



Green & Healthy Homes Initiative®

Exploring clean energy access for historically excluded residents

Health, Housing, Energy, Equity Session 1

October 7, 2021



About GHHI

Vision: Advancing racial and health equity and opportunity 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.

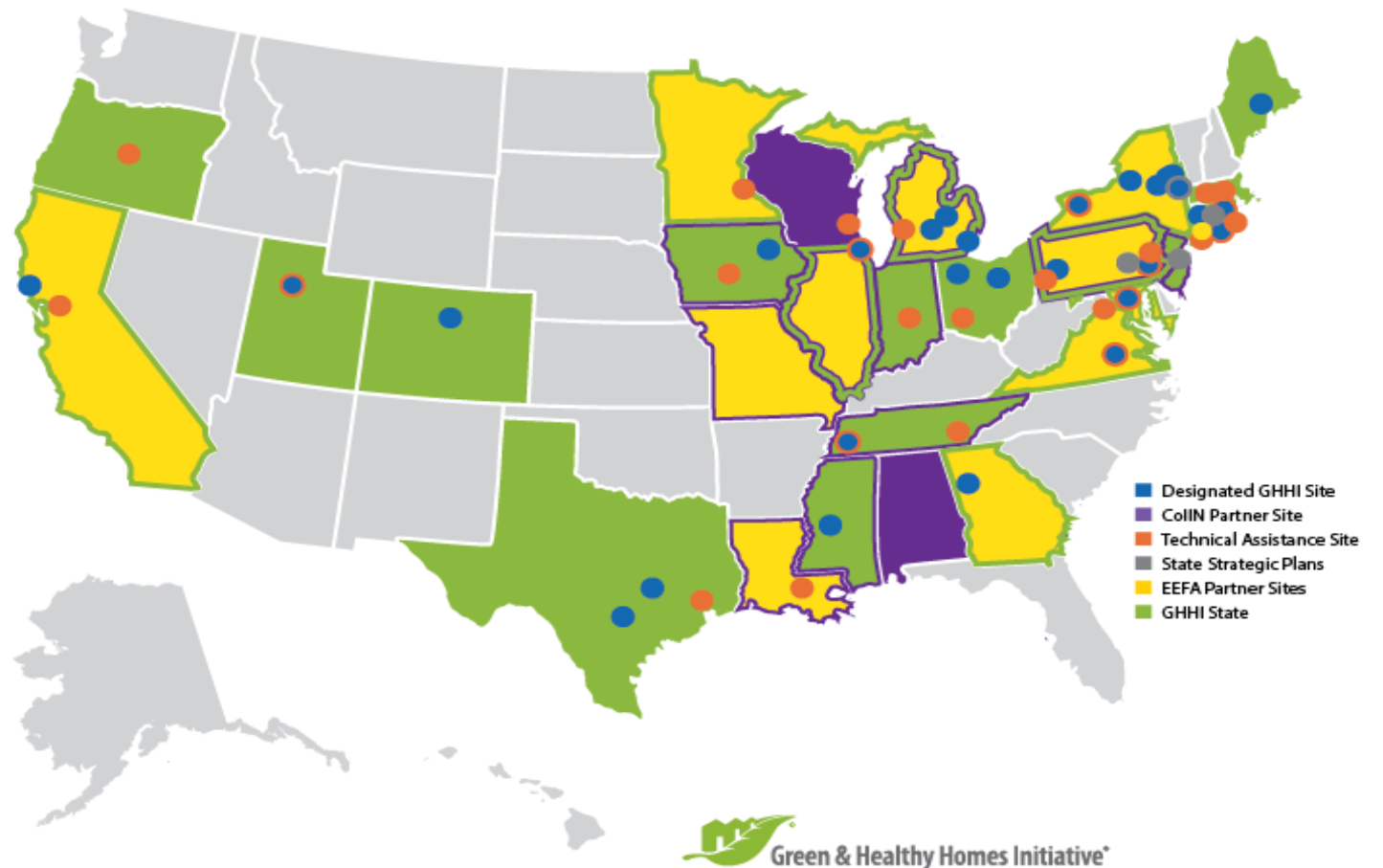
Operating Value: Ensuring racial equity in all policies, practices and actions





About GHHI – Where we work

- In addition to GHHI sites, GHHI operates and manages a variety of state and local projects across the United States.



