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Aleut Corporation Dashboard¹

Population: The Alaska Department of Labor and Workforce Development's current (2012) population estimate for the Aleut ANCSA region is 9,108, an increase of 12% from 2000.

Housing Units: There are currently 2,803 housing units in the Aleut ANCSA region. Of these, 1,591 are occupied, 242 vacant units are for sale or rent, and the remaining 970 are seasonal or otherwise vacant units (Profile Figure R6).

Energy: The average home in the Aleut ANCSA region is 1,230 square feet and uses 115,000 BTUs of energy per square foot annually. This is 16% less than the statewide average of 137,000 BTUs per square foot per year.

Energy Costs: Using AKWarm estimates, average annual energy cost for homes in the Aleut ANCSA region is \$6,710, which is approximately 2.4 times more than the cost in Anchorage, and 3.2 times more than the national average (Profile Figure R13).

Energy Programs: Approximately 9% of the occupied housing units in the Aleut ANCSA region have completed either the Home Energy Rebate or Weatherization programs, or have received BEES certification since 2008, compared to 21% statewide (Profile Figure R12).

Housing Quality: Within current housing stock, newer homes have better energy performance. On average, homes built in the 1940s are currently rated at 1-star-plus, compared to a current average rating of 4-star-plus for homes built after 2000.

Air-tightness: Within current housing stock, newer homes are more air-tight. On average, homes built in the last decade exceed the 2012 BEES standard of 4 air-changes per hour at 50 pascals (ACH50). In contrast, homes built in the 1950s are 3.5 times leakier than those built since 2000 (Profile Figure R7).

Ventilation: An estimated 587 occupied housing units (or 37%) in the Aleut ANCSA region are relatively air-tight and lack a continuous ventilation system. These houses are at higher risk of moisture and indoor air quality-related issues (Profile Figures R9-R10).

Overcrowding: Just fewer than 8% of occupied units are estimated to be either overcrowded (3.5%) or severely overcrowded (4.3%). This is roughly 2 times the national average, and makes the Aleut region the fifth least overcrowded ANCSA region in the state.

Affordability: According to American Community Survey (ACS) data, approximately 25% of households in the Aleut region spend 30% or more of total income on reported housing costs, including rent, water and sewer utilities, and energy costs. Using AKWarm estimates, the average annual energy costs constitute approximately 10% of census median area income for occupied housing.

¹ Figures referenced in the Dashboard are located in the ANCSA Region profile.

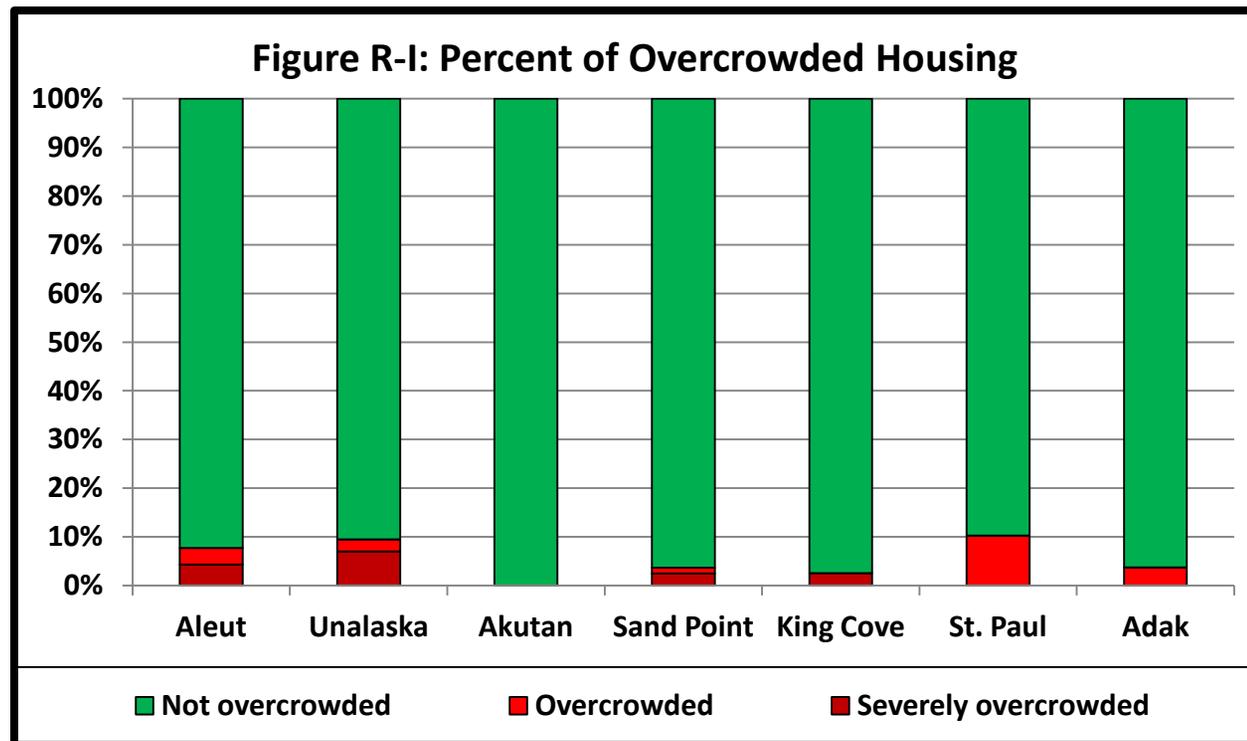
Aleut Corporation Summary

Community

The Aleut Corporation ANCSA region occupies the Southwest corner of Alaska. Its communities are located on the end of the Southwest peninsula and the Aleutian island chain that stretches to the west. Average home sizes in the region range from a low of 864 square feet in the community of King Cove to a high of 1,469 square feet in the community of Unalaska.

Overcrowding

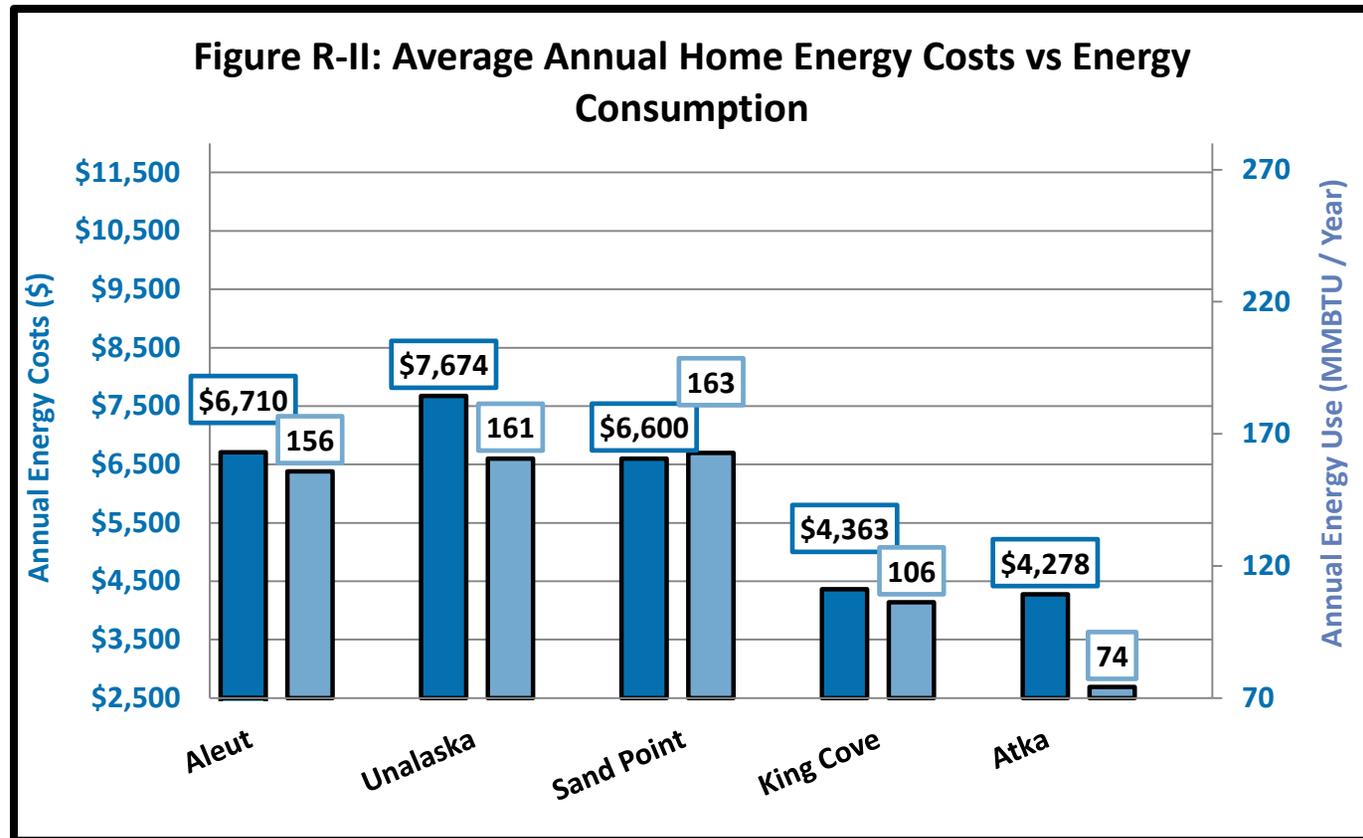
As shown in Figure R-1, the Aleut region is the fifth least overcrowded area in the state with almost 8% of housing units with more than one person per room. Across the entire region, the percent of overcrowded households varies widely, with Nelson Lagoon the highest at an estimated 21% considered overcrowded or severely overcrowded. Overcrowding rates for the six most populous communities in the region vary between an estimated 0% overcrowding in Akutan to approximately 10% of households in St. Paul.



