



# **Weatherization Barriers Toolkit**

***How to Address Health and Safety Barriers  
with an Income-Eligible Focus***

**June 6, 2022**

20-30 Minute Presentation

# Contents

- Introduction & Terminology
- Toolkit Audience & Scope
- The Weatherization Barrier Problem
- How States, Utilities and Others Address the Problem
- Low-Income Home Energy Assistance Program (LIHEAP)
- Other Funding Sources
- Case Study: CT Weatherization Barriers Remediation Program
- Resources

# Introduction

This “Weatherization Barriers Toolkit” provides:

- An overview of the challenges that health and safety barriers create by preventing home weatherization
- Guidance on overcoming barriers
- A case study of a successful program in Connecticut
- Lessons learned to help others develop and implement weatherization barrier remediation programs
- Links to resources

*We hope this Toolkit will help others tackle the weatherization barrier challenge and enable the weatherization of more homes.*

# Terminology

- *Health and Safety Conditions*: Issues such as asbestos, unsafe electrical wiring, mold, backdrafting appliances, etc. that are potential health hazards for occupants
- *Income-Eligible*: Customers that qualify for DOE's Weatherization Assistance Program (WAP) or utility income-restricted programs
- *Weatherization*: Improving the energy performance of buildings (for any income level)
- *Pre-weatherization Repairs*: Remediation that allows weatherization measures to be installed
- *Weatherization Barriers (or "Deferrals")*: Health and safety conditions that prevent participation in weatherization programs

# Toolkit Scope & Focus

- Barriers to weatherization exist in all markets (regardless of income) and impact all housing types
  - In Connecticut, 9% of market rate homes had health and safety barriers preventing weatherization
  - Lower income households have even higher rates of barriers
- This Toolkit focuses on solutions for income-eligible customers
  - Energy burdens are higher for income-eligible households
  - Providing weatherization services is a priority for this population
  - Income-eligible residents have a harder time affording and accessing capital to remediate barrier issues

# THE INCOME-ELIGIBLE WEATHERIZATION BARRIER PROBLEM

# We need systems to deliver health and safety repairs so clients can access weatherization

- Nationally, 10-30% of potential income-eligible weatherization clients are deferred due to health and safety issues
- More recent data shows client deferrals are still an issue

State	Income-Eligible Weatherization Deferral Rate
Connecticut	21% - 23% (2019, 2014-2018)
Vermont	10% (2020)
Virginia	18% (2018-19)
Washington	30-40%, higher in rural areas (2018)

