

Weatherizing Homes of Ohio's Low-Income Families Reduces pollution, cuts energy bills, creates jobs

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Energy spending in Ohio increased 58 percent over the past decade. In 2012, Ohioans spent nearly \$50 billion on energy, equal to nine percent of our gross state product.¹ Over \$9 billion went to heat and power homes in the state, an expense of \$2,052 for the average household.

For low-income families, energy costs can be a financial burden. Roughly one in three Ohio households, 1.4 million in all, are considered cost burdened by the U.S. Department of Housing and Urban Development standards, paying more than 30 percent of their annual income on housing and utilities combined. After paying rent and utility bills, these families have difficulty covering the cost of other necessities such as food, clothing, transportation and medical care. According to the 2013 Home Energy Affordability Gap Report, more than 300,000 Ohio households pay over 30 percent of their annual income just on their home energy bills alone.²

Fortunately, Ohio has one of the best programs in the nation for weatherizing buildings where low-income families live. Ohio's Home Weatherization Assistance Program (HWAP) reduces energy costs for low-income households and makes it easier for them to meet their basic needs, while also making homes more comfortable and reducing pollution. Ohio's program saves more energy per household than has been documented in weatherization programs in any other state.³ This report reviews Ohio's HWAP accomplishments, documents some basic facts about energy use for home heat and power, discusses how recent policy changes are helping and hurting these efforts, and makes recommendations for policies that will spark more investment in weatherization and better returns.

Due to inadequate state, federal and utility funding, we weatherize too few homes—just 1.2 percent of the 460,000 households that sought emergency utility bill assistance last year received weatherization services; and far less than one percent of the 1.3 million households technically eligible to receive them. And a bill recently signed by Ohio Governor John Kasich and passed by the Ohio State Legislature will have detrimental effects on the future level of utility investments.

Key findings

- Ohio's Home Weatherization Assistance Program, one of the best in the nation, lowers home energy bills by more than 20%, helping families achieve home energy affordability.
- Weatherization also generates jobs, reduces pollution, and increases home values.
- Ohio's clean energy standards drove a seven-fold increase in investment in low-income weatherization. Continued increases in annual investment levels were expected until the state froze the standards.
- Freezing and eliminating Ohio's efficiency standard for electric utilities will eliminate more than \$300 million from weatherization services over a ten-year period, enough to weatherize homes of nearly 50,000 families.

¹ Energy Information Administration

² *The Home Energy Affordability Gap 2013*, May 2014.

³ <http://liheap.ncat.org/pubs/ohwxeval.pdf>

In 2008, Ohio put in place an effective standard that requires investor-owned electric utilities to reduce electric energy consumption in their territory by 22 percent by 2025. Since 2008, the standard has driven a seven-fold increase in electric utility investments in low-income home weatherization. In late spring of 2014, however, Governor John Kasich signed into law a bill freezing that energy standard for two years while assessing whether to eliminate it altogether. Eliminating the standard, or minimizing it, would result in dramatic cuts to already modest low-income weatherization programs. Based on current spending trajectories, the freeze and future elimination of Ohio's energy efficiency standard for electric utilities would result in the loss of more than \$300 million in estimated investments in low-income weatherization services, enough to weatherize nearly 50,000 homes over the next ten years. The state should restore Ohio's standard and further incentivize utilities to invest in low-income weatherization to meet requirements.

Ohio would benefit greatly from increased state, federal and utility investments in weatherization. They more than pay for themselves. According to the U.S. Department of Energy, every \$1 invested in HWAP generates \$2.51 in energy savings and related benefits—\$1.80 in reduced energy bills plus 71 cents in benefits to ratepayers, households, and communities.⁴ When low-income households cannot afford their utility bills, much of the cost is born by other ratepayers through increased rates. Weatherization not only reduces utility bills for low-income households, it also shrinks utility debt and lowers rates for all households, improves the health and safety of homes, lessens reliance on imported energy, reduces harmful emissions, and increases employment. For every \$1 million invested in weatherization, 52 direct jobs and 23 indirect jobs are created, many of which go to lower-income workers.⁵

Home Energy Assistance

Heat and electric power are basic necessities. To keep the heat on and power flowing, low-income families are often forced to cut back on other necessities and seek public assistance. These households face a difficult choice between eating properly, purchasing medication, or heating their homes. Each year, hundreds of thousands of Ohioans seek public assistance in paying utility bills.