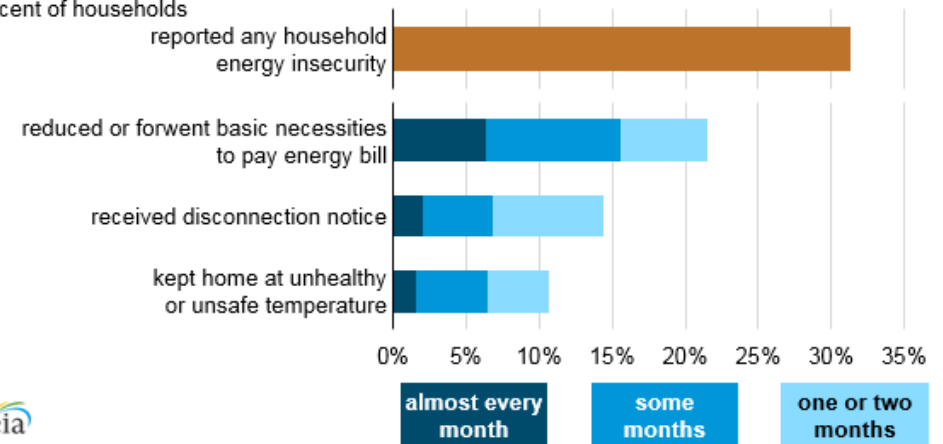


Energy Insecurity: Defining Energy Hardship

- EI is characterized by an “inability of households to meet basic household energy needs” (Hernández, 2016)
 - **Economic:** Unaffordable energy bills; arrearages, financial spiral
 - **Physical:** Inferior housing and energy-related conditions
 - **Behavioral:** Trade-offs, vigilant energy consumption, alternative heating strategies, foregoing comfort
- National Estimate: 37 million Americans are energy insecure (1 in 3 households)
 - Primarily affects low-income households, African Americans and households with children
- Impacts
 - Thermal discomfort and poor indoor air quality
 - Trade-offs due to financial strain-foregoing other necessities
 - Crisis- disconnection notices and shutoffs
 - Psychological effects

One in three U.S. households faces a challenge in meeting energy needs

Households that experienced energy insecure situations, 2015
percent of households



Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey 2015*



The Lived Experience of Energy Insecurity

- *“It's kinda hard because you can never level out [the temperature]. With the temperature being so cold, I even had to go and buy a heater because I cannot cut my heat up on 80, otherwise, I'm looking at a six, or \$700 light bill. At 68 degrees the house is not warm enough for us. That's even with us putting on extra blankets on the bed... The apartment may not be insulated right, but I've talked to the landlord about that. He has put insulation but its still cold in here. It's just certain rooms are hot and others are cold you just can't get it leveled.” --African American Memphis resident, interviewed in 2018*
- *“That furnace was in there since the house was built. It's one of those old-fashioned furnaces that looks like an octopus with all the ducts everywhere. It needed to be replaced and I called the heating/cooling person. He had gotten it to run before but then he said, there wasn't nothin' that he could do for it this time. He said I should find me another house to live or buy another furnace, which would probably cost \$10,000. That's when I started using my stove to have a little heat.” -- African American Detroit resident, interviewed in 2018*



The Burden of Unhealthy Housing

9M 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

Parents miss work days to take care of their sick children with asthma

\$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



Adverse outcomes on African Americans related to energy insecurity

- Housing burden
 - More likely to experience evictions, foreclosures, and other forms of transient housing -> housing affordability issues (Desmond and Kimbro 2015; Evans and Kantrowitz 2002)
- Energy burden and shut-offs
 - Spend the highest percentage of their income on energy costs (Drehobl and Ross 2016)
 - More likely to experience disconnections (U.S. Energy Information Administration 2017)
- Bundled burdens/economic trade-offs
 - Forgoing food and medicine to pay for energy (U.S. Energy Information Administration 2017)

Business • Analysis

Black families pay significantly higher property taxes than white families, new analysis shows

Unfair property assessments lead to widespread overtaxation of black Americans' homes