Approximately 9% of housing units in the region are vacant and available for sale or rent. Housing availability varies widely at the community level; Akutan has approximately zero housing units considered available compared to a high of 78% of housing units available for sale or rent in False Pass.

Energy²

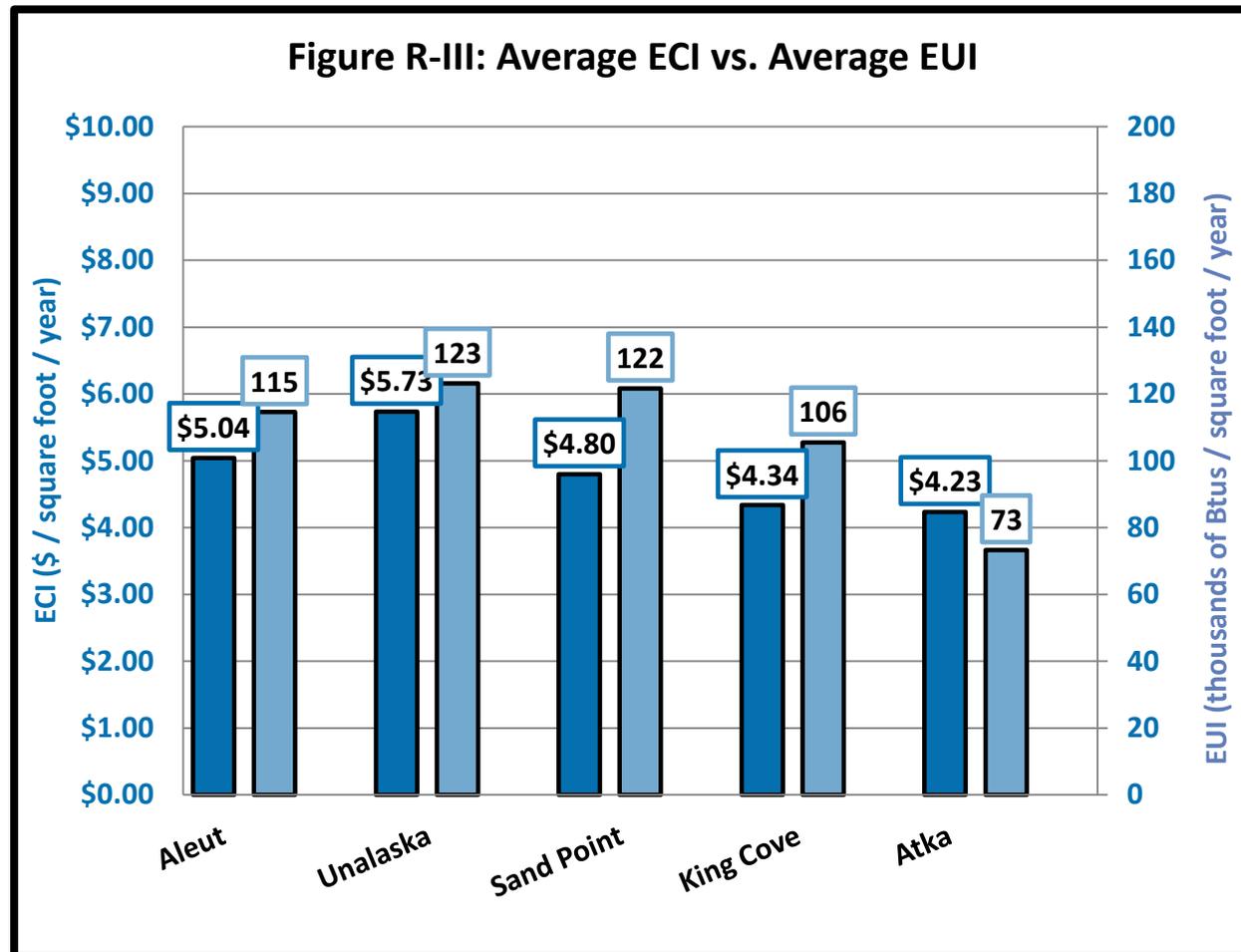
Average regional home energy costs, shown in Figure R-II, are \$6,710 annually. The highest energy costs in the region are found in the community of Unalaska, where residents pay an average of \$7,674 per household per year. Residents of Atka have the lowest annual energy costs, \$4,278, along with the lowest average annual energy use in the region at 74 million BTUs. Sand Point has the highest average annual energy use in the region at 163 million BTUs.



² Regional data appearing in this section is based on communities with sufficient levels of ARIS data, so not all communities were included in the analysis.

The energy use and cost per square foot for communities in the region are shown in Figure R-III.³ The Aleut region has the lowest energy use per square foot⁴ of any ANCSA region in the state using an estimated 115 kBtus/ft²/yr. Unalaska has the highest EUI and ECI in the region at 123 kBtu/ft² and \$5.73/ft². The lowest average EUI and ECI are both found in Atka with an average EUI of 73 kBtu/ft² and an average ECI of \$4.23/ft². While there is relatively little variation in ECI between communities in this region, energy intensity in Unalaska is nearly twice that of Atka.

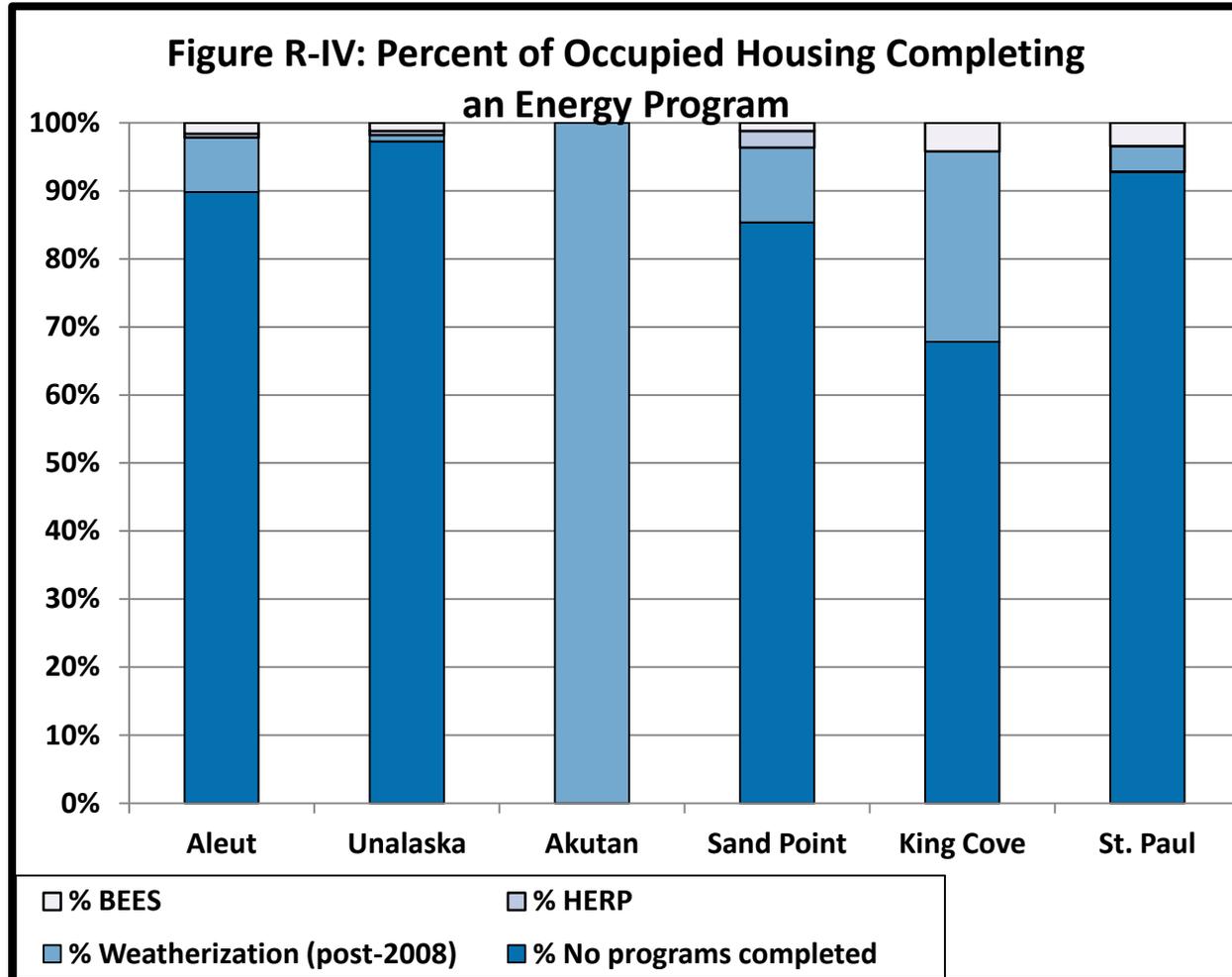
Unalaska and Atka represent the highest and lowest average home heating indices in the region. Housing units in Unalaska have an average home heating index of 9.9 BTUs/ft²/HDD, while those in Atka average 3.1.



³ Energy cost per square foot is also known as the Energy Cost Index, or ECI and is given in dollars per square foot, per year.