In 2012, more than \$440 million in public dollars went to provide utility bill assistance to low-income families: \$162.7 million in emergency assistance from the federal government to help 460,000 Ohio families cope with a winter or summer crisis and \$277.5 million in ratepayer dollars to help 350,000 low-income households reduce their monthly utility bill to six percent of household income. However, relatively few households are weatherized each year. Table 1 shows that in 2012, 5,741 homes were weatherized, less than one percent of the 460,000 households that sought emergency energy bill assistance that year and far less than one percent of the 1.3 million households technically eligible to receive weatherization services. It also provides basic information on the state of Ohio's programs dedicated to making home energy bills more affordable for low-income families.

⁴ Weatherization Assistance Program, *Know the Facts*, http://www.waptac.org/data/files/website_docs/public_information/know%20the%20facts_may2012.pdf

⁵ Ohio Partners for Affordable Energy, *Ohio Home Weatherization Assistance Program Paper*

Table 1
Relatively Few Households Seeking Assistance Receive Weatherization Services

	Program Type	2012 Expenditures	# of Households Served	Eligibility Requirements	# of Ohio Households Eligible
Home Energy Assistance Program	Emergency bill assistance for Winter and Summer Crises	\$162,739,126	459,057	At or below 175% of FPL	1,334,015
Percentage Income Payment Plan (PIPP)	Subsidized bill payment plan based on ability to pay	\$277,456,844	358,000	At or below 150% of FPL	1,121,054
Home Weatherization Program (HWAP)	Weatherization Services	\$38,089,246	5,741	At or below 200% of FPL	1,397,964
Electric Partnership Program (EPP)	Installs efficient lights, appliances; some weatherization services	\$15,000,000	12,519	At or below 150% of FPL	1,121,054

Ohio’s Home Energy Assistance Program (HEAP) is federally funded through the Low Income Home Energy Assistance Program (LIHEAP) and administered by the Ohio Office of Community Assistance in the Ohio Development Services Agency. HEAP is a one-time benefit, administered during a crisis, typically applied as a credit to the utility bill.¹ The average HEAP benefit was \$217 in 2013 (\$277 for a winter crisis and \$171 for summer crisis). The size of the benefit depends on several factors: number of persons in home, total household income, primary fuel used to heat home, and federal funding.

The [Percentage of Income Payment Plan \(PIPP\) plus program](#) is available year round to electric and natural gas customers with incomes under 150 percent of the federal poverty line. Those electing to enroll in the program make monthly utility payments of \$10 or 6 percent of household income, whichever is greater. The state then reimburses the utility for any payment due that is over and above the income-based payment made. PIPP customers can also reduce old debt by paying their monthly PIPP payments on time and in full.

Home Weatherization Assistance Program (HWAP)’s primary objectives are to increase the energy efficiency of homes of low-income renters or owners, reduce participants’ total residential energy expenditure, and improve participants’ health and safety¹. The HWAP receives funding from a mix of federal Department of Energy funds and appropriations from the state Home Energy Assistance Program (HEAP). The state’s HWAP sets the technical standard for energy efficiency programs offered by Ohio’s utility companies.

Electric Partnership Program (EPP) was enacted in 1999 as a result of electric restructuring legislation in Ohio. The program, funded by the Universal Service Fund, aims to reduce electric consumption by households in the PIPP program. The EPP has two major components: 1) A base load efficiency program which audits lights, appliances and other uses of electricity not related to heating and cooling, and installs appropriate measures 2) A weatherization program for those who heat with electricity and who have moderate to high usage. This program adds insulation, performs heating system inspections and addresses health and safety measures.¹ While most of the universal service rider revenues fund PIPP, approximately [\\$15 million](#) is reserved each year for the Electric Partnership Program.

Ohio HWAP Network also Manages Efficiency Programs for Utilities. Ohio leads other states in combining federal weatherization funds with utility resources and other housing rehabilitation funds to provide comprehensive services to low-income families. The current HWAP network also manages programs for all seven major utilities (both gas and electric). This approach enhances household savings and saves ratepayers money.

Source: Ohio Development Services Agency, Ohio Consumers’ Counsel, Ohio Partners for Affordable Energy, Bureau of Economic Analysis
 *FPL stands for Federal Poverty Line.

Home Weatherization Assistance Program (HWAP)

Many low-income families live in older homes with inadequate insulation and inefficient appliances, contributing to high levels of energy use and large utility bills. Ohio’s Home Weatherization Assistance Program increases the energy efficiency of homes of low-income renters or owners and permanently reduces energy bills.⁶ Recipient households receive the following weatherization and efficiency services:⁷

1. An inspection or audit to determine what energy-efficiency measures are appropriate
2. Energy education
3. Installation of weatherization services and necessary health and safety measures including: Wall, attic and floor insulation; blower-door guided air sealing; heating system safety tests, repairs and tune-ups; duct insulation and sealing; hot-water savings measures; and energy related home repairs.⁸
4. Final inspection of installation.

