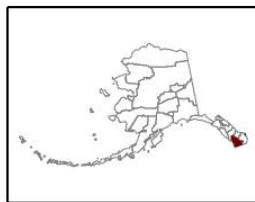
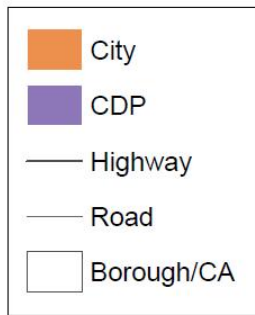


Prince of Wales-Hyder Census Area



Map Prepared by:
Alaska Department of Labor
& Workforce Development

September 2011

Source: US Census
2010 TIGERline

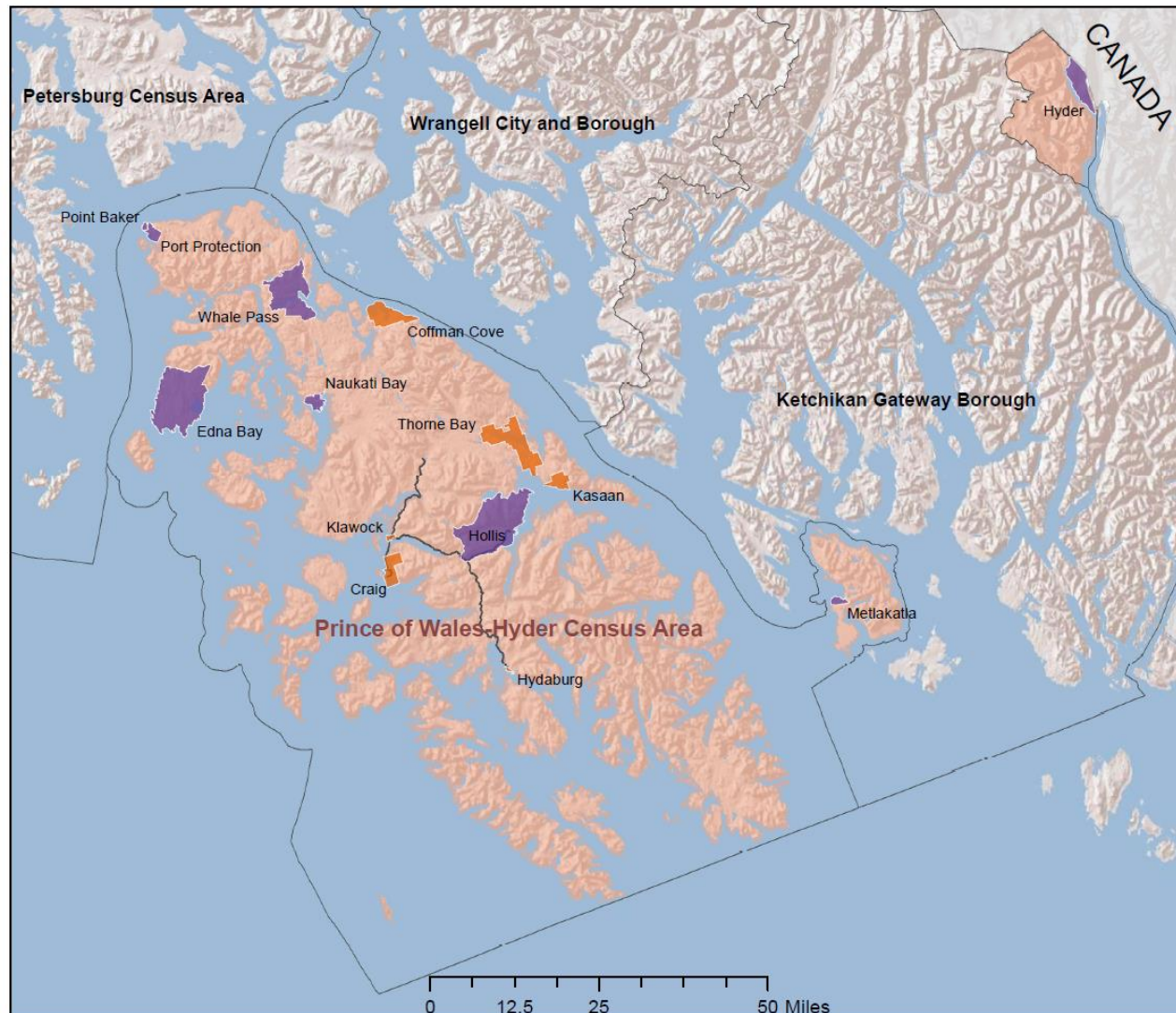


Table of Contents

Prince of Wales-Hyder Census Area Dashboard	III
Prince of Wales-Hyder Census Area Summary.....	IV-VII
Community.....	IV
Overcrowding.....	IV
Energy	V
Affordability	VI
Community, Regional, and Statewide Housing Characteristics.....	VII
How to Interpret the Profile: Data Sources, Definitions & Clarifications.....	A-H
Prince of Wales-Hyder Census Area Profile.....	1-4
Prince of Wales-Hyder Community Profiles	5-30
Coffman Cove Data Quantity: Medium	5
Craig Data Quantity: Medium	7
Edna Bay Data Quantity: Low	9
Hollis Data Quantity: Medium	10
Hydaburg Data Quantity: High	12
Hyder Data Quantity: Low	16
Kasaan Data Quantity: Low	17
Klawock Data Quantity: High	18
Metlakatla Data Quantity: Medium	22

Naukati Bay	Data Quantity: Medium	24
Point Baker	Data Quantity: Low	26
Port Protection	Data Quantity: Low	27
Thorne Bay	Data Quantity: Medium	28
Whale Pass	Data Quantity: Low	30

Prince of Wales-Hyder Census Area Dashboard

Population: The Alaska Department of Labor and Workforce Development's current (2012) population estimate for the Prince of Wales-Hyder Census Area is 5,771—a decrease of 6% from 2000.

Housing Units: There are currently 2,996 housing units in the Prince of Wales-Hyder Census Area. Of these, 2,351 are occupied, 106 are for sale or rent, and the remaining 539 are seasonal or otherwise vacant units (Profile Figure C6).

Energy: The average home in the Prince of Wales-Hyder Census Area is 1,219 square feet and uses 127,000 BTUs of energy per square foot annually, 7% 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 Prince of Wales-Hyder Census Area is \$4,500, which is approximately 1.6 times more than the cost in Anchorage, and 2.1 times more than the national average (Profile Figure C13).

Energy Programs: Approximately 17% of occupied housing in the Prince of Wales-Hyder Census Area 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 1950s 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 relatively tighter. On average, homes built in the last decade do not meet the 2009 BEES standard of 7 air-changes per hour at 50 pascals (ACH50). However, homes built in the 1950s are 2.7 times leakier than those built since 2000 (Profile Figure C7).

Ventilation: An estimated 492 occupied housing units (or 21%) in the Prince of Wales-Hyder Census Area 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: 7.4% of occupied units are estimated to be either overcrowded (4.6%) or severely overcrowded (2.8%). This is roughly 2 times the national average, and makes the Prince of Wales-Hyder Census Area the 14th most overcrowded census area in the state.

Affordability: On average, approximately 21% of households in the Prince of Wales-Hyder Census Area 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 10% of census median area income for occupied housing.

Prince of Wales-Hyder Census Area Summary

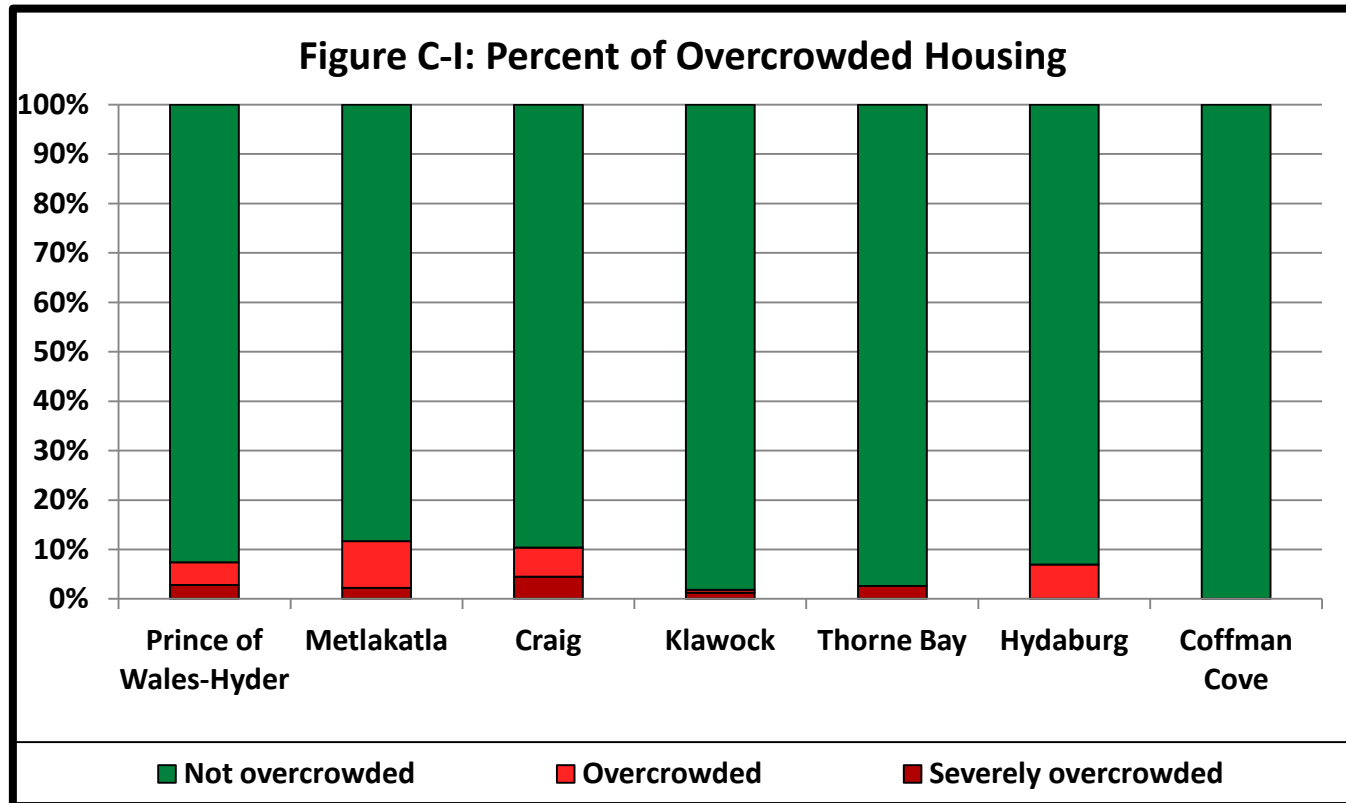
Community

The Prince of Wales-Hyder census area is located near the southern end of the Southeast panhandle of Alaska. It is in the Sealaska Native Corporation ANSCA region. Average home sizes in the census area range from 1,085 square feet in the community of Klawock to 1,250 square feet in Hydaburg.

Overcrowding

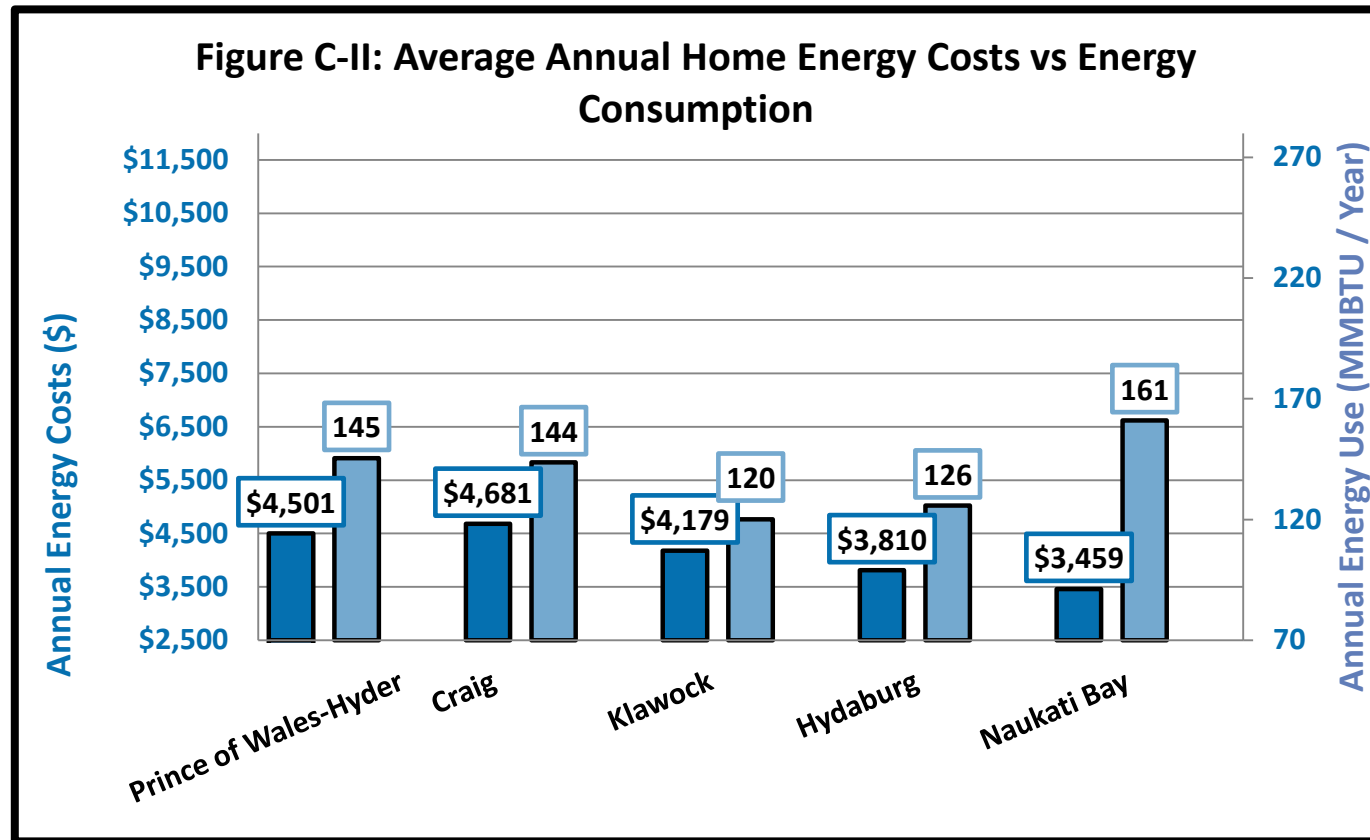
Prince of Wales-Hyder census area has 7% of households with more than one person per room. In the six most populous communities, between 0% and 12% of households are considered overcrowded (Figure C-1). Coffman Cove has the least amount of overcrowding, with approximately zero overcrowded households. Hollis has the highest percentage of overcrowded households, with 1 in 4 households having more than one person per room.

Approximately 4% of housing in the census area is available for sale or rent, though availability varies by community. Naukati Bay has an estimated no homes for sale or rent, as opposed to Coffman Cove, where 12% of housing is available.



Energy

Average annual energy use in the census area is 145 million BTUs per year, the 6th lowest energy use in the state. Communities in the census area with sufficient data for analysis have fairly similar energy characteristics, with relatively little variance in home heating indices, annual energy use, and annual energy costs. Nonetheless, the highest annual energy costs are found in Craig, where residents pay an average of \$4,681 per year. The lowest average annual energy cost is \$3,810 in Naukati Bay. Craig also

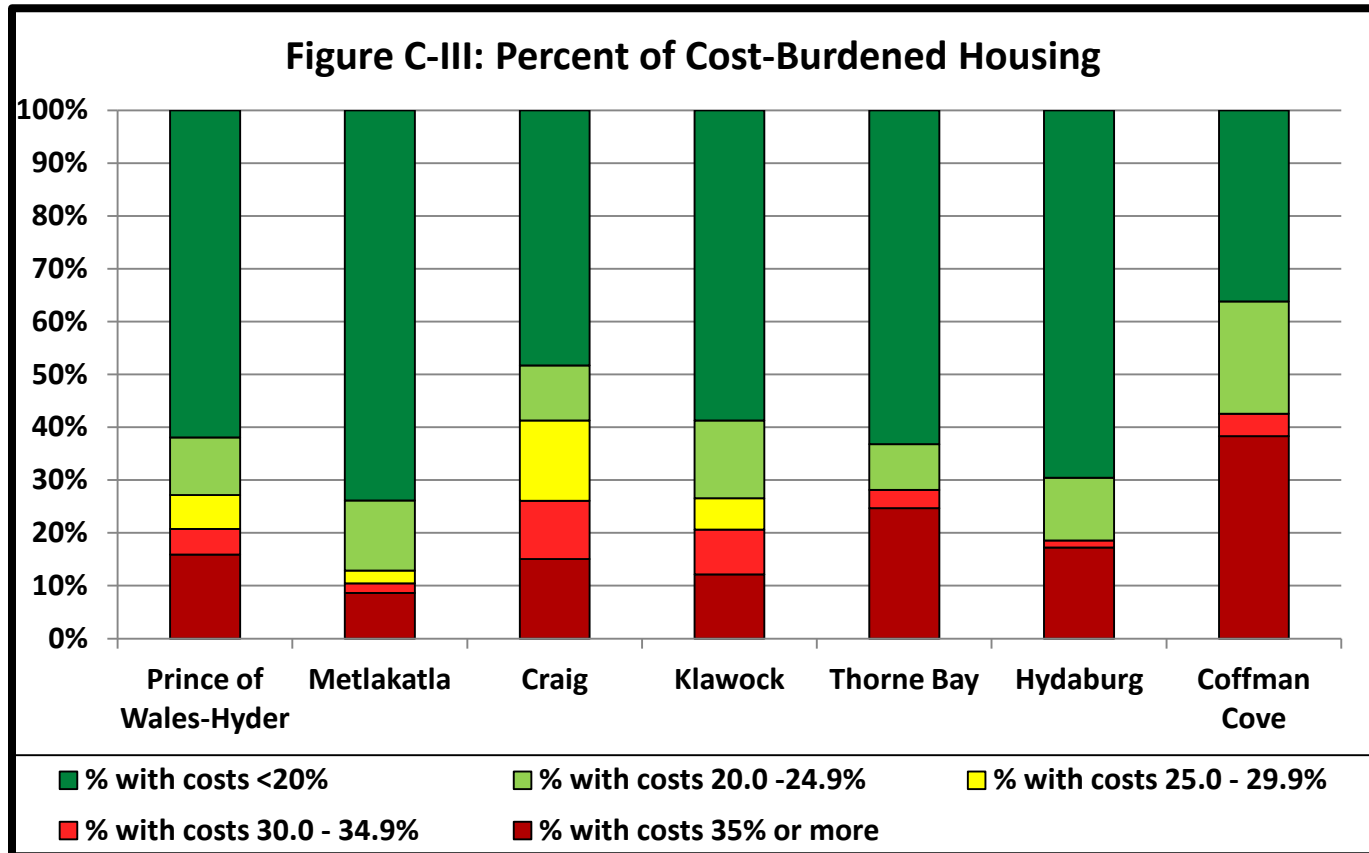


has the highest home heating index, 11.8 BTUs/ft²/HDD, and the lowest average home heating index is found in Hydaburg at 8.6 BTUs/ft²/HDD.

Approximately 19% of housing units in the census area have participated in the Weatherization, Home Energy Rebate, or a BEES program since 2003. The community of Hyder has had the lowest participation, with only 2% of households completing one of the programs. The greatest participation occurred in Hydaburg, where 41% of homes have completed one of the programs. The six most populous communities have had participation rates ranging from 8% to 41%.

Affordability

According to ACS estimates¹, between zero and 71% of households in the census area are considered cost-burdened. The most affordable community is Kasaan, with approximately zero households spending more than 30% of household income on housing costs. Hollis has the highest percentage of cost-burdened households at 71%. In the six most populous communities of the census area, between 10% and 43% of households are cost-burdened (Figure C-III). Of these, Coffman Cove is



the least affordable, with approximately 40% of households considered cost-burdened. Residents of Coffman Cove earn the lowest median household income in the census area at \$24,250. The six most populous communities have median incomes ranging from the \$24,250 in Craig to \$58,164. The highest income in the census area is found in Naukati Bay, \$122,546.

¹ CCHRC's analysis of ACS energy costs indicate that there are systematic underestimations for rural Alaska, which suggests that ACS-based cost burdened housing estimates are low. See Appendix A, "Analysis of American Community Survey Energy Cost Estimates" for more details.

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.

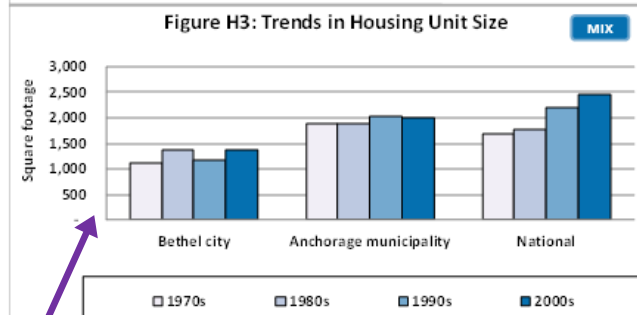
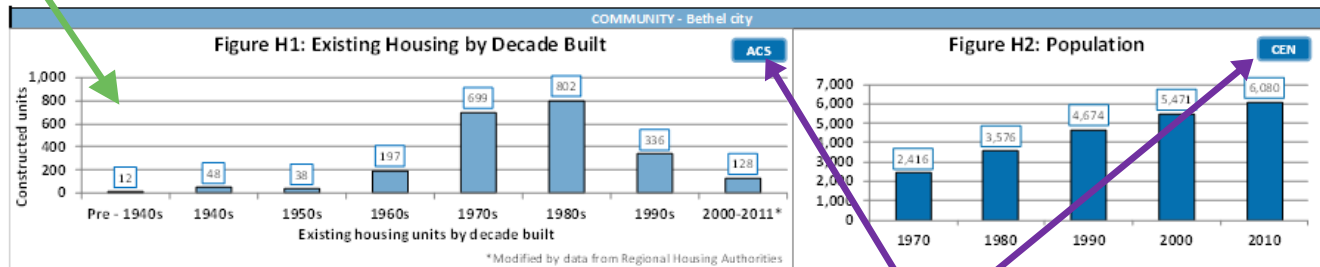
How to Interpret the Profile: Data Sources, Definitions & Clarifications

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:

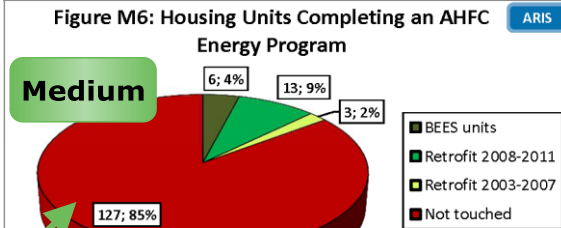
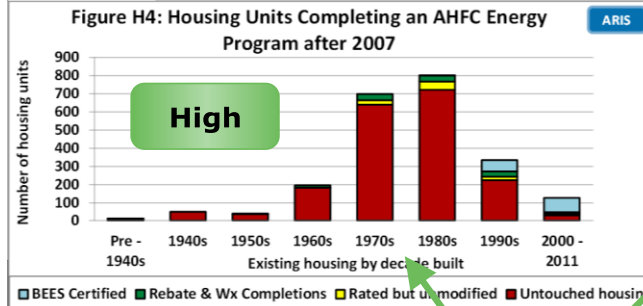
- 2011 American Community Survey 5 year estimates (ACS) **ACS**
- Alaska Retrofit Information System energy audits **ARIS**
- 2010 Decennial Census **CEN**
- Mixed data source; see individual graphs for details. **MIX**

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.

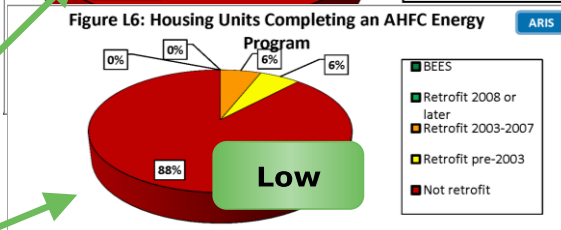
How to Interpret the Profile: Data Sources, Definitions & Clarifications

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.



