

# Energy Costs Come First: A New Approach to Environmental Justice

## PENNSYLVANIA

In the scatter plots for each state, every panel reflects the relationship between Black population and energy burdens in one Congressional District in that state. Within each district's panel, one dot represents each census tract in that district. The slope of each panel's light blue line reflects the correlation between higher black population and higher energy burdens for that district, with its confidence interval shown in gray (so a wider gray shading represents a looser fit for that panel's blue line). Then, each Congressional District in the states included in PPI's report "Energy Costs Come First: a New Approach to Environmental Justice" is mapped such that the fill color of each census tract scales according to the energy burden as a percent of area median income or the proportion of Black households as share of the tract's population.

This appendix uses data from the Department of Energy's Low-income Energy Affordability Data (LEAD) tool collected through the Census Bureau. Importantly, these estimations are not causal and only reflect the statistical level of similarity between the two characteristics across the range of census tracts in each district. Additionally, the underlying data report values for energy burden calculated from area median income and average annual energy costs and so do not capture varying levels of energy burden within each tract or microdata like individual household burden. Even though this correlation does not allow for direct causal claims, the simplicity of this comparison provides significant insight when paired with the entire PPI report.



Read the full report at:

[www.progressivepolicy.org/energy-costs-come-first/](http://www.progressivepolicy.org/energy-costs-come-first/)

# PENNSYLVANIA

## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICTS



Source: DOE LEAD Data

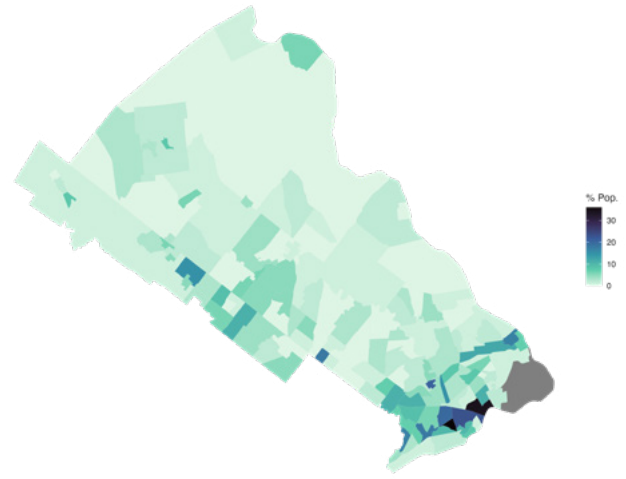
# PENNSYLVANIA DISTRICT 01

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 01



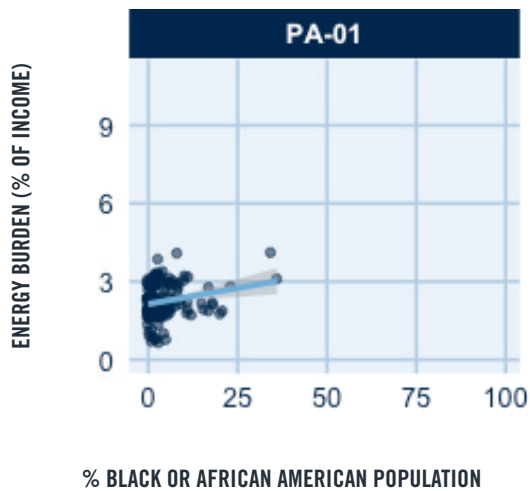
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 01



Source: Data from US Census via tigris and DOE LEAD Tool

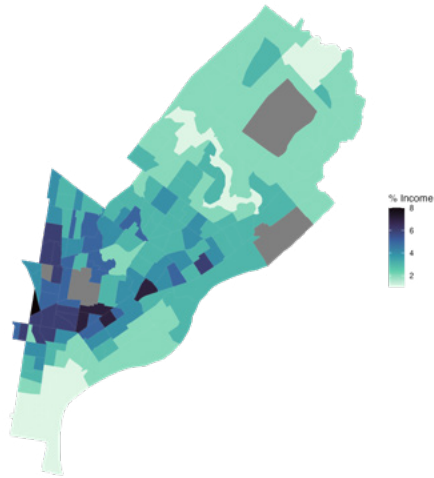
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 01



Source: DOE LEAD Data

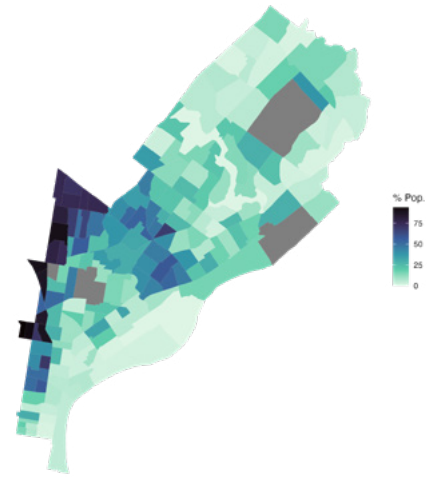
# PENNSYLVANIA DISTRICT 02

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 02



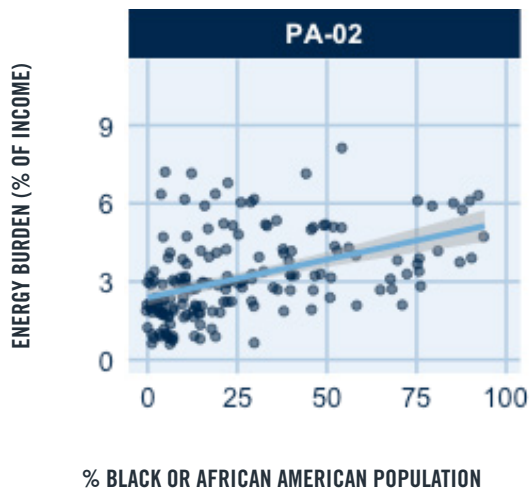
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 02