To qualify, households must be at or below 200 percent of the federal poverty guidelines, as shown in Table 3. Nearly 1.4 million households in Ohio qualify. Since weatherization funds are so limited, priority is given to the elderly, those with disabilities, families with children, and households with high energy burdens.⁹

Size of Family	200% of FPL
1	\$23,340
2	\$31,460
3	\$39,580
4	\$47,700
5	\$55,820
6	\$63,940

Source:
https://development.ohio.gov/is/is_hwap.htm

According to the 2013 Home Energy Affordability Gap Report, over 300,000 Ohio households with incomes at or below 50 percent of the federal poverty level pay 31 percent of their annual income on home energy bills.¹⁰ More than 377,000 households living with incomes between 50% and 100% of the federal poverty level, face a home energy burden of 16%.

Rental housing services: a unique feature of HWAP

Rental units represent a significant portion of homes weatherized in Ohio, a unique feature of the efficiency program. Rental housing typically faces a split incentive when it comes to investing in weatherization, ultimately leading to inaction on the part of both the tenant and landlord. Since nine out of ten tenants in Ohio pay their own energy bills while the landlord owns the building, neither the tenant nor the landlord has an incentive to invest in the building to permanently reduce energy bills.

To ensure weatherization benefits both the low-income tenant and landlord and to spur action, Ohio HWAP adopted the following policy: Weatherization services are largely free to both landlord and tenant. However, landlords contribute 50 percent of cost of any health and safety measures unless the landlord falls within the federal poverty level guidelines. If the landlord pays utility costs, then half the cost of weatherization materials is also required of the landlord. For one year, post-weatherization, the property owner must agree not to raise the rent as a result of the weatherization performed on the house.

Source: Home Weatherization Assistance Program 2014 State Plan

⁶ M. Sami Khawaja et al., Quantec, LLC, Ohio Home Weatherization Assistance Program Impact Evaluation, 2006

⁷ *Id.*

⁸ Blasnik and Downey of Proctor; Hill, Introclo, and Nichols of Tellus; and Jones of Residential Building Analysis, *Ohio’s Home Weatherization Assistance Program: An Independent Evaluation*, <http://liheap.ncat.org/pubs/ohwxeval.pdf>

⁹ *Id.*

¹⁰ Fisher, Sheehan & Colton, *Ohio Home Energy Affordability Gap* 2013 (May 2014)

HWAP State and Federal Funding

HWAP receives funding from the federal Department of Energy (DOE) and an appropriation from the state of Ohio’s federal Home Energy Assistance Program (HEAP) dollars. Per federal rules, up to 20 percent of a state’s HEAP budget can be appropriated to the Home Weatherization Assistance program, and Ohio consistently transfers 15 percent.¹¹ Table 4 shows the level of funding and the number of homes weatherized over a ten-year period. On average, the state of Ohio weatherizes roughly 7,000 homes each year, only about 1.5 percent of the 459,000 households seeking emergency assistance for help with their utility bills.

In 2009, however, the American Reinvestment and Recovery Act (ARRA), also known as the federal stimulus package, temporarily expanded the Weatherization Assistance Program across the nation.¹² Ohio received \$289 million of \$5 billion dollars committed nationally. ARRA also changed a number of existing provisions for weatherization, notably: requiring weatherization workers be paid “prevailing wages”; expanding the income eligibility level from 150 percent to 200 percent of the federal poverty level; increasing the average assistance level per home from \$2,500 to \$6,500; and doubling allowable funding for training.¹³

During ARRA’s three-year period, more than 40,000 homes in Ohio were weatherized with federal stimulus funds. Table 5 shows average household savings during that period ranging between \$540 and \$620, with a net present value of the total lifetime energy savings of measures installed amounting to over \$10,000 per household. Among other benefits, in addition to household energy savings, approximately 1,200 Ohio residents were hired and trained to do the work.¹⁴ Unfortunately, because ARRA funds were temporary, nearly 900 of those workers later lost their jobs, emphasizing the need for a sustainable and consistent source of funding. On a positive note, 300 of the original 1,200 were retained to meet increasing utility investments in weatherization resulting from Ohio’s energy efficiency requirement.