- 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.

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.

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	

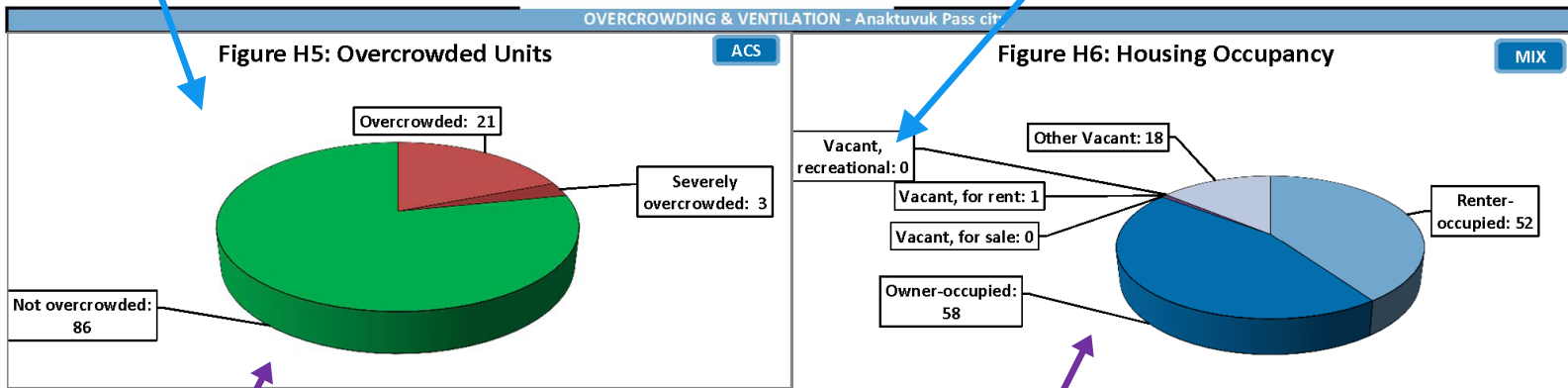
Units weatherized before 2008 are eligible to participate in the program again. (Data source: Alaska Housing Finance Corporation).

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.

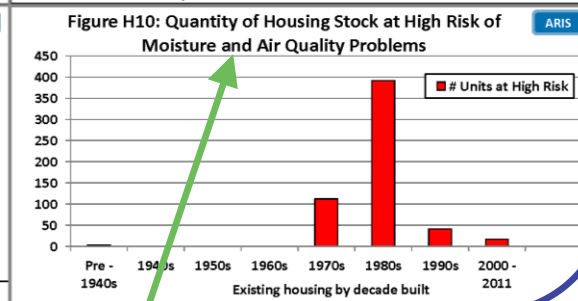
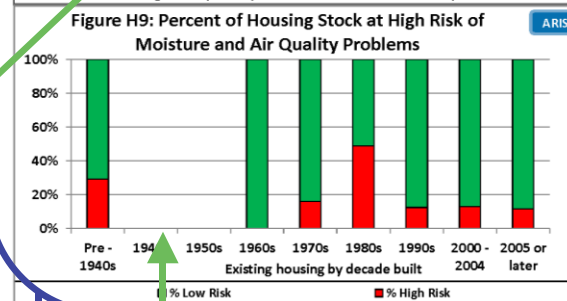
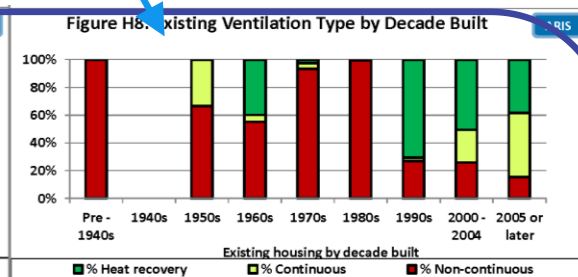
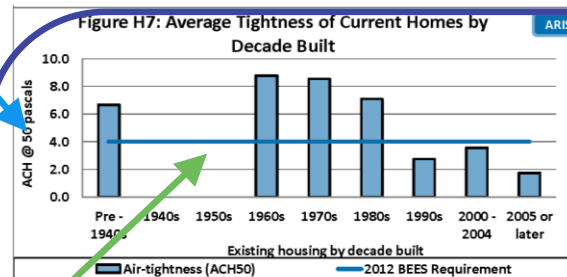
Continuous: Mechanical ventilation without heat recovery operated with automatic controls.

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

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.

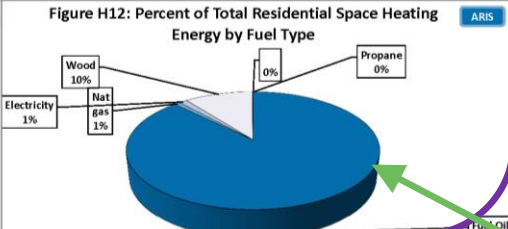
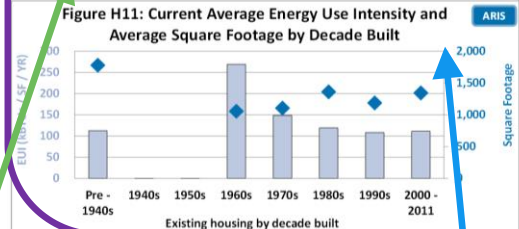
Space Heating, DHW, Appliances:
Estimated annual energy for the end uses of: Space Heating, Domestic Hot Water, and all other energy including lights, appliances, and electronics.

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

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

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



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--

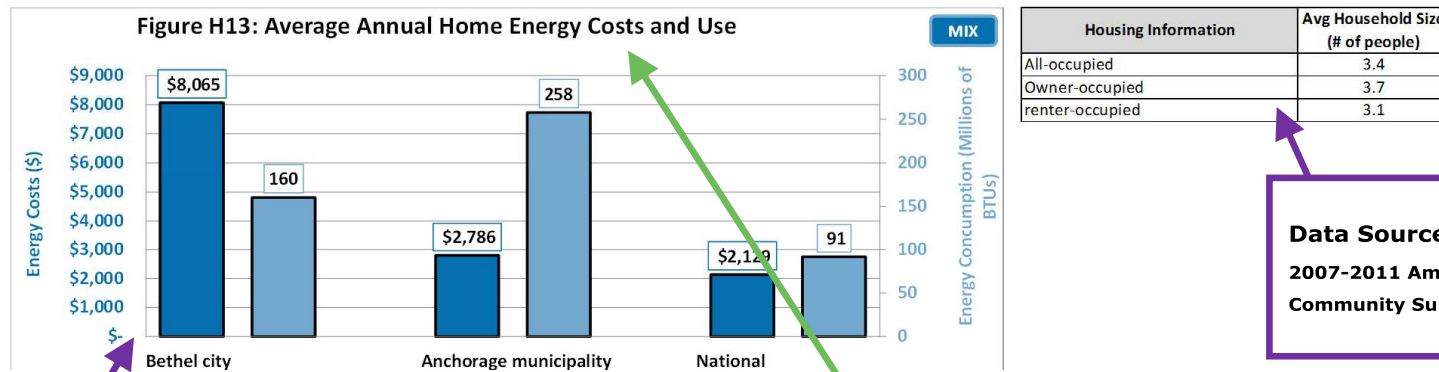
Green: the average value meets or exceeds the 2012 BEES requirement.
Yellow: value is 75-99% of the 2012 BEES requirement.
Red: value is less than 75% of the 2012 BEES requirement.

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%	

Figure H14: Affordability - Housing Costs as a Percent of Income

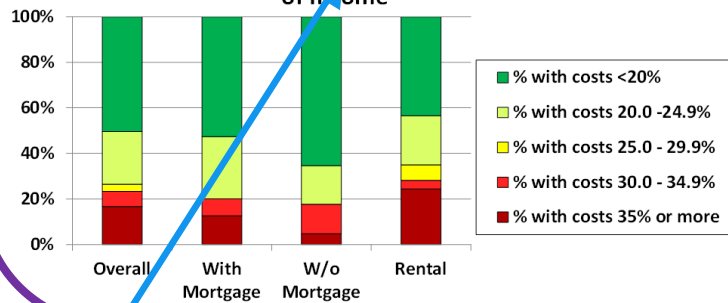
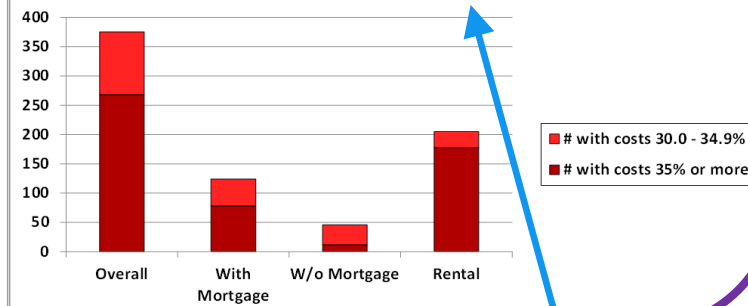


Figure H15: Number of Cost-Burdened Housing Units



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.

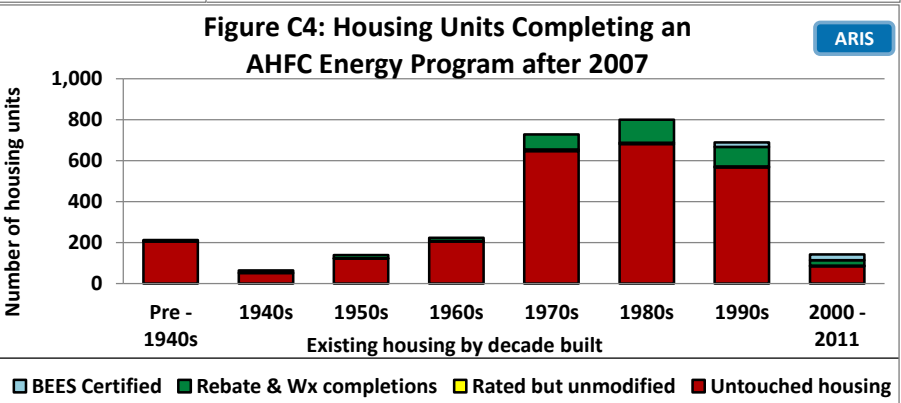
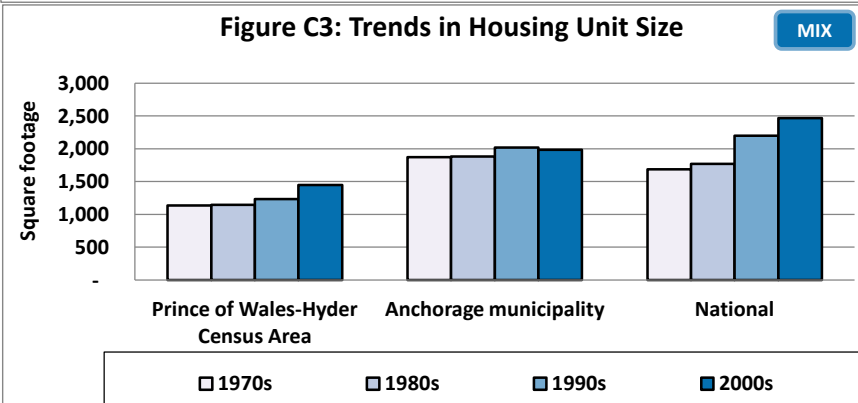
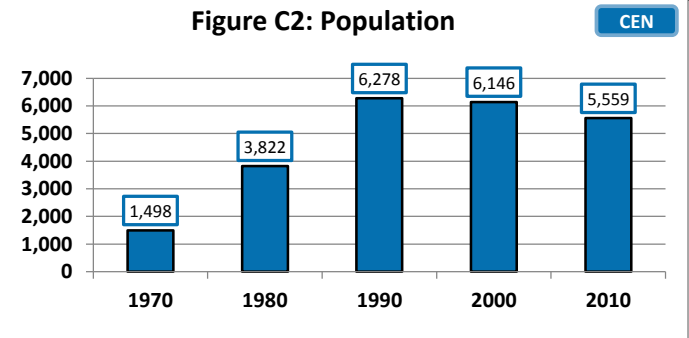
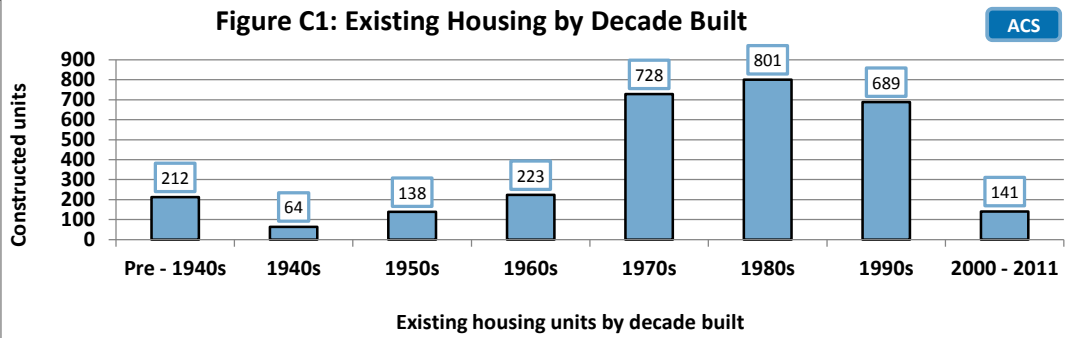
Census Area Profile for: Prince of Wales-Hyder Census Area

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Day Range): Zone 6 (7,200 - 9,000 HDD)

COMMUNITY - Prince of Wales-Hyder Census Area



Houses Lacking Complete Plumbing or Kitchen Facilities	Households	
	Number	Percent
Lack complete plumbing	146	6%
Lack complete kitchen	158	7%

Avg Annual Energy Cost with PCE	\$4,501
Avg Annual Energy Cost without PCE	\$4,971

Weatherization Retrofits (funding increased 2008)	
Date Range	Units
2008 - 2011	331
2003 - 2007	44
1990 - 2002	331

Estimated Total Annual Community Space Heating Fuel Use		
Fuel Oil	1,139,373	(gallons)
Natural Gas	-	(ccf)
Electricity	2,644,610	(kWh)
Wood	3,604	(cords)
Propane	82,395	(gallons)
Coal	-	(tons)

Housing Need Indicators	Number of Units	% Occupied Housing
Overcrowded	174	7%
Housing cost burdened	456	19%
1 Star Homes	841	36%

Housing Stock Estimates	Number of Units
All Housing	2,996
All Occupied Housing	2,351
All Vacant housing	645
Vacant Housing for Sale or Rent	106

OVERCROWDING & VENTILATION - Prince of Wales-Hyder Census Area

Figure C5: Overcrowded Units

ACS

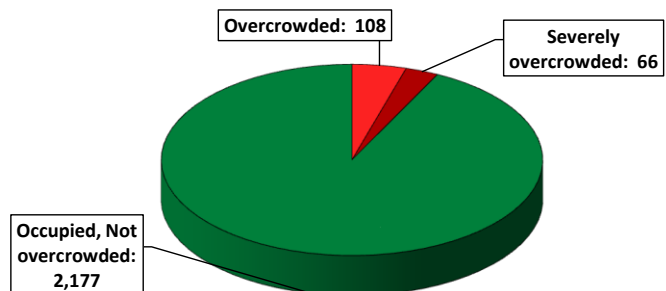


Figure C6: Housing Occupancy

MIX

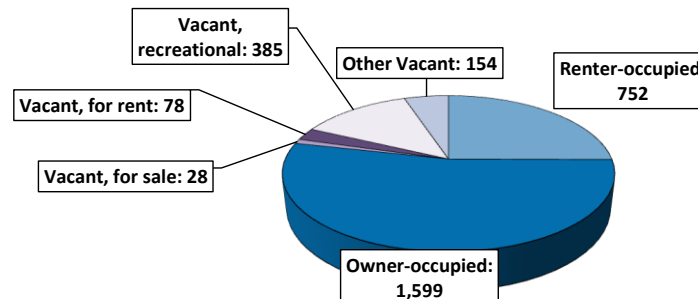


Figure C7: Average Air-Tightness of Current Homes by Decade Built

ARIS

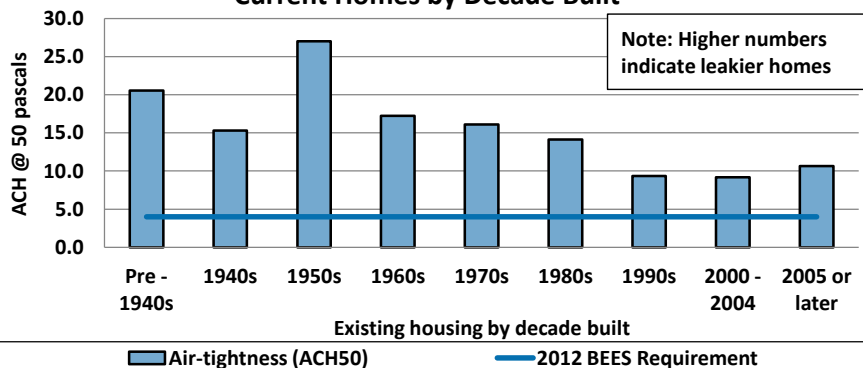


Figure C8: Existing Ventilation Type by Decade Built

ARIS

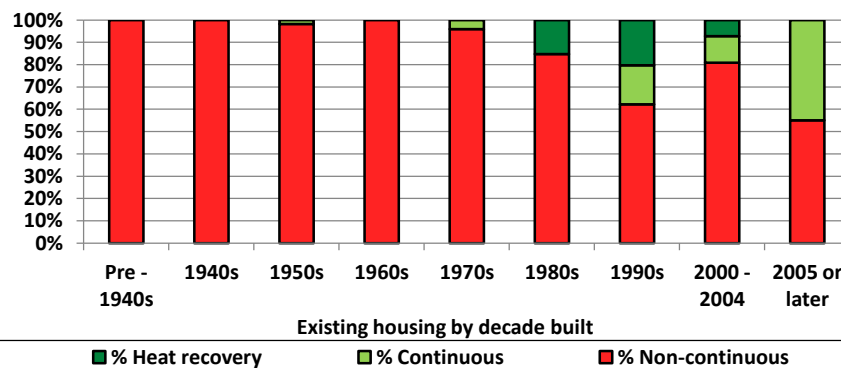


Figure C9: Percent of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS

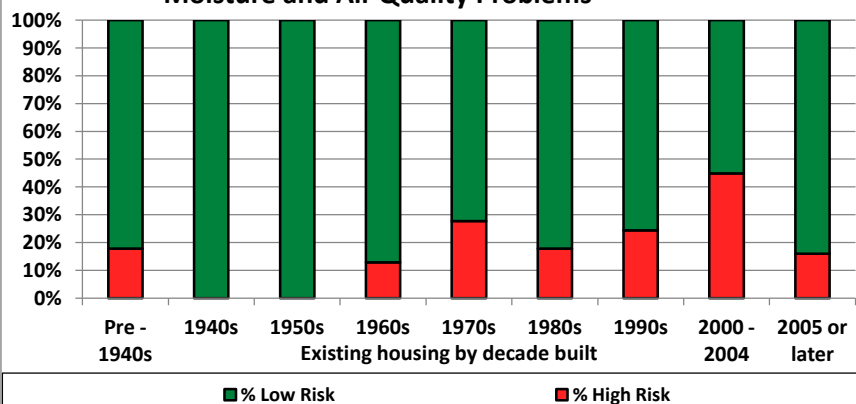
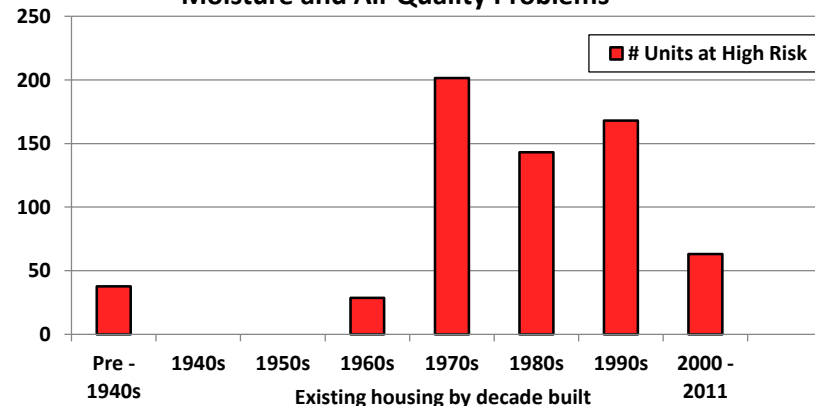


Figure C10: Quantity of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS



ENERGY - Prince of Wales-Hyder Census Area												
Current Prince of Wales-Hyder Census Area 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 Ann Energy by End Use (million Btus)			Avg. EUI (kBtUs / SF)	Avg. ECI (\$ / SF)	Avg. Home Heating Index
							Space Heating	DHW	Appliances			
OVERALL	460	2-star	53.8	1,219	\$4,501	145	91	26	27	127	\$4.07	11.3
Pre- 1940	10	1-star	35.0	1,600	\$6,056	225	187	12	27	146	\$4.24	16.4
1940- 49	22	1-star	37.4	1,171	\$4,349	182	132	22	28	153	\$3.88	15.5
1950- 59	29	1-star	25.7	1,119	\$5,565	206	158	20	29	224	\$6.55	23.7
1960- 69	37	1-star	38.6	1,293	\$4,788	170	128	17	25	147	\$4.37	14.9
1970- 79	171	2-star	52.7	1,135	\$4,712	137	84	27	26	131	\$4.54	11.3
1980- 89	256	2-star	55.5	1,144	\$4,198	135	83	26	25	132	\$4.03	11.7
1990- 99	184	2-star plus	66.7	1,234	\$3,934	124	64	29	26	102	\$3.31	8.0
2000- 2004	43	3-star	72.9	1,448	\$3,942	132	81	26	25	96	\$2.74	8.1
2005 or later	40	3-star plus	73.5	1,406	\$4,475	108	58	21	28	94	\$4.16	7.3

Figure C11: Current Average Energy Use Intensity and Average Square Footage by Decade Built

ARIS

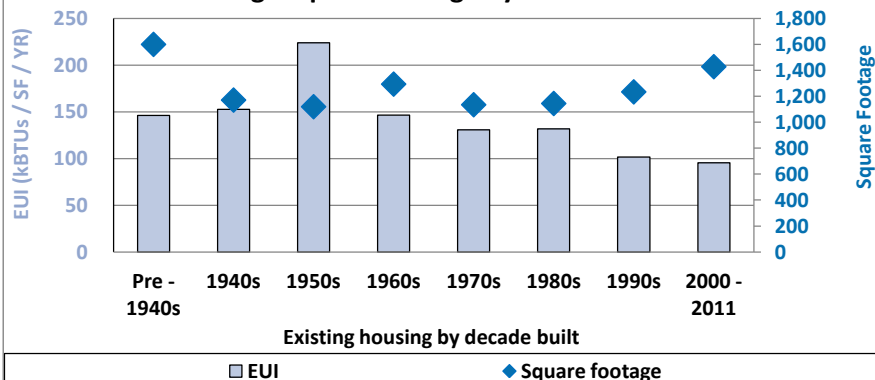
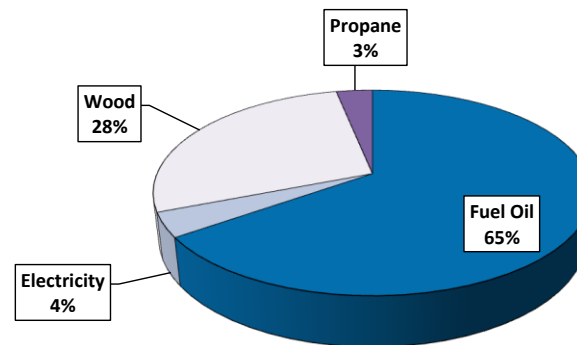


