

Low Income Home Energy Assistance Program - Weatherization **(LIHEAP Wx) Manual**

Overview

With the approval of Tennessee's Low Income Home Energy Assistance Program (LIHEAP) 2016 State Plan, the Tennessee Housing Development Agency (THDA) has been granted authority to allocate 10% of the state's LIHEAP allocation to be used for LIHEAP Weatherization (LIHEAP Wx). THDA will use these allocated funds in concurrence with the Department of Energy's Weatherization Assistance Program (WAP).

Funding

LIHEAP Wx funds are available to subgrantees administering the Department of Energy's Weatherization Assistance Program. THDA currently allocates five percent of the total Tennessee LIHEAP grant to LIHEAP Wx. Subgrantees are then allocated LIHEAP Wx funds based on the same method as the WAP using a three year rolling average from the Small Area Income and Poverty Estimates program.

Client Eligibility

- I. All clients must apply using the current THDA WAP application and intake process. All clients must meet the requirements detailed in the THDA WAP Manual, including having a total household income at or below 200% of the Federal Poverty Level.
- II. As stated in the THDA WAP Manual, priority will be given to clients who meet one or more of the following criteria:
 - a. Countable Income based on Family Size as a percent of Federal Poverty Standard
 - b. Vulnerable Household Member, including the elderly, an individual with a disability or a child under 6 years of age
 - c. High Energy Burden
 - d. High Residential Energy Users

Unit Eligibility

- I. All units must be approved using the current WAP guidelines found in the THDA WAP Manual.
- II. All units must have DOE WAP Energy Conservation Measures recommended from the most current version of the Weatherization Assistant Software (NEAT/ MHEA).
- III. Single Measures cannot be split between DOE WAP funds and LIHEAP Wx funds.
- IV. \$10,000 maximum per unit of LIHEAP Wx funds.

Procurement of Work

All bidding processes outlined in the THDA WAP Manual must be followed. All LIHEAP Wx measures must be included on the final WAP work order.

Allowable Measures

- **Health and Safety Items**

- I. Health and Safety items can vary case by case. LIHEAP Wx funds can be used, but are not limited to the following:
 - a. All units must meet the ASHRAE 62.2-2016 Standard (see Ventilation section)
 - b. Moisture issues
 - c. Electrical issues
 - d. Removal of unvented space heaters in order for replacement of heat source
 - e. Lead Safe Weatherization practices
 - f. Radon
 - i. Whenever site conditions permit, exposed dirt must be covered with a vapor barrier, except for manufactured homes

- **Ventilation**

- I. All units must meet ASHRAE 62.2-2016 standards.
 - a. All units must have an ASHRAE 62.2-2016 ventilation calculation completed and included in the client file.
 - b. Dwellings which require added ventilation must be installed to run continuously or timed-intermittently.
- II. All exhaust ducts must be insulated to R-8 outside the conditioned space and vented outside.
- III. New kitchen exhaust fans must be capable of exhausting 100CFM to meet BPI/IRC requirements. Kitchen exhaust fans are an option to provide continuous or intermittent ventilation as required by ASHRAE 62.2 2016.
- IV. New bath exhaust fans must be capable of moving at least 50cfm of air to meet BPI/IRC requirements.
- V. LIHEAP Wx funds may be used to repair or replace existing exhaust fans and venting as well as non-existent exhaust fans. Replacement exhaust fans in rooms where one did not exist must be carefully documented with written and photo justification. Compliance with ASHRAE 62.2-2016 is not required for fans that are designed to run only on-demand and serve as a supplement to the ASHRAE ventilation requirements.

- **Unvented Space Heater Removal**
 - I. Weatherized units cannot be left with an unvented space heater as the primary heat source.
 - II. Unvented space heaters that are used as the primary heat source, must be removed after the new heat source is functioning.
 - III. Unvented space heaters that are used as a secondary or emergency heat source can remain. The units must meet ANSI Z21.11.2.
 - IV. Unsafe secondary unvented space heaters may be serviced or repaired using LWx funding.

