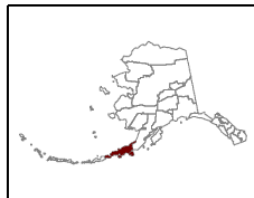
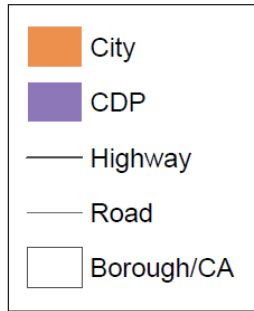


Aleutians East Borough



CDP = Census Designated Place
 CA = Census Area



Map Prepared by:
 Alaska Department of Labor
 & Workforce Development
 September 2011
 Source: US Census
 2010 TIGERline

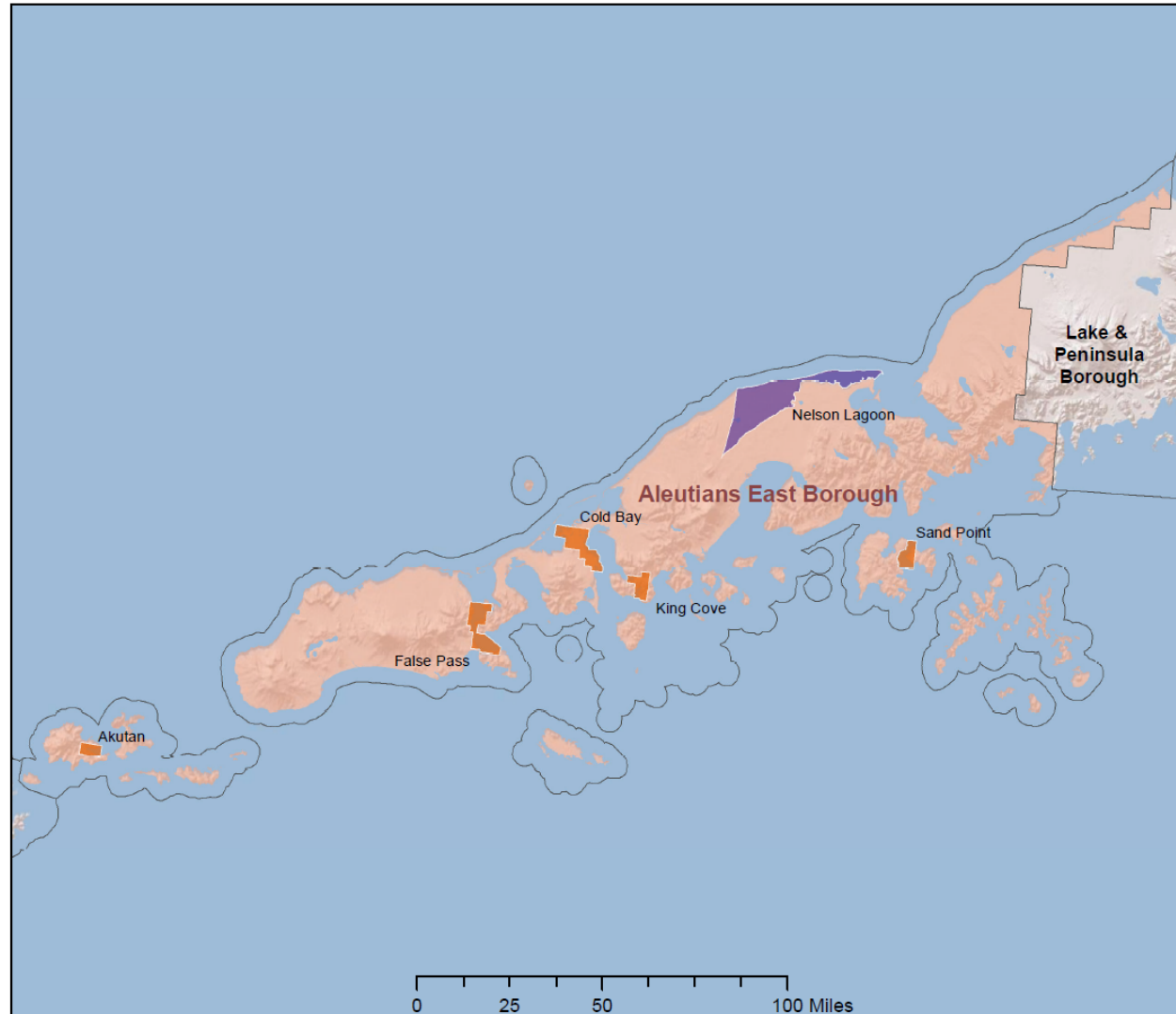


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Regional and Statewide Housing Characteristics

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 East Borough Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Aleutians East Borough is 2,854, an increase of 6 percent from 2000.

Housing Units: There are currently 732 housing units in the Aleutians East Borough. Of these, 577 are occupied, 19 are for sale or rent, and the remaining 174 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Aleutians East Borough is 1,296 square feet and uses 144 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 East Borough is \$4,285. This is approximately the same as the statewide average and 1.9 times the national average.

Overcrowding: An estimated 22 (4 percent) of occupied units are either overcrowded (3 percent) or severely overcrowded (1 percent). This is nearly the same as the national average, and makes this census area the sixth least overcrowded census area in the state.

Drafty Homes and Ventilation: Approximately 178 (43 percent) of occupied homes in the Aleutians East Borough are drafty, exceeding 7 air changes per hour at 50 Pascals (ACH50). The statewide average is 36 percent. In contrast, there are an estimated 136 occupied housing units (33 percent) in the Aleutians East 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 125 (22 percent) of households in the Aleutians East 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 currently no registered beds in senior housing facilities in the Aleutians East Borough. Currently the Alaska Department of Labor and Workforce Development estimates there are 213 seniors in the census area and projects an increase to 408 by 2030.

Housing Issues: There are an estimated 257 homes built before the 1980s in the Aleutians East Borough that have not been retrofitted through a state program in the past 10 years. Approximately 11 (2 percent) homes in the Aleutians East Borough lack complete kitchens and approximately 13 (2 percent) lack complete bathrooms.

Aleutians East Borough Housing Need Highlights

Building senior housing and undertaking retrofits to reduce energy costs are two needs in the Aleutians East Borough.¹ This region is dependent on fuel oil for home heating, which can be a significant cost burden even when oil prices are relatively low. Many homes in the Aleutians East Borough have significant opportunities to reduce energy costs for residents.²