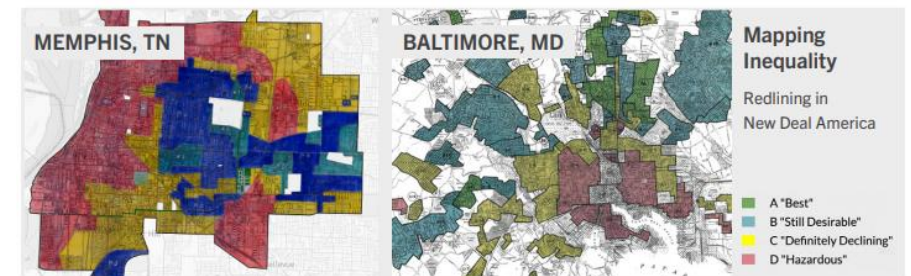
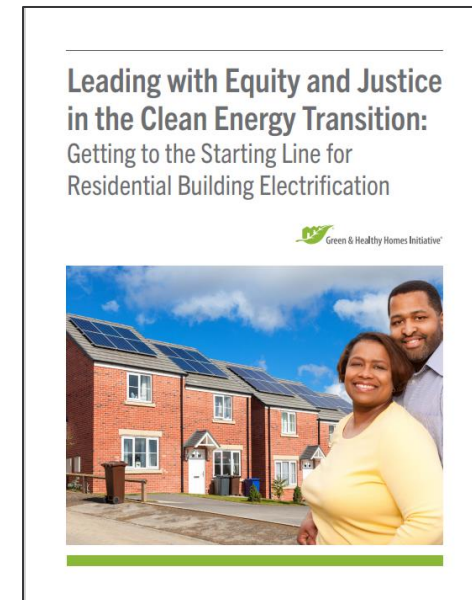
Adverse outcomes on African Americans related to energy insecurity

- Health burdens
 - Energy insecurity can lead to long period of stress that can lead to long-term health problems (Geronimus 2000; Geronimus and Thompson 2004; Hernández et al. 2016b)
 - Increased burden of lead poisoning, asthma, unintentional injuries, hypertension (Bryant-Stephens 2009; Green et al. 2013; Rauh et al. 2008)
- Extreme weather and climate impacts
 - Often affected disproportionately by extreme weather events (Sharkey 2007)
 - Less likely to have air conditioning and more likely to die from extreme heat (Klinenberg 2015; O'Neill 2005)
- Depletion of the resilience reserve
 - Frequent stressors impact the ability to recover from traumatic events (Hernández et al. 2018)



Promoting Equity with Energy Efficiency

- Need for EE, WX and electrification is caused in part by
 - Racist and discriminatory housing policies
 - Residential segregation (Geronimus 2000; Massey and Denton 2003; Oliver and Shapiro 2006)
 - Historical disinvestment
 - Denied access to loans and other resources to improve housing conditions (Aalbers 2006; Blumgart 2017; Woods 2012)
- Energy efficiency, weatherization, and electrification measures
 - Include insulation, HVAC upgrades, window replacements, duct dealing, heat pump installation
 - Improve the quality and conditions of older buildings
 - Lower energy bills, improved comfort and air quality
 - Provide significant health and resilience benefits
- Access to these programs and services are impacted by historical inequities
 - Health and safety hazards and poor housing conditions lead to deferrals, thereby deepening inequities as benefits accrue to the most advantaged
 - Many EE programs are available only to homeowners



Robert K. Nelson, LaDale Winling, Richard Marciano, Nathan Connolly, et al., "Mapping Inequality," *American Panorama*, ed. Robert K. Nelson and Edward L. Ayers, accessed July 26, 2021, <https://dsl.richmond.edu/panorama/redlining/#loc=11/39.293/-76.862&city=baltimore-md>; <https://dsl.richmond.edu/panorama/redlining/#loc=12/35.135/-90.118&city=memphis-tn>

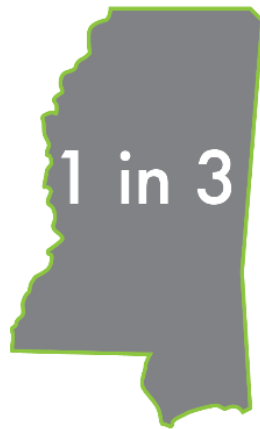
About this Project

- GHHI worked with local partners to collect information, community input, and plan future efforts related to healthy housing
- Goal is to help communities reduce hazards in housing that impact health through education, planning, workforce training, fundraising, and policy development
- Funded by Mississippi State Department of Health Office of Lead Poisoning Prevention and Healthy Homes Program



Burden of Unhealthy Housing in MS

LEAD

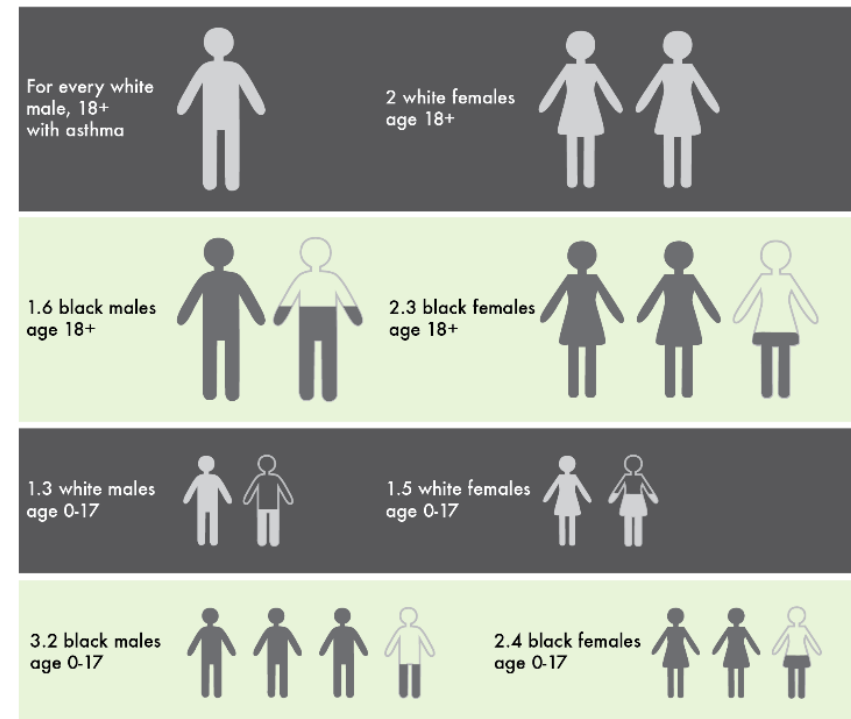


Mississippians live in counties with increased risk for lead exposure



ASTHMA

Over 235,000 Mississippians have asthma. Rates of prevalence vary by race, sex, and age.



HOME INJURY

Mississippi has the 10th highest rate of adult injury related deaths for Americans

