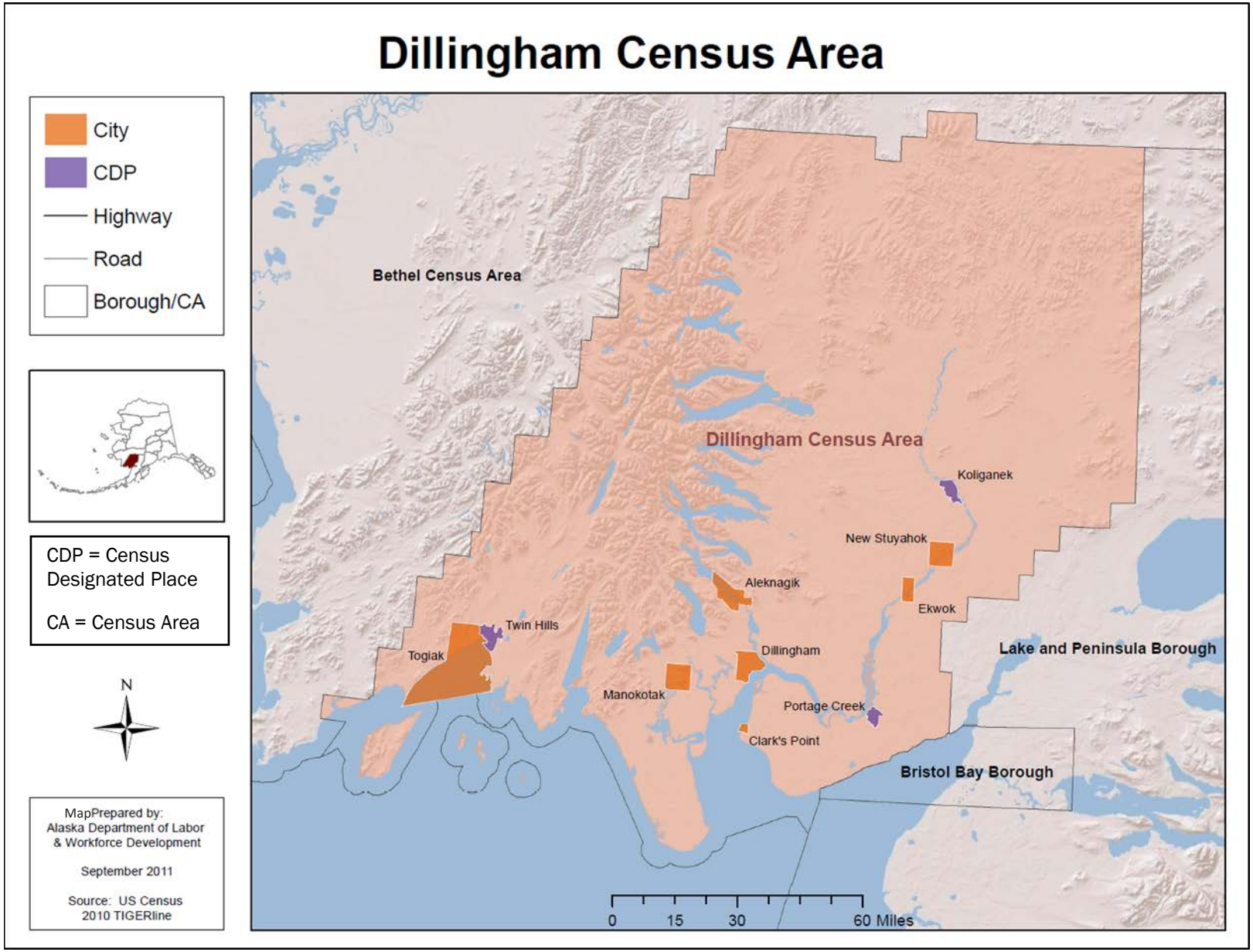
Dillingham Census Area
City
CDP
Highway
Road
Borough/CA
CDP = Census Designated Place
CA = Census Area
N
MapPrepared by:
Alaska Department of Labor & Workforce Development
September 2011
Source: US Census 2010 TIGERline
Bethel Census Area
Dillingham Census Area
Koliganek
New Stuyahok
Aleknagik
Ekwok
Twin Hills
Togiak
Dillingham
Lake and Peninsula Borough
Manokotak
Portage Creek
Clark's Point
Bristol Bay Borough
0
15
30
60 Miles

Table of Contents

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.

