Sierra Club report release

Thursday, March 14, 2024 @ 3pm ET

Highlights the oversized energy burdens faced by black households in Georgia.

“Black households face disproportionately high energy burdens, including historic discrimination and disinvestment in infrastructure.”

We’re just highlighting the details;
Please read our report to learn more!

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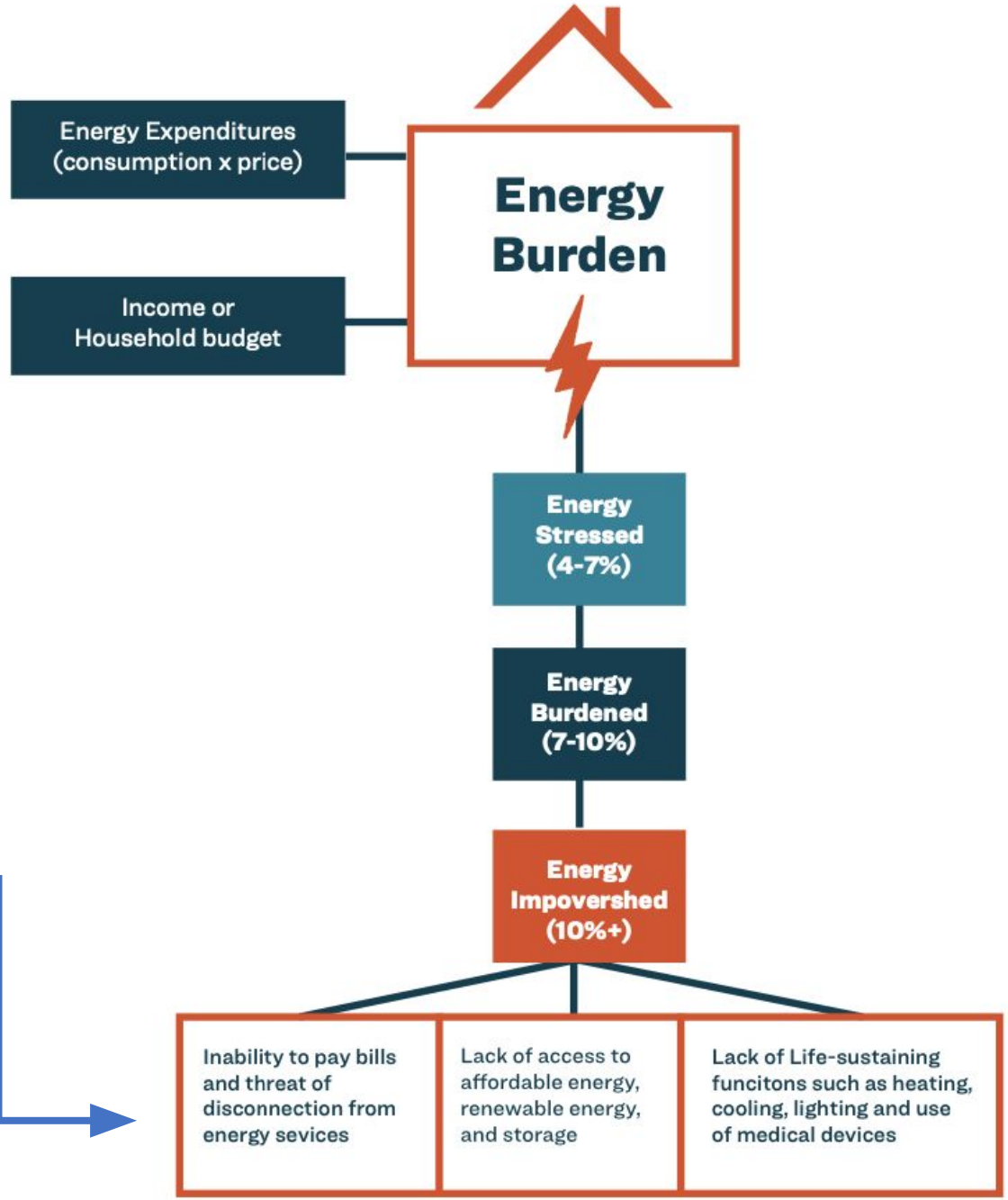
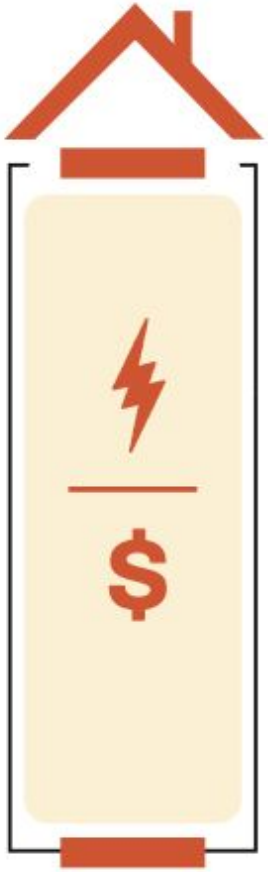
What is energy burden and energy poverty?

Energy Burden is the percentage of a household's income that is spent on electricity, natural gas, and other household fuels such as propane and wood.

Energy Poverty is having an energy burden >10%m and its consequences can be harmful.



Key U.S. energy burden facts



The median energy burden of Black households is 45% higher than that of non-Hispanic white households

The median energy burden of low-income households is 3.5 times higher than that of non-low-income households.

Source: Drehobl (2020)

There is a close correlation between race and income, so how do you know the influence of race alone on energy burden?