Figure C12: Percent of Total Residential Space Heating Energy by Fuel Type

ARIS

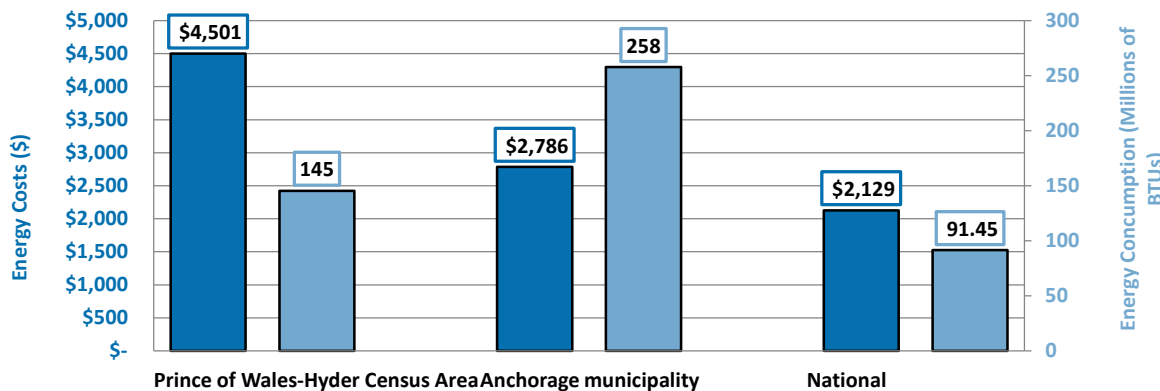


Current Prince of Wales-Hyder Census Area Housing Envelope Characteristics By Decade Built											
Current Residential Units by Year Built	# of AkWarm Records	ACH 50	Ceiling R	Above Grade Wall R	Below Grade Wall R	Above Grade Floor R	On Grade Floor R	Below Grade Floor R	Door U	Garage Door U	Window U
OVERALL	460	14.1	19	10	3	20	2	2	0.41	0.20	0.66
Pre- 1940	10	20.5	9	10	NR	9	NR	NR	0.59	NR	0.69
1940- 49	22	15.3	9	7	NR	9	NR	NR	0.25	NR	0.57
1950- 59	29	27.0	10	7	NR	14	NR	NR	0.43	NR	0.76
1960- 69	37	17.2	10	9	NR	16	NR	NR	0.50	NR	0.79
1970- 79	171	16.1	21	9	3	20	NR	NR	0.40	NR	0.73
1980- 89	256	14.1	22	11	6	22	NR	NR	0.45	NR	0.67
1990- 99	184	9.3	21	12	3	24	3	NR	0.35	0.19	0.56
2000- 2004	43	9.2	27	11	NR	23	NR	NR	0.34	NR	0.51
2005 or later	40	10.6	21	11	4	23	3	NR	0.26	0.25	0.42

BEES 2009 - Climate Zone 6	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012 - Climate Zone 6	4.0	43	25	15	38	15	15	0.30	0.30	0.30

AFFORDABILITY - Prince of Wales-Hyder Census Area

Figure C13: Average Annual Home Energy Cost and Use



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

Median Value of Owner-occupied House with Mortgage
\$175,400

Median Value of Owner-occupied House without a Mortgage
\$113,600

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 45,513
Renter-occupied	\$ 39,643
Owner-occupied	\$ 48,542
w/ mortgage	\$ 69,625
w/o mortgage	\$ 42,222

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 565	\$ 6,780
Gross rent	\$ 638	\$ 7,656
Owner-occupied	\$ 490	\$ 5,880
Housing units w/ mortgage	\$ 1,284	\$ 15,408
Housing units w/out a mortgage	\$ 332	\$ 3,984

Avg % of Median Income Spent on Energy: 9.9%

Figure C14: Affordability - Housing Costs as a Percent of Income

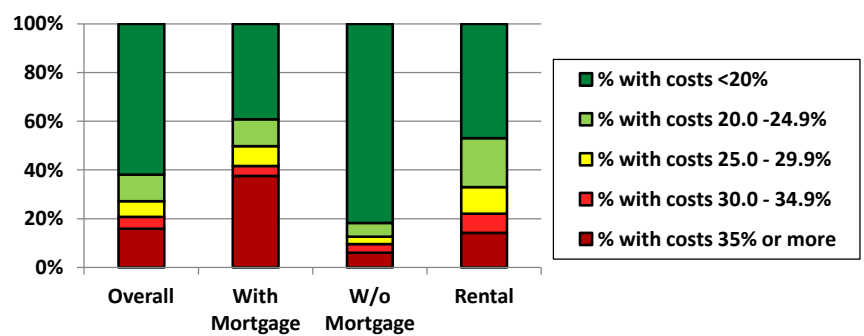
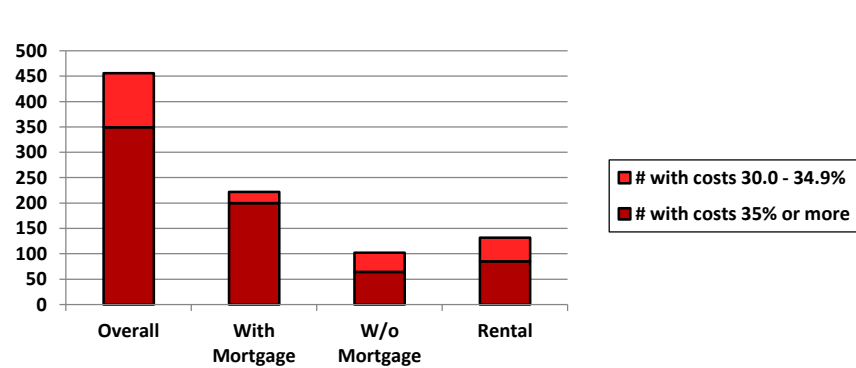


Figure C15: Number of Cost-Burdened Housing Units

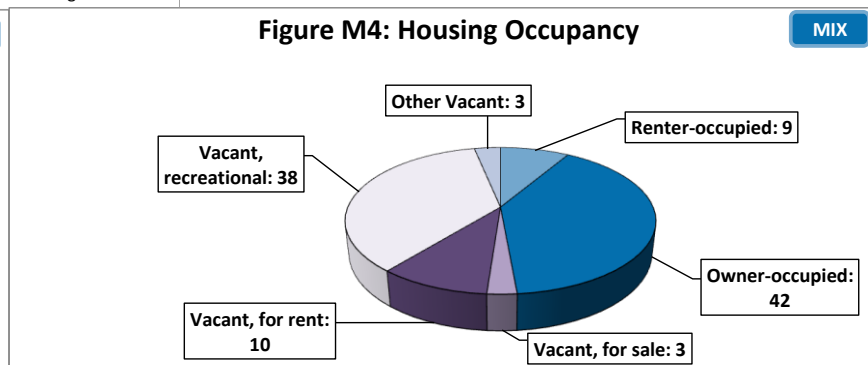
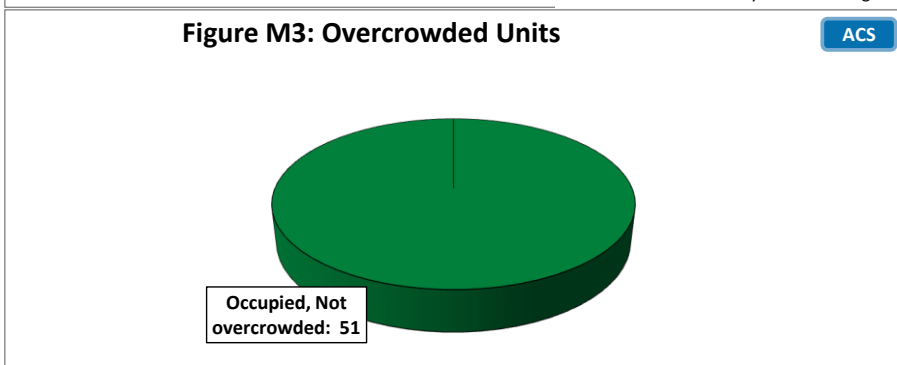
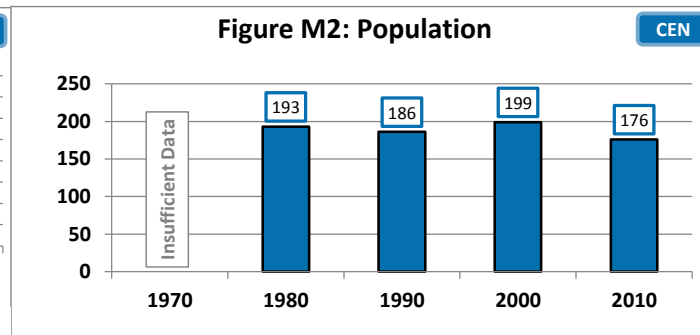
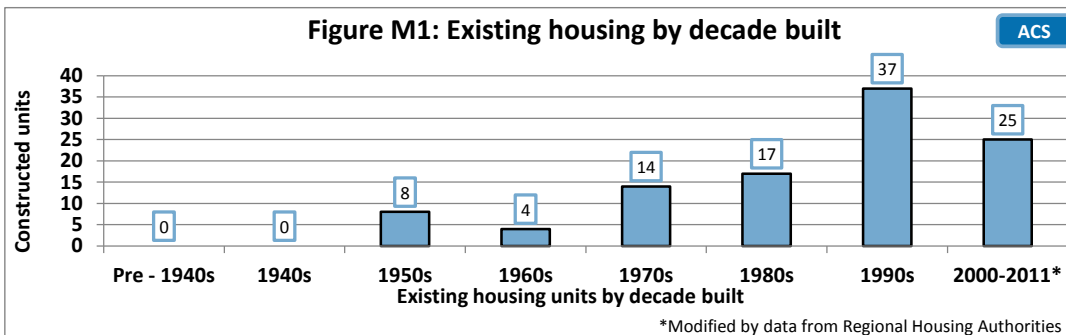


Community Profile for: Coffman Cove city

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (8,104 HDD)



Coffman Cove city Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	4	3-star	71.3	1,715	\$ 4,272	157	104	\$3.18	9.3	25%
Retrofit units	3	3-star plus	76.7	1,728	\$ 3,717	119	79	\$3.02	6.2	100%
New construction	0	NR	NR	NR	NR	NR	NR	NR	NR	NR

Coffman Cove city Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	4	10.5	26	12	NR	26	NR	NR	0.47	NR	0.61
Retrofit units	3	7.6	28	14	NR	28	NR	NR	0.28	NR	0.47
New construction	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

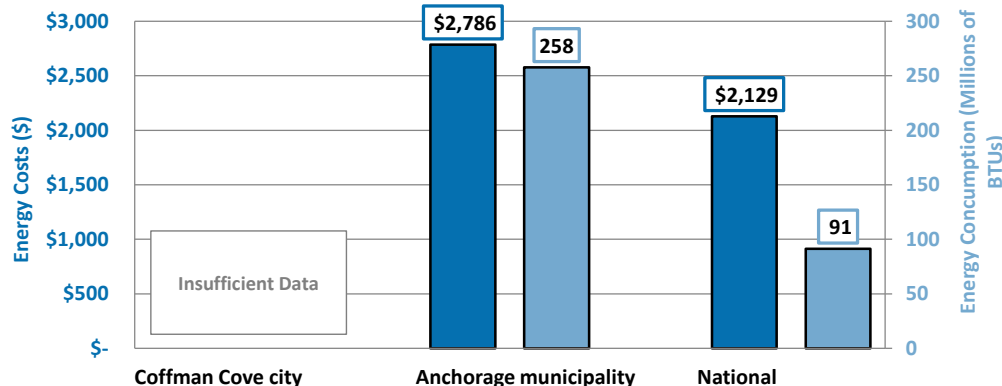
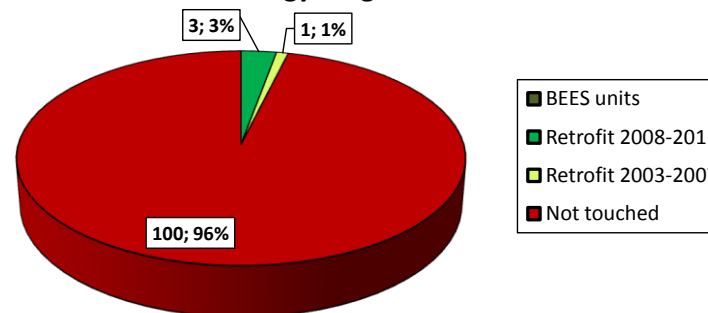


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Coffman Cove city

Owner occupied House with Mortgage, Median Value
\$187,500

Owner-occupied House without a Mortgage, Median Value
\$120,000

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.38
Electricity with PCE (\$/kWh)	\$ 0.18
Electricity without PCE (\$/kWh)	\$ 0.54

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 24,250
Renter-occupied	\$ 52,750
Owner-occupied	\$ 22,292
w/ mortgage	\$ 35,000
w/o mortgage	\$ 21,875

Average Annual Energy Cost	
With PCE	NO PCE
Without PCE	\$6,152

Avg % Median Income spent on Energy	25.4%
-------------------------------------	-------

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 436	\$ 5,232
Gross rent	NR	NR
Owner-occupied	\$ 444	\$ 5,328
Housing units w/ mortgage	\$ 1,025	\$ 12,300
Housing units w/out a mortgage	\$ 329	\$ 3,948

Housing Stock Estimates	Number of Units
All Housing	105
All Occupied Housing	51
All Vacant housing	54
Vacant Housing for Sale/Rent	13

Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

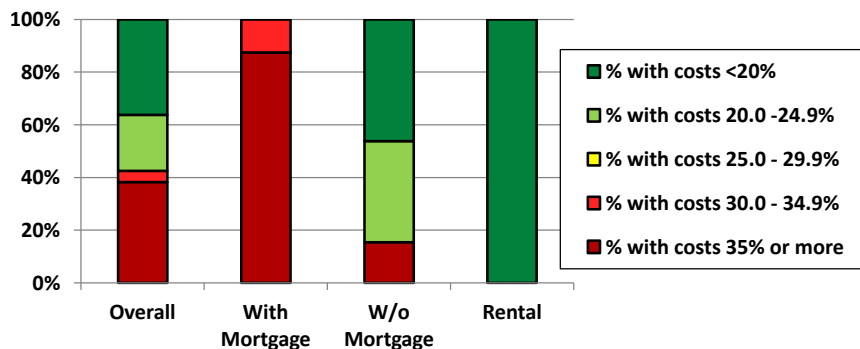
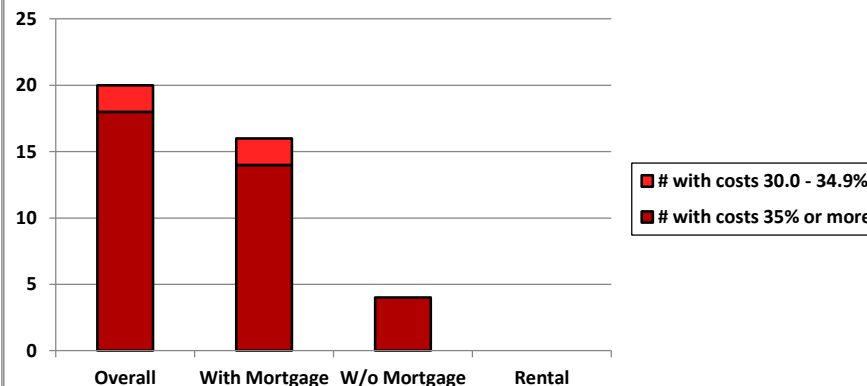


Figure M8: Number of Cost-Burdened Housing Units

ACS

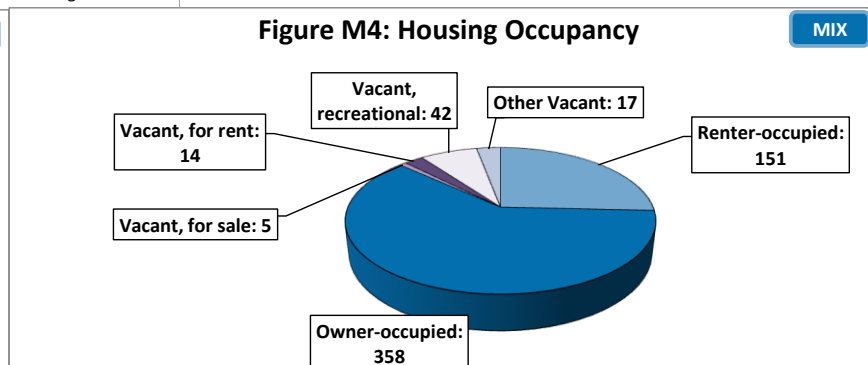
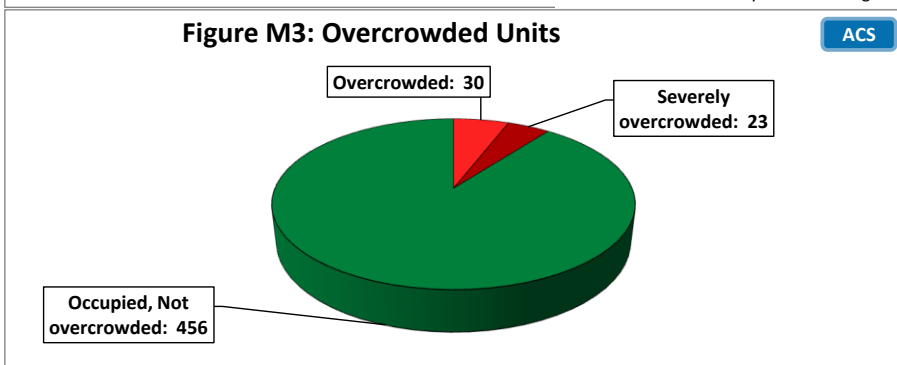
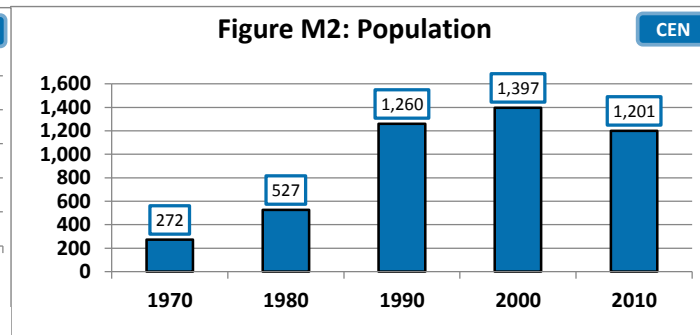
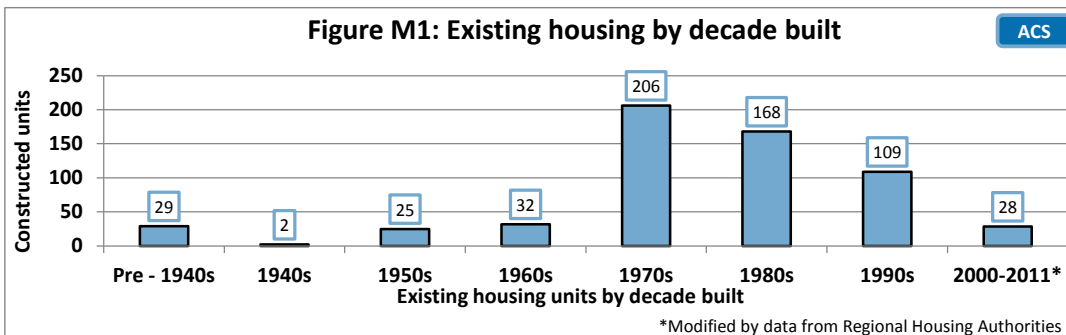


Community Profile for: Craig city

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,487 HDD)



Craig city Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost w/ PCE	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	116	2-star	51.8	1,175	\$ 4,999	156	146	\$4.62	13.5	13%
Retrofit units	111	3-star	73.0	1,183	\$ 3,605	105	93	\$3.30	6.9	44%
New construction	29	5-star	89.2	1,941	\$ 3,901	101	54	\$2.12	3.2	14%
Overall	256	2-star	57.6	1,213	\$ 4,681	144	132	\$4.25	11.8	19%

Craig city Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	116	16.5	19	9	3	19	2	NR	0.44	NR	0.77
Retrofit units	111	10.2	27	11	NR	27	NR	NR	0.25	NR	0.48
New construction	29	3.5	39	15	30	38	3	NR	0.23	0.27	0.34
Overall	256	15.2	20	10	4	20	3	NR	0.41	0.20	0.72

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

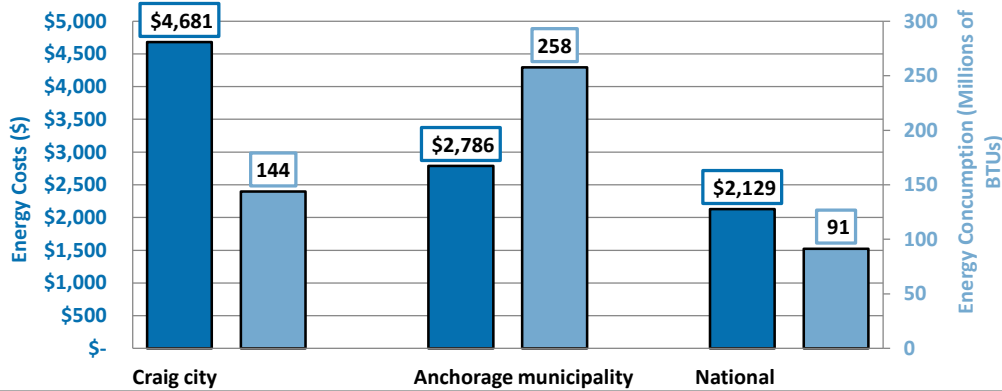
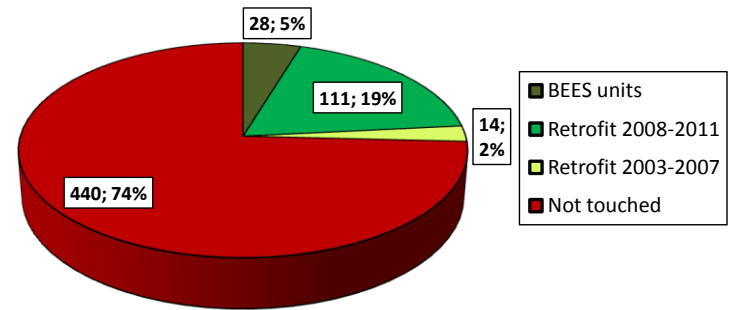


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Craig city

Owner occupied House with Mortgage, Median Value
\$192,500
Owner-occupied House without a Mortgage, Median Value
\$49,500

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 58,164
Renter-occupied	\$ 34,044
Owner-occupied	\$ 72,708
w/ mortgage	\$ 83,750
w/o mortgage	\$ 53,750

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 877	\$ 10,524
Gross rent	\$ 725	\$ 8,700
Owner-occupied	\$ 890	\$ 10,680
Housing units w/ mortgage	\$ 1,429	\$ 17,148
Housing units w/out a mortgage	\$ 619	\$ 7,428

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.23
Electricity with PCE (\$/kWh)	\$ 0.16
Electricity without PCE (\$/kWh)	\$ 0.24

Average Annual Energy Cost	
With PCE	\$4,681
Without PCE	\$5,129

Housing Stock Estimates	Number of Units
All Housing	587
All Occupied Housing	509
All Vacant housing	78
Vacant Housing for Sale/Rent	19

Avg % Median Income spent on Energy	8.0%
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Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

