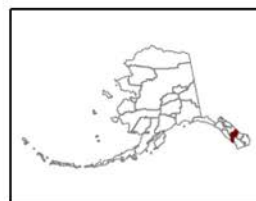
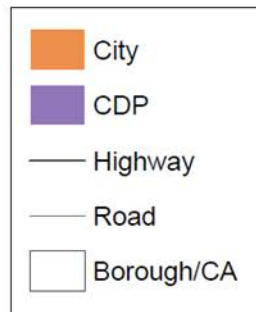


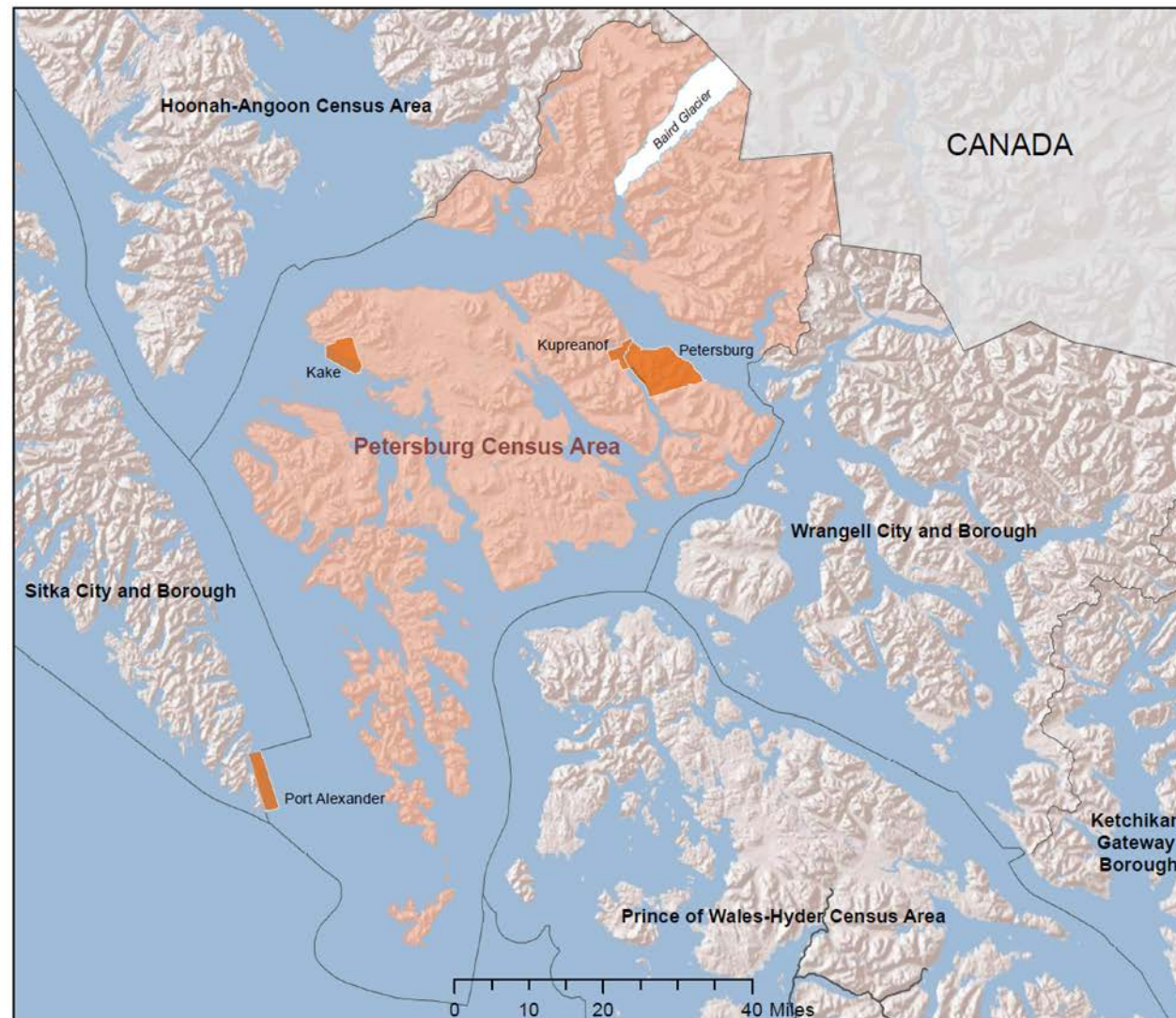
# Petersburg Census Area



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.

