



Evictions in the United States 2010-2016

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Raw Eviction Lab Data

- ~83 million individual case records from 2000 - 2016
- Aggregated to 5 million observations with 27 variables
- Included data for multiple levels of government
 - State, county, place, minor civil divisions, Census tracts and block groups.

Areas of Focus

- What factors are associated with eviction filings?
 - What geographic areas are most impacted?
 - Do similar geographic areas see similar impact?
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Eviction Lab Data Observations

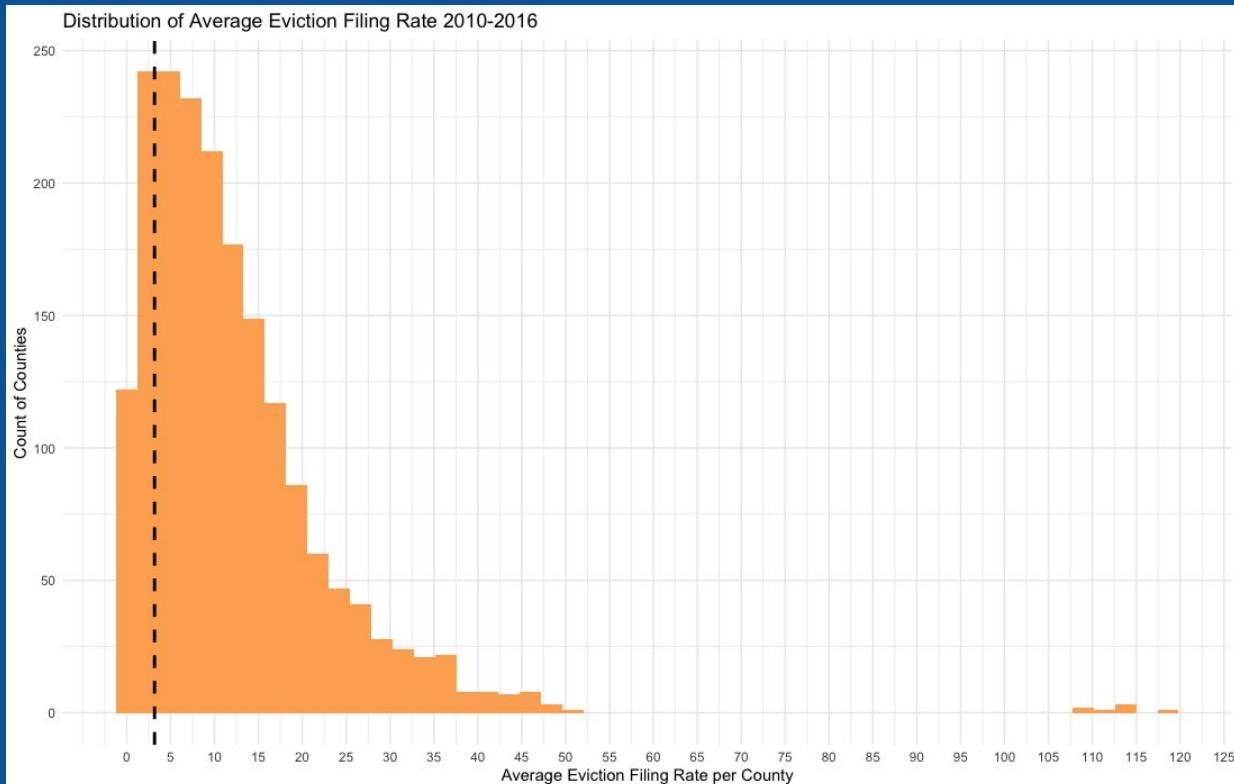
- Increased nulls as we zoom into areas
 - State/county vs. place/smaller level geographies.
 - Four states did not have any eviction rates, but did have filing rates
 - Data availability drastically improved after 2010, decreasing nulls from 22% to 15%
 - Broke down into two datasets - county and state
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Additional Data