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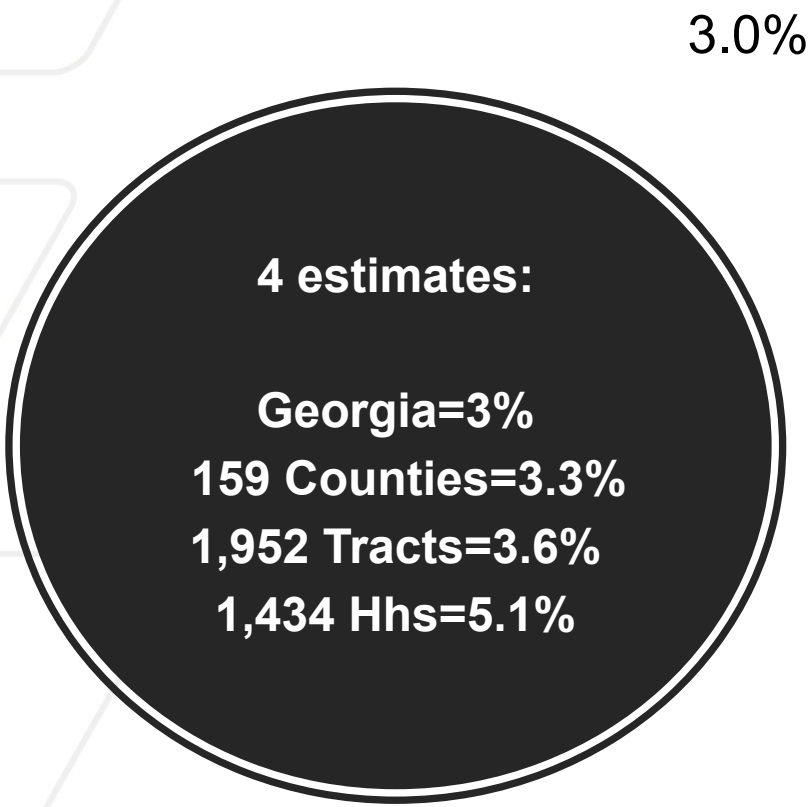
Energy poverty statistics suffer from the “ecological fallacy” – “hiding” energy poverty



3.0% energy burden

5.1% energy stress
(30% higher)

The ratio of two aggregated averages does not always equal the average of individual ratios

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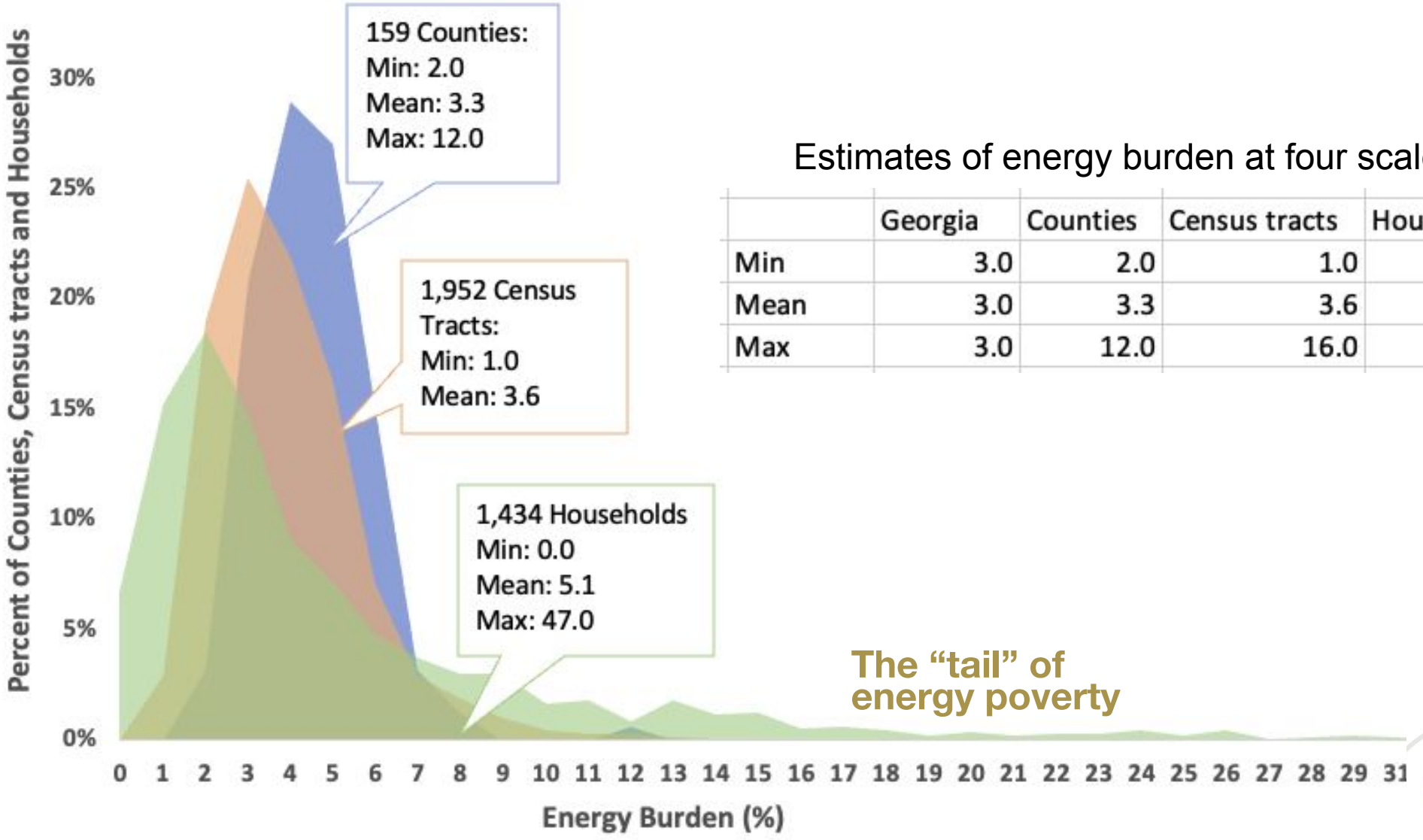
Household energy burdens have a long “tail”



Estimates of energy burden at four scales

	Georgia	Counties	Census tracts	Households
Min	3.0	2.0	1.0	0.0
Mean	3.0	3.3	3.6	5.1
Max	3.0	12.0	16.0	47.0