Dillingham Census Area Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Dillingham census area is 5,007, an increase of 2 percent from 2000.

Housing Units: There are currently 2,248 housing units in the Dillingham census area. Of these, 1,353 are occupied, 57 are for sale or rent and the remaining 1,017 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Dillingham census area is 1,155 square feet and uses 130 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 Dillingham census area is $4,058. This is approximately the same as the statewide average and 1.8 times the national average.

Overcrowding: An estimated 272 (20 percent) of occupied units are either overcrowded (12 percent) or severely overcrowded (8 percent). This is more than six times the national average and makes this census area the sixth most overcrowded of the 30 census areas in the state.

Drafty Homes and Ventilation: Approximately 546 (42 percent) of homes in the Dillingham census area are drafty, exceeding seven air changes per hour at 50 Pascals (ACH50). The statewide average is 36 percent. In contrast, an estimated 585 occupied housing units (45 percent) in the Dillingham census area 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 366 (27 percent) of households in the Dillingham 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 20 beds in senior housing facilities in the Dillingham census area. Currently the Alaska Department of Labor and Workforce Development estimates there are 426 seniors in the census area and projects an increase to 795 by 2030.

Housing Issues: There are an estimated 530 homes built before the 1980s in the Dillingham census area that have not been retrofitted through a state program in the past 10 years. Approximately 94 (7 percent) homes in the Dillingham census area lack complete kitchens and approximately 181 (13 percent) lack complete bathrooms.

Dillingham Census Area Housing Need Highlights

The primary need for the Dillingham census area is senior housing. A secondary need is to retrofit existing homes.

The *Bristol Bay Regional Energy Plan*[1] identified the need to retrofit residences to increase energy efficiency and decrease the region's high space-heating costs. The energy plan suggested residential projects such as outreach, school programs, assistance for homeowners signing up for efficiency programs, and expanding weatherization services to create a focus on energy-efficiency measures to reduce future energy costs.

Additionally, the Dillingham community identified potential energy-efficiency projects at a subregional meeting for the energy plan. The priorities included increasing education and awareness about energy efficiency and building energy use, improving energy efficiency of homes and other buildings, and promoting energy conservation in heating, electricity and transportation.

Housing Gap: There are 2,248 housing units in the census area, and 56 percent are occupied.[2] An estimated 20 percent of occupied units in the census area are overcrowded or severely overcrowded. This is more than six times the national average, and makes the Dillingham census area the sixth most crowded in the state. Forty-four percent of residences are vacant but the vast majority (42 percent) are because they are used seasonally or recreationally, meaning only 2 percent of the houses are available for sale or rent.

Affordable Housing Need: The average annual energy cost for homes in the Dillingham census area is $4,058, which is approximately 1.8 times the national average.[3] This makes approximately 27 percent of households cost-burdened, meaning they spend more than 30 percent of their income on housing.[4]

[1] Southwest Alaska Municipal Conference & Information Insights. (2015). *Bristol Bay Regional Energy Plan. Phase II: Stakeholder Engagement*. Retrieved from http://www.akenergyauthority.org/Policy/RegionalPlanning
[2] U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.
[3] 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
[4] U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

Senior Housing Needs: There are 20 beds in senior housing facilities in the census area, which contains a senior population of 426.[5] This number is projected to increase to 795 by 2030.[6] Increasing the amount of available senior housing could ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: Approximately 6 percent of occupied homes in the Dillingham census area 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).[7] This is the same as the statewide average of 6 percent of inefficient homes. One-third of homes were built before 1980 and have not been retrofitted. Approximately 43 percent of homes are drafty, exceeding 7 air changes per hour at 50 Pascals. An additional 44 percent of occupied units are relatively airtight and lack a continuous ventilation system, making them at higher risk of moisture and indoor air quality issues.

