

WEATHERIZATION ASSISTANCE PROGRAM FACT SHEET

BACKGROUND

- Vermont's Low-Income Weatherization Assistance Programs (WAPs) are operated by four Community Action Agencies and NETO, the Northeast Employment and Training Organization. Operating since the 1980's, these agencies have weatherized 11,600 homes over the last ten years and 27,000 over the last twenty, reducing the average household energy cost by 28%, or \$500 a year on average, depending on fuel prices and usage.
- Low-Income Weatherization has had a dedicated funding stream since 1990. After several years of decline due to lower fuel prices, the funding sources for the Weatherization Trust Fund were restructured and increased in 2016. These sources include:
 - Two cents per gallon tax on fuel oil, propane and kerosene,
 - 0.75% Gross Receipts Tax on natural gas and coal, and
 - 0.5% Gross receipts Tax on electricity.
- The new tax is performing well and provides a stable funding source for Low-Income Weatherization.
- Together these funding sources raised \$9.6 million in 2017 and \$10.1 million in 2018. In addition, the program receives about another \$1.1 - \$1.4 million annually from the U.S. Department of Energy.
- The two-cent fuel tax costs the average homeowner who heats with oil roughly \$15 a year.

THE NEED

- Home energy is a severe financial burden for low-income Vermont households. An estimated 74,300 households below 200% of the Federal Poverty Level lived in "fuel poverty" in 2017. Vermonters between 50% and 100% of Federal Poverty pay an average of 23% of their annual income for their home energy bills. "Fuel poverty" is generally defined as paying 10% or more of income on energy services.
- The WAPs play a big part in helping the State make progress towards the statutory goal it set in 2007 of weatherizing 60,000 homes by 2017 and 80,000 by 2020.
 - In the ten years since the state's goals were set, we have weatherized over 25,400 homes, over half of which were low-income.
 - While progress towards the building energy efficiency goals has been significant, we were unable to meet the 2017 interim goal and will fall far short of meeting the 2020 goal.
 - To accelerate progress, the Governor's Climate Action Commission has recommended *doubling* the number of low- and moderate-income homes weatherized per year. This would take us from roughly 2,000 to 4,000 homes weatherized per year.
- Low-income Weatherization is a solution to Vermont's unique energy and housing health and safety challenges:
 - Vermont has among the oldest housing stock in the nation, with almost 30 percent built before 1939. Older homes have the biggest payoff from Weatherization, which improves both energy efficiency and housing health and safety.
- Statewide there are hundreds of homes and apartments that have been qualified for assistance and await the arrival of a Weatherization crew. The average wait is seven months and can be a year or more.

- Many more low-income Vermonters are eligible for assistance, but outreach efforts have been cut back due to funding limits and not wanting waiting lists to grow too long.
- There is a potential pool of 20,000 households expected to apply for LIHEAP this year whose homes are likely to need Weatherization.

THE ASK

- The State revenue sources for the Low-Income Weatherization Assistance Program sunset on June 30, 2019 and need to be renewed this year for the program to continue.
- Instead of coming up for re-authorization every three years, these revenue sources could be re-authorized for longer periods of time. Ideally, the sunset could be eliminated.
- The Administration is supporting the re-authorization of the existing fuel taxes.

VERMONTERS ARE BETTER OFF THANKS TO WEATHERIZATION ASSISTANCE

- Senior citizens, persons with disabilities, families with young children, households below 60% of median income, and Fuel Assistance recipients receive priority for Weatherization, making their homes more energy efficient and reducing their heating costs.
- It makes homes more affordable, allowing people to focus their scarce resources on other basic needs.
- It often makes health and safety improvements, including replacing unsafe wiring or furnace.
- Families enjoy warmer, safer homes and better indoor air quality, making them healthier and less subject to health issues associated with being chronically cold and mold. Children will have a better chance to succeed.
- The WAPs also refer families to other services, such as Vermont's Lead-Based Paint Program, Head Start, or aging services, helping them save money and live a healthier life.
- Weatherization creates livable-wage, high-skills jobs and grows our economy. At last count, 85 people were employed by the WAPs statewide. In addition, the WAP's hire local heating contractors, plumbers and electricians when that work is needed. Every dollar spent on weatherization stays in Vermont and supports local jobs in the building trades.
- The Weatherization Programs provide energy coaching, which helps families learn how to conserve energy and get the most out of the work done to their homes.
- Weatherization pays dividends for Vermonters and Vermont communities:
 - Weatherization helps Vermonters save on heating costs – homes heated with fuel oil use an average of 150 - 230 gallons less/year.
 - For every \$1 invested in Weatherization, \$2.51 is returned to the household and community. Investing \$12M a year yields a return of more than \$30M over the lifetime of the improvements.
- Weatherization reduces greenhouse gas emissions:
 - 80% of Vermont's heating comes from fossil fuels. Weatherizing an additional 60,000 homes would remove 340,000 metric tons of carbon dioxide from the atmosphere.
 - In 2017, overall weatherization activities resulted in carbon emissions reductions of just under 3,000 tons.