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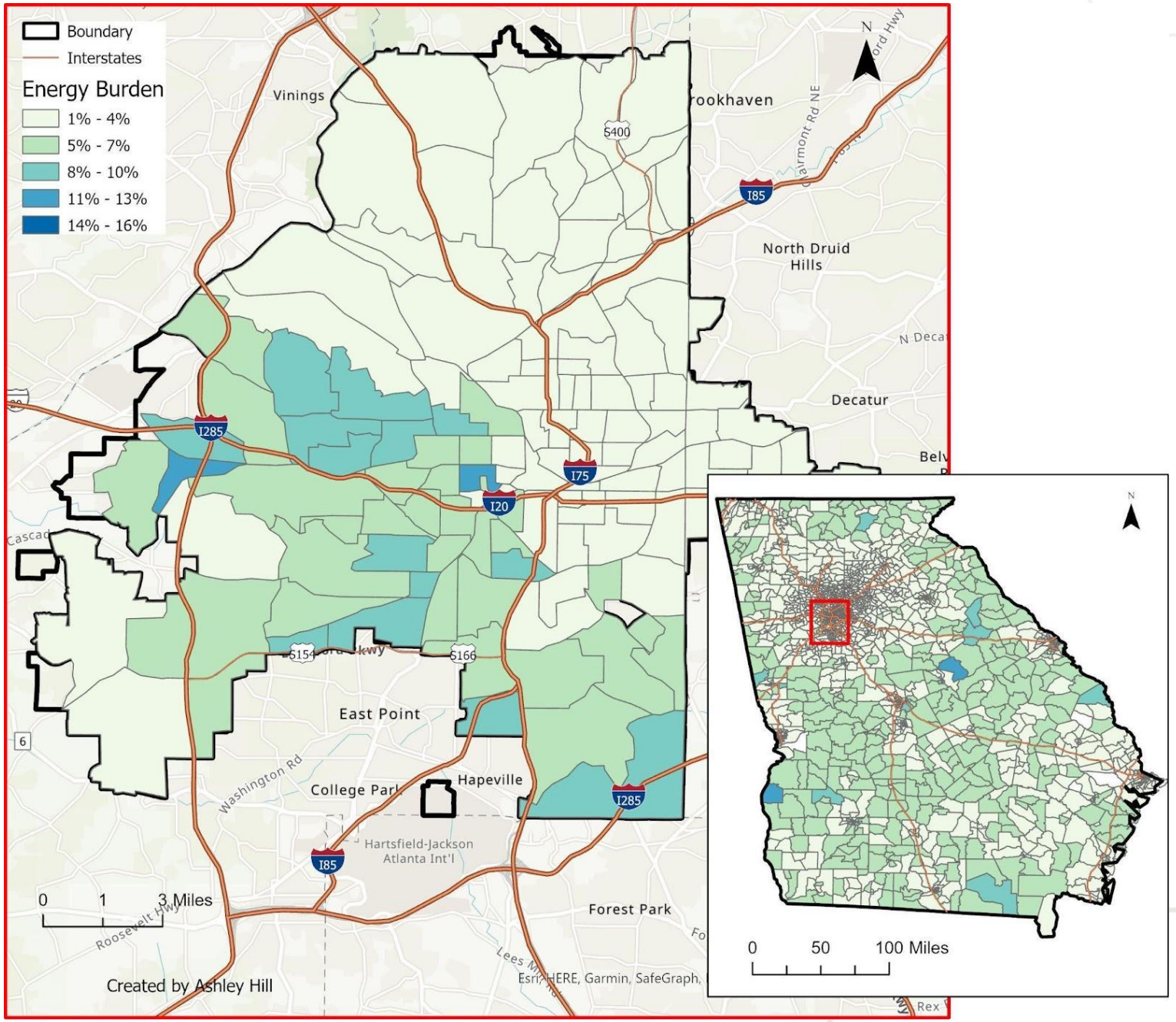
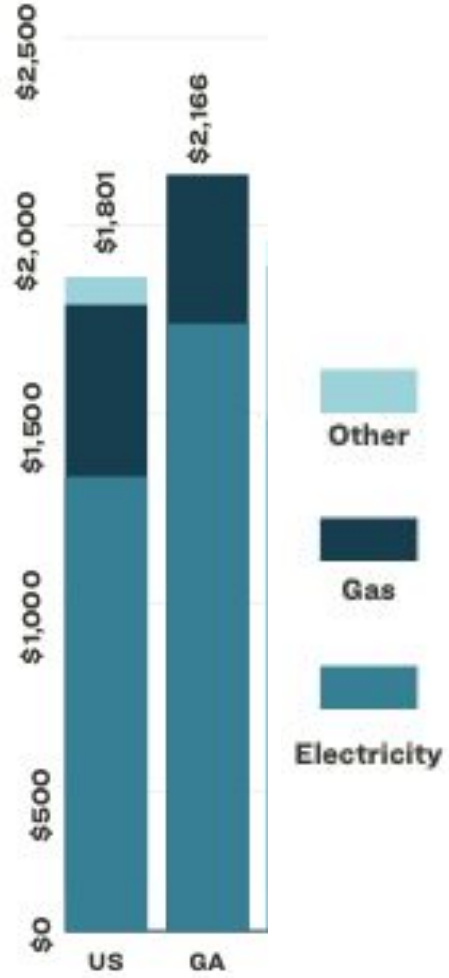
Energy burden maps reveal:

- Clusters of high energy burden, especially in South and West Atlanta
- Surrounded by suburban areas with low energy burdens
- Pockets of energy burden across rural Georgia

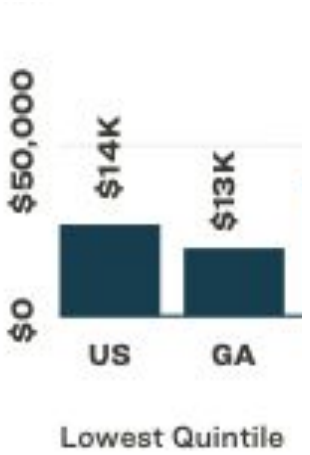


High household energy bills combined with low incomes in Georgia create high energy burdens