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

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

[7] See Appendix C: Methodology for details.

Dillingham Census Area Summary

Community

The Dillingham census area is located in the southwest corner of mainland Alaska in the Bristol Bay Native Corporation ANCSA region. The average home size in the census area is 1,150 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Dillingham census area is approximately the same as the statewide average and lower than the national ratio.[8] The Dillingham 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 approximately the same as the statewide average and lower than the national average. The Dillingham census area region is projected to see the ratio of senior age dependents to working age dependents double by 2030.

There are an estimated 20 dedicated beds in senior housing in the Dillingham census area, with 10 of those dedicated to assisted care living.[9] Currently the Alaska Department of Labor and Workforce Development estimates there are 426 seniors in the census area and projects that there will be 795 senior citizens by 2030.[10] In the Dillingham census area 2.3 percent of senior citizens are in assisted care housing. This is lower 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.[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 Dillingham census area the primary pressure for new housing over the next 15 years will come from households with elderly people.

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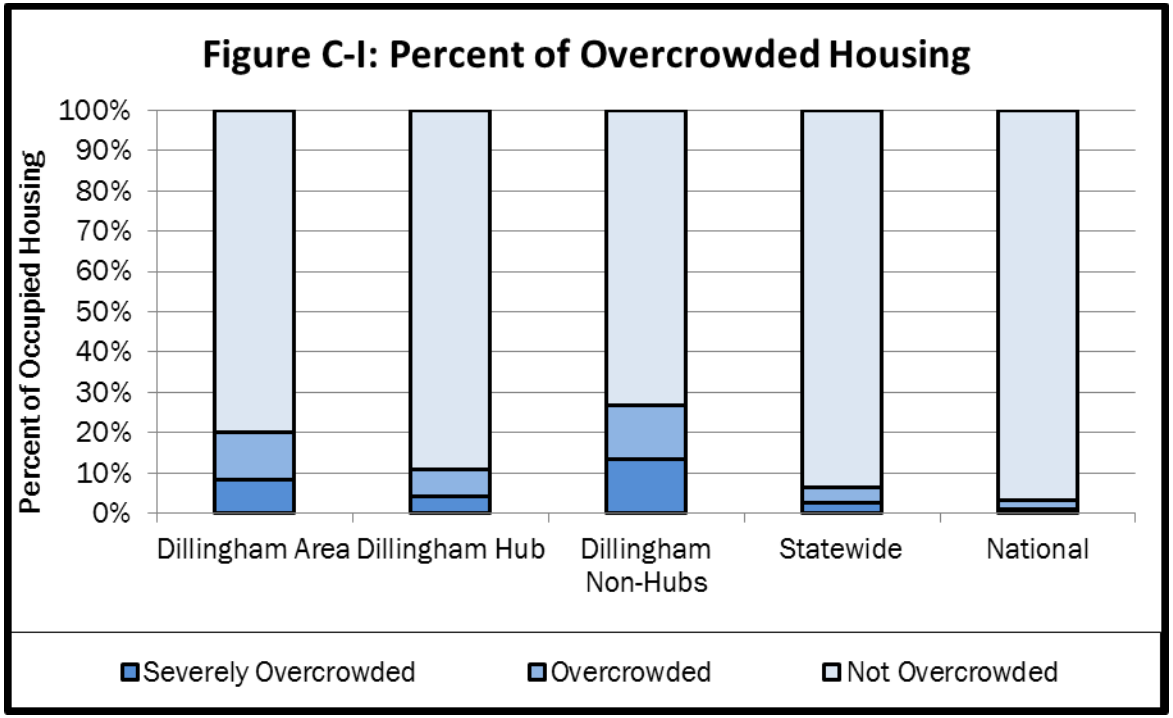
[8] Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). Alaska Population Projections 2015 to 2045. Alaska Department of Labor and Workforce Development, Research and Analysis Section.
U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.
[9] 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] 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[12]

