

# Public Health Service Disparities

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# Presenter Disclosures

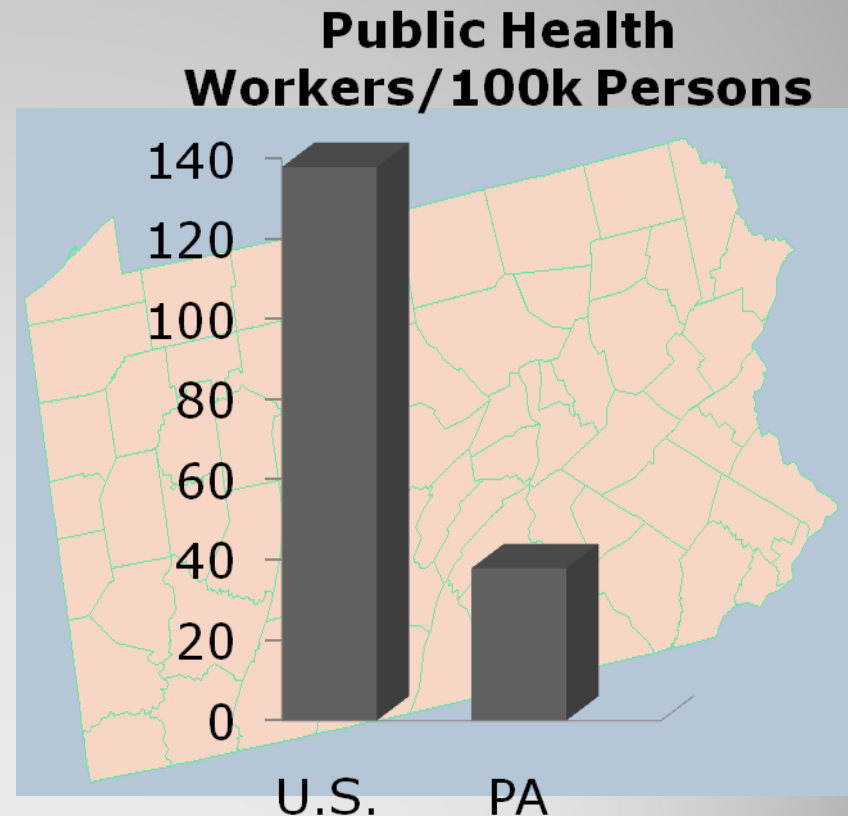
Alberto J.F. Cardelle

**The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

“No relationships to disclose”

# Purpose

- Using the case of Pennsylvania (*smallest public health workforce in the country*)
- Using GIS mapping
- Identifies
  - areas of public health service disparity.
  - geographic correlation between the areas of disparity and
    - a) socio-economic factors
    - b) demographic factors
    - c) institutional factors



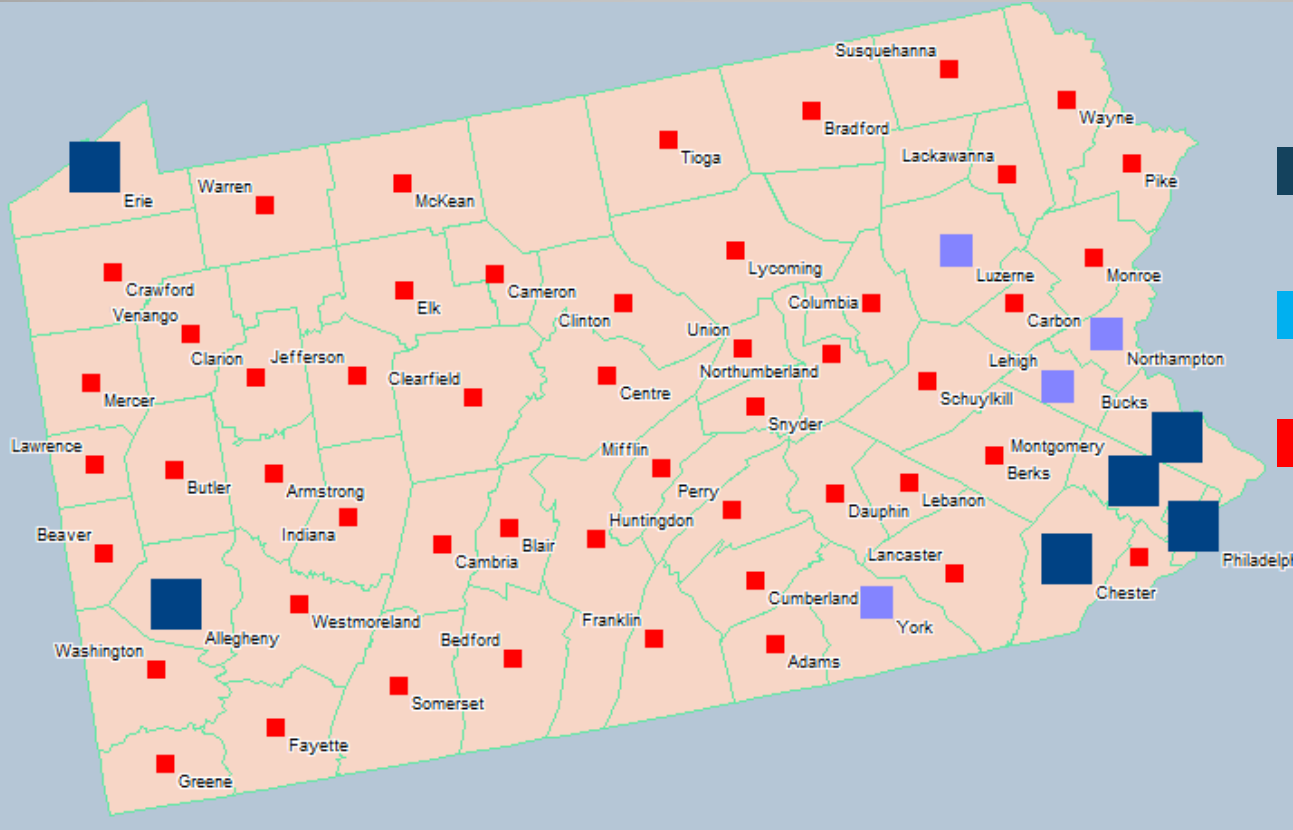
# Background

## PA Local Health Departments

- State legislation establishing LHDs
  - Act 315
    - Provides a 1:1 match of local contribution up to \$6 per capita
  - Act 12
    - Provides \$1.25 subsidy per capita for environmental services
  - Funds can be drawn down one year after establishment

