

WEATHERIZATION BARRIERS WORKSHOP

Wednesday, November 18, 2020 @ 9 AM

Hosted by the Energy Efficiency Board and DEEP



WORKSHOP AGENDA

INTRODUCTION

9:00 am - 9:10 am

“Rules” and best practices for conduct during virtual workshop and establish workshop goals and scope

DRAFT FRAMEWORK

9:10 am - 9:15 am

Outline and discuss the draft framework for addressing barriers to weatherization

ASSESS THE SCALE OF THE ISSUE

9:15 am - 9:30 am

Presentation from the EEB on the breadth and depth of barriers to weatherizing homes

LEVERAGE EXISTING PROGRAMS

9:35 am - 10:30 am

Elevator pitch from existing programs and frameworks followed by discussion

IDENTIFY OPPORTUNITIES AND MECHANISMS FOR CO-INVESTMENT

10:30 am - 10:50 am

Discussion on building a realistic and sustainable funding source and opportunities for co-investment

NEXT STEPS

10:50 am - 11:00 am

Give participants an idea of the structure for the next workshop

RULES AND BEST PRACTICES

- Remain on “mute” when you are not speaking
- Use the “raise hand” feature to participate in discussion
- Please identify yourself before speaking
- Use the chat to ask questions and share useful links and information
- If the chat is distracting, press the down arrow (v) in the top left corner of the chat box and click “ x Close”



WORKSHOP GOALS AND SCOPE

1

Assemble stakeholders with an interest and a role to play in addressing the health, safety and weatherization barriers in Connecticut residences

2

Identify and quantify the breadth and depth of barriers to weatherizing these homes

3

Explore all the programs, budgets and other resources and opportunities for coordination available to address these barriers

4

Begin developing a plan that names a coordinating entity and how best to access and leverage all of the available resources to address the health, safety and weatherization barriers for CT residences

SIX-STEP FRAMEWORK

Are there key questions to answer prior to moving forward?

Are there big steps or considerations missing?

01

STEP 1: COMPILE EXISTING DATA TO ASSESS THE SCALE OF THE ISSUE

Discussion of current deferral rates, costs of not addressing barriers, benefits of a concerted addressal effort, and estimated cost and resource needs.

02

STEP 2: LEVERAGE FRAMEWORK AND CAPACITY IN EXISTING PROGRAMS

Identify and leverage existing programs that are doing work to address health and safety hazards in homes and identify their biggest strengths/challenges.

03

STEP 3: IDENTIFY OPPORTUNITIES AND MECHANISMS FOR CO-INVESTMENT

Determine where existing programs are getting money? (federal and state grants) and identify a sustainable funding source or options for sources can we tap into.

04

STEP 4: DEVELOP A CLEAR REFERRAL SYSTEM

Establish the process for connecting health and safety interventions with efficiency interventions and vice versa.

05

STEP 5: ENSURE EQUITY IN BARRIER REMEDIATION

Identify tactics to ensure equitable barrier remediation. Research how different market segments need to be approached and what metrics should be used to identify this subset.

06

STEP 6: STREAMLINE REPORTING MECHANISMS

Define how to measure the “success” of the program, create program impact metrics, and develop a clear reporting system.

STEP 1: COMPILE EXISTING DATA TO ASSESS THE SCALE OF THE ISSUE

Discussion of current deferral rates, costs of not addressing barriers, benefits of a concerted addressal effort, and estimated cost and resource needs.



Empowering you to make
smart energy choices

Overcoming Weatherization Barriers

An overview of programs working to mitigate barriers to home weatherization projects

Richard Faesy

CT Weatherization Barriers Workshop, November 18, 2020

What is “weatherization”?

- This is not the state’s official definition of “weatherized”, which is a different statutory issue
- Wikipedia:
 - Weatherization is the practice of protecting a building and its interior from the elements
- Upgrading the energy performance of buildings through measures such as:
 - Air-sealing
 - Insulation
 - Window treatments or replacement
 - Duct sealing
 - Tuning and repairing HVAC

What are the benefits of weatherization?

- Saves energy
- Saves money on bills
- Makes a home more comfortable
- Reduces wear and tear on HVAC equipment
- Environmentally friendly
- Keeps occupants healthier
- Increases a home's value
- Supports the local economy

What are weatherization barriers?

- Weatherization barriers preclude upgrading the energy efficiency of buildings due to health, safety and structural concerns
- Common barriers include:
 - Asbestos
 - Knob and tube wiring
 - Vermiculite insulation
 - Mold
 - Lead
 - Structural concerns
 - Venting and combustion safety
 - Gas leaks
 - Carbon monoxide

