

Weatherization Program

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- Assisting homeowners for 30 years
- Income based
- Homeowners and renters may apply
- Services provided at no cost
- Strong history of performance





- Benefits:
 - Resident health and safety
 - Fire safety
 - Improves building stock
 - Invests in local communities
 - Energy savings

600 houses/year with five service providers



Funding:

- Alaska State Legislature
- Department of Energy
 - ~\$1-2 million annually

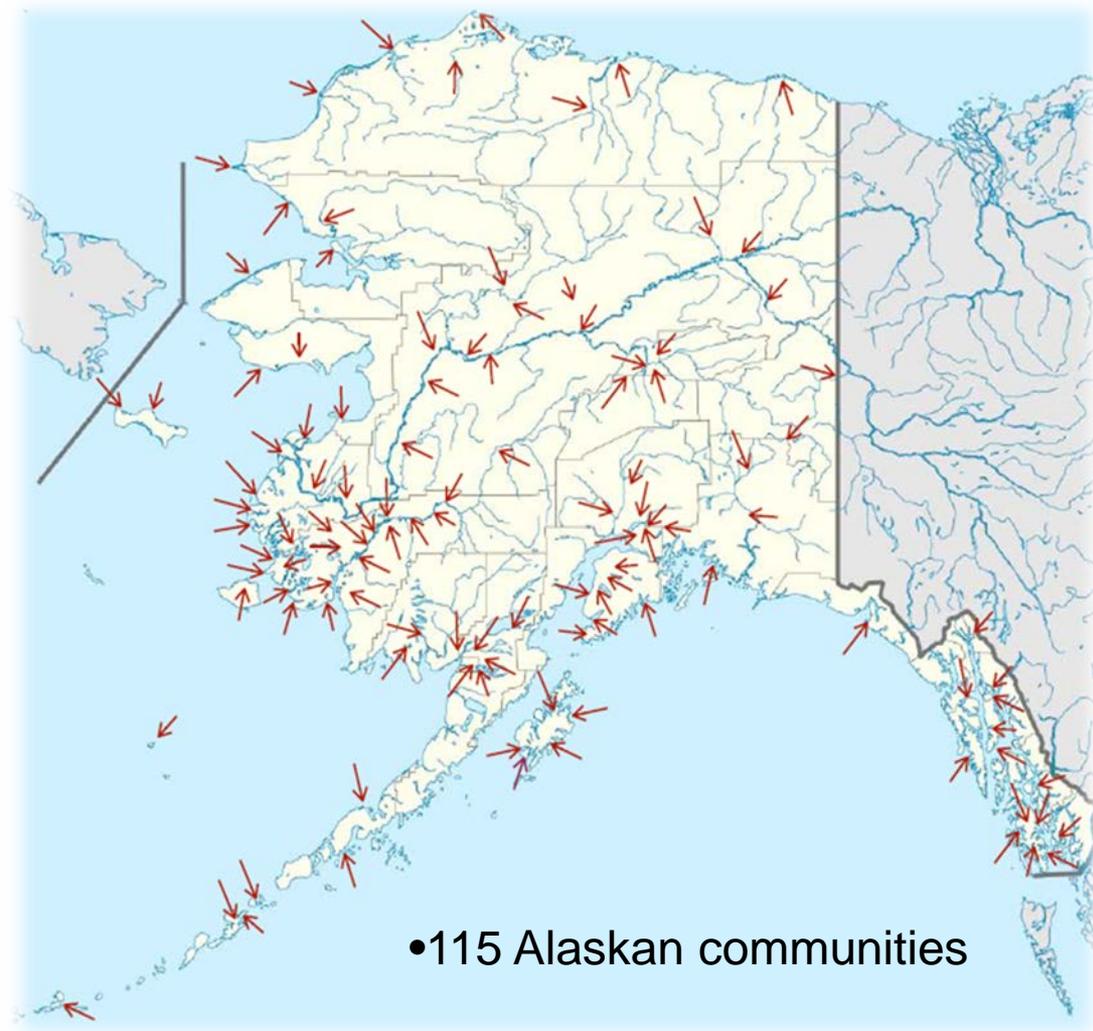


Partners:

- Alaska Community Development Corp.
- Interior Weatherization
- RURAL Community Action Program
- Tanana Chiefs Conference
- Aleutian Housing Authority
- AVCP Regional Housing Authority
- Baranof Island Housing Authority
- Bering Straits Regional Housing Authority
- Bristol Bay Housing Authority
- Cook Inlet Housing Authority
- Copper River Basin Housing Authority
- Interior Region Housing Authority
- Kodiak Island Housing Authority
- Pacific Rim Housing Authority
- Northwest Inupiat Housing Authority
- Tagiugmiullu Nunamiullu Housing Authority
- Tlingit-Haida Housing Authority
- Ketchikan Indian Housing Authority



2008-2010 Residential Weatherization Training



Training Partners

- ✓ Alaska Works Partnership Inc.
- ✓ Denali Commission
- ✓ Wisdom and Associates
- ✓ Alaska Craftsman Home Program
- ✓ Marquam George
- ✓ Alaska Center for Energy and Power
- ✓ Alaska Center for Appropriate Tech
- ✓ Renewable Energy Alaska Project

January 2011 Fuel Prices

Fairbanks	\$3.45
Anchorage	\$3.50
Juneau	\$3.87
Nome	\$4.54
Kotzebue	\$5.44
Atka	\$6.80



Gallon of Milk in Bethel, Alaska “hub community” last week 9/22/11 **\$7.99**

FY 2011 100% OF MEDIAN INCOME LIMITS FOR ALASKA

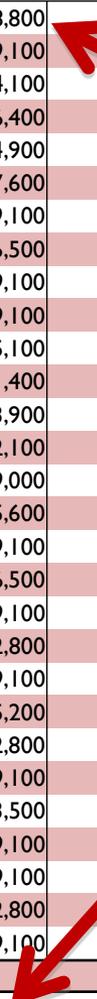
Effective May 31, 2011



Community Name	INCOME LIMIT - 1 PERSON	INCOME LIMIT - 2 PERSONS	INCOME LIMIT - 3 PERSONS	INCOME LIMIT - 4 PERSONS	INCOME LIMIT - 5 PERSONS	INCOME LIMIT - 6 PERSONS	INCOME LIMIT - 7 PERSONS	INCOME LIMIT - 8 PERSONS	EA ADDED FAMILY MEMBER
Anchorage Municipality Low Income Limit	58,800	67,200	75,600	84,000	90,800	97,500	104,200	110,900	6,720
Aleutians East Borough Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Aleutians West Census Low Income Limit	64,100	73,200	82,400	91,500	98,900	106,200	113,500	120,800	7,320
Bethel Census Area Low Income Limit	56,400	64,400	72,500	80,500	87,000	93,400	99,900	106,300	6,440
Bristol Bay Borough Low Income Limit	54,900	62,700	70,500	78,300	84,600	90,900	97,100	103,400	6,264
Denali Borough Low Income Limit	67,600	77,200	86,900	96,500	104,000	111,000	118,000	125,000	7,720
Dillingham Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Fairbanks North Star Borough Low Income Limit	56,500	64,500	72,600	80,600	86,300	92,000	97,700	103,400	6,448
Haines Borough Low Income Limit	49,100	56,100	63,000	70,100	75,800	81,400	87,000	92,600	5,608
Hoonah-Angoon Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Juneau Borough Low Income Limit	65,100	74,400	83,700	92,900	100,000	107,100	114,200	121,300	7,432
Kenai Peninsula Borough Low Income Limit	51,400	58,800	66,100	73,400	79,300	85,200	91,100	96,900	5,872
Ketchikan Gateway Borough Low Income Limit	53,900	61,600	69,300	77,000	83,200	89,400	95,500	101,700	6,160
Kodiak Island Borough Low Income Limit	52,100	59,500	66,900	74,300	80,300	86,300	92,300	98,300	5,944
Lake Peninsula Borough Low Income Limit	49,000	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Matanuska-Susitna Borough Low Income Limit	55,600	63,500	71,400	79,300	85,000	90,700	96,400	102,100	6,344
Nome Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
North Slope Borough Low Income Limit	56,500	64,600	72,700	80,700	86,400	92,100	97,800	103,500	6,456
Northwest Arctic Borough Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Petersburg Census Area Low Income Limit	52,800	60,400	67,900	75,400	81,500	87,500	93,500	99,600	6,032
Prince of Wales-Hyder Census Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Sitka City & Borough Low Income Limit	55,200	63,100	71,000	78,800	85,200	91,500	97,800	104,100	6,304
Skagway Municipality Low Income Limit	52,800	60,400	67,900	75,400	81,500	87,500	93,500	99,600	6,032
Southeast Fairbanks Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Valdez-Cordova Census Low Income Limit	53,500	61,200	68,800	76,400	82,600	88,700	94,800	100,900	6,112
Wade Hampton Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Wrangell City and Borough Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
Yakutat City & Borough Low Income Limit	52,800	60,400	67,900	75,400	81,500	87,500	93,500	99,600	6,032
Yukon-Koyukuk Census Area Low Income Limit	49,100	56,100	63,100	70,100	75,800	81,400	87,000	92,600	5,608
2011 DOE Poverty Income Levels	25,080	33,860	42,640	51,420	60,200	68,980	77,760	86,540	8,780

