

The Spirit of North Dakota: Alive in Weatherization

In the Sioux language, Dakota means “friend,” and North Dakota’s strong community spirit springs from this namesake. Accustomed to average winter temperatures in the single digits, North Dakotans emphasize community responsibility to ensure all residents have access to warm, safe housing. As a key component in this whole-community approach, the North Dakota Division of Community Services 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 households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes more unmanageable when energy prices rise or temperatures plummet. Low-income families often have to cut back on other necessities to pay their energy bills. Weatherization measures alleviate this high energy burden, enabling low-income households to become self-sufficient. Weatherization also benefits the community as a whole by creating jobs, improving local air quality, and reducing the export of energy dollars.

Since the inception of the program, more than 26,000 homes have been weatherized in North Dakota. Professionally trained crews use computerized energy audits and advanced diagnostic equipment, such as the infrared camera and blower door, to determine the most cost-effective energy efficiency measures appropriate for each home. Weatherization crews also test gas furnaces and appliances for carbon monoxide and combustion safety.

Typical weatherization services include installing insulation in attics, walls, and floors; sealing ducts; improving furnace efficiency; and mitigating heat loss through windows, doors, and other infiltration points. 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

NORTH DAKOTA

Homes weatherized in 1999 (with DOE \$)	462
DOE funding in 1999	\$1.5 million
Clients served in 1999	1,516
Elderly	7%
People with disabilities	5%
Families with children	60%

COMMITMENT TO THE COMMUNITY

Seven local agencies deliver weatherization services to eligible residents in every county. The great distances between jobs and the extreme weather conditions often encountered inspire innovative solutions. The Community Action and Development Program carries a “traveling inventory” on a special truck/trailer rig that allows the crew members to travel together and bring all the necessary equipment and materials to each site. The trailer can be locked at night and left on location. This innovation has made the crew’s work more efficient and it reduces travel time and fuel costs.

The Community Action Region VI agency assisted a disabled client in LaMoure County with extensive heating and cooling retrofits. The agency then contacted the client's electrical service provider to develop a system so that the furnace and water heater would operate at off-peak hours. The client could afford the off-peak electrical rate, thus eliminating the need for fuel assistance payments. This comprehensive approach not only boosted the client's health and self-sufficiency, it liberated a portion of fuel assistance funds, which can be used to help another low-income household.

The Community Action Program Region VII and the Red River Valley Community Action agencies strive to educate all low-income residents in the community about the Weatherization Program.

The agencies coordinate with regional councils, senior citizens centers, volunteer organizations like Christmas in April, utility companies, fuel vendors, landlords, and mobile home court owners. This comprehensive outreach effort also enables the agencies to identify additional resources for their clients and expand the services they deliver.

MINING NEW RESOURCES

North Dakota relies predominately on local coal resources to fuel its economy. The state also boasts the nation's only coal-to-synthetic natural gas conversion facility and continues to seek new sources of power, such as wind energy. Similarly, weatherization agencies seek additional resources to supplement core DOE program funding.

Several agencies in North Dakota have developed for-profit activities to help fund additional weatherization services. Agencies perform energy audits for housing programs, contractors, and homeowners that are not eligible for the Weatherization Program. The SouthEastern North Dakota Community Action Agency performs inspection, analysis, and diagnostic testing of contractor-built homes to determine whether they merit designation as a "Gas Premier Home" by the regional utility. Agencies also leverage utility funds for client education activities and use landlord contributions for weatherization measures.



Weatherization crews test heating systems, like this forced air furnace, for carbon monoxide.

The Dakota Prairie Community Action Agency secured funding from the U.S. Department of Health and Human Services for a furnace repair and replacement program for two Native American reservations. The furnace program is delivered in tandem with weatherization services.

North Dakota's diverse efforts to mine additional resources really pay off for weatherization recipients. A Renville County fuel vendor saw weatherization work firsthand. A year after Community Action Opportunities, Inc., weatherized a home, the client's fuel bill decreased by \$500!

SPIRIT OF THE STATE

Weatherization reduces the energy burden on low-income families and improves economic and environmental conditions in the community. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for North Dakota and America!

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