# Background

## PA Local Health Departments



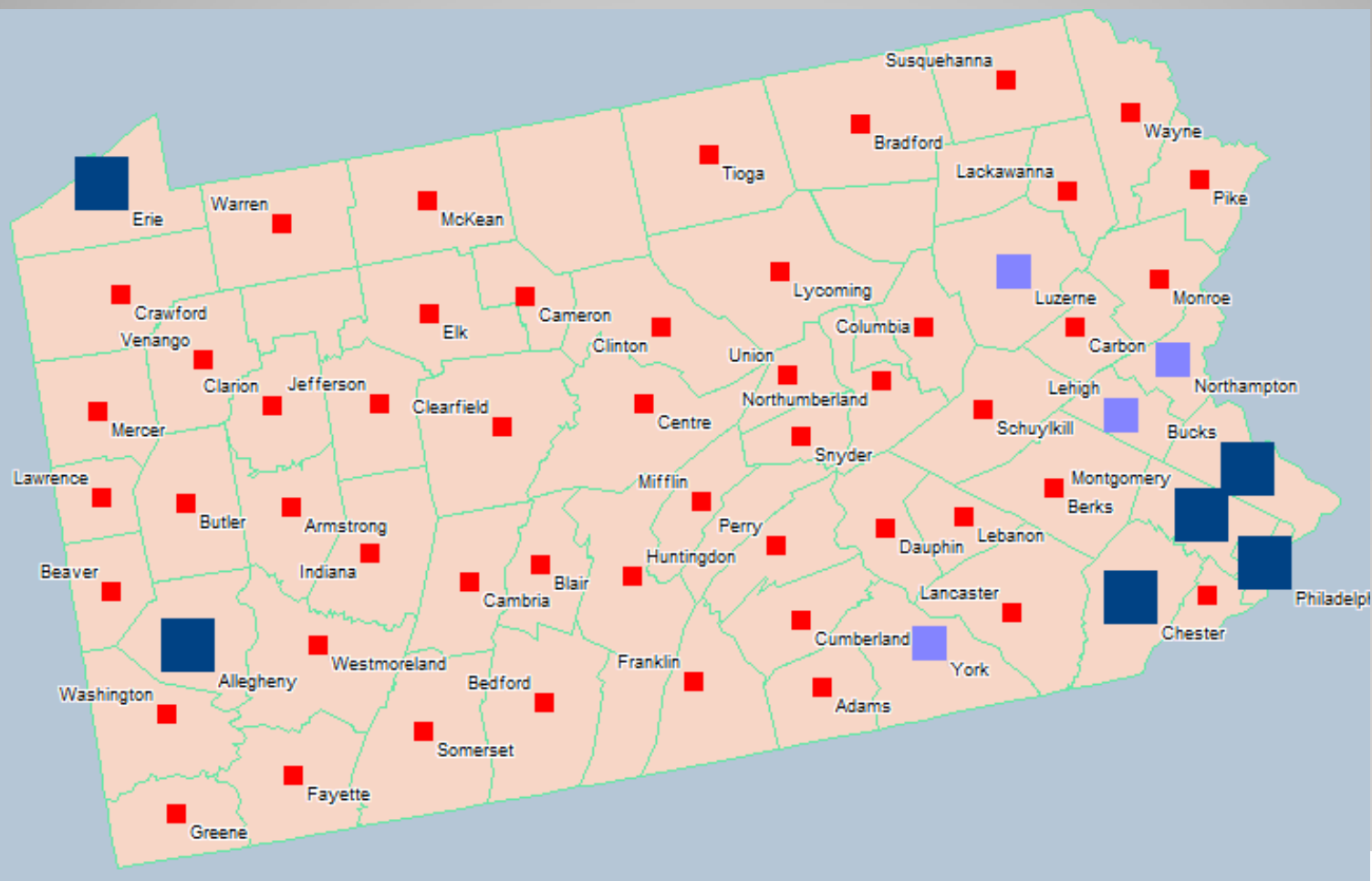
County (6)

Municipal (4)

State Centers (62)

