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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.



Skagway Borough Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Skagway Borough is 1,040, an increase of 21 percent from 2000.

Housing Units: There are currently 718 housing units in the Skagway Borough. Of these, 387 are occupied, 41 are for sale or rent, and the remaining 208 are seasonal or otherwise vacant units.

Energy and Energy Costs: The average home in the Skagway Borough is 1,698 square feet and uses 185 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 Skagway Borough is \$4,401. This is approximately 1.1 times the statewide average and 1.9 times the national average.

Overcrowding: An estimated 15 (4 percent) of occupied units are either overcrowded (1 percent) or severely overcrowded (3 percent). This is almost the same as the national average, and makes this census area the seventh least overcrowded census area in the state.

Drafty Homes and Ventilation: Approximately 267 (58 percent) of homes in the Skagway 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 212 occupied housing units (46 percent) in the Skagway 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 117 (30 percent) of households in the Skagway 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 Skagway Borough. Currently the Alaska Department of Labor and Workforce Development estimates there are 136 seniors in the census area and projects an increase to 223 by 2030.

Housing Issues: There are an estimated 223 homes built before the 1980s in the Skagway Borough that have not been retrofitted through a state program in the past 10 years. Approximately 12 (3 percent) homes in the Skagway Borough lack complete kitchens and approximately 7 (2 percent) lack complete bathrooms.



Skagway Borough Housing Need Highlights

The Skagway Borough census area has two pressing housing issues: no senior housing facilities exist for the senior population of 136 and a large percentage of homes are inefficient and in need of an energy retrofit.¹

Housing Gap: There are 718 housing units in the borough, and 61 percent of these units are occupied.² Six percent of the units are for sale or rent, and the remaining units are occupied seasonally or recreationally. An estimated 4 percent of occupied units are overcrowded or severely overcrowded. This is approximately the national average, making the borough one of the least overcrowded in the state.

Affordable Housing Need: The average annual energy cost for homes in the Skagway Borough is \$4,401, which is approximately 1.1 times the statewide average and 1.9 times the national average.³ Approximately 30 percent of households are cost-burdened, meaning they spend more than 30 percent on housing costs.⁴ This is lower than the national average of 36 percent.

Senior Housing Needs: There are no beds in senior housing facilities in the borough⁵ and the senior population of 136 is projected to increase to 223 by 2030.⁶ Increasing available senior housing could ensure adequate assisted and independent living facilities for the projected population.

Retrofit Needs: Approximately 17 percent of the occupied homes in the Skagway Borough are estimated to be inefficient, using around four times more energy than if they had been built to AHFC's Building Energy Efficiency Standard (BEES).⁷ This is nearly triple the statewide average of 6 percent. Additionally, 52 percent of homes were built before 1980 that have not been retrofitted. These homes are good candidates for retrofit. The majority of occupied homes have potential indoor air quality issues, with only 11 percent of homes having continuous mechanical ventilation or a heat recovery ventilator. Homes are drafty, which can lead to

¹ AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from https://www.ahfc.us/senior-support/

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.*

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.



high energy costs and occupant discomfort, or have the opposite issue of being relatively airtight but without mechanical ventilation, which can lead to indoor air quality and moisture issues.



Skagway Borough Summary

Community

The Skagway Municipality lies on the northern panhandle of Alaska and is in the Sealaska Native Corporation ANCSA region. The average home size in the census area is 1,672 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Skagway Borough is lower than the statewide average and lower than the national ratio. The Skagway 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 Skagway Borough region is projected to see the ratio of senior age dependents to working age dependents increase by 1.5 times by 2030.

There are no registered dedicated beds in senior housing in the Skagway Borough.⁹ Currently the Alaska Department of Labor and Workforce Development estimates there are 136 seniors in the census area and projects that there will be 223 senior citizens by 2030.¹⁰ 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.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 Skagway Borough region the primary pressure for new housing over the next 15 years will come from households with elderly people.

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.



Overcrowding¹²

The Skagway Borough is the seventh least overcrowded census area in Alaska. Approximately 4 percent of households are overcrowded in the census area as a whole. The rate of overcrowding in the Skagway Borough is nearly 61 percent of the statewide (6.4)percent) average and approximately 1.2 times more than 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.

