Weatherization Plus Health Syracuse, New York March 22-23, 2012

The Weatherization Assistance Program: An Overview

Introduction to WAP

- History & Mission
- Flow of Funds
- The WAP Network
- The Process: Eligibility and Priorities
- Energy Inspection (Audit)
- WAP Results
 - Installed Measures
 - Health and Safety

Statutory Purpose

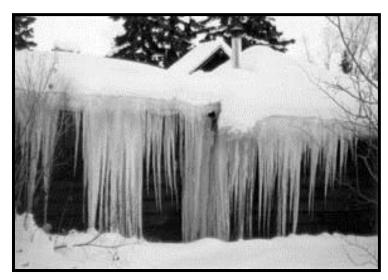
...to develop and implement a weatherization assistance program to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential energy expenditures, and improve their health and safety, especially low-income persons who are particularly vulnerable such as the elderly, the handicapped, and children.

Title 42 of the U.S. Code, Chapter 81, Subchapter III, Part A, 6861

Mission

To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, and children, while ensuring their health and safety

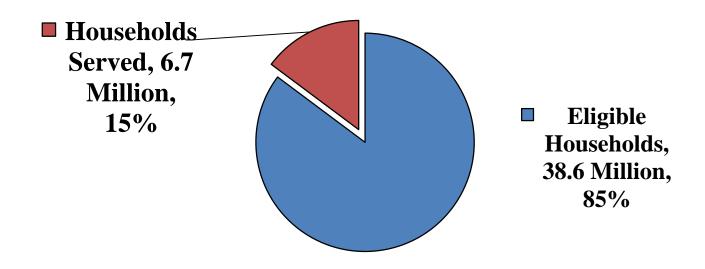




History

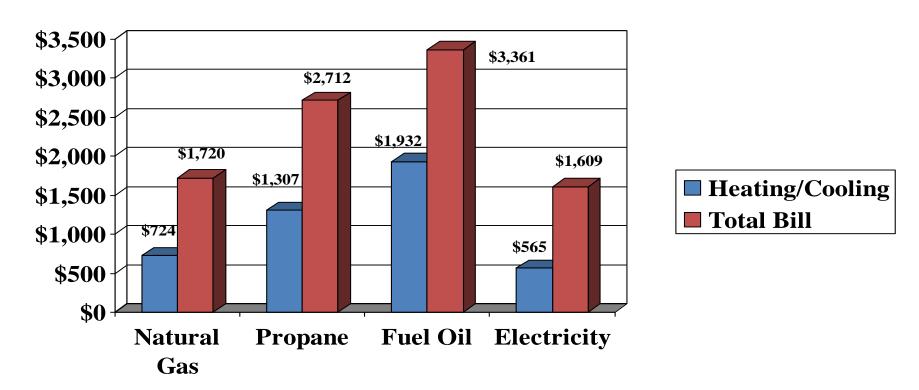
- Legislated DOE program in 1976
- Highly decentralized service delivery network
- Developed and field-tested advances in residential energy efficiency for 30+ years
- Operates in every state, District of Columbia, among Native American tribes, U.S. Territories

- Low-income families often choose between heat and other necessities
- Over 30 million households currently eligible for Weatherization services



EXPECTED ENERGY EXPENDITURES FOR 2010-2011 Low-Income Households

By Primary Heating Fuel



Source: ORNL Tabulation from EIA September 2010 STEO & 2005 RECS

- Increases energy efficiency of the home
- Reduces energy costs year-round
- Provides long-term relief from expensive energy bills
 - Measures continue to save money every year
 - Frees up cash for other necessities
- Alleviates arrears, breaks destructive cycle of shut-offs and re-connections

- Low-income households typically spend 15% of their total income on energy vs. a 3.3% national average
- Low-income families often choose between heat and other necessities
- Reduces our dependence on foreign oil
- Green workforce training







Home Energy Affordability Gap – 2010 New York Data

# of Households	Poverty Level	Energy Burden
526,477	< 50% FPL	39.5%
235,503	50 – 74%	16.2%
280,436	75 – 99%	11.6%

www.homeenergyaffordabilitygap.com

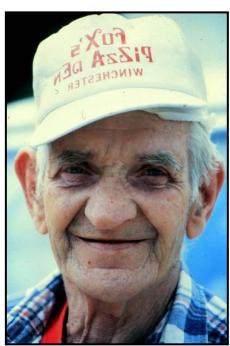
Who is Served?