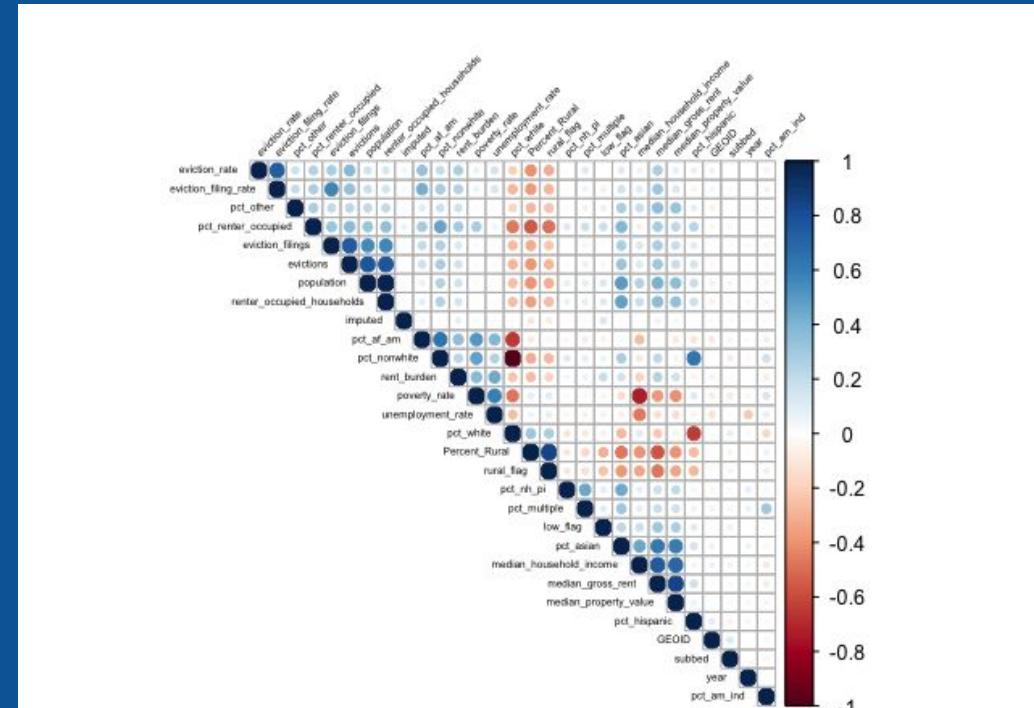
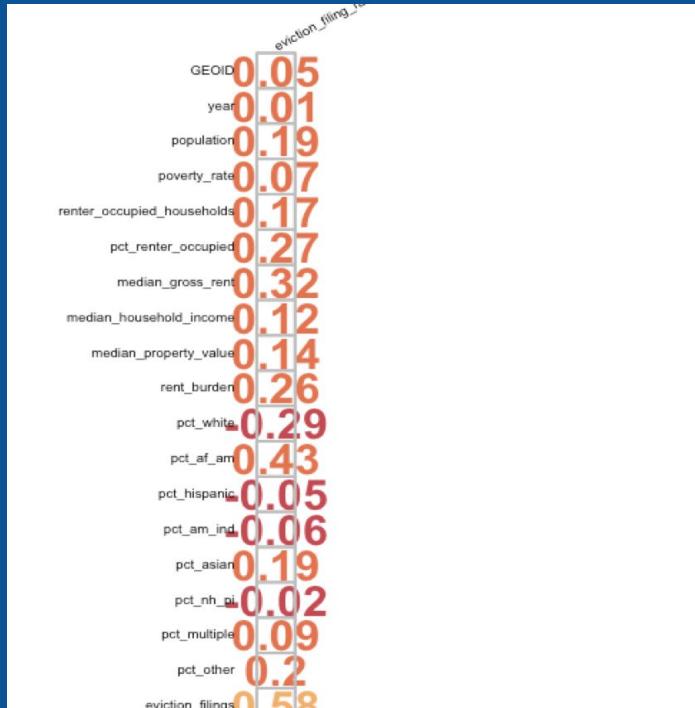
- Web Scraped unemployment rates from Bureau of Labor Statistics website
 - Rural populations from the Census Bureau
 - Geospatial data from Tigris package and Census Bureau
 - Built-in R dataset, U.S. Facts & Figures for regions
 - Northeast, North Central, South and West
 - Created a % Non-White Population Column
 - $1 - \% \text{ White}$
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Exploratory Data Analysis

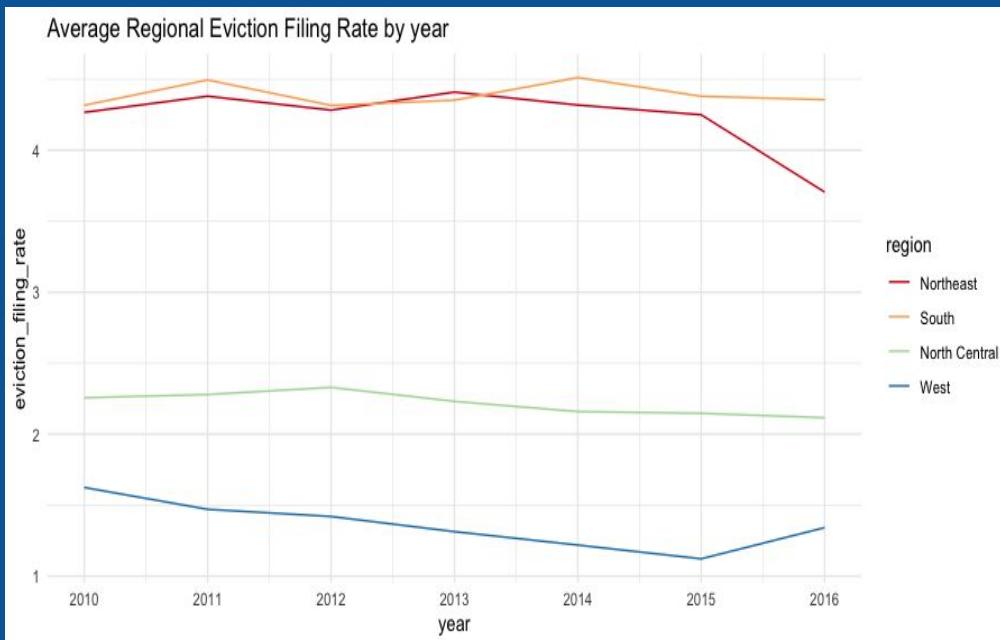
Eviction Filing Rate Skewed Right



Factors Associated with Eviction Filing Rate



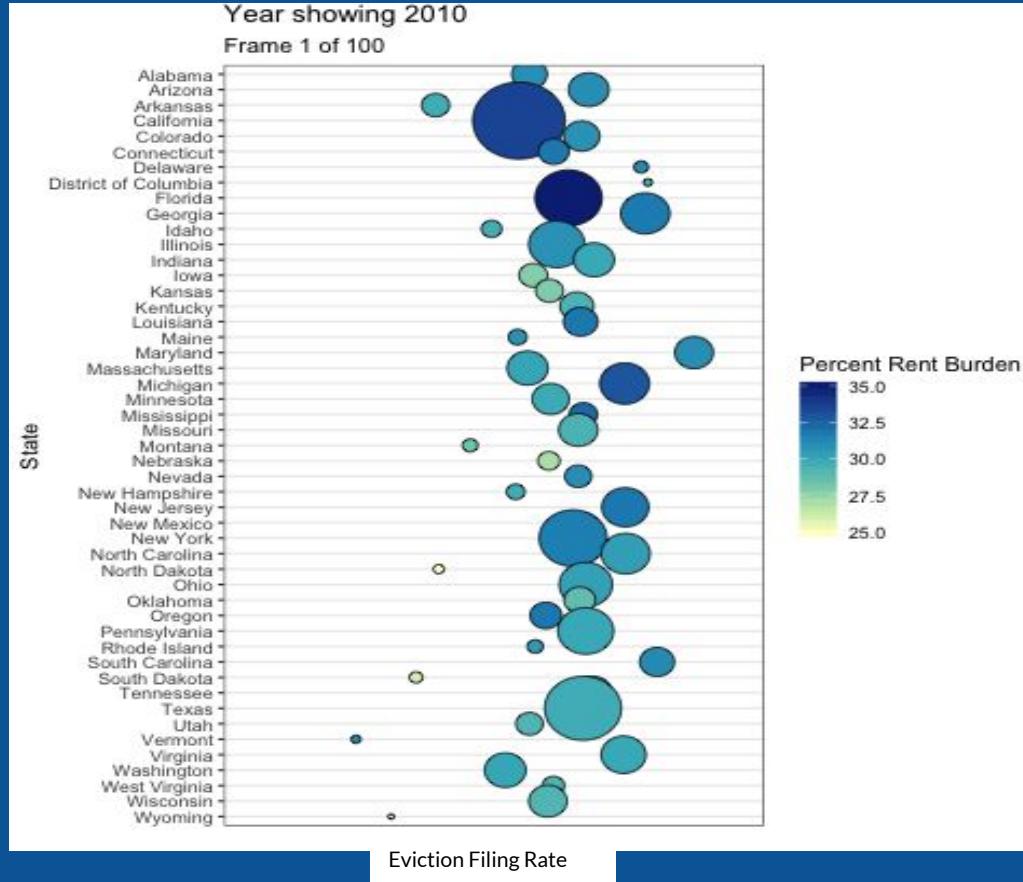
Regional Eviction Filing Rates Over Time