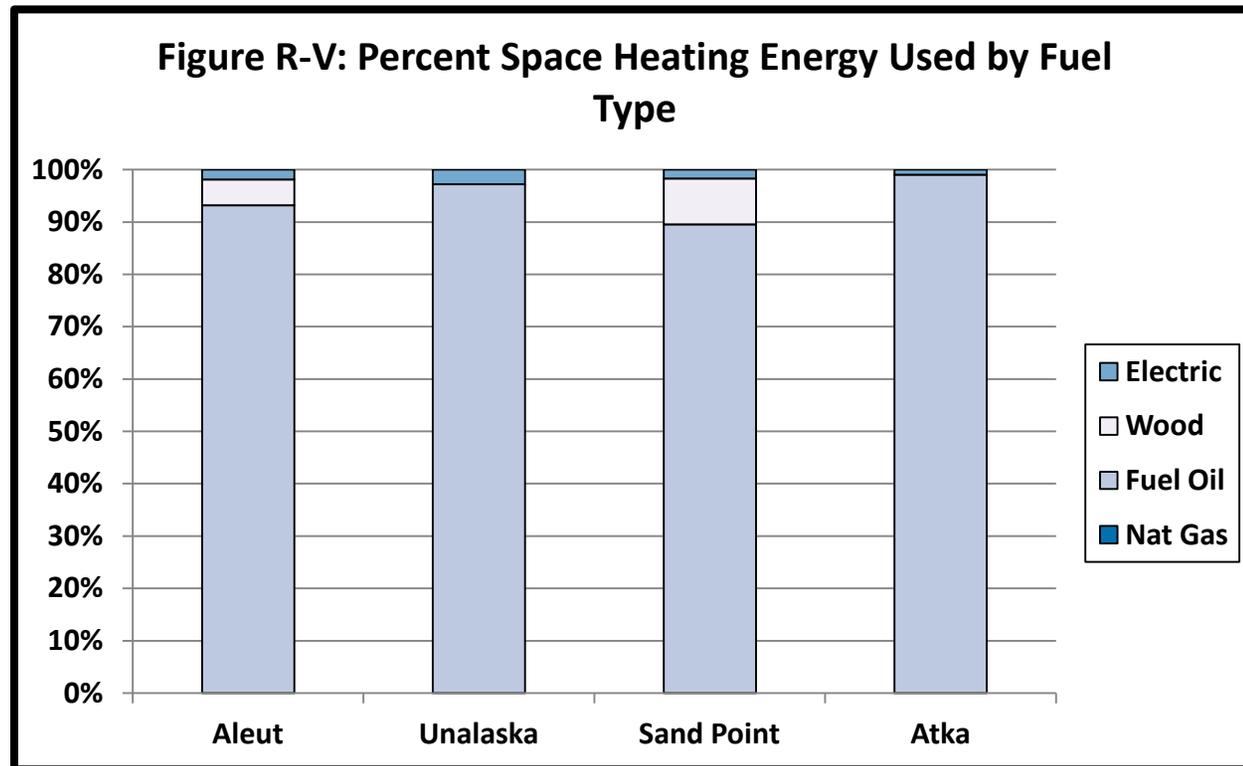
⁴ Energy use per square foot is also known as Energy Use Intensity, or EUI and is given in kBtus per square foot, per year.

Understanding the variations between communities participating in energy efficiency programs is essential to targeting work and resource allocation in the region. Approximately 10% of occupied housing units in the Aleut region have completed the Home Energy Rebate or the Weatherization program, or have received BEES certification since 2008. This is among the lowest participation rates in the state for energy programs. Figure R-IV shows that there is quite a bit of variation among both program participation and community participation. The Home Energy Rebate program has experienced the least participation of the three programs regionally, with approximately 1% of housing units in the region completing the program. The Weatherization program has been the most utilized, with 8% of homes in the region completing the retrofit process, including approximately 100% of the homes in Akutan. However, Weatherization participation is low in other communities. For example, an estimated 1% of households in Unalaska have completed a Weatherization retrofit. The BEES program has seen some participation in communities in the region, with the highest participation occurring in King Cove, with approximately 4% of homes certified to meet BEES. The lowest participation occurred in Adak, where an estimated zero homes have completed any of the programs.

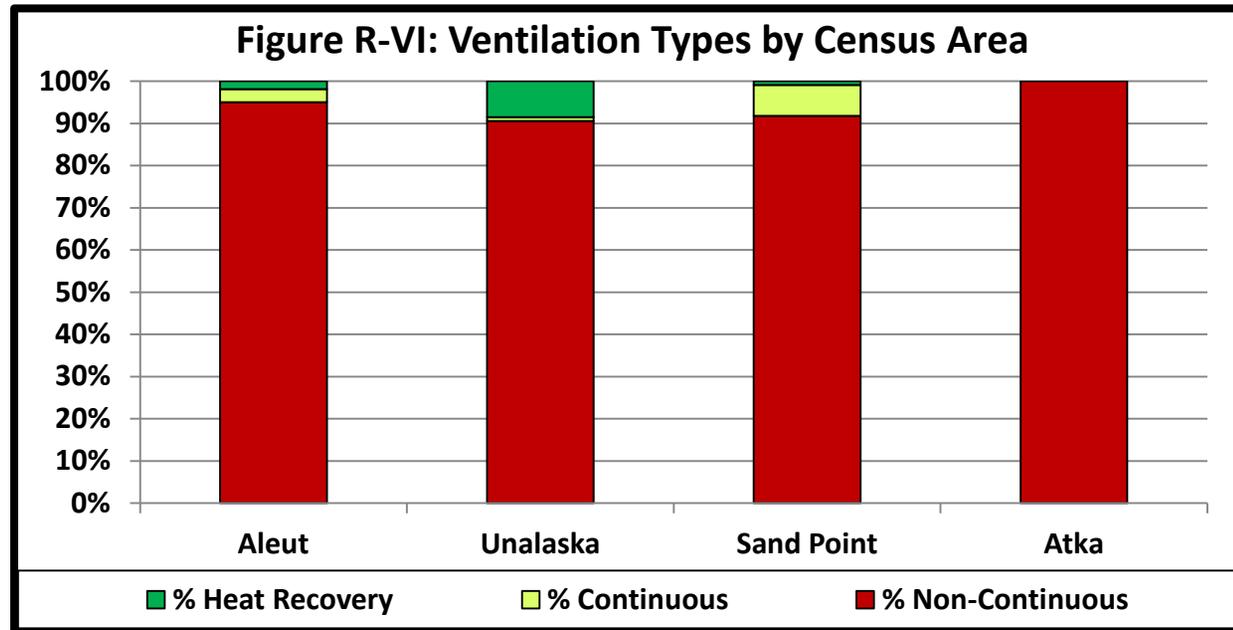


The lowest participation occurred in Adak, where an estimated zero homes have completed any of the programs.

Figure R-V gives the fuel types used for space heating in the Aleut ANCSA region. Households in the region utilize fuel oil as a primary source of heat, accounting for 93% of total energy used for space heating. Much of the remaining space heating needs are met through wood. Wood meets 5% of the space heating needs regionally, with a maximum use of 9% in the community of Sand Point.

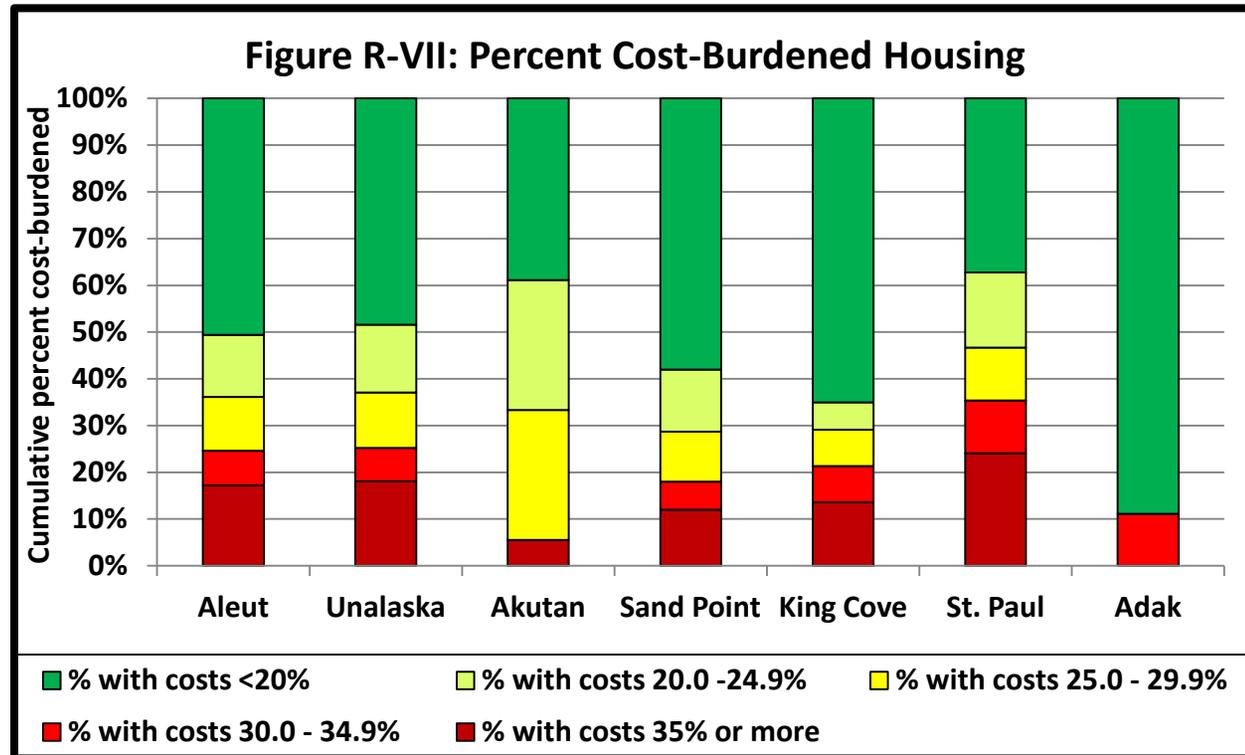


The Aleut region has the smallest percentage of homes in the state with a continuous mechanical or heat recovery ventilation system installed. As shown in Figure R-VI, 5% of housing units overall have continuous ventilation, either with or without heat recovery. The community of Unalaska, with an estimated 12% of housing units with heat recovery or continuous mechanical ventilation, has the highest percentage in the region of households with continuous ventilation.