- **HVAC/Furnace/AC**
 - I. Dwelling units that have a poorly functioning or non-functioning HVAC/Furnace/AC systems can be eligible for maintenance or repair. Repairs can include, but are not limited to:
 - a. Clean and tune-up
 - b. Clean evaporative and condensing coil
 - c. Check the gas pressure and make adjustments as needed
 - d. Clean condensate line
 - II. Dwelling units that have a poorly functioning or non-functioning HVAC/Furnace/AC system that are beyond repair can be eligible for replacement meeting the following guidance:
 - a. New systems must meet current Energy Star rating or equivalent
 - i. AHRI shall be submitted by contractor/crew prior to installation.
 - ii. Verification of model number will be obtained on-site during inspection.
 - b. New Systems must have a Manual J and Manual S calculation.
 - i. Subgrantees may substitute the ACCA Manual J with the Weatherization Assistant estimated post energy usage.
 - ii. Subgrantees shall verify the HVAC sizing calculations are correct prior to installation.
 - c. HVAC units with a SEER or de-rated SEER of 10 or less should be replaced; Documentation of the de-rating calculation must be included in the client file
 - d. Central heating units with an AFUE or de-rated AFUE of 55% or less should be replaced; Documentation of the de-rating calculation must be included in the client file
 - III. Electric Furnace
 - IV. Electric Space Heater
 - V. Air filters must be replaced as needed and up to a one year supply of new air filters must be provided. Air filters are ancillary to an HVAC installation and must be included in the cost of HVAC replacement.
 - VI. Dwelling units that do not have an existing central system may use the following options :
 - a. Window Heat Pumps
 - i. A maximum of 3 window heat pump units can be installed

- ii. Each heat pump must be current Energy Star rated (or equivalent) and sized according to manufacturer's room sizing specifications
 - b. Mini-split Heat Pumps (Ducted or Ductless)
 - c. Central System –
 - i. All previously stated HVAC (II)(b) sizing requirements apply - HVAC (II)(b).
 - ii. All previously stated energy efficiency requirements apply - HVAC (II)(a)
 - iii. Cost considerations of ductwork shall also be considered when selecting between options. Ductwork shall meet the above requirements.
- **Water Heater**
 - I. Water heaters are allowed to be repaired if they are leaking, malfunctioning or otherwise deemed a health and safety hazard.
 - II. Water heaters that are beyond repair can be replaced.
 - a. New water heaters must meet current Energy Star criteria or equivalent. In cases where an Energy Star water heater cannot be installed due to space/installation restrictions, THDA will approve the installation of non-Energy Star water heaters on a case by case basis.
 - III. Gas water heaters must have a complete, passing CAZ test; Documentation of CAZ testing must be including in the client file.

Invoicing

LIHEAP Wx funds are designed to supplement the WAP and support it. Following federal program financial regulation [2 CFR 200.405\(d\)](#), a single expenditure that benefits both WAP and LWx cannot be solely funded through LIHEAP Wx. All expenses in these categories must be allocated a reasonable percentage or hours to the same budget category in WAP.

All LIHEAP Wx invoices must accompany the appropriate WAP invoice and include all backup documentation. Invoices will be delivered in a separate file from the WAP invoice.

Administrative expenditures cannot exceed 8% of the amount awarded.

Allowable sub-grantee administrative costs are:

- I. All telephone costs, including long distance charges, incurred for LIHEAP Wx associated activities
- II. Salary and fringe benefits of the LIHEAP Wx Coordinator when not carrying out the functions allowable under program support
- III. Salaries and fringe benefits of clerks, fiscal, other administrative and supervisory staff for time allocated to LIHEAP Weatherization.
- IV. Administrative costs not covered under other defined categories, including space, copying and consumables
- V. Financial audit and liability insurance
- VI. Indirect cost percentage approved by cognizant agency

Program Support expenditures cannot exceed 10% of the amount awarded. Allowable Program Support charges are:

- I. Direct Salaries of LIHEAP Wx Coordinator
- II. Direct Fringe Benefits of LIHEAP Wx Coordinator

Allowable Program Operation expenditures are:

- I. Approved LIHEAP Wx Measures
- II. Vehicle Costs
- III. Materials and Equipment
- IV. Energy Audits and Inspections
- V. Equipment and Material Storage