\$58,800
1 Person in Anchorage

\$25,080
DOE Income Level



Increased Home Investment

Average Cost Per Unit

Urban

\$7,000



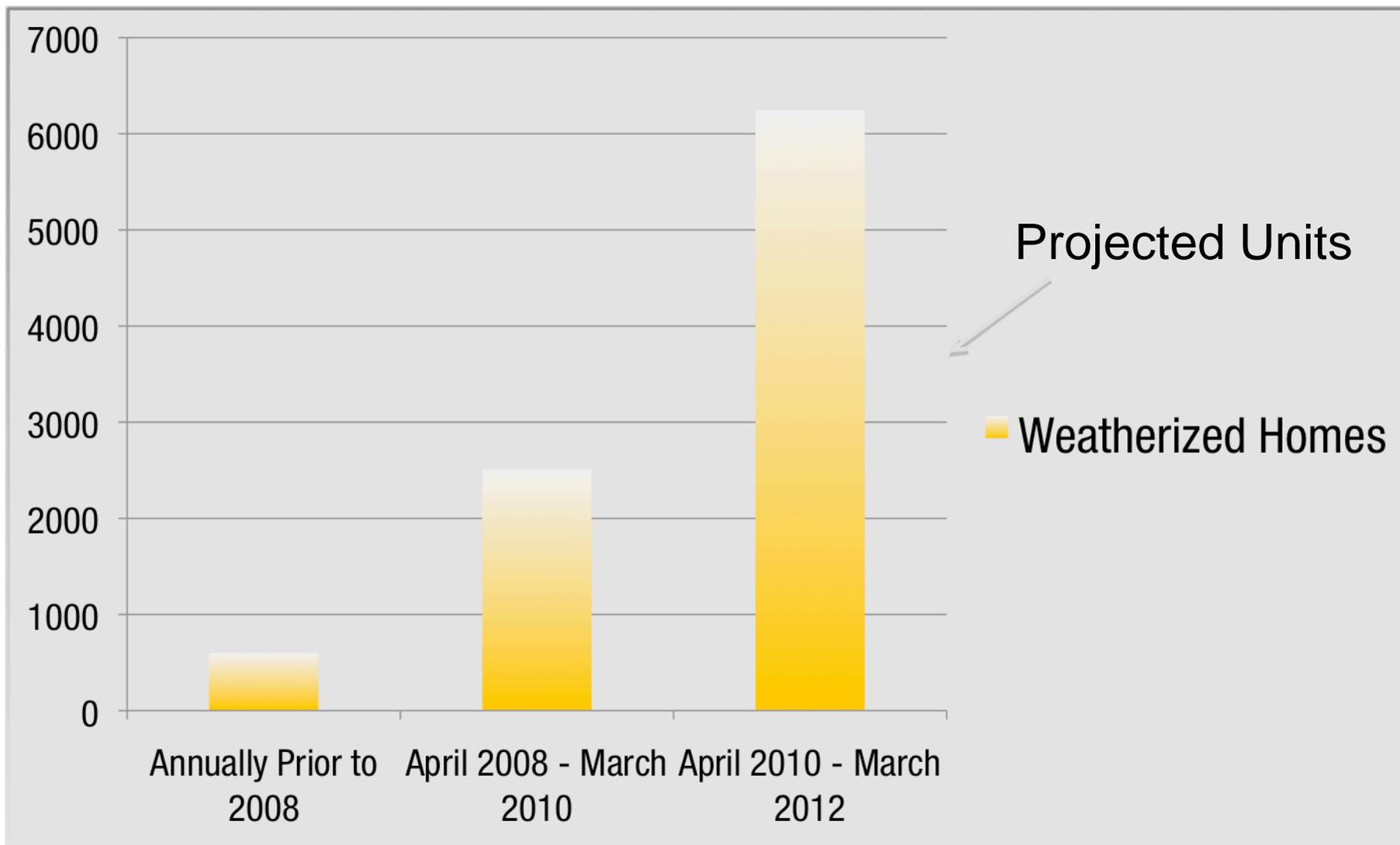