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 of the recommendations in the report, and the potential savings and certainty of those savings was identified as being great in almost every community.³

Housing Gap: Housing gap is the total number of units needed to alleviate overcrowding and meet projected population growth. The population in the Aleutians East Borough is projected to decline slightly in the next decade, and if current construction rates continue, new housing units built by 2025 will be adequate to provide one new home per currently overcrowded household.^{4, 5}

Affordable Housing Need: An estimated 22 percent of households are housing cost-burdened in the Aleutians East Borough.⁶ While the reported fair market rent for a two-bedroom housing unit is low compared to other regions in the state, working 40 hours per week earning the average renter wage in the area is not sufficient to be able to afford rent.⁷

¹ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). Alaska Population Projections 2015 to 2045. Alaska Department of Labor and Workforce Development, Research and Analysis Section.

² See Appendix C: Methodology for details.

³ 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>

⁴ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). Alaska Population Projections 2015 to 2045. Alaska Department of Labor and Workforce Development, Research and Analysis Section.

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

⁶ U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

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

Senior Housing Needs: There are no registered senior housing facilities in the Aleutians East Borough.⁸ There are more than 200 seniors in the region currently, and population is projected to approximately double by 2030.⁹ Increasing available senior housing may ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: While the Aleutians East Borough has already retrofitted a significant number of homes with an estimated 24 percent of occupied housing participating in the Weatherization Assistance Program, there are still inefficient and older homes in need of retrofits.¹⁰ An estimated 42 percent of all homes built before 1980 have not undergone an energy retrofit and would likely benefit from weatherization work. Homes defined as the most inefficient make up an estimated 10 percent of the housing stock and would likely be the most cost-effective retrofits.

