**ELAN SYKES** 

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

#### VIRGINIA

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.

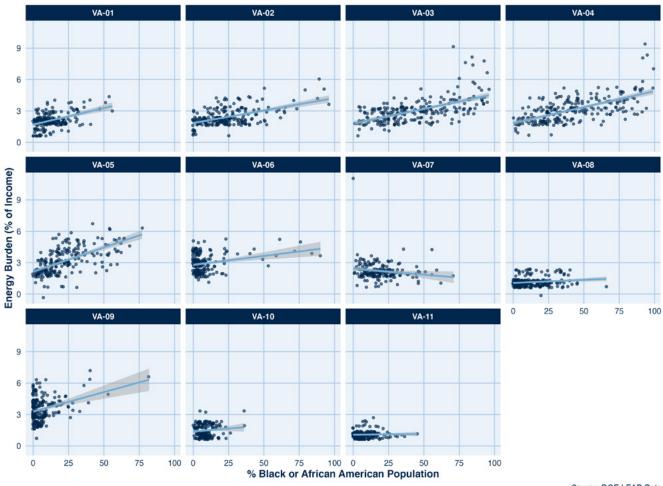


Read the full report at: www.progressivepolicy.org/energy-costs-come-first/



## VIRGINIA

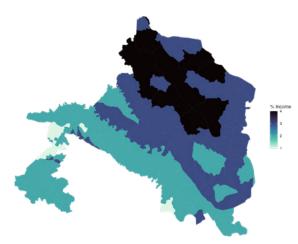
#### BLACK POPULATION SHARE AND ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICTS



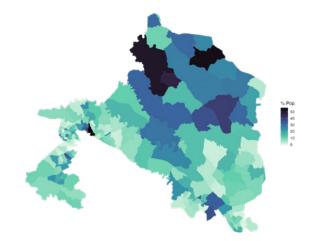
Source: DOE LEAD Data



## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 01



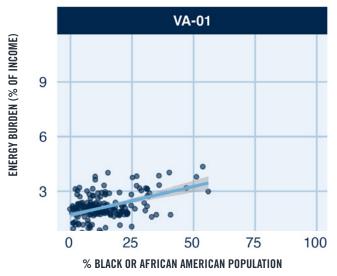
#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 01



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

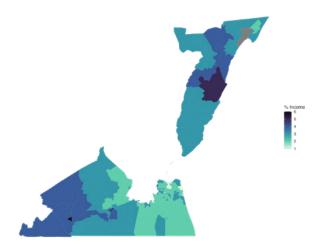
Source: Data from US Census via tigris and DOE LEAD Tool

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





## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 02



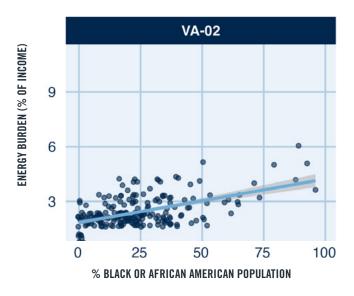
Source: Data from US Census via tigris and DOE LEAD Tool

#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 02



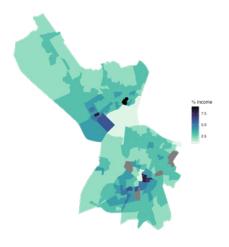
Source: Data from US Census via tigris and DOE LEAD Tool

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

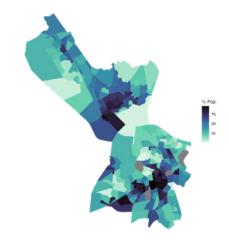




## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 03

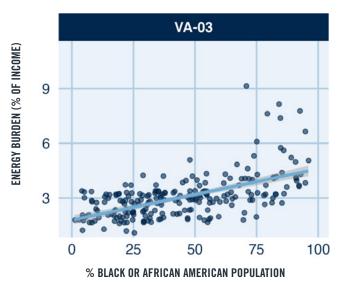


BLACK POPULATION SHARE IN VIRGINIA Congressional district 03



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

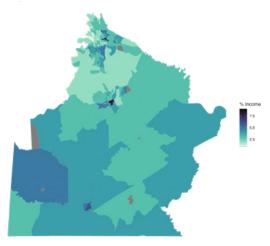
Source: Data from US Census via tigris and DOE LEAD Tool



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

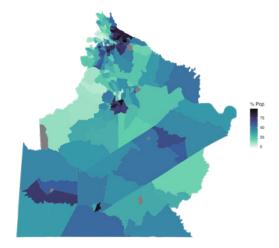


## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 04

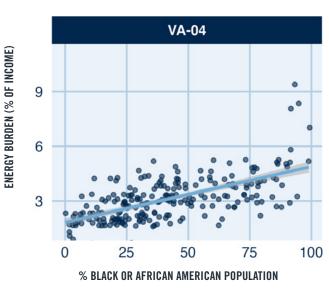


Source: Data from US Census via tigris and DOE LEAD Tool

#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 04



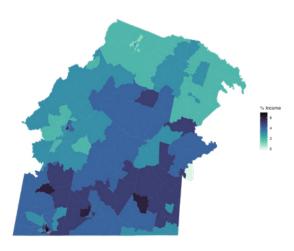
Source: Data from US Census via tigris and DOE LEAD Tool