The Dillingham census area is the sixth most overcrowded of the 30 census areas in Alaska. Approximately 20 percent of the households are overcrowded in the census area as a whole. The rate of overcrowding in the Dillingham census area is more than 3.1 times the statewide average (6.4 percent) and approximately 6.1 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 of Dillingham. 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 Dillingham census area average nearly three times the overcrowding rate of the hub community, with approximately 27 percent of households overcrowded compared to the hub community's 11 percent. Further, 13.3 percent of non-hub community households are severely overcrowded. This is 13.3 times more than the national average.

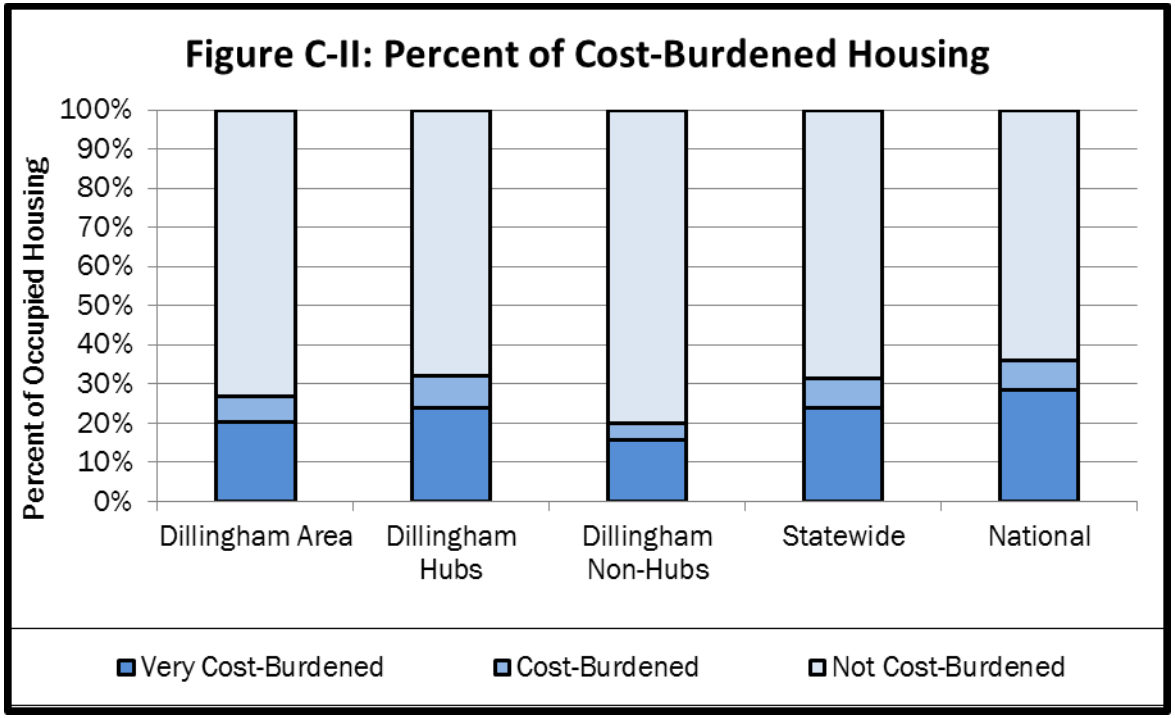
Approximately 2 percent of housing units in the Dillingham census area are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (2 percent) is less than in the hub community of Dillingham (4 percent). Additionally, 42 percent of housing units in the Dillingham census area are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

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

Affordability[13]

According to estimates from the U.S. Census American Community Survey (ACS), 27 percent of households in the Dillingham census area are cost-burdened, that is, spend more than 30 percent of their income on housing costs. Non-hub communities have a lower percentage (20 percent) of households that are cost-burdened than the hub community of Dillingham (32 percent). The rate of cost-burdened households in the Dillingham census area is 80 percent of the national average (36 percent).

