

Brainstorm: BPA Support for Utility Weatherization Programs

Sarah F. Moore – Residential Sector Lead

Courtney Dale – Residential Weatherization Program Support

Review – Residential Weatherization

RTF reevaluated single family weatherization measures

- Savings ↓ 60%
- Payments ↓ 53%
- Effective October 2015

Manufactured homes and multifamily will likely change for October 2016

How Does It Compare?

Measure	Average Expected BPA Payment*	Energy Trust of Oregon Payment	PSE Payment (Per SF**)	Pacific Power (WA)
Attic Insulation	\$0.24	\$0.25	\$600 (\$0.38)	\$0.40
Floor Insulation	\$0.27	\$0.30	\$200 (0.13)	\$0.40
Wall Insulation	\$0.65	\$0.30	\$400 (\$0.31)	\$0.40
Windows	\$3.00	\$1.75	\$1,000 (\$5.00)	\$1.50
Air Sealing	\$0.20/cfm	N/A	\$350	\$0.30 sf

*Based on 2014 program activity

**Assuming a 1600 square foot house

How Can We Support You?

We've been contacted by some utilities and want to include everyone.

What do we need to be focusing on to support you?

We need your input

Brainstorm

Ideas?



Ideas We've Heard

- Measures detailed by HVAC system
- Support for home energy audits
- Outreach tools
- “Program in a box”

HVAC Specific Measures

- “Average” heating system measures rely on RBSA averages
 - Might not be what comes through weatherization programs
- Programs might benefit from screening or targeting homes with furnaces or zonal heat
- Caution: 4x more measures, potential confusion

Two Measure Options

R-11 to R-38 Attic Insulation Example:

A – Average heating system: 0.40 kWh / \$0.25

B { Elec. furnace: 0.75 kWh / \$0.47 *per sq ft*
Zonal: 0.42 kWh / \$0.26
Heat pump: 0.24 kWh / \$0.15

Targeting the High Use Homes

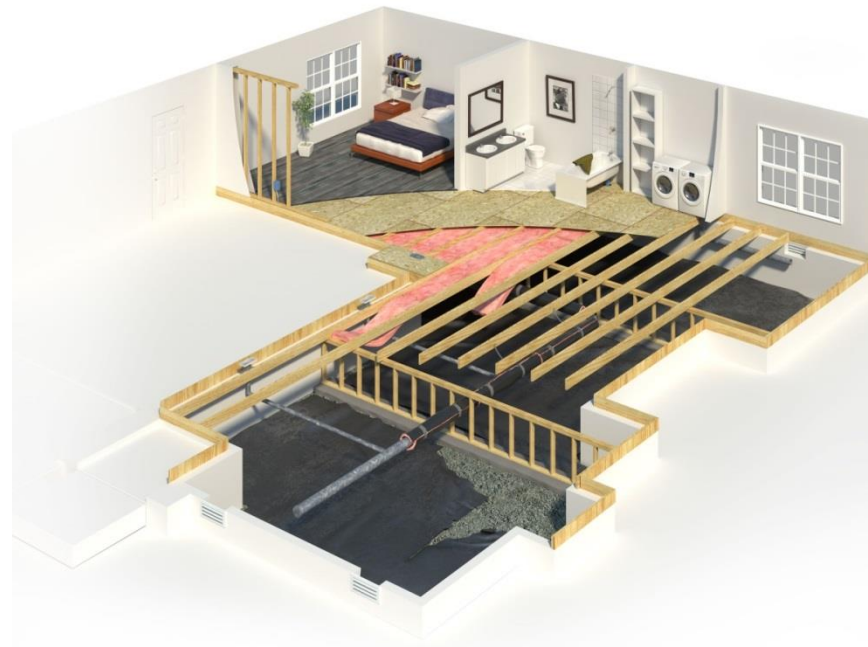
- Use utility data/bills
- Public data (age or size of house)
- Online energy audit
- In-person audit
- Marketing efforts

Energy Audit Tools

- Online, homeowner driven
- Energy auditor software
- Mobile-friendly products
- Energy performance scores/customer report
- Communication best practices training for auditors

Other Ideas?

- Community education materials
- “Program in a box”



Thank You

Sarah F. Moore

Residential Sector Lead

sfmoore@bpa.gov

503-230-4157

Courtney Dale

Weatherization Program Support

crdale@bpa.gov

503-230-3640



Please fill out this assessment and ranking tool!

<https://www.surveymonkey.com/r/BPAWxSupport> (Hyperlink)

Heating System Percentages

	Heating Zone 1	Heating Zone 2	Heating Zone 3
Electric Furnace	15%	28%	27%
Zonal/DHP	46%	30%	34%
Heat Pump	38%	42%	40%

Heating Zone 1	Savings (kWh/yr)			Payments		
	Current	New	% Change	Current	New	% Change
Attic Insulation - R0 to R38	2.66	2.03	-24%	\$0.80	\$0.65	-19%
Attic Insulation - R0 to R49	2.83	2.06	-27%	\$0.85	\$0.65	-24%
Attic Insulation - R11 to R38*		0.40			\$0.25	
Attic Insulation - R11 to R49*		0.43			\$0.25	
Attic Insulation - R19 to R38	0.70	0.20	-72%	\$0.21	\$0.10	-52%
Attic Insulation - R19 to R49	0.87	0.23	-73%	\$0.26	\$0.10	-62%
Wall Insulation - R0 to R11	2.00	1.62	-19%	\$0.61	\$0.65	7%
Floor Insulation - R0 to R19	2.20	0.70	-68%	\$0.65	\$0.25	-62%
Floor Insulation - R0 to R30	2.58	0.78	-70%	\$0.77	\$0.30	-61%
Floor Insulation - R19 to R30	0.40	0.11	-72%	\$0.12	\$0.05	-58%
Windows Double Pane to Class 30	19.16	5.19	-73%	\$6.00	\$3.00	-50%