

## Weatherization Sails on Maryland's Legacy of Innovation

Baltimore was an early leader in America's shipbuilding industry and nautical trends have greatly influenced Maryland's history. The Baltimore Clippers were swift, agile ships built in the 1790s, which integrated cutting-edge technology and design. These innovative ships decisively defended America's independence during the War of 1812. Maryland continues this legacy of innovation through the Weatherization Assistance Program (Weatherization). Weatherization incorporates advanced technologies and new techniques to improve energy efficiency in low-income homes. The program reduces energy costs for low-income families while ensuring their health and safety.

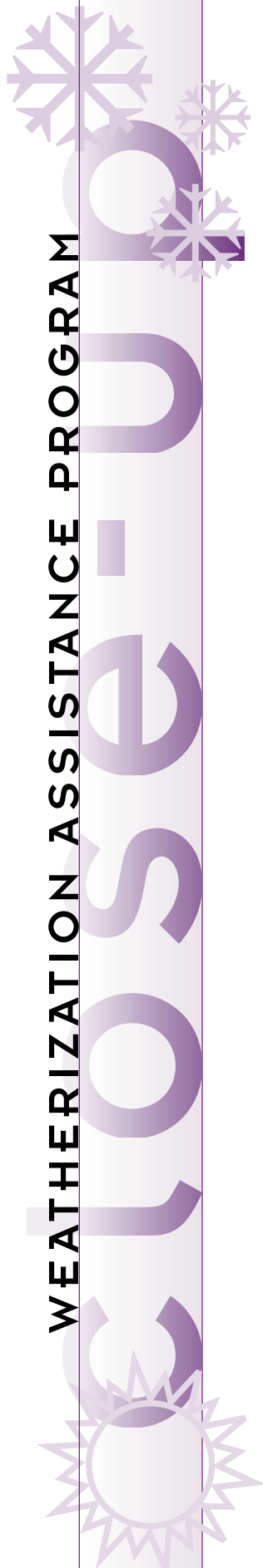
Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes even more unmanageable when energy prices soar or temperatures drop. Low-income families often have to cut back on other necessities to pay their energy bills. Weatherization measures reduce home energy consumption, which provides a permanent boost to the household's budget.

Maryland's Department of Housing and Community Development partners with the U.S. Department of Energy to administer the program and 15 local agencies deliver energy efficiency services to eligible residents in every county. Maryland has weatherized more than 120,000 homes since the inception of the program.

Professionally trained weatherization crews use computerized energy audits and advanced diagnostic equipment, such as the blower door, to determine the most cost-effective energy efficiency measures appropriate for each home. Maryland crews test furnaces and appliances for carbon monoxide, a colorless, odorless gas that can be deadly in large quantities.

NATIONAL WEATHERIZATION PROGRAM	
Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000
MARYLAND	
Homes weatherized in 1999 (with DOE \$)	461
DOE funding in 1999	\$1.6 million
Clients served in 1999	1,369

Typical weatherization services for single-family and mobile homes include installing insulation; sealing ducts; tuning and repairing furnaces; and mitigating heat loss through windows, doors, and other infiltration points. Clients are educated on basic energy conservation and the proper use and maintenance of the installed measures.



**PULLING TOGETHER**

Setting anchor requires a crew to pull together, combining the team's strength and leverage to move the anchor. Weatherization relies on experienced crews, creative partnerships, and leveraged resources to deliver expanded services and reach a wider audience.

The professionalism and courtesy exhibited by Maryland crews underpin the success of the program. Edward Denis\* was equally impressed with the dedication of the weatherization crew and the work completed. The Program Director ensured the job was finished, even though she was on crutches at the time. Edward wrote to the agency, "Thank you for a job well done...She is a very capable director. It has been a pleasure dealing with her."

The Maryland Weatherization Program and Baltimore Gas and Electric have combined resources to help more than 800 families annually improve the energy efficiency of their homes. Baltimore Gas and Electric allocated \$2 million for its Conservation Home Improvement Program (CHIP), mandated by the Maryland Public Service Commission, to help low-income customers in Central Maryland save on their energy bills.

Velma Waters\* heard about the program through a friend. The elderly widow was living without an operable furnace and growing anxious with the dropping temperatures. Weatherization installed a new furnace and insulated her drafty home. Velma was thrilled with the prompt, comprehensive service and remarked, "They came right over and fixed everything."

Inez Alvarez\* used her kitchen stove to provide heat for her two children and five grandchildren, a dangerous and ineffective activity. When she heard about the Weatherization Program, she called immediately. Weatherization and CHIP installed a high-efficiency furnace, insulated the water heater and pipes, and installed energy-efficient light fixtures. The family now enjoys a safe and energy-efficient home.



*Weatherization technician runs an energy audit to determine the most cost-effective measures for this Maryland home.*

**SAIL FULL OF BENEFITS**

Weatherization saves an average household \$300 per year on their heating bills. The improvement in comfort and warmth is valued almost as much as the dollar savings. One elderly client compared her home's chilly environment to her experience as a child, trying to survive a freezing winter with an old, undependable coal stove. She wrote to the weatherization agency, "I cannot thank you enough for our new furnace."

In addition, reducing residential energy demand decreases electricity generation and avoids emissions of nitrogen oxides, sulphur dioxide, and other pollutants. This improves local air quality and reduces adverse health effects, particularly asthma. Weatherization measures also help mitigate residential and power plant emissions of greenhouse gases.

**WEATHERIZATION WORKS!**

Weatherization creates energy, economic, and environmental benefits for low-income families and communities. Nationally, for every \$1 invested in the program, Weatherization produces \$2.10 in energy related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Maryland and America!

*\*Names have been changed to protect the privacy of the subjects.*



**TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:**

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Visit the Weatherization Web site at: [www.eren.doe.gov/buildings/weatherization\\_assistance](http://www.eren.doe.gov/buildings/weatherization_assistance)  
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732