Skagway Area Skagway Hub Skagway Non-Statewide National Hubs ■Severely Overcrowded ■ Not Overcrowded Overcrowded

Figure C-I: Percent of Overcrowded Housing

Approximately 6 percent of housing units in the Skagway Borough are available for sale or rent. The percentage of units for sale or rent in the non-hub communities (Hub only percent) is more than in the hub communities (7 percent). Additionally, 33 percent of housing units in the Skagway Borough are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

100%

90%

80%

70%

60%

50%

40%

30%

20% 10%

0%

Percent of Occupied

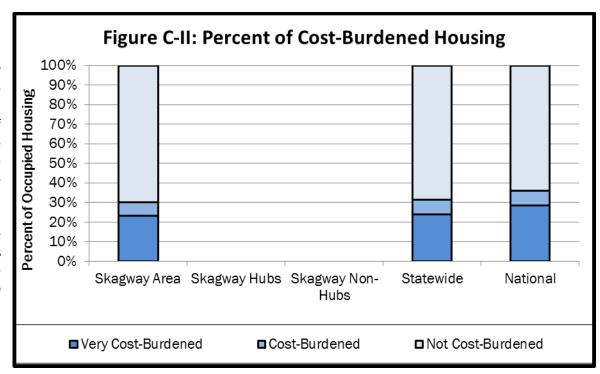
¹² U.S. Census Bureau. (2016). American Community Survey, 2010-2014 American Community Survey Five-year Estimates.



Affordability¹³

According to estimates from the U.S. Census American Community Survey (ACS), 30 percent of households in the Skagway 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 Skagway Borough is 84 percent of the national average (36 percent).

The median household income in the Skagway Borough is \$72,868. This is approximately the same as 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.

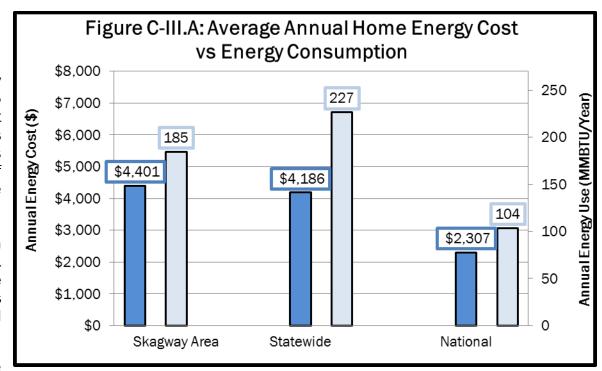


Energy¹⁴

Single-family Units

Single-family homes in the Skagway Borough consume an average of 185 million BTUs per year, the 15th highest energy consumption in the state. This average annual energy consumption is 81 percent of the statewide average of 227 million BTUs and 1.8 times the national average.

Energy costs for single-family homes in the Skagway Borough average \$4,401 annually. This is the 14th highest in the state. Skagway Borough energy costs are 1.1 times the statewide average and 1.9 times the national average.



With an average footprint of 1,698

square feet, single-family homes in the Skagway 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 Skagway Borough averages 118,000 BTUs per square foot, the ninth lowest in the state. This is 92 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 Skagway Borough averages \$2.59, the 10th lowest in the state. This is 1.1 times the statewide average of \$2.31 per square foot and 2.7 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Skagway Borough for the average single-family home is 10.1 BTUs/ft²/HDD. This is the eighth highest in the state. The HHI for the Skagway 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 Skagway Borough averages \$21.47, the 14th

¹⁴ See Appendix C: Methodology for details.



highest in the state. This is 1.4 times the statewide average of \$15.80 per million BTUs and 96 percent of the national average of \$22.27 per million BTUs.



Multifamily Units

Multifamily housing units in the Skagway Borough consume an average of 100 million BTUs per year, the seventh lowest energy consumption in the state. This average annual energy consumption is 64 percent of the statewide average of 156 million BTUs and 1.8 times the national average.