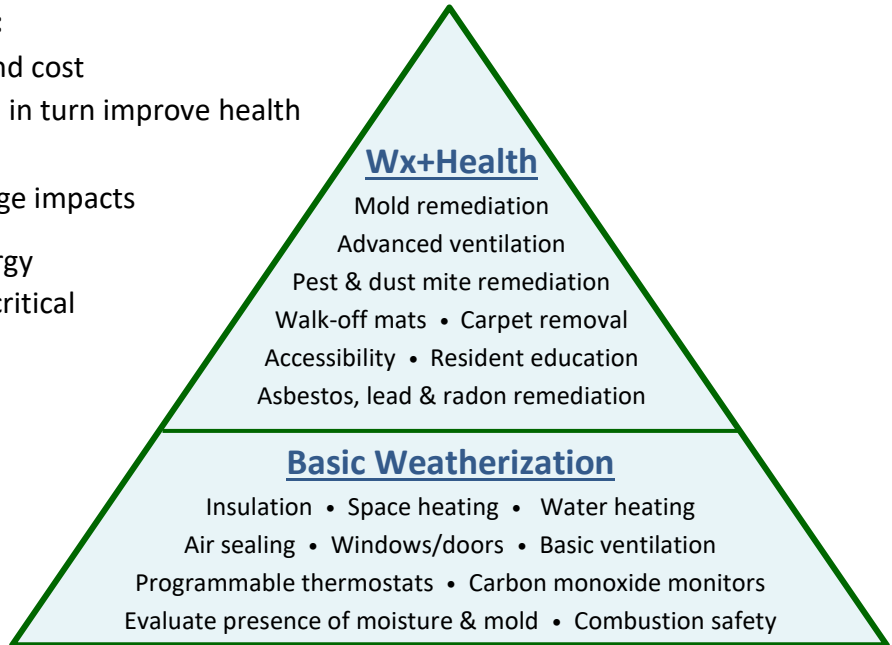
Home weatherization addresses energy, health and environmental problems

Benefits of home weatherization include:

- Reduced household energy usage and cost
- Improved housing conditions, which in turn improve health
- Reduced greenhouse gas emissions
- Increased resilience to climate change impacts

Basic weatherization (Wx) prioritizes energy efficiency improvements but can include critical health and safety improvements.








Weatherization + Health (Wx+Health) prioritizes delivery of health benefits by including specific health and safety improvements in addition to basic Wx strategies, which may be especially helpful for those with chronic health conditions or accessibility challenges.



Wx+Health builds on basic weatherization strategies













Weatherization improves home conditions that affect health

Wx improves the home

-  Reduced energy bills
-  Improved temperature control
-  Improved indoor air quality
-  Enhanced safety
-  Reduced humidity
-  Reduced mold
-  Reduced pest intrusion

**Published evidence about the indoor environmental quality and health impacts of Wx was reviewed to identify the expected effects. The strength of evidence for each finding was based on the quality and amount of evidence available.*

Wx benefits health in many ways

Health benefits...	...are associated with these improvements to home conditions.	Strength of evidence*
General Health		High
Productivity		High
Social Health		High
Upper Respiratory		High
Asthma		Medium
Cardiovascular		Medium
Financial Stress		Medium
Mental Health		Medium
Health Care Utilization & Costs		Medium
Accidental Injury		Low
Infectious Disease		Low
Neurological		Low

Weatherization in action: Vermont case studies

Referrals to Health Services

The Vermont Weatherization Assistance Program (VT WAP) provides free Wx services to income-qualifying households across Vermont. About 20 percent of its funding is used to address critical health and safety issues like electrical or combustion hazards.

VT WAP also uses One Touch, an electronic referral system that connects clients to health, housing and energy programs. The One Touch questionnaire, used during the energy audit, automatically refers clients to local partners for help with asthma management, accessibility needs, and other health-related issues.

Partnering with Hospitals

NeighborWorks of Western Vermont runs a HEAT Squad program that provides low-to-moderate income residents with low-cost energy audits and assistance in identifying, contracting, and financing Wx improvements.

The HEAT Squad began partnering with Rutland Regional Medical Center (RRMC) in 2016 to provide Wx+Health services to RRMC patients with respiratory issues and mobility limitations. Through this partnership, the HEAT Squad and RRMC deliver services that help keep residents healthy and out of the hospital.

Evaluating Health Impacts

Efficiency Vermont (EV) is a public energy efficiency utility that provides energy efficiency services and financial incentives to market-rate clients across Vermont.

EV launched a *Healthy Homes* pilot study in 2018 in partnership with Northeastern Vermont Regional Hospital (NVRH). EV and NVRH will deliver Wx+Health services to 10 low-income households with at least one person managing a chronic respiratory condition. Data will be collected from each home to evaluate the health benefits of Wx+Health services.

What weatherization can do for Vermonters' health: costs and benefits

Low Costs but Limited Funding

The current weatherization rate of 900 low-income homes each year is far below what is needed to meet the state's statutory goal of weatherizing 80,000 homes by 2020, including 20,000 low-income homes. The average cost of a VT WAP project is \$8,500, and funding is one barrier to doing more.

This is a missed opportunity for low-income Vermonters, who spend more of their income on energy and whose health is more likely to be affected by asthma, cold and heat.

Substantial Benefits for Household and Public Health

Weatherizing 2,000 low-income homes in Vermont would help prevent an estimated 223 emergency department visits, 13 hospitalizations, and 0.5 deaths over a 10-year period, associated with reduced health impacts caused by asthma, cold and heat.*

Wx also benefits public health by reducing fine particulate emissions from heating systems. The estimated 10-year value of energy and health benefits is at least \$24,757 per household, or about three times the initial cost. Larger benefits are expected if Wx+Health services are offered to people with existing chronic health conditions.

The estimated 10-year economic benefit per household is nearly three times greater than the initial expense.

Benefit category	Primary beneficiary	First-year benefit	10-year benefit
Thermal and electric energy cost savings	Household	\$1,174	\$11,740
Reduced impacts of asthma, cold, and heat*	Household	\$276	\$2,762
Reduced fine particulate emissions	Public	\$1,026	\$10,255
Total	Household + public	\$2,476	\$24,757

*More benefits are expected but could not be quantified, such as better mental and social health, fewer accidental injuries, and increased productivity.

Visit healthvermont.gov/climate to learn more about these findings and estimated impacts.