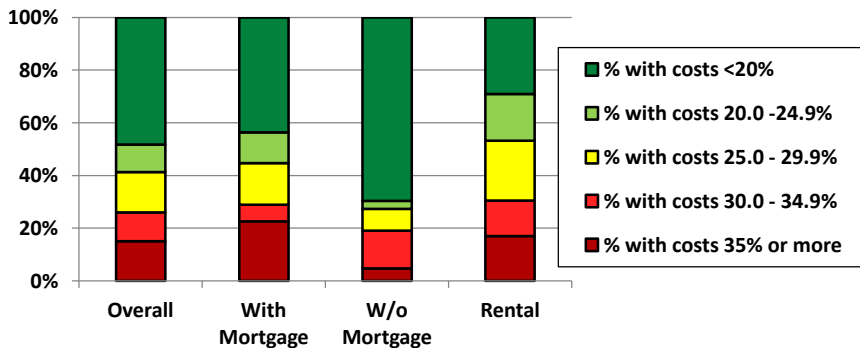
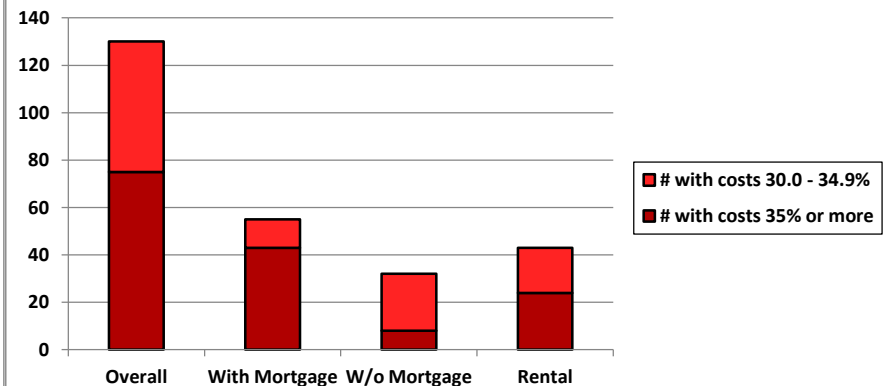


Figure M8: Number of Cost-Burdened Housing Units

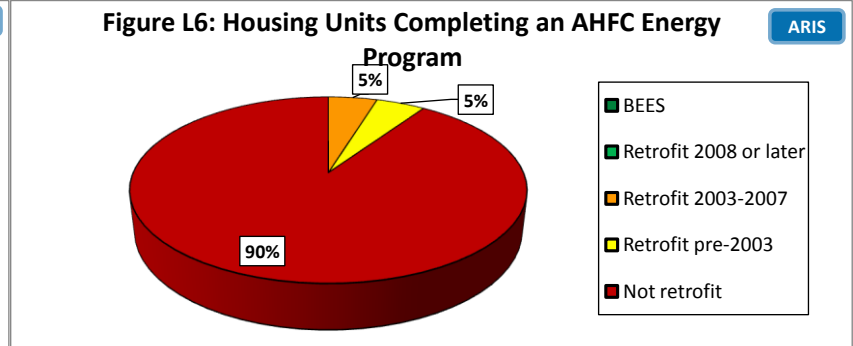
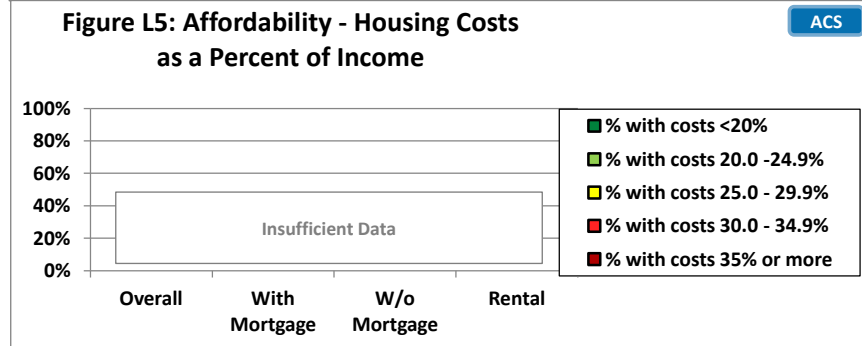
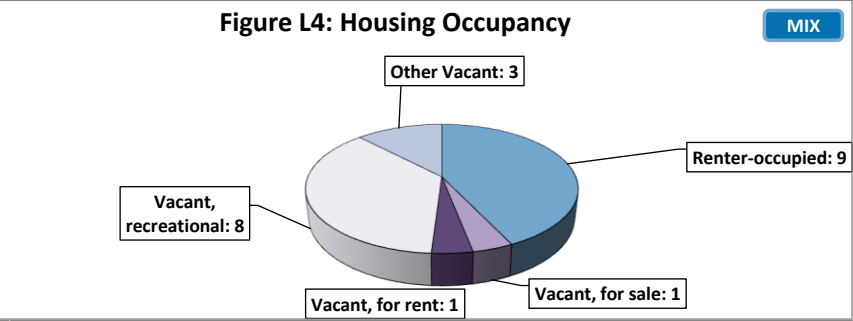
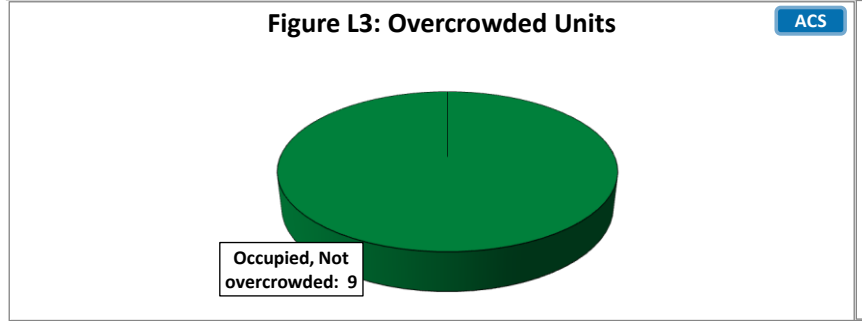
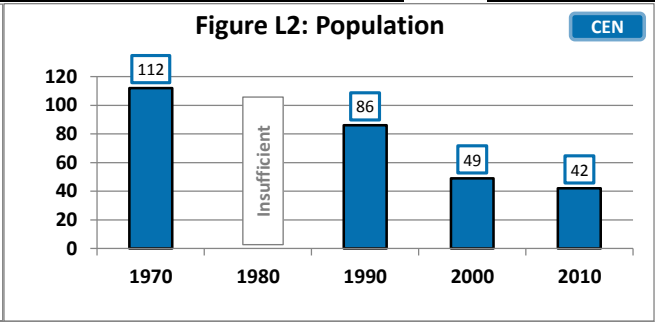
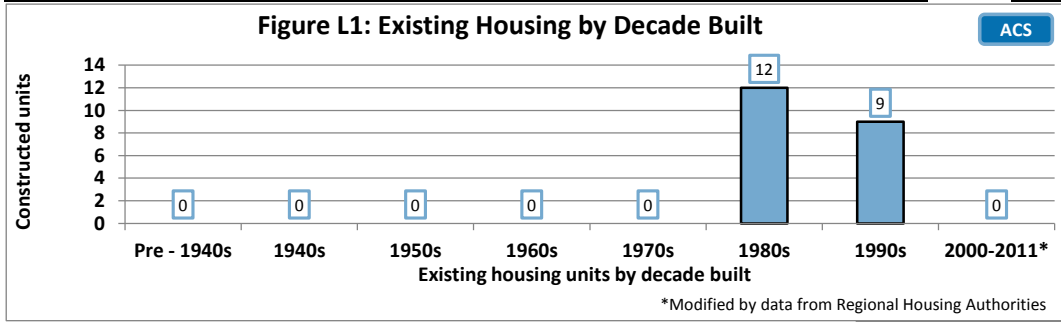
ACS



Community Profile for: Edna Bay CDP

ANCSA Region: Sealaska Corporation

Climate Zone: 6



Owner-occupied House with Mortgage, Median Value
NR

Owner-occupied House without a Mortgage, Median Value
NR

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	No Data
Electricity with PCE (\$/kWh)	No Data
Electricity without PCE (\$/kWh)	No Data

Median Annual Household Income	
Housing Units	Household Income
All-occupied	NR
Renter-occupied	NR
Owner-occupied	NR
w/ mortgage	NR
w/o mortgage	NR

Housing Stock Estimates	Number of Units
All Housing	21
All Occupied Housing	9
All Vacant housing	12

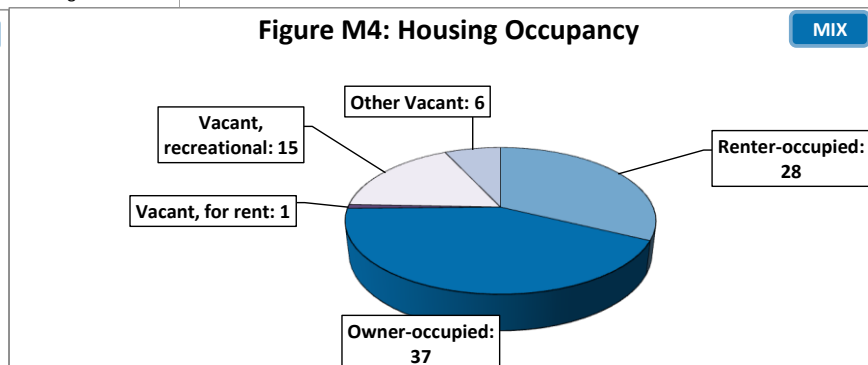
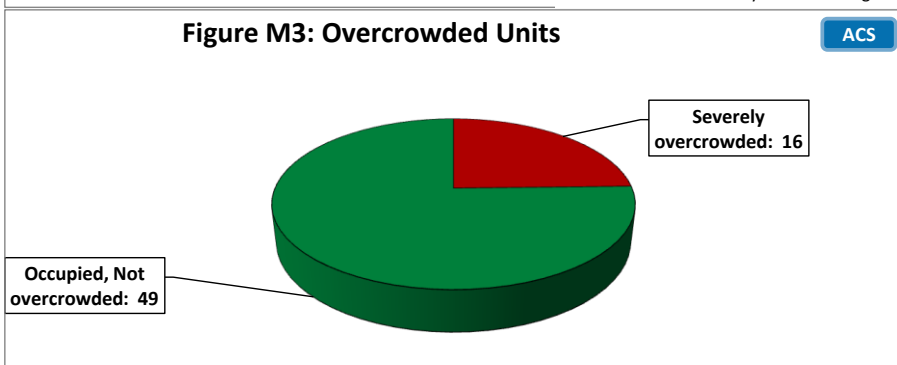
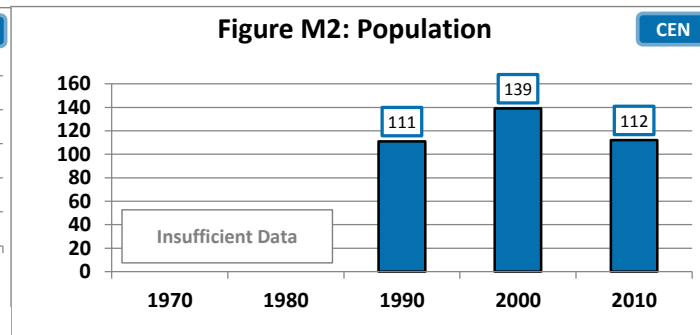
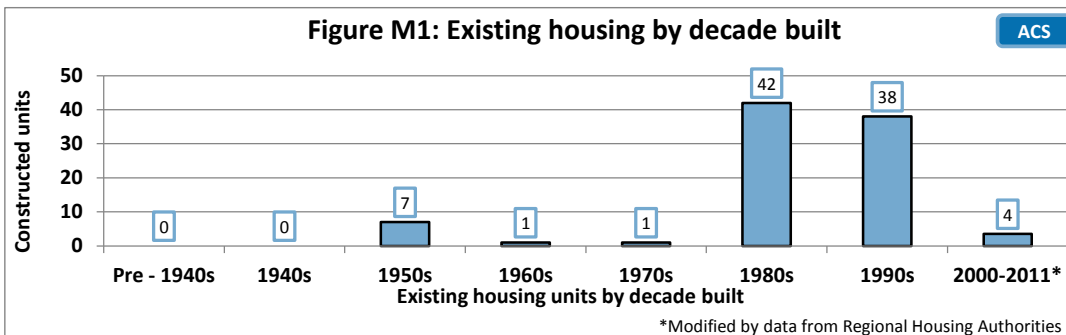
Median Housing Costs		
	Monthly	Annual
All-occupied	NR	NR
Gross rent	NR	NR
Owner-occupied	NR	NR
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	NR	NR

Community Profile for: Hollis CDP

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,802 HDD)



Hollis CDP Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	8	2-star	51.9	1,128	\$ 4,795	152	147	\$4.70	13.6	16%
Retrofit units	7	3-star plus	77.5	1,199	\$ 3,347	111	97	\$2.97	7.7	50%
New construction	1	NR	NR	NR	NR	NR	NR	NR	NR	NR

Hollis CDP Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	8	16.3	20	12	NR	11	NR	NR	0.45	NR	0.73
Retrofit units	7	10.4	30	14	NR	32	NR	NR	0.19	NR	0.64
New construction	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

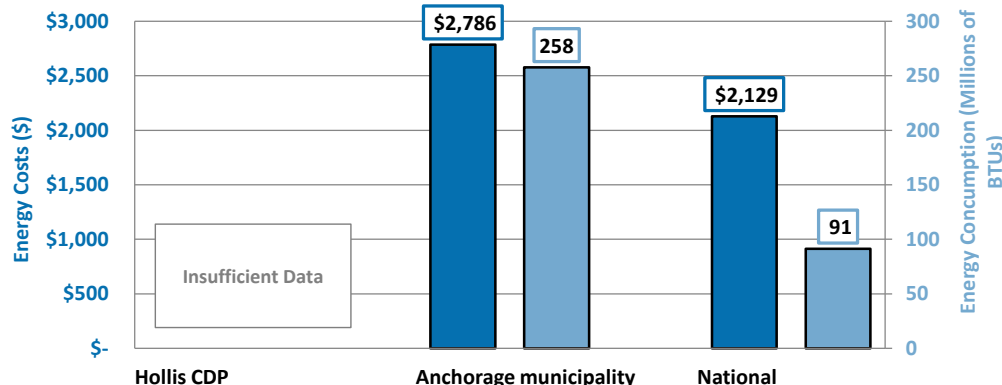
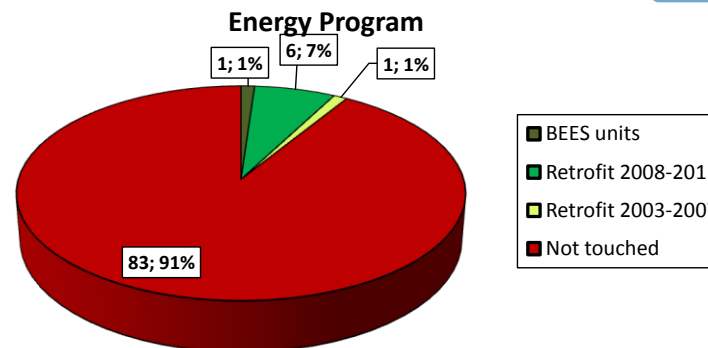


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Hollis CDP

Owner occupied House with Mortgage, Median Value
\$255,800

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 24,821
Renter-occupied	\$ 12,188
Owner-occupied	\$ 30,288
w/ mortgage	\$ 30,288
w/o mortgage	\$ 65,000

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 1,219	\$ 14,628
Gross rent	NR	NR
Owner-occupied	\$ 1,337	\$ 16,044
Housing units w/ mortgage	\$ 1,471	\$ 17,652
Housing units w/out a mortgage	\$ 450	\$ 5,400

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.03
Electricity with PCE (\$/kWh)	\$ 0.19
Electricity without PCE (\$/kWh)	\$ 0.24

Average Annual Energy Cost	
With PCE	NO PCE
Without PCE	\$4,907

Housing Stock Estimates	Number of Units
All Housing	87
All Occupied Housing	65
All Vacant housing	22
Vacant Housing for Sale/Rent	1

Avg % Median Income spent on Energy	19.8%
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Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

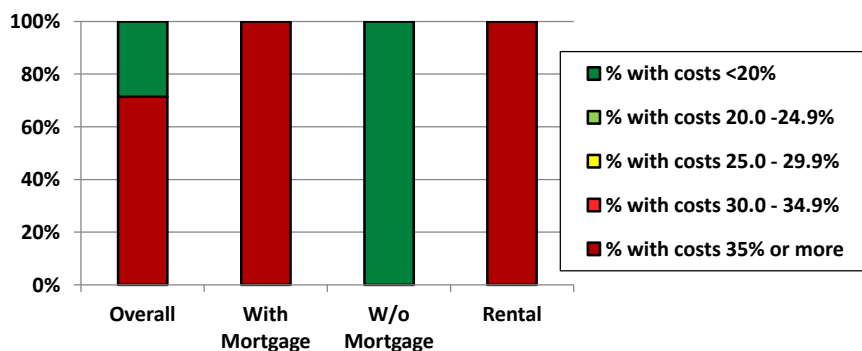
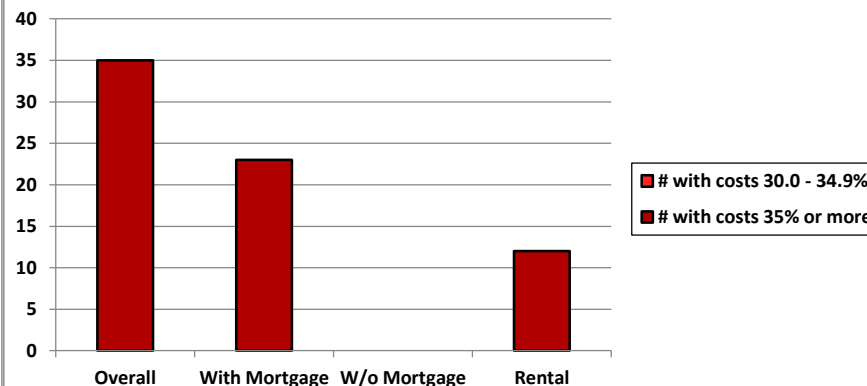


Figure M8: Number of Cost-Burdened Housing Units

ACS



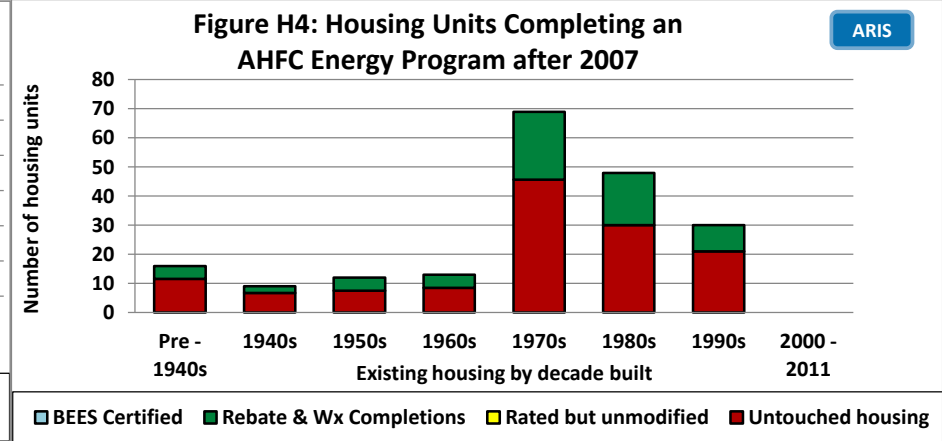
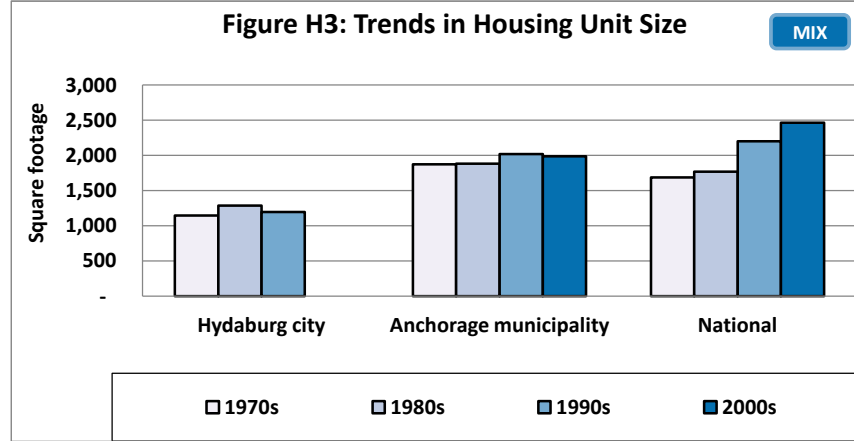
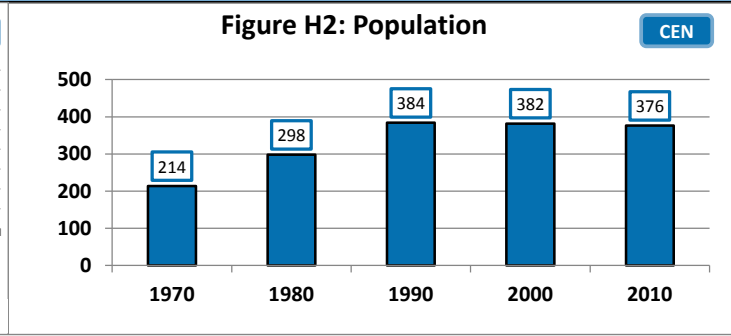
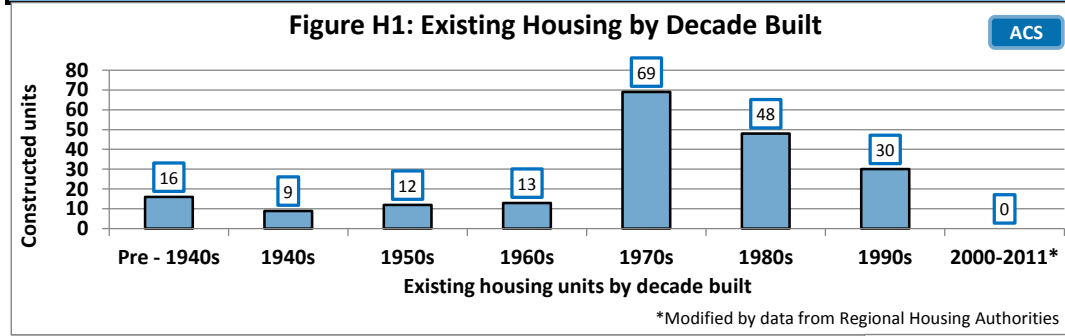
Community Profile for: Hydaburg city

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,487 HDD)

COMMUNITY - Hydaburg city



Houses Lacking Complete Plumbing or Kitchen Facilities	Households	
	Number	Percent
Lack complete plumbing	0	0%
Lack complete kitchen	0	0%

Avg Annual Energy Cost with PCE	\$3,810
Avg Annual Energy Cost without PCE	\$4,287

Weatherization Program Retrofits (funding increased in 2008)	
Date Range	Units
2008-2011	65
2003-2007	5
1990-2002	23

Estimated Total Annual Community Space Heating Fuel Use		
Fuel Oil	64,132	(gallons)
Nat Gas	-	(ccf)
Electricity	43,659	(kWh)
Wood	262	(cords)
Propane	1,011	(gallons)
Coal	-	(tons)

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$4.19
Electricity with PCE (\$/kWh)	\$0.16
Electricity cost without PCE (\$/kWh)	\$0.24

Housing Stock Estimates	Number of Units
All Housing	197
All Occupied Housing	172
All Vacant housing	25
Vacant Housing for Sale or Rent	11

