

Sitka City and Borough

2014 Alaska Housing Assessment



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Sitka City and Borough Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2012) population estimate for the Sitka City and Borough is 9,084–an increase of 3% from 2000.

Housing Units: There are currently 4,078 housing units in the Sitka City and Borough. Of these, 3,632 are occupied, 128 are for sale or rent, and the remaining 318 are seasonal or otherwise vacant units (Profile Figure C6).

Energy: The average home in the Sitka City and Borough is 1,546 square feet and uses 114,000 BTUs of energy per square foot annually, 17% 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 Sitka City and Borough is \$4,960, which is approximately 1.8 times more than the cost in Anchorage, and 2.3 times more than the national average (Profile Figure C13).

Energy Programs: Approximately 12% of occupied housing in the Sitka City and Borough has completed either the Home Energy Rebate, Weatherization, or BEES programs since 2008, compared to 21% statewide (Profile Figure C12).

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, compared to a current average rating of 3-star-plus for houses built after 2000.

Air-tightness: Within current housing stock, newer homes are tighter. On average, homes built in the last decade meet the 2009 BEES standard of 7 air-changes per hour at 50 pascals (ACH50). In contrast, homes built in the 1960s are 3 times leakier than those built since 2000 (Profile Figure C7).

Ventilation: An estimated 2,145 occupied housing units (or 59%) in the Sitka City and Borough 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 C9-C10).

Overcrowding: 4% of occupied units are estimated to be either overcrowded (2%) or severely overcrowded (2%). This is roughly similar to the national average, and makes the Sitka City and Borough the 21st most overcrowded census area in the state.

Affordability: On average, approximately 35% of households in the Sitka City and Borough spend more than 30% of total income on housing costs, which include rent, utilities, and energy costs. Based on average AKWarm estimates, annual energy costs constitute approximately 7% of census median area income for occupied housing.



Sitka City and Borough Summary

Community

The City and Borough of Sitka census area lies on the Southeast panhandle of Alaska, facing the Gulf of Alaska. It is in the Sealaska Native Corporation ANCSA region. Average homes in Sitka are 1,546 square feet in size.

Overcrowding

Sitka experiences roughly the same level of overcrowding as the United States as a whole, with 4% of housing units considered overcrowded (2%) or severely overcrowded (2%). Approximately 46% of occupied housing units are occupied by renters.

Energy

Only 12% of occupied homes in Sitka have completed an energy program, such as the Home Energy Rebate, Weatherization, or a BEES program. This is approximately half of the statewide average of 21%. Additionally, most building envelope components (such as floor, walls, ceilings, and windows) do not meet BEES on average. The exception is doors, which meet BEES standards on average for recently built homes.

Average tightness for homes built in the 1990s through 2004 nearly meets the 2012 BEES standard of 4 air changes per hour at 50 pascals (ACH50). Homes built since 2005 are leakier, with an average of ACH50 of more than twice the BEES standard. However, more than 75% of housing units built between 1980 and 2004 are relatively air-tight and lack continuous ventilation systems. These houses are at a higher risk of mold, rot, and indoor air quality issues. Of housing built before the 1990s, less than 10% of housing units have an HRV or other continuous ventilation system. In contrast, 46% of homes built since 2005 have some type of continuous ventilation system installed.