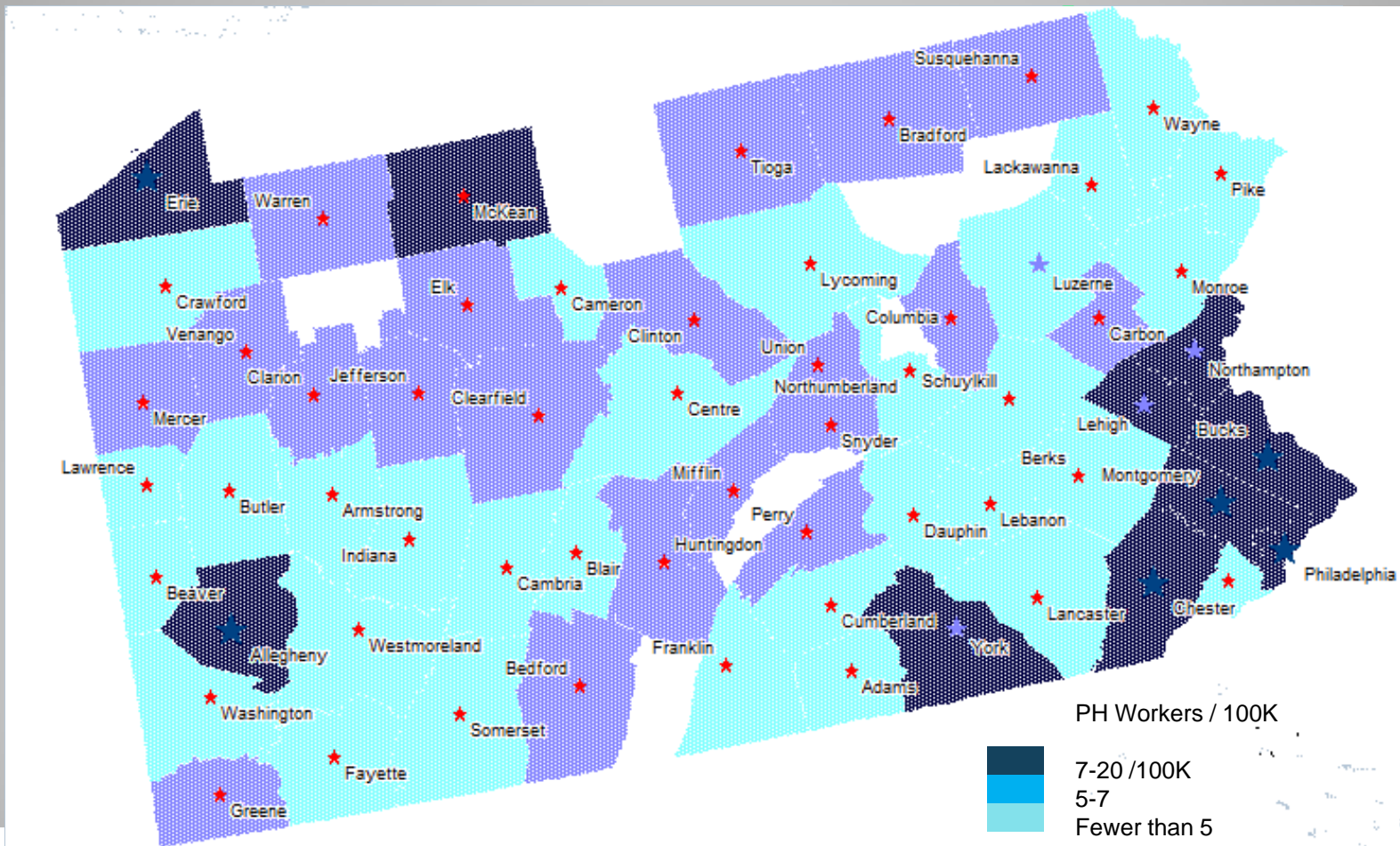
# Impact

“If you have seen one LHD...”



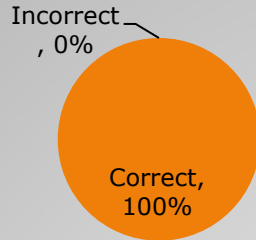
# Impact

## "If you have seen one LHD..."

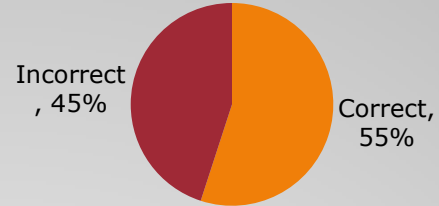


Significant at .05 level.