## Petersburg Borough Dashboard

**Population:** The Alaska Department of Labor and Workforce Development's current (2015) population estimate for the Petersburg Borough is 3,199, a decrease of 25 percent from 2000.

**Housing Units:** There are currently 1,830 housing units in the Petersburg Borough. Of these, 1,367 are occupied, 92 are for sale or rent, and the remaining 302 are seasonal or otherwise vacant units.

**Energy and Energy Costs:** The average home in the Petersburg Borough is 1,750 square feet and uses 159 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 Petersburg Borough is \$3,670. This is approximately 88 percent of the statewide average and 1.6 times the national average.

**Overcrowding:** An estimated 23 (2 percent) of occupied units are either overcrowded (1 percent) or severely overcrowded (rounds to zero percent). This is nearly the same as the national average, and makes this census area the second least overcrowded census area in the state.

**Drafty Homes and Ventilation:** Approximately 1,106 (67 percent) of occupied homes in the Petersburg 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 644 occupied housing units (39 percent) in the Petersburg 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 378 (28 percent) of households in the Petersburg 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 an estimated 66 beds in senior housing facilities in the Petersburg Borough. Currently the Alaska Department of Labor and Workforce Development estimates there are 520 seniors in the census area and projects an increase to 793 by 2030.

**Housing Issues:** There are an estimated 720 homes built before the 1980's in the Petersburg Borough that have not been retrofitted through a state program in the past 10 years. Approximately 32 (2 percent) homes in the Petersburg Borough lack complete kitchens and approximately 16 (1 percent) lack complete bathrooms.

## Petersburg Borough Housing Need Highlights

Two primary housing needs in the Petersburg Borough are increasing affordability of housing for renters and retrofitting an aging housing stock.

**Housing Gap:** There is very little overcrowding in Petersburg, with an estimated 2 percent of occupied housing units considered overcrowded.<sup>1</sup> The population is projected to decrease by 5 percent by 2025. If the current construction rate continues, sufficient new units will be built so that there is at least one new unit per currently overcrowded household by 2025.

**Affordable Housing Needs:** While the Petersburg Borough has one of the higher area median incomes in the state, it also has one of the lowest average renter wages. This makes housing particularly unaffordable for renters, with a renter household needing 1.9 full-time jobs paying the average renter wage in order to afford a two-bedroom rental unit at the fair market rent.<sup>2</sup>

**Senior Housing Needs:** Petersburg currently has the fourth-highest ratio of registered senior facility beds to senior citizens, approximately double the statewide average.<sup>3</sup> While this puts Petersburg in relatively better shape to house seniors than many areas in Alaska, the senior population is projected to increase by 53 percent by 2030.<sup>4</sup>

**Retrofit Needs:** Petersburg has an aging housing stock, with an estimated 49 percent of homes built before 1980 that have not had an energy retrofit.<sup>5</sup> An estimated 19 percent of homes are inefficient, meaning they use at least four times more energy than a new home built to Alaska's Building Energy Efficiency Standard. Approximately two-thirds of homes are estimated to be drafty based on their reported air-tightness. While Petersburg has the fourth highest participation in energy programs in the state, additional energy retrofits could alleviate energy burden and potentially increase longevity of housing stock.

