

Weatherization Creates Spectacular Savings in Utah

Visitors to Arches National Park marvel over the 2,000 natural stone arches and the spectacular contrasts in color, texture, and form. They are often surprised by the quick temperature changes, which can vary by 50 degrees in one day. This diverse weather pattern is reflective of the larger variations across Utah. Annual precipitation ranges from 5 inches in the desert to 60 inches in the mountain ranges and snow can accumulate to more than 10 feet in the resort areas. Temperatures vary from minus 37 degrees Fahrenheit in the winter to summer highs of over 100 degrees. Providing adequate protection from the diverse elements poses a challenge to Utah residents, particularly to low-income families. To address this situation, Utah partners with the U.S. Department of Energy (DOE) to deliver 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.

SPANNING THE GAP

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes more pronounced when energy prices soar. Low-income families often have to cut back on other necessities to pay their energy bills. Weatherization reduces home energy consumption by 25-30%, which provides a permanent boost to the household's budget.

Utah's Weatherization Program prioritizes services to the elderly, people with disabilities, and families with children. These low-income households are often on fixed incomes or rely on income assistance programs and are most vulnerable to volatile changes in energy markets.

Since the inception of the program, more than 45,000 Utah homes have been weatherized, directly impacting 165,000 Utah residents. Weatherization measures provide long-term relief for low-income families and protect them from future fluctuations in supply and price.

NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 2000	72,000
DOE allocations in 2000	\$135 million
Average annual energy cost savings per household	\$218
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$1.80
Jobs supported	7,000

UTAH

Homes weatherized in 2000 (with DOE \$)	606
DOE funding in 2000	\$1.2 million
Clients served in 2000	1,475
Elderly	17%
People with disabilities	14%
Families with children	43%

The Utah Division of Community Development (DCD) manages the state's Weatherization Program and a network of eight regional agencies delivers services to eligible residents in every county. The DCD leverages core DOE funding to deliver expanded services and weatherize more low-income homes. In 2000, Utah weatherized 606 homes with DOE funds and an additional 865 homes with leveraged funds from both the public and private sectors.

TECHNICAL MARVEL

Weatherization crews use computerized energy audits and advanced diagnostic equipment, such as the blower door and infrared camera, to determine the most cost-effective energy efficiency measures appropriate for each home. Utah Weatherization licensed natural gas technicians also test heating units and appliances for combustion safety and efficiency.

Typical weatherization services include installing insulation; sealing ducts; tuning and repairing heating systems; and mitigating heat loss through windows, doors, and other infiltration points. In addition, Utah uses utility funds to install electric base load reduction measures. Clients are also educated on the proper use and maintenance of the installed measures.

AWE-INSPIRING RESULTS

Weatherization measures offer an important hand-up to households in need. Jared Miller*, a Salt Lake County resident, was overwhelmed by his energy bills, but reluctant to seek assistance. He remarked, "Because of an illness, I have found myself, for the first time in my life, not able to work and provide the income needed to support my family and our home. I never did think that I would be the person in need. It has been a very humbling experience. I deeply appreciate the kind and generous way that you handled my home and my family."

Irene Rohr*, an elderly widow from Cache County, was on the brink of leaving her lifelong home due to her high energy bills. Irene's house lacked any insulation and was almost impossible to keep warm. The weatherization crew installed insulation in the attic and walls and sealed the numerous air leaks. The weatherization work reduced Irene's energy bills and enabled her to stay in her own home.

SPECTACULAR SAVINGS

Weatherization saves money for low-income families, and many times, weatherization crews save lives. Low-income households often rely on sub-standard heating equipment that poses high risks of carbon monoxide poisoning and fires.

When the weatherization crew arrived at the Brown* house in Weber County, it didn't take long to diagnose the symptoms of the family's recent health problems. The furnace was emitting dangerous levels of carbon monoxide, an odorless, colorless gas. The crew replaced the furnace and installed insulation throughout the home. These measures reduced the family's utility bills by more than 20%, and most importantly, removed a serious health risk from the home.



Weatherization technician uses a blower door to test for air infiltration in this Provo home.

Weatherization measures create benefits for the entire community by reducing the export of energy dollars. Keeping more money in the community spurs local economic growth and creates additional jobs. Reducing residential energy demand decreases electricity generation and mitigates associated emissions. This 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 \$1.80 in energy-related benefits. Weatherization reduces national energy consumption and curbs demand for imported oil. Weatherization works for Utah 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
or call the Energy Efficiency and Renewable Energy Clearinghouse at: (800) DOE-3732



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