	Total Funding	# Homes Weatherized
2003	\$28,369,727	6,807
2004	\$27,742,752	6,658
2005	\$29,627,500	6,682
2006	\$36,744,248	8,211
2007	\$32,368,880	6,885
2008	\$37,509,012	7,087
2009	\$53,633,503	2,199
ARRA	\$288,677,576	40,198
2011	\$41,057,474	3,977
2012	\$38,089,246	5,741

Source: Ohio Development Services

Principal factors considered (per household)	Estimates
Average heating and cooling bill reduction	\$440
Savings in electricity bills for electric appliances	\$100-\$180
Average cost of weatherizing a house unit under the program	\$5,760
Net present value of energy savings	\$10,350
Energy benefit cost ratio	1.8

Source: Oak Ridge National Laboratory

¹¹ M. Sami Khawaja et al., Quantec, LLC, Ohio Home Weatherization Assistance Program Impact Evaluation, 2006

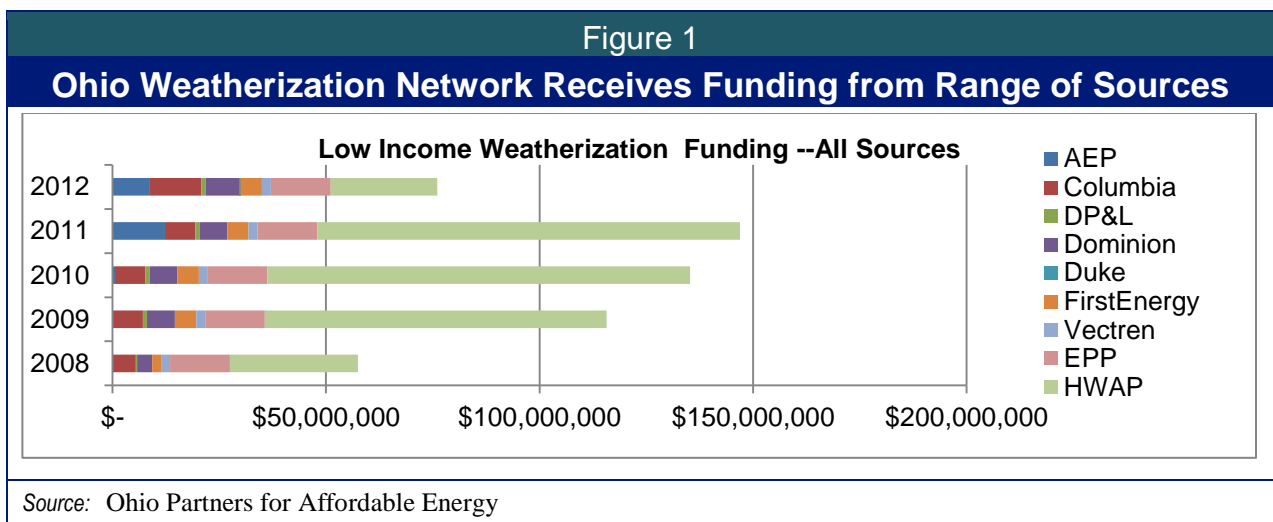
¹² http://weatherization.ornl.gov/pdfs/ORNL_TM-2010-66.pdf

¹³ United States Government Accountability Office, *Recovery Act: Progress and Challenges in Spending Weatherization Funds*, 2011

¹⁴ Sarah Robinson, ARRA’s Home Weatherization Assistance Program, 2010

Ohio’s Weatherization Network also Manages Low-income Energy Efficiency Programs for Ohio’s Utilities.

Ohio’s HWAP network also manages low-income efficiency programs for all seven major utilities in the state (both gas and electric companies), and for a number of smaller gas utilities, an approach that enhances household savings and saves ratepayer money. The majority of electricity and natural gas services in the United States are provided by investor-owned utilities (private companies with stockholders typically regulated by state public service commissions). Figure 1 below shows the many sources supporting Ohio’s weatherization network, the largest source being federal HWAP dollars, which peaked during the three-year federal stimulus period from 2009 to 2011.



Ohio’s Clean Energy Law Drives Utility Investments.

Roughly half of the states, including Ohio, have laws and regulations in place requiring utilities to invest in energy efficiency programs. Ohio’s efficiency standard, prior to being frozen by Governor Kasich and the state legislature, required electric utilities to achieve a 22 percent reduction in energy consumption by 2025 (starting at 0.3 percent annual savings in 2009, ramping up to one percent annually in 2014 and two percent in 2019).

Table 7 below shows that as Ohio’s efficiency requirements ramped up, utility investments in low-income weatherization increased dramatically. Since Ohio’s efficiency standards were enacted, electric utility investments increased seven-fold. In 2012 alone, to meet energy efficiency requirements, Ohio’s electric utilities invested approximately \$249 million in efficiency services, six percent of which went towards low-income weatherization programs. In 2013, Ohio ranked [18th in the nation](#) for its energy efficiency policies and was the most improved state (according to the [American Council for an Energy-Efficiency Economy’s 2013 State Energy Efficiency Scorecard](#)). Unfortunately, since then, Ohio became the first state to roll back its efficiency requirement for electric utilities. Governor Kasich signed a bill essentially freezing Ohio’s efficiency standard for two years while the legislature debates whether to eliminate the standard altogether. This is a huge setback for Ohio’s clean energy economy and for low-income weatherization programming.