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 See Appendix C: Methodology for details.

Aleutians East Borough Summary

Community

The Aleutians East census area is located in the Southwest peninsula off the coast of mainland Alaska. It is in the Aleut Native Corporation ANSCA region. The six communities in the census area sit on islands or the coast of the Southwest peninsula. The average home size in the census area is 1,296 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Aleutians East Borough is lower than the statewide average and lower than the national ratio.¹¹ The Aleutians East 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 lower than the statewide average and lower than the national average. The Aleutians East Borough region is projected to see the ratio of senior age dependents to working age dependents increase by 2.1 times by 2030.

There are no registered dedicated beds in senior housing in the Aleutians East Borough.¹² Currently the Alaska Department of Labor and Workforce Development estimates there are 213 seniors in the census area and projects that there will be 408 senior citizens by 2030.¹³ Statewide an estimated 2.8 percent of senior citizens live in assisted care housing. Nationally, approximately 3.5 percent of senior citizens are in senior living facilities.¹⁴

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

¹¹ 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*.

¹² AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from <https://www.ahfc.us/senior-support/>

¹³ Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

¹⁴ 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.

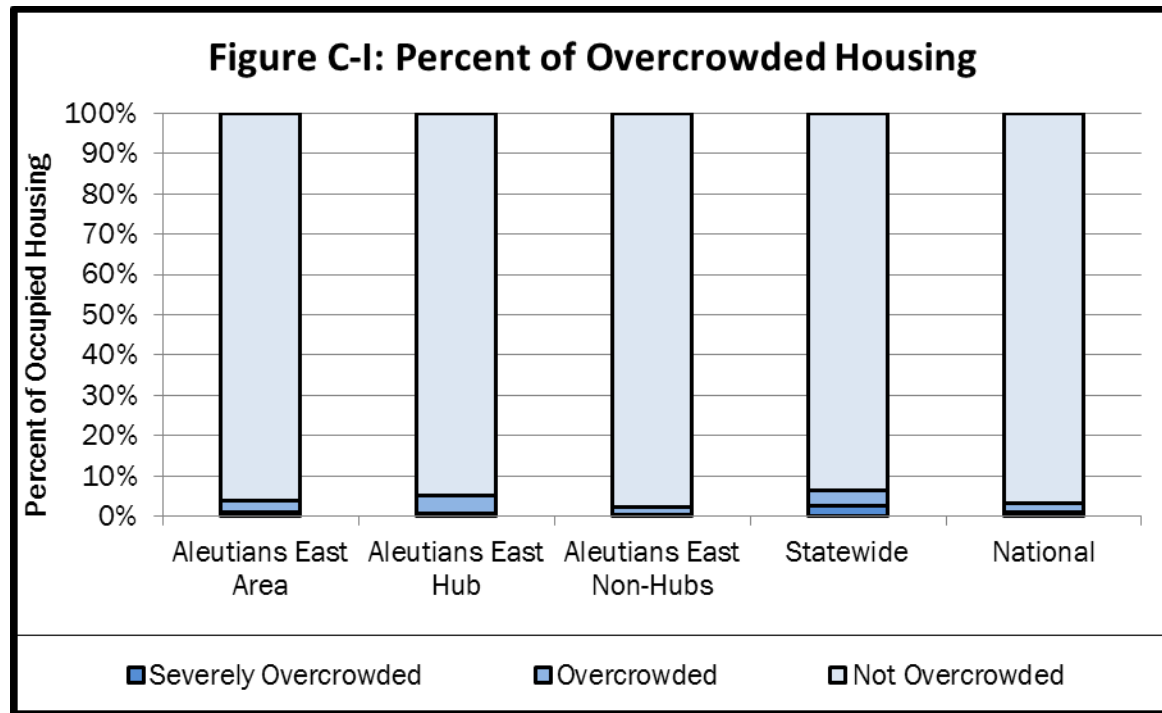
Overcrowding¹⁵

The Aleutians East Borough is the sixth least overcrowded census area in Alaska. Approximately 4 percent of the households are overcrowded in the census area as a whole. The rate of overcrowding in the Aleutians East Borough is nearly 59 percent of the statewide average (6.4 percent) and approximately 1.2 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 East Borough on average have an overcrowding rate that is less than half that of the hub community, with approximately 2 percent of households overcrowded compared to the hub community's 5 percent. Further, 0.3 percent of non-hub community households are severely overcrowded. This is 30 percent of the national average.

Approximately 2 percent of housing units in the Aleutians East Borough are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (24 percent) is more than in the hub communities (3 percent). Additionally, 23 percent of housing units in the Aleutians East Borough are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

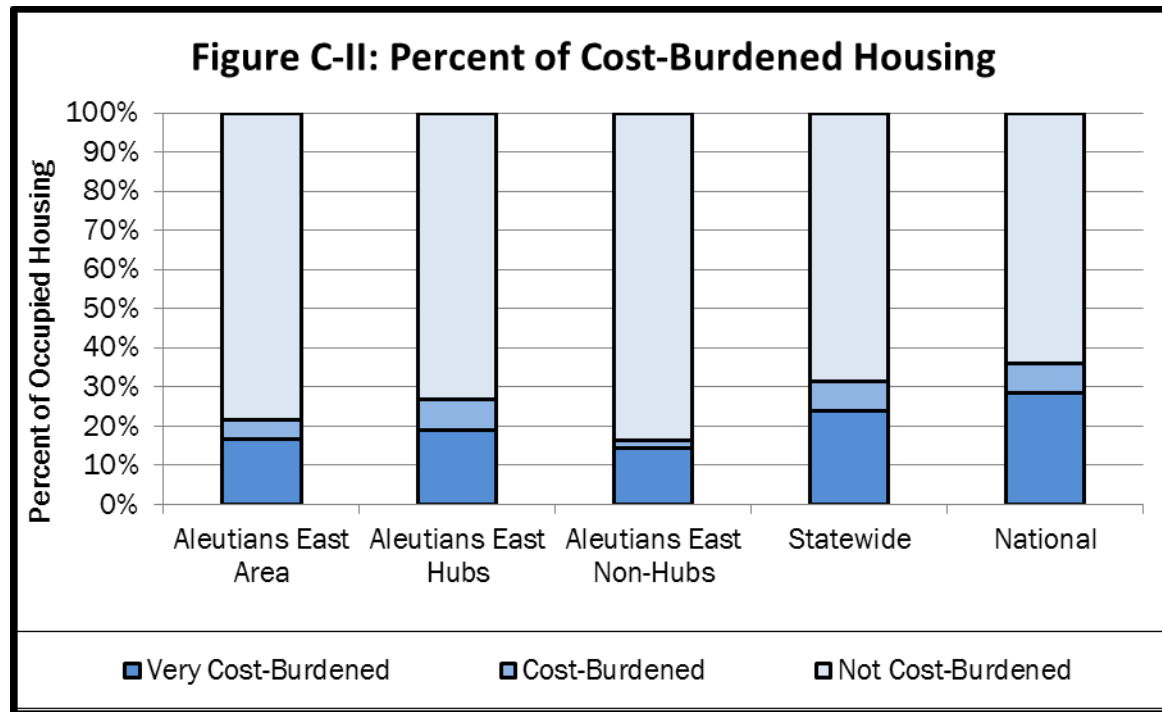


¹⁵ U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Affordability¹⁶

According to estimates from the U.S. Census American Community Survey (ACS), 22 percent of households in the Aleutians East Borough are cost-burdened, that is, spend more than 30 percent of their income on housing costs. Non-hub communities have a lower percentage (16 percent) of households that are cost-burdened than the hub community of Sand Point (27 percent). The rate of cost-burdened households in the Aleutians East Borough is 60 percent of the national average (36 percent).