Energy costs for multifamily housing units in the Skagway Borough average \$2,819 annually. This is the 11th lowest in the state. Skagway Borough energy costs are 97 percent of the statewide average and 2.2 times the national average.

With an average footprint of 940 square feet, multifamily housing units in the

Figure C-III.B: Average Annual Home Energy Cost vs Energy Consumption \$8.000 Annual Energy Use (MMBTU/Year) \$7,000 200 \$6,000 156 \$5,000 150 \$4,000 100 \$2,905 100 \$2,819 \$3.000 56 \$2,000 \$1,290 50 \$1.000 \$0 Skagway Area Statewide National

Skagway 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 Skagway Borough averages 118,000 BTUs per square foot, the 10th highest in the state. This is 92 percent of the statewide average of 128,000 BTUs per square foot and twice the national average. The energy cost index (ECI), or annual energy cost per square foot, for a multifamily housing unit in the Skagway Borough averages \$3.00, the 10th highest in the state. This is 1.3 times the statewide average of \$2.27 per square foot and 2.2 times the national average of \$1.39 per square foot.

The home heating index (HHI) in the Skagway Borough for the average multifamily housing unit is 9.58 BTUs/ft²/HDD. This is the third highest in the state. The HHI for the Skagway Borough 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 Skagway Borough averages



\$21.37, the 14th lowest in the state. This is 1.7 times the statewide average of \$12.79 per million BTUs and 92 percent of the national average of \$23.12 per million BTUs.

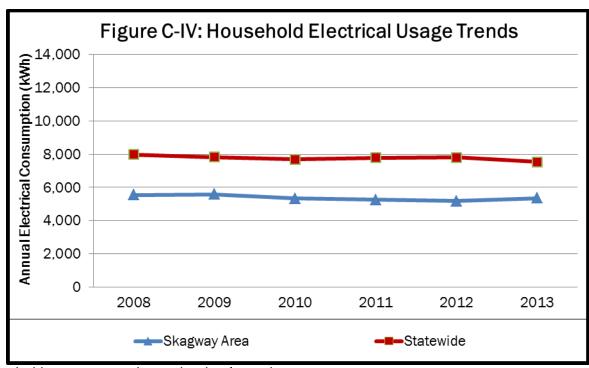


Historical Household Electricity Usage¹⁵

In 2013 the average household in the Skagway Borough consumed 5,357 kWh of electricity annually. This is approximately 3 percent less than in 2008. Statewide, the average household consumed 7,540 kWh of electricity in 2013, a decrease of 5 percent since 2008.

Inefficient and Older Homes¹⁶

Approximately 67 (17 percent) of the occupied homes in the Skagway 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 Skagway Borough fit these two criteria, higher 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-Alaska Energy Statistics 2011Report Final 2014-04-30.pdf

¹⁶ See Appendix C: Methodology for details.



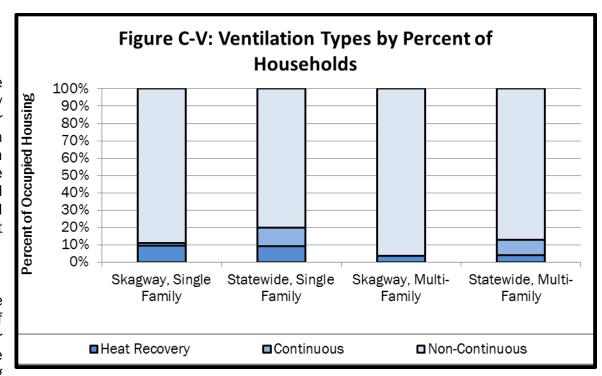
Housing Condition ¹⁷

Ventilation

Approximately 11 percent of the occupied homes in the Skagway Borough region have heat recovery or continuous mechanical ventilation systems installed. This is the sixth 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 Skagway Borough has the 14th highest percentage of housing



units in the state that are both relatively airtight and lack continuous mechanical ventilation. Approximately 121 (31 percent) of the occupied homes in the Skagway Borough are estimated to be at moderate risk, with 58 (15 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 160 (41 percent) of the occupied homes in the Skagway Borough are estimated to be drafty, with 64 (16 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.