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

<sup>2</sup> 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](http://nlihc.org/sites/default/files/oor/OOR_2016.pdf)

<sup>3</sup> AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from <https://www.ahfc.us/senior-support/>

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

<sup>5</sup> See Appendix C: Methodology for details.

## Petersburg Borough Summary

### Community

The Petersburg census area is located on the southeast panhandle of Alaska and is in the Sealaska Native Corporation ANCSA region. The average home size in the census area is 1,714 square feet.

The ratio of dependents, including those under 16 and over 65, relative to the working age population in the Petersburg Borough is higher than the statewide average and lower than the national ratio.<sup>6</sup> The Petersburg 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 higher than the national average. The Petersburg Borough region is projected to see the ratio of senior age dependents to working age dependents increase by 1.9 times by 2030.

There are an estimated 66 dedicated beds in senior housing in the Petersburg Borough, with 30 of those dedicated to assisted care living.<sup>7</sup> Currently the Alaska Department of Labor and Workforce Development estimates there are 520 seniors in the census area and projects that there will be 793 senior citizens by 2030.<sup>8</sup> In the Petersburg Borough 5.8 percent of senior citizens are in assisted care housing. This is higher 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.<sup>9</sup>

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 Petersburg Borough region the primary pressure for new housing over the next 15 years will come from households with elderly people.

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<sup>6</sup> 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*.

<sup>7</sup> AHFC Senior Housing Office. (2016). *Inventory List: Independent Living Homes/Facilities*. Revised 5/02/2016. Retrieved from <https://www.ahfc.us/senior-support/>

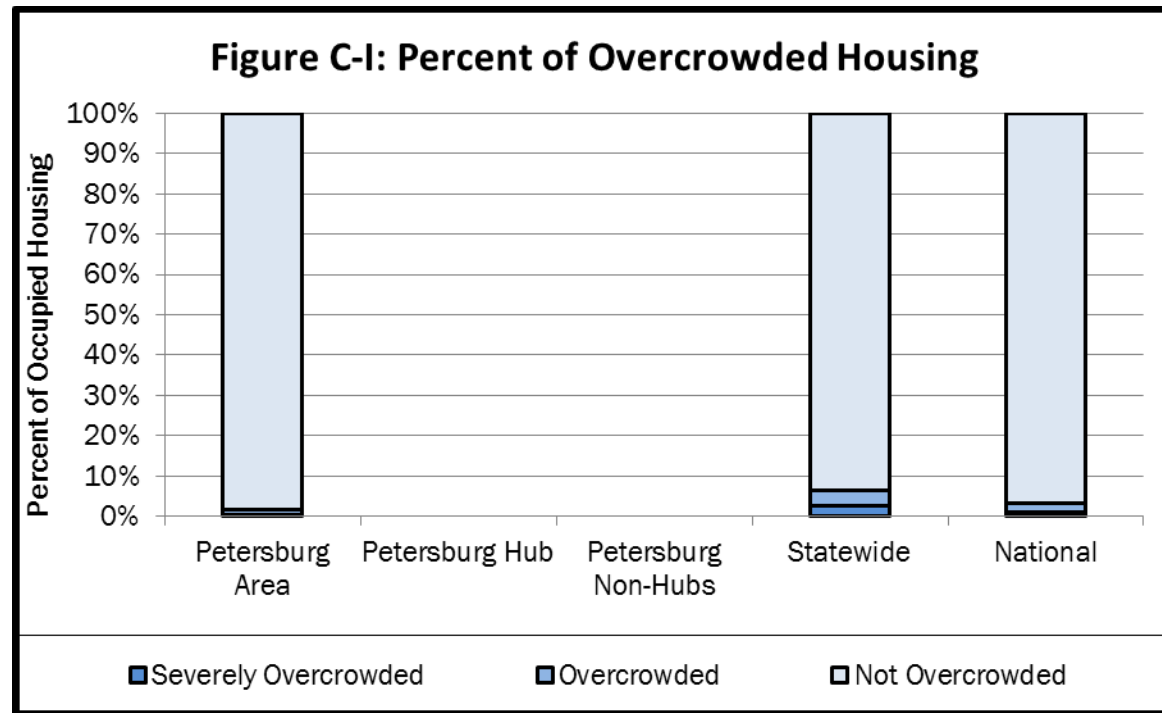
<sup>8</sup> Hunsinger, Eddie, Sandberg, E., & Brooks, L. (2016). "Alaska Population Projections 2015 to 2045." Alaska Department of Labor and Workforce Development, Research and Analysis Section.