The median household income in the Aleutians East Borough is \$59,886. This is lower than the statewide median of \$71,829. The national median is \$53,482.



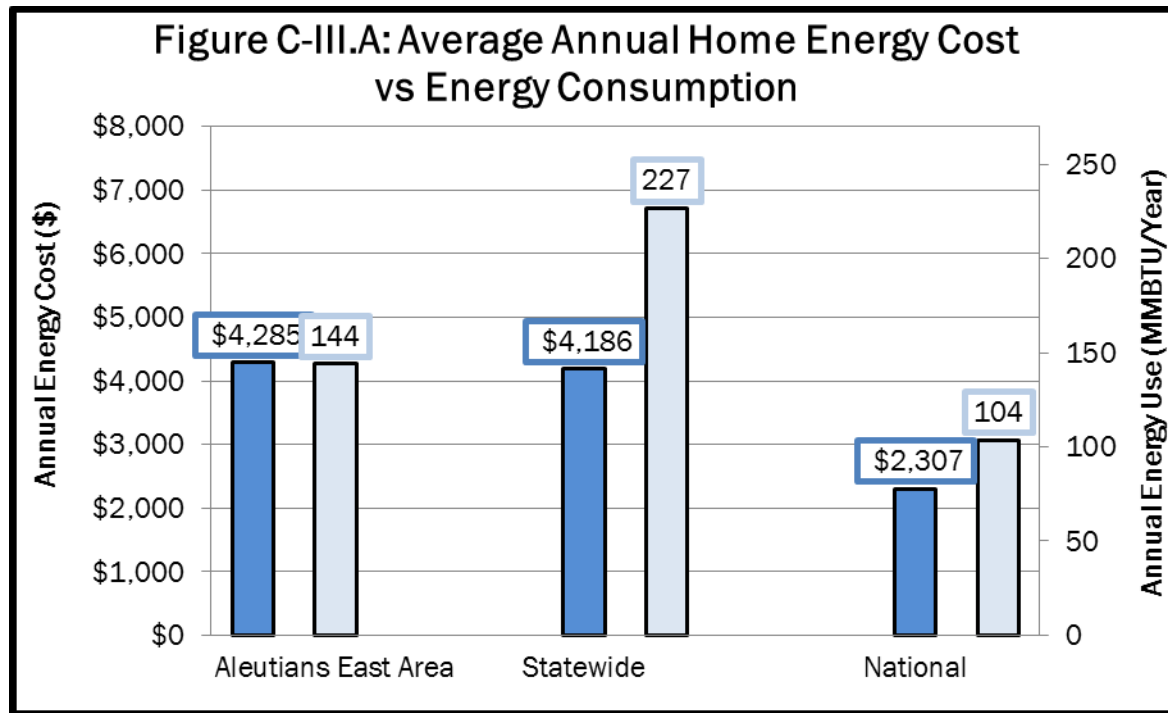
¹⁶ U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

Energy¹⁷

Single-family Units

Single-family homes in the Aleutians East Borough consume an average of 144 million BTUs per year, the eighth lowest energy consumption in the state. This average annual energy consumption is 64 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 East Borough average \$4,285 annually. This is the 14th lowest in the state. Aleutians East Borough energy costs are approximately the same as the statewide average and 1.9 times the national average.



With an average footprint of 1,296 square feet, single-family homes in the Aleutians East 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 Aleutians East Borough averages 114,000 BTUs per square foot, the sixth lowest in the state. This is 89 percent of the statewide average of 128,000 BTUs per square foot and 2.7 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Aleutians East Borough averages \$3.31, the 11th highest in the state. This is 1.4 times the statewide average of \$2.31 per square foot and 3.5 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Aleutians East Borough for the average single-family home is 8.15 BTUs/ft²/HDD. This is the eighth lowest in the state. The HHI for the Aleutians East Borough 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 Aleutians East Borough averages

¹⁷ See Appendix C: Methodology for details.