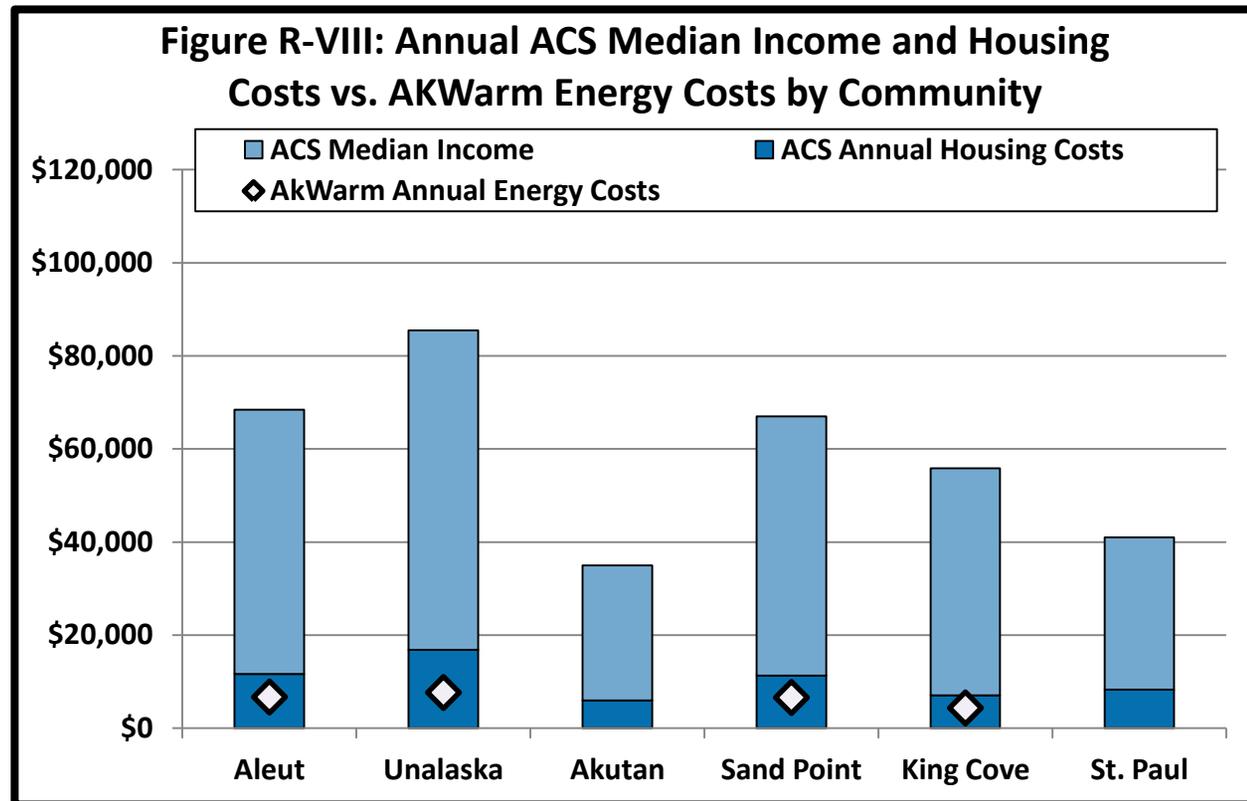
Affordability

Approximately 25% of households in the Aleut region are considered cost-burdened, spending 30% or more of total household income on housing costs.⁵ Among all communities in the region, the range is almost double that of the most populous communities, with a low of approximately zero cost-burdened households in Atka and a high of 60% of households in False Pass considered cost-burdened. Figure R-VII shows the percent of cost-burdened households for the Aleut region and its most populous communities. The percentage of cost-burdened households varies by community. Among the six most populous communities in the region, Akutan has the lowest percent of cost burdened households with an estimated 6%, while 35% of St. Paul's households are considered cost-burdened.



⁵Our analysis of ACS energy costs indicate that there are systematic underestimations for Rural Alaska, which suggests that ACS-based cost burdened housing estimates would be low. See Appendix A, "American Community Survey Energy Cost Estimates" for more details.

Figure R-VIII shows the median incomes as well as the average housing costs and energy estimates for the Aleut region and some of its communities. The regional median household income is approximately \$68,419, while median household incomes in the region vary widely by community. The highest median income (\$96,071) at the community level is found in Atka, and the lowest median income (\$16,125) is found in Nikolski. Considering the region's six most populous communities, the median income levels range between \$35,000 in Akutan and \$85,455 in Unalaska.



Community, Regional, and Statewide Housing Characteristics

This ANCSA region summary only includes the highlights of housing characteristics at the ANCSA regional level. A detailed data profile with charts and tables for this region follows. The 2014 Alaska Housing Assessment provides a significant amount of data and analysis at statewide, ANCSA region, census area, and community levels. This assessment provides a statewide analysis of housing characteristics, how they compare to national numbers, and the estimated housing needs. Within the 2014 Alaska Housing Assessment, written summaries are available for each individual ANCSA region and census area, and data profiles are available for each community and census area characterizing the housing stock from the perspective of community, overcrowding, energy and affordability. These different tiers of information and analysis allow researchers, housing authorities, policymakers and others to generate answers to specific questions. For a detailed discussion of estimating housing need

and comparison of methods to previous Housing Assessments, see Appendix B, "Statewide Need Assessment" of the 2014 Alaska Housing Assessment.

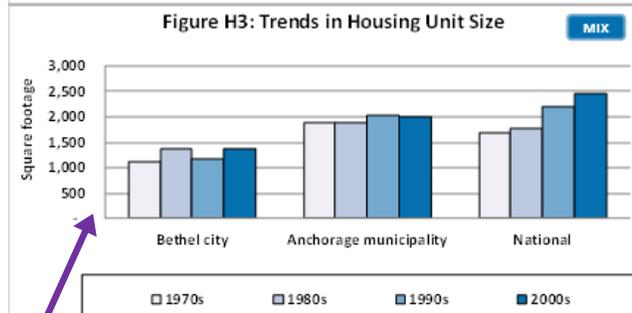
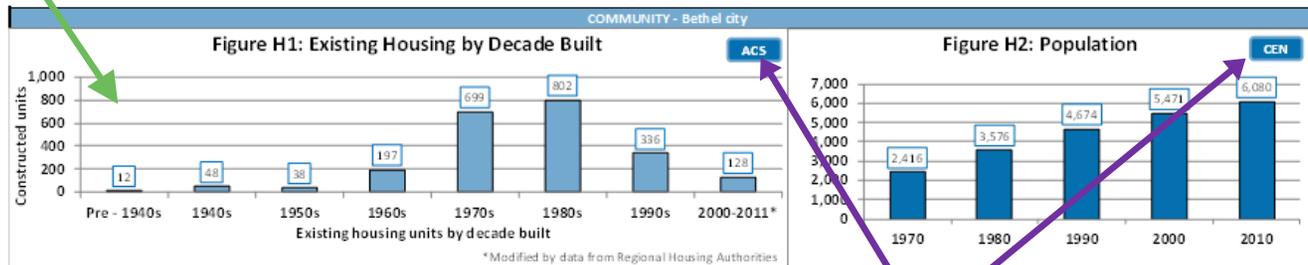
How to Interpret the Profile: Data Sources, Definitions & Clarifications

1

This graph show the breakdown of *current* housing stock by the decade in which the housing units were built. It does *not* show trends over time.

The Alaska Building Energy Efficiency Standard (BEES) was established by AHFC for the State of Alaska to promote the construction of energy efficient buildings. The standards for specific building components are divided into four climate zones, from Zone 6 in Southeast AK to Zone 9 on the North Slope.

Community Profile for:	Bethel city	ANCSA Region	Calista
Regional Housing Authority:	AVCP Regional Housing Authority	BEES Climate Zone (Heating Degree Days)	Zone 8 (13,334 HDD)



Data Source Key:

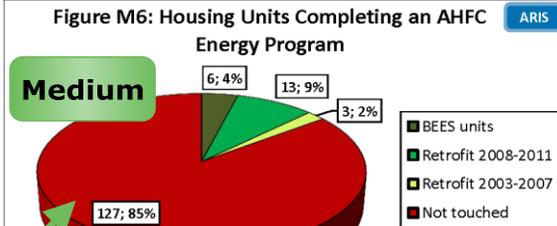
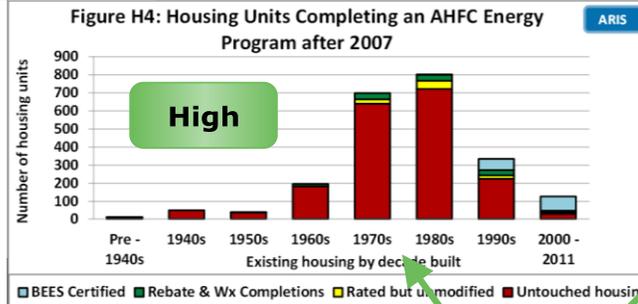
- 2011 American Community Survey 5 year estimates (ACS) **ACS**
- Alaska Retrofit Information System energy audits **ARIS**
- 2010 Decennial Census **CEN**
- Mixed data source; see individual graphs for details. **MIX**

Data Sources: National trends come from the 2009 Residential Energy Consumption Statistics published by the U.S. Energy Information Administration. Anchorage and census area data come from the Alaska Retrofit Information System.

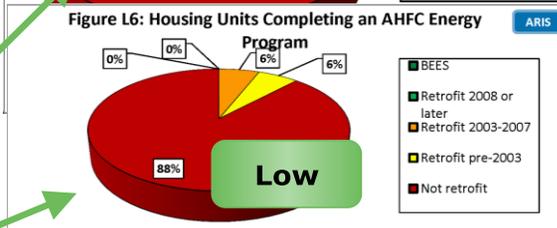
How to Interpret the Profile: Data Sources, Definitions & Clarifications

1

Energy program activity within communities with high, medium and low amounts of ARIS data available. (See p.7 of "How to Interpret" for detail on data levels).



