

# Green and Healthy Homes

## Initiative Overview

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# [Collective] Financial Burden

**9M families live in unhealthy homes.**

Over 14,000,000...

- Missed school days because of an asthma episode
- Missed work days caring for a child during an asthma episode

Percent of income spent on energy costs:

- 14-20% in low income households
- 3.5% in all other homes

Tax dollars ALREADY spent annually:

- \$43B+ on lead poisoning
- \$51B+ on asthma-related illness
- \$19B+ on seniors' trip & fall injuries

# DeWayne's Story

DeWayne Davis, age 8, suffered from asthma caused by his unhealthy, energy-inefficient home which was full of asthma triggers.



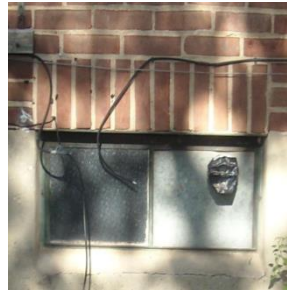
Old carpets =  
allergens



Water leaks =  
mold hazards



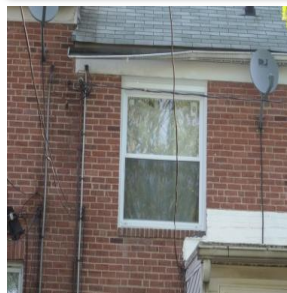
Deteriorated  
windows = air leaks



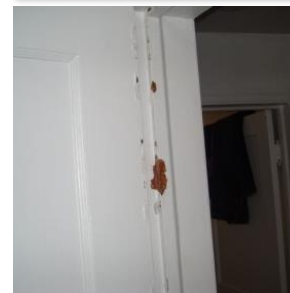
Broken hot water  
heater & furnace



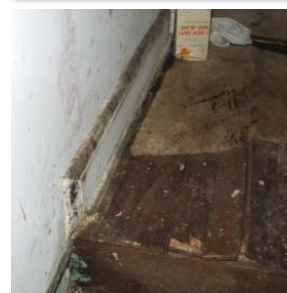
Defective gutters =  
water leaks



Chipping paint =  
lead hazard



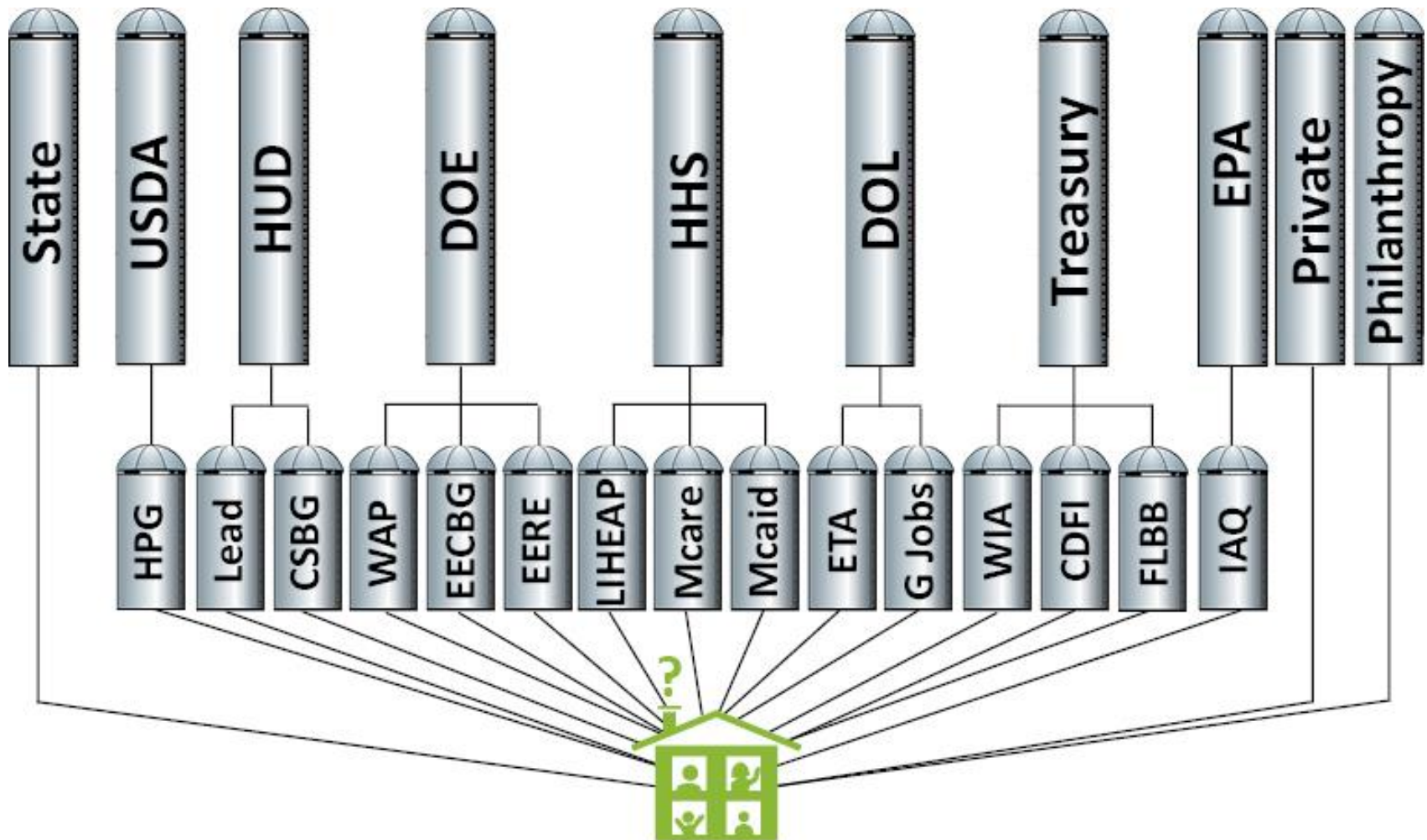
Broken tile =  
safety hazard



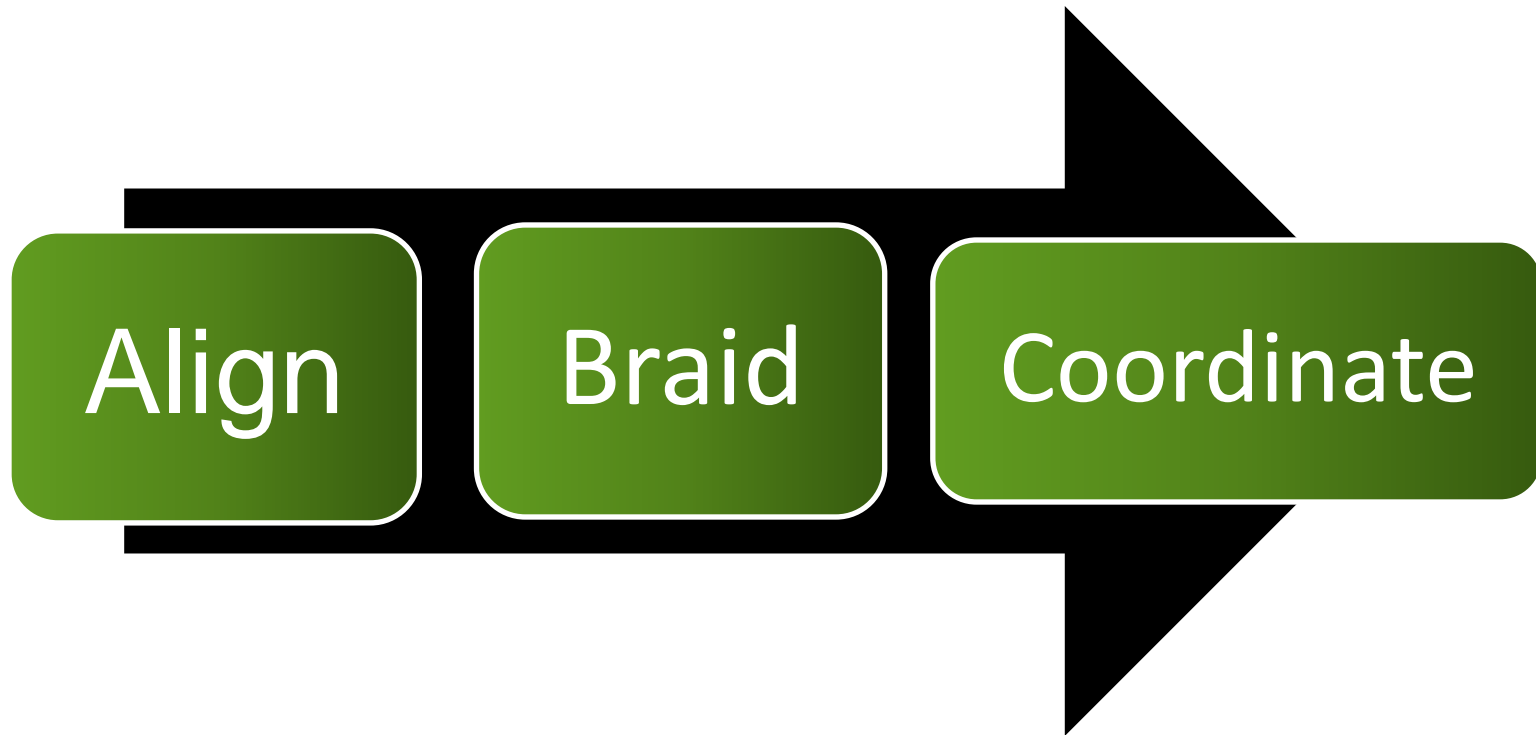
Broken ducts =  
higher heating bills



# A Fractured Delivery System



# How does it work?



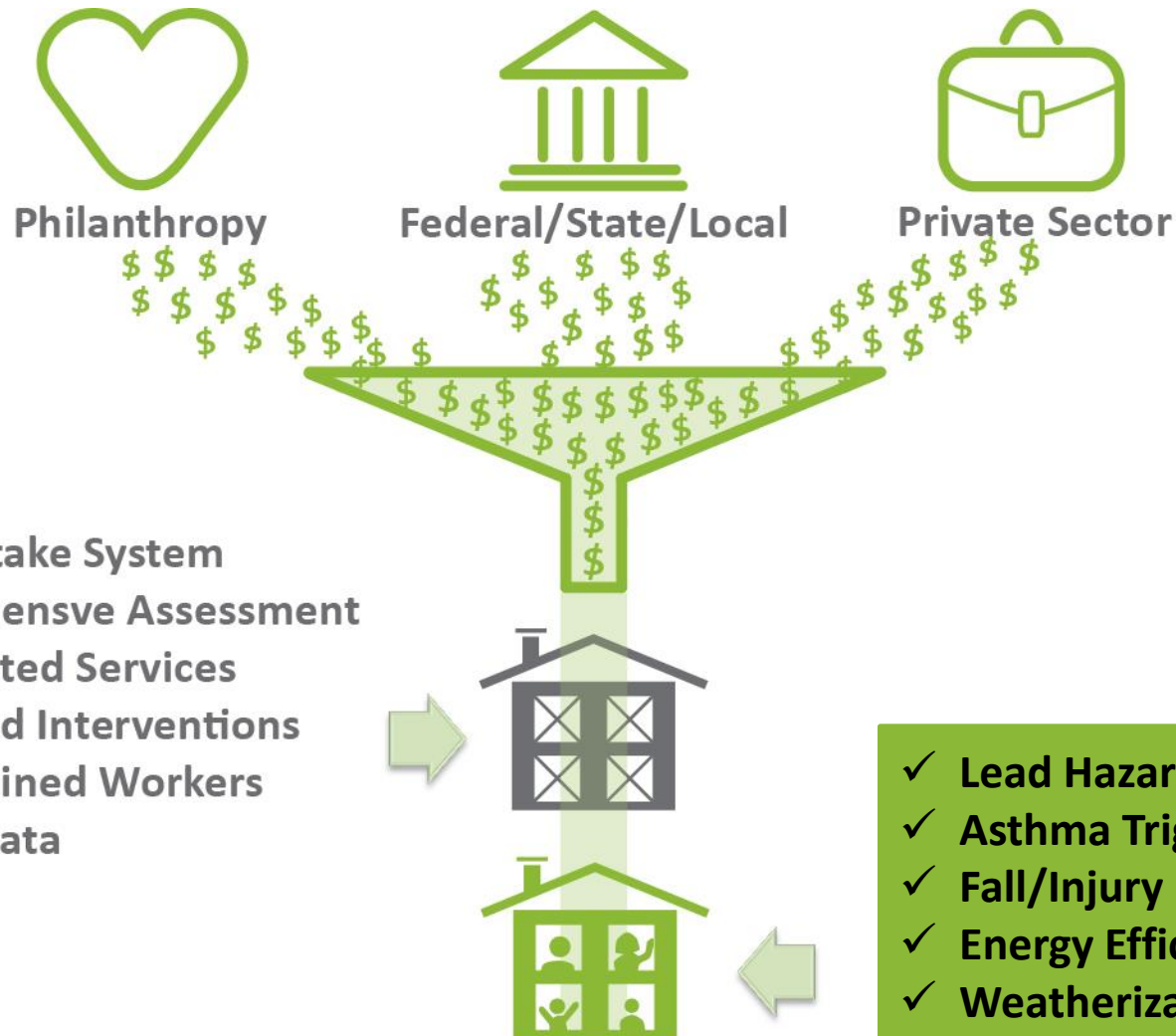
# A Solution Through Braiding



- Interventions in DeWayne's home cost 25% less (\$12k vs \$16k)
- DeWayne hasn't returned to the hospital for asthma related visits
- DeWayne's school attendance has improved