\$27.14, the eighth highest in the state. This is 1.7 times the statewide average of \$15.80 per million BTUs and 1.2 times the national average of \$22.27 per million BTUs.

Multifamily Units

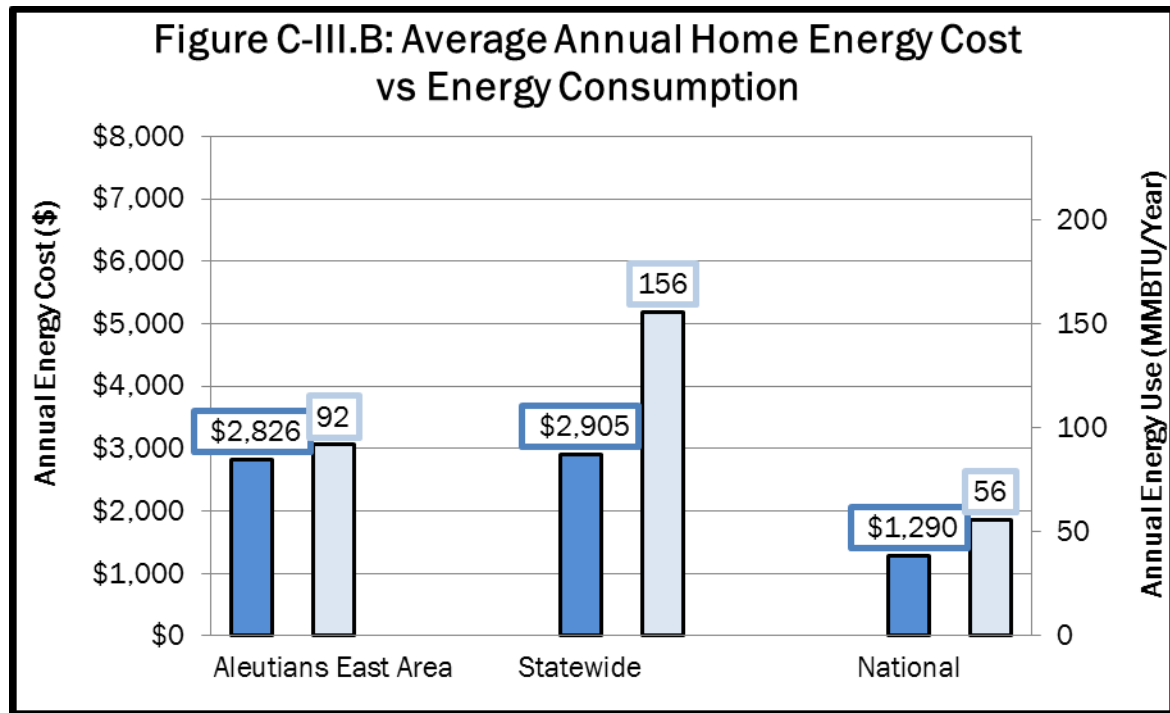
Multifamily housing units in the Aleutians East Borough consume an average of 92 million BTUs per year, the sixth lowest energy consumption in the state. This average annual energy consumption is 59 percent of the statewide average of 156 million BTUs and 1.4 times the national average.

Energy costs for multifamily housing units in the Aleutians East Borough average \$2,826 annually. This is the 12th lowest in the state. Aleutians East Borough energy costs are 97 percent of the statewide average and 2.2 times the national average.

With an average footprint of 1,044 square feet, multifamily housing units in the Aleutians East Borough 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 East Borough averages 90,000 BTUs per square foot, the fifth lowest in the state. This is 70 percent of the statewide average of 128,000 BTUs per square foot and 1.5 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Aleutians East Borough averages \$2.71, the 15th highest in the state. This is 1.2 times the statewide average of \$2.27 per square foot and 1.9 times the national average of \$1.39 per square foot.