The median household income in the Dillingham census area is $54,846. This is lower than the statewide median of $71,829. The national median is $53,482.



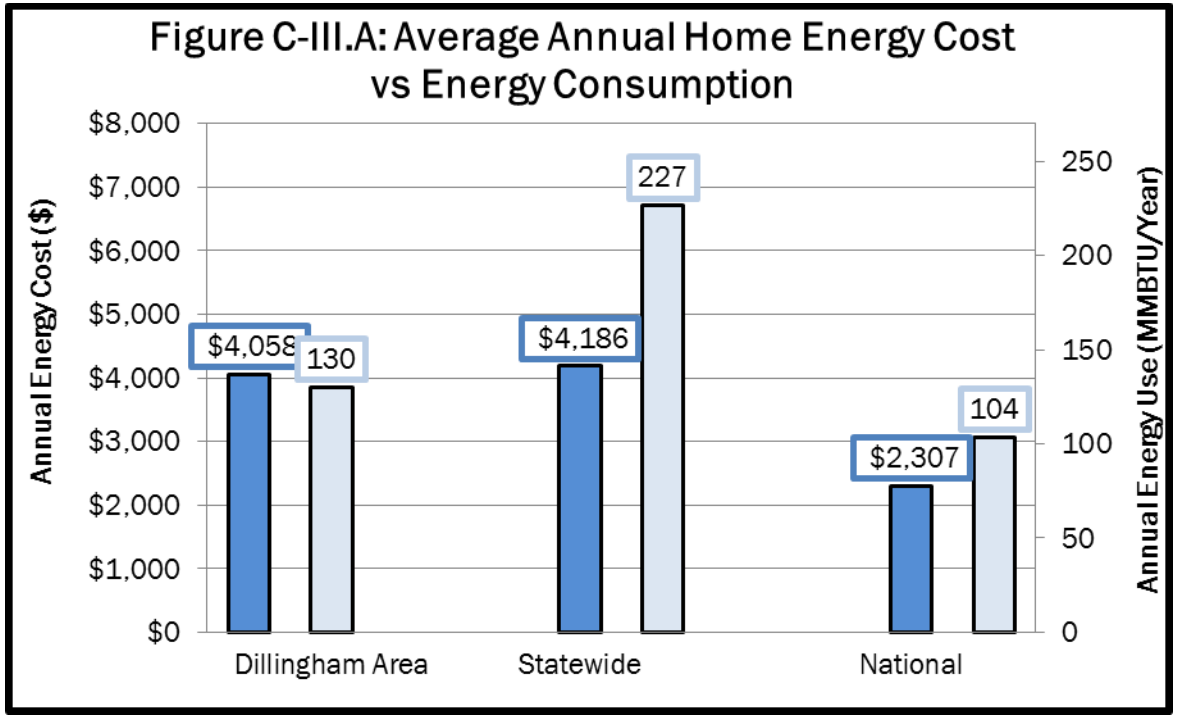
[13] U.S. Census Bureau. (2016). *American Community Survey, 2010–2014 American Community Survey Five-year Estimates*.

Energy[14]

Single-family Units

Single-family homes in the Dillingham census area consume an average of 130 million BTUs per year, the second lowest energy consumption in the state. This energy consumption is 57 percent of the statewide average of 227 million BTUs and 1.3 times the national average.

Energy costs for single-family homes in the Dillingham census area average $4,058 annually. This is the eighth lowest in the state. Dillingham census area energy costs are 97 percent of the statewide average and 1.8 times the national average.



With an average footprint of 1,155 square feet, single-family homes in the Dillingham 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 Dillingham census area averages 122,000 BTUs per square foot, the 10th lowest in the state. This is 95 percent of the statewide average of 128,000 BTUs per square foot and 2.8 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a single-family home in the Dillingham census area averages $3.51, the ninth highest in the state. This is 1.5 times the statewide average of $2.31 per square foot and 3.7 times the national average of $0.95 per square foot.