Communities - AHFC Energy Program Activity
High Data - Reported by decade built for the housing units.
Medium Data - Reported by percent of total housing units touched.
Low Data - Have few or no post-2008 Weatherization/Rebate completions or BEES certifications in the ARIS database.



American Community Survey (ACS) Data:
Complete Plumbing: Includes hot & cold running water, a flush toilet, and a bathtub or shower within the home.
Complete Kitchen: Includes a sink with a faucet, a stove/range, and a refrigerator.

- PCE = Power Cost Equalization
- Average Annual Energy Cost with PCE: The cost to the household after it has been lowered by the PCE subsidy.
- Without PCE: The actual energy cost, including the amount paid by the State for PCE.

Houses Lacking Complete Plumbing or Kitchen Facilities	# Households	% Households
Lack complete plumbing	3	10%
Lack complete kitchen	0	0%

Estimated Total Community Space Heating Fuel Use by Type		
Fuel Oil	20,816	(gallons)
Nat Gas	-	(ccf)
Electricity	15,459	(kWh)
Wood	3	(cords)
Propane	-	(gallons)
Coal	-	(tons)

Avg Annual Energy Cost with PCE	\$5,265
Avg Annual Energy Cost without PCE	\$6,643

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$5.16
Electricity with PCE (\$/kWh)	\$0.03
Electricity cost without PCE (\$/kWh)	\$0.27

Weatherization Program Retrofits (funding increased in 2008)	
Date Range	Units
2008-2011	17
2003-2007	-
1990-2002	10

Housing Stock Estimates	
All Housing	Nu
All Occupied Housing	
All Housing	
Vacant housing for Sale or Rent	

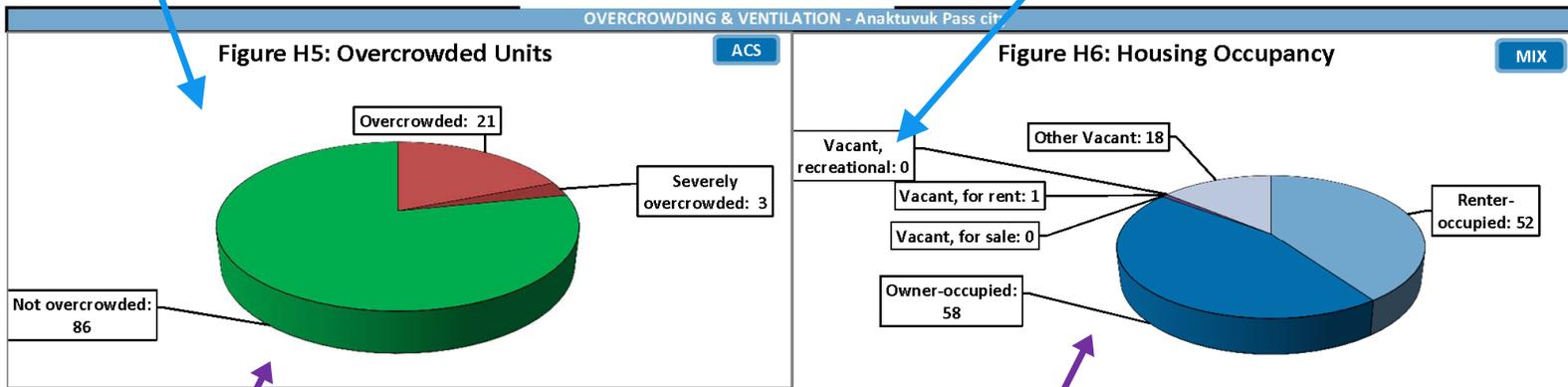
Units weatherized before 2008 are eligible to participate in the program again. (Data source: Alaska Housing Finance Corporation).

How to Interpret the Profile: Data Sources, Definitions & Clarifications

2

Overcrowded: Housing units with more than 1 person per room
Severely Overcrowded: Housing units with more than 1.5 people per room.
 "Rooms" include bedrooms, living rooms, dining rooms, kitchens, and other finished, separated spaces, but not including bathrooms, porches, balconies, foyers, halls, or unfinished basements.

Recreational: For seasonal, recreational, or occasional use.



Data Source:
2011 American Community Survey 5-year estimates

Data Sources: The number of owner-occupied, renter-occupied, and total vacant units are taken from the 2011 ACS 5-year estimates. Data for vacancy type, only available from the decennial Census, were derived by taking the decennial census ratios by vacancy type and applying them to the total number of vacant units.

How to Interpret the Profile: Data Sources, Definitions & Clarifications

2

Heat Recovery: Continuous mechanical ventilation with heat recovery operated with automatic controls.

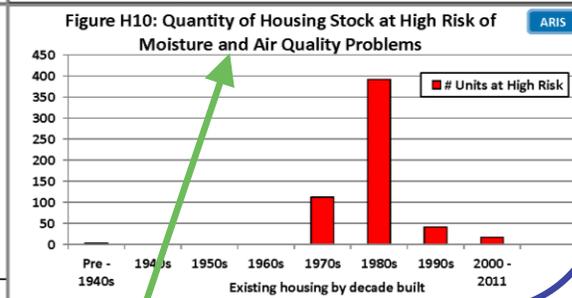
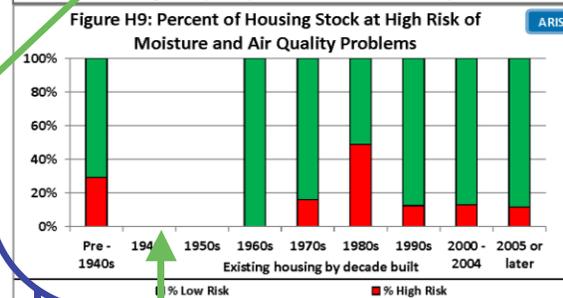
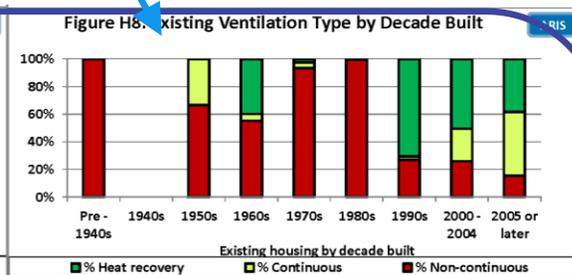
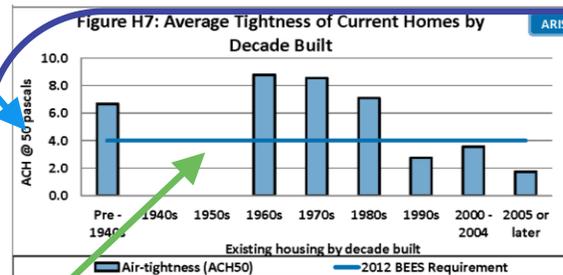
Continuous: Mechanical ventilation without heat recovery operated with automatic controls.

Non-Continuous ventilation: Includes homes with range and/or bath fans not operated using automatic controls.

ACH50: The results of a blower door test to measure building air leakage. Smaller numbers indicate tighter buildings. Tighter buildings lose less heated air to the outside and thus use less energy for space heating.

The 2012 Building Energy Efficiency Standard (BEES) for air-tightness is for reference only, as it was implemented after the majority of homes in Alaska were built.

Data Source:
Alaska Retrofit Information System



Decades with no bar lack sufficient data for reporting. They should not be considered zero quantities.

High Risk of Moisture and Air Quality Problems: Note that moisture or poor indoor air quality have not been physically measured; these houses are considered "at-risk" because they are relatively air tight (less than 0.5 estimated natural air changes per hour) and do not have a continuous ventilation system.

How to Interpret the Profile: Data Sources, Definitions & Clarifications

3

Rating stars and points are based on AHFC's AkWarm energy rating system.

Average annual energy cost:
Includes all end uses. Costs are estimated using January 2013 energy prices, and include reductions from the PCE program.

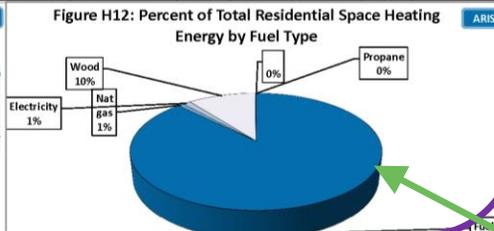
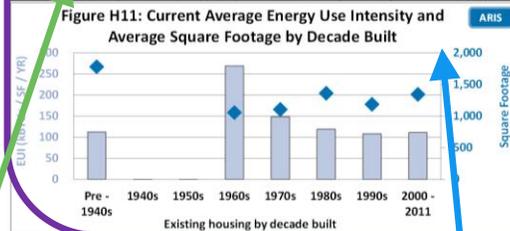
Space Heating, DHW, Appliances:
Estimated annual energy for the end uses of: Space Heating, Domestic Hot Water, and all other energy including lights, appliances, and electronics.

ECI: Energy Cost Index, the amount of money spent on energy per year divided by square footage.

The number of AkWarm records from each decade built that were used to calculate the averages reported.

Current Residential Units by Year Built	Number of Records	Avg Energy Rating	Avg Energy Rating Points	Avg Sq. Feet	Avg Annual Energy Cost (with PCE)	Avg Annual Energy Use (million BTUs)	Avg Ann Energy by Use (million Btus)			Avg. EUI (kBtu/SqFt)	Avg. ECI (\$ / SqFt)	Avg. Home Heating Index
							Space Heating	DHW	Appliances			
OVERALL	419	3-star	70.7	1,237	\$ 8,065	160	102	27	26	132	\$ 6.97	6.5
Pre- 1940	7	3-star	68.3	1,779	\$ 11,107	199	145	21	33	113	\$ 6.66	6.4
1940-49	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1950-59	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1960-69	15	2-star	52.3	1,056	\$ 11,087	287	225	35	27	269	\$ 10.60	16.0
1970-79	71	2-star plus	64.5	1,106	\$ 7,961	153	105	21	25	149	\$ 8.09	7.8
1980-89	113	3-star plus	74.7	1,361	\$ 8,239	157	100	30	26	119	\$ 6.40	5.8
1990-99	111	4-star	79.9	1,187	\$ 6,395	122	57	21	20	108	\$ 5.58	4.7
2000-2004	71	3-star plus	77.5	1,388	\$ 8,435	143	80	35	27	118	\$ 7.24	5.2
2005 or later	28	5-star	91.9	1,233	\$ 4,504	92	39	28	25	79	\$ 3.82	2.5

Home Heating Index:
The energy used per square foot per year divided by the area's heating degree days.