Affordability

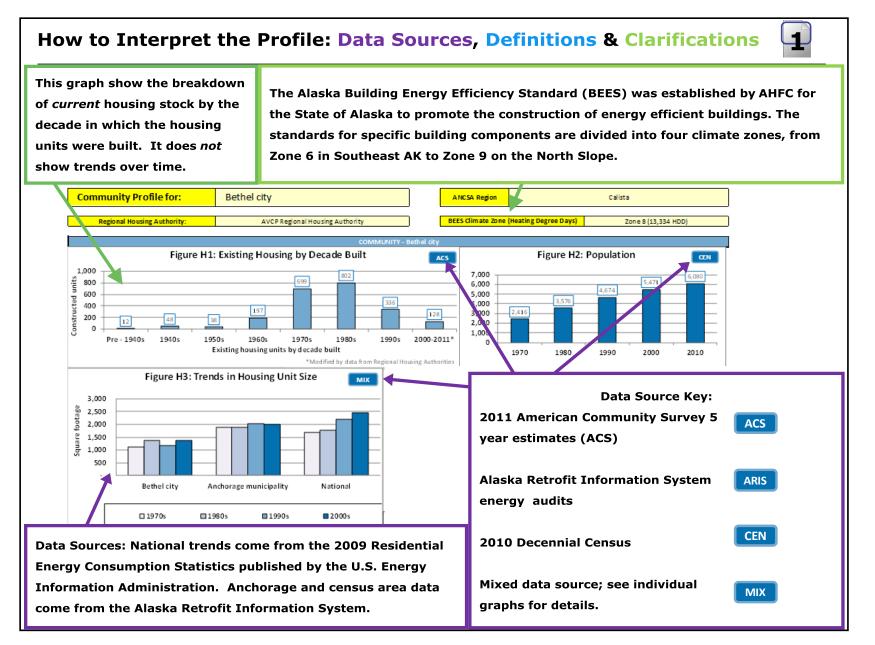
The Sitka census area is the third least affordable census area in Alaska, trailing only Anchorage and the Fairbanks North Star Borough with 35% of households spending 30% or more of household income on housing costs. Energy costs do not appear to be the main factor, as approximately 7% of household income is spent on energy, which is the fourth lowest rate among the 29 census areas in Alaska. One factor that may be contributing to the high percentage of cost-burdened households is the large number of renters in the census area (46% of occupied housing units are occupied by renters). Over half (57%) of renter households are cost-burdened, compared to 25% of households with a mortgage. Further, households that are renting have a median household income less than half that of households that own their homes.



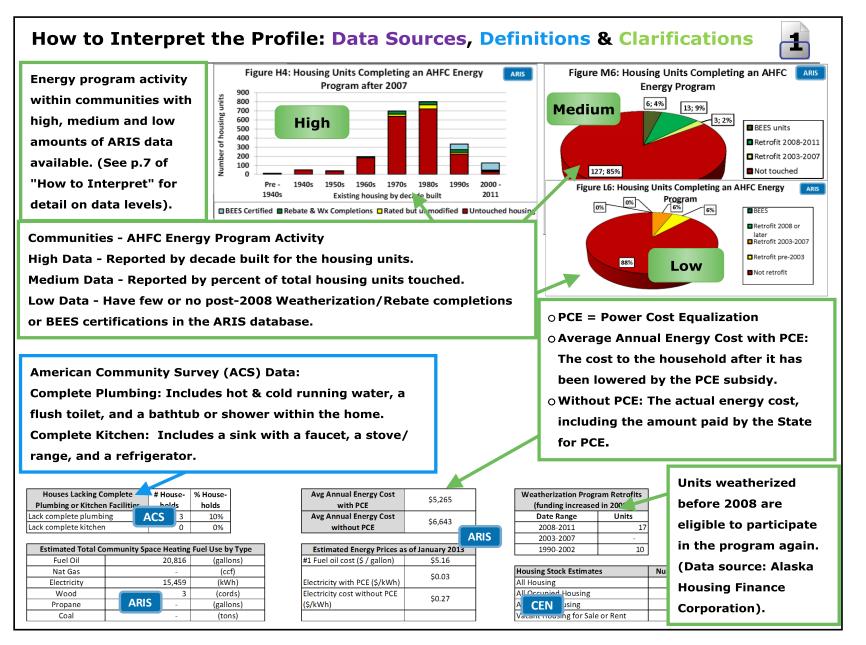
Community, Regional, and Statewide Housing Characteristics

This census area summary only includes the highlights of housing characteristics at the census area level. Detailed data profile with charts and tables for both the census area and for each of the communities within it follow. 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.