\$11,000

Rural

\$18,000

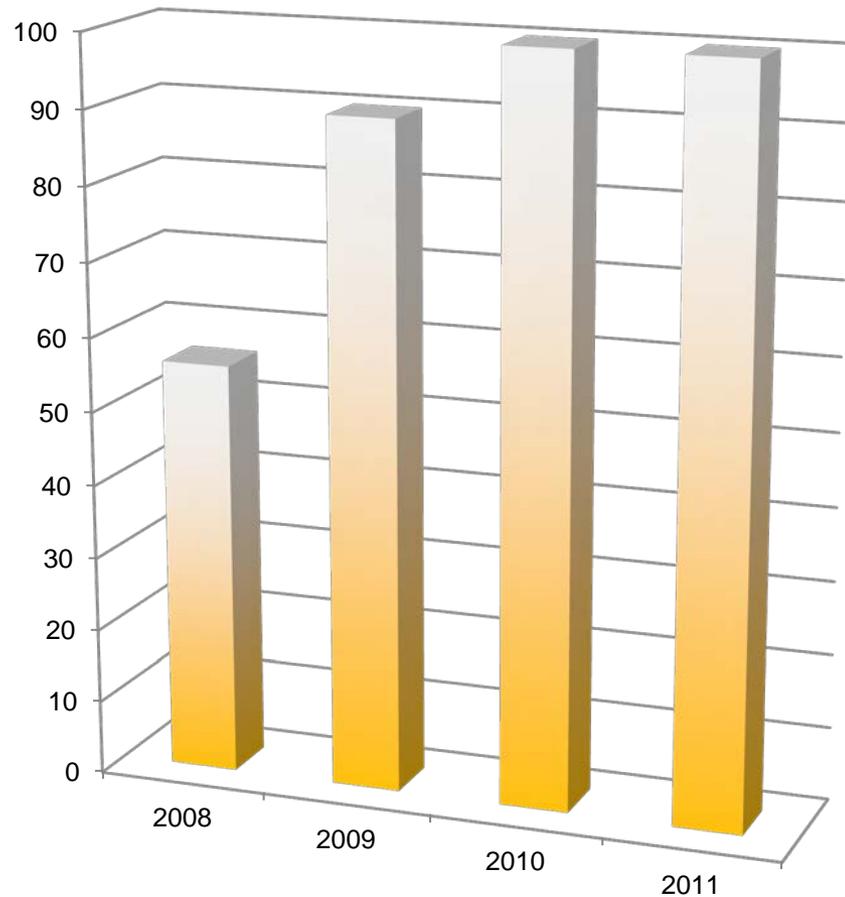


\$30,000

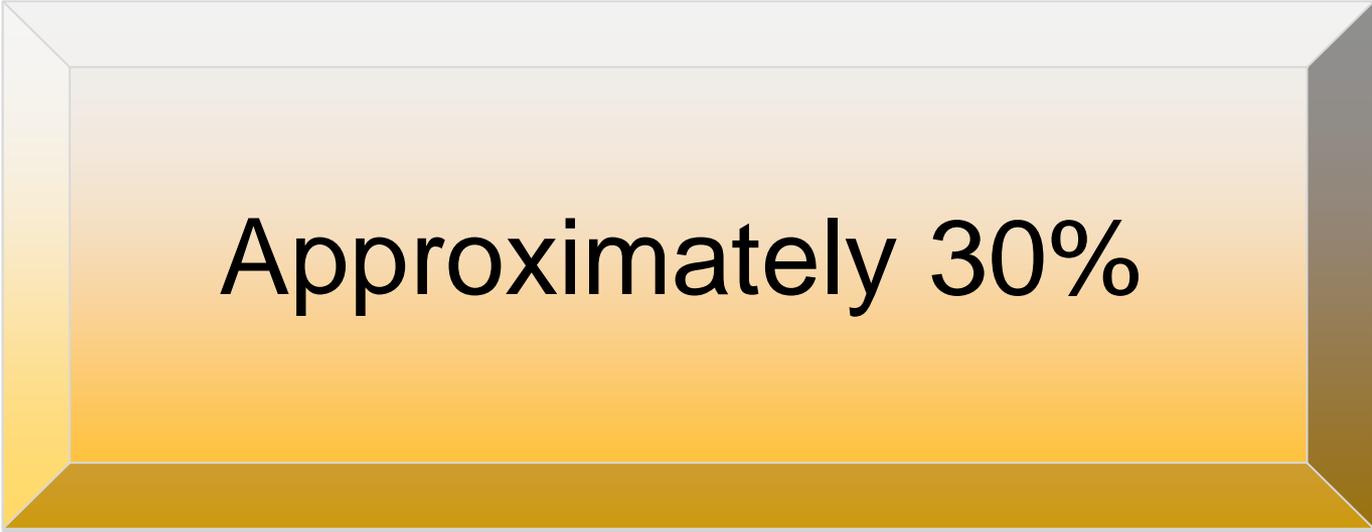


Communities Served

