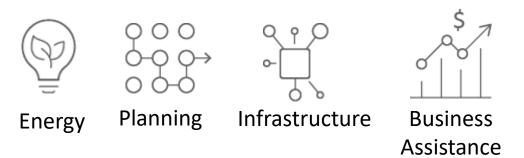


# Washington's Weatherization Plus Health Program

Michael Furze
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# We strengthen communities

The Department of Commerce touches every aspect of community and economic development. We work with local governments, businesses and civic leaders to strengthen communities so all residents may thrive and prosper.







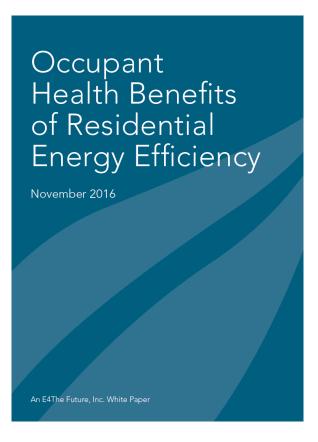
Housing



Safety /
Crime Victims



## **Weatherization Plus Health Benefits**



# Achieving Health and Social Equity through Housing:

Understanding the Impact of Non Energy Benefits in the United States

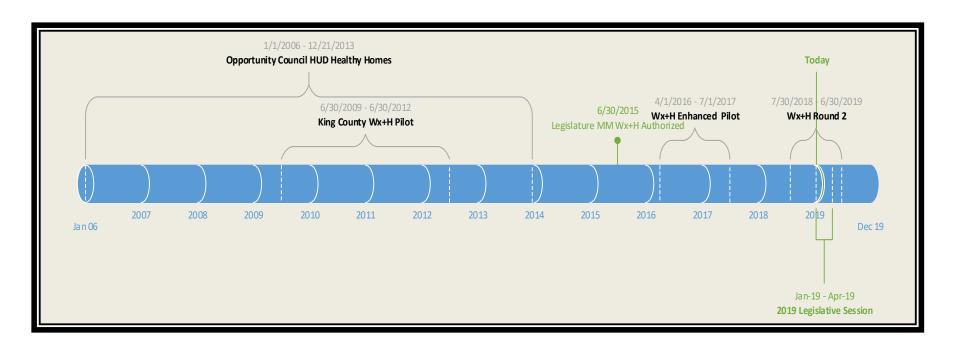




Green & Healthy Homes Initiative

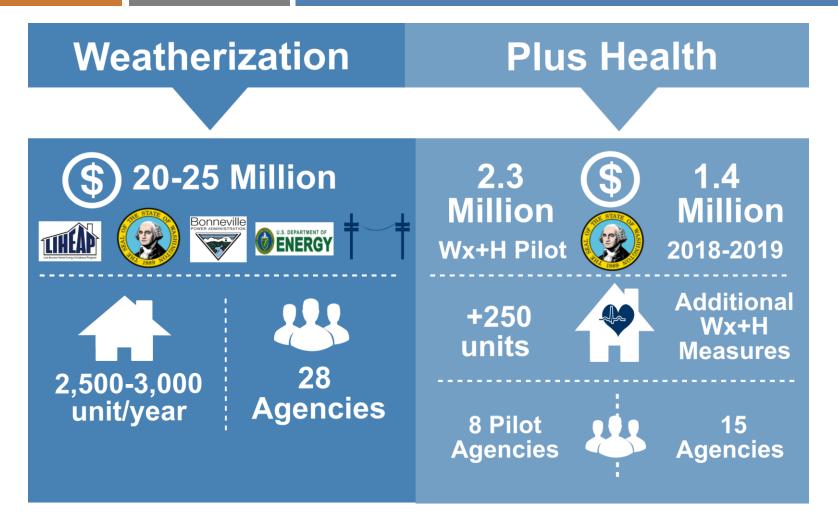


## Where We Have Been





# Low-Income Weatherization in Washington





## Where are we headed?



## What does it look like?

#### **Wx+Health**

Mold remediation
Advanced ventilation
Pest & dust mite remediation
Walk-off mats • Carpet removal
Accessibility • Resident education
Asbestos, lead & radon remediation