- Household energy bills are higher in Georgia than the U.S. average
- Household income is lower in Georgia than the US average



Energy bills for households with 0-30% of median income in 2018



Median household income in Georgia and U.S. in 2018

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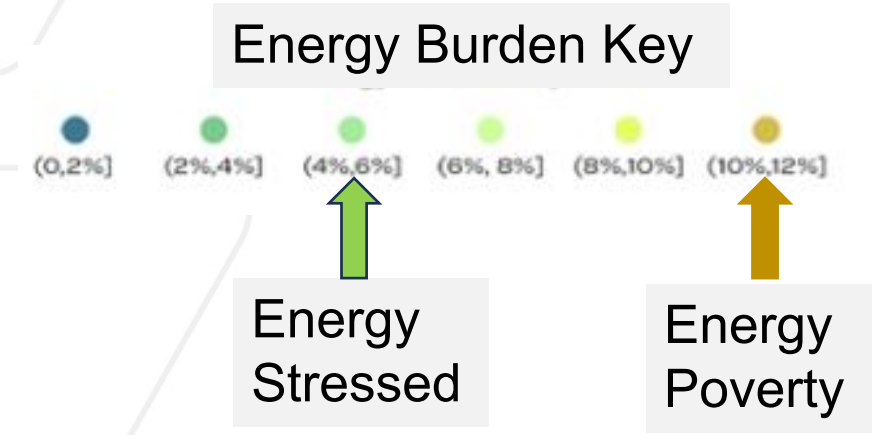
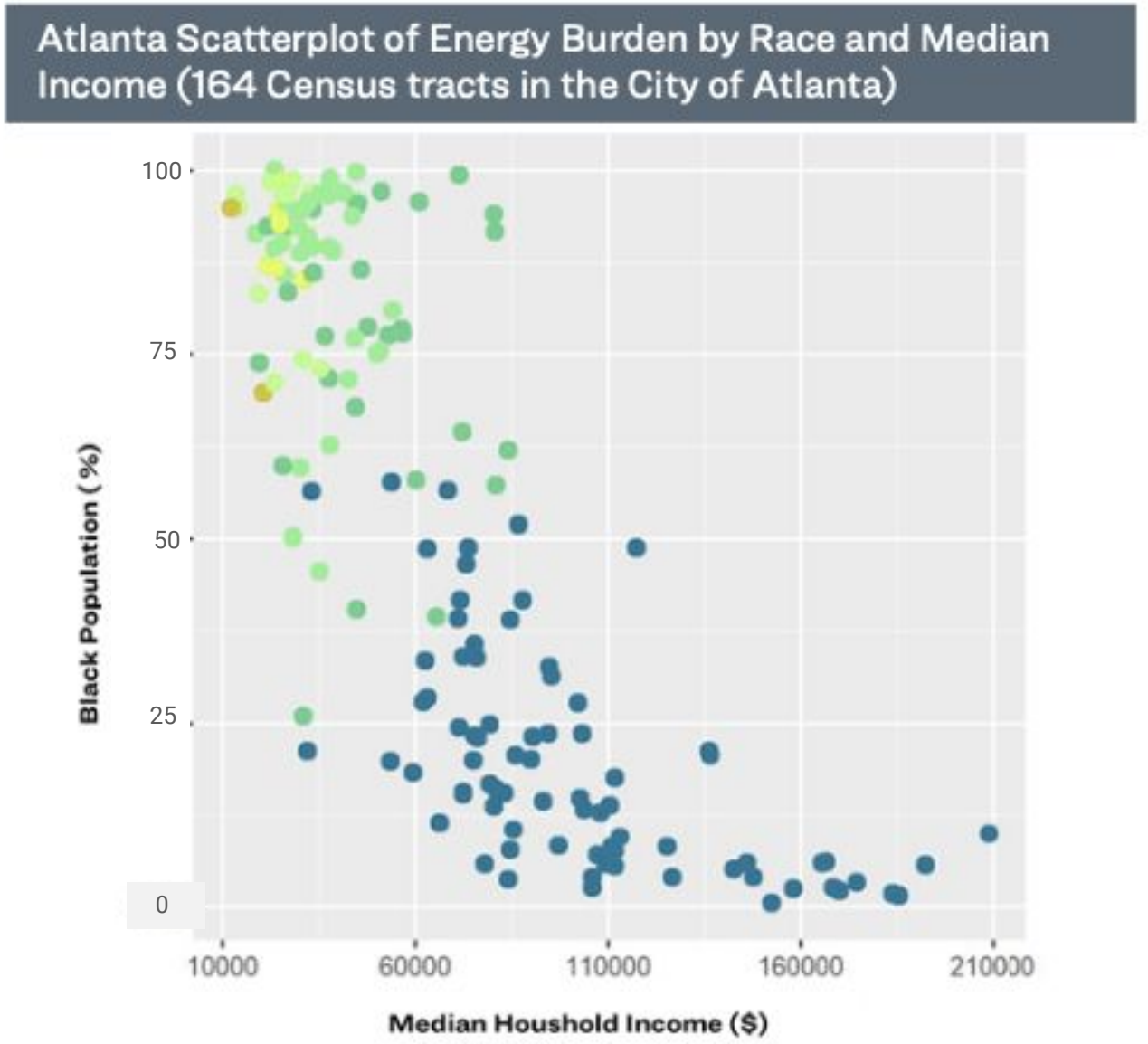
As the % black population in neighborhoods increases, energy burdens rise