- 2008: **56**
- 2009: **90**
- 2010: **100+**
- 2011: **100+**



Energy Savings



Approximately 30%

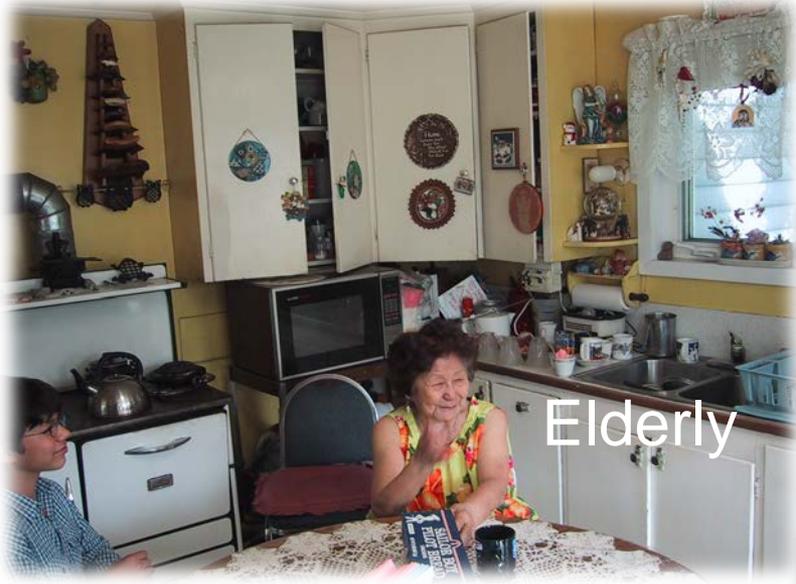
Before