Table 5							
Utility Investment in low-income weatherization							
		2008	2009	2010	2011	2012	2013
Electric Utility Energy Savings Requirements (by year)		n/a	0.3%	0.5%	0.7%	0.8%	0.9%
Electric utility Investments in Low-Income Weatherization (by year)	<i>American Electric Power</i>	\$-	\$-	\$590,000	\$12,270,000	\$8,790,000	\$11,604,000
	<i>Dayton Power & Light</i>	\$265,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	<i>Duke</i>	\$-	\$-	\$-	\$-	\$350,000	\$365,000
	<i>FirstEnergy</i>	\$2,100,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
	Total	\$2,365,000	\$6,000,000	\$6,590,000	\$18,270,000	\$15,140,000	\$17,969,000
American Electric Power	The Community Assistance Program allows customers with low or fixed incomes to receive weatherization assistance. Energy efficiency measures include: home energy assessment, attic and wall insulation, air sealing, CFLs, and refrigerator replacement. The Community Assistance Program saves energy for residential low-income customers through electric measures and weatherization upgrades.						
Dayton Power & Light	Residential Low Income Affordability program identifies and implements energy efficiency measures in qualifying homes to reduce energy bills and debts, and increase energy savings. In 2009, DP&L provided efficiency services to roughly 850 low-income households.						
Duke Energy	Duke Energy provides some energy efficiency services to low-income customers, including furnace or heat pump clean and tune, energy-efficient light bulbs, energy saving tips, hot water heater wrap, weather stripping, pipe wrap, duct sealing, wall and attic insulation and other air leakage sealing measures. Low Income Neighborhood Program aims to reduce energy consumption by directly installing measures and educating the customers on better ways to manage their energy bills. Low Income Services offers a refrigerator replacement program.						
First Energy	Community Connections program provides weatherization, client education, and energy efficient products and services to low-income customers.						
Sources: Policy Matters, data compiled from http://www.liheap.ncat.org/profiles/Ohio.htm , Duke Energy's Integrated Resource Plan, Dayton Power & Light's Energy Efficiency and Peak Energy Demand Reduction Plan, First Energy's Energy Efficiency and Peak Energy Demand Reduction Plan, and AEP's Energy Efficiency and Peak Energy Demand Reduction Plan							

HWAP Administration. With respect to energy savings achieved, Ohio has one of the most successful weatherization assistance programs in the country.¹⁵ According to an independent evaluation conducted in 2006, “Ohio’s HWAP program is so effective that many households don’t need to go on [the Percent Income Payment Plan] to retain utility service.”¹⁶ Ohio also set an example for other states by creating a funding model combining federal weatherization funds with utility resources and other housing rehabilitation funds to provide the most comprehensive and effective services possible, discussed more in the next section. The Ohio Development Services Agency administers HWAP through its Office of Community Assistance (OCA). The OCA oversees weatherization providers to ensure regulations are followed and the program is effective.¹⁷ Services are delivered through a network of 58 community action agencies and local governmental organizations throughout the state, in partnership with local, independent contractors. Weatherization providers are trained at the Ohio Weatherization Training Center run by the Corporation for Ohio Appalachian Development.¹⁸

HWAP Outcomes. Nationally, for every \$1 invested in the [Low-Income Weatherization Assistance Program](#), weatherization returns \$2.51 to the household and economy: \$1.80 to the household through reduce energy bills; 71 cents to ratepayers, households, and communities through fewer payment shortfalls and uncollectible bills, decreases in heat-related illness and death, reduced risk of home fires due to utility disconnection, and increased local employment.¹⁹ On average, HWAP participants reduce their gas consumption by 25 percent for single-family homes and 20 percent for multifamily homes, saving low-income families \$350 in reduced first-year energy costs following a HWAP project.²⁰ Beyond energy benefits, weatherization increases property value, reduces fires, improves health and safety conditions, increases comfort for occupants, reduces homelessness, and extends the lifetime of affordable housing.²¹ Investments in weatherization also reduce reliance on imported energy, curb harmful greenhouse gas emissions, and increase employment.