OVERCROWDING & VENTILATION - Hydaburg city

Figure H5: Overcrowded Units

ACS

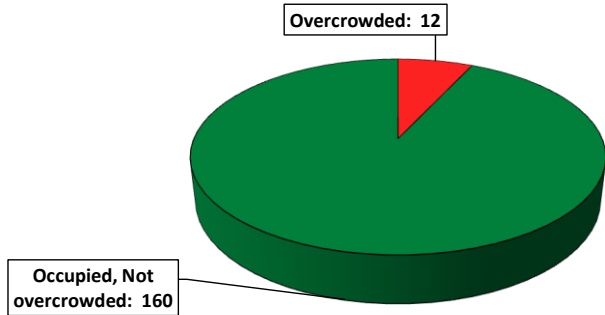


Figure H6: Housing Occupancy

MIX

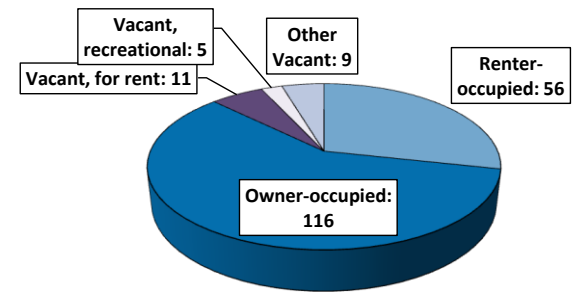


Figure H7: Average Air-Tightness of Current Homes by Decade Built

ARIS

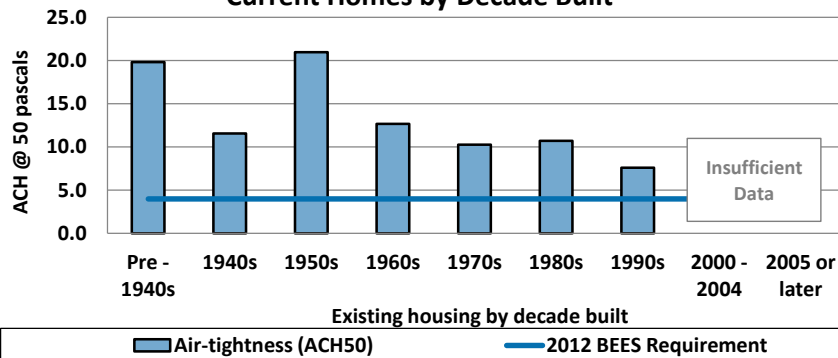


Figure H8: Existing Ventilation Type by Decade Built

ARIS

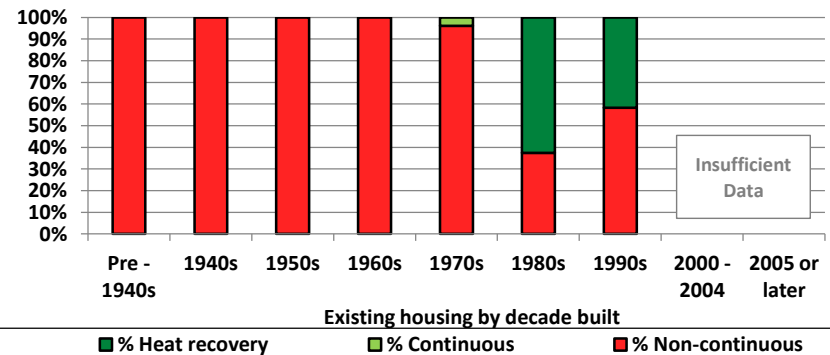


Figure H9: Percent of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS

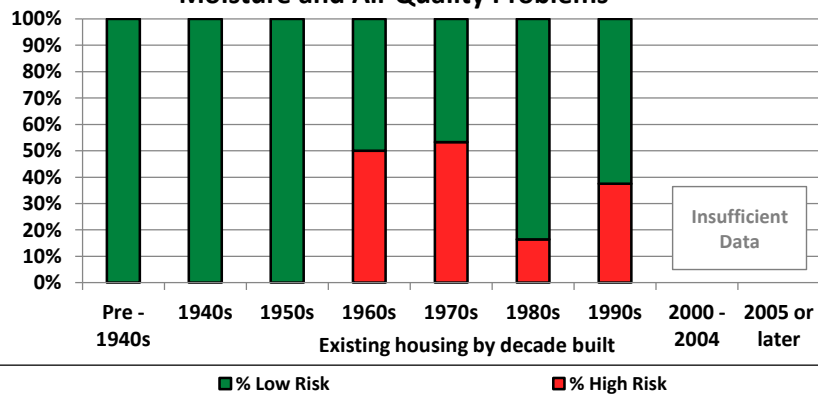
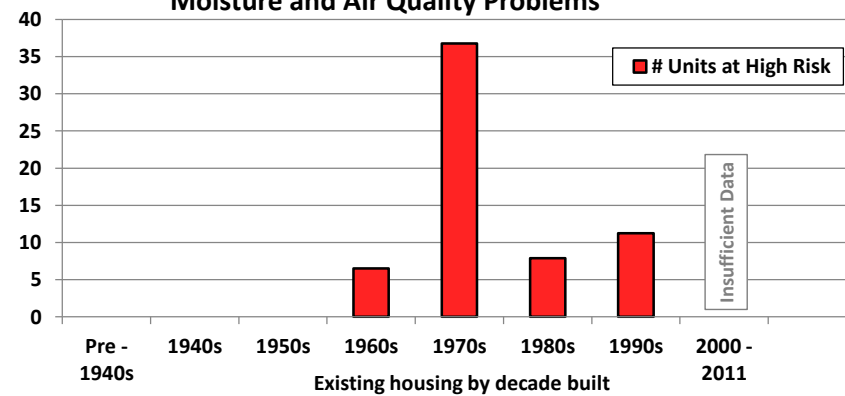


Figure H10: Quantity of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS



ENERGY - Hydaburg city

Current Hydaburg city Housing Energy Characteristics By Decade Built

Current Residential Units by Year Built	Number of 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 Ann Energy by End Use (million Btus)			Avg. EUI (kBtUs/SF)	Avg. ECI (\$ / SF)	Avg. Home Heating Index
							Space Heating	DHW	Appliances			
OVERALL	67	2-star plus	61.9	1,250	\$ 3,810	126	71	28	26	105	\$ 3.22	8.6
Pre- 1940	9	1-star plus	48.1	1,439	\$ 5,152	189	147	14	29	133	\$ 3.96	14.2
1940- 49	5	2-star	59.4	1,250	\$ 2,133	134	94	16	24	107	\$ 1.71	10.3
1950- 59	9	2-star	50.1	1,245	\$ 4,828	132	94	13	25	108	\$ 3.94	10.8
1960- 69	9	1-star plus	41.4	1,566	\$ 4,841	206	153	23	30	134	\$ 3.47	14.1
1970- 79	45	2-star plus	63.9	1,145	\$ 3,661	112	60	26	25	101	\$ 3.27	7.7
1980- 89	39	2-star plus	64.6	1,288	\$ 3,587	118	57	36	25	104	\$ 3.08	7.3
1990- 99	14	3-star plus	74.6	1,194	\$ 3,443	97	46	27	23	81	\$ 2.90	5.2
2000- 2004	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2005 or later	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Figure H11: Current Average Energy Use Intensity and Average Square Footage by Decade Built

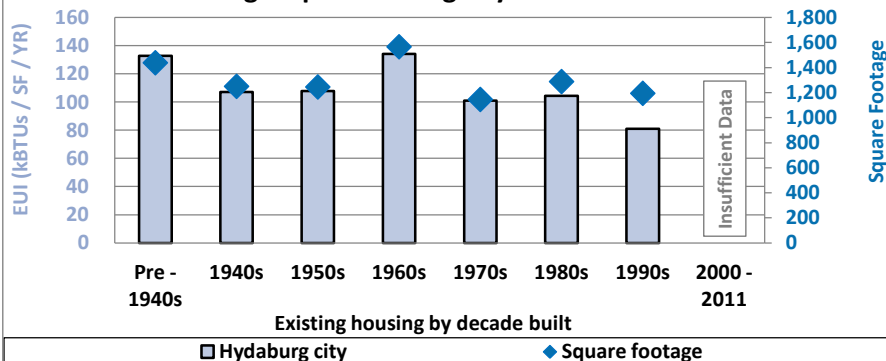
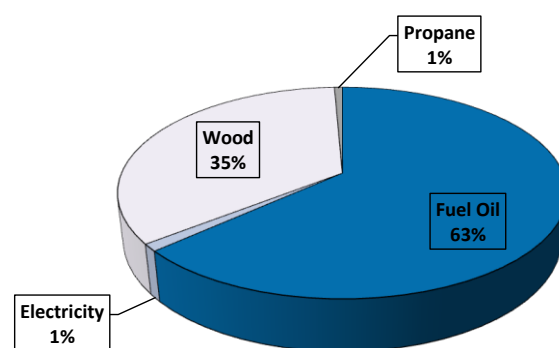


Figure H12: Percent of Total Residential Space Heating Energy by Fuel Type



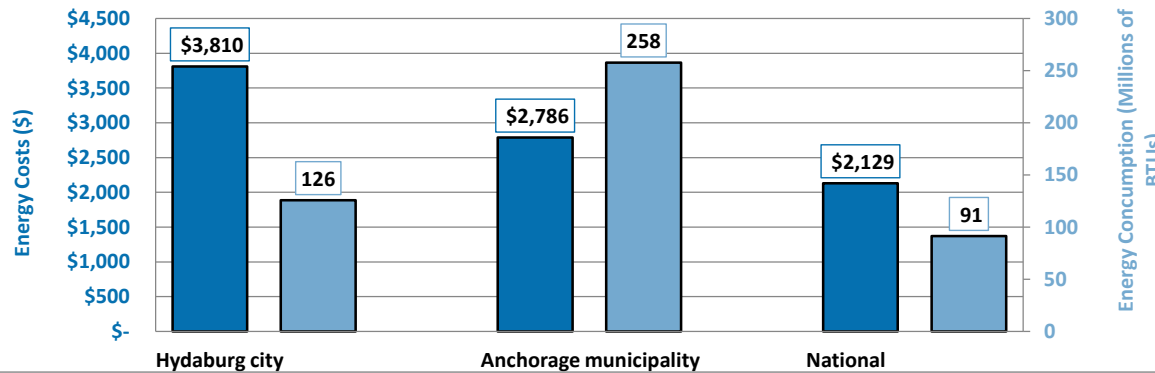
Current Hydaburg city Housing Envelope Characteristics By Decade Built

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	67	12.1	21	12	NR	20	NR	NR	0.34	NR	0.57
Pre- 1940	9	19.8	NR	NR	NR	NR	NR	NR	NR	NR	NR
1940- 49	5	11.5	NR	NR	NR	NR	NR	NR	NR	NR	NR
1950- 59	9	21.0	NR	NR	NR	NR	NR	NR	NR	NR	NR
1960- 69	9	12.7	NR	NR	NR	NR	NR	NR	NR	NR	NR
1970- 79	45	10.2	28	11	NR	20	NR	NR	0.31	NR	0.57
1980- 89	39	10.7	34	14	NR	32	NR	NR	0.34	NR	0.53
1990- 99	14	7.6	42	16	NR	38	NR	NR	0.18	NR	0.46
2000- 2004	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2005 or later	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

BEES 2009 - Climate Zone 6	7.0	38	21	15	30	15	15	15	0.33	0.33	0.33
BEES 2012 - Climate Zone 6	4.0	43	25	15	38	15	15	15	0.30	0.30	0.30

AFFORDABILITY - Hydaburg city

Figure H13: Average Annual Home Energy Costs and Use



Housing Information	Avg Household Size (# of people)
All-occupied	2.4
Owner-occupied	2.6
renter-occupied	2.2

Owner-occupied House with Mortgage, Median Value
\$62,500

Owner-occupied House without a Mortgage, Median Value
\$120,800

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 33,750
Renter-occupied	\$ 43,438
Owner-occupied	\$ 33,000
w/ mortgage	\$ 23,173
w/o mortgage	\$ 36,094

	Median Housing Costs	
	Monthly	Annual
All-occupied	\$ 485	\$ 5,820
Gross rent	\$ 611	\$ 7,332
Owner-occupied	\$ 421	\$ 5,052
Housing units w/ mortgage	\$ 812	\$ 9,744
Housing units w/out a mortgage	\$ 298	\$ 3,576

Avg % of Median Income Spent on Energy	11.3%
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Figure H14: Affordability - Housing Costs as a Percent of Income

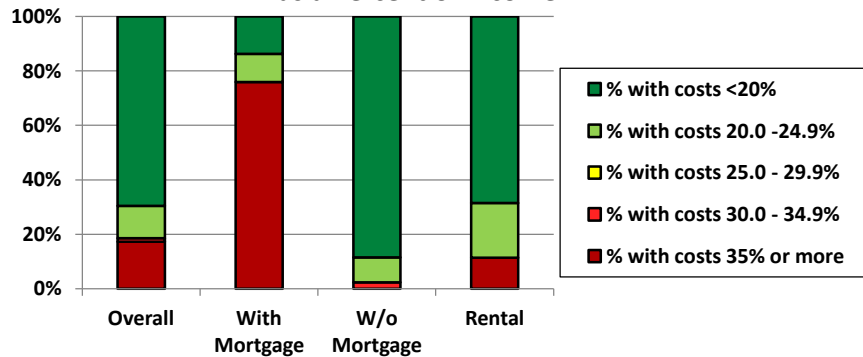
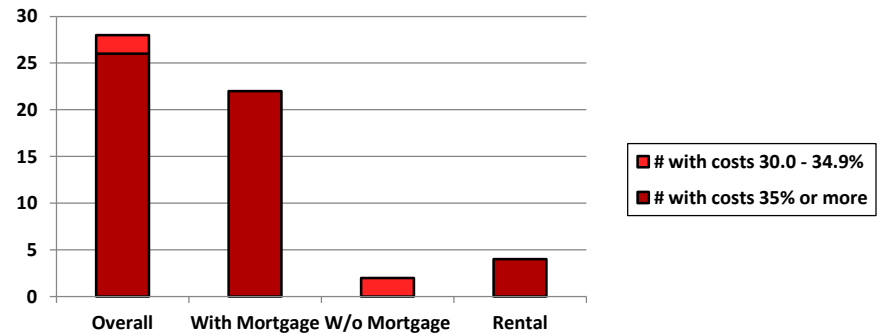


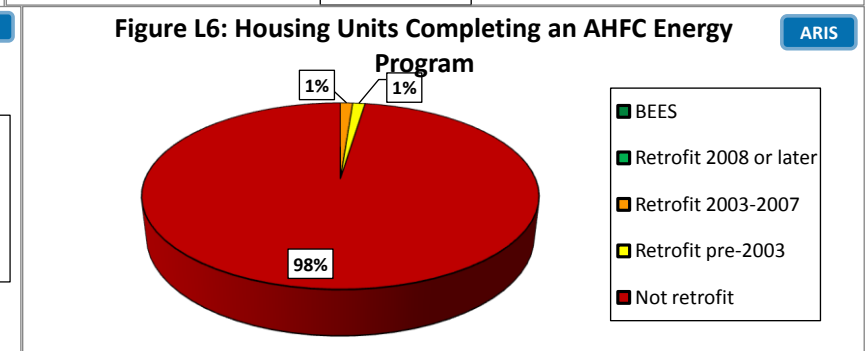
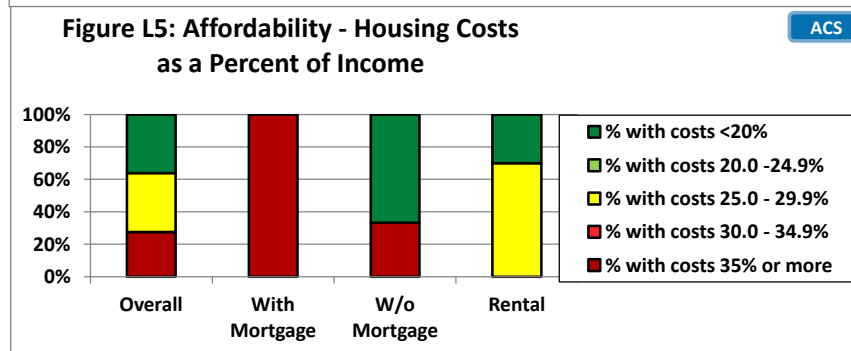
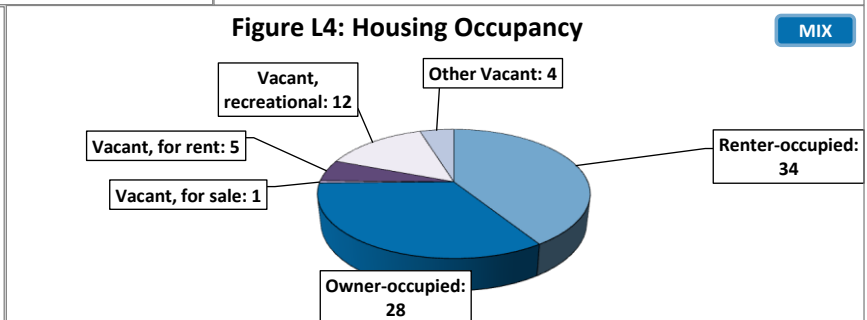
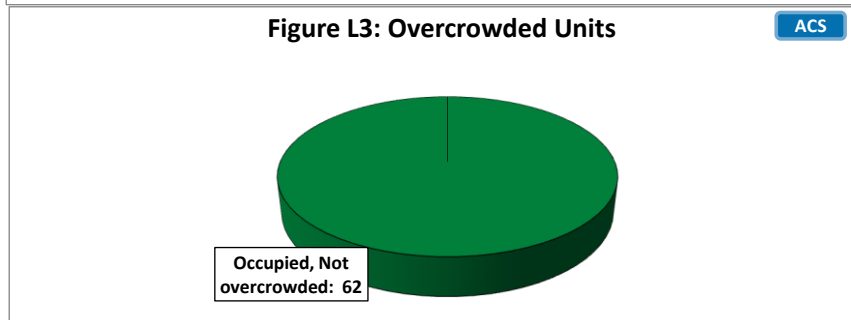
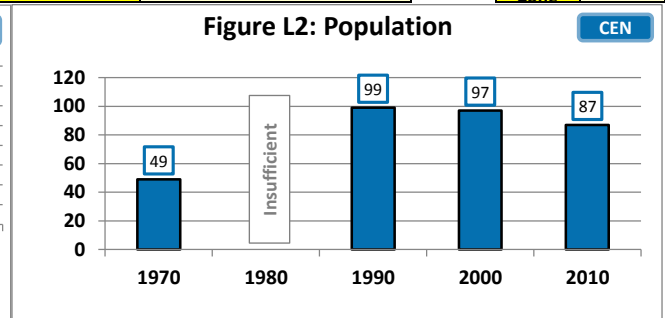
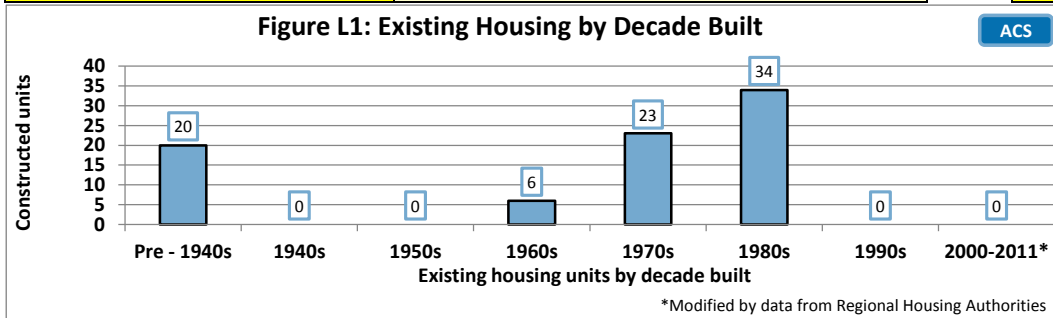
Figure H15: Number of Cost-Burdened Housing Units



Community Profile for: Hyder CDP

ANCSA Region: Sealaska Corporation

Climate Zone: 6



Owner-occupied House with Mortgage, Median Value
NR

Owner-occupied House without a Mortgage, Median Value
\$57,500

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	No Data
Electricity with PCE (\$/kWh)	No PCE
Electricity without PCE (\$/kWh)	\$ 1.00

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 27,500
Renter-occupied	\$ 19,048
Owner-occupied	\$ 36,667
w/ mortgage	NR
w/o mortgage	\$ 35,625

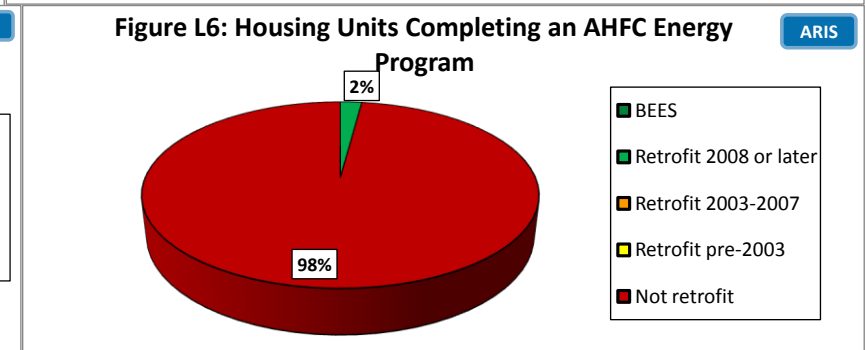
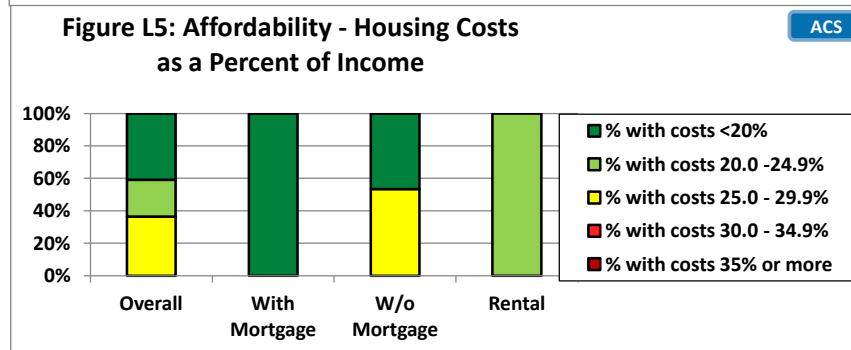
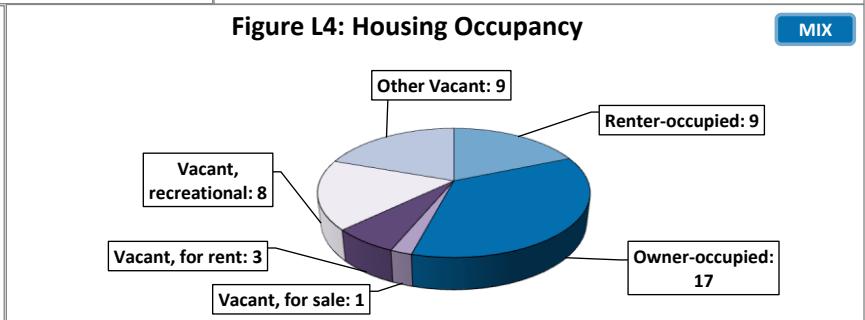
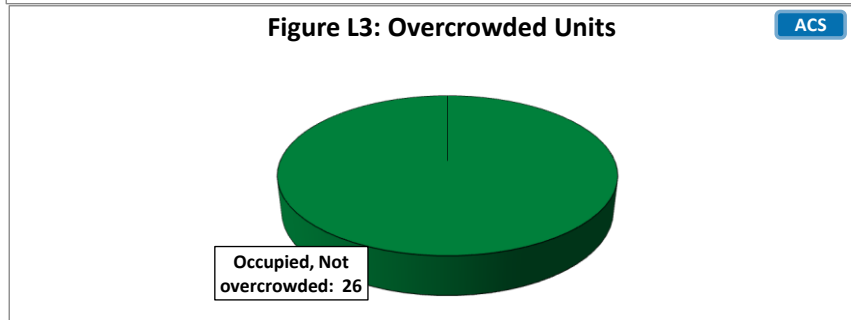
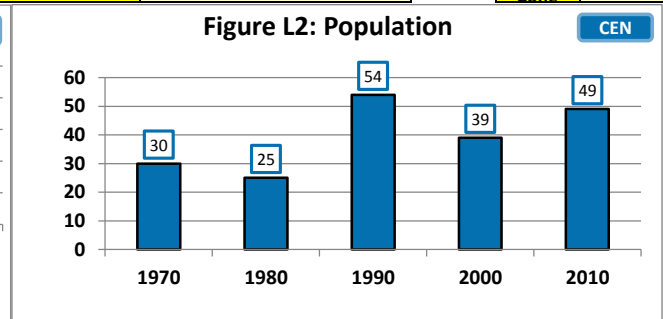
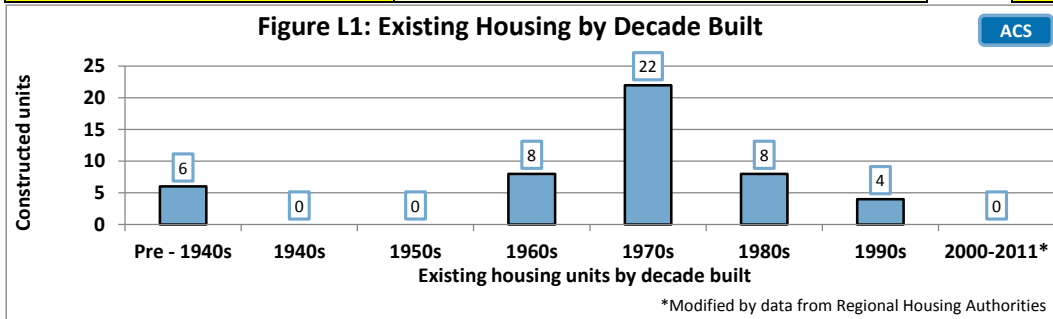
Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 440	\$ 5,280
Gross rent	\$ 436	\$ 5,232
Owner-occupied	\$ 533	\$ 6,396
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	\$ 288	\$ 3,456