BLACK POPULATION SHARE AND ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 04



## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 05

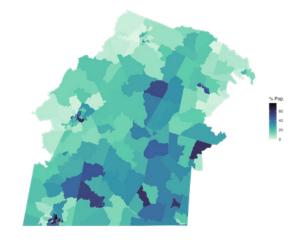


Source: Data from US Census via tigris and DOE LEAD Tool

**VIRGINIA CONGRESSIONAL DISTRICT 05** 

**BLACK POPULATION SHARE AND ENERGY BURDENS IN** 

#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 05



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

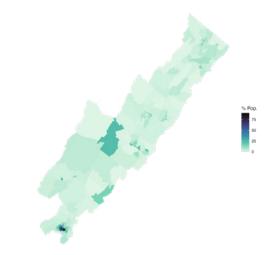
#### VA-05 9 9 0 0 0 25 50 75 100 8 BLACK OR AFRICAN AMERICAN POPULATION



## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 06

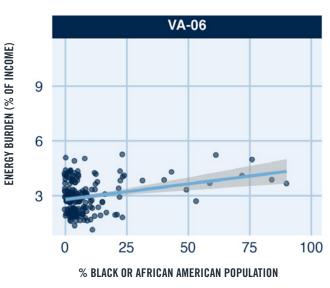


BLACK POPULATION SHARE IN VIRGINIA Congressional district 06



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

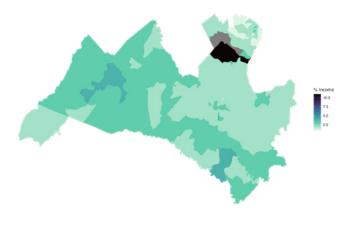
Source: Data from US Census via tigris and DOE LEAD Tool



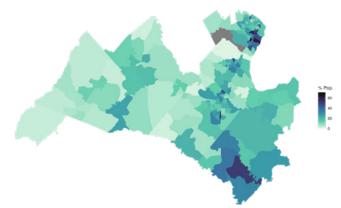
BLACK POPULATION SHARE AND ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 06



## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 07



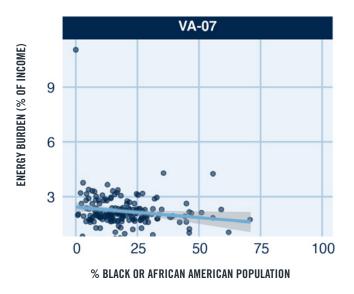
#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 07



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

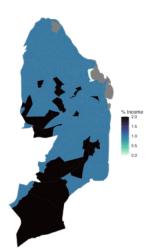
Source: Data from US Census via tigris and DOE LEAD Tool

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





## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 08

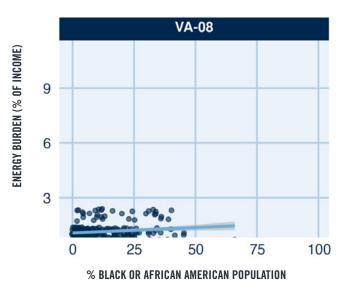


#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 08



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

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



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



### ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 09

#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 09

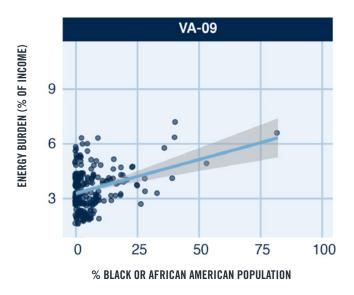




Source: Data from US Census via tigris and DOE LEAD Tool

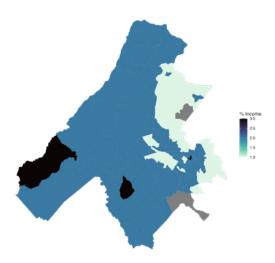
Source: Data from US Census via tigris and DOE LEAD Tool

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

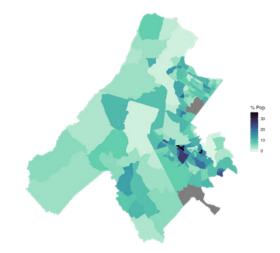




## ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 10



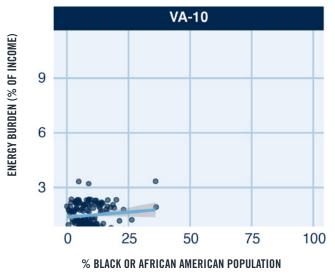
#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 10



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

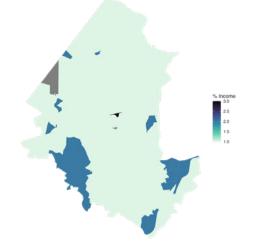
Source: Data from US Census via tigris and DOE LEAD Tool

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

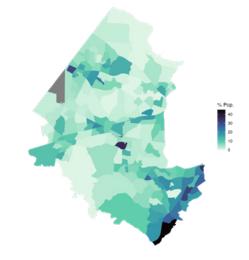




### ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 11



#### BLACK POPULATION SHARE IN VIRGINIA Congressional district 11



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

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

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BLACK POPULATION SHARE AND ENERGY BURDENS IN VIRGINIA CONGRESSIONAL DISTRICT 11