



BayREN Forum: Connecting Health & Energy
June 11, 2019



The Burden of Unhealthy and Energy Inefficient Homes

30M families live in unhealthy homes

Homes with environmental hazards are making their residents sick

14.4M missed days of school each year

Asthma is the top reason students miss school

14.2M missed days of work each year

Collateral burden of sick children is missed days of work for parents and caretakers

\$51B+ spent on asthma

\$31B+ spent on slip & fall injuries

\$43B+ spent on lead poisoning

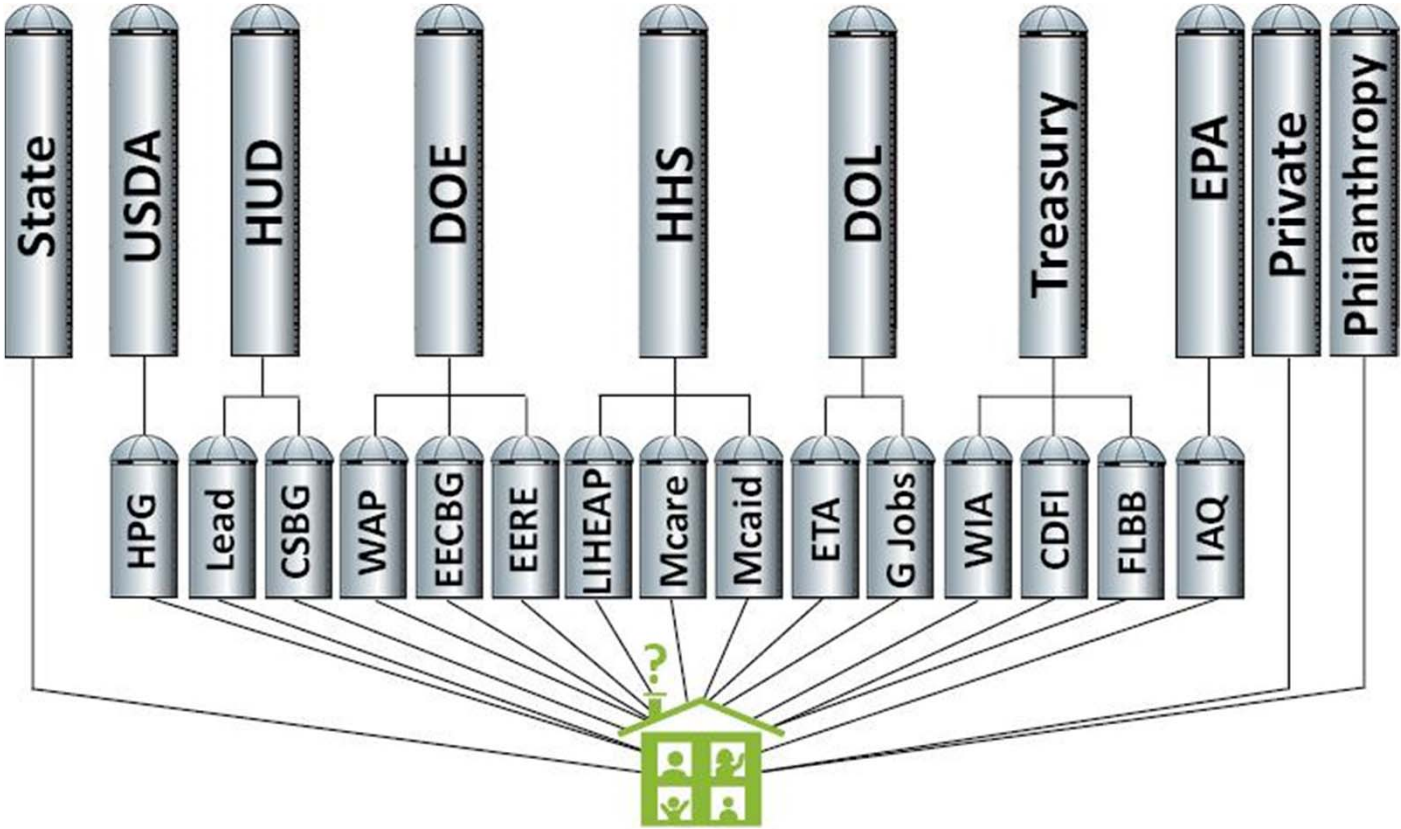
Over \$100B in taxpayer funding is spent each year to address the impact of these hazards

Low income families spend 20% of monthly income on energy costs

VS.