<sup>9</sup> 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<sup>10</sup>

The Petersburg Borough is the second least overcrowded census area in Alaska. Approximately 2 percent of households are overcrowded in the census area as a whole. The rate of overcrowding in the Petersburg Borough is more than 27 percent of the statewide average (6.4 percent) and approximately 52 percent of the national average (3.3 percent).

Approximately 5 percent of housing units in the Petersburg Borough are available for sale or rent. Additionally, 17 percent of housing units in the Petersburg Borough are considered vacant because they are used for seasonal, recreational or other non-year-round purposes.

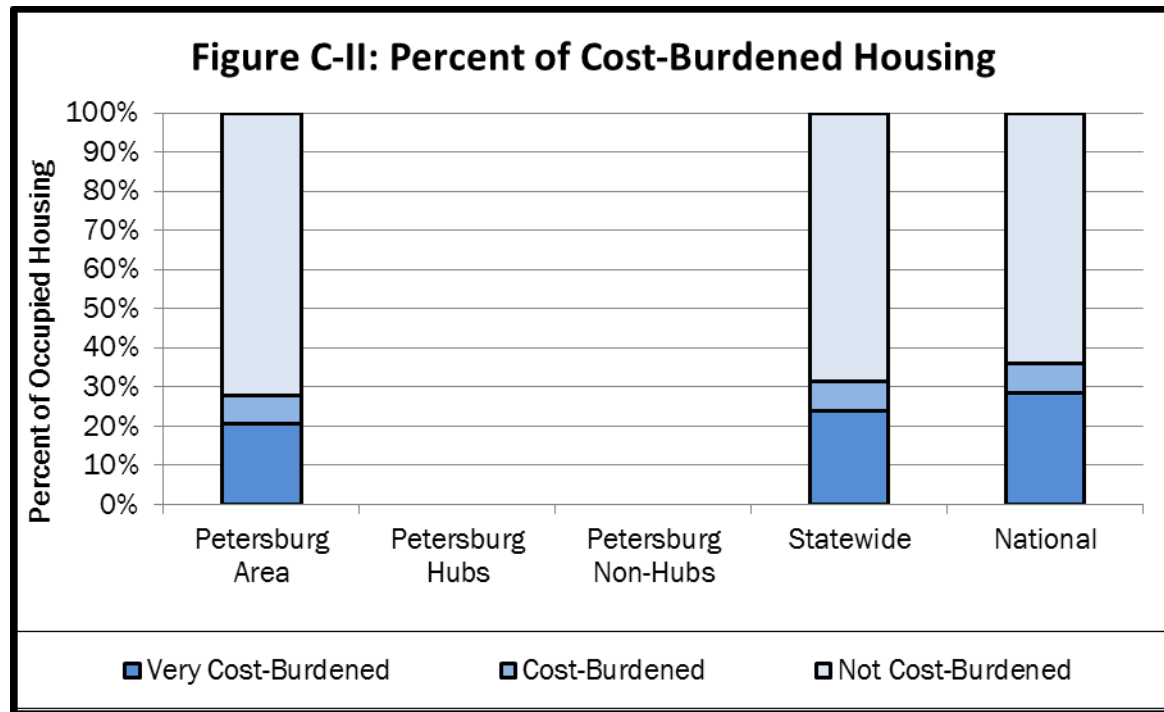


<sup>10</sup> U.S. Census Bureau. (2016). *American Community Survey, 2010-2014 American Community Survey Five-year Estimates*.