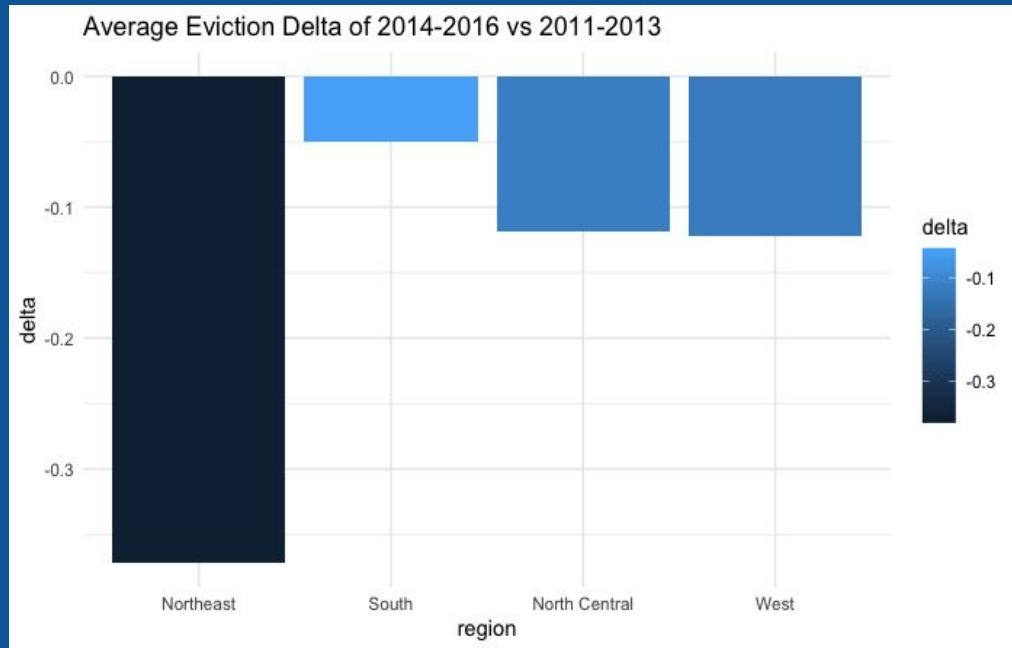
- Highest filing rates in the Northeast and South
- Increase in the West in 2016

*Eviction filing rates are the proportion of filings to renter occupied households. Multiple filings can be entered against a single address.