- Often no funding or process exists to address barrier issues

# Barriers

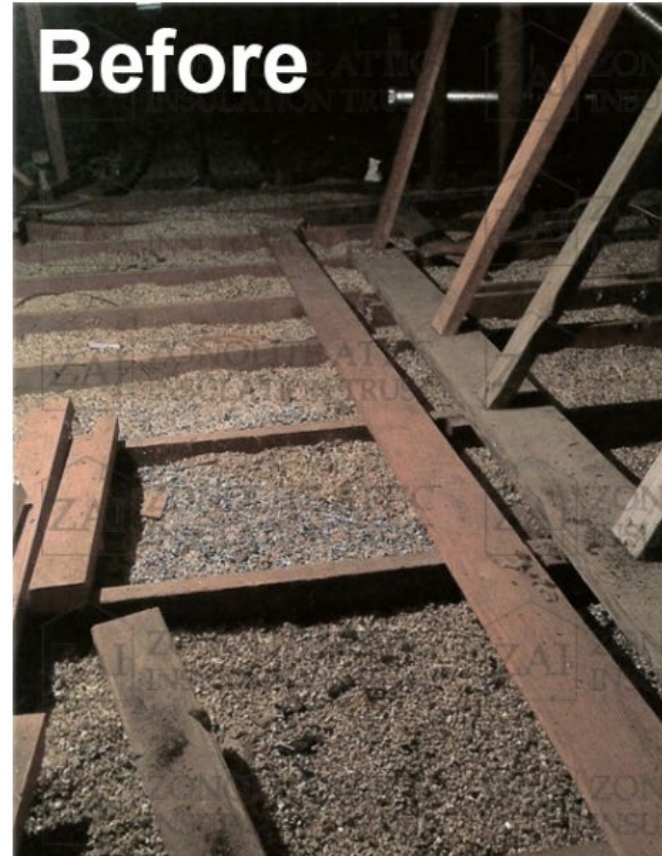
## Roof Repairs or Replacement



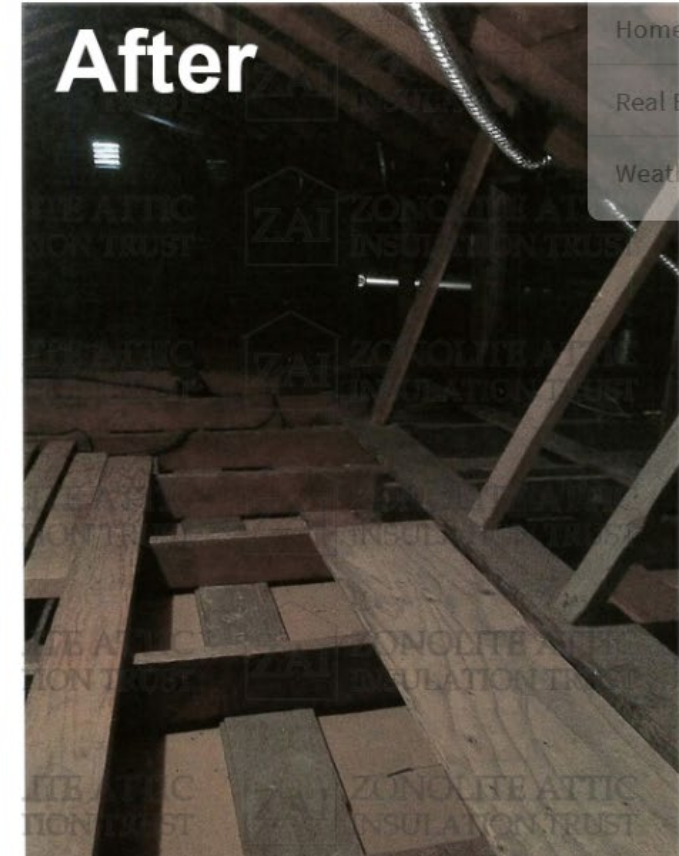
<https://www.spanglerroofing.net/services/repair-replacement>



## Vermiculite (Asbestos) Attic Insulation



<https://www.zonoliteatticinsulation.com/S/Photos>





# Barriers

## Knob and Tube Wiring



Close-up of typical ceramic "knob" circa 1925.  
*Expanded HEAT Loan Initiative Report*, December 2015, E4TheFuture.

## Asbestos



Boiler wrapped in asbestos insulation  
Picture from *Expanded HEAT Loan Initiative Report*, December 2015, E4TheFuture.

## Combustion Venting, Gas Leaks



<https://www.startribune.com/water-heater-backdrafting-how-to-test-for-proper-draft/571757672>