Asbestos, Knob and Tube Wiring



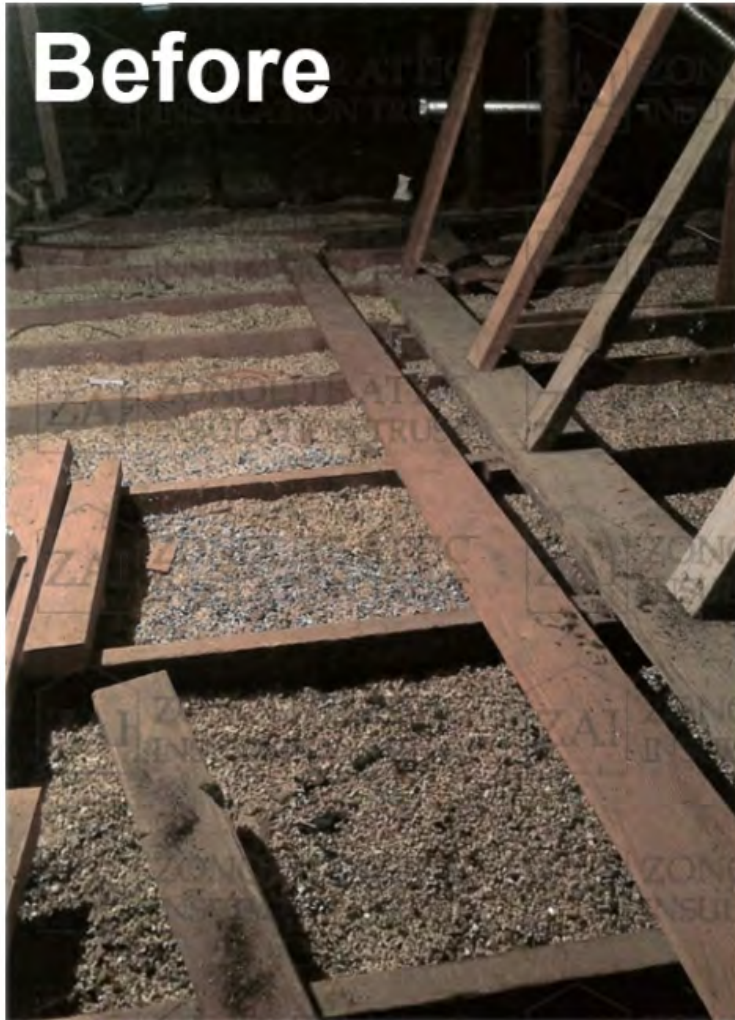
Boiler wrapped in asbestos insulation
Picture from *Expanded HEAT Loan Initiative Report*, December 2015, E4theFuture.



Close-up of typical ceramic "knob" circa 1925.

Picture from *Expanded HEAT Loan Initiative Report*, December 2015, E4theFuture.

Vermiculite Attic Insulation



Mold, Lead Paint



<https://blackmoldcontrol.com/basement/>



<https://tristatecontractingsolutions.com/lead-paint-removal/>

Structural Concerns, Combustion Venting



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



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

Carbon Monoxide, Gas Leaks



<https://www.news-medical.net/health/Carbon-Monoxide-Poisoning.aspx>



<https://diy.stackexchange.com/>

Weatherization Barrier Costs

Barrier	Number of Homes	Cost Range	Average
Asbestos	17	\$4,299 - \$31,908	\$14,721
Mold	13	\$11,305 - \$35,575	\$23,886
Vermiculite	10	\$3,318 - \$38,114	\$20,167
Asbestos/Mold	4	\$10,917 - \$58,670	\$35,237
Asbestos/Mold/Pests	1	\$40,426	\$40,426
Vermiculite/Mold	2	\$13,997 - \$15,910	\$14,954
Asbestos/Pests	2	\$16,025 - \$30,042	\$23,034
Mold/Pests	1	\$25,729	\$25,729
Total	50	\$3,318 - \$58,670	\$20,910

Data Source: 2016 - 2019 Clean Energy Healthy Homes Initiative Projects that have been completed for remediation.

Prior CT Efforts & Opportunities

- Northeast Utilities-NSTAR merger funds (\$1.5 million)
 - “Clean Energy Healthy Homes Initiative”
- ARRA funds (\$3 million)
 - CT Energy and Healthy Homes Initiative (CT Children’s Medical Center & Utilities)
- Green & Healthy Homes Initiative (CT Green Bank)
- Dept. of Economic Community Development
- Operation Fuel’s Home Systems Repair and Replacement Program
- DSS/LIHEAP
- Weatherization Assistance Program
- Etc.



Deferral Rates for CT Weatherization Work

- Barriers result in home weatherization deferrals
- Homes barred from weatherization in CT (2017-2019):
 - 9% of Home Energy Solutions (HES)
 - 23% of HES-Income Eligible (IE)
- Of CT's 1.38 million housing units:
 - 21% (or 290,000 homes) are IE-Eligible
 - 67,000 barred homes
 - 79% (or 1.09 million homes) are market-rate
 - 98,000 barred homes
 - ***Total of 165,000 barred homes in CT that will need help***

CT Utility Weatherization Program Plans

- HES & HES-IE in 2021: **42,656** homes will be served

2021	Eversource	United Illuminating	Total
HES	18,676	3,194	21,870
HES-IE	17,958	2,828	20,786
Total	36,634	6,022	42,656

Connecticut Programs

- CT Green Bank
 - Smart E-Loan
 - Energize CT Health & Safety Revolving Loan Fund
 - Loans Improving Multifamily Efficiency (LIME) Loan
 - Navigator Pre-Development Loan
- Home Energy Solutions- Income Eligible (HES-IE)
- Connecticut Children's Hospital Healthy Homes
- One Touch Referral Tool

United States

- Zonolite Attic Insulation Trust
- Low-Income Home Energy Assistance Program (LIHEAP)
 - Administered by CT Dept. of Social Services (DSS)
- Weatherization Assistance Program (WAP)
 - Administered by CT DEEP

Other State Weatherization Barrier Efforts

- Delaware
 - Pre-Weatherization Program
- Massachusetts
 - Mass Save LEAN
 - HEAT Loan
 - Barrier Mitigation Grant
 - Home Energy Assessment
- Rhode Island
 - Double Green Loan
 - HEAT Loan
 - Weatherization Barrier Incentive
- New York
 - EmPower New York
 - Assisted Home Performance with ENERGY STAR
 - Green Jobs Green NY
 - Healthy Homes Pilots
- Vermont
 - Home Energy Loan
 - Healthy Homes Pilots
 - One Touch Referral Program



Lessons Learned

- A huge potential for collaboration exists between weatherization efforts and medical community
- LIHEAP funds (DSS) generally have greater flexibility than WAP funds when addressing weatherization barriers
 - Flexibility varies significantly depending on how the state agency administering LIHEAP develops the LIHEAP State Plan
- There are many available resources but an overall lack of coordination
 - How can we streamline and coordinate all available resources for contractors and households to take advantage of them?

Appendix / Details

Connecticut Programs

- Smart E-Loan
- Energize CT Health & Safety Revolving Loan Fund
- LIME Loan
- Navigator Pre-Development Loan
- Home Energy Solutions- Income Eligible (HES-IE)
- Connecticut Children's Hospital Healthy Homes
- One Touch Referral Program

Connecticut: Smart-E Loan

Provides financing for home energy improvements

- **Barriers/ Amount Covered:** 25% can go to lead removal, knob and tube wiring, electric upgrades; Up to \$25,000 can go to asbestos or mold remediation
- **Eligibility:** Must be owner-occupied; Must be a 1- to 4- unit residential building
- **Program administrator:** Administered by CT Green Bank in partnership with Energize CT

Energize CT Health & Safety Revolving Loan Fund

Allows owners of multifamily housing, primarily low-income residents, to remediate health and safety issues that will enable energy improvements

- **Amount:** Loans from \$10,000 to \$300,000
- **Eligibility:** Multifamily properties (5+ units); At least 60% of the units serve low-income residents (households with incomes at 80% of AMI or less)
- **Program administrator:** Administered by Inclusive Property on behalf of CT Green Bank in partnership with Energize CT
- **Barriers covered:** Most all energy-related health and safety measures

Connecticut: Loans Improving Multifamily Efficiency (LIME) Loan

Enables multifamily buildings with 5+ units to make energy improvements

- **Amount:** 25% can go to barrier mitigation
- **Eligibility:** Multifamily properties (5+ units); at least 60% of the units serve low-income residents (households with incomes at 80% of AMI or less)
- **Program administrator:** Administered by CT Green Bank in partnership with Capital for Change
- **Barriers covered:** Most all energy-related health and safety measures

Connecticut: Navigator Pre-Development Loan

Allows for customized analysis and design of energy improvements for multifamily properties

- **Amount:** Up to \$250,000
- **Eligibility:** Multifamily properties (5+ units)
- **Program administrator:** Administered by CT Green Bank in partnership with Energize CT
- **Barriers covered:** Identification of project health and safety needs

Connecticut: Home Energy Solutions- Income Eligible (HES-IE)

HES-IE is a program offered for income-eligible customers that provides both gas and electric measures for single-family and 1-4-unit buildings

- **Amount:** No specific amount of funding; Utilities ask vendors to submit the cost of weatherization barriers with their add-on measure proposals if cost effective
- **Eligibility:** Must meet income eligibility requirements
- **Program administrator:** Eversource CT and United Illuminating
- **Barriers covered:** Minor fixes such as knob-and-tube wiring and ventilation

Connecticut Children's Hospital Healthy Homes

Provides energy assessment and remediation of lead hazards and other health and safety hazards for income-qualified homes

- **Amount:** \$5,000 available to make homes safe & healthy
 - Funding for lead hazards: sliding scale
- **Eligibility:** Must be private property owner
 - HUD funding- 80% of AMI
 - DOH funding- 120% poverty line
- **Program administrator:** Connecticut Children's Hospital
- **Barriers covered:** Most health and safety measures covered (a focus on lead hazards)

Connecticut: One Touch Referral Program

Available statewide in Vermont; now being used in Hartford, CT and Waterbury, CT. Connects HES-IE households with resources and services to help them address issues preventing energy work

- **Service:** Electronic referral program that connects health, energy, and housing home visiting and repair programs
- **Eligibility:** HES-IE households
- **Program administrator:** Tohn Environmental Strategies LLC
- **Barriers covered:** Most health and safety measures covered

Delaware

Pre-Weatherization Program helps low-income families prepare their homes to meet the requirements of the State of Delaware's Weatherization Assistance Program

- **Amount:** Covers cost of barrier removal
- **Eligibility:** Low-income households deferred from state weatherization assistance program
- **Program administrator:** Energize Delaware
- **Barriers covered:** Structural: loose flooring, roof leaks, doors and windows, faulty wiring

Massachusetts

- Mass Save LEAN
- HEAT Loan
- Barrier Mitigation Grant
- Home Energy Assessment

Mass Save Low-Income Energy Affordability Network (LEAN)

Addresses all structural and weatherization barriers in homes. LEAN is the association of the Massachusetts non-profit agencies that deliver the WAP program

- **Amount:** Covers the cost of barrier mitigation
- **Eligibility:** Low-income households
- **Program administrator:** Mass Save
- **Barriers covered:** All weatherization barriers

Mass Save HEAT Loan

Mass Save HEAT loans are no-interest loans available for home energy efficiency improvements

- **Amount/ Barriers covered:**
 - Knob and tube wiring; Vermiculite- up to \$10,000
 - Mold abatement- up to \$4,000
 - Structural concerns; Combustion safety- up to \$1,000
- **Eligibility:** Must be accompanied by weatherization work
- **Program administrator:** Mass Save

Mass Save Barrier Mitigation Grant

Grants for moderate-income customers of Mass Save who have barriers to completing weatherization or heating upgrades

- **Amount/Barriers covered:**
 - Knob and tube wiring; Vermiculite- up to \$7,000
 - Asbestos- up to \$4,000
- **Eligibility:** Moderate-income customers (must be income verified by their local CAP)
- **Program administrator:** Mass Save

Mass Save Home Energy Assessment

Home energy audits for homeowners, which includes referrals for weatherization barriers.

- **Service:** Home assessment + referral program
- **Eligibility:** Customers must live in a 1-4-unit home
- **Program administrator:** Mass Save
- **Barriers covered:** Combustion safety and knob and tube wiring

New York

- EmPower New York
- Assisted Home Performance with ENERGY STAR
- Green Jobs Green NY
- Healthy Homes Pilots

EmPower New York

Provides no-cost energy efficiency solutions to low-income households

- **Service:** Home energy assessment and measure installations; covers costs of service
- **Eligibility:** Available to households <60% AMI, includes homeowners and renters.
- **Program administrator:** NYSERDA
- **Barriers covered:** Health and safety measures, including combustion safety testing, bathroom venting, bath fans, dryer vents, chimney liners, moisture barriers, and others on case-by-case basis

New York: Assisted Home Performance with ENERGY STAR

Provides a discount to the cost of home energy efficiency improvements to those who qualify

- **Amount:** Discount covering 50% of energy efficiency improvement costs up to \$5,000 for single-family and up to \$10,000 for 2-4-unit residential homes
- **Eligibility:** Available to <60-80% AMI households
- **Program administrator:** NYSERDA
- **Barriers covered:** Combustion safety testing, bathroom venting required during shell improvement

Green Jobs Green NY Loan Fund

Finances energy audits and energy efficiency retrofits or improvements for owners of residential 1-4 family buildings

- **Amount:** Loans allow for up to 50% of ancillary health and safety measures
- **Eligibility:** Owners of residential 1-4 family buildings
- **Program administrator:** NYSERDA
- **Barriers covered:** Health and safety measures, including asbestos removal, roof repair, and venting

New York: Healthy Homes Value-Based Payment Pilot

Combines energy efficiency/weatherization measures with in-unit measures aimed at addressing respiratory conditions and home injury hazards

- **Service:** Managed care organizations fund residential healthy home interventions. This includes home assessment and measure installation
- **Eligibility:** Medicaid members residing in high asthma burden region of New York State; at least one resident age 0-17 with poorly-controlled asthma
- **Program administrator:** NYSERDA
- **Barriers covered:** Health and safety repairs

Rhode Island

- Double Green Loan
- HEAT Loan
- Weatherization Barrier Incentive

Rhode Island: Double Green Loan

Helps to finance measures that make homes more energy-efficient and safe. Also available in Massachusetts

- **Amount:** Loans range from \$500 to \$25,000
- **Eligibility:** Serves moderate-to-middle income homeowners with less-than-perfect credit
- **Program administrator:** Capital Good Fund in partnership with National Grid
- **Barriers covered:** Removal of knob-and-tube wiring

Rhode Island: HEAT Loan

HEAT Loan is designed to promote the installation of high efficiency improvements

- **Amount/ Barriers covered:**

- Knob and tube wiring; vermiculite- up to \$10,000
- Asbestos; mold abatement- up to \$4,000
- Structural concerns; combustion safety- up to \$1,000

- **Eligibility:** Must be participating in National Grid's EnergyWise Home Energy Assessment Program and must be an owner of a 1-4 family home

- **Program administrator:** National Grid

Rhode Island: Weatherization Barrier Incentive

This incentive is offered to a customer if a weatherization barrier has been identified during a home assessment

- **Amount:** Up to \$250 is available for barrier mitigation
- **Eligibility:** Must be participating in National Grid's EnergyWise Home Energy Assessment Program and must be a resident or owner of a 1-4 family home
- **Program administrator:** National Grid
- **Barriers covered:** Knob and tube wiring, ventilation, mechanical systems (draft failure, carbon monoxide)

Vermont

- Home Energy Loan
- Healthy Homes Pilots
- One Touch Referral Program

Vermont: Home Energy Loan

Provides financing for home energy projects for low- and moderate- income Vermonters

- **Amount:** Loans up to \$40,000; health and safety repairs can be up to 50% of the total loan amount
- **Eligibility:** Low- and moderate- income households
- **Program administrator:** Efficiency VT
- **Barriers covered:** Health and safety measures

Vermont: Healthy Homes Pilots

Pilots aim to improve housing and indoor air quality for customers with health risks

- **Service:** Pilots are a combination of home repair measures and in-home patient education on energy and self-managed care practices
- **Eligibility:** Customers with respiratory illnesses or in-home fall hazards
- **Program administrator:** Efficiency Vermont
- **Barriers covered:** Health and safety repairs

Vermont: One Touch Referral Program

Also being used in Hartford, CT and Waterbury, CT. Connects low-income households with resources and services to help address issues preventing energy work

- **Service:** Electronic referral program that connects health, energy, and housing home visiting and repair programs
- **Eligibility:** All single-family low-income weatherization jobs use One Touch
- **Program administrator:** Tohn Environmental Strategies LLC
- **Barriers covered:** Most health and safety measures covered

United States

- Zonolite Attic Insulation Trust
- Low-Income Home Energy Assistance Program (LIHEAP)
- Weatherization Assistance Program (WAP)

Zonolite Attic Insulation Trust

Reimburses homeowners a portion of cost to remove or contain Zonolite brand of vermiculite attic insulation

- **Amount:** Provides a reimbursement contribution of up to 55% of the abatement cost
- **Eligibility:** Homeowners with Zonolite brand of vermiculite attic insulation
- **Program administrator:** Zonolite Attic Insulation Trust
- **Barriers covered:** Zonolite brand of vermiculite attic insulation

Low-Income Home Energy Assistance Program (LIHEAP)