Eviction Filing Rates Improved After 2010



Changes in Eviction Filing Rates

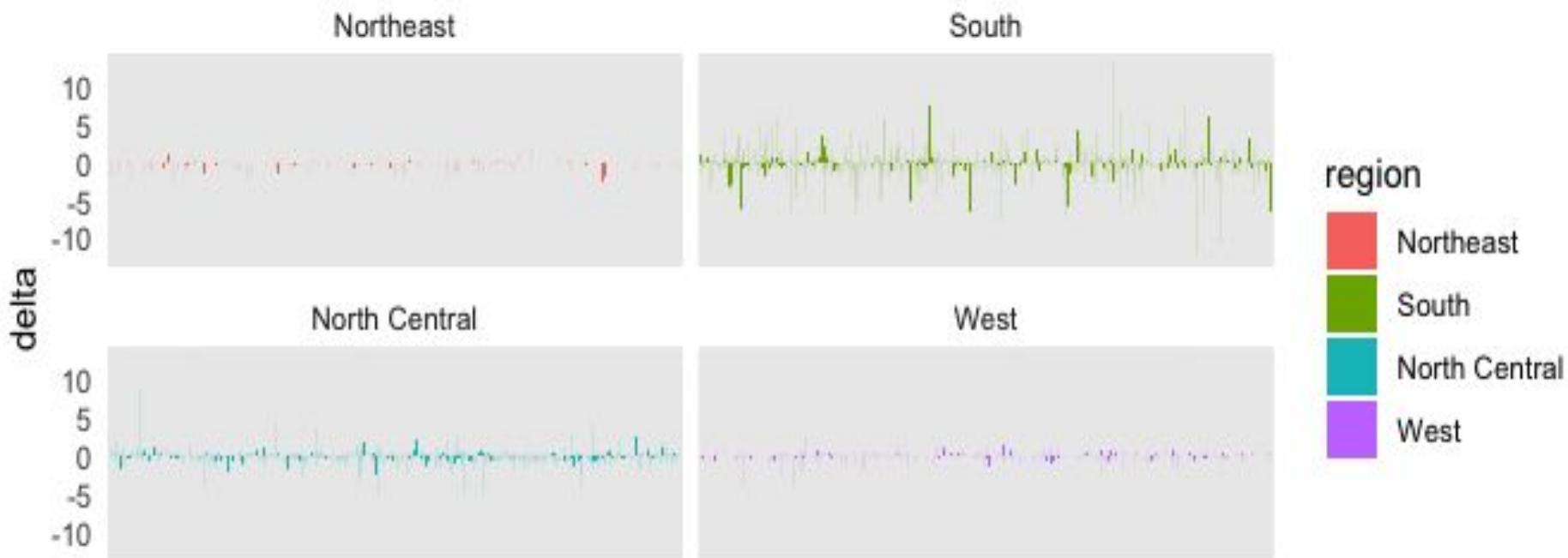


- Northeast declined most
- South remained flat
- Other areas saw some decline

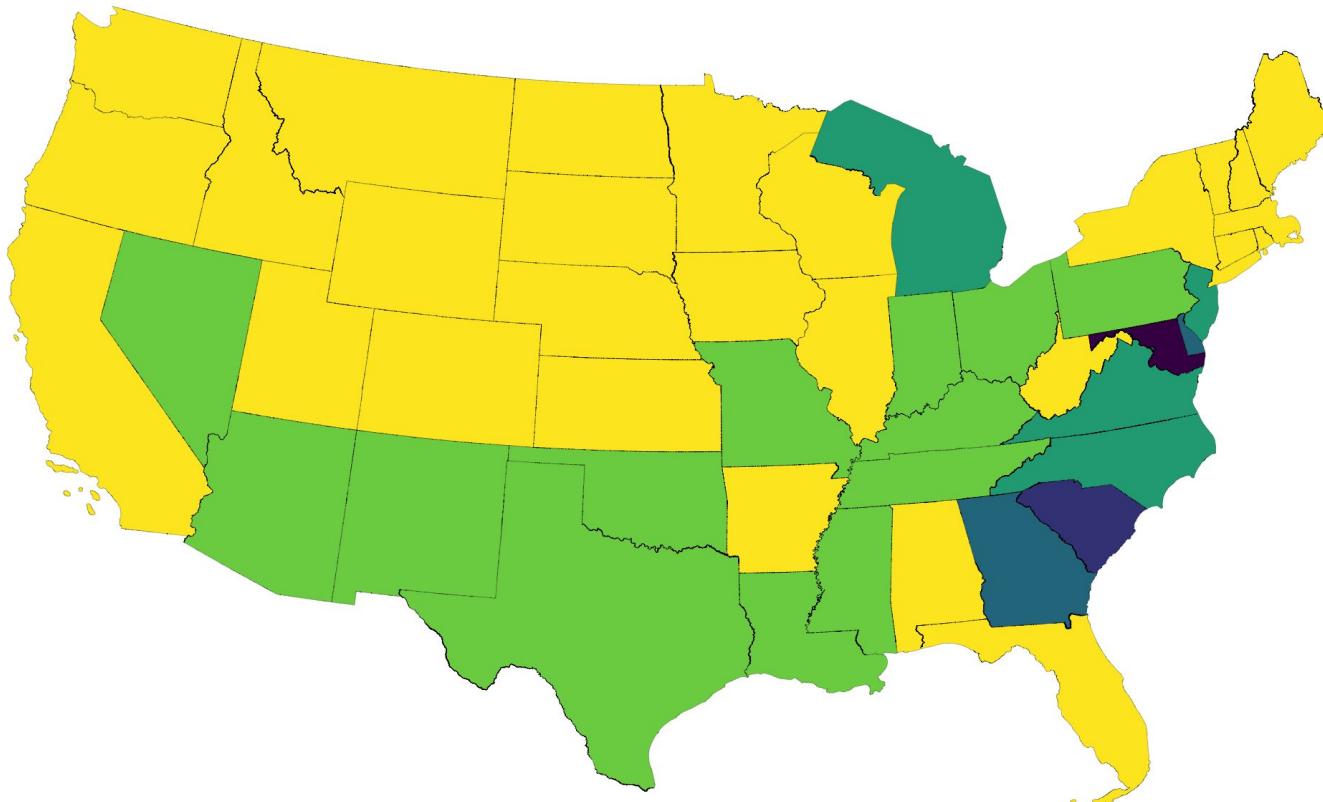
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The South is Flat Due to Increasing Counties Being Offset by Decreases in Other Counties

Average Eviction Delta of Counties by Region 2014-2016 vs 2011-2013



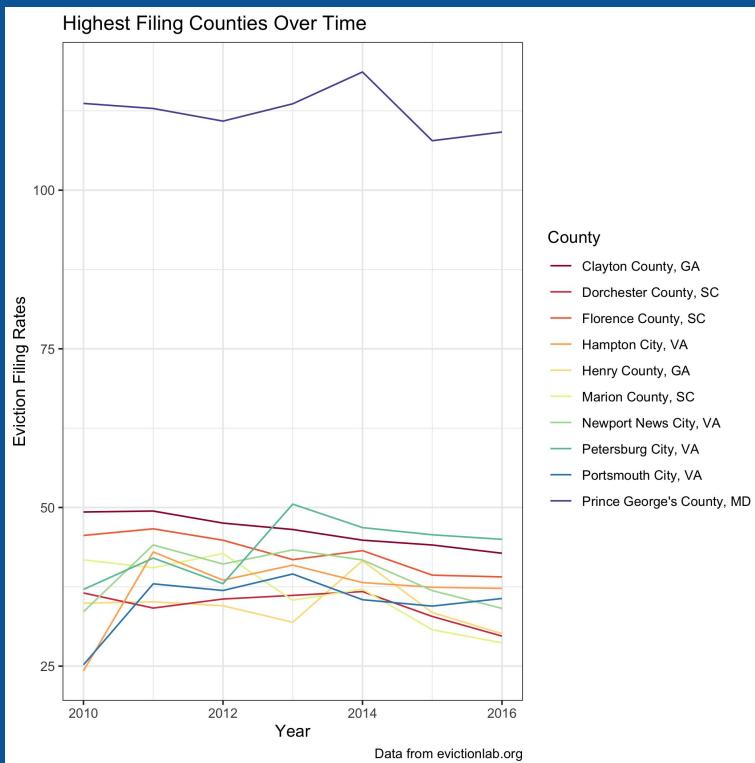
Average Eviction Filing Rate by State



Average Eviction Filing Rate

A horizontal color bar with a gradient from yellow to dark purple. Below it is a numerical scale with labels at 5, 10, 15, 20, 25, and 60.