# Barriers

## Mold or Moisture



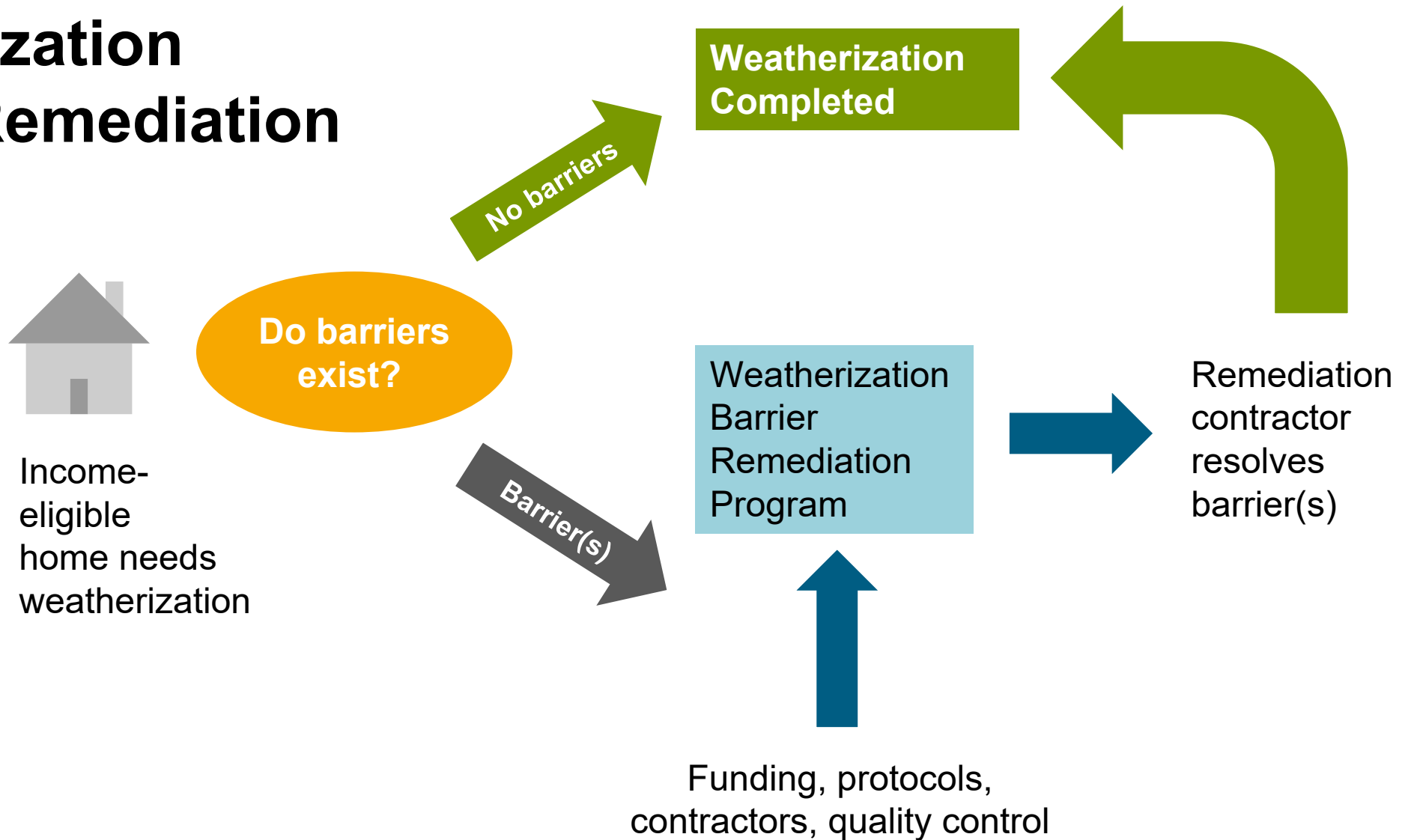
<https://blackmoldcontrol.com/basement>

## Structural Concerns



<http://ctcoastalconstruction.com/services/sillrepair>

# An Effective Weatherization Barrier Remediation Program



# Key Elements of an Effective Program

Coordinates with weatherization program & contractors

Funds repairs for common issues

Establishes average job costs, but offers some flexibility

Transparent process

Sustainable funding

# FUNDING SOURCES

# Potential Barrier Remediation Funding

## Federal

- LIHEAP
- WAP – potential new funds
- ARPA
- Infrastructure (IIJA)?

## State, Utility, Other

- State appropriation
- State fee on all fuels
- Philanthropic funds
- Regional energy funding (e.g., RGGI)
- Utility programs

# Many states access LIHEAP for deferral programs

Low-Income Home Energy Assistance Program (LIHEAP) helps keep families safe and healthy through initiatives that assist families with energy costs. It provides federally funded assistance in managing costs associated with:

- Home energy bills
- Energy crises
- Weatherization and energy-related minor home repairs

# LIHEAP Can Support Weatherization Work and Energy Related Home Repairs

- LIHEAP grantees may allocate up to 15% of total LIHEAP funds to weatherization including addressing barriers
  - Grantee may increase allocation **up to 25%** via waiver by US Health and Human Services (HHS) if certain requirements are met
- LIHEAP Grantees must submit annual LIHEAP Plan that describe[s]... any steps the State will take to address the weatherization and energy-related home repair needs of households that have high home energy burdens (42 USC § 8624(c)(1)(D))



# Many Northeastern States Use LIHEAP for Deferral Repairs\*

State	Eligible Repairs	Funding Total and Source
Connecticut	Asbestos, vermiculite, moisture & mold, knob/tube, pests, others	\$6.650 MM ARPA, \$5.550 MM LIHEAP, \$150K State SEP
Massachusetts	Asbestos abatement and other measures	LIHEAP/FCM/RGGI/Utility
New Hampshire	Roof repairs, require waiver	LIHEAP
New Jersey	Structural repairs, roofs, mold, etc.	LIHEAP
New York	Roof repair	LIHEAP
Rhode Island	Knob and Tube Oil tank replacement	\$2MM – ARPA LIHEAP \$1M – LIHEAP Crisis Assistance
Pennsylvania	Deferral issues Clean & tune, preventative maintenance	\$2MM – ARPA LIHEAP & past LIHEAP \$21MM – ARPA LIHEAP
Vermont	Roof repairs, Vermiculite, knob and tube and other obstacles	LIHEAP, ARPA, state, transmission utility dividend funds, private foundation funds



\* Examples, not based on comprehensive survey

# Other Federal Funding

- DOE Weatherization Assistance Program (WAP)
  - Some deferral issues can be covered
  - Many are not allowable health and safety repairs ([WAP Notice 22-7](#))
  - 2022 Weatherization Readiness Funds (WRFs) of \$15MM for structural or health and safety work that prevent weatherization. WRF's are tied to each state's formula allocation. See WAP Notice 22-6 [here](#)
- USDA
  - Housing Rehab Funds (504 program)
    - Grants and loans
- American Rescue Plan Act (ARPA)
- Infrastructure Investment and Jobs Act (IIJA)
  - Under consideration by Congress in 2022

# Regional and Utility Funding

- Regional
  - States have discretion to use proceeds from regional energy funds they choose, without specific restrictions
  - Massachusetts accesses Forward Capacity Market (FCM) and Regional Greenhouse Gas Initiative (RGGI) funds
- Utility
  - Massachusetts uses Mass Save ratepayer energy efficiency funds to remediate weatherization barriers: 1) income-eligible households, 2) up to \$7000 in moderate-income households, and 3) 0% HEAT loan for selected barriers in market-rate households

# State & Philanthropic Funds

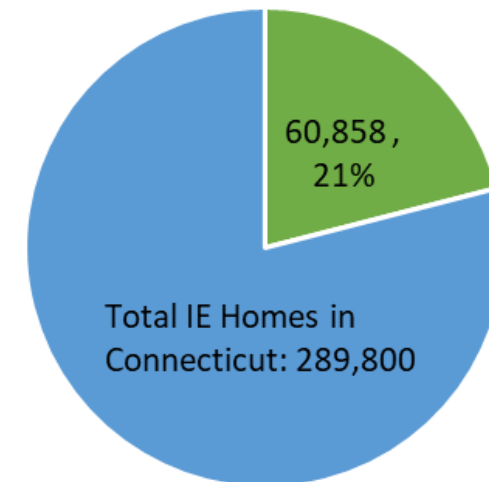
- State Appropriations
  - Oregon Legislative Appropriation
    - Healthy Homes repair fund, via Healthy Homes Act, HB 2842
- State energy fees
  - Vermont State Energy Fee funds portion of WAP w/ statewide charge on all fuels sold; flexibility to spend funds on health & safety issues without DOE rule mandates
- Philanthropic Funding
  - Vermont: Grants from electric transmission system (VLITE) and Vermont Community Foundation