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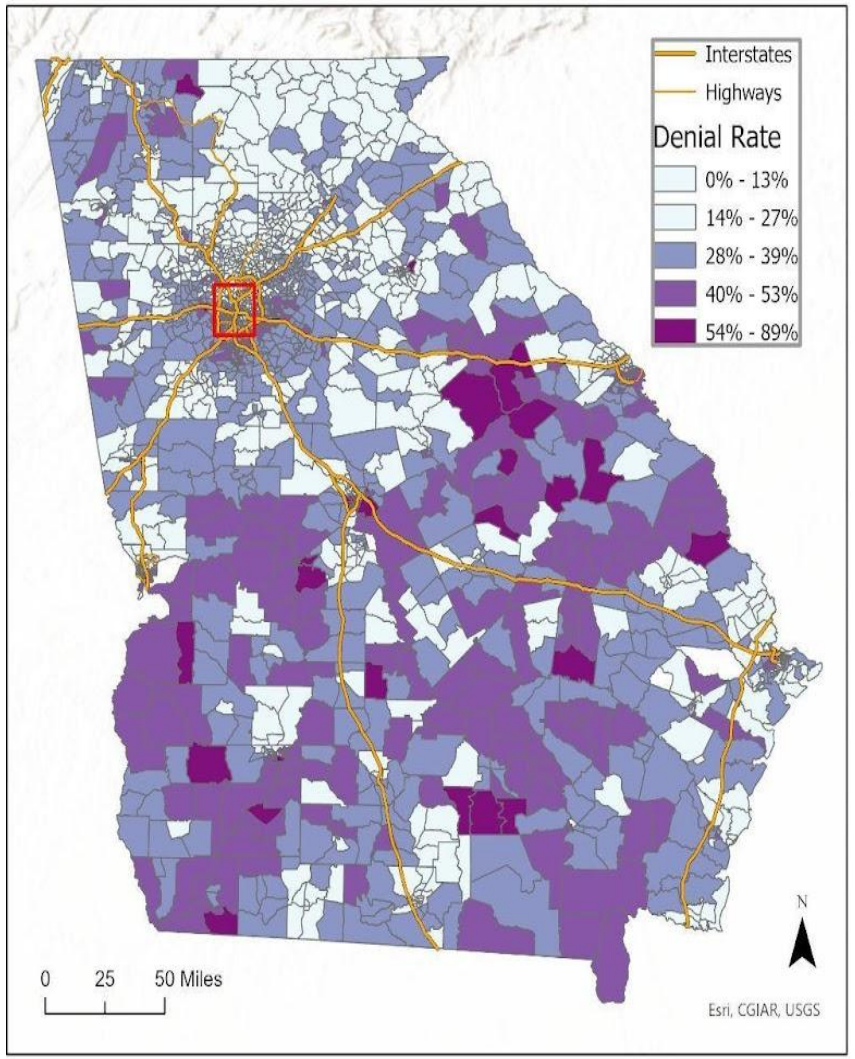
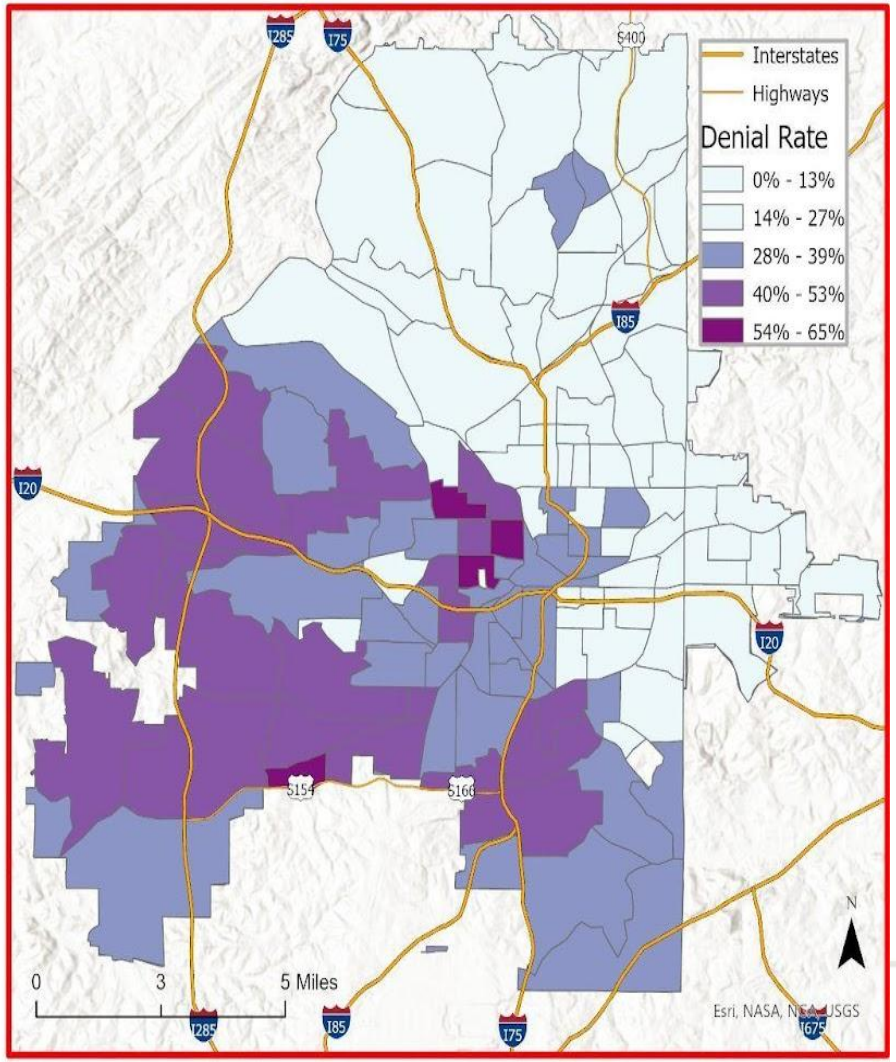
Redlining has caused dis-invest ment in homes

Mortgage Denial Rates by Census Tract (2018), Georgia (left) and Atlanta (right)