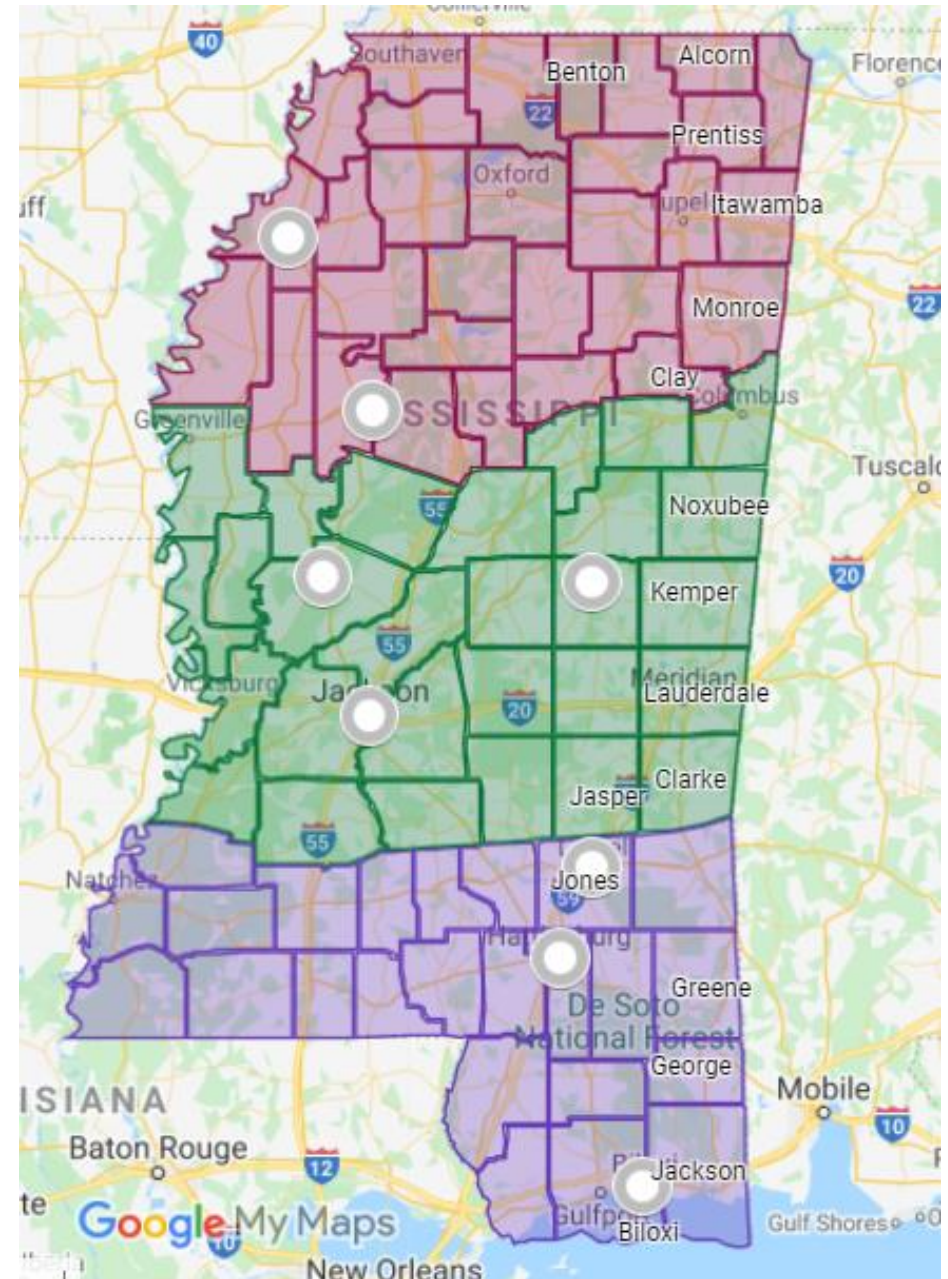


Fires and burns, falls and poisoning are significant contributing factors to that rate

Where We Are Working

Communities by Public Health Region

- Biloxi
- Greenwood
- Hattiesburg
- Jackson
- Laurel
- Meridian
- MS Band of Choctaw Indians



Project Activities

- Researched housing characteristics and policies related to property maintenance, health and safety
- Surveying local communities about housing and neighborhood characteristics, local government services, and related topics
- Providing ongoing education services about healthy housing and lead poisoning prevention
- Supported local efforts for code enforcement, property maintenance repair program implementation, and financing
- Identified future workforce training, fundraising, and policy development opportunities



Legacy of Housing Policies with Health Impacts

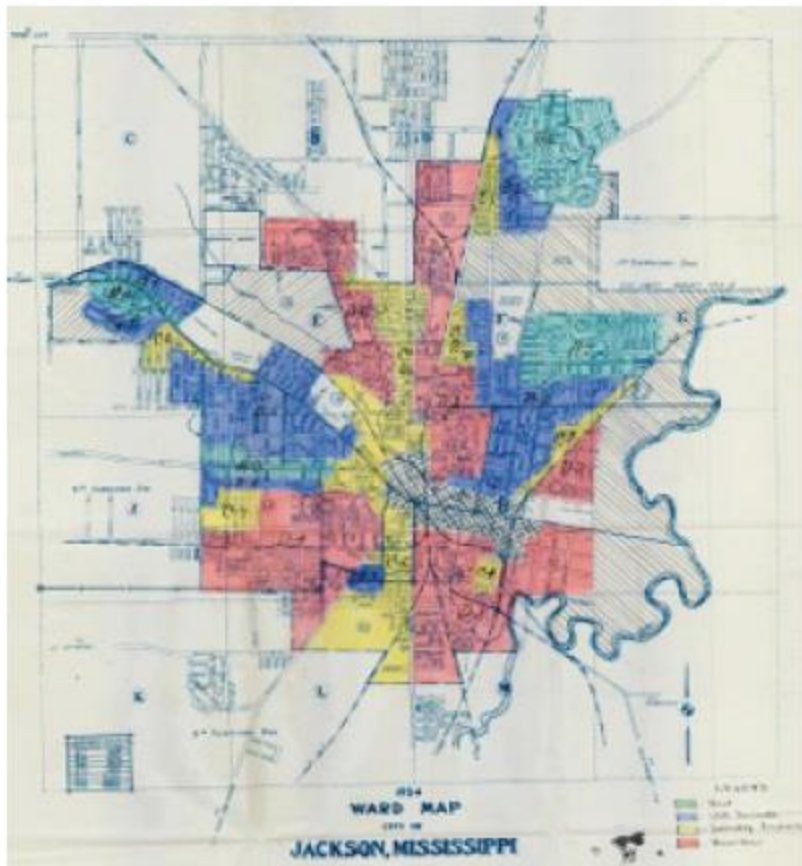


Figure 1 HOLC Map of Jackson, MS (1934)

FACILITY	RURAL FARM	RURAL NON-FARM	URBAN
RUNNING WATER	3.2%	32.4%	66.4%
FLUSH TOILET	2.3%	22.3%	46.3%
PRIVATE BATH	2.3%	22.1%	41.3%
MECHANICAL REFRIGERATION	5.0%	24.1%	33.2%
RADIO	28.4%	50.9%	61.5%
ELECTRIC LIGHTS	8.5%	45.3%	68.1%
CENTRAL HEATING	0.8%	1.8%	4.6%

Figure 2: Mississippi Housing Facilities—1940 (from Housing for Mississippians (1947)).

1974 Housing Act Helping Few of the Nation's Poor

By ERNEST HOISENDOLPH

Special to The New York Times

WASHINGTON, Nov. 1.—The next, some experts say they \$11-billion Housing and Com- are convinced that it will munity Development Act, never measure up to its prom- passed by Congress in the late- ise.

summer of 1974 with provi- "The 1974 housing act is sions that were to create more extremely misguided," said an housing for the poor, has not Robert C. Embrey Jr., Baltimore's yet made any impact on their Commissioner of Housing and housing supply, according to Community Development. "I municipal officials and hous- cannot understand this Admin- ing industry spokesmen. istration's reluctance to admit

The act, which is a departure its failure."

from the established approach Section 8 of the housing act, to housing people who are too subsidizes rents of the poor in the poor to compete in the free three kinds of housing—sound, market, is supposed to replace existing housing: rehabilitated such programs as public hous- housing and newly constructed ing, urban renewal, Model dwellings.

Cities and subsidized construc- Under the act the tenants pay less

tion. from 15 to 25 per cent of his So far, however, only about gross annual income to the 200 families in the nation have landlord for rent, with the De- occupied housing under the partment of Housing and Urban the program. Although the pro- Development subsidizing the the gram's defenders say it is too early to judge its effective- Continued on Page 44, Column 1 (C)

Connecting Racial Discrimination in Housing and SDOH

over 300,000 households in Mississippi are cost burdened by housing and are more likely to experience exposure to unhealthy housing conditions they are unable to address for both financial and regulatory reasons

- ▶ 371,672 homeowners currently have a mortgage loan and 381,219 homeowners do not have a mortgage loan. About 58% of homeowners without a mortgage loan make less than \$50,000 a year.
- ▶ Racial characteristics of owner occupied housing show that 69% of households are White, 28.5% are Black, and 2.5% are other or two or more races.
- ▶ The median household income for residents of owner-occupied units is \$55,904.
- ▶ About 142,056 of owner occupied units, or 19%, pay 30% or more of their income on housing costs.
- ▶ About 296,160 housing units, or 39.3%, of owner occupied units, were built before 1978.^{xxiv}
- ▶ Data on racial characteristics of renter occupied housing show that 43.3% are White, 53% are Black, and 3.7% are other or two or more races.
- ▶ The median household income for residents of renter-occupied units is \$27,460.
- ▶ About 157,197 housing units, or 44.7% of renter occupied units, were built before 1978.
- ▶ About 146,041 renter occupied units, or 41.5%, pay 30% or more of their income on housing costs.^{xxvii}

Disparities in homeowner/renter property maintenance entrenching health disparities

Most Federal Housing Expenditures Benefit Homeowners

Federal housing expenditures in billions, 2015

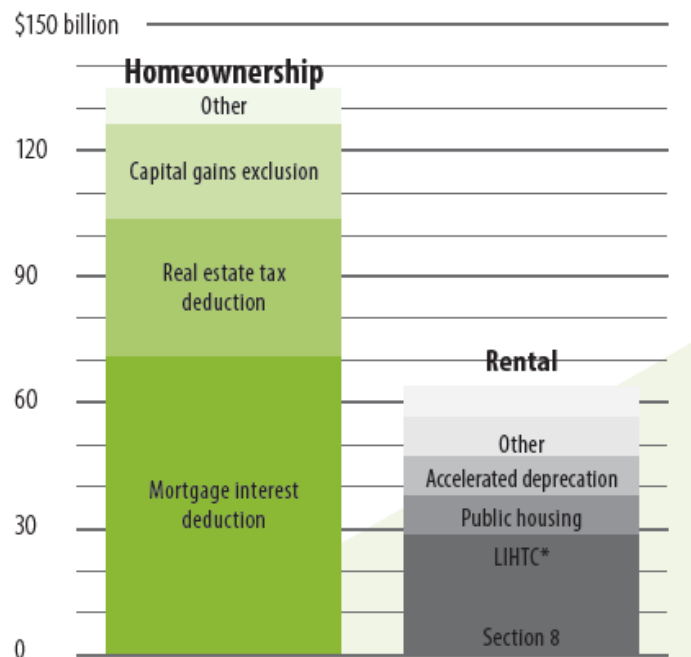


Figure 3: Federal Housing Expenditures (2015) Center on Budget and Policy Priorities^{xxii}

Homeowners are more likely to live in higher quality housing and have the financial capacity to address needs to improve housing quality or recover from emergencies like flooding, pest infestations, and other hazardous conditions.

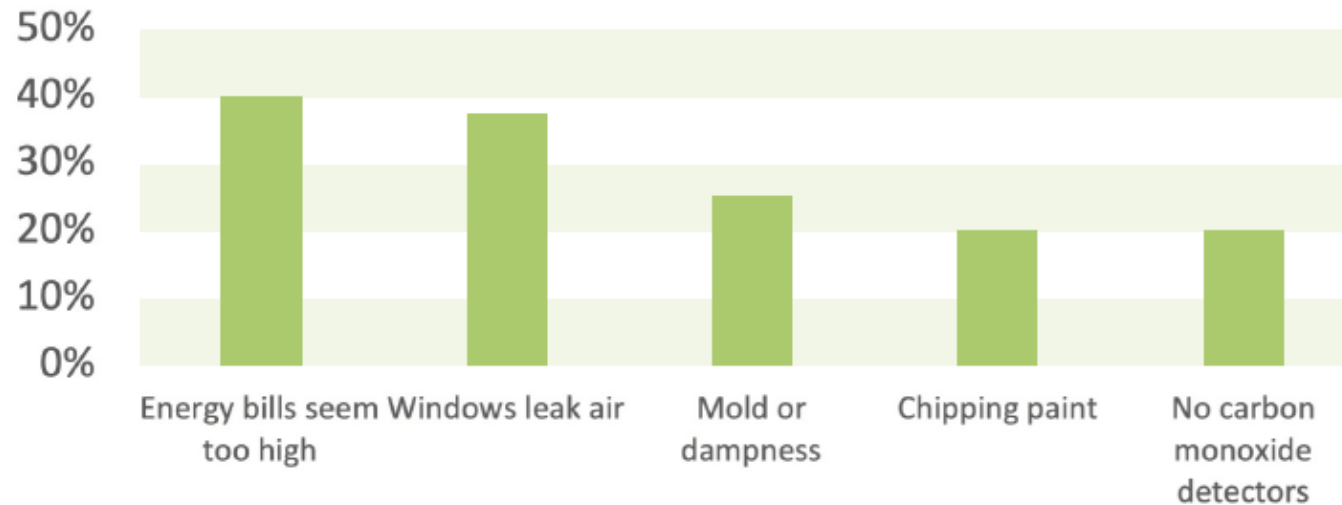
Households with fewer rental property options are more likely to occupy units with hazardous conditions (such as lead paint, pests, water leaks, and poor ventilation), units with poor thermal control, and more likely to be overcrowded.