Assists households with low incomes in meeting their immediate home energy needs

- **Amount:** States can allocate up to 15% of their LIHEAP grant to deliver weatherization services. Each state spends different amounts of their LIHEAP funds on weatherization assistance
- **Eligibility:** Low-income households; must qualify with local LIHEAP office
- **Program administrator:** US Department of Health and Human Services
- **Barriers covered:** Health and safety measures

Weatherization Assistance Program (WAP)

Provides low-income households with weatherization assistance

- **Amount:** Provides energy audit, scope of work, and weatherization work; covers cost of process
- **Eligibility:** Low-income households (DOE guidelines: at or below 200% poverty income guidelines)
- **Program administrator:** US Department of Energy
- **Barriers covered:** DOE WAP has specific guidelines for what is covered. Examples include combustion appliance safety testing, repair or replacement of vent systems, and evaluate mold and moisture hazards

Recommendations

- Increase availability of WAP funds beyond \$1,000 limit if utility or state funds are available to complete weatherization
- If WAP funds can be used for weatherization, use utility or public funds for barrier mitigation
- Cost effectiveness calculations should be allowed on a program or sector basis, not on a house-by-house or measure-by-measure basis
- When funds are shared for barrier mitigation, all programs should get credit for the savings

Recommendations (cont.)

- Health care institutions that treat patients with illnesses such as asthma or COPD should have an explicit referral system to weatherization programs to encourage building improvements
- Upon calculation of decreased admissions for those illnesses, health care industry should provide financial support for the work done in those homes
- Cost effectiveness calculations should include monetization of health benefits
 - Massachusetts includes a \$700 monetized benefit per low-income household that receives services
- Coordination across programs is critical in accessing and leveraging all possible resources in order to maximize weatherization efforts
- One possible solution may be the One Touch Referral Tool for energy and health and safety referrals

DISCUSSION TOPICS

- Current deferral rates
- Benefits of a concerted effort to address barriers
- Estimated cost
- Resources needed

Please leave any questions or comments in the chat or write them down for later discussion.



STEP 2: LEVERAGE FRAMEWORK AND CAPACITY IN EXISTING PROGRAMS

Identify existing programs that are doing work to address health and safety hazards in homes and identify their biggest strengths/challenges.

Weatherization Assistance Program (WAP)

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Connecticut Department of Energy and Environmental Protection

WAP Structure and Funding

- Federally funded by US DOE since 1976
- DEEP is grantee of WAP funding since 2012
- 2 Community Action Agencies (CAAs) are sub-grantees/service providers
 - New Opportunities, Inc. (NOI), Waterbury
 - Community Renewal Team (CRT), Hartford
- CAAs employ their own auditors and quality control inspectors



WAP Eligibility and Qualifying Barriers

- Clients must meet 60% state median income requirement to qualify
 - Certain demographics prioritized
- Ability to address minor barriers to weatherization
 - Smoke/CO monitors
 - Bath/Kitchen ventilation
 - Water/moisture issues
 - Heating system repair/replacement
- See Weatherization Program Notice 17-7 for more details
- 200 - 250 unit/year capacity





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November 2020

Home Energy Solutions Market Rate/Income Eligible

Home Energy Solutions (No Cost for Income Eligible)



Blower Door
Guided Air
Sealing

Duct Sealing

Water-Saving
Measures

LED Lighting

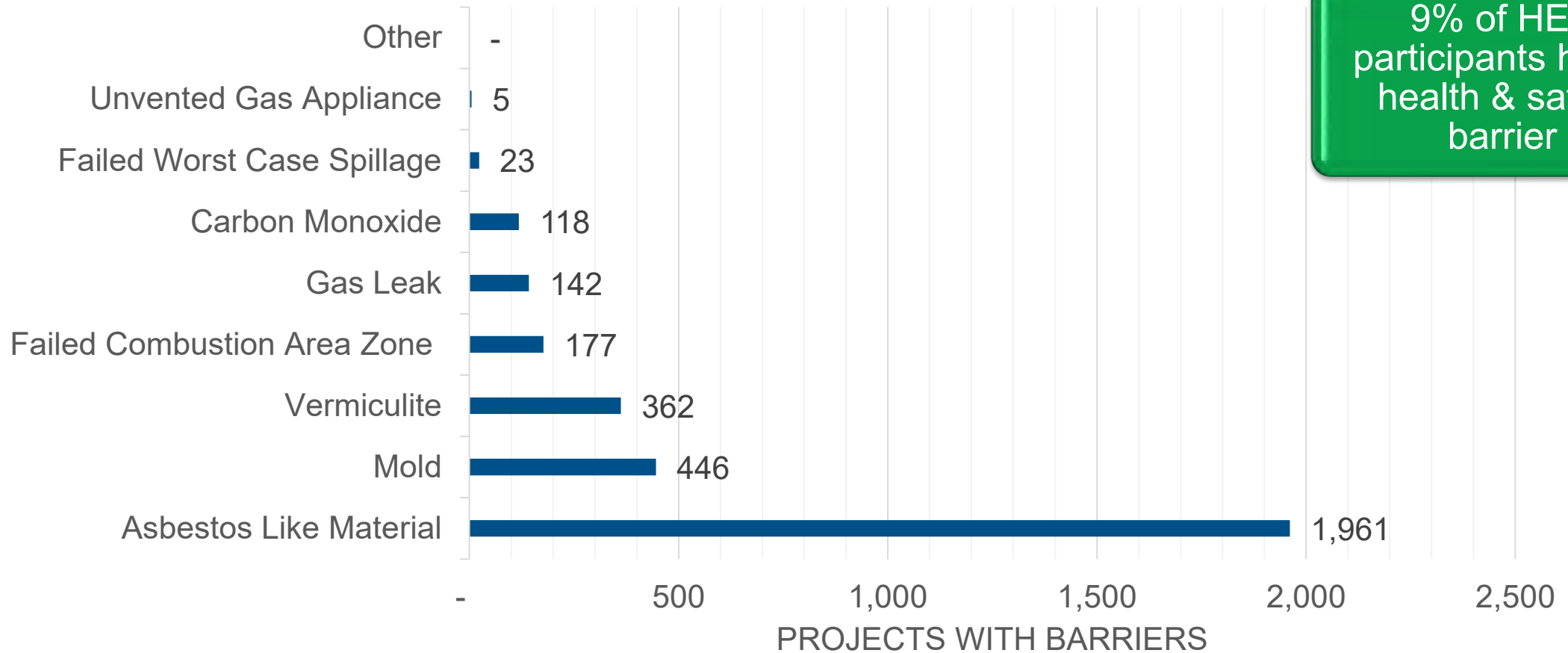
Health &
Safety Check

Assessment
Report

Additional
Energy Saving
Measures

Health & Safety Barriers: 2017 -2019

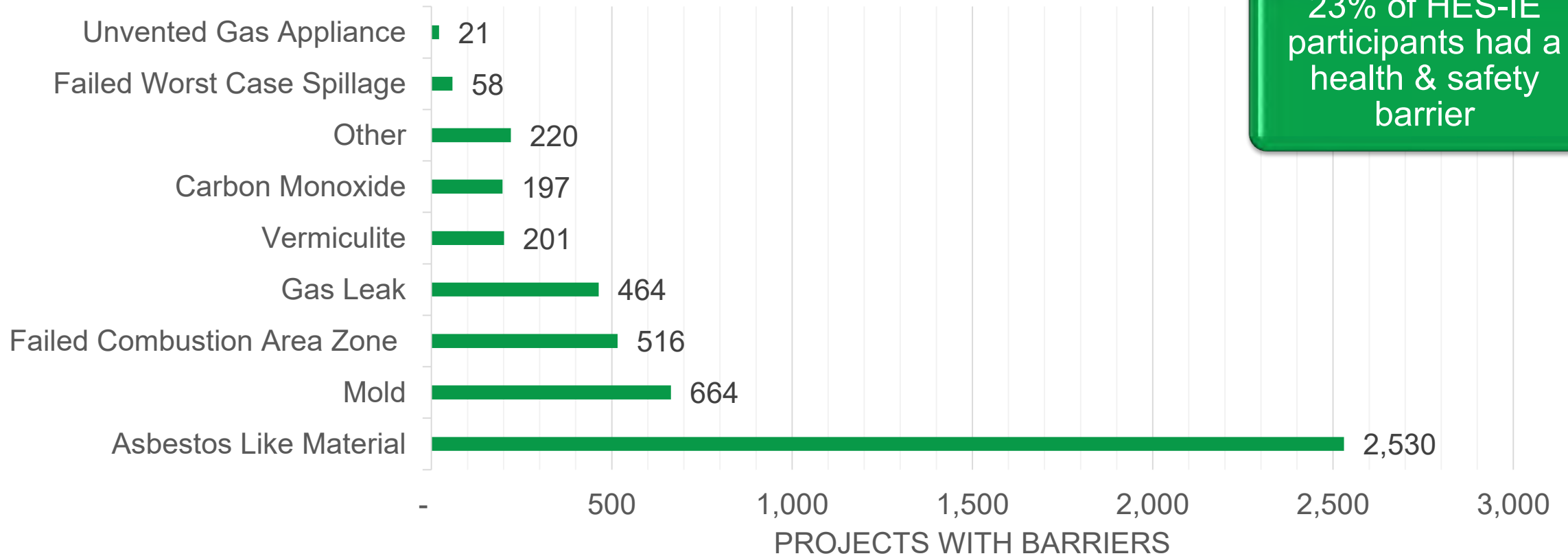
HES: Eversource + UI Total



9% of HES participants had a health & safety barrier

Health & Safety Barriers: 2017 -2019

HES-IE: Eversource + UI Total



Barrier Remediation Funding & Experience

Federal Grant (2010 – 2013)

- UI and Eversource received Federal Grant for remediation services
 - Deeper remediation services included duct cleaning

DEEP Grant from NU-NSTAR Merger Funds (2016 – 2018)

- Remediated barriers preventing blower door guided air sealing
 - Provided insight into the cost and complexity when remediating barriers

Knob and Tube Wiring

- Mitigation costs can be included in insulation proposals for Home Energy Solutions – Income Eligible participants
 - Mainly knob and tube deactivation costs can be covered by the incentive



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smart energy choices

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Thank you



Building for Health: Pathways to Partnership

A presentation for
Weatherization Barriers Workgroup
November 18, 2020



Healthy Homes Program



Established in 2003

Served more than 3,100 families

- Includes more than 1,800 children under 6

Attracted more than \$40 million in federal and state investment

\$29 million in matching funds from municipal partners

Operating statewide (currently active in more than 40 towns)

Healthy Homes Program | Core Services



Assess
Lead, mold,
asbestos,
radon, etc.