# Impact



**Counties with  
Local Health Department**

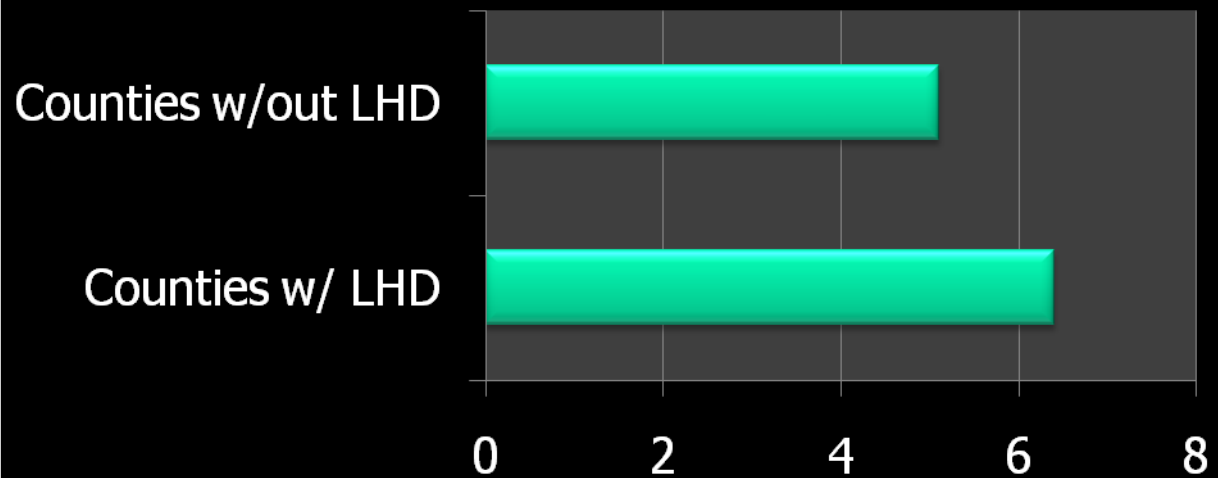


**Counties without  
Local Health Department**



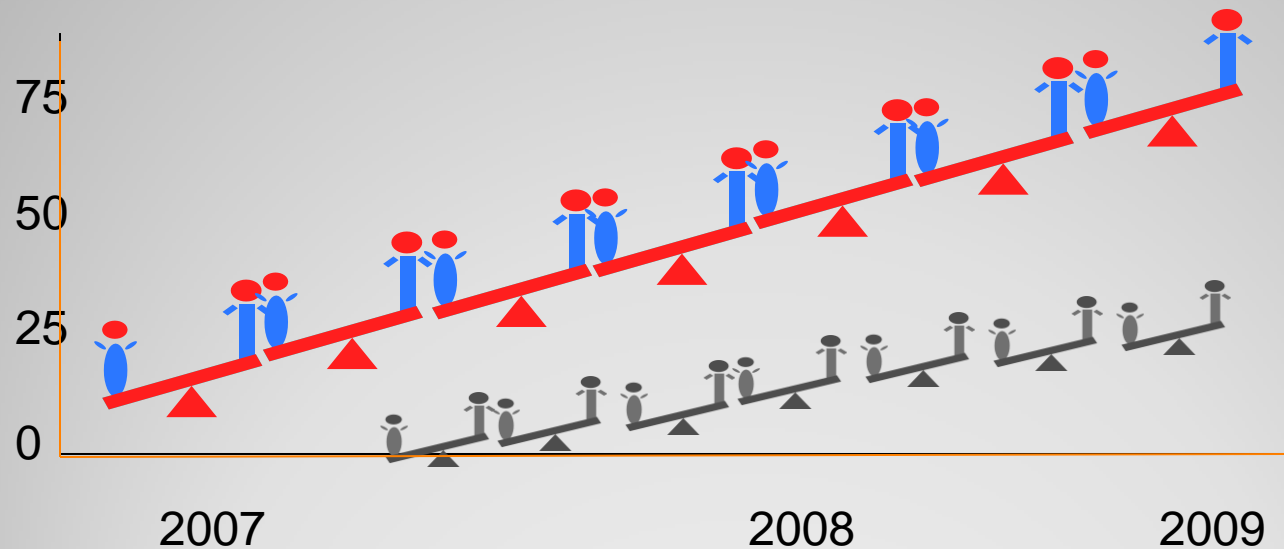
# Impact

## Progress Toward 2010 Chronic Disease Goals



# Impact

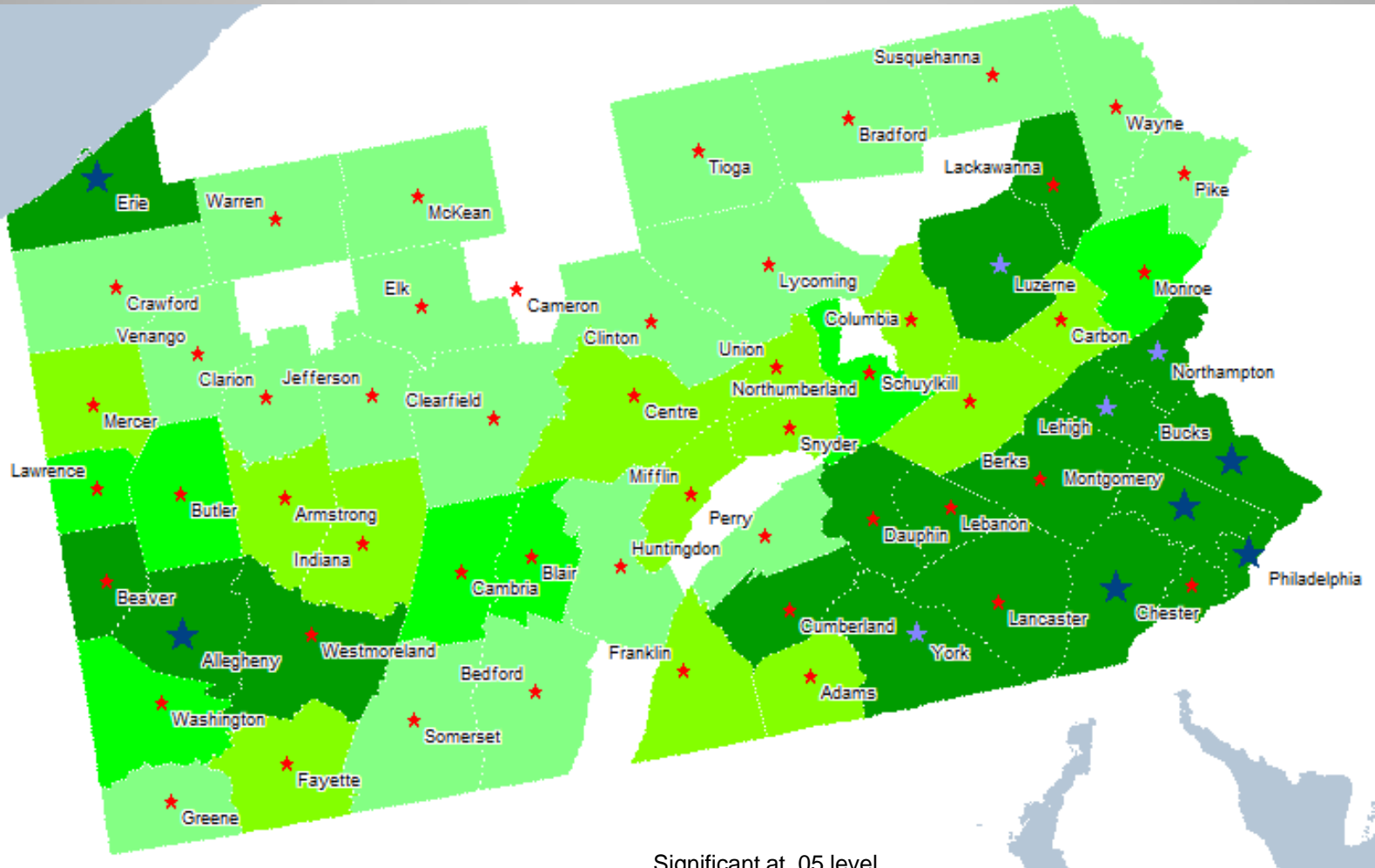
## Number of Parks that Adopted the “Young Lungs at Play” Initiative



 = Counties with Local Health Department  
 = Counties without Local Health Department