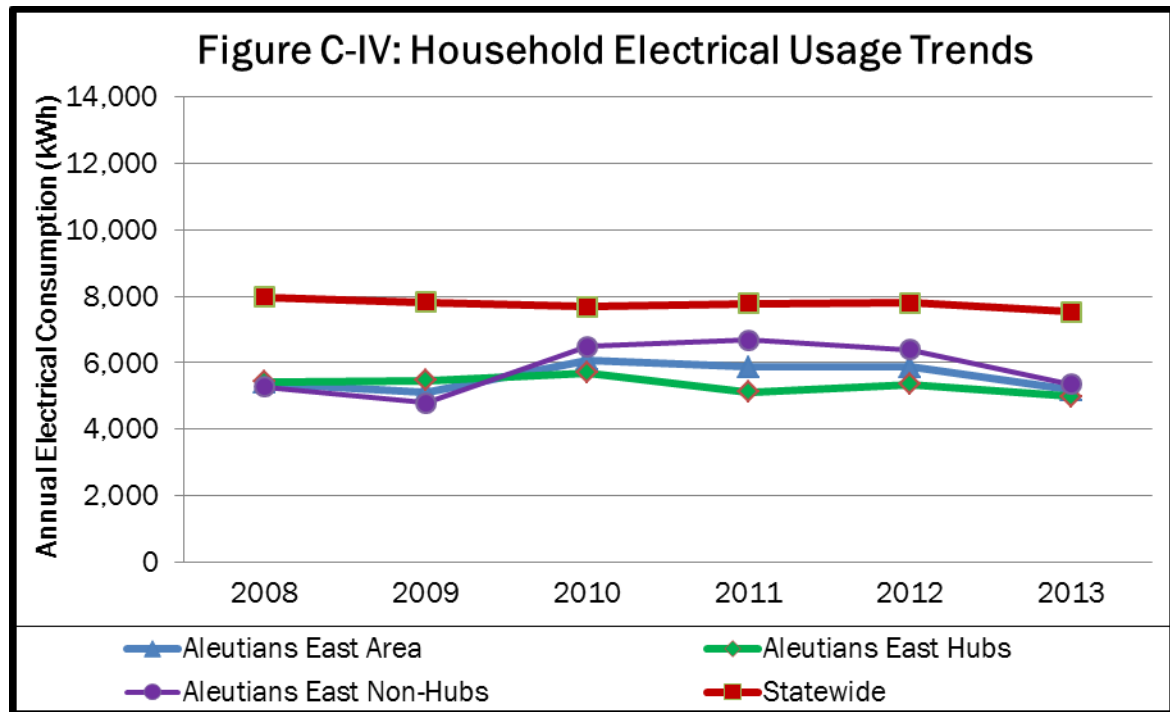
The home heating index (HHI) in the Aleutians East Borough for the average multifamily housing unit is 4.20 BTUs/ft²/HDD. This is the sixth lowest in the state. The HHI for the Aleutians East Borough is lower than the statewide average of 8.28 BTU/ft²/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a unit in multifamily housing in the Aleutians East Borough



averages \$23.89, the 12th highest in the state. This is 1.9 times the statewide average of \$12.79 per million BTUs and approximately the same as the national average of \$23.12 per million BTUs.

Historical Household Electricity Usage¹⁸

In 2013 the average household in the Aleutians East Borough consumed 5,175 kWh of electricity annually. This is approximately 4 percent less than in 2008. Hub communities in the census area averaged 4,979 kWh per year. This is a decrease of 8 percent over the same period. In contrast, non-hub communities averaged 5,347 kWh in 2013, remains approximately the same since 2008. Statewide, the average household consumed 7,540 kWh of electricity in 2013, a decrease of 5 percent since 2008.



Inefficient and Older Homes¹⁹

Approximately 40 (10 percent) of the occupied homes in the Aleutians East 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 14,966 (6 percent) of occupied homes are estimated to be 1-star homes.

Homes built before 1980 that have not been retrofit are potentially homes in need. Approximately 42 percent of all homes in the Aleutians East Borough fit these two criteria, higher than the statewide average of 39 percent.

¹⁸ 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

¹⁹ See Appendix C: Methodology for details.

Housing Condition ²⁰

Ventilation

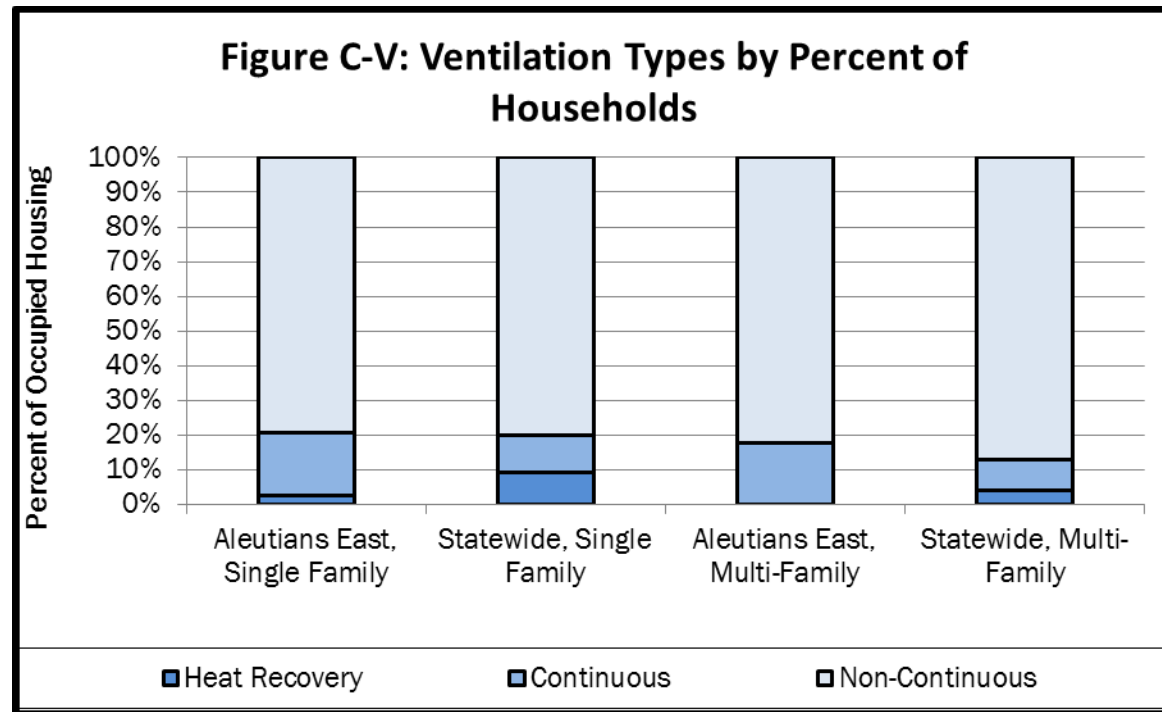
Approximately 21 percent of the occupied homes in the Aleutians East Borough region have heat recovery or continuous mechanical ventilation systems installed. This is the 13th highest in the state. Statewide approximately 20 percent of occupied homes have continuous mechanical ventilation systems, with 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 East Borough has the 13th lowest percentage of housing units in the state that are both relatively airtight and lack continuous mechanical ventilation. Approximately 115 (20 percent) of the occupied homes in the Aleutians East Borough are estimated to be at moderate risk, with 73 (13 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 192 (33 percent) of the occupied homes in the Aleutians East Borough are estimated to be drafty, with 57 (10 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.



²⁰ See Appendix C: Methodology for details.