Source: Data from US Census via tigris and DOE LEAD Tool

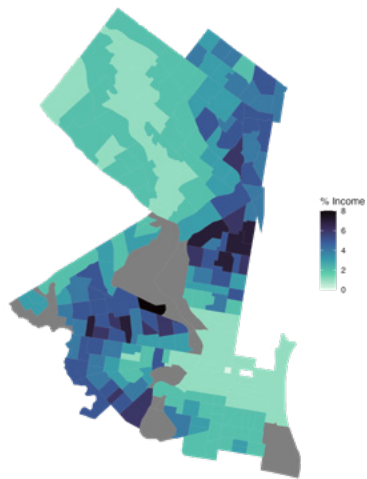
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 02



Source: DOE LEAD Data

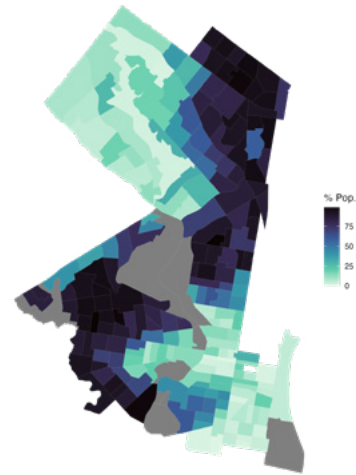
# PENNSYLVANIA DISTRICT 03

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 03



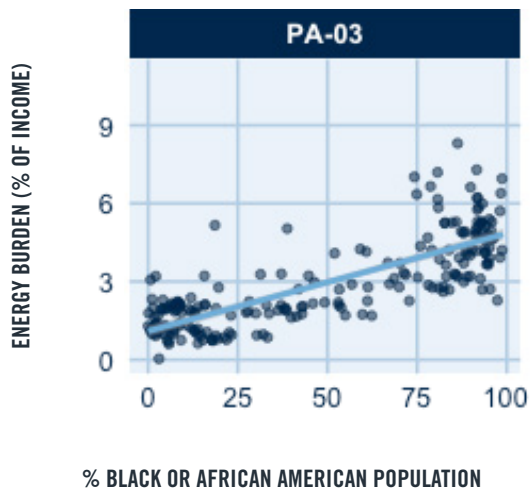
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 03



Source: Data from US Census via tigris and DOE LEAD Tool

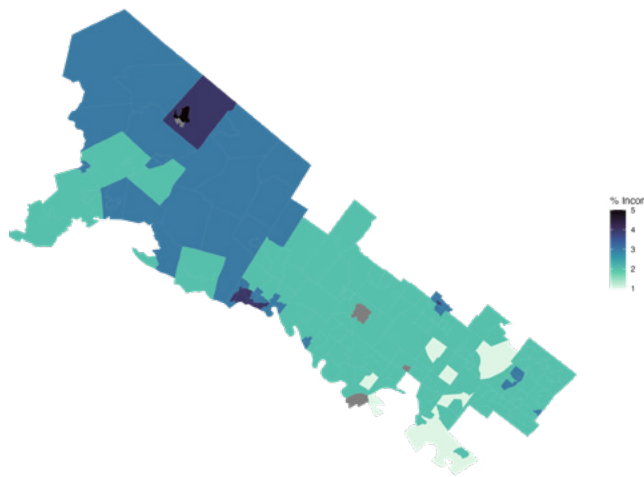
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 03



Source: DOE LEAD Data

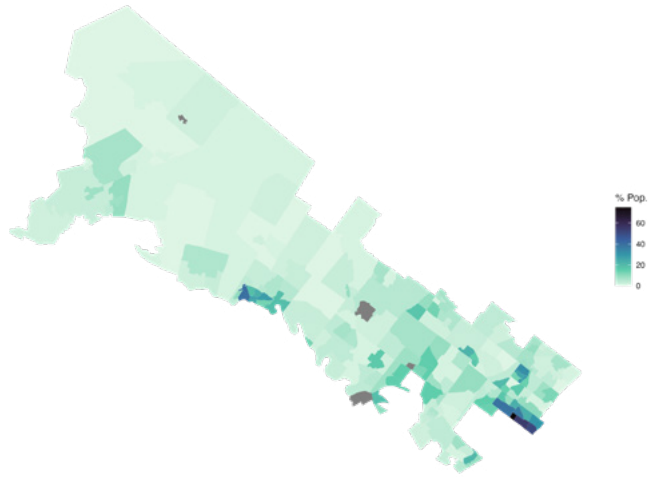
# PENNSYLVANIA DISTRICT 04

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 04



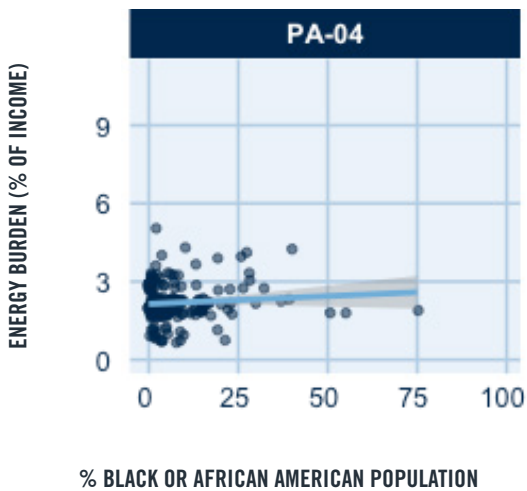
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 04



Source: Data from US Census via tigris and DOE LEAD Tool

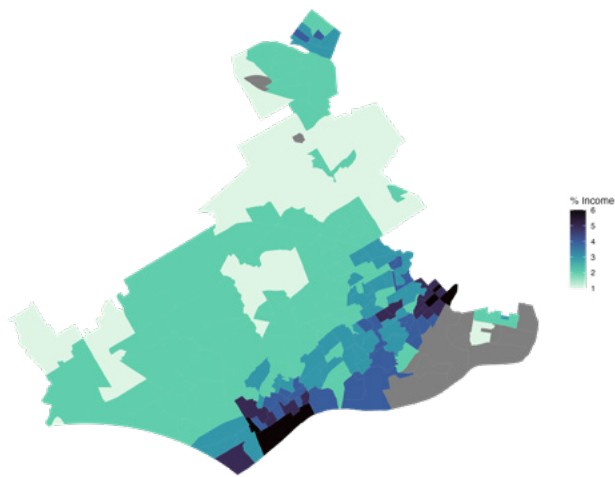
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 04



Source: DOE LEAD Data

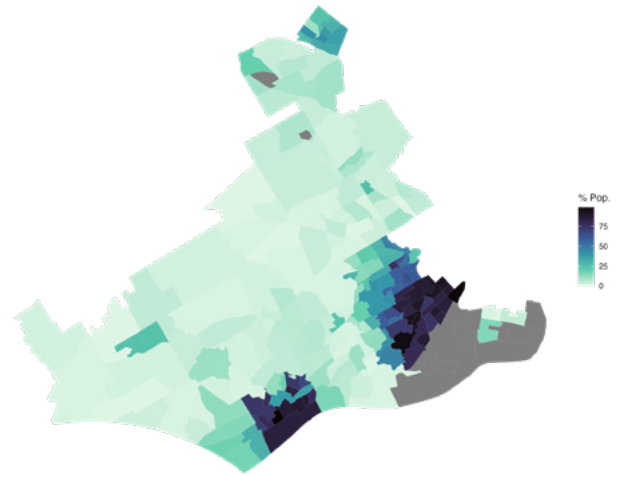
# PENNSYLVANIA DISTRICT 05

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 05



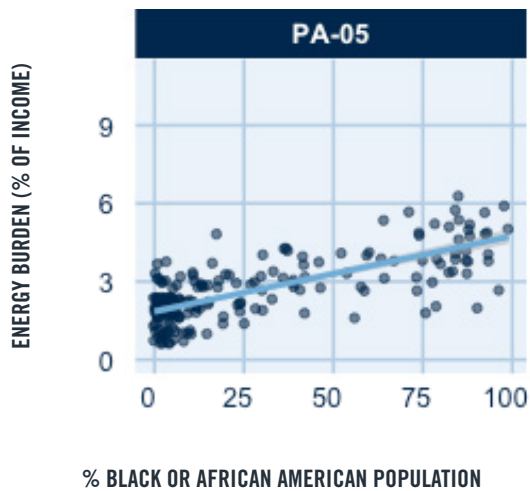
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 05



Source: Data from US Census via tigris and DOE LEAD Tool

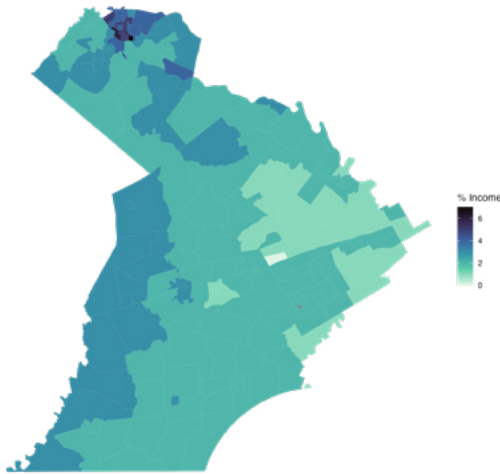
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 05



Source: DOE LEAD Data

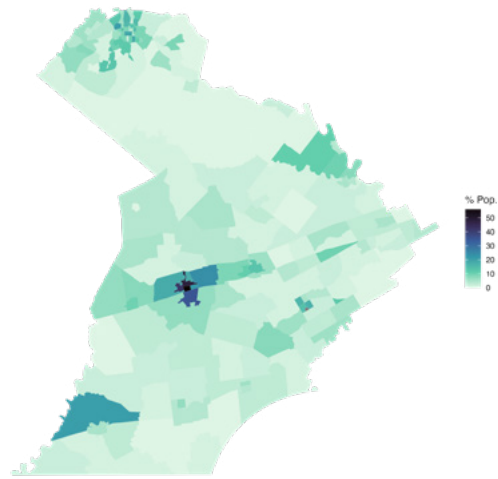
# PENNSYLVANIA DISTRICT 06

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 06



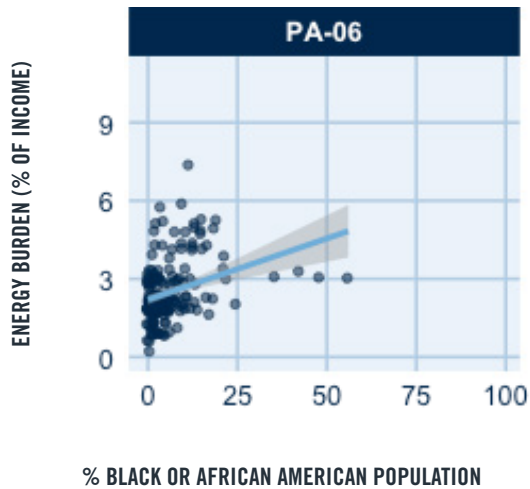
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 06



Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 06

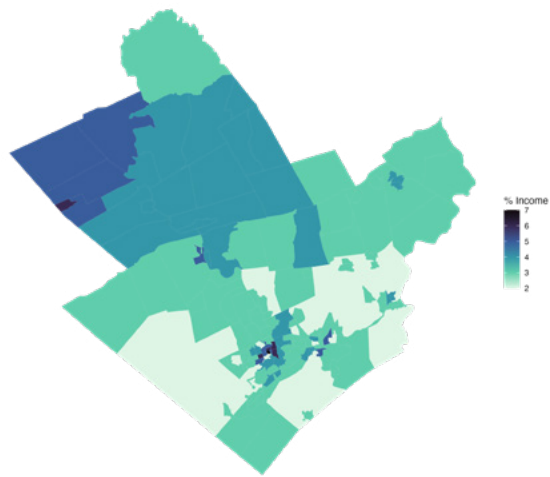


Source: DOE LEAD Data



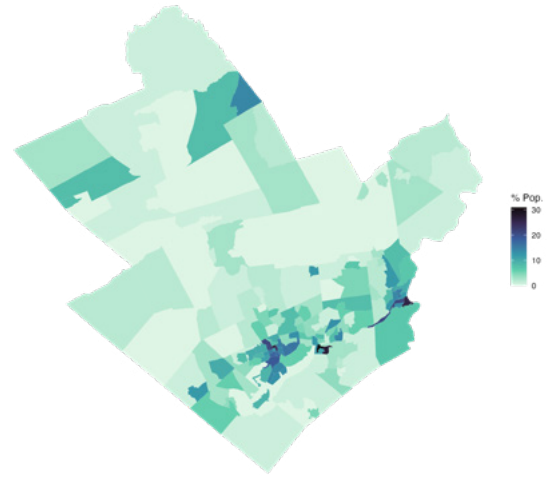
# PENNSYLVANIA DISTRICT 07

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 07



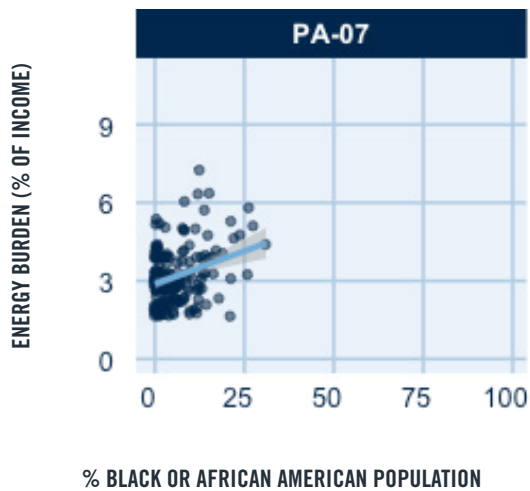
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 07



Source: Data from US Census via tigris and DOE LEAD Tool

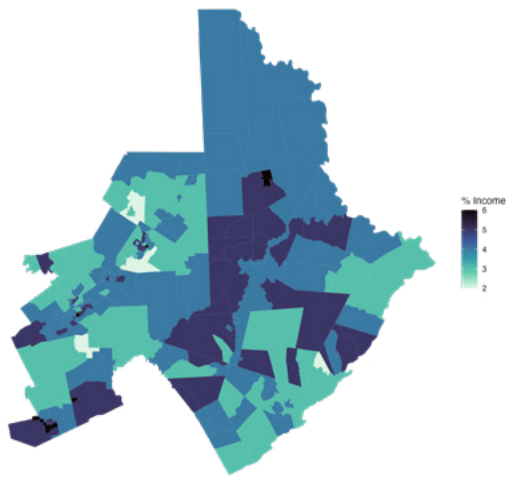
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 07



Source: DOE LEAD Data

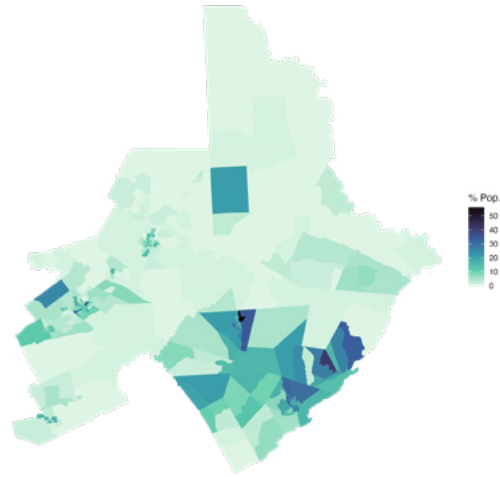
# PENNSYLVANIA DISTRICT 08

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 08



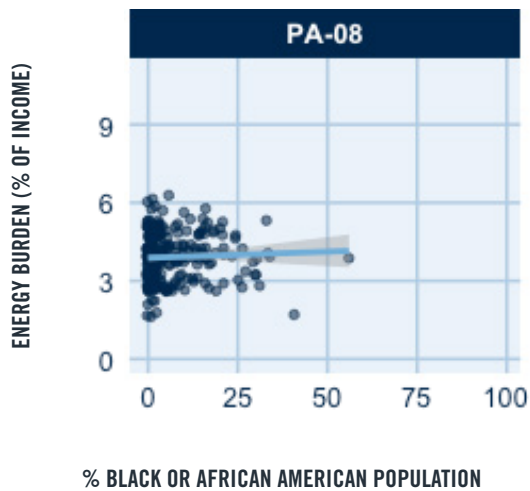
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 08



Source: Data from US Census via tigris and DOE LEAD Tool

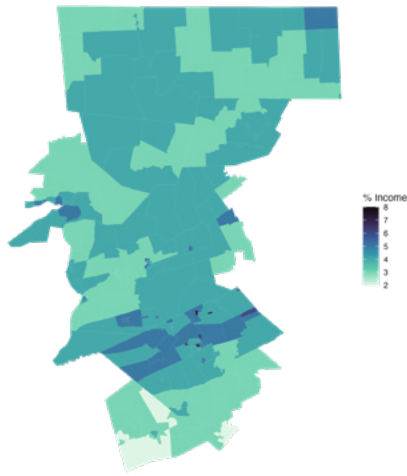
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 08



Source: DOE LEAD Data

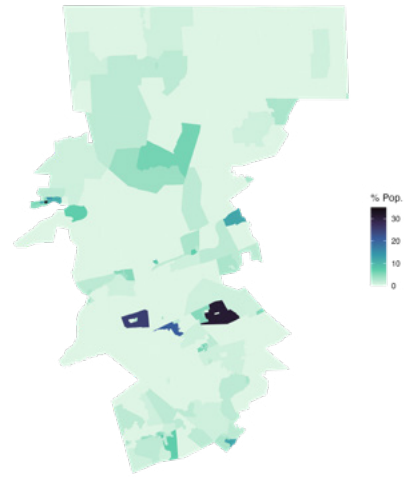
# PENNSYLVANIA DISTRICT 09

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 09



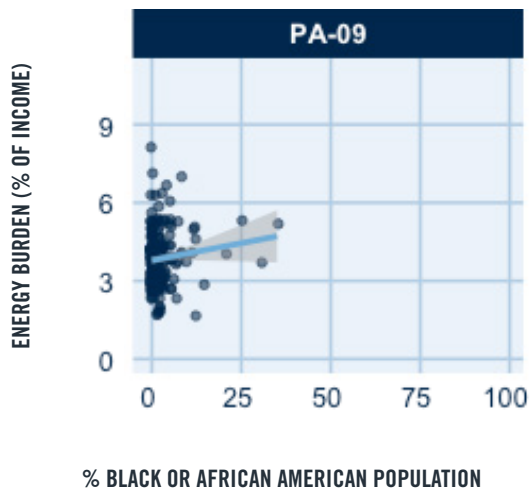
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 09



Source: Data from US Census via tigris and DOE LEAD Tool

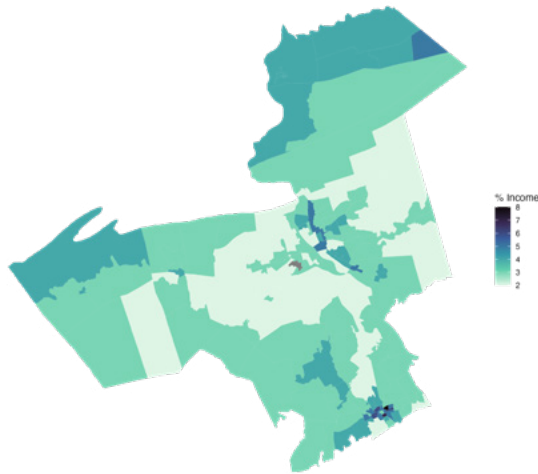
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 09



Source: DOE LEAD Data

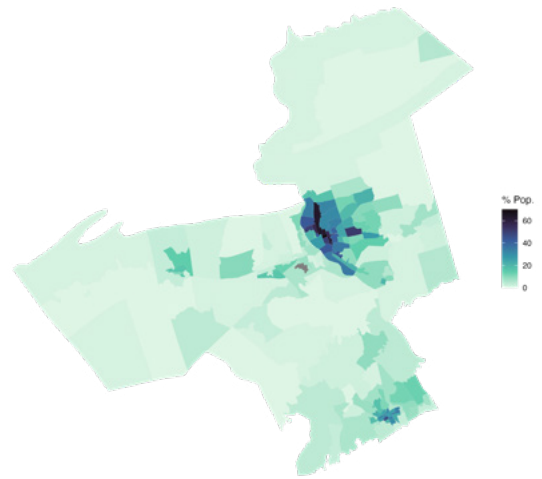
# PENNSYLVANIA DISTRICT 10

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 10



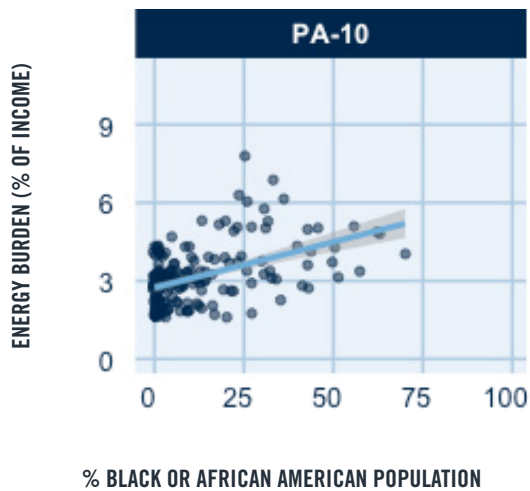
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 10



Source: Data from US Census via tigris and DOE LEAD Tool

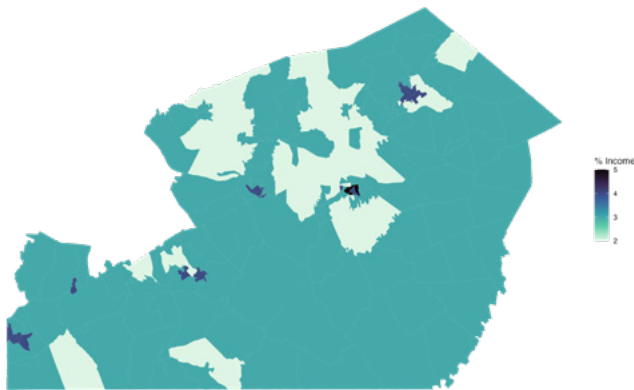
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 10