After



Priority Clients





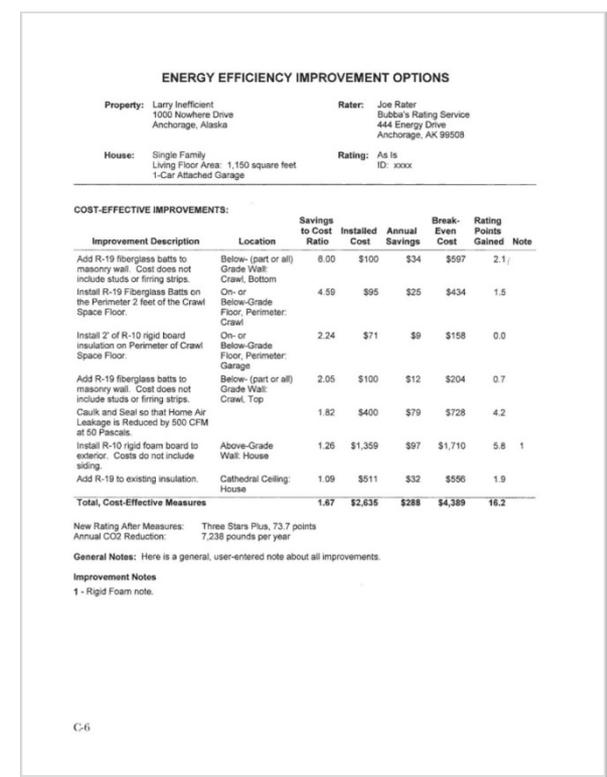
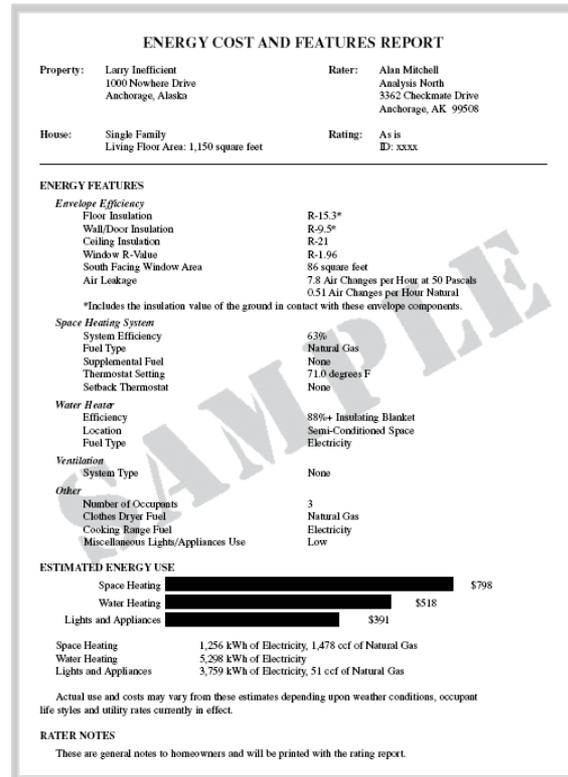
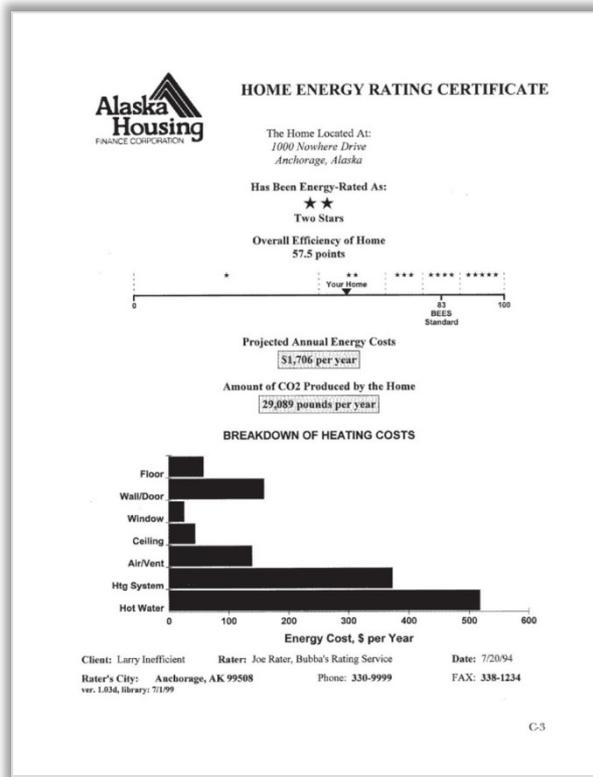