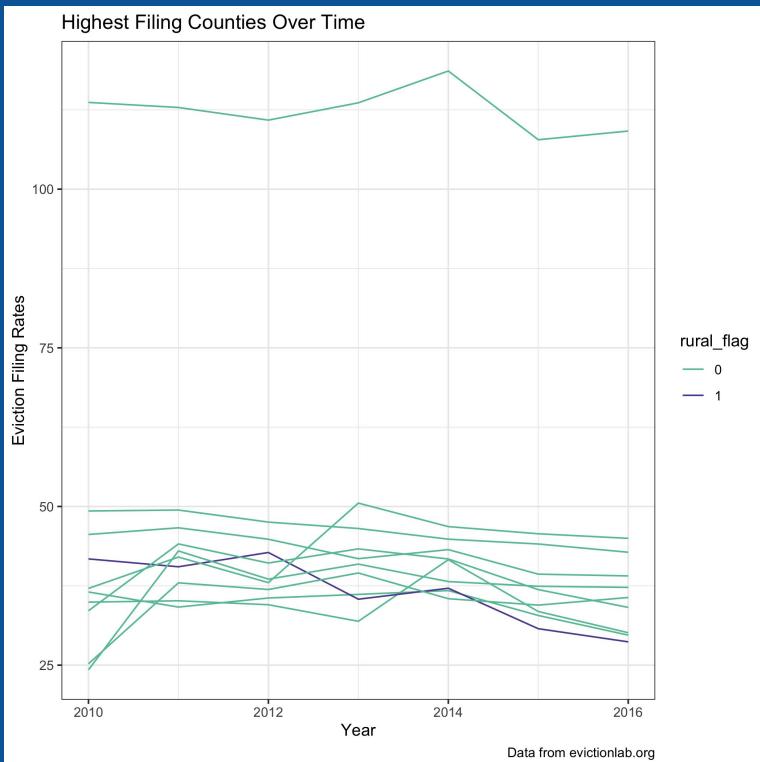
Highest Filing Counties



- Prince George's County, MD has far and above the highest eviction filing rates*
- All of these counties are in the South

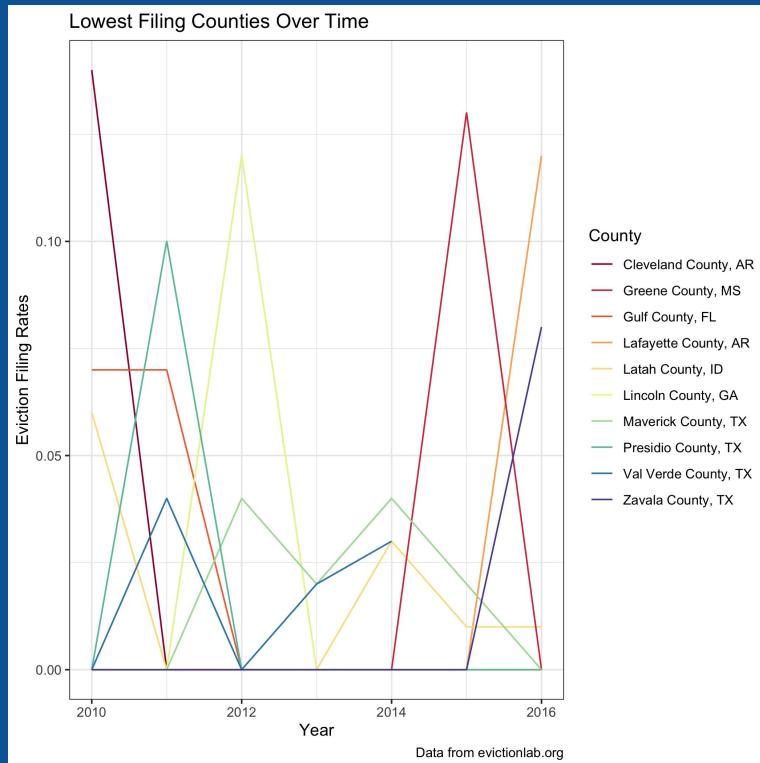
*Eviction filing rates are the proportion of filings to renter occupied households. Multiple filings can be entered against a single address.

Highest Filing Counties (Cont.)



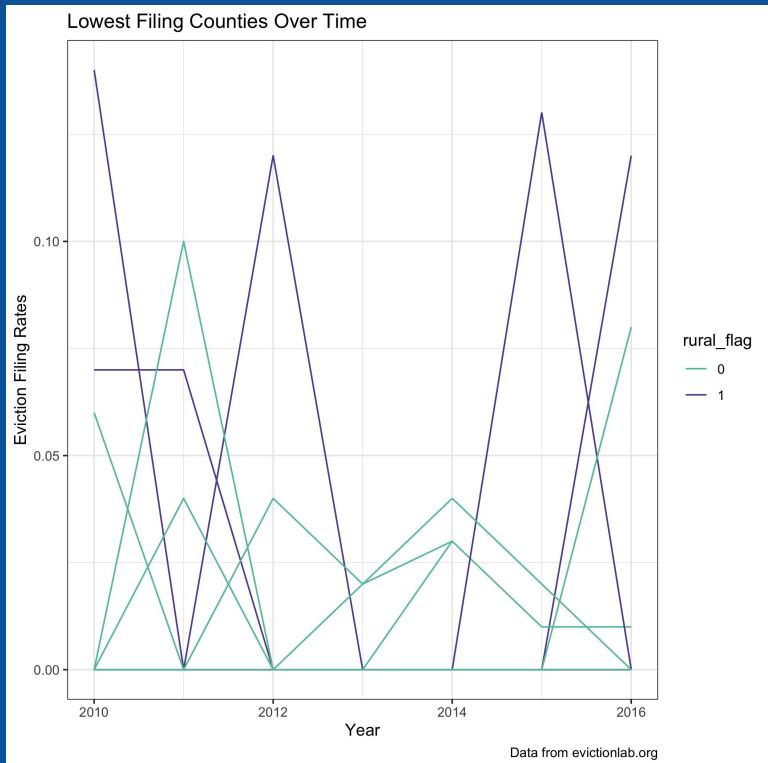
- Marion County, SC is the only rural county among the highest filing counties