Data Source:
AkWarm ratings from AHFC's Alaska Retrofit Information System (ARIS).

Average energy characteristics of the *current* housing stock by decade built (high data communities) or by pre-/post-retrofit and new construction categories (medium data communities).

Energy Use Intensity (EUI) is the total amount of energy used per year per square foot of floor space.

This is the community's breakdown by fuel type of the energy (BTUs) used for home space heating. It is not the percent of housing using a given fuel in primary space heating devices. Because wood burning devices are inefficient, they may use a significant portion of total energy even if no homes in a community use wood as a primary fuel.

How to Interpret the Profile: Data Sources, Definitions & Clarifications

3

Average building envelope characteristics of the *current* housing stock by decade built (high data communities) or by pre-/post-retrofit and new construction categories (medium data communities).

ACH50: The results of a blower door test to measure building leakiness. Smaller numbers indicate tighter buildings.

R-value: the capacity to resist heat flow. The higher the value, the better the insulator.

U-value: the conductance to heat flow. The lower the value, the better the insulator.

Data Sources: AkWarm ratings from AHFC's Alaska Retrofit Information System (ARIS).

Current Bethel city Housing Envelope Characteristics By Decade Built

Current Residential Units by Year Built	Number of Records	ACH 50	Ceiling R	Above Grade Wall R	Below Grade Wall R	Above Grade Floor R	On Grade Floor R	Below Grade Floor R	Door U	Garage Door U	Window U
OVERALL	419	6.4	23	17	7	30	NR	2	0.36	0.27	0.54
Pre- 1940	7	6.7	26	21	NR	30	NR	NR	0.30	NR	0.40
1940- 49	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1950- 59	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1960- 69	15	8.8	16	14	NR	21	NR	NR	0.44	NR	1.65
1970- 79	71	8.5	20	15	NR	29	NR	NR	0.39	NR	0.57
1980- 89	113	7.1	29	17	NR	32	NR	NR	0.30	NR	0.44
1990- 99	111	2.7	56	31	NR	50	NR	NR	0.19	0.12	0.29
2000- 2004	71	3.6	13	21	NR	36	NR	NR	0.27	0.23	0.40
2005 or later	28	1.7	41	22	NR	41	NR	NR	0.20	NR	0.31
BEES 2009 - Climate Zone 8		7.0	38	30	15	38	15	15	0.22	0.22	0.22
BEES 2012 - Climate Zone 8		4.0	48	30	15	38	15	15	0.22	0.22	0.22

The number of AkWarm records from each decade built that were used to calculate the averages reported.

"NR" is used when there are insufficient records to protect the confidentiality of the occupants.

Color Coding--

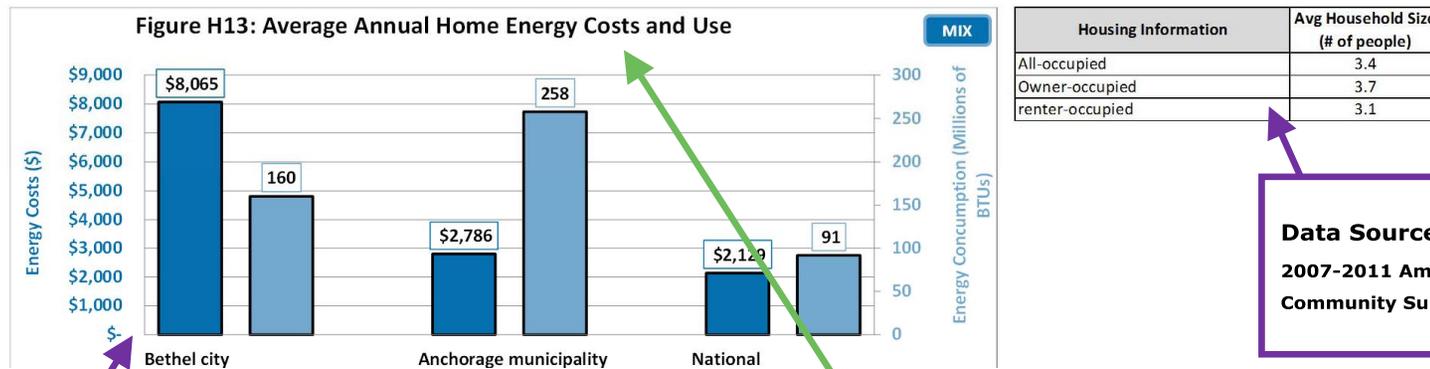
Green: the average value meets or exceeds the 2012 BEES requirement.
Yellow: value is 75-99% of the 2012 BEES requirement.
Red: value is less than 75% of the 2012 BEES requirement.

How to Interpret the Profile: Data Sources, Definitions & Clarifications

4

Communities are categorized in this report by the amount of ARIS data available, and reporting is more extensive for locations with more data. Data quantities are defined as--
High: ARIS records exist for housing units built in 7 of the 9 date ranges use in this report, and there are either more than 50 records or records totaling 20 percent or more of the total number of housing units.
Medium: There are three or more ARIS records. Data are presented for an "overall" group if there are "As Is" ARIS records totaling at least 10% of the community's occupied housing units.
Low: There are fewer than three ARIS records for the location.

Community Template - Data Quantity: High



Data Source:
2007-2011 American Community Survey

Data Sources: Census Area and Anchorage data come from AFHC's Alaska Retrofit Information System. National figures come from the U.S. Energy Information Administration's 2009 Residential Energy Consumption Statistics (RECS) for "cold"/"very cold" climate regions.

Average annual home energy costs and usage estimates are for all end uses, including space heating, domestic hot water, lighting and appliances. Costs are estimated using January 2013 energy prices and include reductions from the PCE program.

How to Interpret the Profile: Data Sources, Definitions & Clarifications

4

Data Source:
2007-2011
American
Community
Survey.

"Value" is determined by responses to the ACS question: "How much do you think this house and lot, apartment, or mobile home (and lot, if owned) would sell for if it were for sale?"

Household income includes all earnings from salaries, stocks, gifts, public assistance, etc.

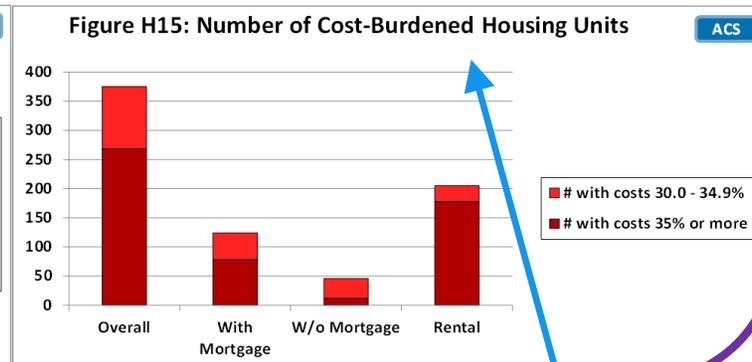
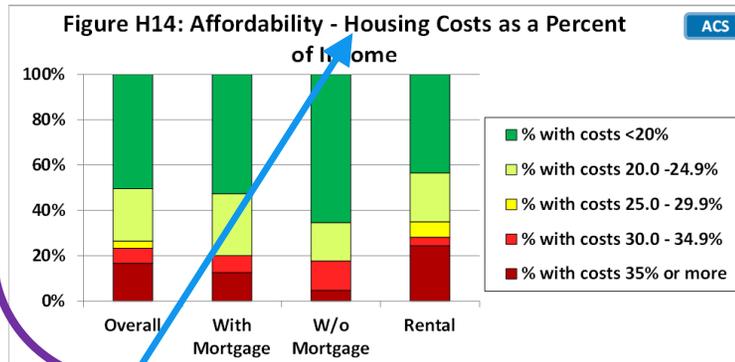
Data Source: Median income comes from 2007-2011 ACS estimates; energy costs come from AHFC's Alaska Retrofit Information System (ARIS).

Owner-occupied House with Mortgage, Median Value
\$226,800
Owner-occupied House without a Mortgage, Median Value
\$119,600

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 91,302
Renter-occupied	\$ 70,170
Owner-occupied	\$ 107,908
w/ mortgage	\$ 111,167
w/o mortgage	\$ 70,400

Median Household Expenses		
	Monthly	Annual
All-occupied	\$ 1,369	\$ 16,428
Gross rent	\$ 1,201	\$ 14,412
Owner-occupied	\$ 1,610	\$ 19,320
Housing units w/ mortgage	\$ 1,854	\$ 22,248
Housing units w/out a mortgage	\$ 680	\$ 8,160

Avg % of Median Income Spent on Energy	8.8%
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Rental housing costs: Contract rent, fuels, utilities.

