



Green & Healthy Homes Initiative®

NESCAUM

Building Electrification Task Force

Climate, Energy and Healthy Housing

July 28, 2022 | 9:30 am – 10:30 am ET

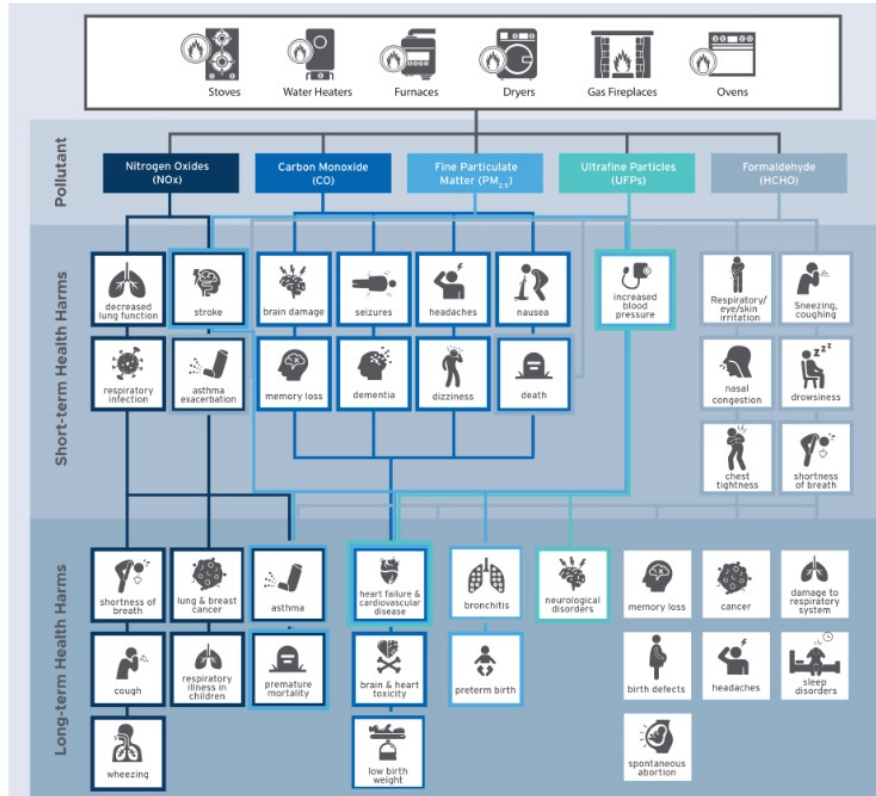
The Challenge – Context

- 40% of pollution globally is attributable to buildings
- 34 million households reported experiencing energy insecurity in 2020
- 26 million households below 80% of their area median income burn health-damaging and polluting fossil fuels inside their homes

Source: RMI



Living in a Home with Fossil Fuel Appliances Increases Health Risks



Source: RMI, <https://rmi.org/insight/decarbonizing-homes/>

Effects of Gas Stoves



Photo by [KWON JUNHO](#) on [Unsplash](#)

Gas stoves constantly leak methane, even when turned off.

<https://pubs.acs.org/doi/10.1021/acs.est.1c04707>

- Gas stoves emit a variety of pollutants, including particulate matter, nitrogen dioxide, and carbon monoxide.
- Peak indoor air pollution from using gas stoves can reach levels that, if outdoors, would be illegal.
- Health risks related to nitrogen dioxide are well known. NO₂ is known risk for asthma and other respiratory illnesses.
- In homes with gas stoves:
 - Children with current asthma problems face a 42% increased risk of experiencing symptoms
 - Children face a 24% increased risk of ever being diagnosed with asthma
 - Children face, overall, a 32% increased risk of experiencing symptoms and being diagnosed

Source: RMI, <https://rmi.org/insight/gas-stoves-pollution-health/>

30 Million Families Live in Unhealthy Homes in the US

Lead poisoning costs \$43B+ annually

- Primary cause is lead-based paint in homes built before lead paint was banned in 1978
- Leads to learning disabilities, ADHD, lower IQ, higher crime rates, lower lifetime earnings

Asthma costs \$81B+ annually

- 40% of asthma episodes caused by asthma triggers in the home
- Primary reason kids miss school-14.4M days
- 3rd leading reason kids are hospitalized



Fall hazards cost \$50B+ annually

- 30% of adults age 65+ fall annually, mostly at home

Energy inefficiencies cost \$20B annually

- Energy burden for low-income households 3x higher than that of other households

Housing quality is a matter of health, racial and economic equity - Communities of color are more likely to live in unhealthy homes, causing disproportionate rates of lead poisoning, asthma episodes, energy insecurity, and severe economic effects exacerbated by the affordable housing crisis.