Lowest Filing Counties



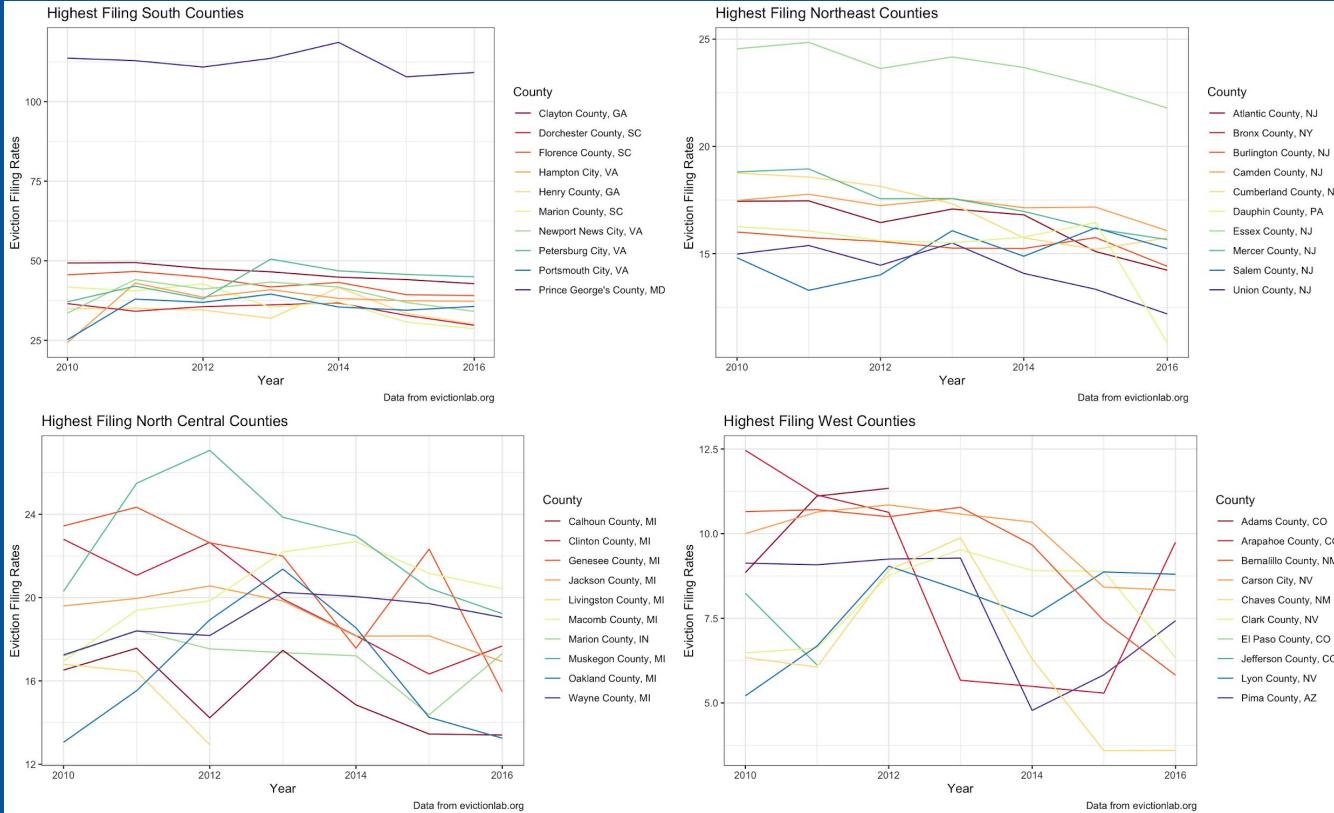
- All have an average eviction filing rate of 0.15 or lower
- Many of these counties are also in the South

Lowest Filing Counties (Cont.)