#### **Basic Weatherization**

Insulation • Space heating • Water heating
Air sealing • Windows/doors • Basic ventilation
Programmable thermostats • Carbon monoxide monitors
Evaluate presence of moisture & mold • Combustion safety

Wx+Health builds on basic weatherization strategies



# **Weatherization + Health- Program Components**

Traditional Weatherization

**Education** 

Additional Healthy Homes Measures (\$4000+)

Client Support Tools



New heating systems or repairs

Increased ventilation

Insulation

Air Sealing

Low Cost (pipe wrap, showerheads, lighting)



Energy and Healthy Homes Education

Condition specific health education (CHW)



Hard Surface Flooring

Duct cleaning or deep cleaning

Advanced ventilation

Roofs, repairs, mold abatement, and plumbing



Filtered (HEPA) vacuum

Green Cleaning Kits

Mattress dust-mite covers

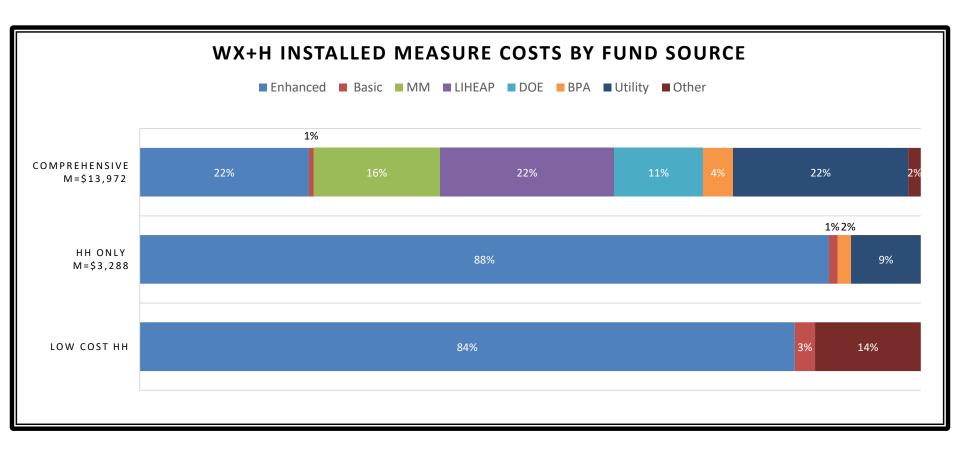
Air filters

Humidity gauges (CHW)

Medication Spacers/Nebulizers (CHW)

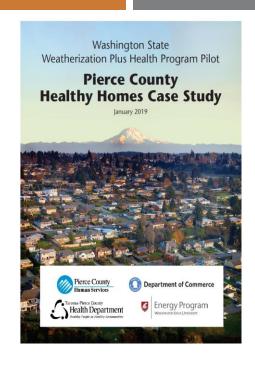


# **Results: Leveraging Weatherization Services**





# **Initial Results Are Promising**



#### **Taking Action**



86% of households getting follow up home assessments reported taking 2 or more actions to reduce environmental triggers.

#### **Quality of Life**



70% Reported an improvement in Quality of Life as measured by AQLQ and CCQ (38% of improvements were significant).

#### Respiratory Control



65% reported improvement (47% significant improvement in ACT scores). The percentage of those with respiratory issues conditions under control went from 42% to 67%.

#### **Fewer Medical Visits**



One year after initial services, study participants reported 4 fewer urgent care visits, 15 fewer ER visits, and 6 fewer hospital admissions.