Question: select the top three issues that apply to your home

Housing and Neighborhood Improvement Needs

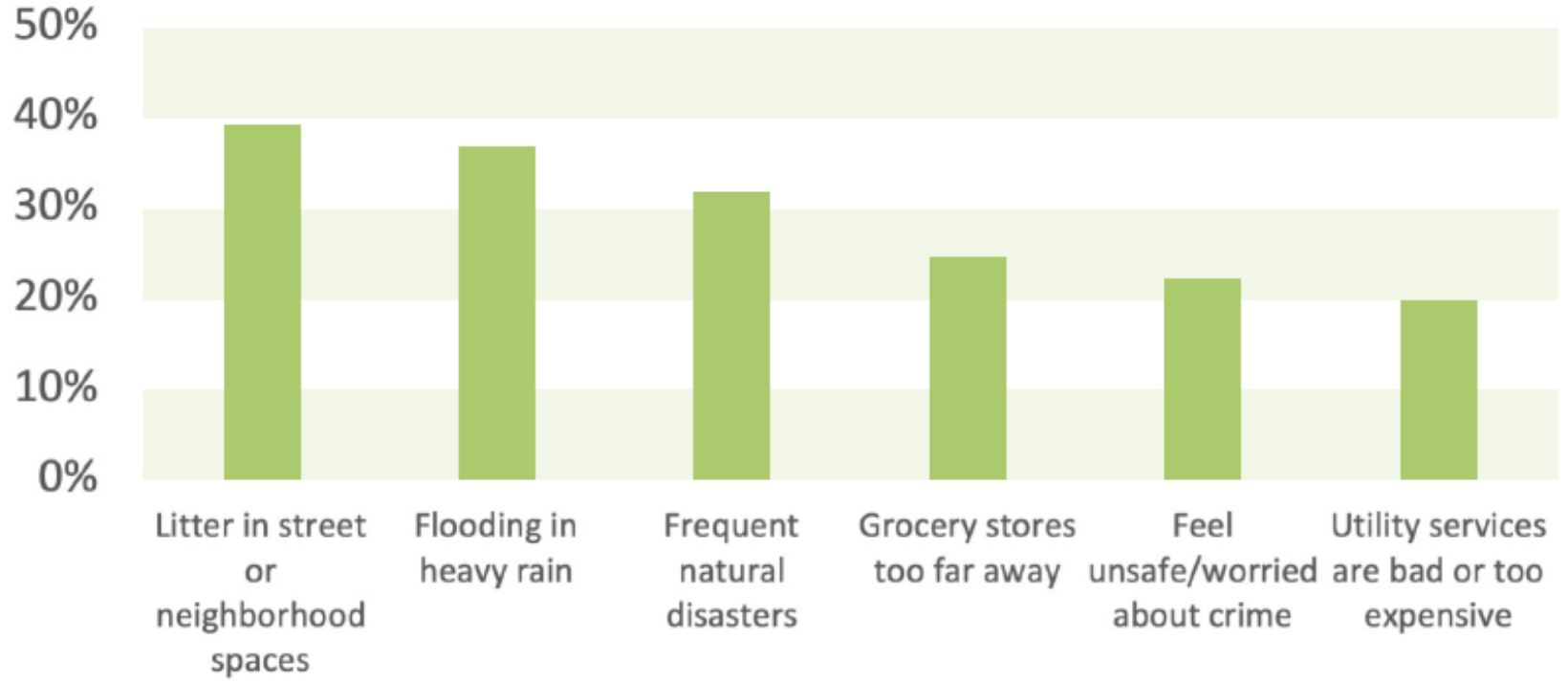
The survey included a question that asked participants to review a list of 15 common housing issues and select the three of greatest concern in their own homes. The results show a combination of efficiency and health concerns.

Most Common Responses



Questions: Select most common neighborhood quality Issues

Most Common Responses



Focus Groups

How do we replace policies that result in exposure to unsafe conditions, eviction, displacement, and economic insecurity with policies that enable housing repairs and improvement of health, safety, efficiency and affordability?



Mold in occupied rental housing in Mississippi



Housing unit repaired through the Lead Safe Jackson Housing Program, where lead paint hazards were identified in the screen porch and child's outdoor play area.

Barriers



More research needed to understand the true health impact of substandard housing



Limited public and private resources for property maintenance.



Increased instances of flooding and other extreme weather



Green & Healthy Homes Initiative®



Difficulty sustaining work around healthy housing issues



Too few credentialed workers to implement programs