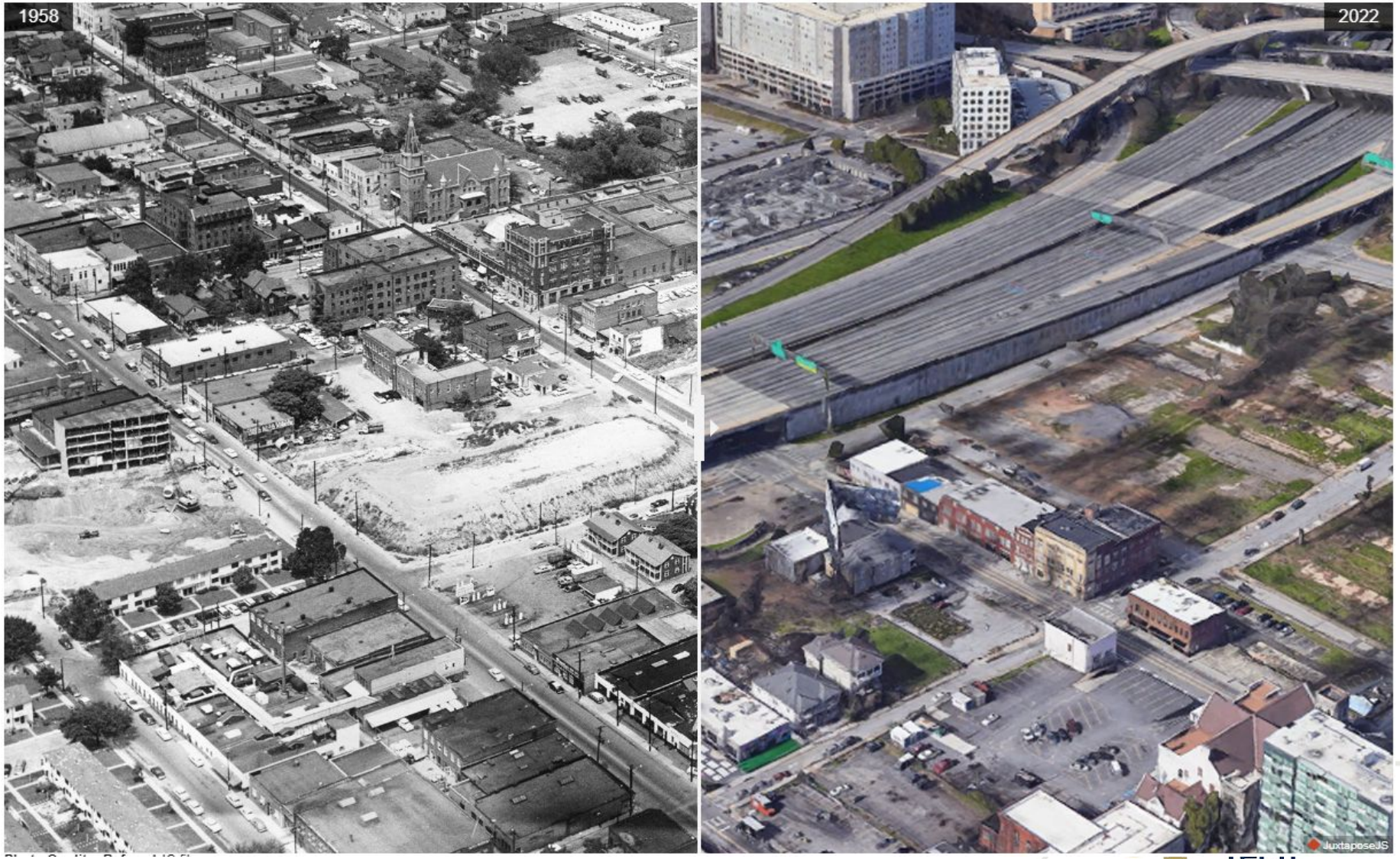
Maps by Ashley Hill (July 2022)

Data Source: Home Mortgage Disclosure Act. (2018). https://ffiec.cfpb.gov/data-browser/data/2018

Atlanta's Auburn Avenue neighborhood was bisected by highway construction (I-75/I-85)

Racism was built into many of the decisions on where to locate freeways.

USDOT Secretary Pete Buttigieg

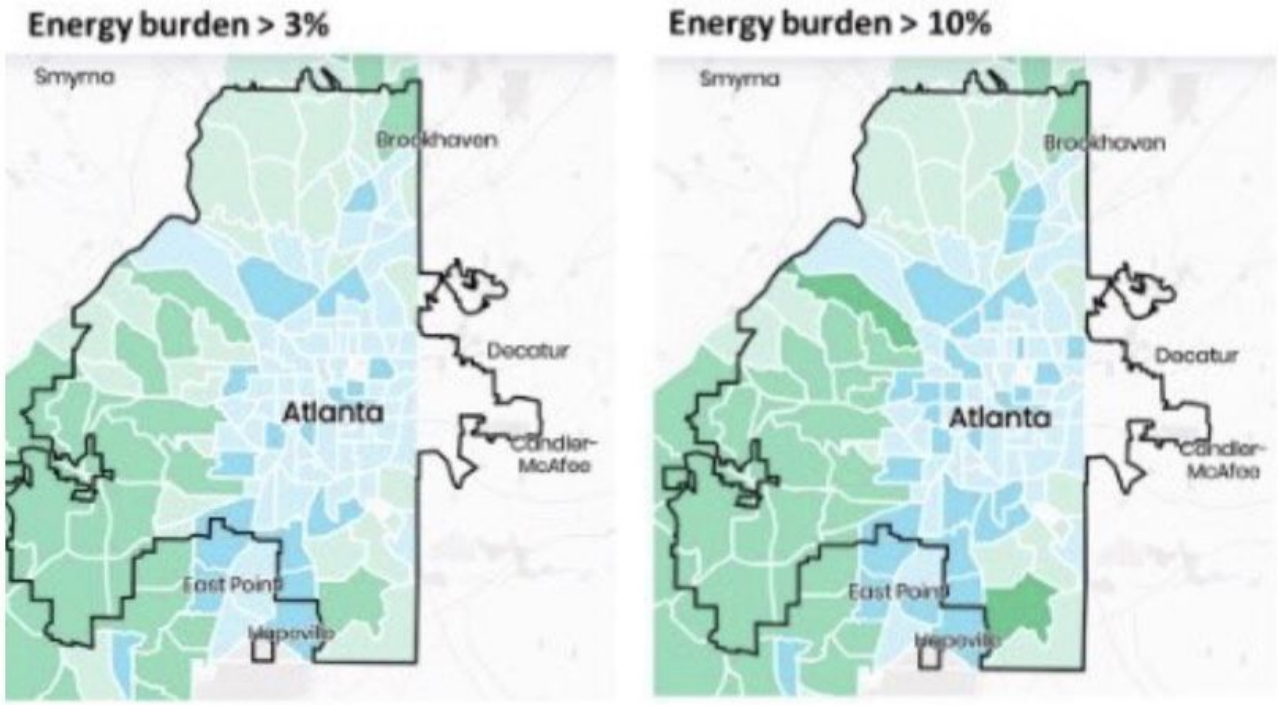


Before: 1958 (left)