Home Energy Rebate

PROGRAM

- For individuals who do not qualify for Weatherization Program
- No income requirements
- Owner-occupied, year-round residences
- Homeowners pay up front & are then rebated for making eligible improvements they choose
- “Before & After” energy ratings required

Three parts of an energy rating





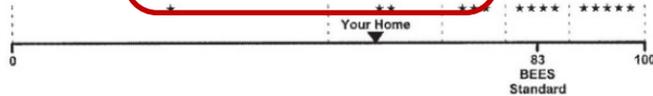
HOME ENERGY RATING CERTIFICATE

The Home Located At:
1000 Nowhere Drive
Anchorage, Alaska

Has Been Energy-Rated As:

★ ★
Two Stars

Overall Efficiency of Home
57.5 points



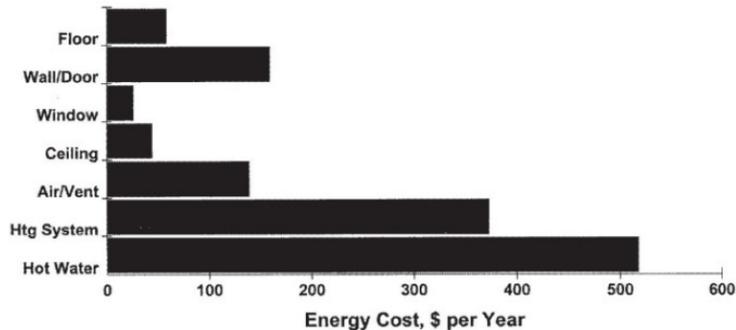
Projected Annual Energy Costs

\$1,706 per year

Amount of CO2 Produced by the Home

29,089 pounds per year

BREAKDOWN OF HEATING COSTS



Client: Larry Inefficient

Rater: Joe Rater, Bubba's Rating Service

Date: 7/20/94

Rater's City: Anchorage, AK 99508

Phone: 330-9999

FAX: 338-1234

ver. 1.03d, library: 7/1/99

Energy Rating Certificate:

Shows star rating, points & energy costs of home

ENERGY COST AND FEATURES REPORT

Property: Larry Inefficient
1000 Nowhere Drive
Anchorage, Alaska

Rater: Alan Mitchell
Analysis North
3362 Checkmate Drive
Anchorage, AK 99508

House: Single Family
Living Floor Area: 1,150 square feet

Rating: As is
ID: xxxx

ENERGY FEATURES

Envelope Efficiency

Floor Insulation R-15.3*
Wall/Door Insulation R-9.5*
Ceiling Insulation R-21
Window R-Value R-1.96
South Facing Window Area 86 square feet
Air Leakage 7.8 Air Changes per Hour at 50 Pascals
0.51 Air Changes per Hour Natural

*Includes the insulation value of the ground in contact with these envelope components.

Space Heating System

System Efficiency 63%
Fuel Type Natural Gas
Supplemental Fuel None
Thermostat Setting 71.0 degrees F
Setback Thermostat None

Water Heater

Efficiency 88%+ Insulating Blanket
Location Semi-Conditioned Space
Fuel Type Electricity

Ventilation

System Type None

Other

Number of Occupants 3
Clothes Dryer Fuel Natural Gas
Cooking Range Fuel Electricity
Miscellaneous Lights/Appliances Use Low

ESTIMATED ENERGY USE

Space Heating	\$798
Water Heating	\$518
Lights and Appliances	\$391

Space Heating 1,256 kWh of Electricity, 1,478 ccf of Natural Gas
Water Heating 5,298 kWh of Electricity
Lights and Appliances 3,759 kWh of Electricity, 51 ccf of Natural Gas

Actual use and costs may vary from these estimates depending upon weather conditions, occupant life styles and utility rates currently in effect.