Making homes healthier is a preventive measure. Energy efficiency and appliance electrification interventions can reduce carbon emissions but also impact health by improving indoor air quality, reducing extreme heat and cold, and addressing safety risks such as carbon monoxide poisoning.

The Opportunity...

To shift from disinvestment and ill-conceived and unjust policies to resilient homes and neighborhoods that support children in reaching their full potential as they grow, and adults as they age with health, vitality and dignity.

Leveraging health, housing and energy sectors.

Reduce deferral rates by addressing hazardous housing conditions that prevent low-income clients from accessing energy efficiency resources.

Climate change mitigation is a **new pathway for healthy and affordable housing.**

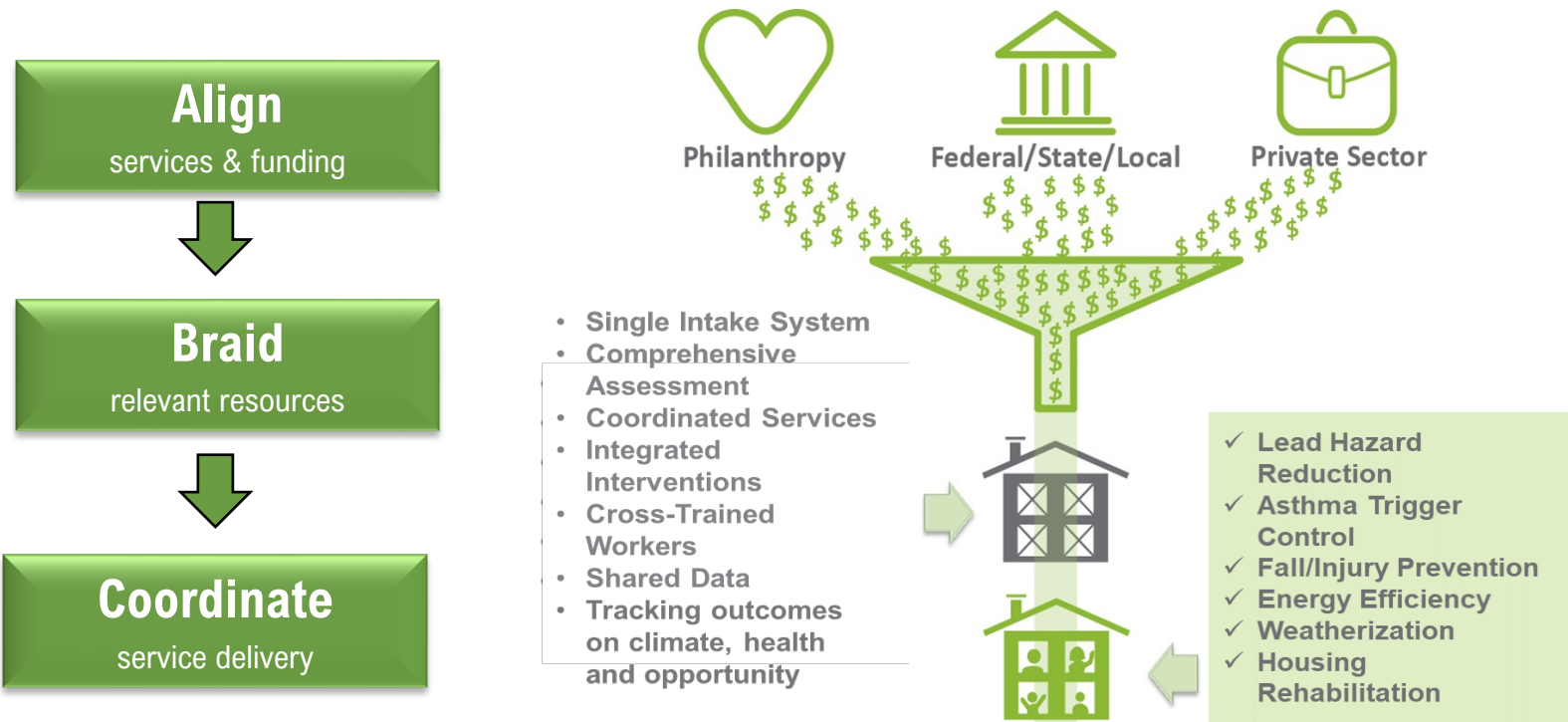
GHHI - Centering Our Work on Health and Racial Equity

Vision | Addressing the social determinants of health and racial equity through healthy housing.