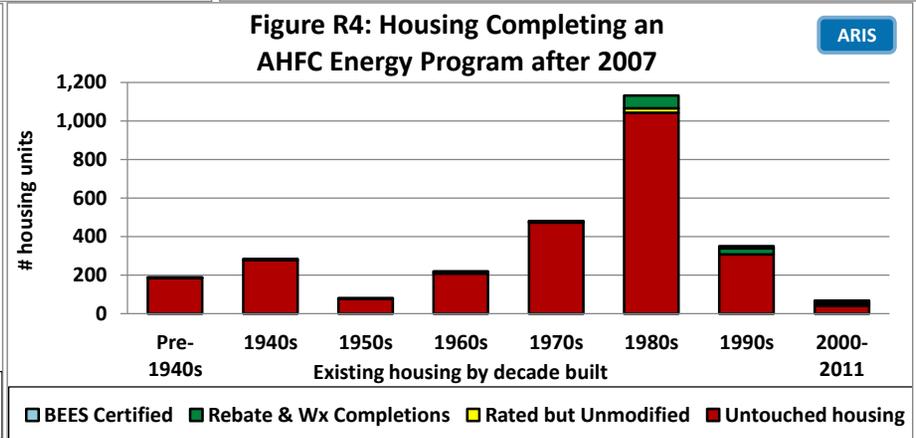
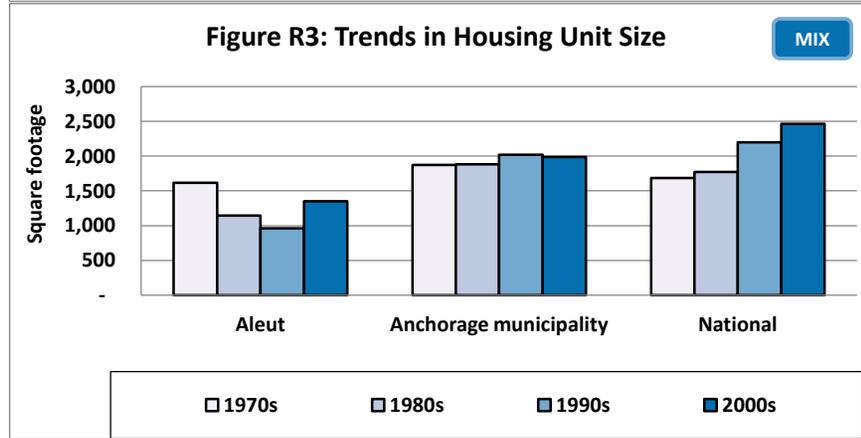
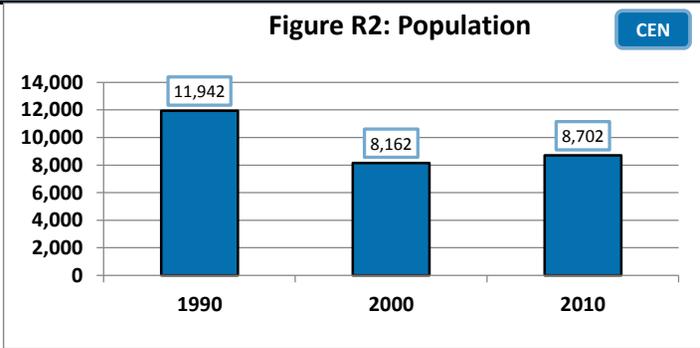
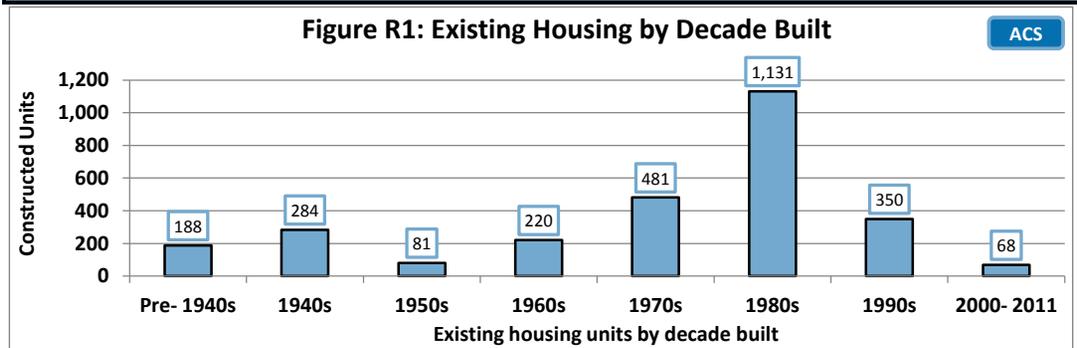
Owner housing costs: Mortgage payments, property taxes, insurance, fuels, utilities, condo fees.

Households are considered "cost burdened" if they spend 30% or more of total household income on housing costs. Households spending more than this amount on housing costs may have difficulty affording basic necessities such as food, transportation, and medical care.

ANCSA Region Profile for: Aleut

Climate Zone (Heating Degree Day Range) Zone 7 (9,000 - 12,600 HDD)

COMMUNITY - Aleut



Houses Lacking Complete Plumbing or Kitchen Facilities	Households	
	Number	Percent
Lack complete plumbing	73	5%
Lack complete kitchen	60	4%

Avg Annual Energy Cost with PCE	\$6,710
Avg Annual Energy Cost without PCE	\$8,180

Weatherization Retrofits (funding increased 2008)	
Date Range	Units
2008-2011	106
2003-2007	18
1990-2002	6

Estimated Total Annual Community Space Heating Fuel Use		
Fuel Oil	1,214,167	(gallons)
Natural Gas	-	(ccf)
Electricity	963,806	(kWh)
Wood	476	(cords)
Propane	308	(gallons)
Coal	-	(tons)

Housing Need Indicators	Number of units	% Occupied Housing
Overcrowded	123	8%
Housing cost burdened	315	20%
1 Star Homes	468	29%

Housing Stock Estimates	Number of Units
All Housing	2,803
All Occupied Housing	1,591
All Vacant housing	1,212
Vacant Housing for Sale or Rent	242