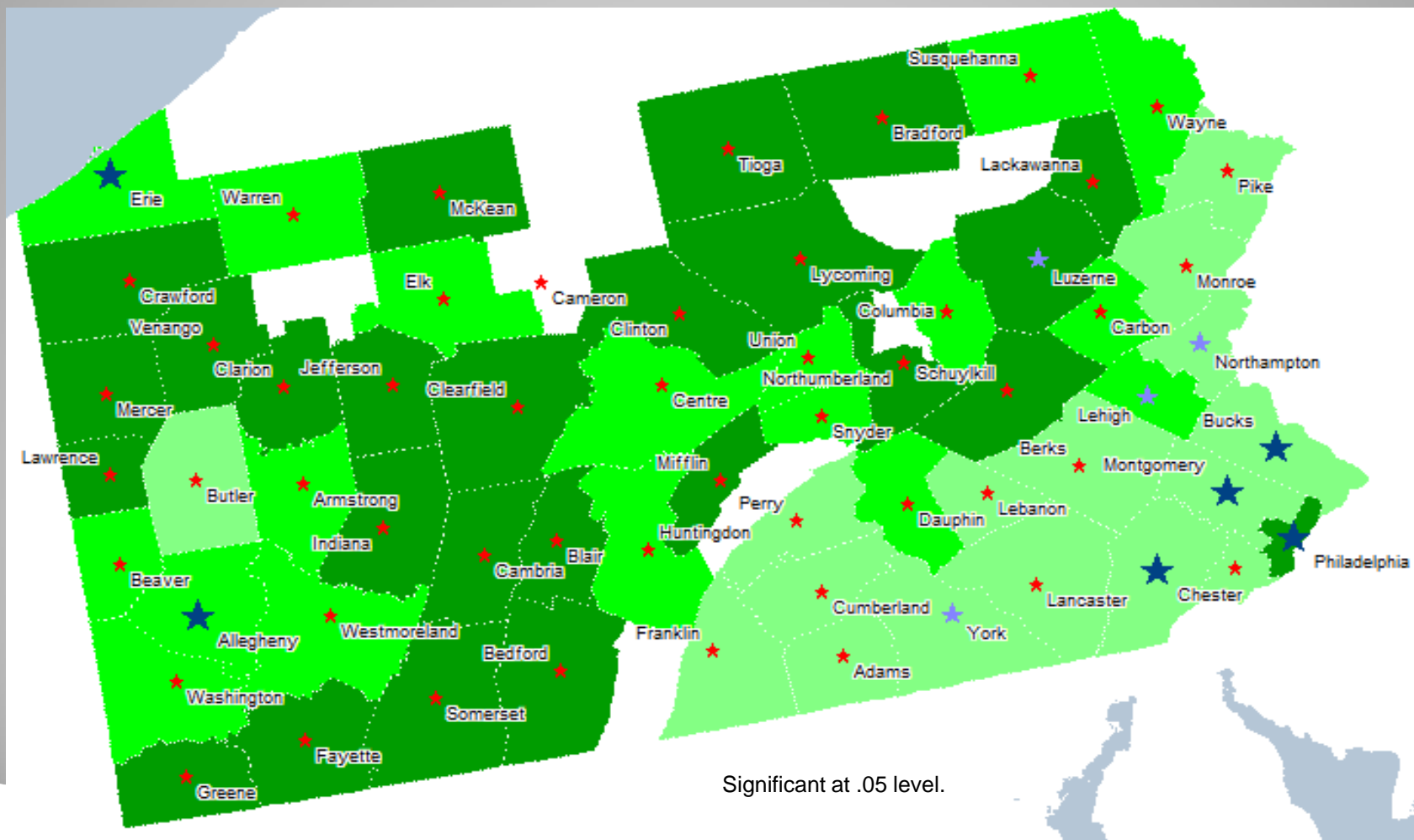
# Results

A significant inverse relation between Phworkers/capita and Population Density



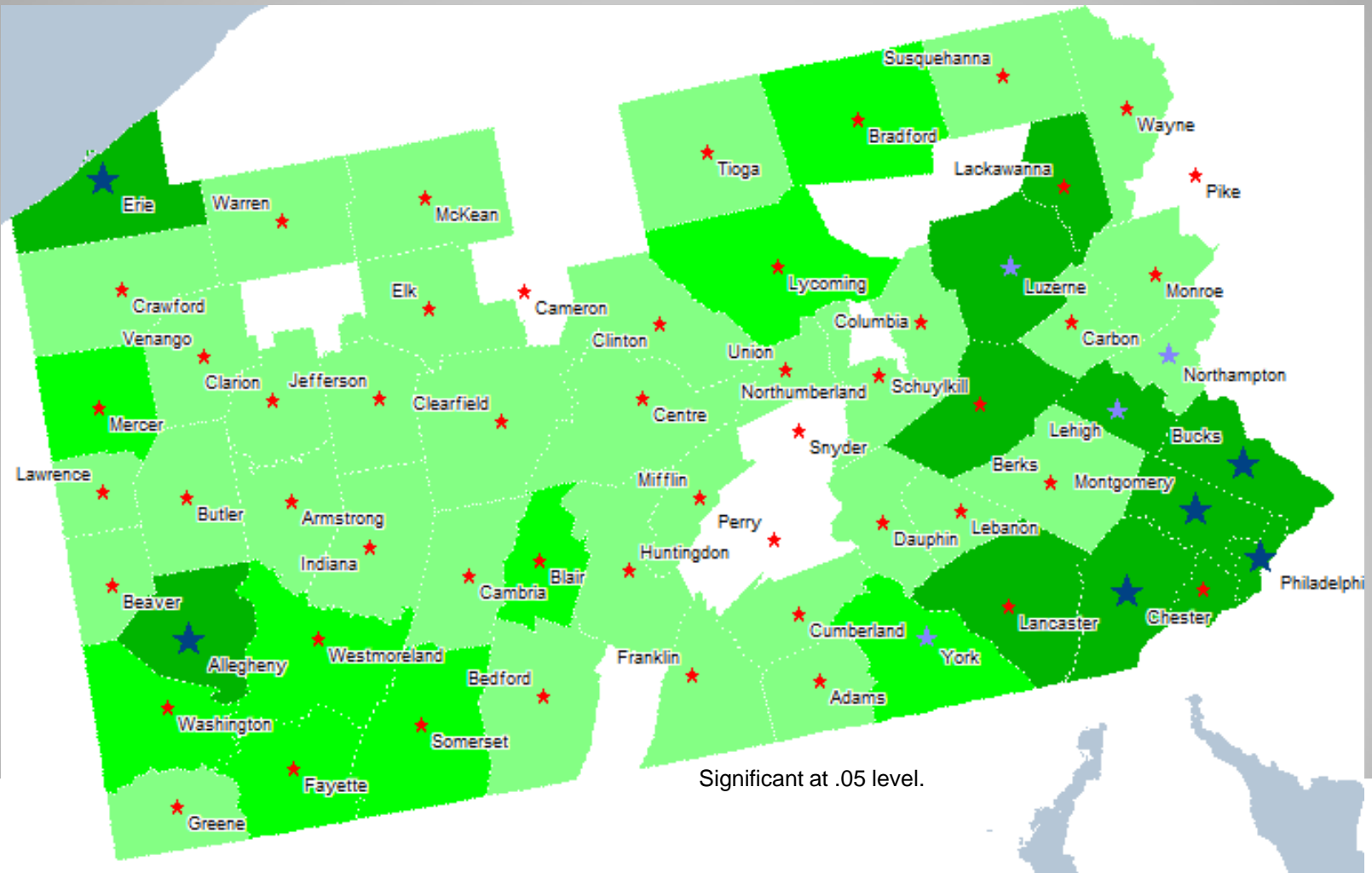