Mission | The Green & Healthy Homes Initiative is dedicated to addressing the social determinants of health and the advancement of racial and health equity through the creation of healthy, safe and energy efficient homes. By delivering a standard of excellence in its work, GHHI aims to eradicate the negative health impacts of unhealthy housing and unjust policies for children, seniors and families to ensure better health economic and social outcomes in low-income communities of color.

Operating Value | Ensuring health and racial equity in all policies, practices and actions.

The GHHI Model: Aligning Resources to Advance Holistic Retrofits



Advancing Climate Goals in Housing



Supporting Innovative Policy in Maryland

- **1% Bill:** Improves equity in EmPOWER program through low-income households energy savings goal standards for the state
- **Climate Solutions Now Bill:** Supports transition to clean energy and reduced emissions in building sector

Integrating **Building Decarbonization** into Projects

- Portion of the homes in **ProMedica Project** to receive decarbonization retrofits
- **NJ Whole House** approach makes LMI homes ready for electrification

Making the Case for **Investments** in Building Decarbonization

- **Field research** on impacts of replacing combustion appliances
- Advance **federal policies** to align WAP, healthy homes and clean energy
- **National convening** with Climate Imperative and other partners

New Jersey Whole House Program

Vision

To meet the state's climate goals by scaling up and coordinating residential energy efficiency services and healthy homes programs in the state, particularly for limited income residents, Black and Brown residents, older adults, and residents of underserved, and under-resourced communities.

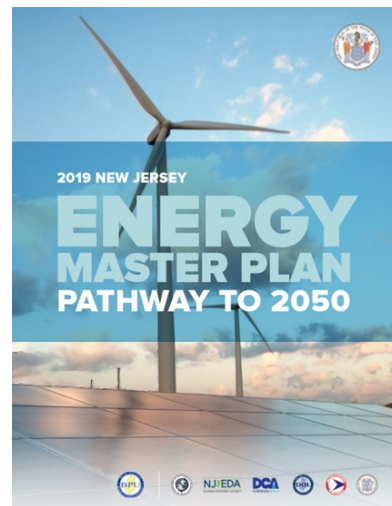
How?

Evidence-based housing interventions

- Support housing stability and affordability through lower energy burdens
- Address health and safety hazards and improve energy efficiency in housing
- Support transformative impacts, including economic stability, career advancement, and improved health outcomes through holistic housing interventions

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



Healthcare Investments in Healthy and Energy Efficient Housing

Seven High-Priority Cities - \$100 Million ProMedica Impact Fund Investment

City | Primary Service Provider | Budget for 1,000 Homes per Site including workforce, management, and evaluation

Detroit, MI

Primary Service Provider: Wayne Metro Community Action Agency
Budget: \$16.7 million

Cleveland, OH

Primary Service Provider: CHN Housing Partners
Estimated Budget: \$16.2 million

Chicago, IL

Primary Service Provider: Elevate
Budget: \$8.7 million

Philadelphia, PA

Primary Service Provider: Philadelphia Energy Authority
Estimated Budget: \$19.3 million

Toledo, OH

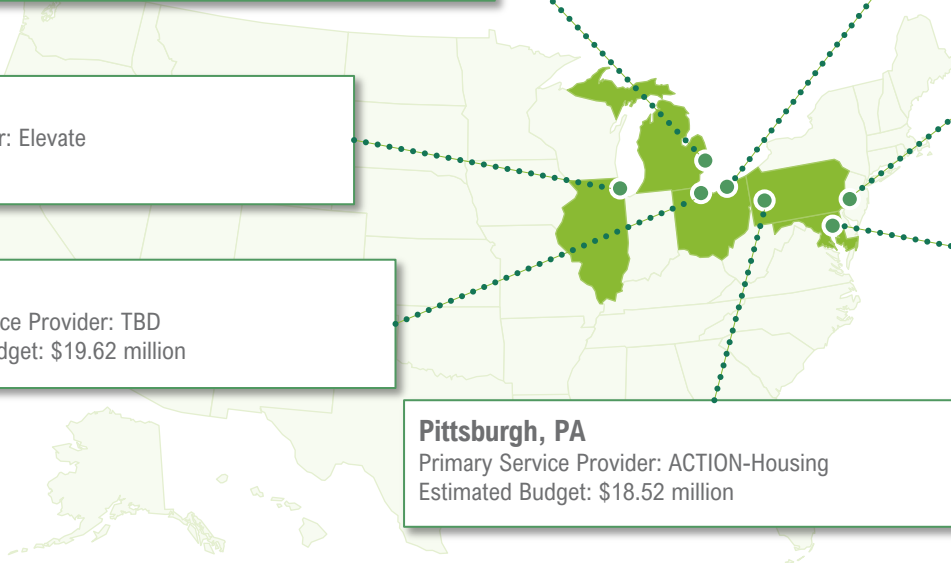
Primary Service Provider: TBD
Estimated Budget: \$19.62 million