**CASE STUDY:  
CONNECTICUT WEATHERIZATION BARRIERS  
REMEDIATION PROGRAM**

# CT Program Sought to Address High Deferral Rates

- 289,800 homes income-eligible throughout CT
  - 21% of income eligible were deferred in 2019
  - 60,000+ IE- barriered homes statewide likely need remediation
  - CT utilities have a list of 20,000 IE deferred customers
- Most common deferrals (2014-2019)
  - 39% asbestos-like materials
  - 14% mold
  - 14% failed combustion safety testing

Barriered Income-Eligible Homes in CT



■ Barriered IE homes

# Key Stakeholders Drove Process

- Connecticut Department of Energy & Environmental Protection (DEEP), Bureau of Energy and Technology Policy
  - Recognized need for funds to address deferrals, allocated staff resources
  - Elevated issue, kept conversation going
- Energy Efficiency Board (EEB)
  - Recognized issue and convened workshops/meetings
- Utilities
  - Gathered and shared data, supported new program design
- Advocates: Environmental, energy, and social justice stakeholders
  - Highlighted the problem and pushed for equitable solutions
- Other Important Allies: Governor and program contractors
  - Supported solutions

# CT Process

## Phase 1: Build the Case

**Utility administrators** gather data on deferrals, share with DEEP & EEB.

**Advocates** raise equity and access issues with DEEP and EEB. Engage stakeholders and push for public workshops.

## Phase 2: Public Discussion

**DEEP & EEB** sponsor public workshops to share data, define needs, explore solutions including models from other states.

**DEEP** identifies potential funding sources.

**Advocates & DEEP** engage LIHEAP Board.

## Phase 3: Secure Funding + Rollout Program

**Governor and Legislature** aligned to allocated ARPA and LIHEAP funds.

**LIHEAP Board** supports use of funds for deferrals.

**DEEP** issues program operator RFP.



# Summary of Connecticut Program

- January 1, 2022 – December 31, 2024
- Program will be funded by LIHEAP and ARPA funds with supplemental US DOE State Energy Program (SEP)
  - **Up to \$5,500,000** over FY22-24 (Oct. 1, 2022 – Sept. 30, 2024) from LIHEAP
  - **Up to \$6,650,000** in supplemental funding from 2021 American Rescue Plan Act (ARPA) to support Health and Safety Barriers to Housing Remediation over 2022-2024 (Jan. 1, 2022 – Dec. 31, 2024)
  - **Up to \$150,000** supplemental from U.S. Department of Energy's SEP through FY22 (January 2021 - June 30, 2022)
- See Resources for detail

# Key Lessons Learned from CT (1)

- **Collect and organize data on deferrals**
- **Make the case using the data**
  - Use data to show key decision makers *who is missing out* on program participation
- **Engage stakeholders**
  - Provide forums to share data, solicit information from contractors and programs, hear from advocates
- **Enlist the support of key decisionmakers**
  - Educate and engage people in power

# Key Lessons Learned from CT (2)

- **Find support and allies within state government and utilities**
- **Understand and support the interests of key agencies, utilities and their staff**
  - Equity an important driver for state agencies
- **Coordinate closely with the program administrators**
- **It takes time**
- **Reframe what is possible, even if a new approach**
  - Highlight: addressing deferrals will reduce demand for LIHEAP over time as households lower their energy usage, freeing up funds for more clients

# RESOURCES

# Connecticut Program Development Resources

- Slides from CT DEEP workshops
  - [Workshop 1 on 11/18/20](#)
  - [Workshop 2 on 1/20/21](#)
- [Slides from LIHEAP Board presentation from DEEP](#)
- [RFP for Statewide Weatherization Barrier Remediation Program Operator](#)
- [Eversource “Home Energy Solutions Market Rate/Income Eligible presentation.” November 2020.](#)
- [Access additional resources from E4 website here](#)

# Credits

- [E4TheFuture](#) funded research and development of the toolkit
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