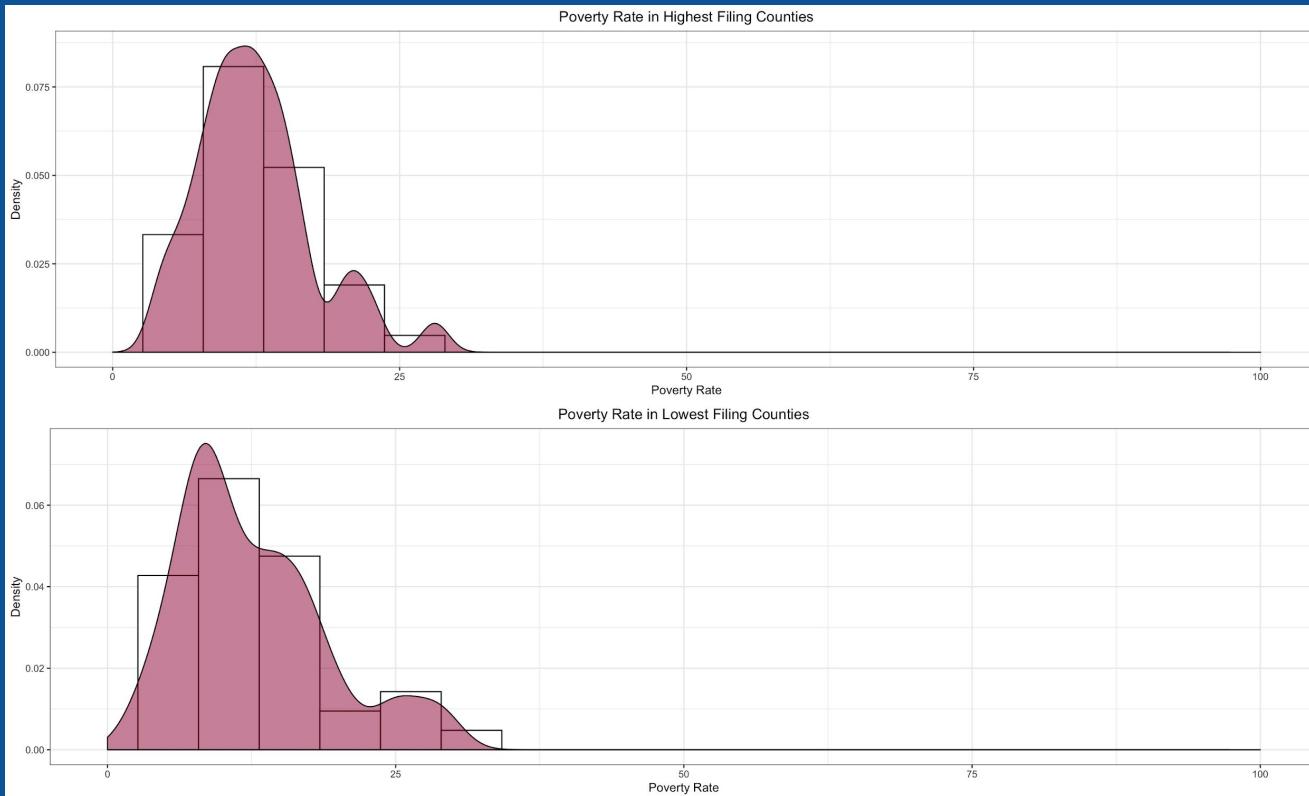


- There are more rural counties among the lowest filing counties than among the highest filing counties