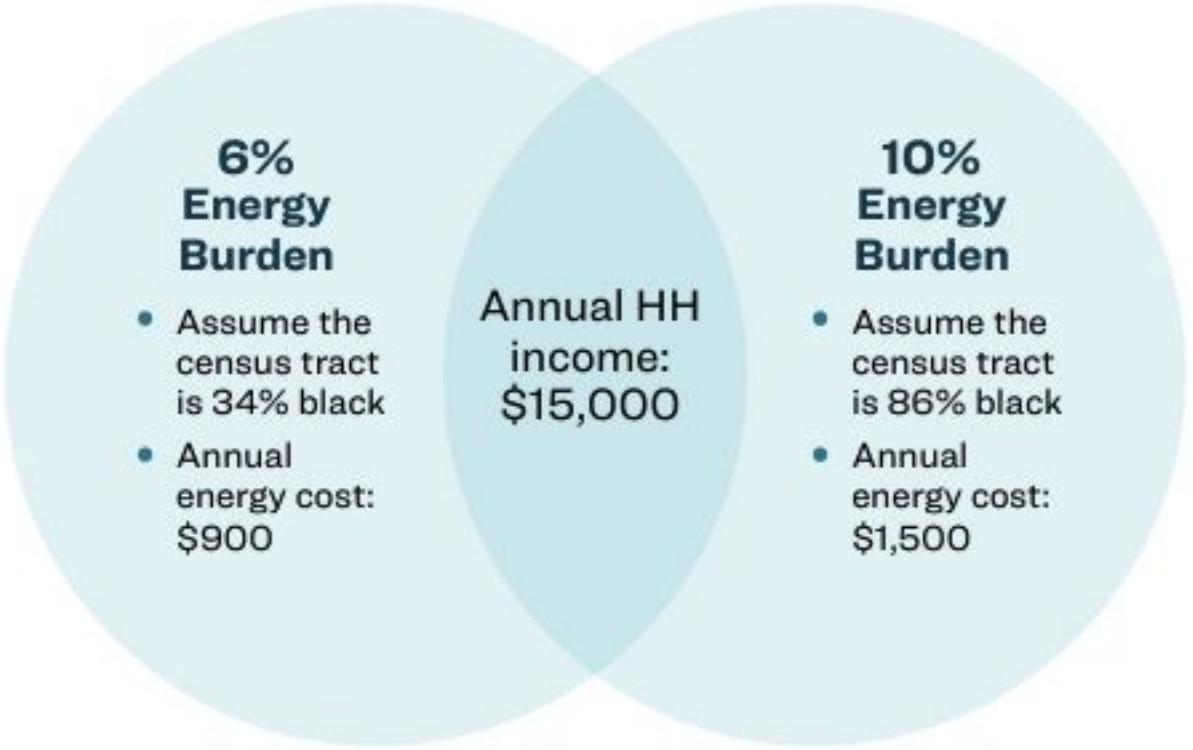
After: 2022 (right)

Lack of urban tree canopy contributes to energy burden

Over time, urban tree canopy has been lost in many disadvantaged urban settings in Georgia



Illustrating the causal relationship between race and energy burden



Energy stressed → Energy poor

Comparison of hypothetical Georgia neighborhoods

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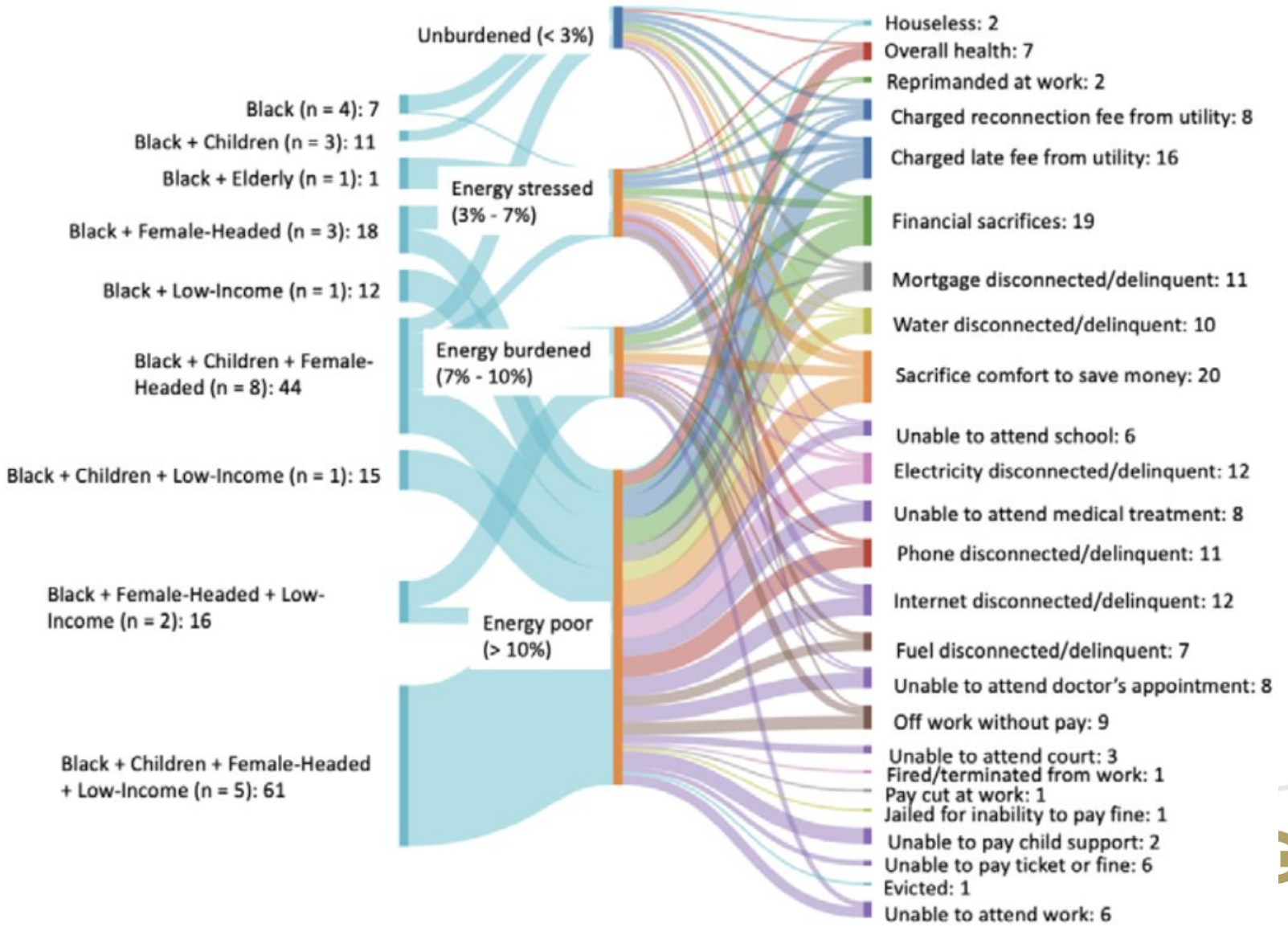
Vulnerabilities magnify consequences