# Results

A significant inverse relation between Phworkers/capita and Household Income



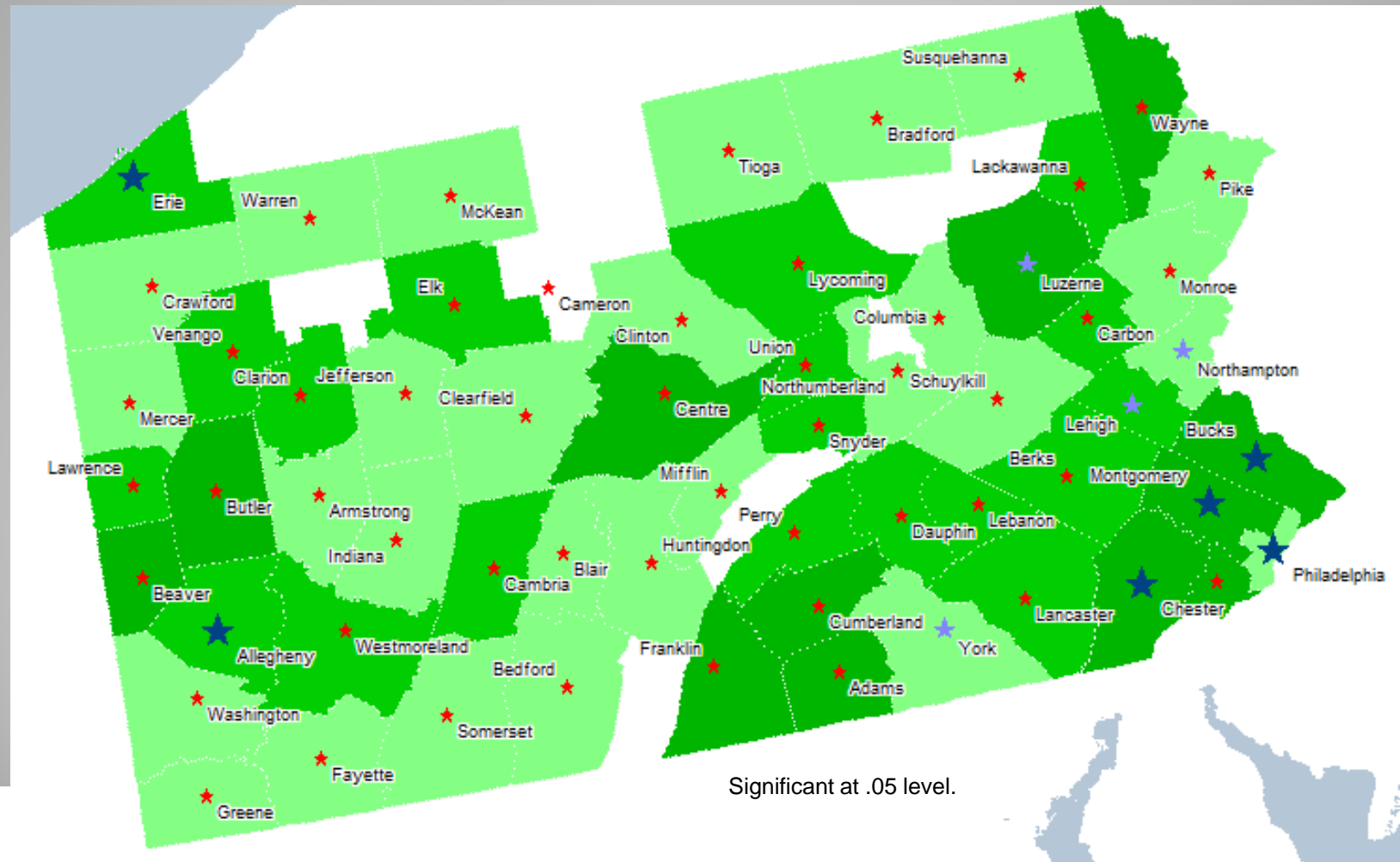
# Results

A significant positive relation between Phworkers/capita and Number of Acute Care Centers