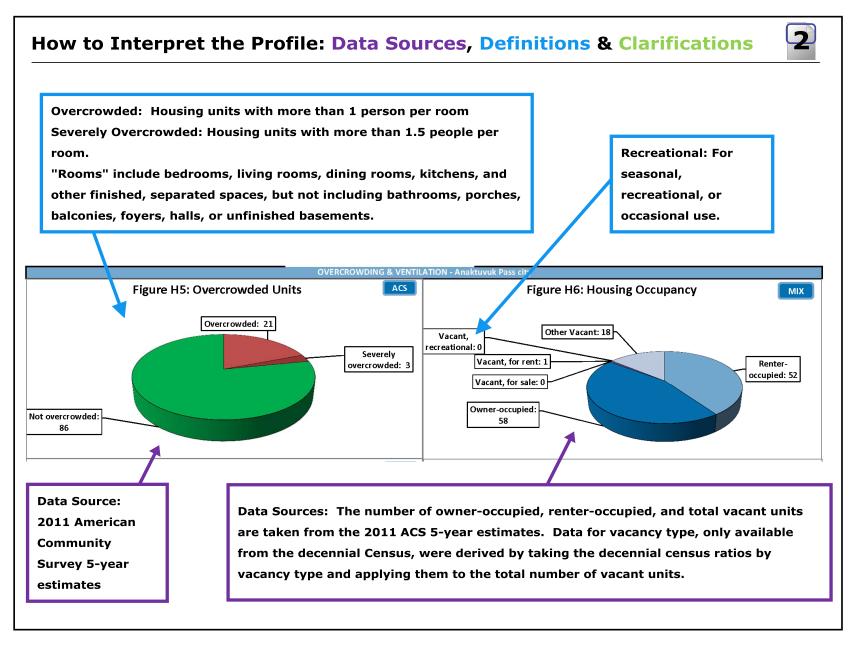






2014 Alaska Housing Assessment







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

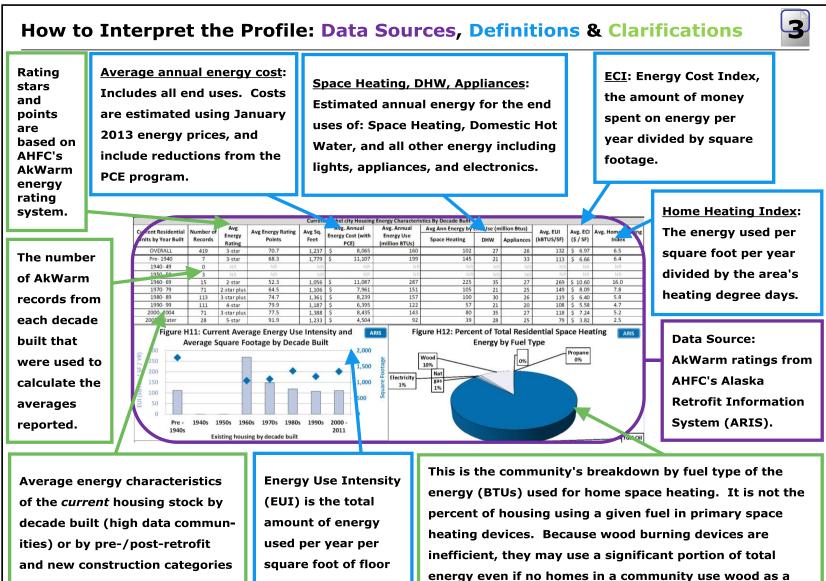
Heat Recovery: Continuous mechanical ventilation with heat recovery operated with automatic controls.

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 Figure H7: Average Tightness of Current Homes by Figure H8, xisting Ventilation Type by Decade Built **ARIS** blower door test to measure Decade Built 10.0 100% building air leakage. Smaller als 8.0 80% 6.0 60% numbers indicate tighter ACH @ 50 4.0 40% buildings. Tighter buildings 2.0 20% 0.0 0% lose less heated air to the 2000 - 2005 or Pre 1940s 1950s 1960s 1970s 1980s 1990s Pre -1940s 1950s 1960s 1970s 1980s 1990s 2000 - 2005 or 1940 2004 later 1940s 2004 outside and thus use less Existing housing by decade built Existing housing by decade built % Heat recovery % Non-continuous Air-tightness (ACH50) 2012 BEES Requirement % Continuous energy for space heating. Figure H9: Percent of Housing Stock at High Risk of ARIS Figure H10: Quantity of Housing Stock at High Risk of ARIS Moisture and Air Quality Problems Moisture and Air Quality Problems 450 100% 400 # Units at High Risk 80% 350 The 2012 Building Energy 300 60% 250 **Efficiency Standard** 40% 200 150 (BEES) for air-tightness is 20% 100 50 0% for reference only, as it 194 1950s 1960s 1970s 1980s 1990s 2000 - 2005 or Pre -1940s 1950s 1970s 1980s 1990s 2000 -2004 later Pre -194 Js 1960s Existing housing by decade built was implemented after 1940s 2011 8 High Risk Existing housing by decade built % Low Risk the majority of homes in Alaska were built. Decades with no bar High Risk of Moisture and Air Quality Problems: Note lack sufficient data that moisture or poor indoor air quality have not been Data Source: for reporting. They physically measured; these houses are considered Alaska Retrofit should not be "at-risk" because they are relatively air tight (less Information considered zero than 0.5 estimated natural air changes per hour) and System quantities. do not have a continuous ventilation system.