- As household vulnerabilities increase from 1 to 5, the consequences of high energy burdens are magnified.



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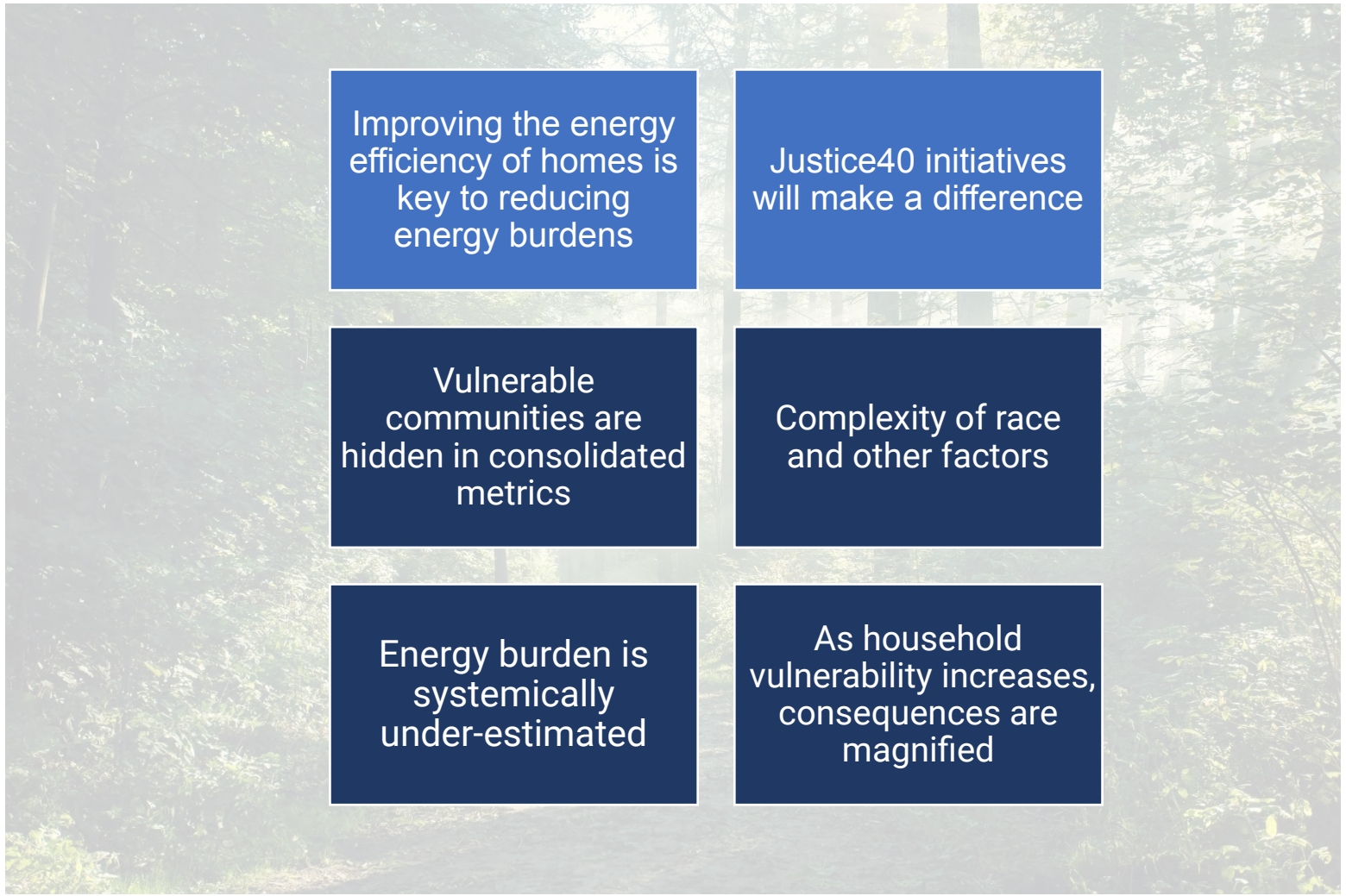
Some conclusions and takeaways



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