Investments in HWAP create jobs, many of which pay relatively decent wages. For every \$1 million invested in weatherization, 52 direct jobs and 23 indirect jobs are created.²² Basic weatherization includes minor repairs, blowing and batting insulation, window and door repair, weather stripping, solar film installation, air sealing, caulking, minor structural repairs, air and duct sealing, light bulb installation, and installing smoke detectors. Special weatherization work, usually done by qualified independent local contractors, includes door and window replacement, installation or repair of furnace/cooling system (HVAC) and related electrical, pipe and duct work. Weatherization jobs don’t pay as well as many building trades positions, but they pay above minimum wage. Table 6 details prevailing wages for both general and special work related to weatherization jobs, based on a survey conducted for 2010 ARRA purposes. Table 6, below, shows official prevailing wages compiled by the Department of Labor for weatherization and related work across Ohio.²³

¹⁵ M. Sami Khawaja et al., Quantec, LLC, Ohio Home Weatherization Assistance Program Impact Evaluation, 2006

¹⁶ *Id.*

¹⁷ https://development.ohio.gov/is/is_hwap.htm

¹⁸ Michael Blasnik and Tom Downey of Proctor; David Hill, Shawn Introclo, and David Nichols of Tellus; and Don Michael Jones of Residential Building Analysis, Ohio’s Home Weatherization Assistance Program: An Independent Evaluation, <http://liheap.ncat.org/pubs/ohwxeval.pdf>

¹⁹ M. Sami Khawaja et al., Quantec, LLC, Ohio Home Weatherization Assistance Program Impact Evaluation, 2006

²⁰ Ohio Partners for Affordable Energy, *Ohio Home Weatherization Assistance Program White Paper*

²¹ *Id.*

²² *Id.*

²³ Dept. of Labor, Wage and Hour Division, *Ohio Residential Weatherization Wage Determination*

Table 6						
2010 Ohio prevailing wages in weatherization and related work						
Weatherization Survey				Existing Residential Wage (www.wdol.gov)		
Counties	Weatherization Worker	Doors & Windows Replacement Worker	HVAC, Furnace, Heating & Cooling Repair, Installation	Carpenter	Electrician	Plumber
Ohio (average)	\$10.54	\$10.72	\$14.46	\$12.78	\$13.58	\$13.78
Adams	\$10.80	\$10.80	\$17.20	\$12.03	\$12.69	\$13.40
Allen	\$10.95	\$10.95	\$17.75	\$7.63	\$7.62	\$8.68
Ashland	\$9.49	\$9.50	\$12.79	\$12.03	\$12.69	\$13.40
Ashtabula	\$10.28	\$10.28	\$14.88	\$21.30	\$29.15	\$21.84
Athens	\$7.35	\$7.35	\$8.36	\$12.03	\$12.69	\$13.40
Auglaize	\$11.75	\$12.50	\$12.79	\$7.63	\$7.62	\$8.68
Belmont	\$10.36	\$10.36	\$13.42	\$15.18	\$11.50	\$17.90
Brown	\$10.80	\$10.80	\$16.73	\$15.33	\$17.00	\$12.26
Butler	\$10.88	\$10.88	\$17.75	\$15.33	\$17.00	\$12.26
Carroll	\$10.00	\$10.00	\$13.42	\$15.18	\$16.20	\$17.90
Champaign	\$10.00	\$10.00	\$12.79	\$12.03	\$12.69	\$13.40
Clark	\$13.45	\$13.45	\$21.00	\$15.33	\$16.25	\$12.26
Clermont	\$10.00	\$10.00	\$16.73	\$15.33	\$17.00	\$12.26
Clinton	\$13.88	\$13.88	\$13.08	\$12.03	\$12.69	\$13.40
Columbiana	\$10.58	\$10.58	\$10.56	\$13.23	\$13.00	\$12.94
Coshocton	\$9.49	\$9.49	\$12.14	\$12.03	\$12.69	\$13.40
Crawford	\$13.32	\$13.32	\$12.79	\$10.18	\$11.22	\$12.05
Cuyahoga	\$10.00	\$10.00	\$20.00	\$16.13	\$18.55	\$21.84
Darke	\$10.00	\$10.00	\$12.79	\$12.03	\$12.69	\$13.40
Defiance	\$11.12	\$11.12	\$12.79	\$12.03	\$12.69	\$13.40
Delaware	\$9.00	\$9.00	\$13.29	\$7.61	\$8.53	\$9.02
Erie	\$11.12	\$11.12	\$26.50	\$12.03	\$12.69	\$13.40
Fairfield	\$16.00	\$16.00	\$13.29	\$7.61	\$8.53	\$9.02
Fayette	\$9.75	\$9.75	\$17.00	\$12.03	\$12.69	\$13.40
Franklin	\$16.79	\$21.25	\$18.96	\$7.61	\$8.53	\$9.02
Gallia	\$7.30	\$7.30	\$11.45	\$12.03	\$12.69	\$13.40
Geauga	\$10.28	\$10.28	\$14.88	\$21.30	\$18.55	\$21.84
Greene	\$10.88	\$10.88	\$17.75	\$15.33	\$17.00	\$12.26
Guernsey	\$8.32	\$8.32	\$9.49	\$12.03	\$12.69	\$13.40
Hamilton	\$12.47	\$12.47	\$17.75	\$15.33	\$17.00	\$12.26
Hancock	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Hardin	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Harrison	\$8.32	\$8.32	\$9.49	\$12.03	\$12.69	\$13.40
Henry	\$11.12	\$11.12	\$12.79	\$12.03	\$12.69	\$13.40
Highland	\$9.97	\$9.97	\$17.00	\$12.03	\$12.69	\$13.40
Hocking	\$7.35	\$7.35	\$8.36	\$12.03	\$12.69	\$13.40
Holmes	\$9.49	\$9.48	\$8.23	\$12.03	\$12.69	\$13.40
Huron	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Jackson	\$10.25	\$10.25	\$12.00	\$12.03	\$12.69	\$13.40
Jefferson	\$10.17	\$10.17	\$13.42	\$15.18	\$16.20	\$17.90
Knox	\$9.49	\$9.51	\$12.79	\$12.03	\$12.69	\$13.40