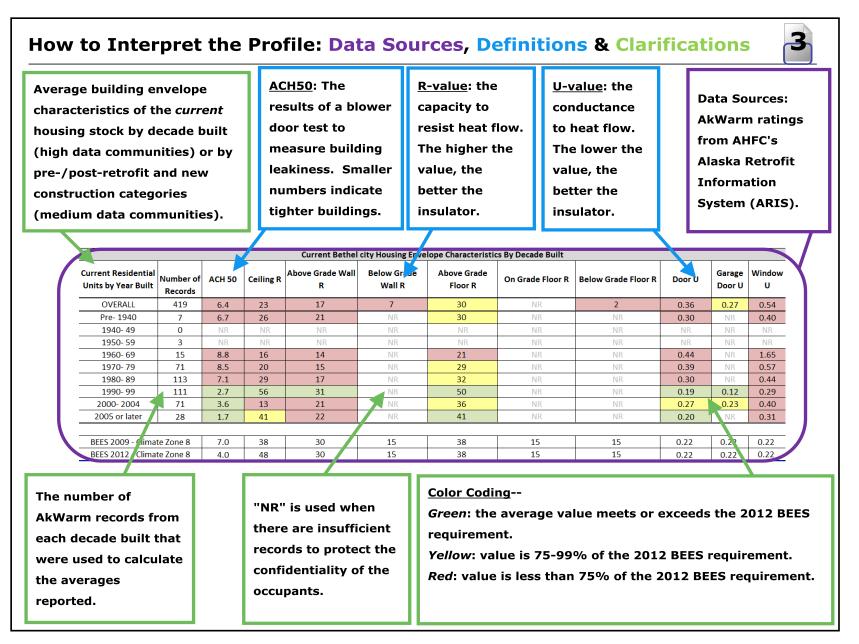
primary fuel.

How To Interpret the Profile

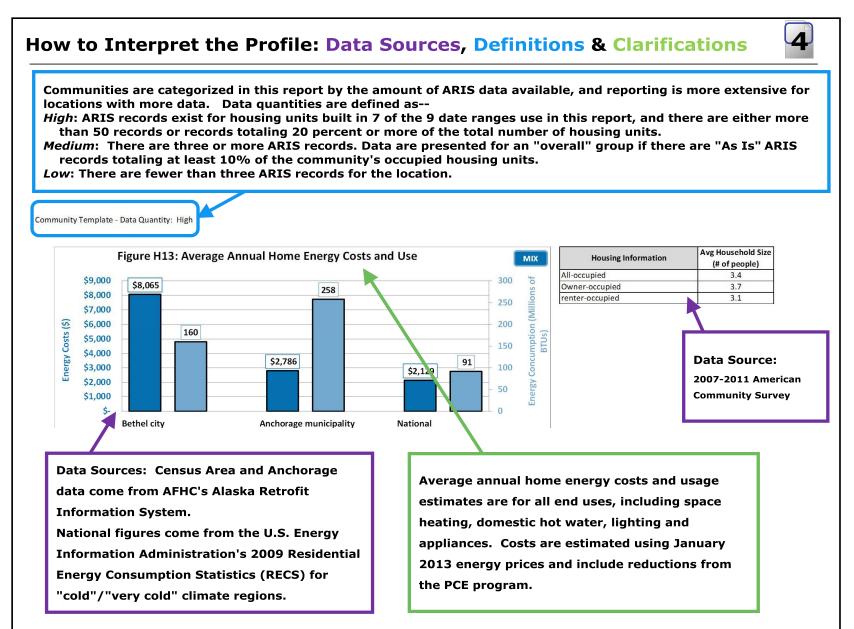
(medium data communities).

space.