Housing Stock Estimates	Number of Units
All Housing	83
All Occupied Housing	62
All Vacant housing	21

Community Profile for: Kasaan city

ANCSA Region: Sealaska Corporation

Climate Zone: 6



Owner-occupied House with Mortgage, Median Value
\$162,500

Owner-occupied House without a Mortgage, Median Value
\$139,100

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.25
Electricity with PCE (\$/kWh)	\$ 0.16
Electricity without PCE (\$/kWh)	\$ 0.24

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 38,125
Renter-occupied	\$ 42,750
Owner-occupied	\$ 37,813
w/ mortgage	NR
w/o mortgage	\$ 34,844

Housing Stock Estimates	
Housing Stock Estimates	Number of Units
All Housing	48
All Occupied Housing	26
All Vacant housing	22

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 675	\$ 8,100
Gross rent	NR	NR
Owner-occupied	\$ 619	\$ 7,428
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	\$ 606	\$ 7,272

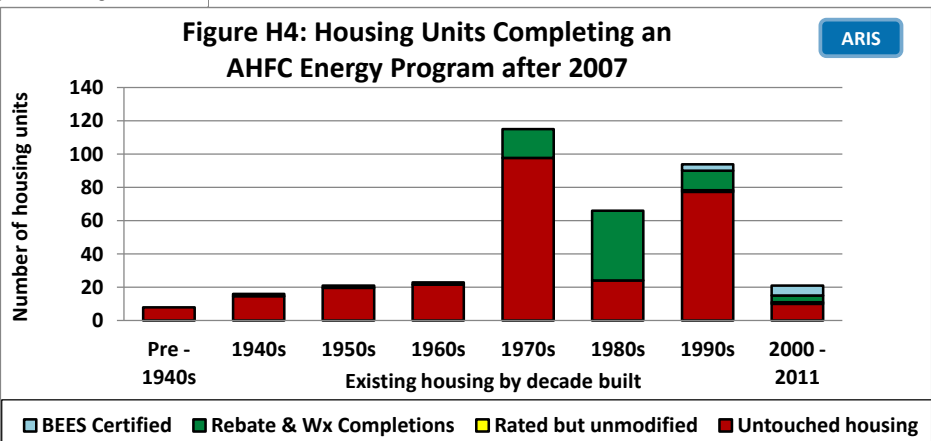
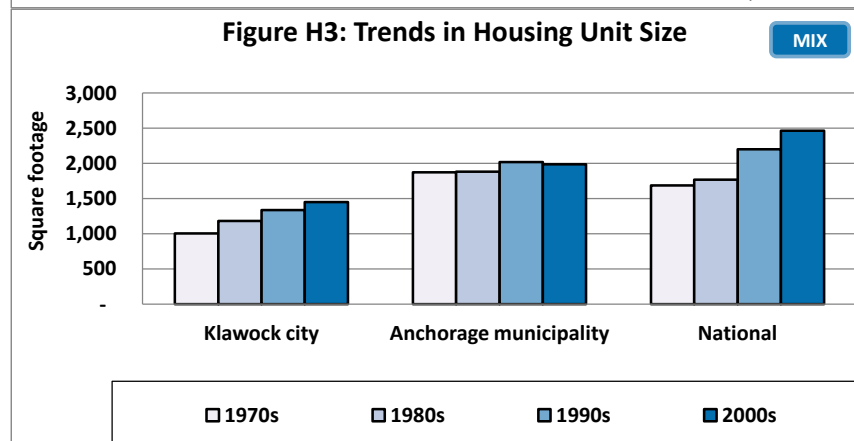
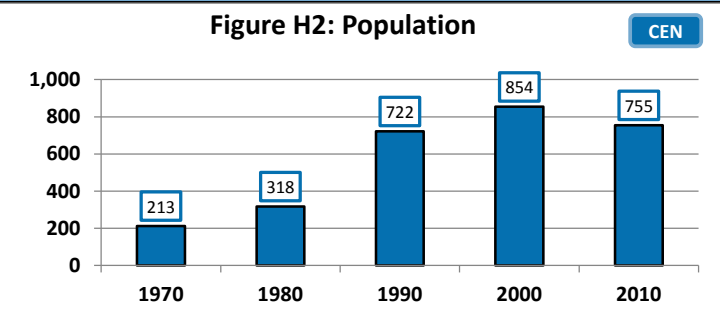
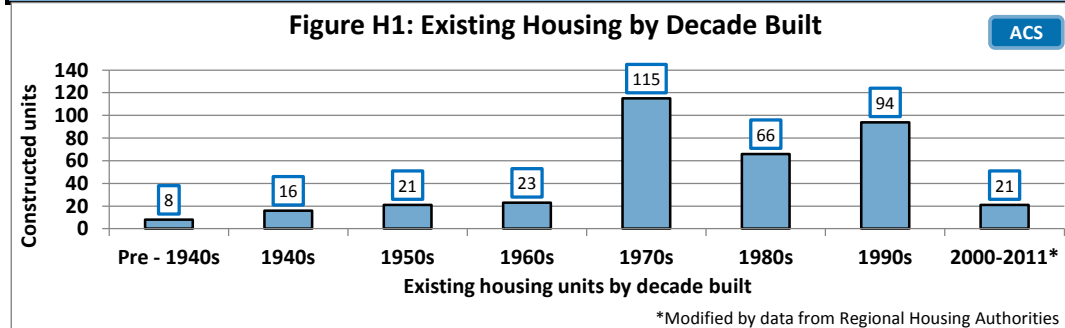
Community Profile for: Klawock city

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,487 HDD)

COMMUNITY - Klawock city



Houses Lacking Complete Plumbing or Kitchen Facilities	Households	
	Number	Percent
Lack complete plumbing	2	1%
Lack complete kitchen	0	0%

Avg Annual Energy Cost with PCE	\$4,179
Avg Annual Energy Cost without PCE	\$4,625

Weatherization Program Retrofits (funding increased in 2008)	
Date Range	Units
2008-2011	76
2003-2007	7
1990-2002	39

Estimated Total Annual Community Space Heating Fuel Use		
Fuel Oil	130,823	(gallons)
Nat Gas	-	(ccf)
Electricity	109,541	(kWh)
Wood	191	(cords)
Propane	23,227	(gallons)
Coal	-	(tons)

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$4.25
Electricity with PCE (\$/kWh)	\$0.16
Electricity cost without PCE (\$/kWh)	\$0.24

Housing Stock Estimates	Number of Units
All Housing	364
All Occupied Housing	321
All Vacant housing	43
Vacant Housing for Sale or Rent	9

OVERCROWDING & VENTILATION - Klawock city

Figure H5: Overcrowded Units

ACS

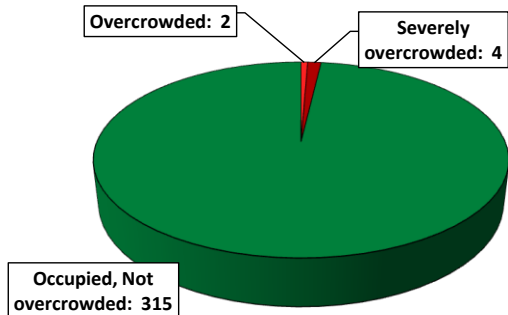


Figure H6: Housing Occupancy

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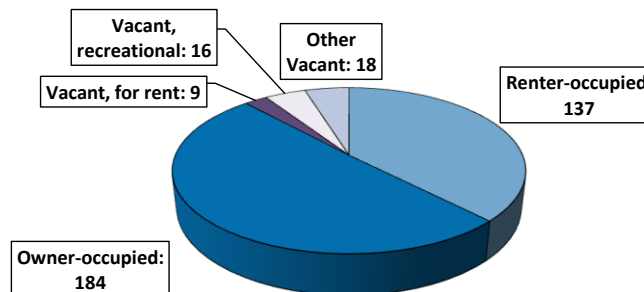


Figure H7: Average Air-Tightness of Current Homes by Decade Built

ARIS

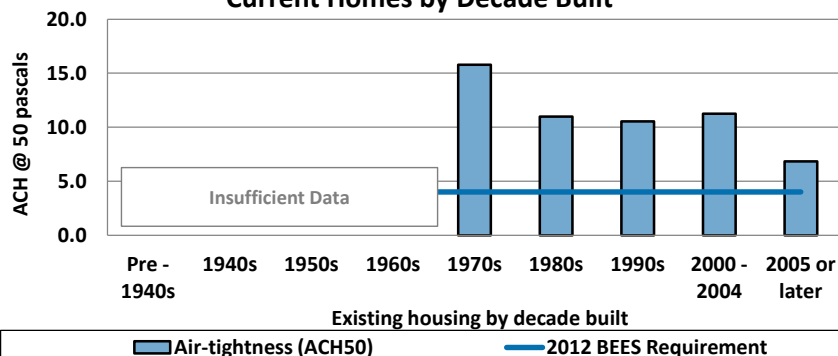


Figure H8: Existing Ventilation Type by Decade Built

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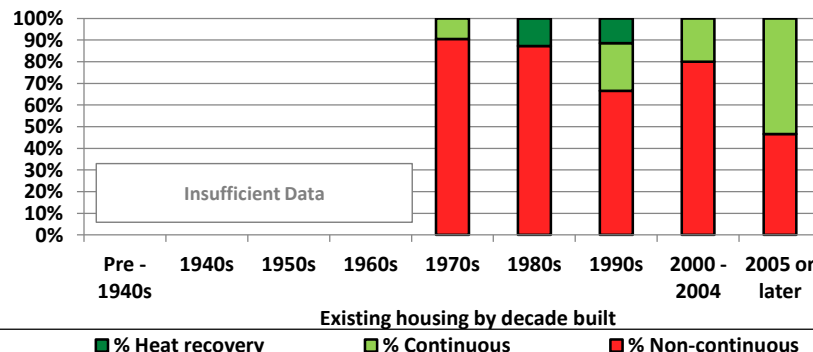


Figure H9: Percent of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS

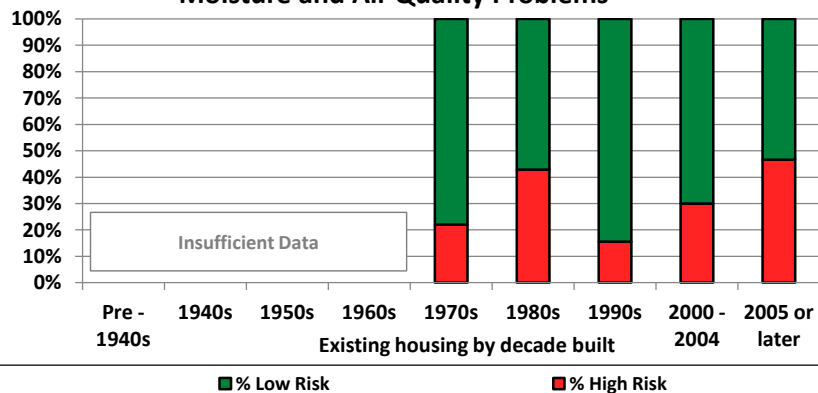
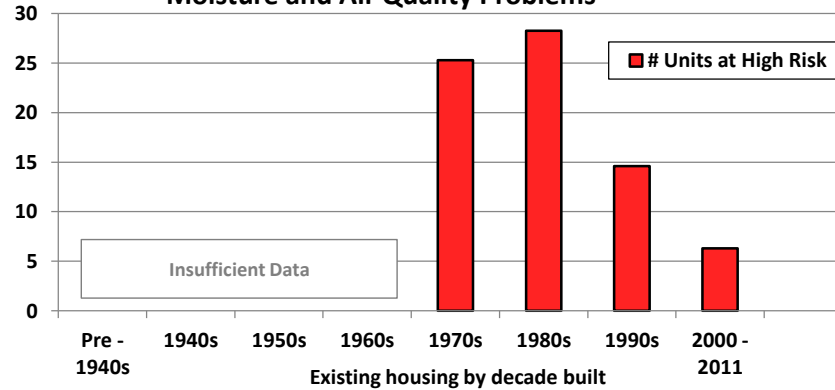


Figure H10: Quantity of Housing Stock at High Risk of Moisture and Air Quality Problems

ARIS



ENERGY - Klawock city												
Current Klawock city Housing Energy Characteristics By Decade Built												
Current Residential Units by Year Built	Number of 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 Ann Energy by End Use (million Btus)			Avg. EUI (kBtus/SF)	Avg. ECI (\$ / SF)	Avg. Home Heating Index
							Space Heating	DHW	Appliances			
OVERALL	94	2-star	56.0	1,085	\$ 4,179	120	71	23	25	118	\$ 3.97	10.0
Pre- 1940	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1940- 49	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1950- 59	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1960- 69	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1970- 79	29	2-star	57.7	1,003	\$ 4,222	115	65	27	23	123	\$ 4.56	9.5
1980- 89	88	3-star	70.8	1,180	\$ 3,563	107	61	21	25	99	\$ 3.19	8.3
1990- 99	30	2-star	58.0	1,335	\$ 4,875	146	86	29	25	118	\$ 3.97	10.0
2000- 2004	6	3-star	70.2	1,451	\$ 3,630	123	63	34	26	95	\$ 2.64	7.1
2005 or later	9	4-star plus	84.4	1,161	\$ 3,053	73	32	18	23	88	\$ 3.79	4.6

Figure H11: Current Average Energy Use Intensity and Average Square Footage by Decade Built

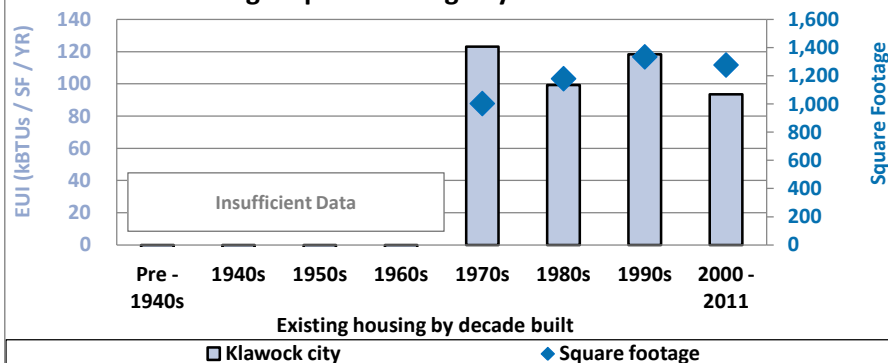
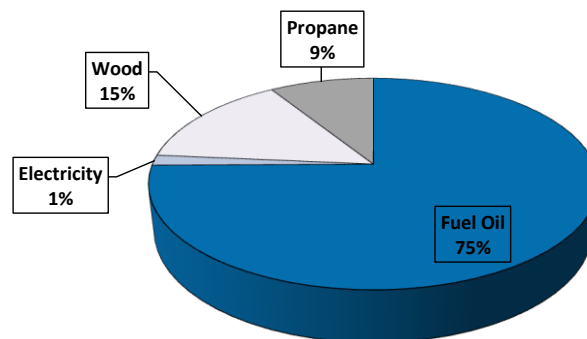


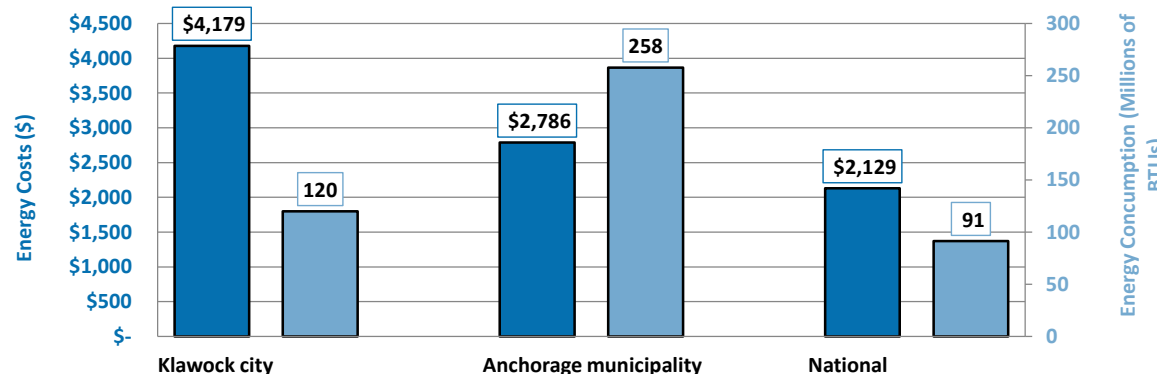
Figure H12: Percent of Total Residential Space Heating Energy by Fuel Type



Current Klawock 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	94	13.2	23	12	NR	24	3	NR	0.37	0.18	0.57
Pre- 1940	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1940- 49	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1950- 59	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1960- 69	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1970- 79	29	15.8	28	11	NR	20	NR	NR	0.32	NR	0.69
1980- 89	88	11.0	30	13	NR	30	NR	NR	0.34	NR	0.50
1990- 99	30	10.5	17	11	NR	23	NR	NR	0.41	NR	0.51
2000- 2004	6	11.3	28	17	NR	30	NR	NR	0.47	NR	0.46
2005 or later	9	6.8	26	14	NR	37	NR	NR	0.30	NR	0.44
BEES 2009 - Climate Zone 6		7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012 - Climate Zone 6		4.0	43	25	15	38	15	15	0.30	0.30	0.30

AFFORDABILITY - Klawock city

Figure H13: Average Annual Home Energy Costs and Use



Housing Information	Avg Household Size (# of people)
All-occupied	2.0
Owner-occupied	2.1
renter-occupied	1.7

Owner-occupied House with Mortgage, Median Value
\$148,300

Owner-occupied House without a Mortgage, Median Value
\$125,000

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 41,806
Renter-occupied	\$ 26,641
Owner-occupied	\$ 68,214
w/ mortgage	\$ 71,250
w/o mortgage	\$ 47,500

	Median Housing Costs	
	Monthly	Annual
All-occupied	\$ 560	\$ 6,720
Gross rent	\$ 671	\$ 8,052
Owner-occupied	\$ 459	\$ 5,508
Housing units w/ mortgage	\$ 1,000	\$ 12,000
Housing units w/out a mortgage	\$ 328	\$ 3,936

Avg % of Median Income Spent on Energy	10.0%
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Figure H14: Affordability - Housing Costs as a Percent of Income

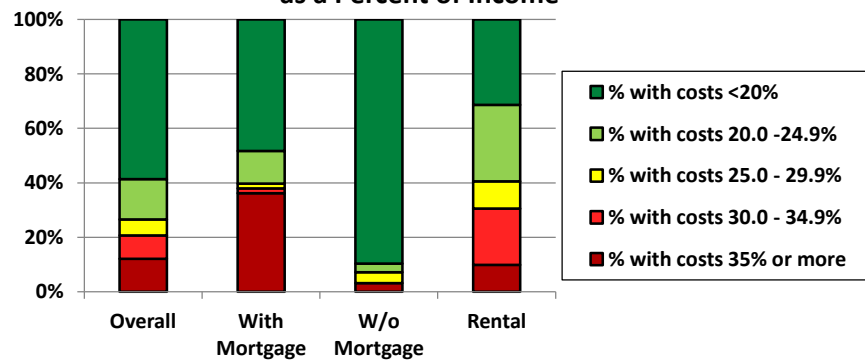
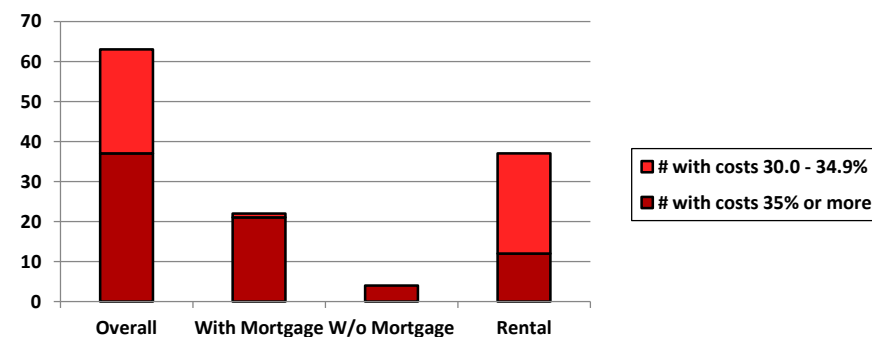


Figure H15: Number of Cost-Burdened Housing Units

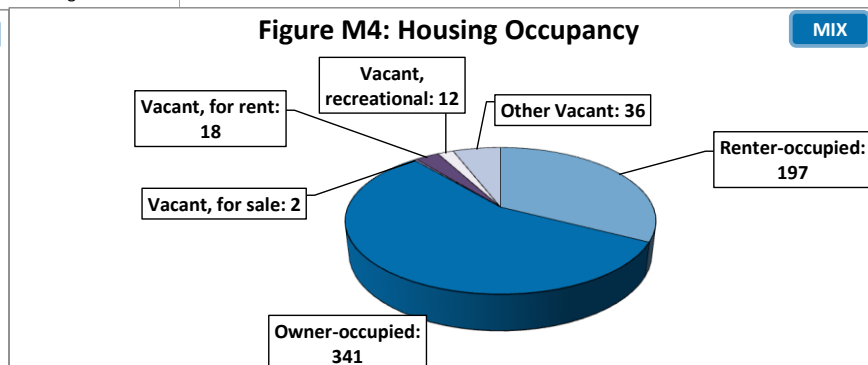
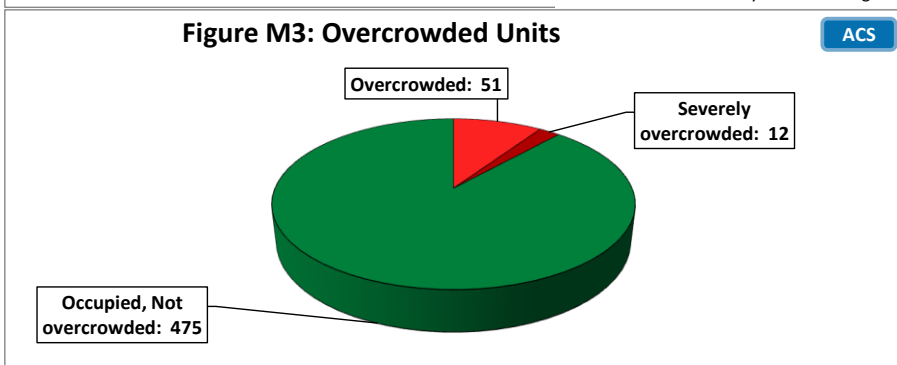
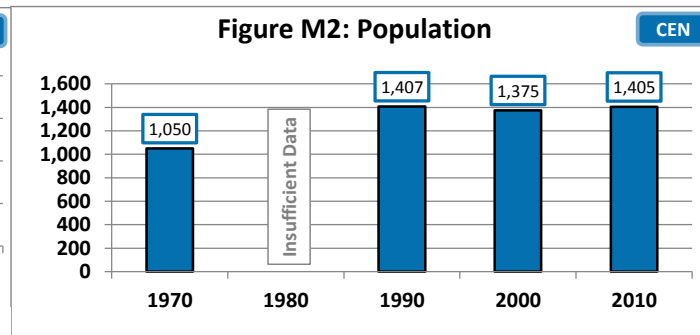
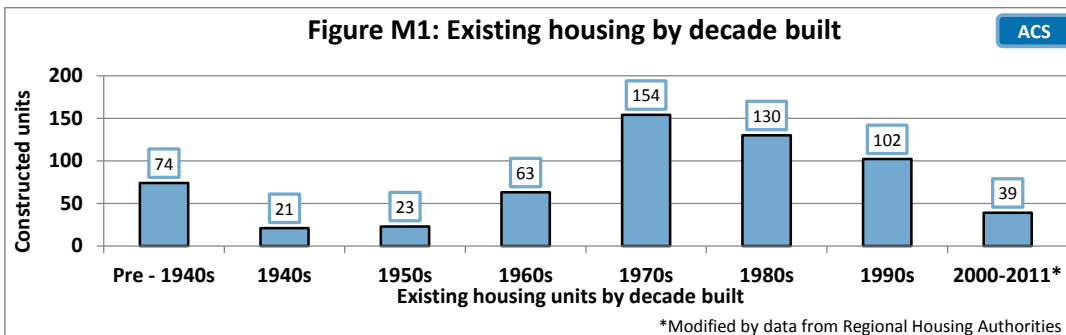