OVERCROWDING & VENTILATION - Aleut

Figure R5: Overcrowded Units

ACS

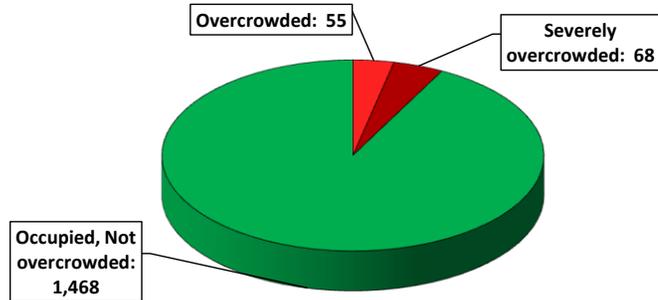


Figure R6: Housing Occupancy

MIX

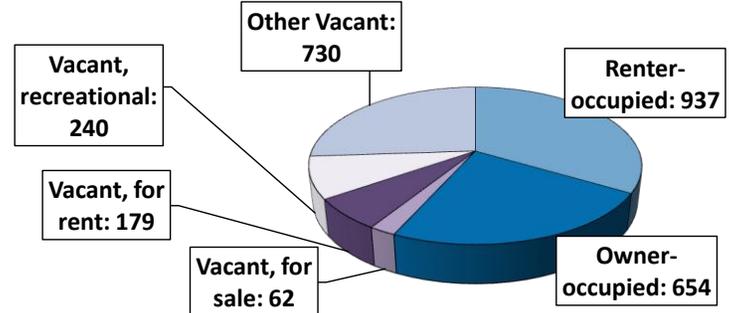


Figure R7: Average Air-Tightness of Current Homes by Decade Built

ARIS

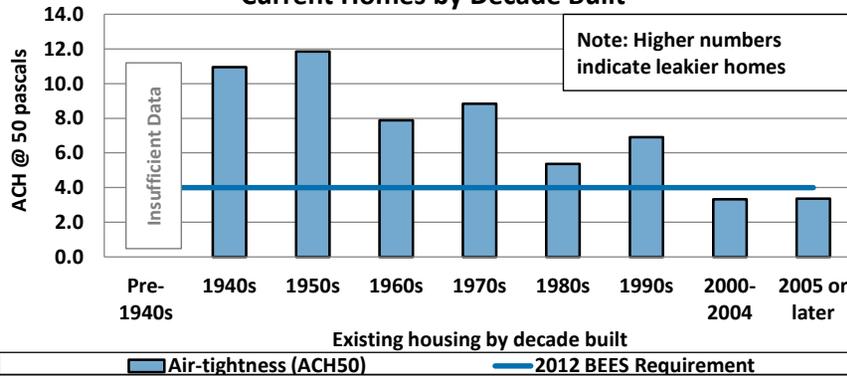


Figure R8: Existing Ventilation Type by Decade Built

ARIS

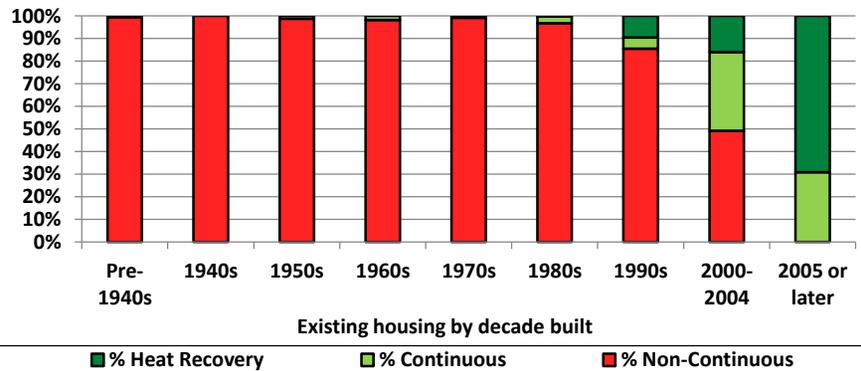


Figure R9: Percent of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS

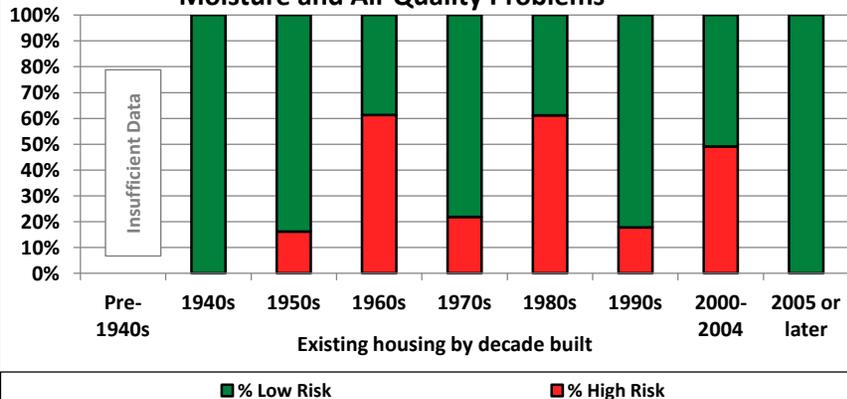
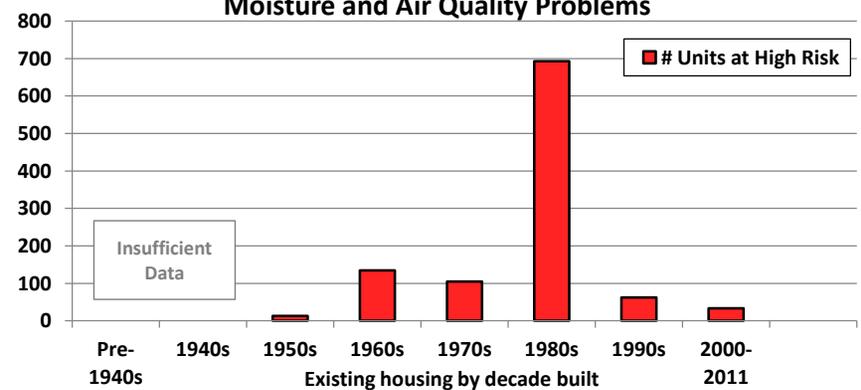


Figure R10: Quantity of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS



ENERGY - Aleut												
Current Aleut Housing Energy Characteristics By Decade Built												
Current Residential Units by Year Built	# of AkWarm Records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Annual Energy Cost (with PCE)	Avg. Annual Energy Use (million BTUs)	Avg Annual Energy / End Use (million Btus)			Avg. EUI (kBtus / SF)	Avg. ECI	Avg. Home Heating Index
							Space Heating	DHW	Appliances			
OVERALL	206	2-star plus	64.8	1,230	\$6,710	156	100	28	27	115	\$5.04	7.8
Pre- 1940	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1940- 49	6	1-star plus	43.1	1,332	\$8,554	195	150	18	26	165	\$7.16	14.3
1950- 59	8	2-star	54.7	1,259	\$7,141	160	116	20	24	128	\$6.04	10.4
1960- 69	12	1-star plus	45.6	1,135	\$9,028	252	200	25	27	236	\$8.48	21.7
1970- 79	10	2-star plus	61.9	1,616	\$8,365	191	147	18	27	126	\$5.43	10.6
1980- 89	93	4-star	78.7	1,143	\$5,058	110	59	28	24	96	\$4.37	5.8
1990- 99	47	4-star	81.8	962	\$4,453	104	57	24	20	116	\$4.98	6.6
2000- 2004	13	4-star	82.7	1,350	\$4,481	106	56	22	28	77	\$3.20	4.5
2005 or later	14	5-star	91.1	1,127	\$4,116	88	32	33	23	80	\$3.73	2.9

Figure R11: Current Average Energy Use Intensity and Average Square Footage by Decade Built

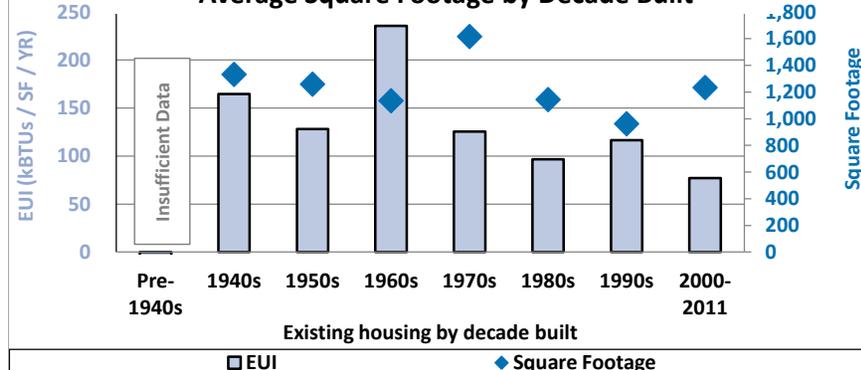
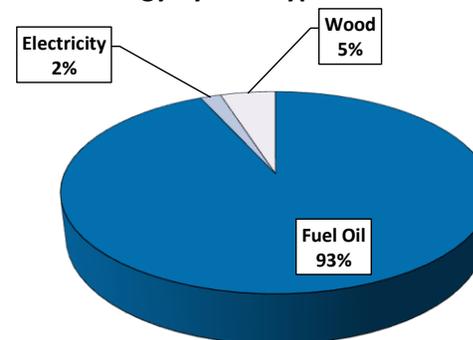


Figure R12: Percent of Total Residential Space Heating Energy by Fuel Type

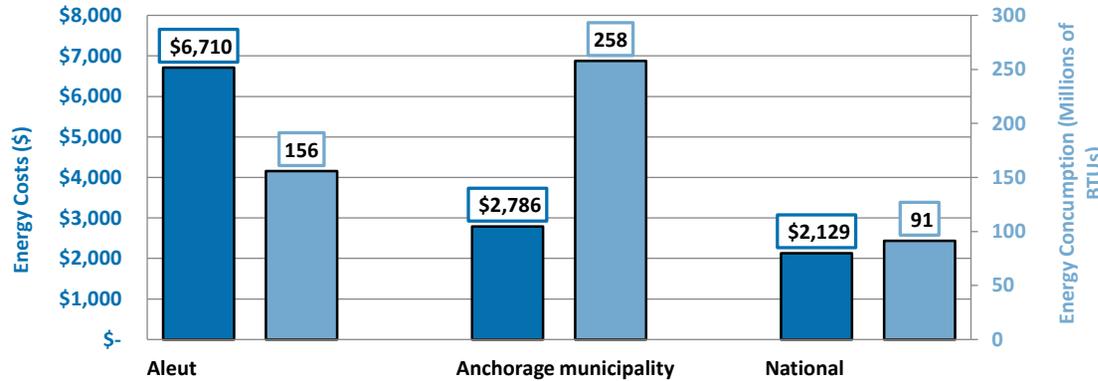


Current Aleut Housing Envelope Characteristics By Decade Built											
Current Residential Units by Year Built	# of AkWarm Records	ACH 50	Ceiling R	Above Grade Wall R	Below Grade Wall R	Above Grade Floor R	On Grade Floor R	Below Grade Floor R	Door U	Garage Door U	Window U
OVERALL	206	7.0	20	14	8	20	3	2	0.27	0.27	0.50
Pre- 1940	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1940- 49	6	11.0	8	7	NR	11	NR	NR	0.36	0.36	0.67
1950- 59	8	11.9	14	8	NR	17	NR	NR	0.24	0.24	0.68
1960- 69	12	7.9	9	7	NR	10	NR	NR	0.56	0.56	0.50
1970- 79	10	8.8	17	11	NR	24	NR	NR	0.32	0.32	0.54
1980- 89	93	5.4	28	16	12	28	3	2	0.25	0.25	0.53
1990- 99	47	6.9	34	19	16	22	3	3	0.23	0.23	0.41
2000- 2004	13	3.3	31	18	NR	NR	NR	NR	0.22	0.22	0.36
2005 or later	14	3.4	46	23	19	NR	NR	3	0.30	0.30	0.29

BEES 2009 - Climate Zone 7	7.0	38	21	15	38	15	15	15	0.33	0.33	0.33
BEES 2012 - Climate Zone 7	4.0	43	25	15	38	15	15	15	0.30	0.30	0.30

AFFORDABILITY - Aleut

Figure R13: Average Annual Home Energy Cost and Use



Housing Information	Avg Household Size (# of people)
All-occupied	2.4
Owner-occupied	2.6
Renter-occupied	2.3

Median value of owner-occupied house with mortgage
\$225,800

Median value of owner-occupied house without a mortgage
\$106,500

Median Household Income	
Housing Units	Annual Household Income
All-occupied	\$ 68,419
Renter-occupied	\$ 65,398
Owner-occupied	\$ 76,818
w/ mortgage	\$ 99,896
w/o mortgage	\$ 55,368

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 972	\$ 11,664
Gross rent	\$ 1,096	\$ 13,152
Owner-occupied	\$ 848	\$ 10,176
Housing units w/ mortgage	\$ 1,534	\$ 18,408
Housing units w/out a mortgage	\$ 549	\$ 6,588

Avg % of Median Income Spent on Energy	9.8%
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Figure R14: Affordability - Housing Costs as a Percent of Income

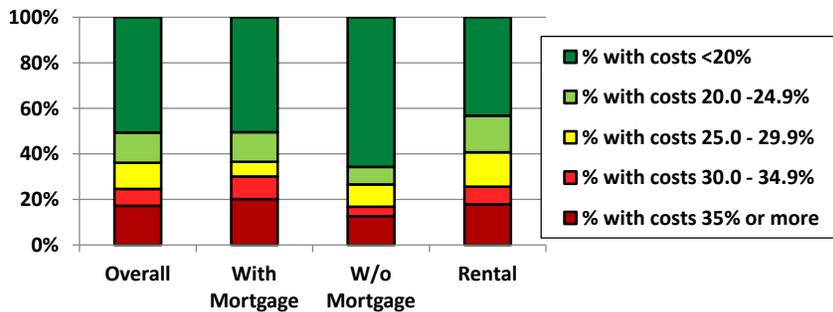


Figure R15: Number of Cost-Burdened Housing Units