Develop
**scope of
work**



Coordinate
relocation,
cross-sector
referral



Procure
contractor,
supervise
construction

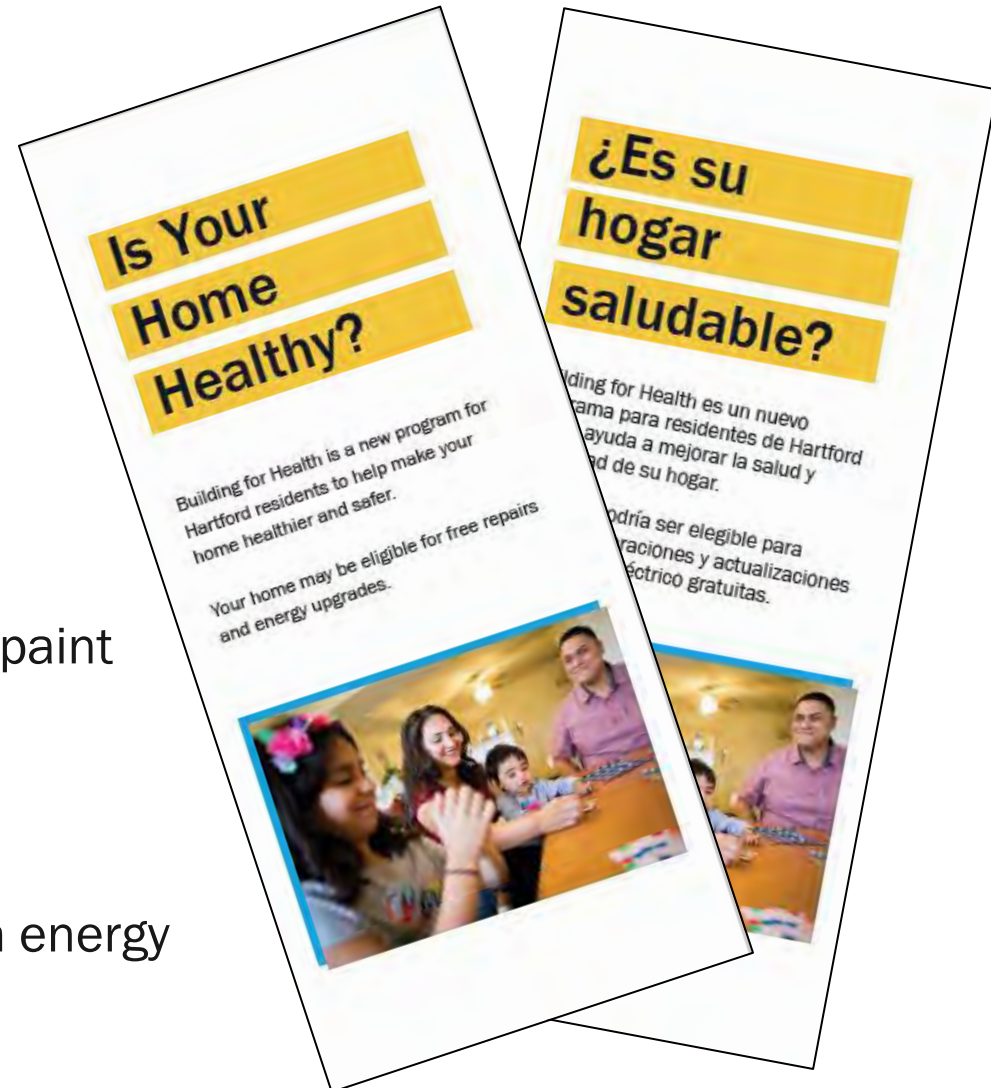
\$12,000

Avg value of
interventions, per home

Program covers 100% of cost of
interventions in **3 out of 4 homes**

Building for Health: One Touch

- Launched in Spring 2019
- Focus on 32 of 39 Hartford census tracts (LMI)
- Focus area is income pre-qualified for all programs
- Screen and refer using One Touch® platform
- 63 households assessed since March 2019
 - 60% of homes built pre-1978 and have cracked, peeling paint
 - 23% have no working CO detectors
 - 1/3 have visible mold or moisture damage
 - 1 in four reported spending more than 20% of income on energy



One Touch clearinghouse connects energy clients with added housing or health services



- ✓ **Operating in Hartford and Waterbury.** Connects HES-IE clients with housing rehab and other services. Piloting with Eversource vendor HE Energy Solutions.
 - ✓ Hartford Coordinators: LISC & CT Children's Medical Center (2019-current)
 - ✓ Waterbury Coordinator: Waterbury Dept Health (2020- current)
- ✓ **Serves primarily low income households**
- ✓ **Fills a gap.** 30% VT and 50% Hartford energy clients need referrals

Program is scalable, flexible, and tracks metrics

Our IT electronic referral approach

- **Flexible:** Can incorporate new programs and referrals
- **Provides Accessible Data:** Auto generated reports and web-based accessible data summary
- **Scalable for State Use:** For example, VT weatherization uses One Touch[®] in all single family projects, >4,000 homes to date

Current funding

- Waterbury – HUD Lead/Healthy Homes
- Hartford – Hartford Foundation grant to LISC



For More Contact: Ellen Tohn, etohn@tohnenvironmental.com; www.onetouchhousing.com; [Building for Health](#)



Green & Healthy Homes Initiative®

Connecticut Green & Healthy Homes Project

Briefing for Barriers to Weatherization Workshop

Nov 18, 2020

Connecticut Green & Healthy Homes Project

Vision

“Any family across Connecticut – whether they come to a health facility for treatment of asthma, contact their utility for energy efficiency services, or seek housing repairs from a local social service nonprofit – would get the package of interventions needed to make their home green, safe and healthy.”

How?