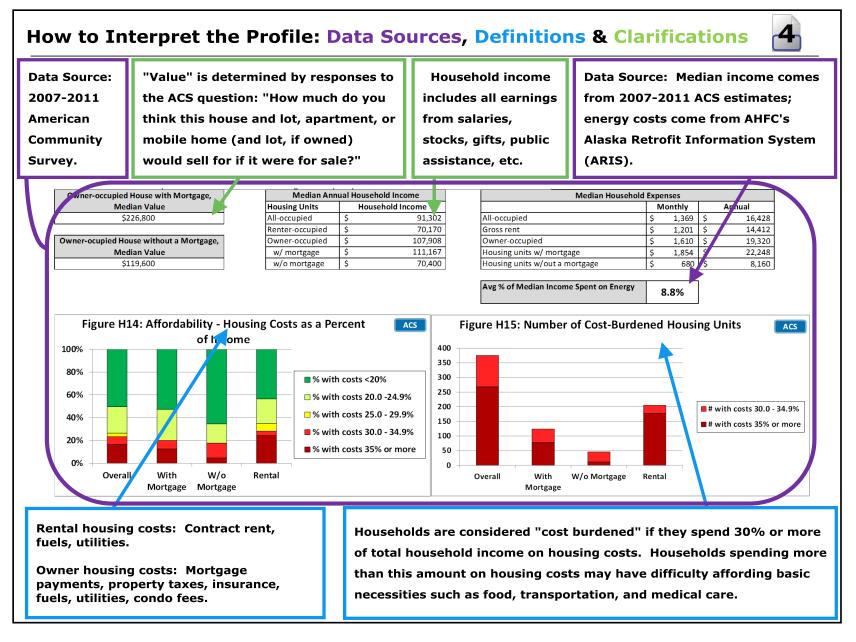


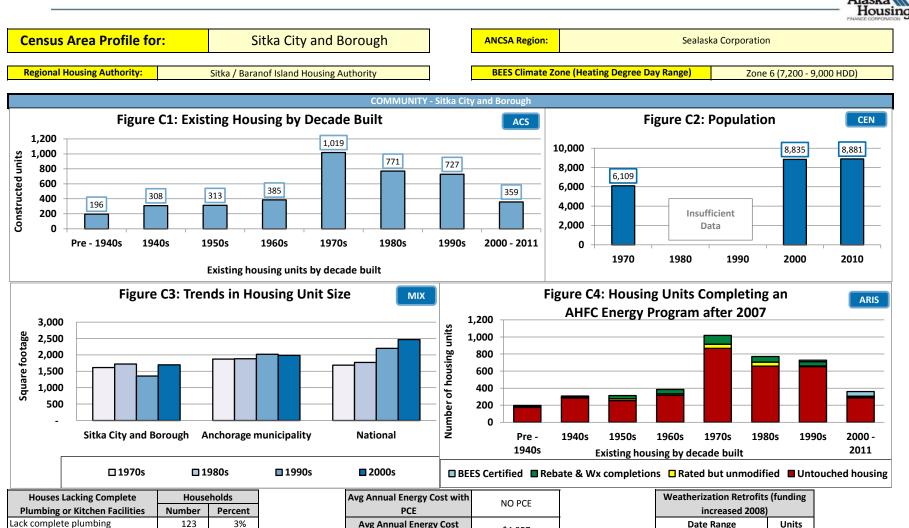












Estimated Total Annual Community Space Heating Fuel Use									
Fuel Oil	2,404,366	(gallons)							
Natural Gas	-	(ccf)							
Electricity	17,572,677	(kWh)							
Wood	2,087	(cords)							
Propane	38,723	(gallons)							
Coal	-	(tons)							