Community Profile for: Metlakatla CDP

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,000 HDD)



Metlakatla CDP Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	88	2-star	55.8	1,308	\$ 3,478	128	95	\$2.57	7.4	27%
Retrofit units	75	2-star	52.4	1,318	\$ 3,008	127	94	\$2.28	8.7	53%
New construction	0	NR	NR	NR	NR	NR	NR	NR	NR	NR

Metlakatla CDP Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	88	8.4	17	6	NR	17	NR	NR	0.40	NR	0.54
Retrofit units	75	7.0	25	6	NR	25	NR	NR	0.37	NR	0.46
New construction	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

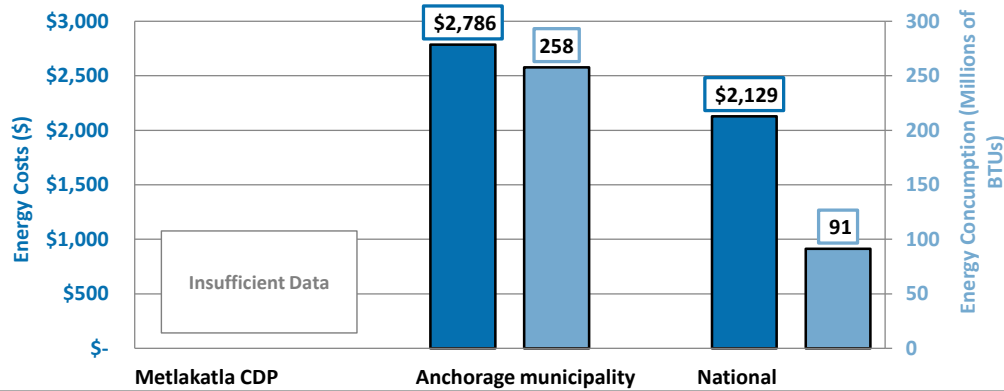
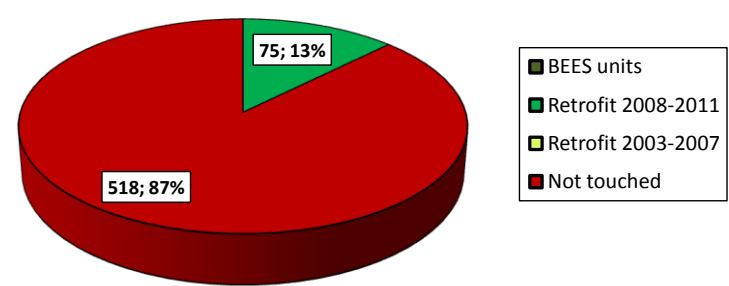


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Metlakatla CDP

Owner occupied House with Mortgage, Median Value
\$150,600

Owner-occupied House without a Mortgage, Median Value
\$78,600

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 3.98
Electricity with PCE (\$/kWh)	No PCE
Electricity without PCE (\$/kWh)	\$ 0.09

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 45,776
Renter-occupied	\$ 45,694
Owner-occupied	\$ 46,875
w/ mortgage	\$ 59,688
w/o mortgage	\$ 42,000

Average Annual Energy Cost	
With PCE	NO PCE
Without PCE	\$3,420

Avg % Median Income spent on Energy	7.5%
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Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 472	\$ 5,664
Gross rent	\$ 620	\$ 7,440
Owner-occupied	\$ 349	\$ 4,188
Housing units w/ mortgage	\$ 775	\$ 9,300
Housing units w/out a mortgage	\$ 266	\$ 3,192

Housing Stock Estimates	Number of Units
All Housing	606
All Occupied Housing	538
All Vacant housing	68
Vacant Housing for Sale/Rent	20

Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

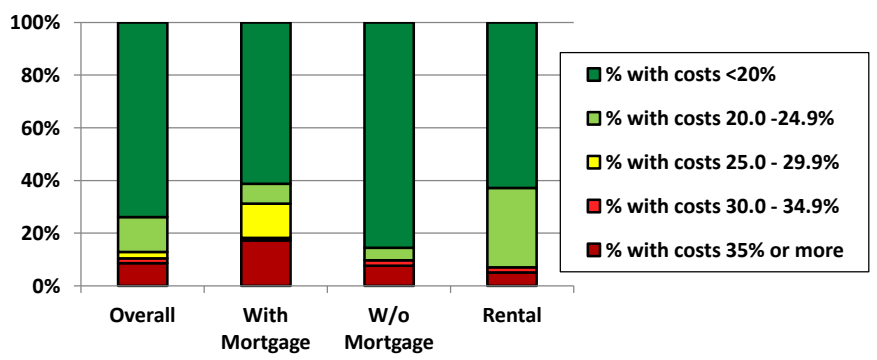
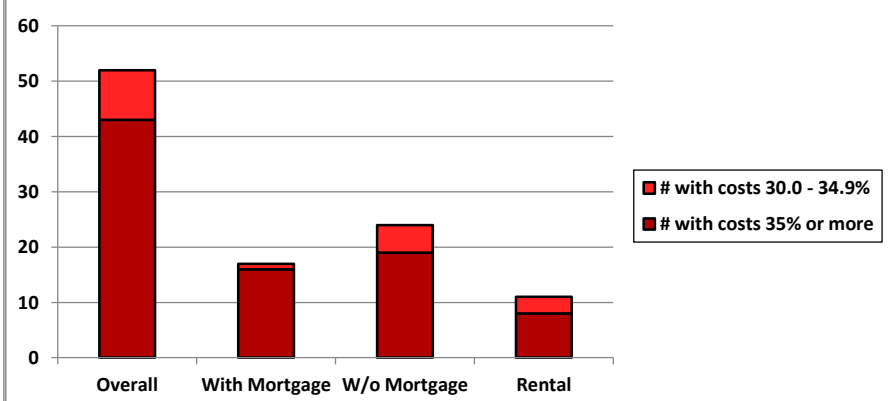


Figure M8: Number of Cost-Burdened Housing Units

ACS

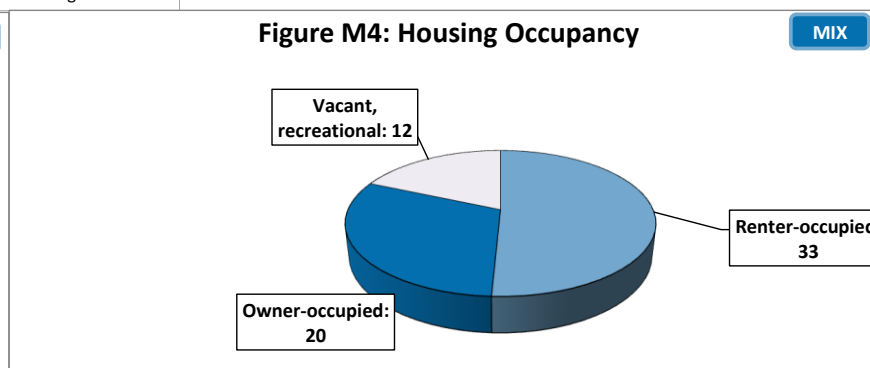
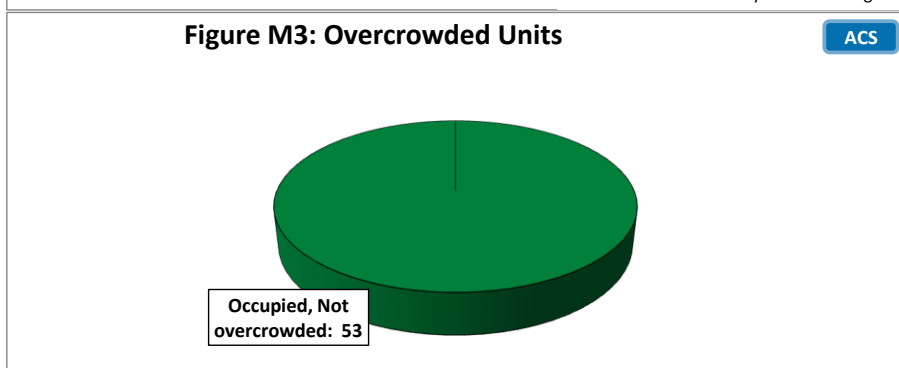
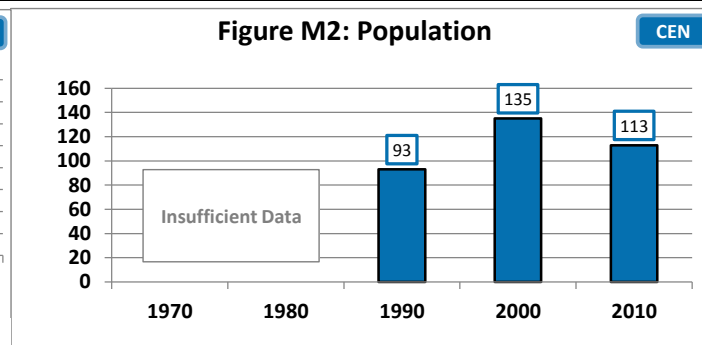
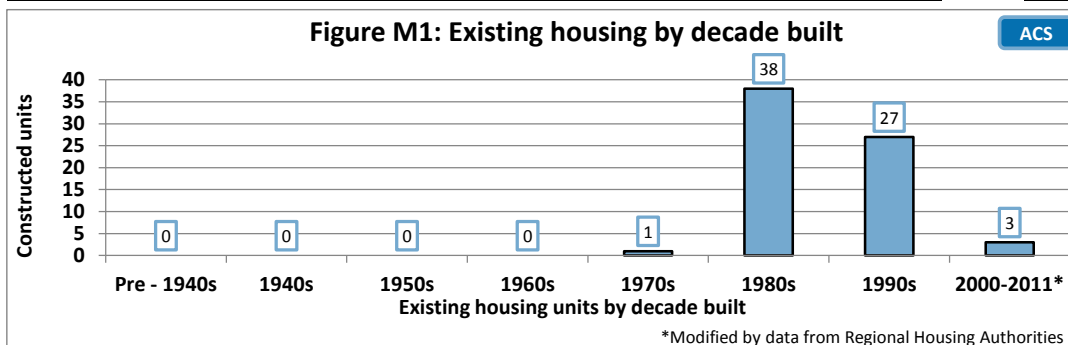


Community Profile for: Naukati Bay CDP

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,802 HDD)



Naukati Bay CDP Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost w/ PCE	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	8	1-star plus	50.0	1,116	\$ 3,873	154	155	\$4.73	13.1	25%
Retrofit units	5	3-star plus	76.2	1,122	\$ 3,188	101	100	\$3.16	6.1	60%
New construction	1	NR	NR	NR	NR	NR	NR	NR	NR	NR

Naukati Bay CDP Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	8	12.4	11	9	NR	17	NR	NR	0.58	NR	0.60
Retrofit units	5	7.7	24	15	NR	30	NR	NR	0.44	NR	0.53
New construction	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

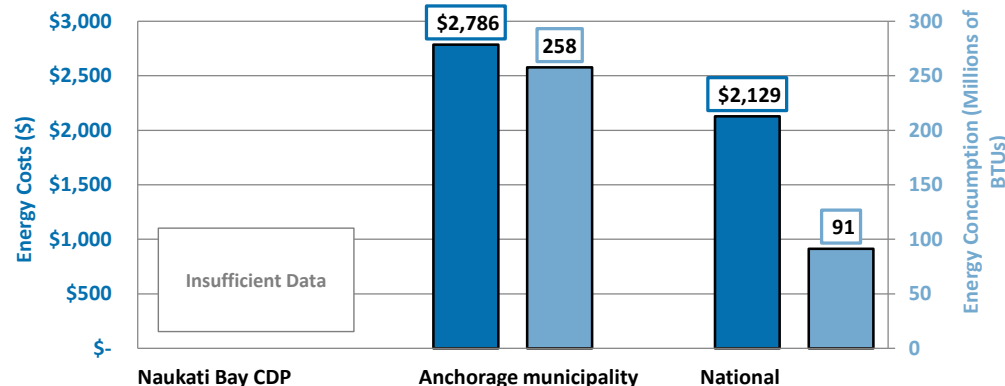
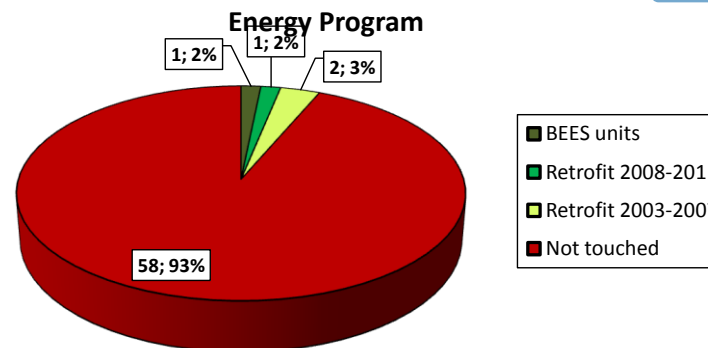


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Naukati Bay CDP

Owner occupied House with Mortgage, Median Value
NR

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 122,546
Renter-occupied	\$ 123,472
Owner-occupied	\$ 117,727
w/ mortgage	NR
w/o mortgage	\$ 117,727

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 349	\$ 4,188
Gross rent	\$ 331	\$ 3,972
Owner-occupied	NR	NR
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	NR	NR

Owner-occupied House without a Mortgage, Median Value
\$177,300

Average Annual Energy Cost	
With PCE	Without PCE
NR	NR
NR	NR

Housing Stock Estimates	Number of Units
All Housing	65
All Occupied Housing	53
All Vacant housing	12
Vacant Housing for Sale/Rent	0

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.33
Electricity with PCE (\$/kWh)	\$ 0.19
Electricity without PCE (\$/kWh)	\$ 0.54

Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

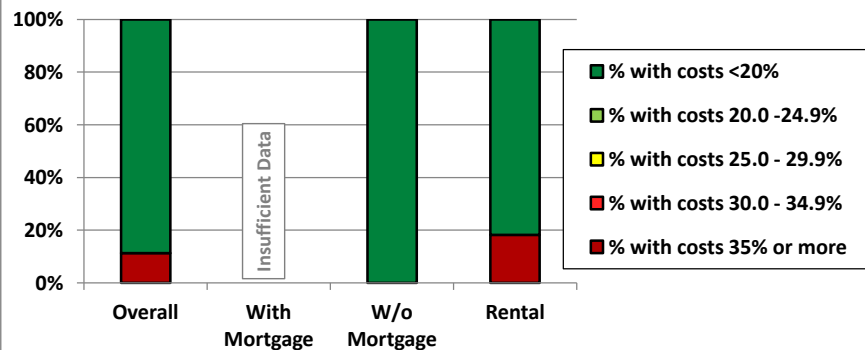
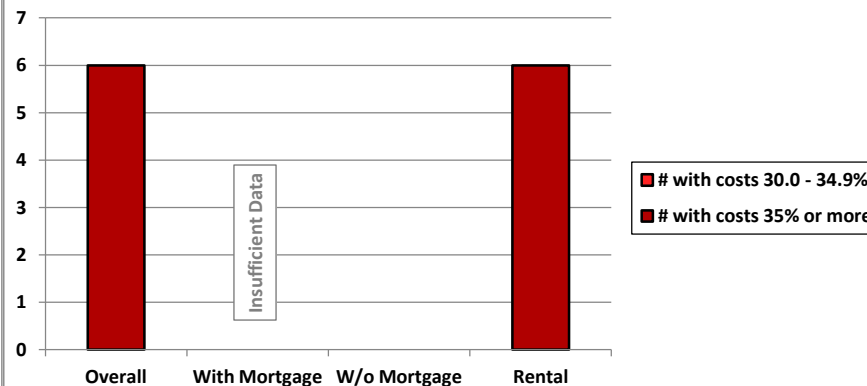
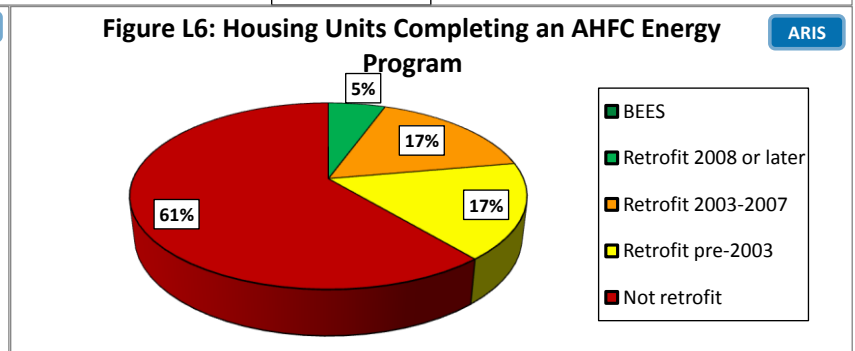
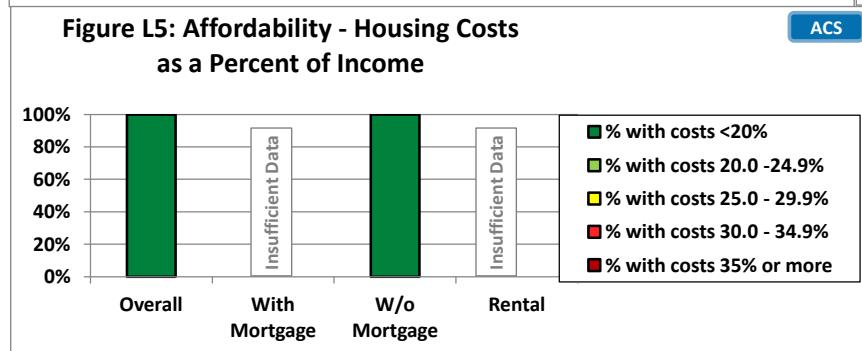
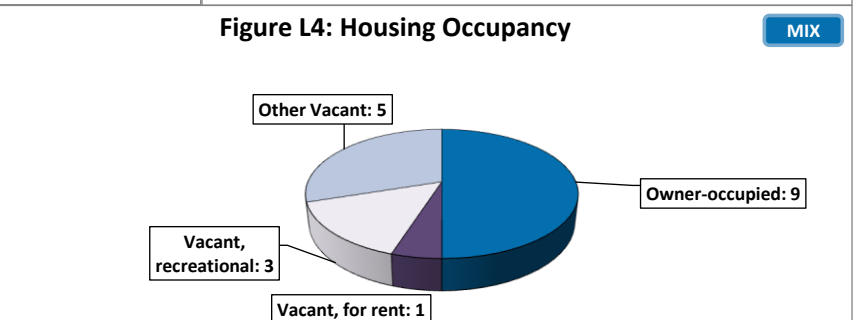
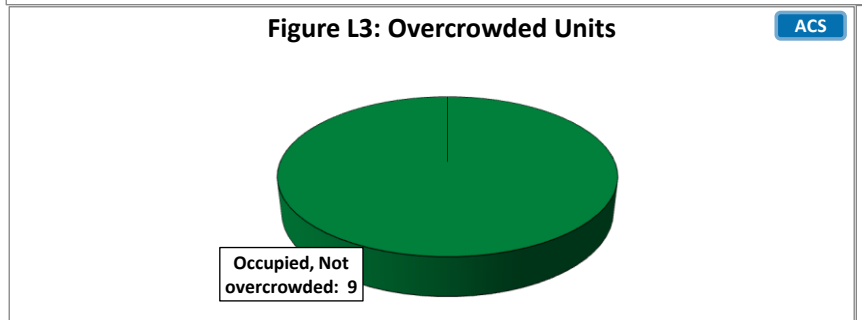
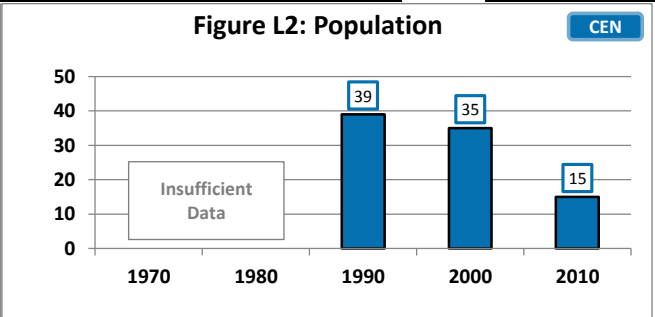
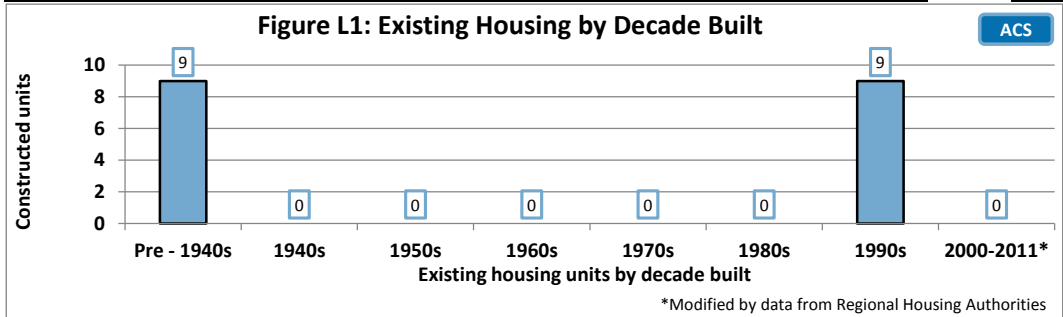


Figure M8: Number of Cost-Burdened Housing Units

ACS



Community Profile for:	Point Baker CDP	ANCSA Region	Sealaska Corporation	Climate Zone	6
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Owner-occupied House with Mortgage, Median Value
NR

Owner-occupied House without a Mortgage, Median Value
NR

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 5.30
Electricity with PCE (\$/kWh)	No PCE
Electricity without PCE (\$/kWh)	\$ 1.00

Median Annual Household Income	
Housing Units	Household Income
All-occupied	NR
Renter-occupied	NR
Owner-occupied	NR
w/ mortgage	NR
w/o mortgage	NR