- The family's monthly heating bills have been decreased

<p><b>Remove old carpets</b></p>  <p>HUD (HHDP)</p>	<p><b>Remediate mold, install dehumidifier</b></p>  <p>HUD (HHDP)</p>	<p><b>Install Energy Star windows</b></p>  <p>HUD (HHDP)</p>	<p><b>Install furnace &amp; hot water heater</b></p>  <p>Philanthropy</p>
<p><b>Replace broken gutters</b></p>  <p>HUD (HHDP)</p>	<p><b>Stabilize chipping paint</b></p>  <p>HUD (HHDP)</p>	<p><b>Resurface uneven floors</b></p>  <p>HUD (HHDP)</p>	<p><b>Seal ducts, blow insulation</b></p>  <p>DOE (WAP)</p>

# The “No Wrong Door” Model



# The Elements of the GHHI Model

1. Local GHHI Learning Network
2. Signed GHHI Compact
3. Single Portal Intake, Enrollment, and Eligibility Determination
4. Shared Data Platform/Evaluation
5. Health & Safety Environmental Assessment
6. Energy Audit
7. Resident Education
8. Scope of Work Development
9. Integrated Green & Healthy Hazard Remediation Interventions



# An Integrated Home Assessment

## Elements of a Green & Healthy Home

**Dry**

**Well Ventilated**

**Contaminant Free**

**Pest Free**

**Well Maintained**

**Safe**

**Clean**

**Energy Efficient**

## Cost-Benefit Analysis

### Cost Benefit Analysis for Government Innovation, Wealth Retention and Long Term Health and Energy Outcomes

- Develop evaluation tools to measure improvements in health outcomes
- Develop evaluation tools to measure energy consumption reductions and energy cost savings
- Develop evaluation tools to measure cost savings from integrated assessment and intervention approach

# Questions?