The home heating index (HHI) in the Dillingham census area for the average single-family home is 6.78 BTUs/ft^2/HDD. This is the second lowest in the state. The HHI for the Dillingham census area is lower than the statewide average of 8.83 BTU/ft^2/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a single-family home in the Dillingham census area averages

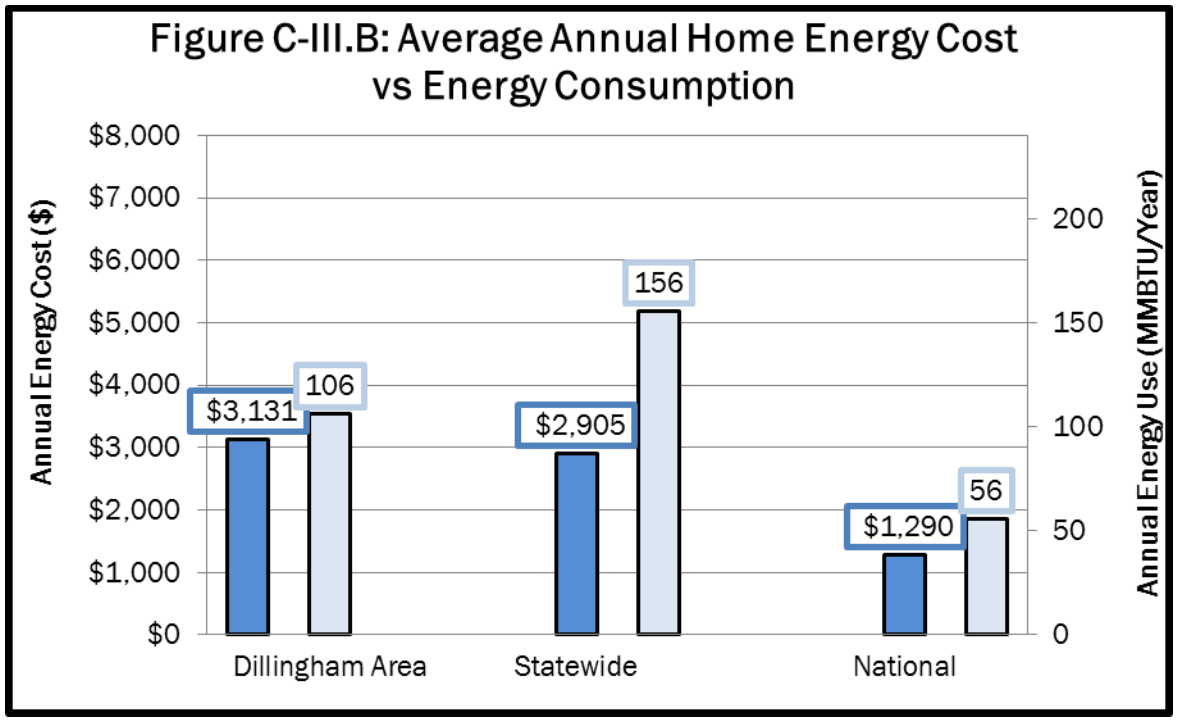
[14] See Appendix C: Methodology for details.

$25.52, the ninth highest in the state. This is 1.6 times the statewide average of $15.80 per million BTUs and 1.1 times the national average of $22.27 per million BTUs.

Multifamily Units

Multifamily housing units in the Dillingham census area consume an average of 106 million BTUs per year, the 11th lowest energy consumption in the state. This average annual energy consumption is 68 percent of the statewide average of 156 million BTUs and 1.3 times the national average.

Energy costs for multifamily housing units in the Dillingham census area average $3,131 annually. This is the 12th highest in the state. Dillingham census area energy costs are 1.1 times the statewide average and 2.4 times the national average.



With an average footprint of 1,340 square feet, multifamily housing units in the Dillingham census area are larger than the statewide average of 1,284 square feet. Nationally the average unit in multifamily housing is 930 square feet.

