# Introduction to Weatherization

# Weatherization Installer/Technician Fundamentals

Learning Objectives

By attending this session, participants will be able to:

* Describe the background of the Weatherization Assistance Program (WAP).
* Explain the characteristics of the client base served by the program.
* Recognize that building science guides the selection of measures installed with program dollars.
* Summarize the principles of cost-effectiveness and the savings-to-investment ratio (SIR).
* Recognize modern weatherization measures.

Key Terminology

Air-handling unit (AHU)

American Recovery and Reinvestment Act (ARRA)

Base load

Community action program (CAP)

Energy burden

Energy Information Administration (EIA)

Health and safety (H&S)

Incidental repairs

Lead-safe weatherization (LSW)

Present value (PV)

Savings-to-investment ratio (SIR)

Training and technical assistance (T&TA)

U.S. Department of Energy (DOE)

U.S. Department of Housing and Urban Development (HUD)

Weatherization Assistance Program (WAP***)***

Supplemental Materials

Handouts & Resources

2009 Weatherization Works Video.

Lawrence National Laboratory Estimated Energy Usage by Source chart.

Virginia Program Evaluation Summary.

Brown, Marilyn., Berry, Linda. “Weatherization Assistance: The Single Family Study.” *Home*

*Energy* Sept./Oct. 1993. <www.homeenergy.org>.

Haywood, Talmon. “More Than Just Patching Holes.” *Home Energy* Mar./Apr. 2002. <www.homeenergy.org>.

Kurnick, Chuck and Cynthia Woodley. "NREL Job Task Analysis: Retrofit Installer Technician." May 2011. <www.nrel.gov>

“This is the World of Weatherization.” WxTV. Montana Weatherization Training Center. <www.wxtvonline.org>.

Class Overview

* After introductions and general "housekeeping," (i.e., explaining about breaks, where the bathrooms are, etc.) ask the class what they perceive the role of an Installer to be. After some discussion, write the definition given in the scope section of the NREL JTA – Retrofit Installer Technician on the whiteboard. Explain that this course is specifically designed to meet the Job Task Analyses (JTAs) considered necessary to perform the job as described. Review the JTAs quickly and try to get an idea of which are most typical in the working lives of the students. This can help you prepare for the rest of the course by focusing on areas they may be completely new to, and reviewing familiar topics to make sure they are using up-to-date methods.
* Use the presentation and discussion to teach students about the history and future of the Weatherization Assistance Program (WAP).
* Calculate the simple payback of a refrigerator replacement using local prices. Explain the relationship of simple payback to savings-to-investment ratio.
* Discuss the Virginia program evaluation considering the effectiveness of “old-school” versus modern weatherization measures.
* Break up class time by showing the “2009 Weatherization Works” video presented at the 2009 National Weatherization Training Conference. The video provides a perfect summary of the facts and benefits of the program for clients and the nation.
* Describe weatherization success stories from your own experience to emphasize the value of weatherization done correctly.
* As wrap-up, have students brainstorm the many benefits of weatherization and keep a running list on the board.