Source: DOE LEAD Data

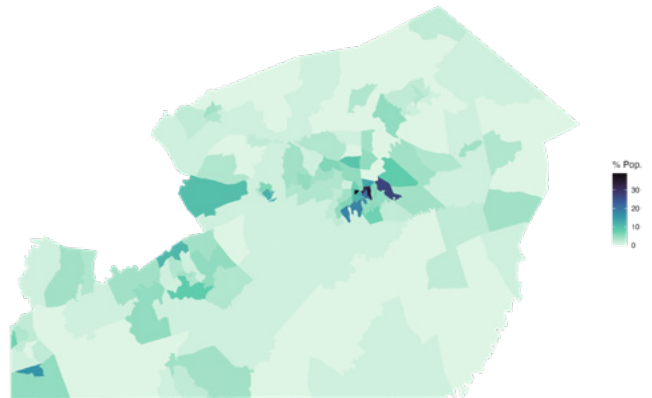
# PENNSYLVANIA DISTRICT 11

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 11



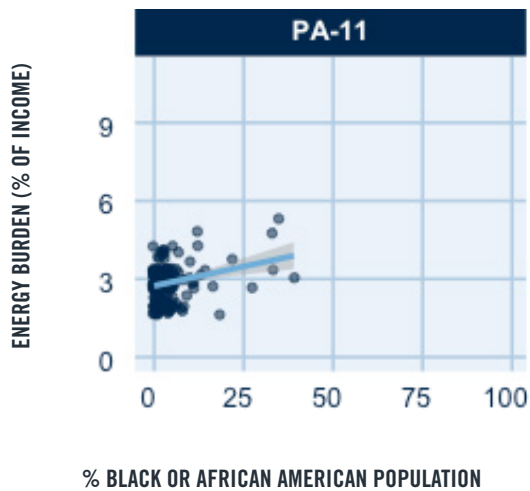
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 11



Source: Data from US Census via tigris and DOE LEAD Tool

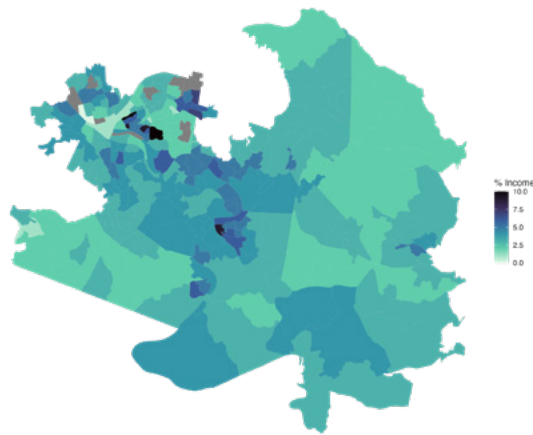
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 11



Source: DOE LEAD Data

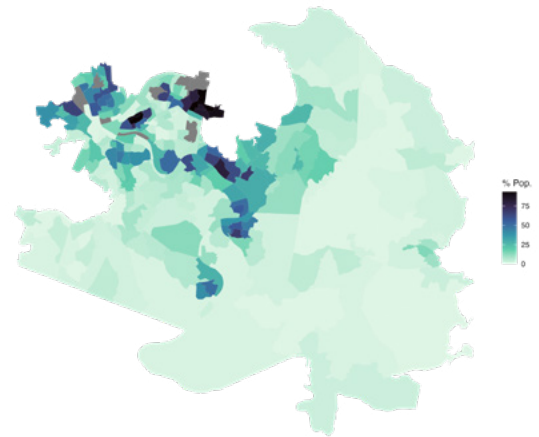
# PENNSYLVANIA DISTRICT 12

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 12



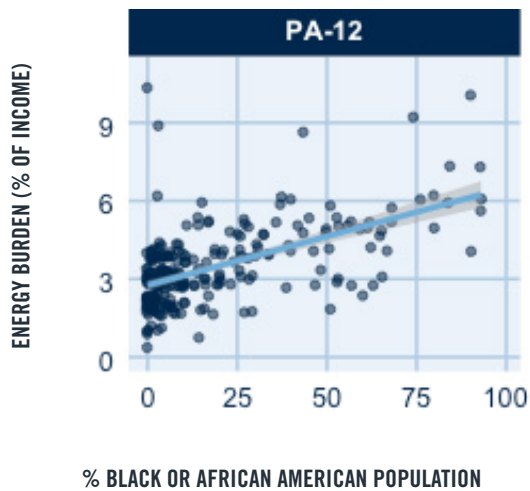
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 12



Source: Data from US Census via tigris and DOE LEAD Tool

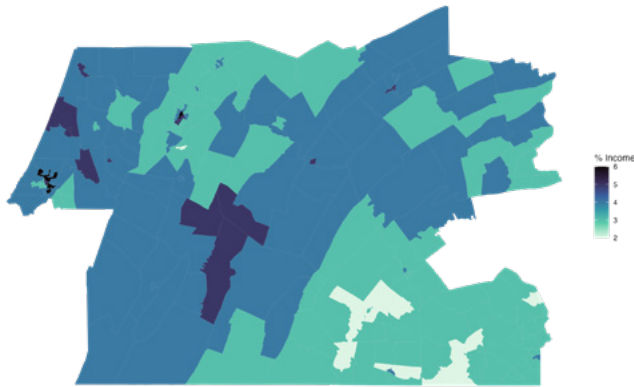
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 12