47

1%

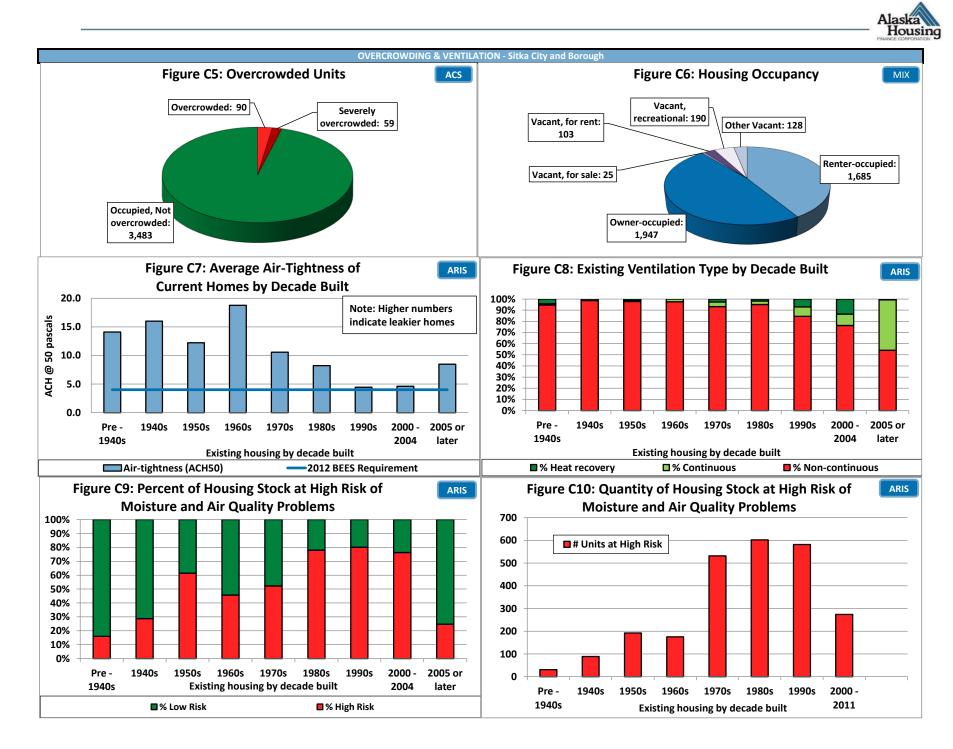
Avg Annual Energy Cost with PCE	NO PCE
Avg Annual Energy Cost	\$4.957
without PCE	φ-,557

Housing Need Indicators	Number of Units	% Occupied Housing
Overcrowded	149	4%
Housing cost burdened	1,162	32%
1 Star Homes	710	20%

Weatherization Retrofits (funding								
increased 2008)								
Units	Date Range							
234	2008 -2011							
29	2003-2007							
61	1990-2002							

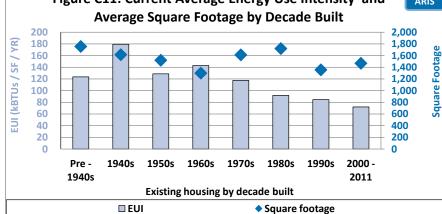
Housing Stock Estimates	Number of Units
All Housing	4,078
All Occupied Housing	3,632
All Vacant housing	446
Vacant Housing for Sale or Rent	128

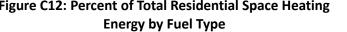
Lack complete kitchen

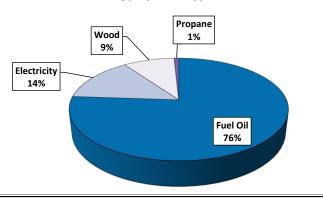




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Current Sitka City and Borough Housing Energy Characteristics By Decade Built												
Current Residential Jnits by Year Built	# of AkWarm Records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Annual Energy Cost	Avg. Annual Energy Use (million BTUs)	Avg Ann Energy by Space Heating	End Use (m DHW	illion Btus) Appliances	Avg. EUI (kBTUS /SF)	Avg. ECI (\$ / SF)	Avg. Home Heating Index
OVERALL	698	2-star	58.4	1,546	\$4,957	163	108	25	29	114	\$3.51	10.1
Pre- 1940	39	1-star plus	43.7	1,756	\$6,751	216	162	23	31	124	\$3.82	12.0
1940- 49	37	1-star	34.2	1,615	\$7,863	263	201	31	30	179	\$5.45	18.0
1950- 59	99	1-star plus	49.1	1,520	\$5,346	181	129	23	29	129	\$3.88	11.9
1960- 69	118	1-star plus	45.8	1,299	\$5,492	175	129	20	27	143	\$4.52	13.5
1970- 79	256	2-star	55.4	1,612	\$5,468	180	127	24	28	118	\$3.64	10.6
1980-89	175	2-star plus	64.5	1,720	\$4,351	152	98	24	30	92	\$2.65	7.8
1990- 99	123	3-star	72.1	1,355	\$3,534	110	57	26	24	84	\$2.74	5.6
2000- 2004	51	4-star	78.9	1,695	\$3,743	119	70	20	29	70	\$2.26	5.3
2005 or later	36	3-star plus	74.1	1,146	\$2,564	81	42	16	24	75	\$2.32	5.3