Lake	\$10.28	\$10.28	\$14.88	\$21.30	\$29.90	\$21.84
Lawrence	\$8.78	\$8.78	\$11.45	\$15.33	\$13.59	\$12.26
Licking	\$10.66	\$10.66	\$13.29	\$7.61	\$8.53	\$9.02
Logan	\$10.00	\$10.00	\$12.79	\$12.03	\$12.69	\$13.40
Lorain	\$12.06	\$12.06	\$14.88	\$16.13	\$11.56	\$17.90
Lucas	\$11.00	\$11.00	\$26.50	\$21.20	\$21.91	\$20.28
Madison	\$9.00	\$9.00	\$13.29	\$7.61	\$8.53	\$9.02
Mahoning	\$8.50	\$8.50	\$14.00	\$14.65	\$16.75	\$17.90
Marion	\$13.32	\$13.32	\$12.79	\$12.03	\$12.69	\$13.40
Medina	\$11.47	\$12.57	\$16.03	\$16.13	\$11.56	\$17.90
Meigs	\$7.30	\$7.30	\$11.45	\$12.03	\$12.69	\$13.40
Mercer	\$11.75	\$12.50	\$12.79	\$12.03	\$12.69	\$13.40
Miami	\$14.27	\$14.27	\$17.75	\$15.33	\$17.00	\$12.26
Monroe	\$8.32	\$8.32	\$9.49	\$12.03	\$12.69	\$13.40
Montgomery	\$10.88	\$10.88	\$17.75	\$15.33	\$17.00	\$12.26
Morgan	\$10.17	\$10.17	13.42	\$12.03	\$12.69	\$13.40
Morrow	\$10.66	\$10.66	\$13.29	\$12.03	\$12.69	\$13.40
Muskingum	\$10.00	\$10.00	\$14.00	\$12.03	\$12.69	\$13.40
Noble	\$8.32	\$8.32	\$9.49	\$12.03	\$12.69	\$13.40
Ottawa	\$11.00	\$11.00	\$26.50	\$12.03	\$12.69	\$13.40
Paulding	\$11.12	\$11.12	\$12.79	\$12.03	\$12.69	\$13.40
Pickaway	\$14.68	\$14.68	\$12.26	\$7.61	\$8.53	\$9.02
Pike	\$9.43	\$9.43	\$13.96	\$12.03	\$12.69	\$13.40
Portage	\$9.00	\$9.00	\$14.00	\$15.18	\$19.47	\$17.90
Preble	\$10.88	\$10.88	\$17.75	\$12.03	\$12.69	\$13.40
Putnam	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Ross	\$9.97	\$9.97	\$17.00	\$12.03	\$12.69	\$13.40
Sandusky	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Scioto	\$13.26	\$17.20	\$17.20	\$12.03	\$12.69	\$13.40
Seneca	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40
Shelby	\$10.00	\$10.00	\$12.79	\$12.03	\$12.69	\$13.40
Stark	\$10.00	\$10.00	\$13.42	\$15.18	\$15.50	\$17.90
Summit	\$11.00	\$11.00	\$20.00	\$15.18	\$19.47	\$21.84
Trumbull	\$8.50	\$8.50	\$14.00	\$14.65	\$16.75	\$17.90
Tuscarawas	\$8.32	\$8.32	\$9.49	\$12.03	\$12.69	\$13.40
Union	\$9.00	9	\$13.29	\$12.03	\$12.69	\$13.40
Van Wert	\$9.00	\$11.85	\$12.79	\$12.03	\$12.69	\$13.40
Vinton	\$10.25	\$10.25	\$12.00	\$12.03	\$12.69	\$13.40
Warren	\$10.88	\$10.88	\$17.75	\$15.33	\$17.00	\$12.26
Washington	\$10.17	\$10.17	\$13.42	\$7.25	\$7.50	\$7.50
Wayne	\$11.47	\$12.57	\$16.03	\$12.03	\$12.69	\$13.40
William	\$11.12	\$11.12	\$12.79	\$12.03	\$12.69	\$13.40
Wood	\$11.12	\$11.12	\$26.50	\$10.35	\$7.89	\$10.69
Wyandot	\$10.95	\$10.95	\$12.79	\$12.03	\$12.69	\$13.40