RATER NOTES

These are general notes to homeowners and will be printed with the rating report.

Energy Cost & Features Shows current energy features of home:

Poor insulation

Drafty

Inefficient

Water heater info

Potential indoor air quality issues

ENERGY EFFICIENCY IMPROVEMENT OPTIONS

Property: Larry Inefficient
1000 Nowhere Drive
Anchorage, Alaska

Rater: Joe Rater
Bubba's Rating Service
444 Energy Drive
Anchorage, AK 99508

House: Single Family
Living Floor Area: 1,150 square feet
1-Car Attached Garage

Rating: As Is
ID: xxxx

COST-EFFECTIVE IMPROVEMENTS:

Improvement Description	Location	Savings to Cost Ratio	Installed Cost	Annual Savings	Break-Even Cost	Rating Points Gained	Note
Add R-19 fiberglass batts to masonry wall. Cost does not include studs or furring strips.	Below- (part or all) Grade Wall: Crawl, Bottom	6.00	\$100	\$34	\$597	2.1	
Install R-19 Fiberglass Batts on the Perimeter 2 feet of the Crawl Space Floor.	On- or Below-Grade Floor, Perimeter: Crawl	4.59	\$95	\$25	\$434	1.5	
Install 2' of R-10 rigid board insulation on Perimeter of Crawl Space Floor.	On- or Below-Grade Floor, Perimeter: Garage	2.24	\$71	\$9	\$158	0.0	
Add R-19 fiberglass batts to masonry wall. Cost does not include studs or furring strips.	Below- (part or all) Grade Wall: Crawl, Top	2.05	\$100	\$12	\$204	0.7	
Caulk and Seal so that Home Air Leakage is Reduced by 500 CFM at 50 Pascals.		1.82	\$400	\$79	\$728	4.2	
Install R-10 rigid foam board to exterior. Costs do not include siding.	Above-Grade Wall: House	1.26	\$1,359	\$97	\$1,710	5.8	1
Add R-19 to existing insulation.	Cathedral Ceiling: House	1.09	\$511	\$32	\$556	1.9	
Total, Cost-Effective Measures		1.67	\$2,635	\$288	\$4,389	16.2	

New Rating After Measures: Three Stars Plus, 73.7 points
Annual CO2 Reduction: 7,238 pounds per year

General Notes: Here is a general, user-entered note about all improvements.

Improvement Notes

1 - Rigid Foam note.

Energy Efficiency Improvement Options report

Shows detailed list of energy efficiency improvements

“Add R-19 to existing insulation”

“Caulk and Seal so that Home Air Leakage is reduced by 500 CFM at 50 Pascals”

Home Energy Rebate Results

April 2008 – Sept 9, 2011

- Spent **\$117.4 million**
- Rebates **15,260**
- As-Is **27,204**
- 5+ Homes **1,180**

Home Energy Rebate Program Statewide Annual Outcome

Estimates*	Home Energy Rebate Program
Total Energy Savings	991,967 MMBTUs
Total CO2 Emissions Reduced	62,581 net tons
Total kwh Savings	115,784,000 kwh
Average home energy savings	32.9%
Average home cost savings	\$1,347.59/year
Average Home Age	33.6 years
As is rating	2 Star Plus
Post rating	4 Star
Average increase in rating	3 Steps

Alaska Energy Efficiency Revolving Loan Fund (AEERLF)

- Energy efficiency improvements for:
 - Regional Educational Attendance Areas (REAs)
 - University of Alaska
 - State facilities
 - Municipal facilities
- Guaranteed savings from energy efficiency improvements are used to pay off the loan

**“Alaska Sustainable Energy Act”
\$250 million revolving loan fund**