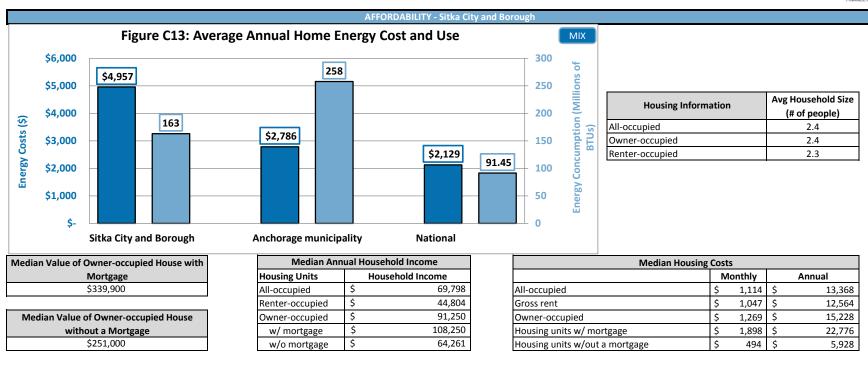


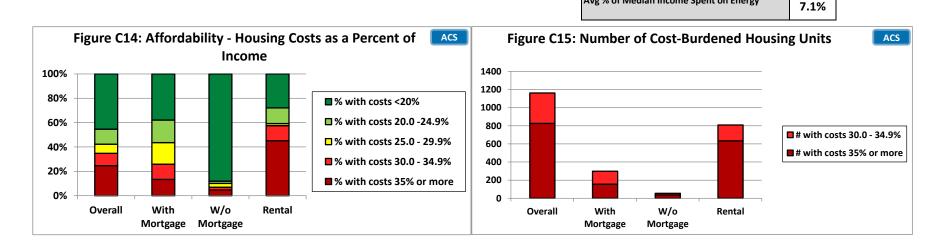




Current Sitka City and Borough Housing Envelope Characteristics By Decade Built												
Current Residential Units by Year Built	# of AkWarm Records	ACH 50	Ceiling R	Above Grade Wall R	Below Grade Wall R	Above Grade Floor R	On Grade Floor R	Below Grade Floor R	Door U	Garage Door U	Window U	
OVERALL	698	10.9	16	10	2	15	3	3	0.39	0.41	0.57	
Pre- 1940	39	14.1	9	9	2	13	2	2	0.39	NR	0.59	
1940- 49	37	16.0	9	4	NR	12	NR	NR	0.40	NR	0.69	
1950- 59	99	12.2	14	8	2	14	3	3	0.42	NR	0.63	
1960- 69	118	18.8	14	9	2	15	3	2	0.46	0.47	0.65	
1970- 79	256	10.6	16	10	2	16	3	4	0.38	0.50	0.60	
1980- 89	175	8.2	18	12	2	18	3	2	0.40	0.48	0.53	
1990- 99	123	4.4	28	17	4	13	4	3	0.33	0.25	0.43	
2000- 2004	51	4.6	22	17	7	33	3	NR	0.28	NR	0.42	
2005 or later	36	8.5	32	17	2	30	3	NR	0.30	0.20	0.40	
BEES 2009 - Climat	e Zone 6	7.0	38	21	15	30	15	15	0.33	0.33	0.33	
BEES 2012 - Climat	e Zone 6	4.0	43	25	15	38	15	15	0.30	0.30	0.30	

Alaska Housing





Avg % of Median Income Spent on Energy

Sitka City and Borough