Measuring the Impacts of Low-Income Weatherization on Single Family Homes Heated with Fuel Oil

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Purpose of the Evaluation

The poster will contain a summary of the purpose of the evaluation and the reason this type of research is needed to obtain actual energy savings resulting from conservation work done on oil heated single-family homes occupied by low-income families. We will highlight the researchable issues as they relate to the study. We will include a summary of the potential uses of the study results with a priority of assisting with policy development in the Weatherization program, but also the applicability to other programs as well.

Research Design and Methodology

The poster will include summaries of the research design and methodology including the types of building measurements obtained in the field and the logging equipment used to collect the data. Photos will be included of typical installations. We will summarize the study design that included approaches to working with Weatherization agencies and clients, training field staff, and managing the data collected. We will show the number of homes involved in the study, both treatment and control homes as well as discussing the selection of these homes. We will discuss how the split winter procedure was setup and the timing of measure installations. We will show the data collection forms used for documenting the building conditions and samples of the logging equipment. We will also discuss an alternative method of measuring oil consumption used in a companion study.

Research Findings

Beyond the energy savings, the lessons learned from implementing the design approach will be covered to include success in working with the agencies and clients and the recruitment and training of field staff. We will show energy savings data for a sample of homes, but the study will still be on-going at the time of the conference. We will show the results of a comparison of runtime logging to an alternative method using tank monitoring equipment.