Source: DOE LEAD Data

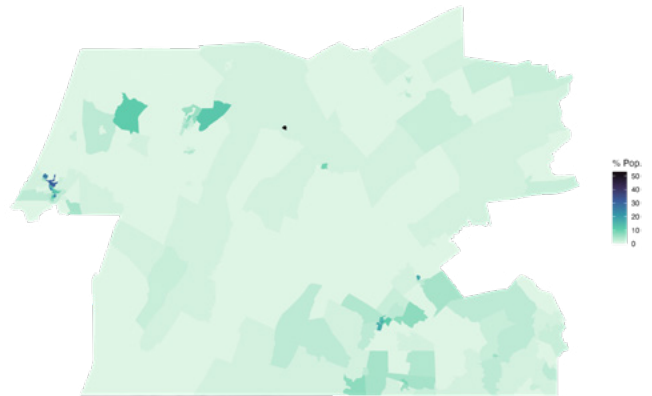
# PENNSYLVANIA DISTRICT 13

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 13



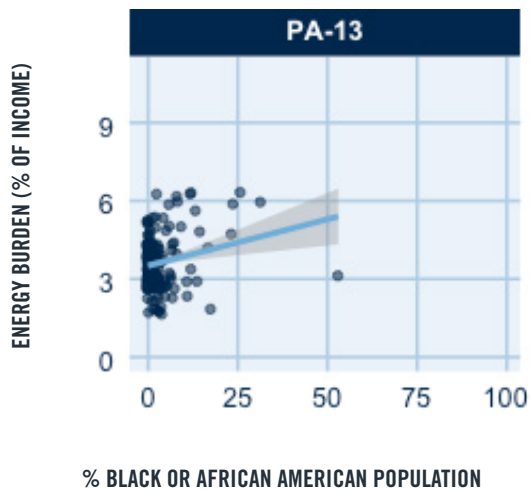
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 13



Source: Data from US Census via tigris and DOE LEAD Tool

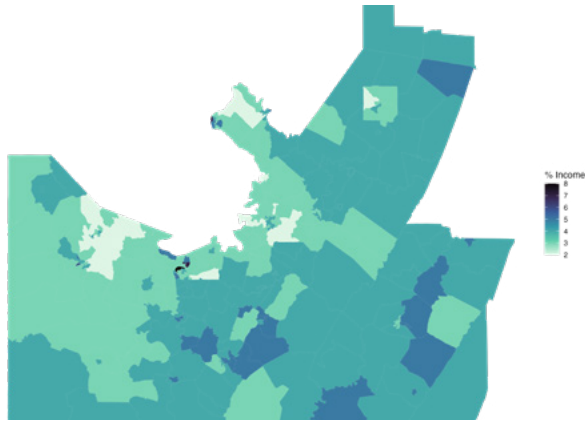
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 13



Source: DOE LEAD Data

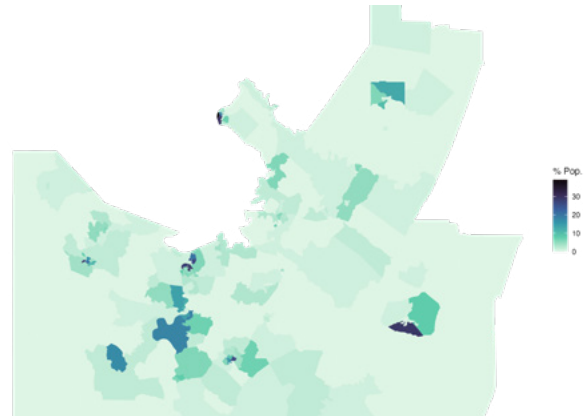
# PENNSYLVANIA DISTRICT 14

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 14



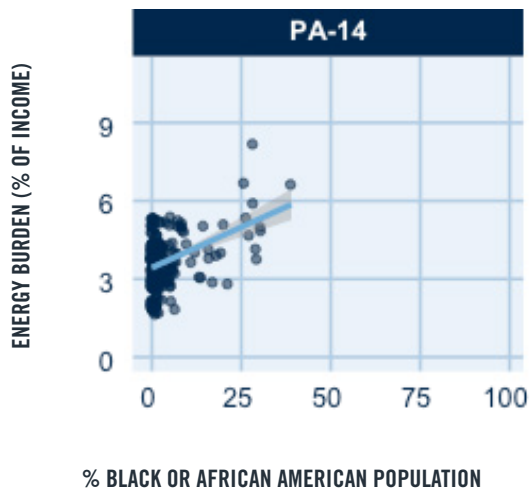
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 14



Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 14

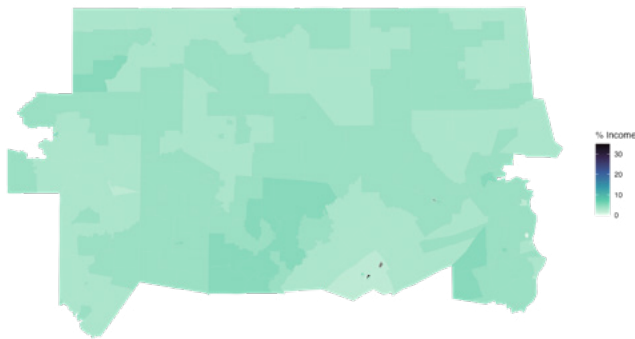


Source: DOE LEAD Data



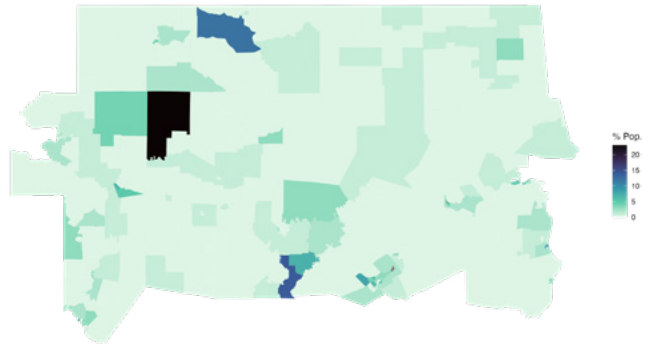
# PENNSYLVANIA DISTRICT 15

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 15



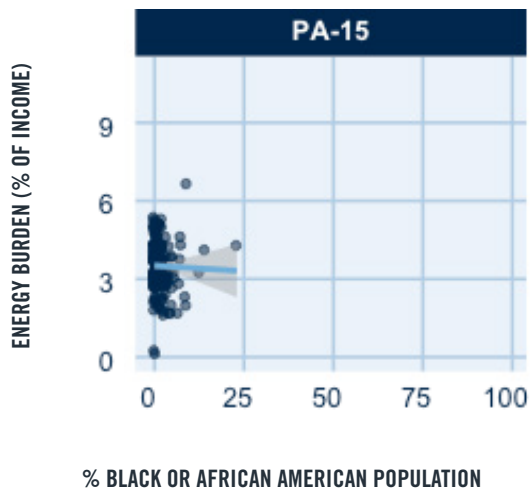
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 15