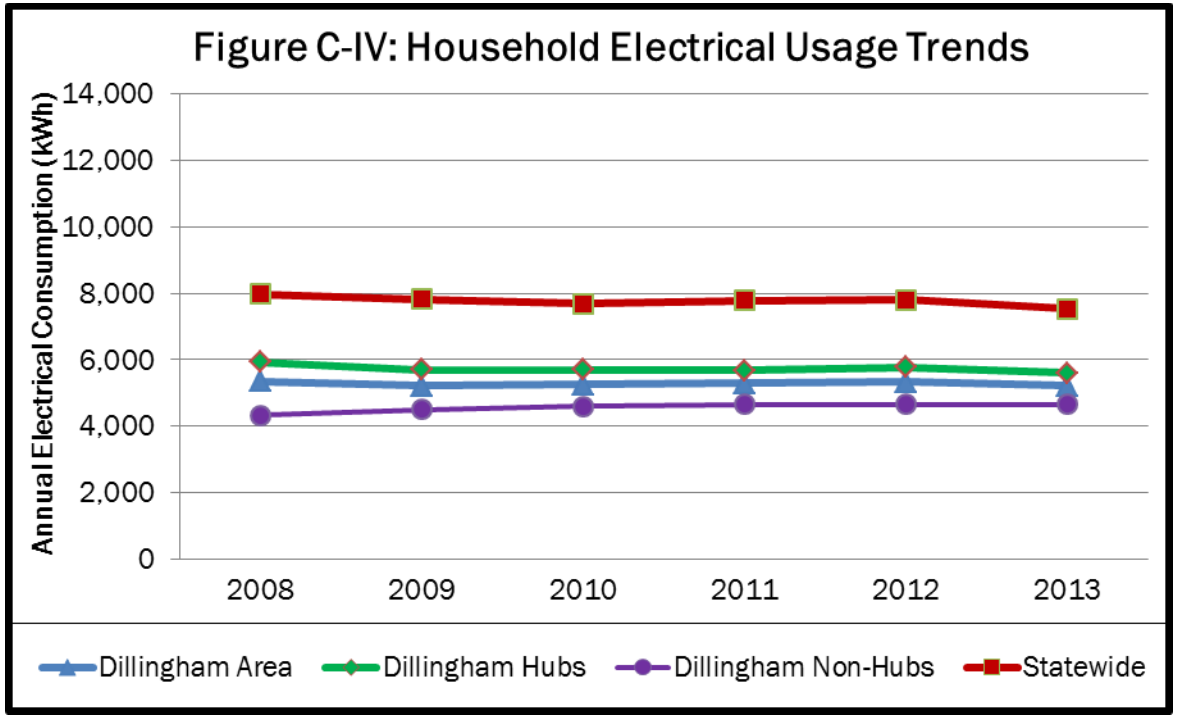
The energy use intensity (EUI), or annual energy used per square foot, for a multifamily housing unit in the Dillingham census area averages 80,000 BTUs per square foot, the third lowest in the state. This is 63 percent of the statewide average of 128,000 BTUs per square foot and 1.3 times the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Dillingham census area averages $2.34, the sixth 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 Dillingham census area for the average multifamily housing unit is 3.48 BTUs/ft^2/HDD. This is the fifth lowest in the state. The HHI for the Dillingham census area is lower than the statewide average of 8.28 BTU/ft^2/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a unit in multifamily housing in the Dillingham census area

averages $21.95, the 13th highest in the state. This is 1.7 times the statewide average of $12.79 per million BTUs and 95 percent of the national average of $23.12 per million BTUs.

Historical Household Electricity Usage[15]

In 2013 the average household in the Dillingham census area consumed 5,223 kWh of electricity annually. This is approximately 2 percent less than in 2008. Hub communities in the census area averaged 5,599 kWh per year. This is a decrease of 6 percent over the same period. In contrast, non-hub communities averaged 4,649 kWh in 2013, an increase of 7 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 Homes[16]

Approximately 75 (6 percent) of the occupied homes in the Dillingham 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 33 percent of all homes in the Dillingham census area fit these two criteria. This is lower than the statewide average of 39 percent.