Evidence-based housing interventions

- Address health and safety hazards and improve energy efficiency
- Support housing stability and affordability through lower energy burdens
- Support academic achievement and career advancement through improved health outcomes

Our collective opportunity:

- Solve the funding gaps for health and safety remediation
- Break down silos – on the funding side and the delivery side
- Focus on sustainable solutions – so we can solve the problem at scale across the state

Unlocking Systemic Sustainable Funding for Interventions

1

Effectively make the case for healthcare investment in the existing **robust service delivery infrastructure**: energy-efficiency contractor network that serves 20,000 households each year (HES and HES-IE) and Medicaid home visiting agencies that serve 15,000 households each year

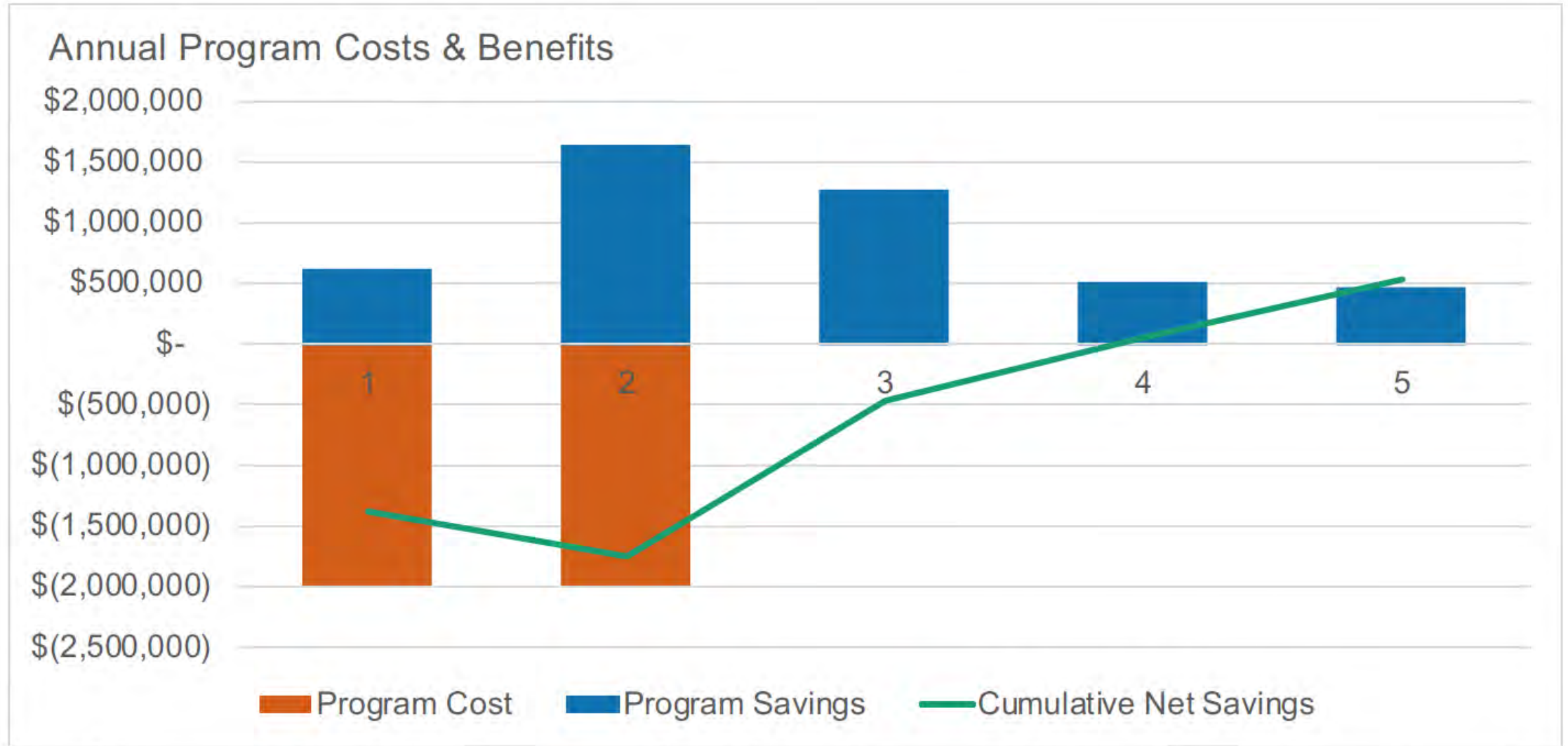
2

Evidence-base is clear that **healthcare savings can pay for some healthy/safety improvements**. Used real CT HUSKY data to determine the specific **return on investment** for housing H&S interventions.

3

Address households with highest energy, housing, and health burdens, which also targets the **same households at highest risks of COVID-19: older adults, African-Americans, and Latinos**

Healthcare Benefit-Cost Analysis



Basic Program Model

The program combines in-home education for self-management of health conditions and the assessment and remediation of housing hazards and energy-efficiency opportunities.

1

In-home education and ongoing follow-up care and coordination



Healthy Homes Educator:

Provides education, supplies

- Follow-up and referral to meet needs
- Care coordination with medical providers

2

Integrated assessment & home modifications address health/safety hazards and energy-efficiency needs



Assessor: Comprehensive environmental assessment and energy audit, coordinated scope of work



Contractors: Address asthma triggers, trip/fall risks, broader healthy home measures, and energy efficiency interventions

DISCUSSION

- Strengths and weaknesses of projects/programs
- Does the capacity to solve the problem of health and safety barriers to weatherization in CT exist?
- What are some missing links?



STEP 3: IDENTIFY OPPORTUNITIES AND MECHANISMS FOR CO-INVESTMENT

Determine where existing programs getting money? (federal and state grants) and identify a sustainable funding source or options for sources can we tap into.

NEXT STEPS

- **Recording will be shared with registrants**
- **Participant survey**
- **Aim to reconvene in December workshop to apply learnings**
 - Structure and content will depend on participant feedback
 - Continue discussions about the rest of the six-step framework
 - Consider further steps for program establishment