## What worked?

#### Basic Weatherization

- •Primary focus is energy efficiency measures.
- •All projects and measures meet energy efficiency cost effectiveness tests.
- •Modest allowances for health, safety and repairs needed to complete project
- Prioritization based on income, energy burden, age and disability

#### Wx+H 1.0

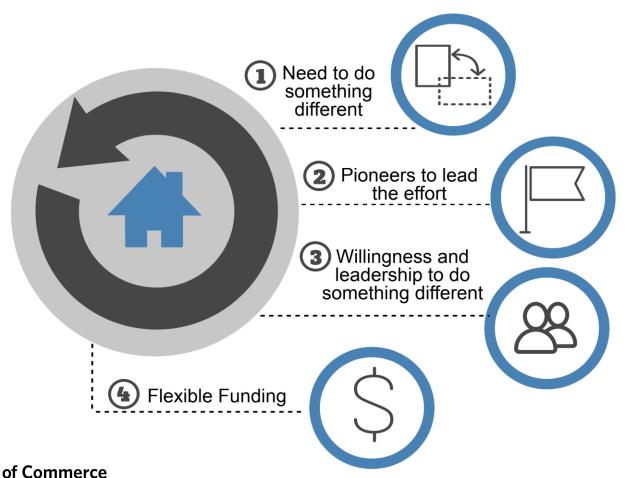
- •Additional funding and assessment for support healthy homes measures
- •Energy efficiency cost effectiveness requirements and repair and H+S caps relaxed
- Limited healthy homes education to address environmental "building" triggers
- •Client health needs are included in prioritization

#### Wx+H 2.0

- •Client health needs are a primary driver
- Client case management focuses on coordinated services
- •Wx is a service provided to some households
- •Education and behavioral interventions
- Strong community and medical or public health partners to deliver behavioral interventions



# Can This Model be Replicated?





### The Future

#### Near

- Continuation funding from for 18/19 biennium, approved but less than pilot (All 8 grantees continuing to provide services, and 7 new agencies)
- Continue to leverage federal funds and increase state funding
- Continue to assess opportunities for flexibility with current program funding

#### **Farther**

Document health impacts for funders and make Wx+H 1.0 services available statewide

### **Farthest**

Build capacity with weatherization and community health providers to move program to a Wx+H 2.0 model.



## **Resources and References**

Achieving Health and Social Equity through Housing: Understanding the Impact of Non Energy Benefits in the United States, Green and Healthy Homes Initiative, (see Slide #5) <a href="https://www.greenandhealthyhomes.org/wp-content/uploads/AchievingHealthSocialEquity\_final-lo.pdf">https://www.greenandhealthyhomes.org/wp-content/uploads/AchievingHealthSocialEquity\_final-lo.pdf</a>

Achieving Home Rx: The Health Benefits of Home Performance, Department of Energy, December, 2016 <a href="https://e4thefuture.org/wp-content/uploads/2016/11/Occupant-Health-Benefits-Residential-EE.pdf">https://e4thefuture.org/wp-content/uploads/2016/11/Occupant-Health-Benefits-Residential-EE.pdf</a>

Occupant Health Benefits of Residential Energy Efficiency, E4 the Future, Inc, November 2016, <a href="https://e4thefuture.org/wp-content/uploads/2016/11/Occupant-Health-Benefits-Residential-EE.pdf">https://e4thefuture.org/wp-content/uploads/2016/11/Occupant-Health-Benefits-Residential-EE.pdf</a>

Weatherization + Health, Health and climate Change co-Benefits of Home Weatherization in Vermont, Vermont Department of Health, December 2018.

Washington State Weatherization Plus Health Pierce County Human Services/Tacoma-Pierce County Public Health Data DRAFT, 2019, <a href="http://www.commerce.wa.gov/wp-content/uploads/2019/01/Pierce-County-Healthy-Homes-Case-Study-Jan-22-2019.pdf">http://www.commerce.wa.gov/wp-content/uploads/2019/01/Pierce-County-Healthy-Homes-Case-Study-Jan-22-2019.pdf</a>

Washington State Weatherization Plus Health website, <a href="https://www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/matchmaker/weatherization-plus-health-wxh/">https://www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/matchmaker/weatherization-plus-health-wxh/</a>

Washington State Weatherization Plus Health Pilot: Implementation and Lessons Learned, Washington State University Energy Program, July 2018, <a href="http://www.commerce.wa.gov/wp-content/uploads/2018/08/WxHSummaryReport1.pdf">http://www.commerce.wa.gov/wp-content/uploads/2018/08/WxHSummaryReport1.pdf</a>





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