

Weatherization Innovation Pilot Program

Program Overview and Philadelphia Project Highlight

The Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) recently launched the Weatherization Innovation Pilot Program (WIPP) to accelerate innovations in whole-house weatherization and advance DOE's goal of increasing the energy efficiency and health and safety of homes of low-income families. Since 2010, WIPP has helped weatherization service providers as well as new and nontraditional partners leverage non-federal financial resources to supplement federal grants, saving taxpayer money. WIPP complements the Weatherization Assistance program (WAP), which operates nation-wide, in U.S. territories and in three Native American tribes.

16 grantees are implementing weatherization innovation projects using experimental approaches to find new and better ways to weatherize homes. They are using approaches such as:

- **Financial tools**—by understanding a diverse range of financing mechanisms, grantees can maximize the impact of the federal grant dollars while providing high-quality work and benefits to eligible low-income clients.
- **Green and healthy homes**—in addition to helping families reduce their energy costs, grantees can protect their health and safety. Two WIPP projects (Connecticut and Maryland) will augment standard weatherization services with a comprehensive green and healthy homes approach.
- **New technologies and techniques**—following the model of continuous improvement in weatherization, WIPP grantees will continue to use new and better technologies and techniques to improve the quality of work.
- **Residential energy behavior change**—Two grantees are rigorously testing home energy monitors (HEMs) that display energy used in kilowatt-hours, allowing residents to monitor and reduce their energy use, and another is examining best-practices for mobile home energy efficiency.
- **Workforce development and volunteers**—with a goal of creating a self-sustaining weatherization model that does not require future federal investment, three grantees are adapting business models successful in other sectors of the home performance business to perform weatherization work. Youthbuild is training youth to perform home energy upgrades to eligible clients and



A weatherization worker blows cellulose insulation into the attic of a home, bringing the R value up to R38. Adding insulation to a home is a typical energy upgrade measure.
Photo by Dennis Schroeder, NREL/PIX 17955

Habitat for Humanity is developing a model for how to incorporate volunteer labor in home weatherization.

These innovative approaches will improve key weatherization outcomes, such as:

- Increasing the total number of homes that are weatherized
- Reducing the weatherization cost per home
- Increasing the energy savings in each weatherized home
- Increasing the number of weatherization jobs created and retained
- Reducing greenhouse gas emissions.

Program Eligibility

The weatherization innovation projects operate across the county. Individuals and families living in these locations with household income at or below 200% of the federally established poverty income guidelines¹ are eligible for assistance.

The WIPP serves homeowners and renters living in all types of housing, including single-family homes, apartments, and mobile homes. Renters must have written permission from their landlords before agencies can perform weatherization upgrades.

Applicants will be asked to provide proof of income, and grantees give preference to people more than 60 years old, those with disabilities, and families with children.

¹ WIP provides income eligibility guidelines at http://www1.eere.energy.gov/wip/wap_apply.html#eligible.

People participating in other assistance programs, such as Supplemental Security Income and/or Temporary Assistance for Needy Families, may also qualify for this program.

Evaluation

The success of this program and 16 other WIPP recipients will be evaluated and measured by the Oak Ridge National Laboratory (ORNL). The lessons learned and successful innovations from WIPP can then be used in the WAP program or in future WIPP grants.

WIPP Highlight: Pennsylvania Commission on Economic Opportunity

DOE awarded the Pennsylvania’s Commission on Economic Opportunity (CEO) \$2.4 million to weatherize 2,500 low-income homes using an innovative approach and leveraging utility dollars to maximize the benefit of the program. WIPP selected CEO for its creative plan to use labor provided by AmeriCorps’s EnergyCorps to provide one-on-one energy education with each client household.

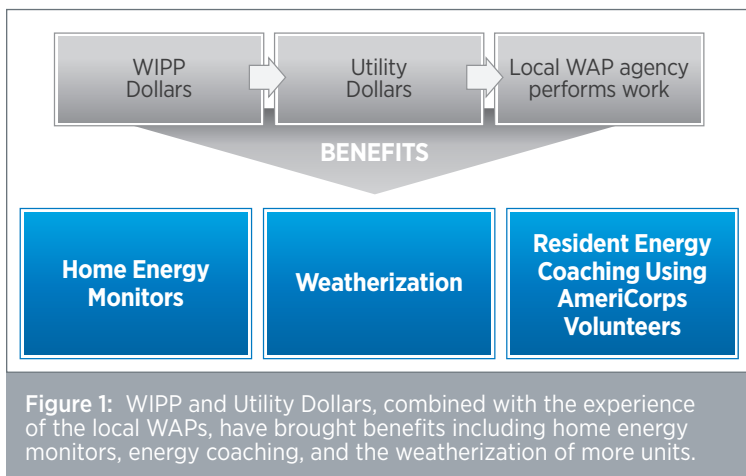


Figure 1: WIPP and Utility Dollars, combined with the experience of the local WAPs, have brought benefits including home energy monitors, energy coaching, and the weatherization of more units.

The grant also supplies home energy monitors (HEMs) to help reduce energy use through behavior change. CEO also earned the grant by securing over \$9.2 million in utility match funding, exceeding the 3:1 required (match to WIPP) ratio.

CEO was early to succeed in implementation of the grant, starting weatherization production on March 26, 2011, just

three months after contracts were fully executed. In addition, they have rapidly completed 548 homes in a two-county area. With this success in implementation, they will likely have few barriers to meet their target of service to 2,500 homes in 29 counties by September of 2012.

Much of CEO’s rapid ramp up is due to its use of existing WAP agencies to perform the WIPP weatherization work. The timing of this project is ideal, as the agencies finish up the American Recovery and Reinvestment Act of 2009 (ARRA) weatherization production, they now have additional funding to complete homes utilizing the WIPP grant.

The most exciting component is the innovation of bringing young AmeriCorps volunteers to coach residents, who receive the service free of charge, on saving energy. From the beginning, they have enthusiastically demonstrated to low-income residents the multiple benefits of conserving energy. They also work with the residents to understand HEMs and how they can be used to inform the residents which items and behaviors use the most energy in their households.

Another successful innovation piece is expanding CEO’s service to include the total weatherization of several high rise multi-unit structures. Serving low-income clients in multifamily buildings is often challenging because the building must qualify at least 66% of its occupants as low-income to service the entire building to be weatherized. Additionally the owner must agree to the retrofits. This comprehensive approach to the weatherization compared with the minimal treatment of individual units will result in higher energy savings for all occupants. CEO has succeeded in qualifying and placing agreements with two large multifamily buildings, and a third is in progress.

CEO has experienced some lessons learned with the project as the Executive Director Gene Brady discovered. CEO had plans to pursue carbon credits to add additional revenue that could be used to weatherize more low-income homes. Further investigation into the market revealed that no options currently exist to obtain cash or credits from the weatherization energy savings. But due to careful program planning, CEO will not be left without the required grant match. They instead will rely on the \$9.2 million in utility dollars to complete their goals and warm the homes of 2,500 low-income Pennsylvania residents.