3.5% in other households

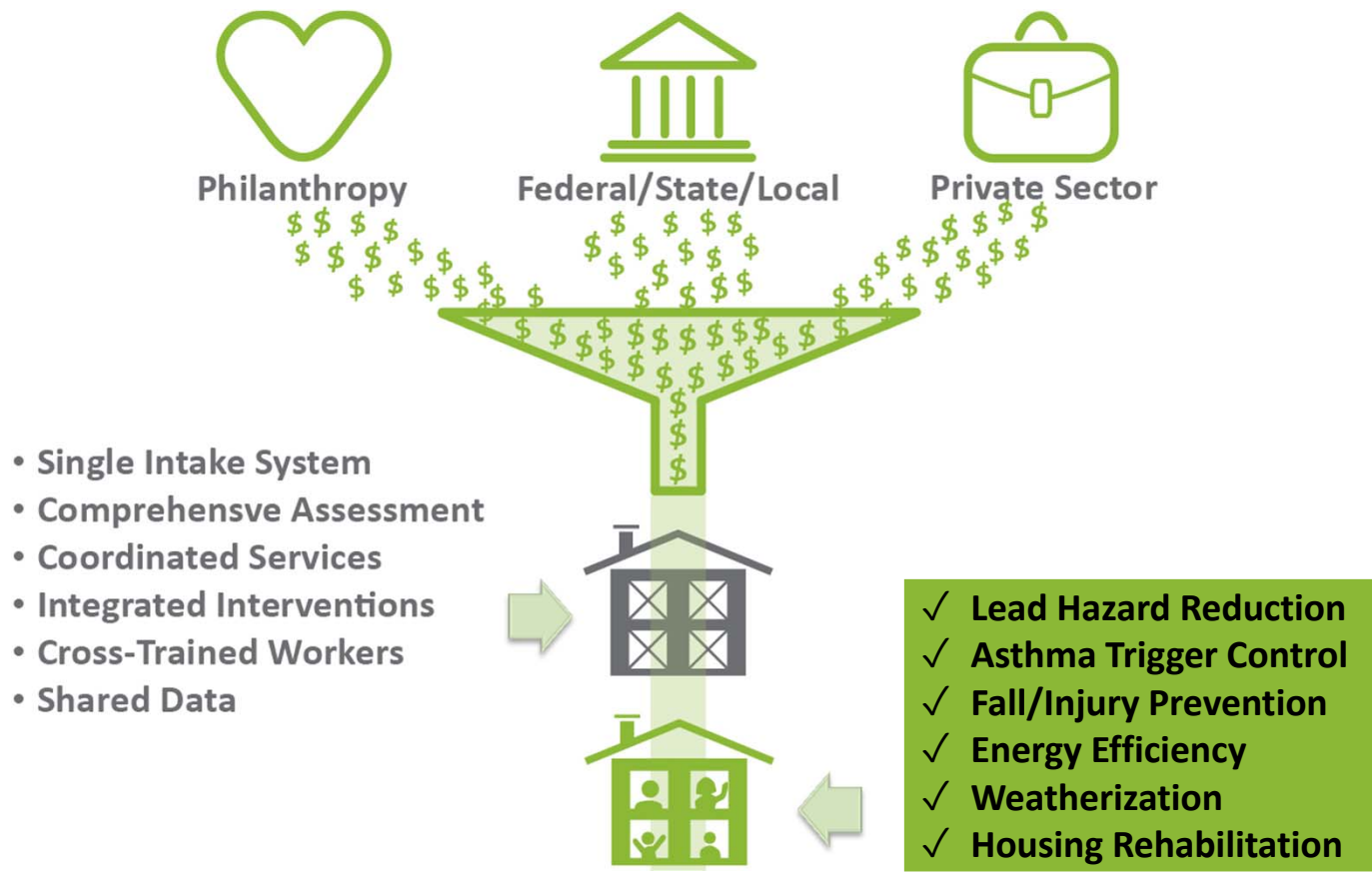
A Fractured Delivery System



GHHI Background



The GHHI Model: No Wrong Door

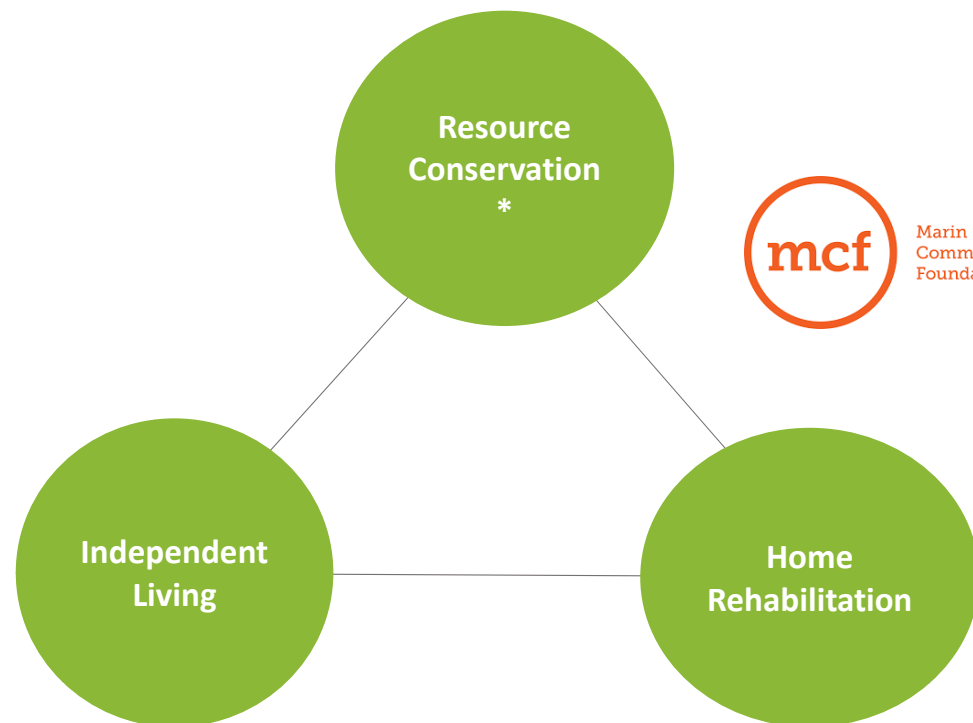


GHHI Marin:

a collaborative approach

Guided by *Theory of Change*

- ➔ Seamless access to information, incentives, and services
- ➔ More residents to utilize related programs and services
- ➔ Reduce energy/water consumption, waste generation, and greenhouse gas emissions
- ➔ Enable more residents to experience improved health and safety within their home



Serving:

- Low income residents (up to 80% AMI, HUD)
- Single family, multi family, mobile homes and floating homes
- Owners and renters

Funding:

- Leveraging partner programs and resources
- MCF grant funding
 - \$5,000 per single family unit
 - \$2,250 per multifamily unit



Current model:

| MULTIFAMILY | SINGLE FAMILY |
|-------------|---------------|
|-------------|---------------|



| | |
|---|---|
| <ul style="list-style-type: none">• Comprehensive GHHI assessment• Comprehensive SOW• Pipeline project management• Partner referrals | <ul style="list-style-type: none">• Comprehensive GHHI assessment• Comprehensive SOW• Pipeline project management• Partner referrals |
|---|---|



Lessons learned:

- **Partner buy in and support**
- Project management is key for appropriate timelines and service coordination
- Data sharing requires systems build out and can be slow moving
- Coordinated vs. comprehensive approach: program resources and capacity are unknown
- Residents trust in programs and willingness to share information
- Flexible funding is a must!
- Education and training is needed for all parties

Sir Francis Drake Boulevard:



Fairfax, Marin County



4 Section 8 Units



2 senior tenants
2 tenants with special needs



Home rehab, energy efficiency, safety
and accessibility work needed



| Resource Conservation/Energy Efficiency (Green) |
|---|