Source: U.S. Department of Labor
<http://www.dol.gov/whd/recovery/dbsurvey/weatherOH.htm#.ULe0bM2GBEE>

* incomplete data for Fulton, Perry, and Richland Counties, so not included

Weatherization and Health Partnerships

Low-income weatherization service providers are in a unique position to address health and safety issues when they enter homes to do weatherization-related work. To this end, Ohio's home weatherization network has expanded the types of services it provides when funding allows. These health and safety measures and home modifications can increase safety of homes, prevent injuries, and reduce health care costs, particularly for elderly people and children. Measures might include electrical work, addressing mold and moisture issues and poor air quality, lead abatement, roof maintenance, and/or basic home repairs such as banister repair, debris removal, installation of shower bars, ramps, and supplemental lighting.

Weatherization service providers are largely housed in non-profit community action agencies that also administer senior programs, health clinics and Head Start programs, making them trusted members of the community and more likely to be welcomed into the homes of residents (a typical barrier to service delivery). Rather than having different groups of people enter a dwelling multiple times to tackle various issues, weatherization providers in coordination with public health entities can and often do achieve a one-touch approach to delivering services.

Warm and Healthy Homes For Cleveland

Homes in low-income urban areas are often hazardous for the health and safety of their occupants, especially for infants, asthmatics and the elderly. In an effort to addressing the multitude of hazards in the home environment using a holistic approach, Environmental Health Watch in partnership with the City of Cleveland HWAP program used HUD Healthy Homes funding to layer interventions for health onto weatherization. One of the primary goals was to provide healthy homes assessments and housing interventions addressing the many hazards. Partners conducted more than 200 home assessments. Interventions included moisture problem correction, heating system repairs, and weatherization services.

Another aspect of the program provides urgent home interventions for asthma and COPD patients in partnership with the Swetland Center for Environmental Health at the Case Western School of Medicine. Monitoring of health outcomes continues but initial results from a previous version of the program show a 50 percent decline in hospitalization rates while the average cost of the housing intervention amounted to 12.8 times less than the cost of a single asthmatic hospitalization.

Summary

Weatherization helps end the cycle of energy poverty for low-income households and shrink the home energy affordability gap. Ohio's Home Weatherization Assistance Program, one of the best in the nation, reduces financial stress on low-income families in Ohio and enables them to allocate more of their income towards other necessities, such as food, medication, and transportation. There are also health benefits related to the program. But we do way too little of it. By reviving Ohio's energy efficiency standard and driving greater state, federal and utility investments in low-income weatherization, Ohio can lead the nation in energy efficiency while reducing the energy burden on struggling families. Investments in weatherization also create jobs, reduce dependence on polluting fossil fuels imported from elsewhere, and improve public health.

Recommendations

- 1. Require energy utilities to invest in home weatherization for low-income families.** Unfreeze Ohio's energy efficiency standards. Doing so will promote greater investment and innovation in weatherization. Electric utilities should be further encouraged to meet requirements by expanding their low-income weatherization programs.
- 2. Make low-income home weatherization an important component of Ohio's State Implementation Plan for meeting the Environmental Protection Agency's carbon rule.** The Obama Administration is in the process of establishing carbon rules that will require significant reductions in carbon pollution by 2030. In order to meet Ohio's specific requirements, the state must create an implementation plan. Ohio's state implementation plan should make investing in low-income weatherization one of its priorities to achieve the necessary carbon reductions.
- 3. Create additional avenues to combine federal, state and local funding for weatherization, home repair and health service delivery for low-income households.** During initial weatherization consultations, contractors should examine low-income households for other problems, including mold or leakage. Such efforts can combine funding sources to improve the overall health and quality of homes through weatherization and other home improvements.
- 4. Increase state and federal investments in low-income weatherization.** Federal funding should return to ARRA levels. These long-term investments reduce energy costs and demand, improve the health and safety of a home, reduce harmful greenhouse gas emissions and increase federal support for weatherization services, providing additional tools to states for meeting carbon reduction goals. Ohio's Advanced Energy Fund could also be a source of additional support from the state.
- 5. Expand the Energy Efficiency Standards to the federal level.** Require ten percent national energy efficiency standard to encourage utilities throughout the nation to increase investment in weatherization and other energy efficiency measures.

Authors

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