## Affordability<sup>11</sup>

According to estimates from the U.S. Census American Community Survey (ACS), 28 percent of households in the Petersburg 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 Petersburg Borough is 77 percent of the national average (36 percent).

The median household income in the Petersburg Borough is \$61,492. This is lower than the statewide median of \$71,829. The national median is \$53,482.



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

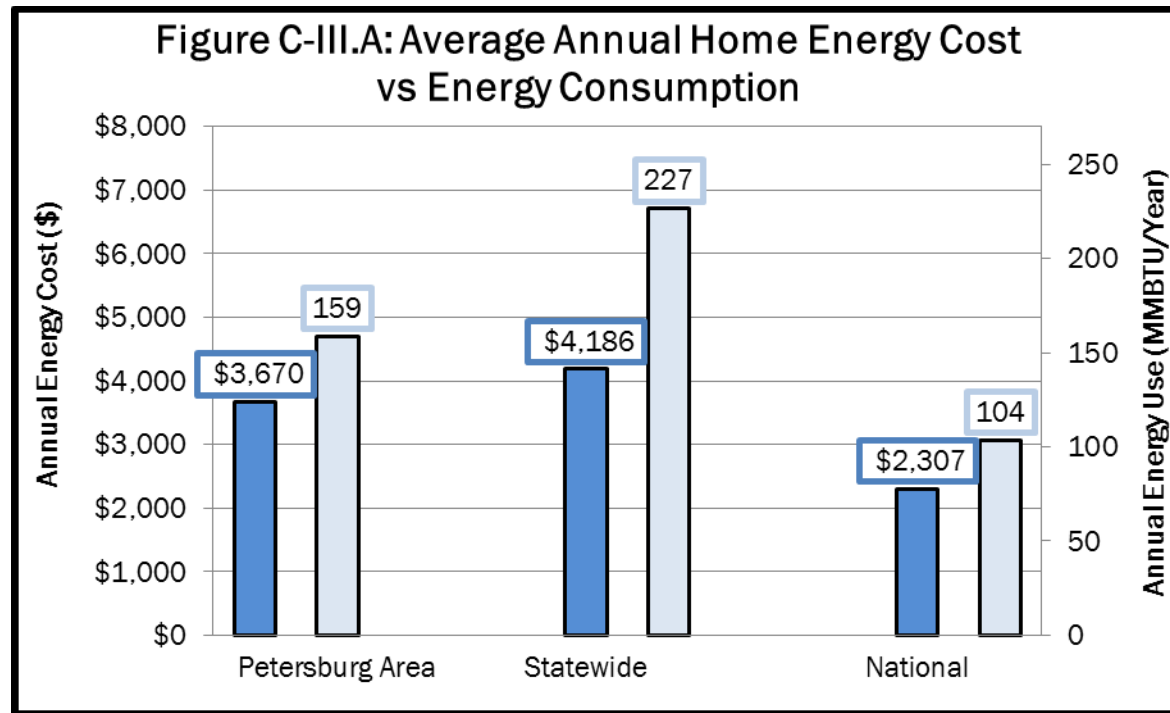


## Energy<sup>12</sup>

### Single-family Units

Single-family homes in the Petersburg Borough consume an average of 159 million BTUs per year, the 11th lowest energy consumption in the state. This average annual energy consumption is 70 percent of the statewide average of 227 million BTUs and 1.5 times the national average.

Energy costs for single-family homes in the Petersburg Borough average \$3,670 annually. This is the fourth lowest in the state. Petersburg Borough energy costs are 88 percent of the statewide average and 1.6 times the national average.



With an average footprint of 1,750 square feet, single-family homes in the Petersburg 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 Petersburg Borough averages 102,000 BTUs per square foot, the lowest in the state. This is 80 percent of 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 single-family home in the Petersburg Borough averages \$2.10, the fifth lowest in the state. This is 91 percent of the statewide average of \$2.31 per square foot and 2.2 times the national average of \$0.95 per square foot.

The home heating index (HHI) in the Petersburg Borough for the average single-family home is 9.00 BTUs/ft<sup>2</sup>/HDD. This is the 12th lowest in the state. The HHI for the Petersburg Borough is approximately the same as the statewide average of 8.83 BTU/ft<sup>2</sup>/HDD. The normalized cost of energy, in terms of dollars per million BTUs, for a single-family home in the Petersburg

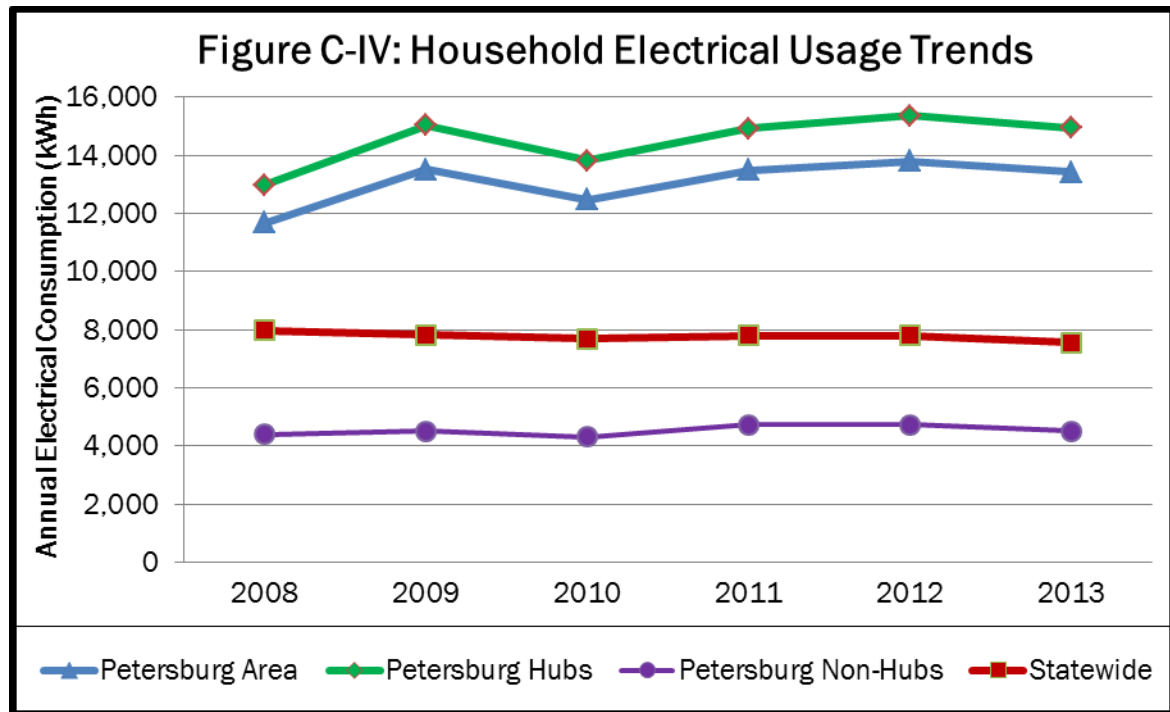
<sup>12</sup> See Appendix C: Methodology for details.

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Borough averages \$24.93, the 10th 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.

### Historical Household Electricity Usage<sup>13</sup>

In 2013 the average household in the Petersburg Borough consumed 13,412 kWh of electricity annually. This is approximately 15 percent more than in 2008. Hub communities in the census area averaged 14,932 kWh per year. This is an increase of 15 percent over the same period. In contrast, non-hub communities averaged 4,496 kWh in 2013, an increase 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 Homes<sup>14</sup>

Approximately 309 (19 percent) of the occupied homes in the Petersburg Borough are estimated to be 1-star homes. A 1-star home uses approximately 4 times the energy it would 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 49 percent of all homes in the Petersburg Borough fit these two criteria, higher than the statewide average of 39 percent.

<sup>13</sup> 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](http://iser.uaa.alaska.edu/Publications/2013_12-AlaskaEnergyStatistics2011Report_Final_2014-04-30.pdf)

<sup>14</sup> See Appendix C: Methodology for details.

## Housing Condition <sup>15</sup>

### Ventilation

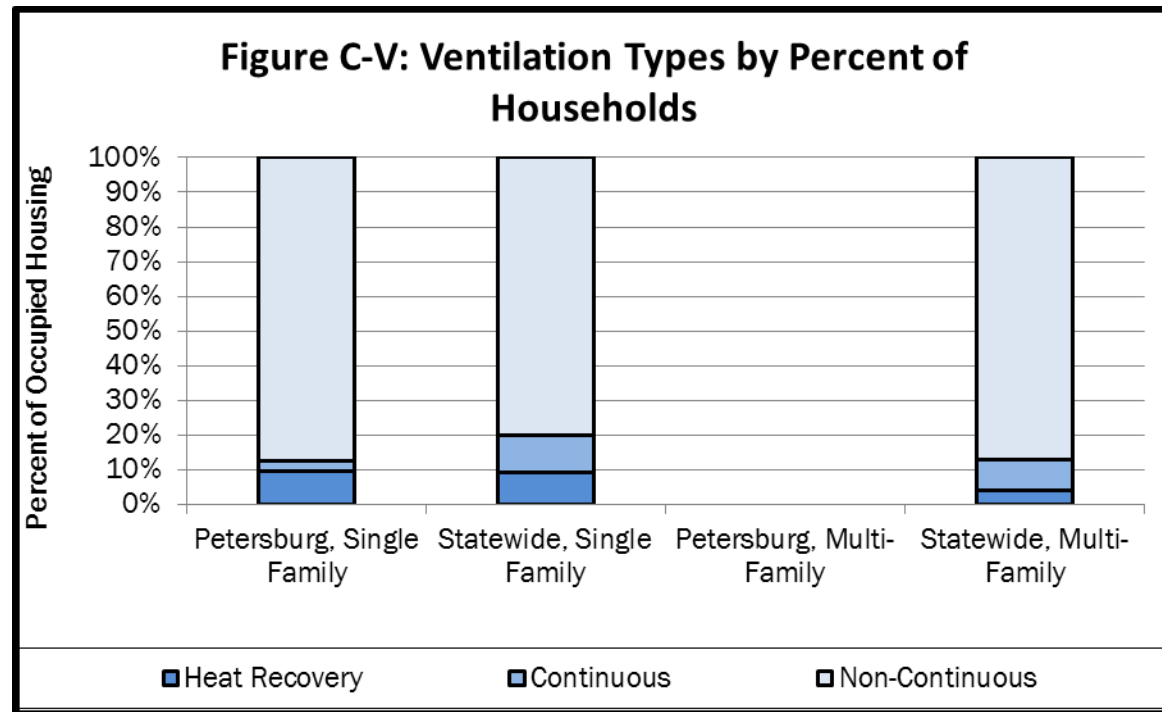
Approximately 13 percent of the occupied homes in the Petersburg Borough region have heat recovery or continuous mechanical ventilation systems installed. This is the ninth lowest in the state. Statewide approximately 20 percent of occupied homes have continuous mechanical ventilation systems, with or 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 Petersburg Borough has the 14th lowest percentage of housing units in the state that are both relatively air-tight and lack continuous mechanical ventilation. Approximately 360 (26 percent) of the occupied homes in the Petersburg Borough are estimated to be at moderate risk, with 179 (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 457 (33 percent) of the occupied homes in the Petersburg Borough are estimated to be drafty, with 456 (33 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.



<sup>15</sup> See Appendix C: Methodology for details.