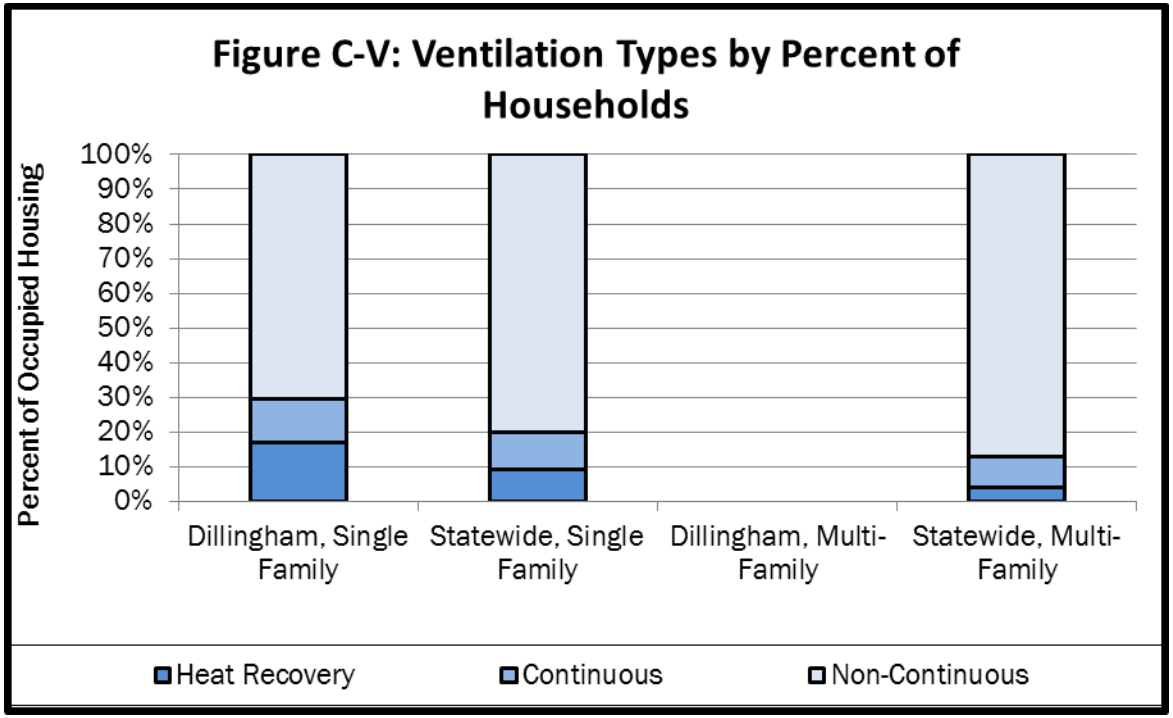
[15] Fay, G., Villalobos Melendez, A. & West, C. (2014). *Alaska Energy Statistics: 1960–2011*. UAA Institute of Social and Economic Research. Retrieved from http://iser.uaa.alaska.edu/Publications/2013_12-AlaskaEnergyStatistics2011Report_Final_2014-04-30.pdf

[16] See Appendix C: Methodology for details.

Housing Condition [17]

Ventilation

Approximately 30 percent of the occupied homes in the Dillingham census area region have heat recovery or continuous mechanical ventilation systems installed. This is the sixth highest in the state. Statewide approximately 20 percent of occupied homes have continuous mechanical ventilation systems.



Indoor Air Quality

A tight home with no or inadequate ventilation has an increased risk of issues with indoor air quality or moisture. The Dillingham census area has the 10th highest percentage of housing units in the state that are relatively airtight and lack continuous mechanical ventilation. Approximately 339 (25 percent) of the occupied homes in the Dillingham census area are estimated to be at moderate risk, with 263 (19 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

Drafty homes were defined as those with 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 402 (30 percent) of the occupied homes in the Dillingham census area are estimated to be drafty, with 170 (13 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.

[17] See Appendix C: Methodology for details.