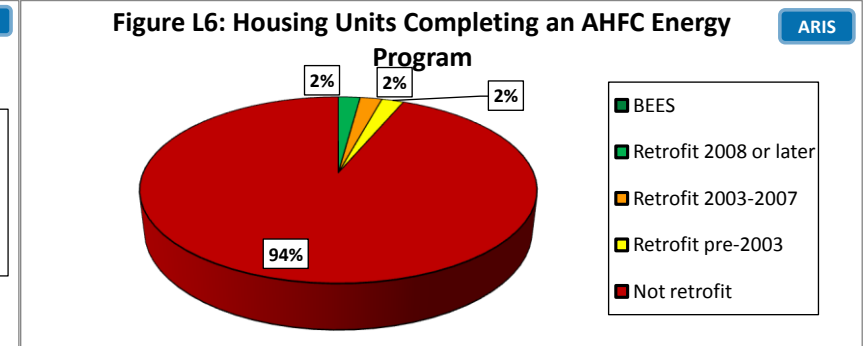
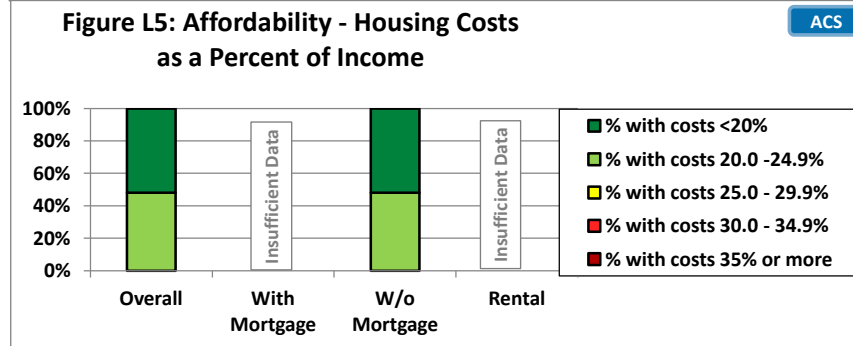
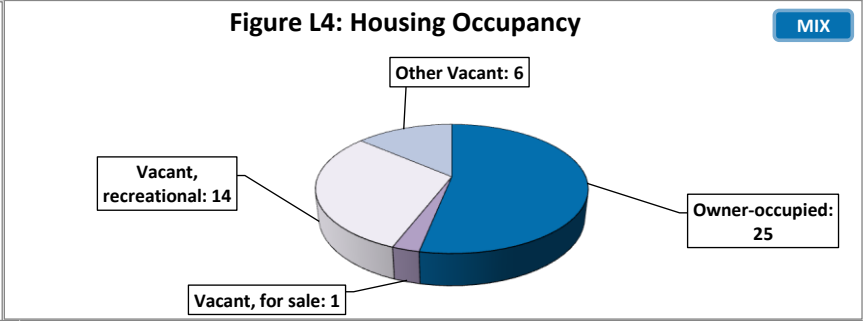
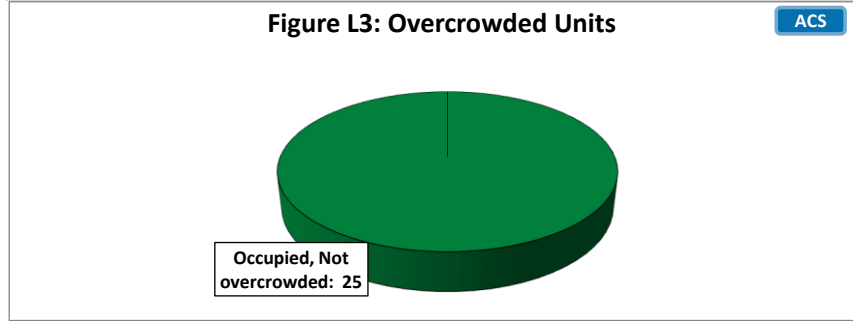
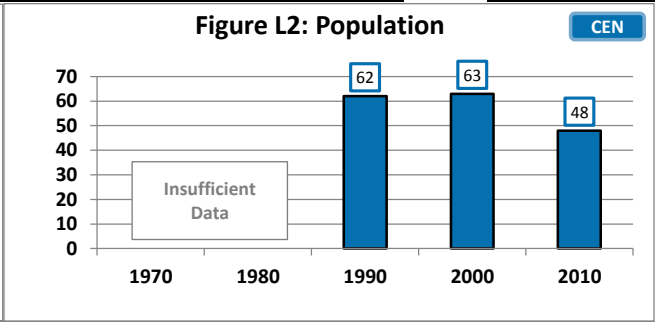
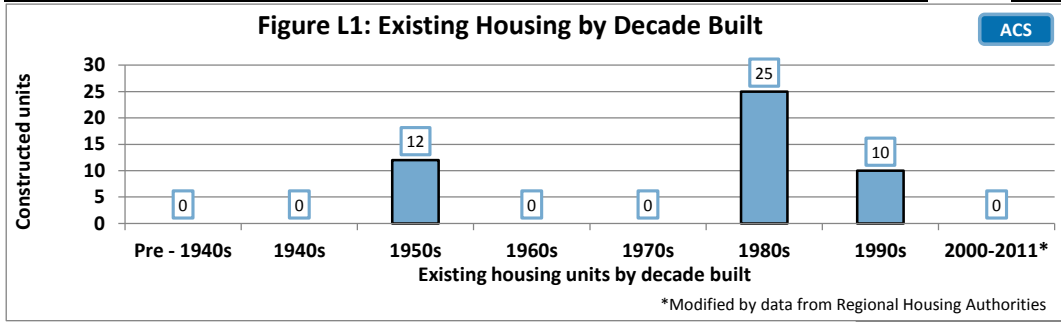
Housing Stock Estimates	Number of Units
All Housing	18
All Occupied Housing	9
All Vacant housing	9

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 100	\$ 1,200
Gross rent	NR	NR
Owner-occupied	NR	NR
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	\$ 100	\$ 1,200

Community Profile for: Port Protection CDP

ANCSA Region: Sealaska Corporation

Climate Zone: 6



Owner-occupied House with Mortgage, Median Value
NR

Owner-occupied House without a Mortgage, Median Value
\$101,300

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 5.26
Electricity with PCE (\$/kWh)	No PCE
Electricity without PCE (\$/kWh)	\$ 1.00

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 27,625
Renter-occupied	NR
Owner-occupied	\$ 27,625
w/ mortgage	NR
w/o mortgage	\$ 27,625

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 353	\$ 4,236
Gross rent	NR	NR
Owner-occupied	\$ 305	\$ 3,660
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	\$ 353	\$ 4,236

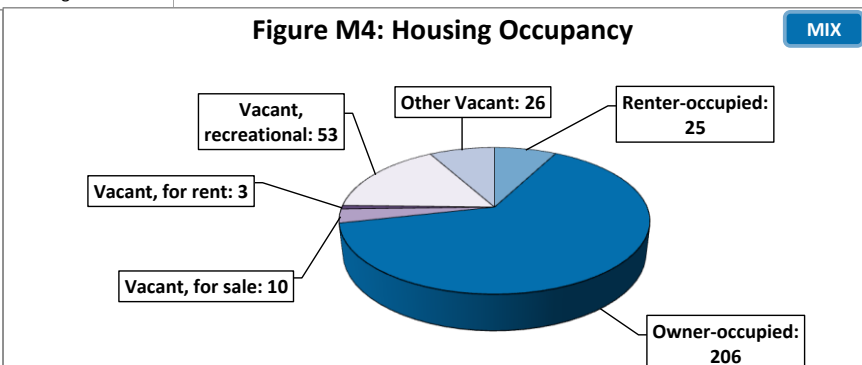
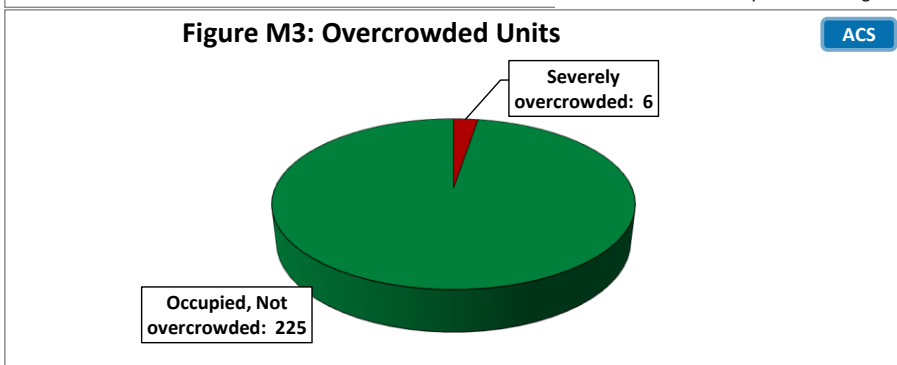
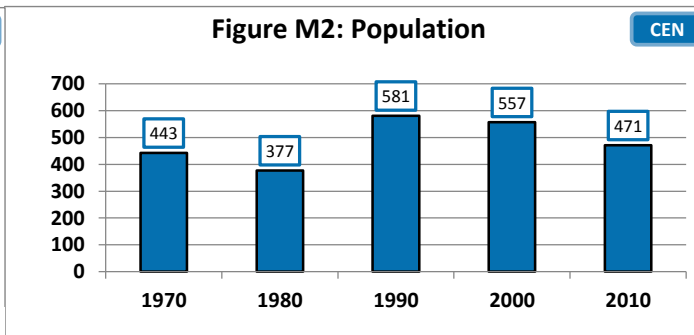
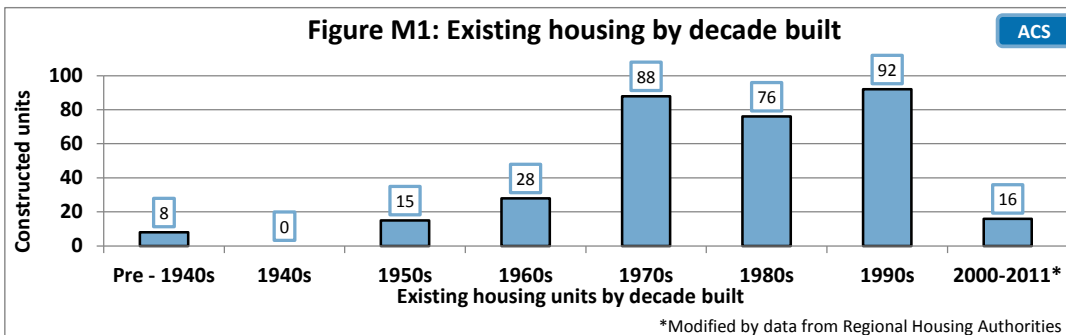
Housing Stock Estimates	
Housing Stock Estimates	Number of Units
All Housing	47
All Occupied Housing	25
All Vacant housing	22

Community Profile for: Thorne Bay city

ANCSA Region: Sealaska Corporation

Regional Housing Authority: Tlingit-Haida Regional Housing Authority

BEES Climate Zone (Heating Degree Days): Zone 6 (7,802 HDD)



Thorne Bay city Housing Energy Characteristics

Residential Unit Categories	Number of records	Avg Energy Rating Stars	Avg Energy Rating Points	Avg Sq. Feet	Avg. Ann Energy Cost	Avg. Ann Energy Use (million BTUs)	Avg. EUI (kBtus/SF)	Avg. ECI	Avg. Home Heating Index	% Tight Homes, No Ventilation
Pre-retrofit units	7	1-star plus	43.3	1,286	\$ 6,231	189	163	\$5.68	15.2	29%
Retrofit units	8	3-star plus	77.7	1,548	\$ 4,460	133	90	\$3.09	6.7	38%
New construction	7	5-star	89.7	1,818	\$ 3,407	85	49	\$2.08	2.8	29%

Thorne Bay city Housing Envelope Characteristics

Residential Unit Categories	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
Pre-retrofit units	7	18.1	8	9	NR	16	NR	NR	0.56	NR	0.58
Retrofit units	8	8.0	28	12	5	36	NR	NR	0.32	NR	0.44
New construction	7	3.7	43	20	NR	40	NR	NR	0.20	NR	0.35

BEES 2009	7.0	38	21	15	30	15	15	0.33	0.33	0.33
BEES 2012	4.0	43	25	15	38	15	15	0.30	0.30	0.30

Figure M5: Average Annual Home Energy Costs and Use

MIX

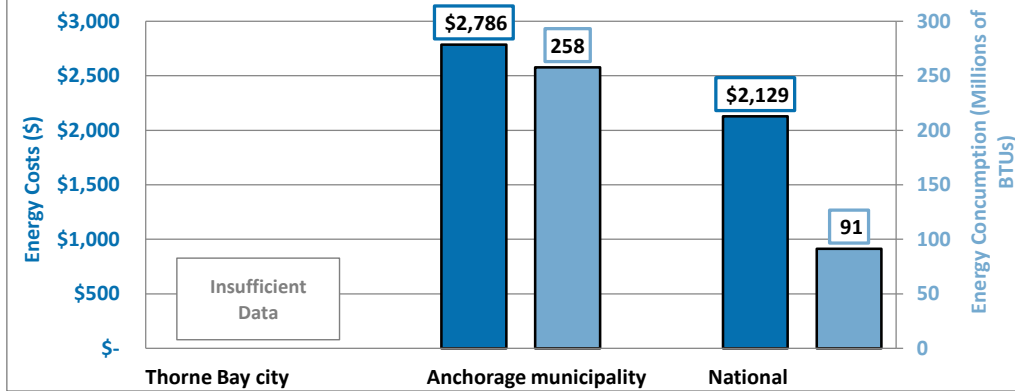
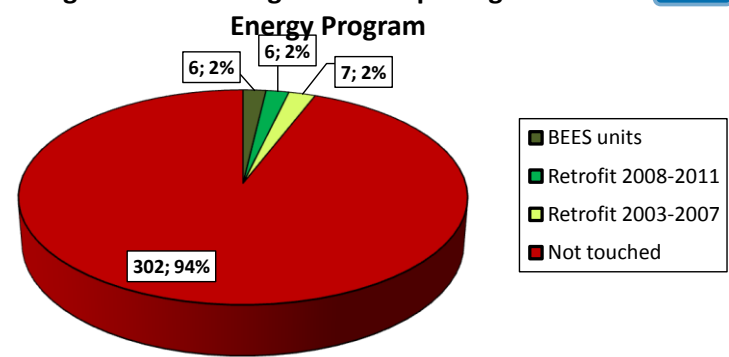


Figure M6: Housing Units Completing an AHFC Energy Program

ARIS



AFFORDABILITY - Thorne Bay city

Owner occupied House with Mortgage, Median Value
\$256,800

Owner-occupied House without a Mortgage, Median Value
\$157,500

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.38
Electricity with PCE (\$/kWh)	\$ 0.16
Electricity without PCE (\$/kWh)	\$ 0.24

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 52,014
Renter-occupied	\$ 61,875
Owner-occupied	\$ 51,806
w/ mortgage	\$ 73,571
w/o mortgage	\$ 48,636

Average Annual Energy Cost	
With PCE	NO PCE
Without PCE	\$6,555

Avg % Median Income spent on Energy	12.6%
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Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 457	\$ 5,484
Gross rent	\$ 917	\$ 11,004
Owner-occupied	\$ 398	\$ 4,776
Housing units w/ mortgage	\$ 1,904	\$ 22,848
Housing units w/out a mortgage	\$ 329	\$ 3,948

Housing Stock Estimates	Number of Units
All Housing	323
All Occupied Housing	231
All Vacant housing	92
Vacant Housing for Sale/Rent	12

Figure M7: Affordability - Housing Costs as a Percent of Income

ACS

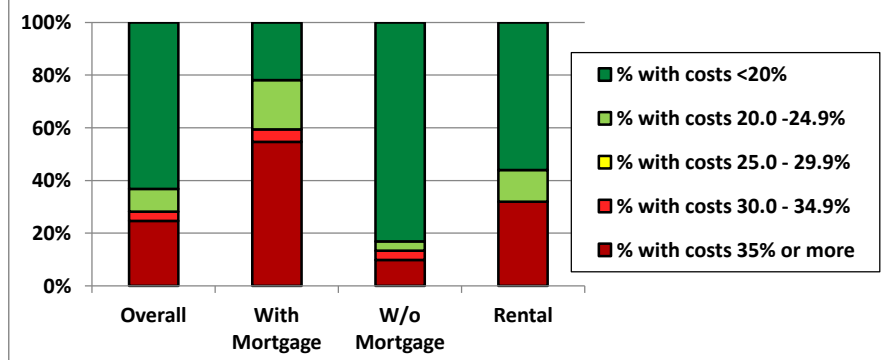
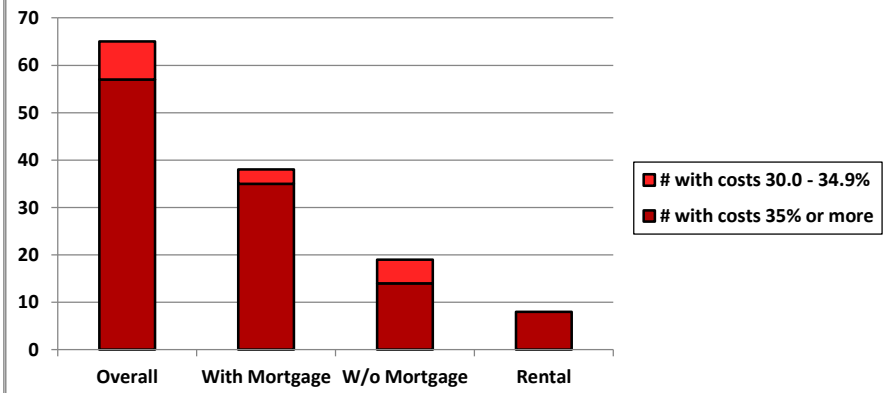
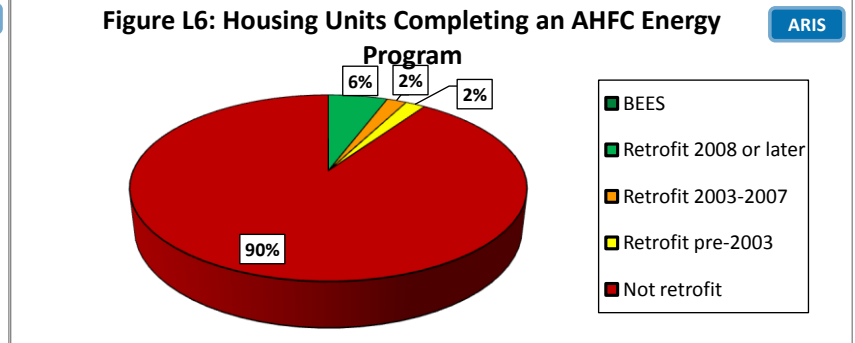
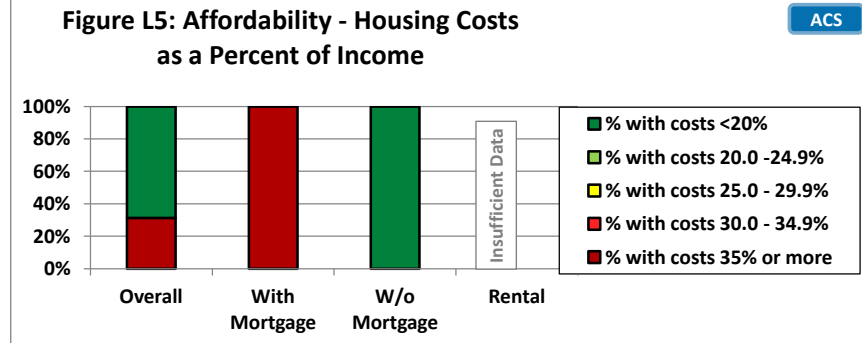
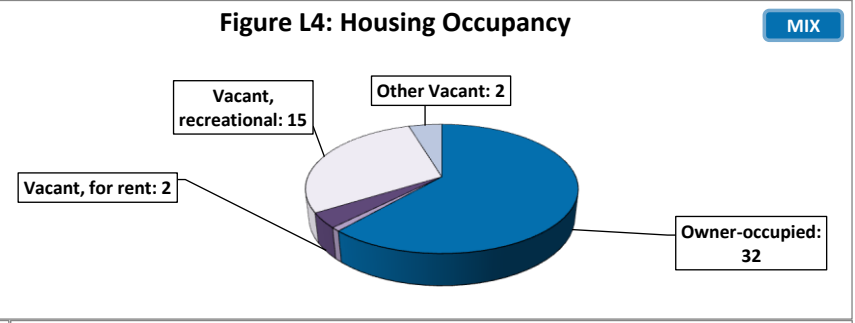
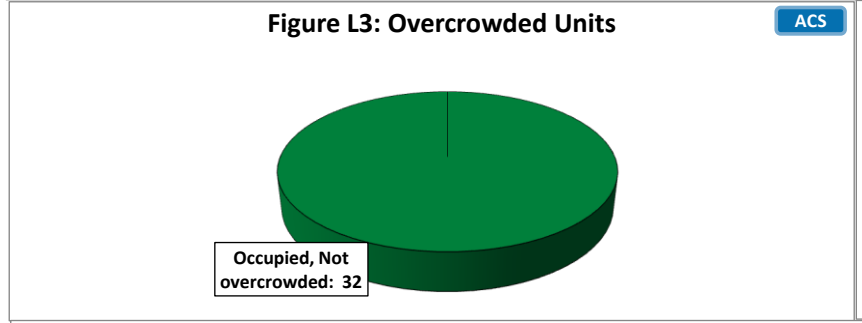
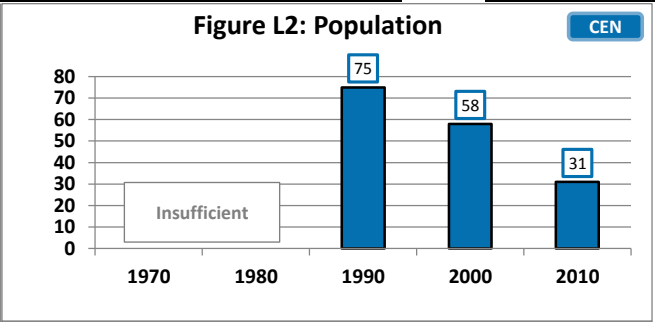
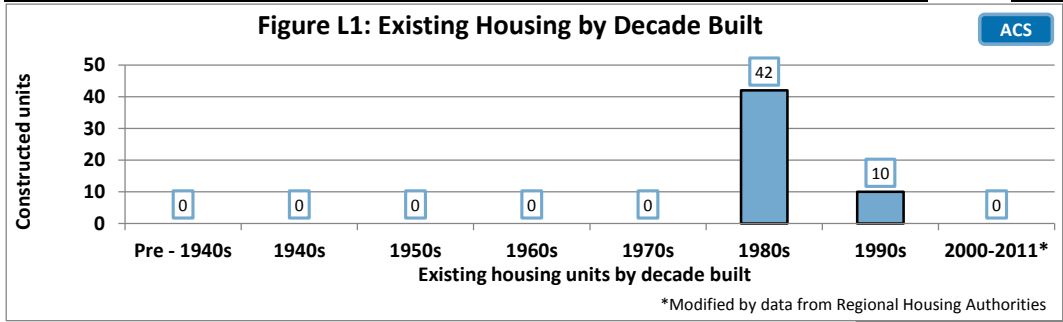


Figure M8: Number of Cost-Burdened Housing Units

ACS



Community Profile for:	Whale Pass CDP	ANCSA Region	Sealaska Corporation	Climate Zone	6
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Owner-occupied House with Mortgage, Median Value
NR
Owner-occupied House without a Mortgage, Median Value
\$121,200

Median Annual Household Income	
Housing Units	Household Income
All-occupied	\$ 38,654
Renter-occupied	NR
Owner-occupied	\$ 38,654
w/ mortgage	NR
w/o mortgage	\$ 39,615

Median Housing Costs		
	Monthly	Annual
All-occupied	\$ 186	\$ 2,232
Gross rent	NR	NR
Owner-occupied	\$ 173	\$ 2,076
Housing units w/ mortgage	NR	NR
Housing units w/out a mortgage	NR	NR

Estimated Energy Prices as of January 2013	
#1 Fuel oil cost (\$ / gallon)	\$ 4.38
Electricity with PCE (\$/kWh)	\$ 0.25
Electricity without PCE (\$/kWh)	\$ 0.55

Housing Stock Estimates	Number of Units
All Housing	52
All Occupied Housing	32
All Vacant housing	20