

Frosty Conditions Catalyze Weatherization Solutions

The first colony in Maine was established at Popham in 1607, the same year as the settlement of Jamestown, Virginia. The Popham colony was wiped out during the first winter, giving Jamestown the distinction as the oldest U.S. settlement. Today, Maine thrives with over one million inhabitants. Mainers implement innovative solutions to survive the harsh winter conditions. A prime example is the partnership with the U.S. Department of Energy (DOE) to implement the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income families typically spend 14% of their total annual income on energy costs, compared to 3.5% for other households. Rising energy prices compound this heavy burden. Weatherization measures reduce home energy consumption and provide a boost to the household's budget.

The Maine State Housing Authority partners with the DOE to administer the Weatherization Program and a network of 11 local agencies delivers services to eligible residents in every county. Maine leverages core DOE funding to secure additional funds from the state and utilities. In 1999, Maine weatherized 684 homes with DOE dollars and used leveraged funds to weatherize an additional 189 homes.

ICY INSPIRATION

Maine's cold weather often inspires clever new solutions for staying warm, such as earmuffs, which were invented by native Mainer Chester Greenwood. The Weatherization Program continuously seeks advanced technologies and new techniques to increase energy savings and improve the comfort of each home. On a national basis, this innovative approach has propelled average heating savings from 18% in 1989 to more than 25% today.

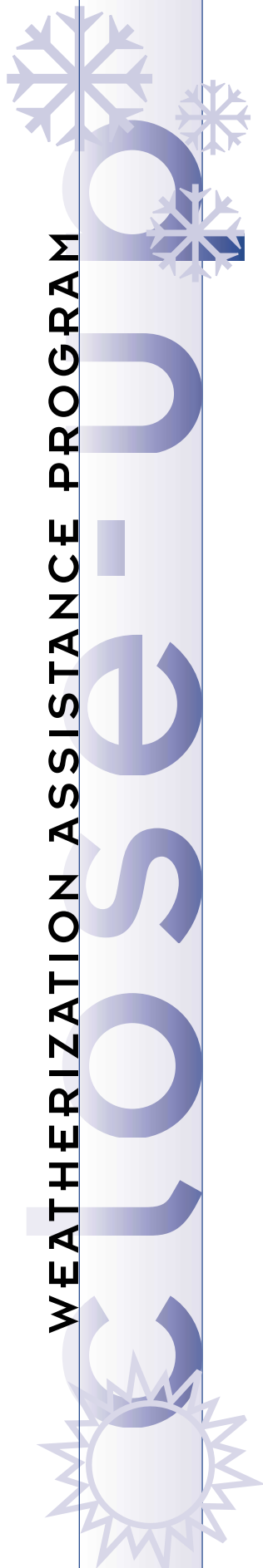
NATIONAL WEATHERIZATION PROGRAM

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

MAINE

Homes weatherized in 1999 (with DOE \$)	684
DOE funding in 1999	\$1.8 million
Clients served in 1999	
Elderly	24%
People with disabilities	20%
Families with children	5%

Weatherization crews use a computerized energy audit and advanced diagnostic equipment, like the blower door and manometer, to determine the most cost-effective measures appropriate for each home. Gas furnaces and appliances are tested for carbon monoxide, an odorless, colorless gas that can be deadly in large quantities. Typical weatherization measures include installing insulation into the ceiling, walls, and floors; tuning-up and repairing furnaces; and mitigating heat loss through windows, doors, and other infiltration points. Clients are also educated on basic energy conservation.



ALTRUISTIC MOTIVATION

Weatherization crews safeguard the health and safety of the clients they serve. Crews regularly avert health threats, such as carbon monoxide poisoning and gas leaks. Maine has also shown leadership in combating lead-based paint hazards. While the state has the highest rate of home ownership in the nation, its housing stock ranks among the oldest. Many of these homes contain lead-based paint, which can be particularly toxic for children and pregnant women.

Maine received a grant from the U.S. Department of Housing and Urban Development (HUD) to control lead hazards. The grant funds lead-based paint control activities in homes with small children and the development of a lead curriculum that educates and trains crews in eliminating lead hazards. Maine crews deliver the lead control activities in tandem with weatherization services.

SUCCESSFUL IMPLEMENTATION

Creative partnerships enhance Weatherization Program capabilities, often providing funding for additional services. Weatherization leveraged funding for a pilot project to retrofit and renovate the homes of elderly Mainers. After installing weatherization measures, crews renovated the homes to improve accessibility, including constructing wheelchair ramps, widening doorways, relocating bathrooms and bedrooms, and adding handrails to walls. The homeowners were thrilled with their increased mobility, independence, and comfort. This project mitigates the inflow of elderly residents in nursing homes and lowers related costs to the state. The project's success prompted state officials to advocate a \$2.7 million statewide program.

Maine also participates in HUD's "Fix Me" program. Fix Me provides low-interest loans to eligible families to make necessary home repairs and improvements. When recipients receive weatherization services, the Fix Me loan provides funding to replace faulty appliances and perform other improvements. The success of this partnership lies in its fundamental approach: The two programs work to offer people a hand-up, not a handout. This helps Mainers, like

Suzanne Mulligan*, to become more self-sufficient.

Last winter, Suzanne constantly worried about her failing furnace and mounting energy bills. Though hesitant to ask, she finally called her local weatherization agency for help. Weatherization crews installed energy efficiency measures throughout her house and used Fix

Me funds to install a new furnace. Today, Suzanne and her daughter Sierra have a warm, safe home and they have remained economically independent.



Weatherization worker installs sidewall insulation in a low-income home.

WEATHERIZATION WORKS!

Weatherization creates an array of energy, economic, and environmental benefits for low-income families and communities. Nationally, Weatherization produces \$2.10 in energy-related benefits for every \$1 invested in the program. Weatherization reduces national energy consumption and curbs demand for imported oil. Weatherization works for Maine and America!

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



TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

Weatherization Assistance Program • U.S. Department of Energy, EE-42
1000 Independence Avenue, SW • Washington, DC 20585-0121 • (202) 586-4074

Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732