| <ul style="list-style-type: none">• Replace windows• Install crawlspace and roof insulation• Install tankless water heater• Direct install measures: LED lighting, faucet and shower aerators |
| Accessibility, Health, and Safety (Healthy) |
| <ul style="list-style-type: none">• Pest remediation• Security lighting• Bathroom ventilation • Tree work• Deck repair• Fencing and gate repair• Carport repair • Bathroom ADA• Handrails ADA |

Increased comfort

Removed trip and fall hazards

Increased accessibility

Lowered utility bills (projected)

Saving 2,271 Therms per year (projected)

Increased indoor air quality

Marin Villa:



Canal, Marin County



12 low income units



Home rehab, energy efficiency and safety and work needed

Program Resources

- \$600 Multifamily Energy Savings Program
- \$14,400 Low Income Families and Tenants (LIFT) Program
- \$13,228 Low Income Solar
- \$27,000 GHHI Marin



Green and Healthy Measures

- Electrical panel upgrades
- Structural upgrades (dry rot)
- CO monitors
- T24 compliant windows
- LED light bulbs
- Low flow faucets
- 32.26 kW solar system (49,598 kWh annual production)



Increased comfort

Removed fire hazard

Increased structural safety

Lowered utility bills

**Saving 3,386.5 kWh per year
(projected)**

Increased indoor air quality

Haverhill Court:



Novato, Marin County



Single family home



2 senior residents, 1 uses a wheelchair one uses a walker, both have respiratory health needs



Home rehab, energy efficiency, safety and accessibility work needed

Program Resources

- Marin County LIHEAP (CCES)
- Bob Roberts Client Assistance Program (MCIL)
- GHHI Marin
- Wood Smoke Program (County of Marin CDA)*

Green and Healthy Measures

- ADA accessible bathroom*
- Removal and replacement of wood burning fireplace*
- Weatherstripping
- LED light bulbs
- Low flow faucets
- Smoke alarm

Increased comfort

Improved accessibility

**Lowered utility bills
(projected)**

Increased indoor air quality



Thank You

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Focus areas:

