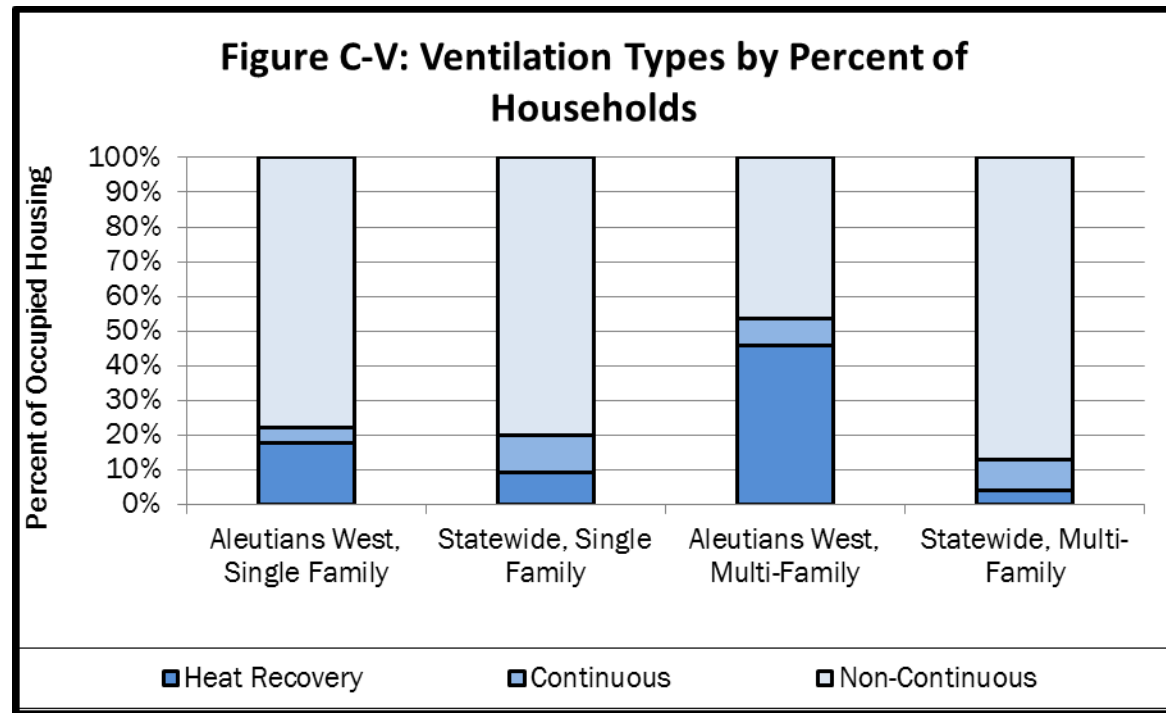
Approximately 22 percent of the occupied homes in the Aleutians West census area region have heat recovery or continuous mechanical ventilation systems installed. This is the 10th highest in the state. Statewide approximately 20 percent of occupied homes have continuous mechanical ventilation systems, 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 Aleutians West census area has the third lowest percentage of housing units in the state that are both relatively airtight and lack continuous mechanical ventilation. Approximately 306 (28 percent) of the occupied homes in the Aleutians West census area are estimated to be at moderate risk, with 76 (7 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 358 (32 percent) of the occupied homes in the Aleutians West census area are estimated to be drafty, with 83 (8 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.



²¹ See Appendix C: Methodology for details.