Baltimore, MD

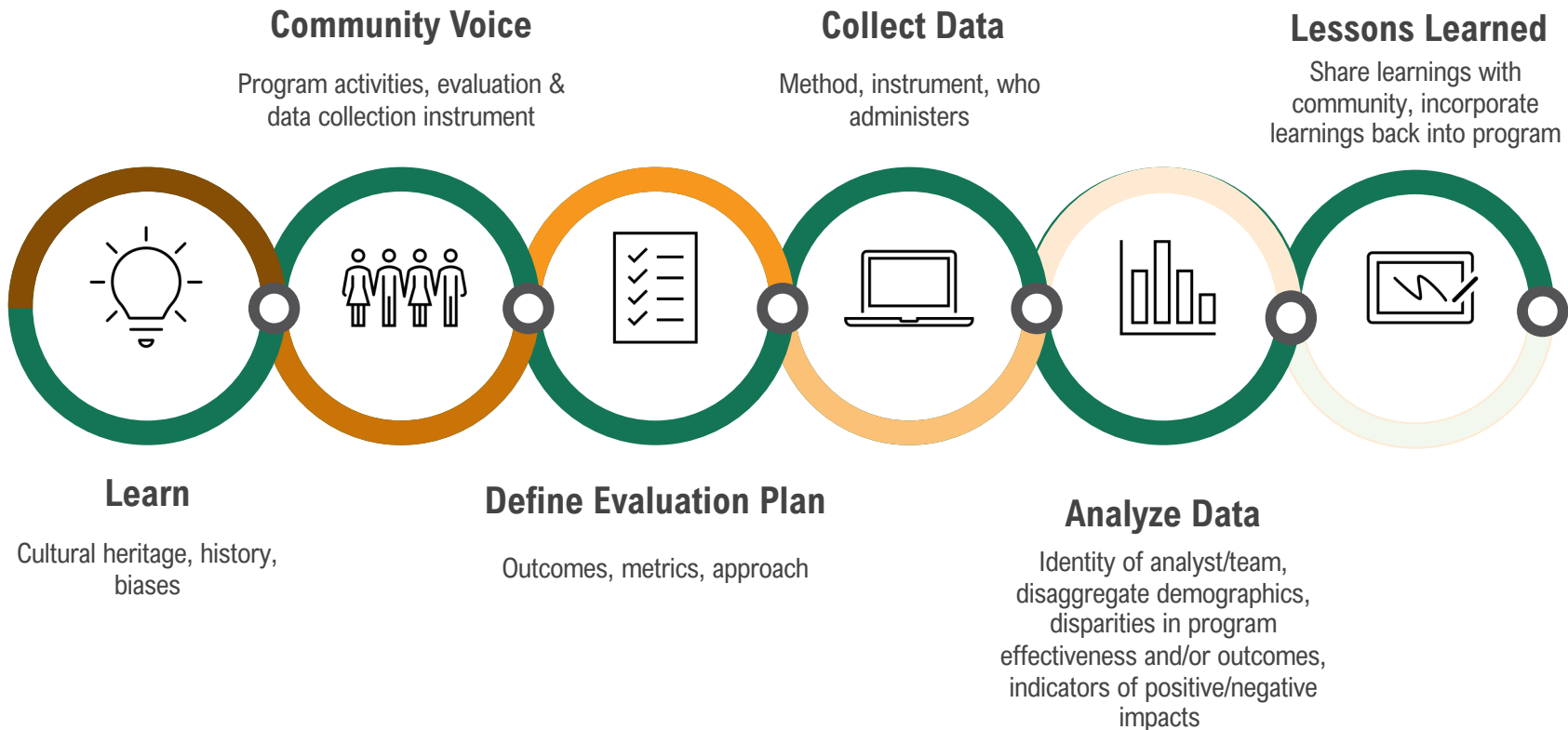
Primary Service Provider:
Green & Healthy Homes Initiative
Estimated Budget: \$7.1 million

Pittsburgh, PA

Primary Service Provider: ACTION-Housing
Estimated Budget: \$18.52 million



Setting Racial Equity Metrics



A photograph showing two individuals in full white protective hazmat suits, including hoods and respirators with pink filters, working in a window opening. The window frame is white and shows signs of wear and debris. The background is a brick wall. A green semi-transparent overlay is on the left side of the image, containing contact information.

Ruth Ann Norton
President & CEO
ranorton@ghhi.org
410-534-6477

[@RuthAnnNorton](https://www.instagram.com/RuthAnnNorton)

[@HealthyHousing](https://www.instagram.com/HealthyHousing)

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