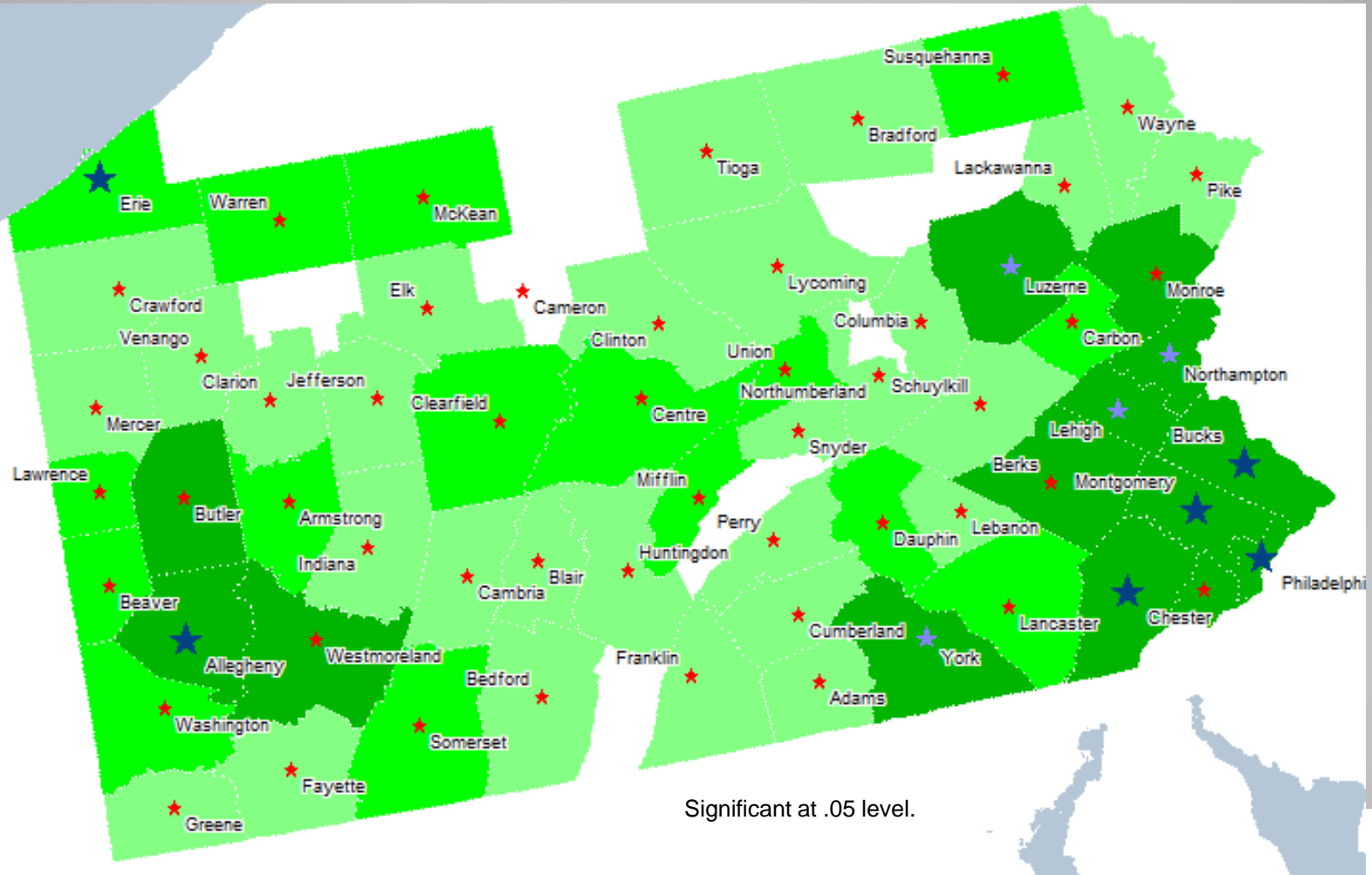
# Results

A significant positive relation between Phworkers/capita and Voter Turn Out



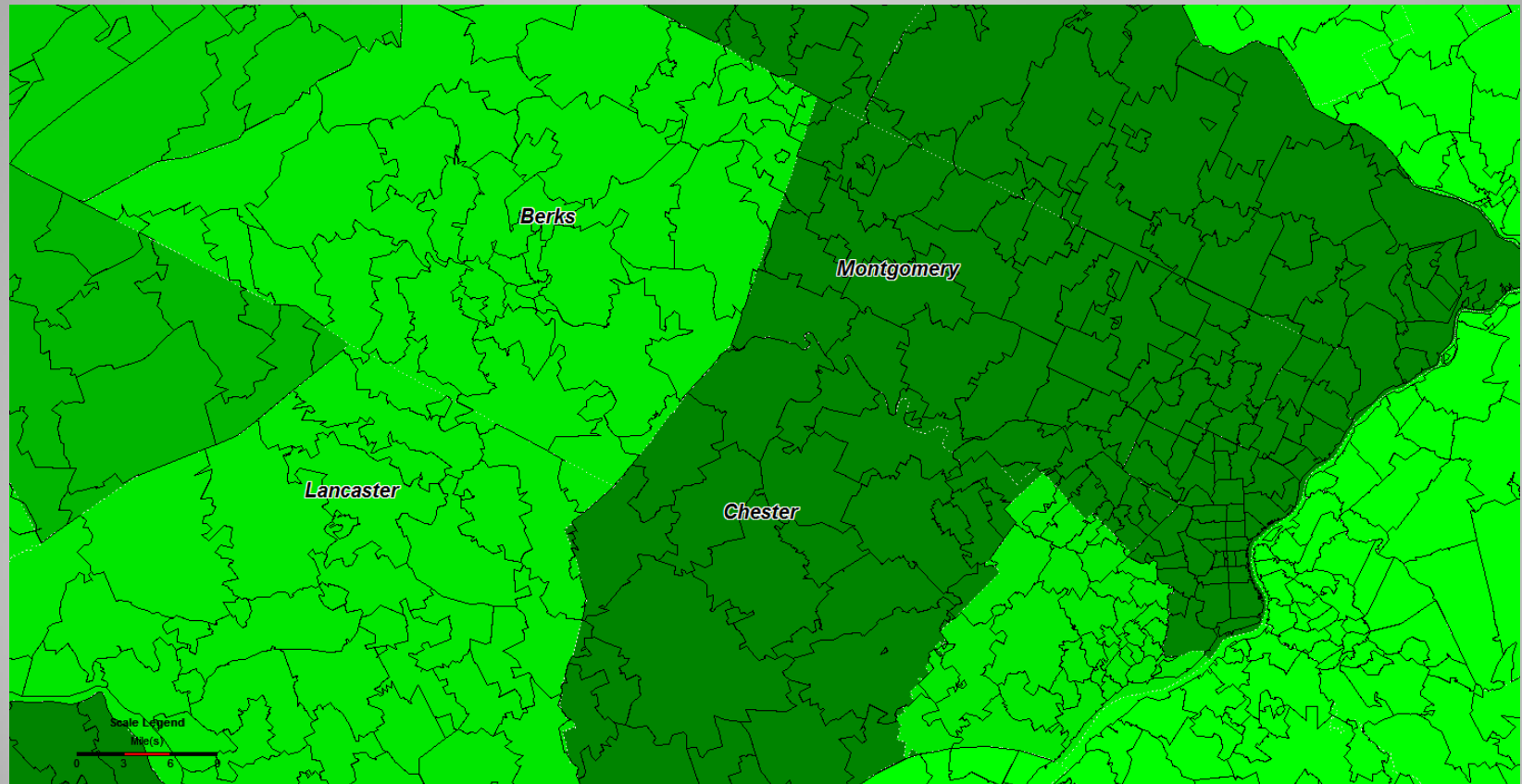
# Results

A significant inverse relation between Phworkers/capita and County Senators



# Results

## Micro-level Disparities

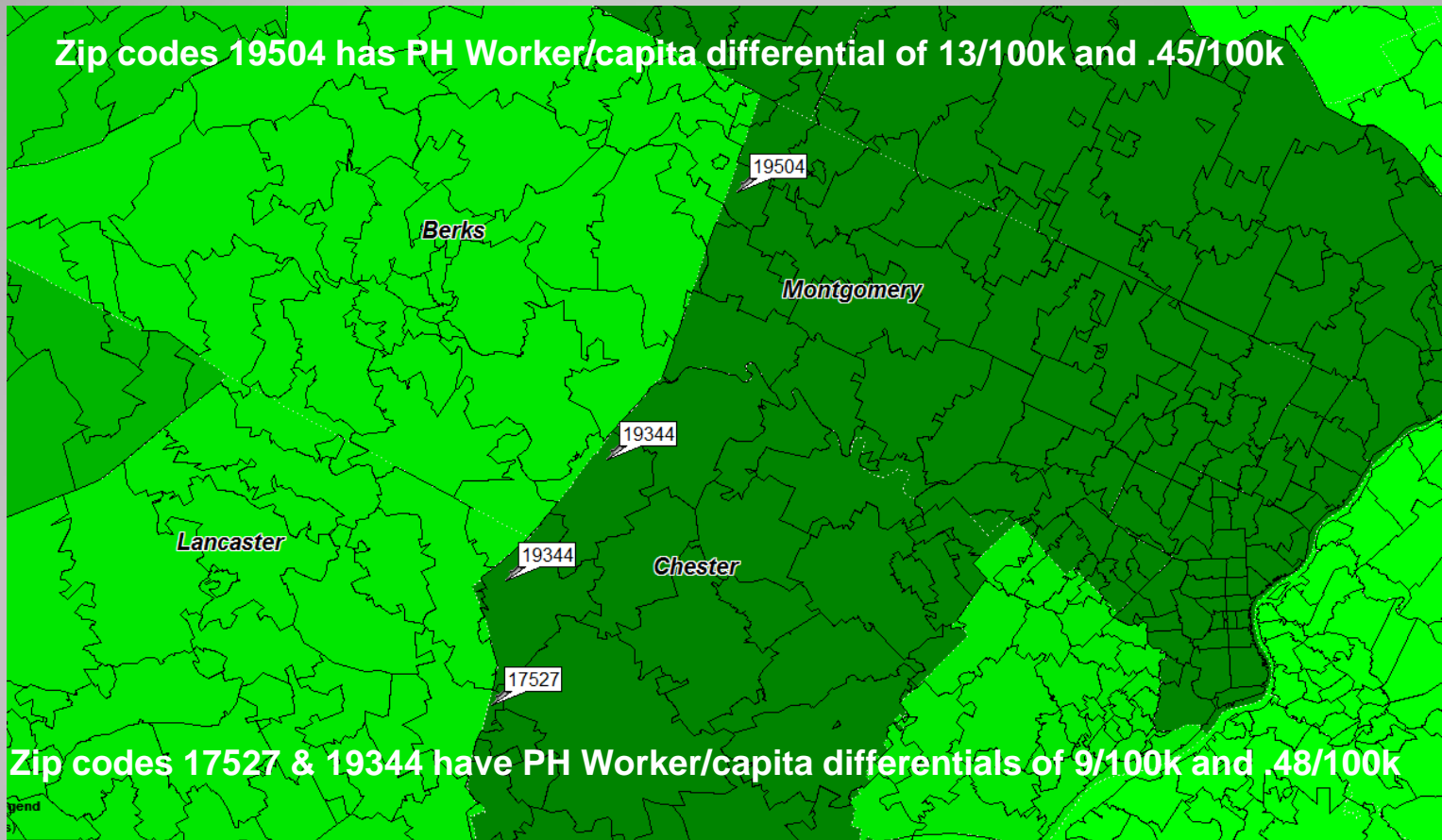


Significant at .05 level.



# Results

## Micro-level Disparities



# Findings

- State level funding policies set a high threshold for creation of LHDs
- Areas without LHD
  - have fewer public health workers
  - are affected with fewer public health s
    - Services
    - Policies

# Findings

- Areas with low PH workers/capita are correlated with
  - Socioeconomic and demographic factors
    - Ruralness
    - Poverty
    - Educational attainment
  - Institutional factors
    - Healthcare infrastructure
    - Political representation
- State statutes establishing LHDs favor areas with financial and political capital.