

Weatherization Radiates Energy Savings in Florida

Known as the “Sunshine State,” Florida has recorded some of the hottest temperatures in the nation. Compounded by the intense humidity, Florida residents often incur high energy bills to cool their homes. Keeping cool can be a challenge for low-income families who are particularly vulnerable to rising energy costs. To provide relief to low-income households, Florida partners 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 shoulder a disproportionate energy burden. They typically spend 14% of their annual income on energy, compared with 3.5% for other households. This burden becomes more unmanageable when energy prices rise sharply. Weatherization alleviates this burden by reducing home energy consumption and lowering the household’s energy costs. Florida’s Department of Community Affairs (DCA) administers the state’s Weatherization Program and 34 local agencies deliver weatherization services to eligible residents in every county.

Weatherization measures make it easier to keep a home cool in the summer and warm in the winter. Professionally trained technicians use a computerized energy audit to determine the most cost-effective measures for each home. Additional diagnostic tools, like the blower door, are used to identify and mitigate air infiltration, duct leakage, and pressure imbalances. Florida crews test gas furnaces and appliances for carbon monoxide, an odorless, colorless gas, which can be deadly in large concentrations.

Typical weatherization measures include installing insulation; sealing ducts; performing basic heating and cooling repairs; and mitigating air infiltration through doors and windows. Clients are also educated on the proper use and maintenance of the installed measures.

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

FLORIDA

DOE funding in 1999	\$1.2 million
Clients served in 1999	
Elderly	25%
People with disabilities	34%
Families with children	25%

THE GLOW OF SUCCESS

Weatherization crews take pride in their work. Their focus on quality customer service often compels crews to go beyond the call of duty. One weatherization crew from Bay County volunteered 2,500 hours and raised \$19,000 for materials to renovate a local retirement home. The crew fixed the leaky roof, repaired the ceiling and floors, replaced windows and doors, and installed hand rails and wheelchair ramps. The crew members received commendations from the state, including the “Volunteer of the Year” award. But according to the crew leader, “Our reward comes from the smile on the faces or the squeeze on the hand from an elderly lady when you are done.”

THE POWER OF PARTNERSHIPS

Florida forms partnerships and leverages core DOE funding for the program to serve more households and to implement innovative pilot projects. In 1999, Florida weatherized 4,266 homes using DOE dollars, Petroleum Violation Escrow funds, and other leveraged resources.

The Solar Weatherization Assistance Program (SWAP), a joint effort by DOE, DCA, Florida Solar Energy Center, and local weatherization agencies, installed solar hot water systems into low-income homes. By using an alternative power source, SWAP aimed to reduce electricity consumption and costs in the homes.

After tracking the data and compiling the results, SWAP reported that the solar systems reduced water heating energy consumption by 50%, which saved an average of \$140 on the household's annual energy bill. This pilot prompted Florida to fund similar programs and train other states in using solar technologies.

A BREAK IN THE CLOUDS

Weatherization helps low-income families become self-sufficient by providing a hand-up instead of a handout. Joseph Long* spent many uncomfortable years in his mobile home, contending with a leaky roof, broken windows, and a malfunctioning cooling/heating system. After suffering a serious heart attack, Joseph needed help keeping his home dry and comfortable. He contacted a local weatherization agency for help. The crew saw that the mobile home lacked adequate insulation, and they could feel air blowing through the roof and door.

After conducting an audit, the crew installed insulation into the floor and walls, replaced the door, and fixed the windows. They also replaced the heating and cooling unit with a reverse-cycle heat/air wall unit. Today, Joseph lives in a safe, energy-efficient home and he remains self-sufficient.



Weatherization crew diagnoses air infiltration and pressure imbalances in a mobile home.

Weatherization measures can decrease a low-income household's gas heating usage by nearly one-third, which saves an average of \$300 on the energy bill. The household can use the energy savings to purchase other essential goods, like food and medicine.

Weatherization also creates benefits for the entire community. Reducing energy bills for low-income families

keeps dollars in the local economy that would typically be exported out to pay for energy. Every \$1 retained in the community produces an estimated \$3 in multiplier benefits. Reducing residential energy demand also decreases electricity generation and associated power plant emissions, a significant source of air pollution. Helping low-income families lower their energy consumption improves local air quality and reduces adverse health effects, particularly asthma.

WEATHERIZATION WORKS!

Weatherization produces an impressive range of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Florida 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



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