Eligibility based on household income and family size. In NYS, 60% of state median income (HEAP)

Priority service to:

- Elderly persons
- Persons with disabilities
- Families with children
- High energy users
- High energy burden





Housing Stock

 Services delivered to single-family, multi-family, and mobile homes



Housing Stock Often Substandard

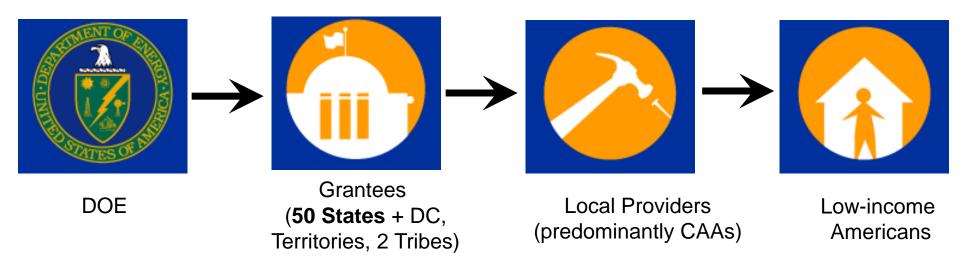
- Structural problems
- No insulation/air leaks
- Wiring and plumbing problems
- Poorly maintained
- Neglected heating systems







WAP Funding



- DOE provides core program funding to states
- States can leverage funds such as LIHEAP (HHS), utilities, and others
- States contract with local agencies to deliver program services

WAP Funding

- WAP is the largest residential energy efficiency program in the nation
- Most states also receive LIHEAP funding
- DOE rules allow leveraging to expand WAP services
 - NYSERDA funded programs
 - RGGI Funds
 - Owner Investment
 - Other programs
- DOE program and rules define WAP service delivery network and infrastructure

WAP Network

- Network of 63 agencies reach every county in state
 - Most have direct hire crews that do WAP work
 - Availability of training
 - Quality control
 - Others utilize contractors for at least some of the work
- Approx. 75% of local agencies are CAA's







March 2012

Weatherization Plus Health Conference

The Process

- Client Intake
 - Application and income verification
 - Approval process
- Inspection/audit of the home
 - Diagnostic testing
 - Determination of most cost-effective measures
 - Determination of health and safety measures
 - Work order for crew or contractor



The Process, continued

- Installation of Measures
 - As per Work Order
- Client Education
 - Insure client knows what was done on the home, why, and maintenance tips
 - Educate on other tips to save energy in the home





The Process, continued

- Quality Control Post Work Inspection
 - Every completed unit must have an agency inspection before it is reported
 - Insure correct measures were done professionally and effectively as per audit and Work Order
 - Insure combustion safety and indoor air quality
 - Insure accountability of materials used

How has the WAP evolved since the 1970's?

Early Weatherization Program

- Lower cost jobs
- Similar measures on all jobs
- More focus on storm windows, exterior measures

Modern Program

- Advanced diagnostic techniques and computerized energy audits to provide most cost effective measures
- Advanced installation techniques, such as dense-pack sidewall insulation and mobile home insulation
- Increased focus on health and safety

A Word about Multifamily Units

- Have always been part of WAP, but increased focus under ARRA
- Annual State Plan requires rental plan
- Multifamily buildings require 66% eligibility to qualify entire building
- HUD/DOE Final Rule WPN 10-15 added 3 lists of eligible Multifamily Buildings
- Different set of skills needed for auditing and retrofits

Proven Results

- Average annual energy savings = \$437* first-year savings per household, with savings year after year
- Savings average 35% of consumption
- Returns \$1.80 in energy-related benefits for every \$1 invested in the program
- Reduces carbon dioxide emissions by 53 metric tons over life of measures for every home weatherized
- Decreases national energy consumption by the equivalent of 24.1 million barrels of oil annually

^{*} Updated February 2010 based on 20-year EIA annual price projections discounted to present value.

Other Results and Outcomes

- Value Of Non-Energy Benefits \$4,082 over the life of the measures.
- Societal Benefit/Cost Ratio 2.5 TO 1
- Supports local economies and small businesses with the purchase of supplies and materials.
- Diagnostic approach and program technology has influenced residential energy efficiency in all housing stock and income brackets
- WAP viewed as major employer of the "Green Workforce" and as a gateway to "Green Economy"

WAP and the Recovery Act

NYS WAP - Pre-Recovery Act

- \$60 million-Average federal and state funding
- 12,000 units/yr. Average production

NYS Recovery Act (FY 2009 - 11)

- \$396 million
- Over 60,000 units of production
- 1,400 jobs created
- Training a new work force

WAP is 2nd in ARRA Job Creation



ARRA Jobs and Training

- ARRA WAP sustains an estimated 15,000+ jobs with countless more supported by program spending
- Training centers across the country teaching the latest diagnostic techniques and skills to conduct home energy audits and state-of-the-art efficiency retrofits
- This training can be applied beyond the low-income Weatherization Program

DOE T&TA Plan states that ARRA T&TA funds are to:

 "Build the training capacity to support the weatherization network Recovery Act ramp up and lay the foundation for a sustainable national retrofit industry with ready access to a well-trained workforce and opportunities for worker mobility and career pathways."