Source: Data from US Census via tigris and DOE LEAD Tool

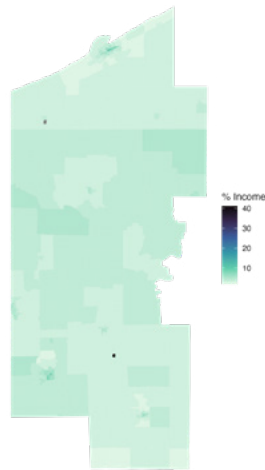
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 15



Source: DOE LEAD Data

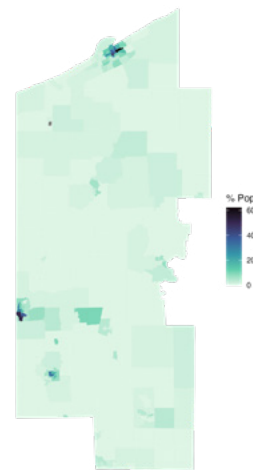
# PENNSYLVANIA DISTRICT 16

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 16



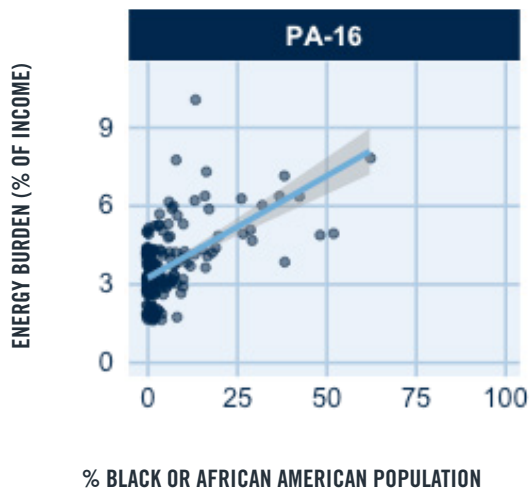
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 16



Source: Data from US Census via tigris and DOE LEAD Tool

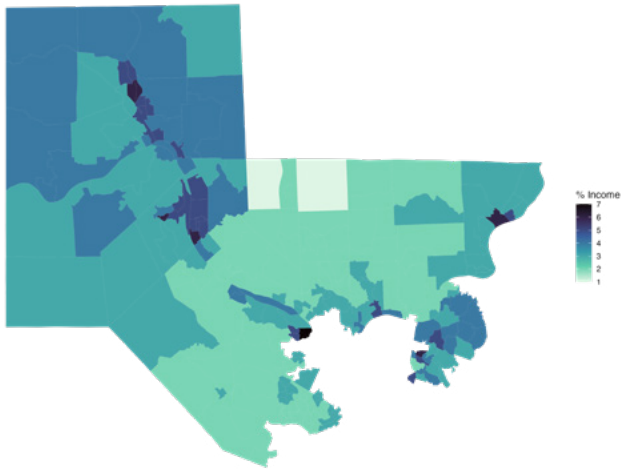
## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 16



Source: DOE LEAD Data

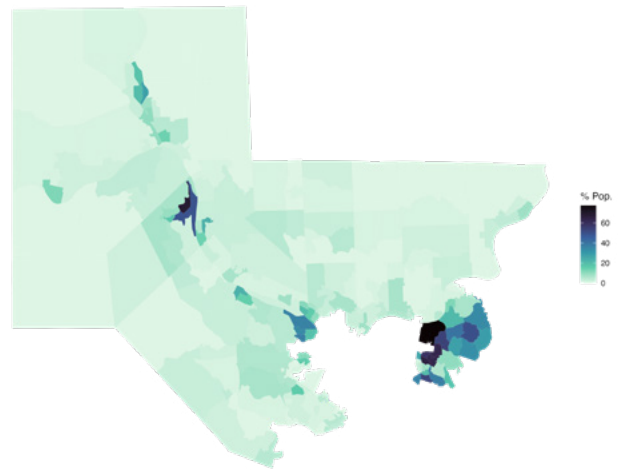
# PENNSYLVANIA DISTRICT 17

## ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 17



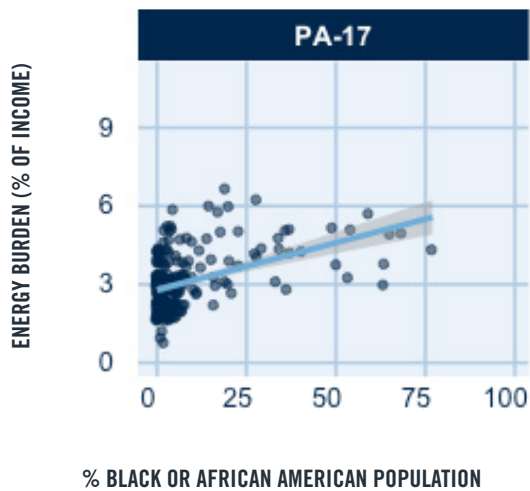
Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE IN PENNSYLVANIA CONGRESSIONAL DISTRICT 17



Source: Data from US Census via tigris and DOE LEAD Tool

## BLACK POPULATION SHARE AND ENERGY BURDENS IN PENNSYLVANIA CONGRESSIONAL DISTRICT 17



Source: DOE LEAD Data