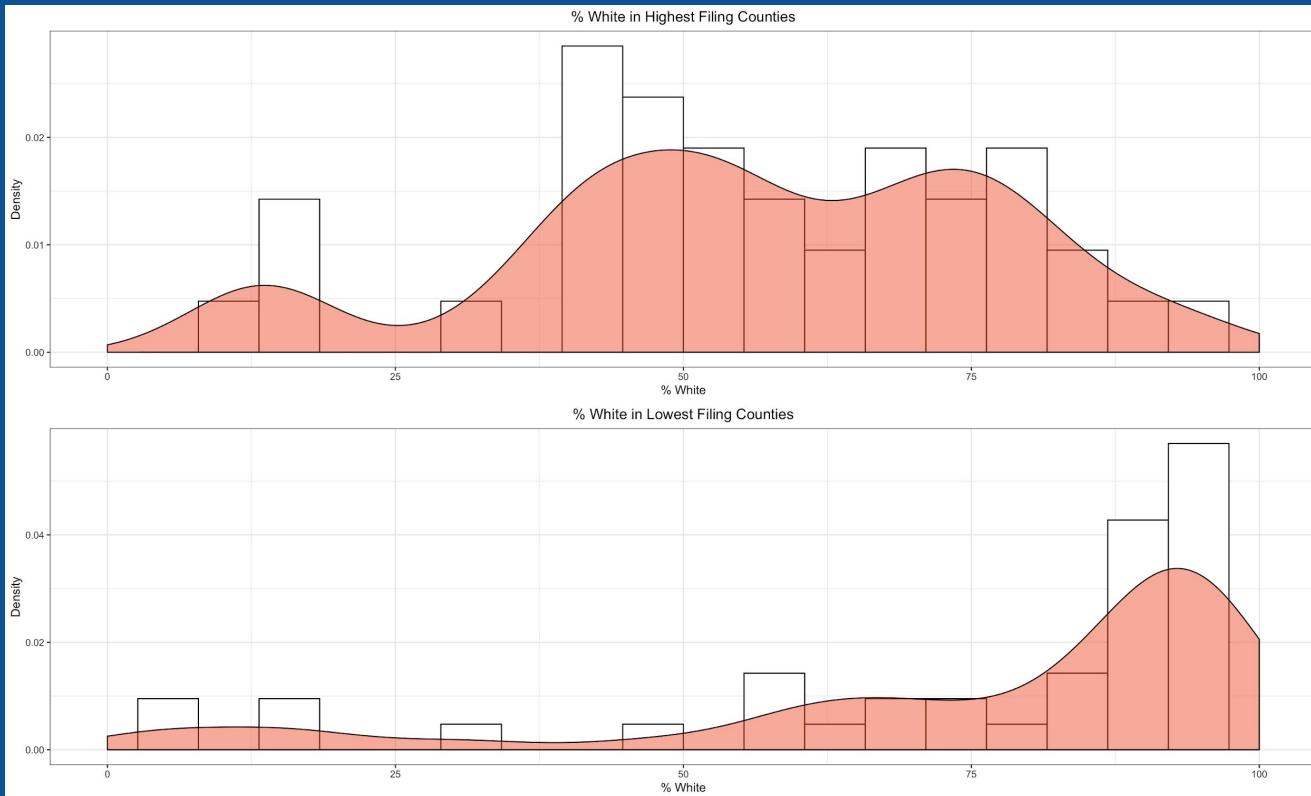
Highest Filings by Region



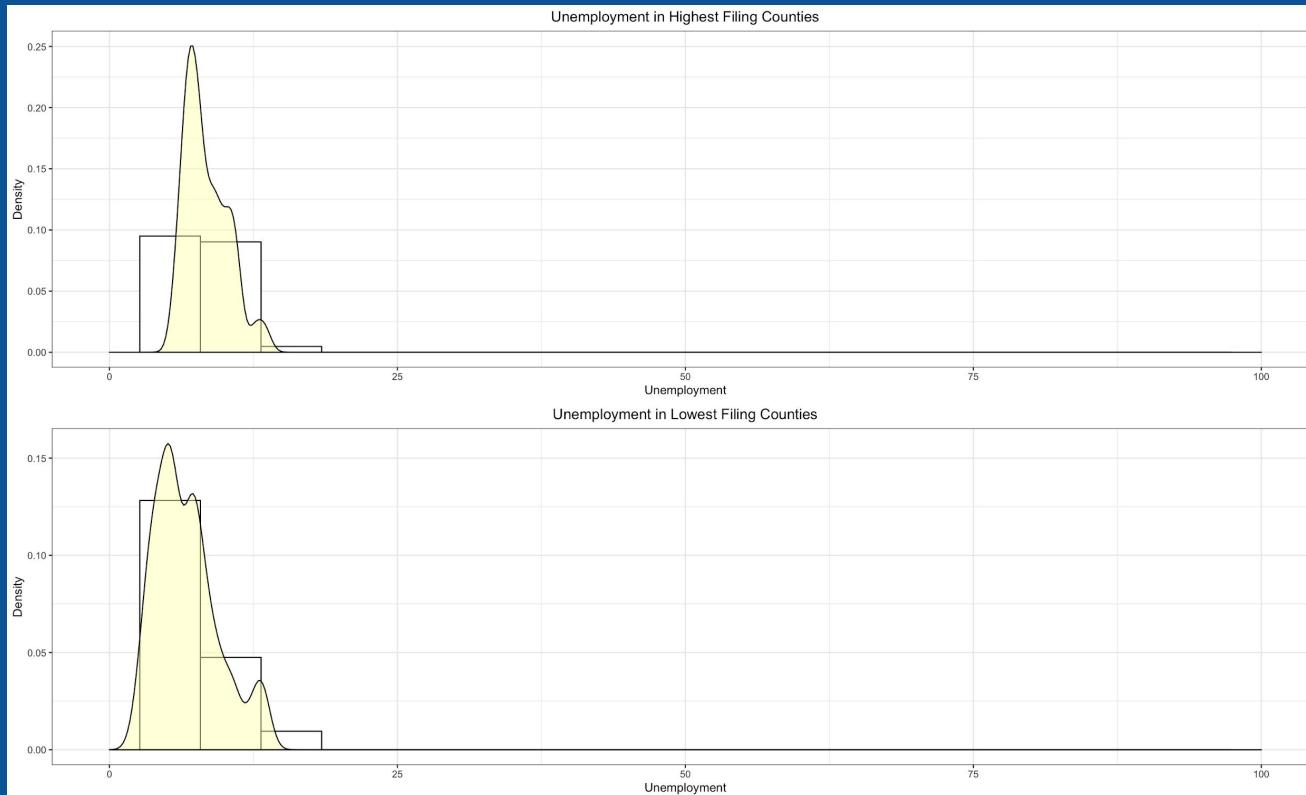
Similar Poverty Rates for Highest & Lowest Filings



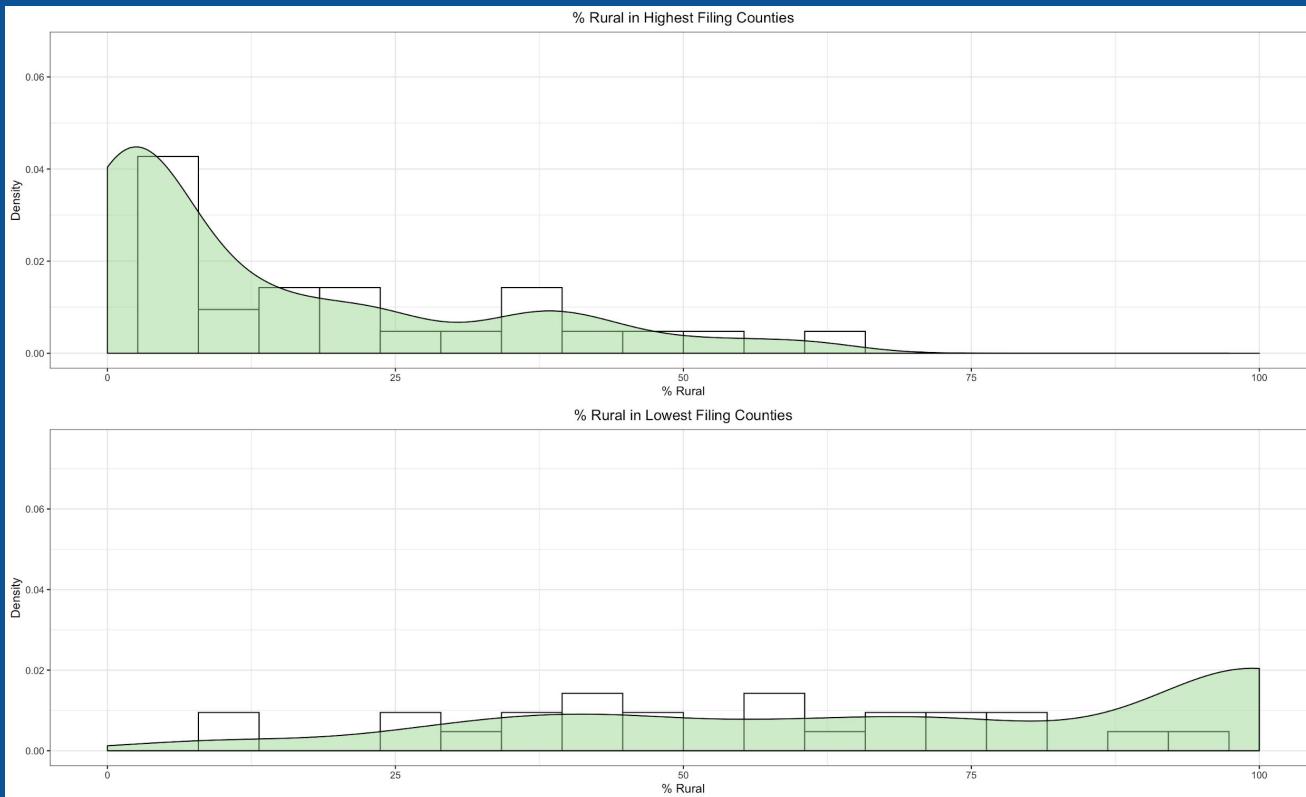
More White = Less Filings



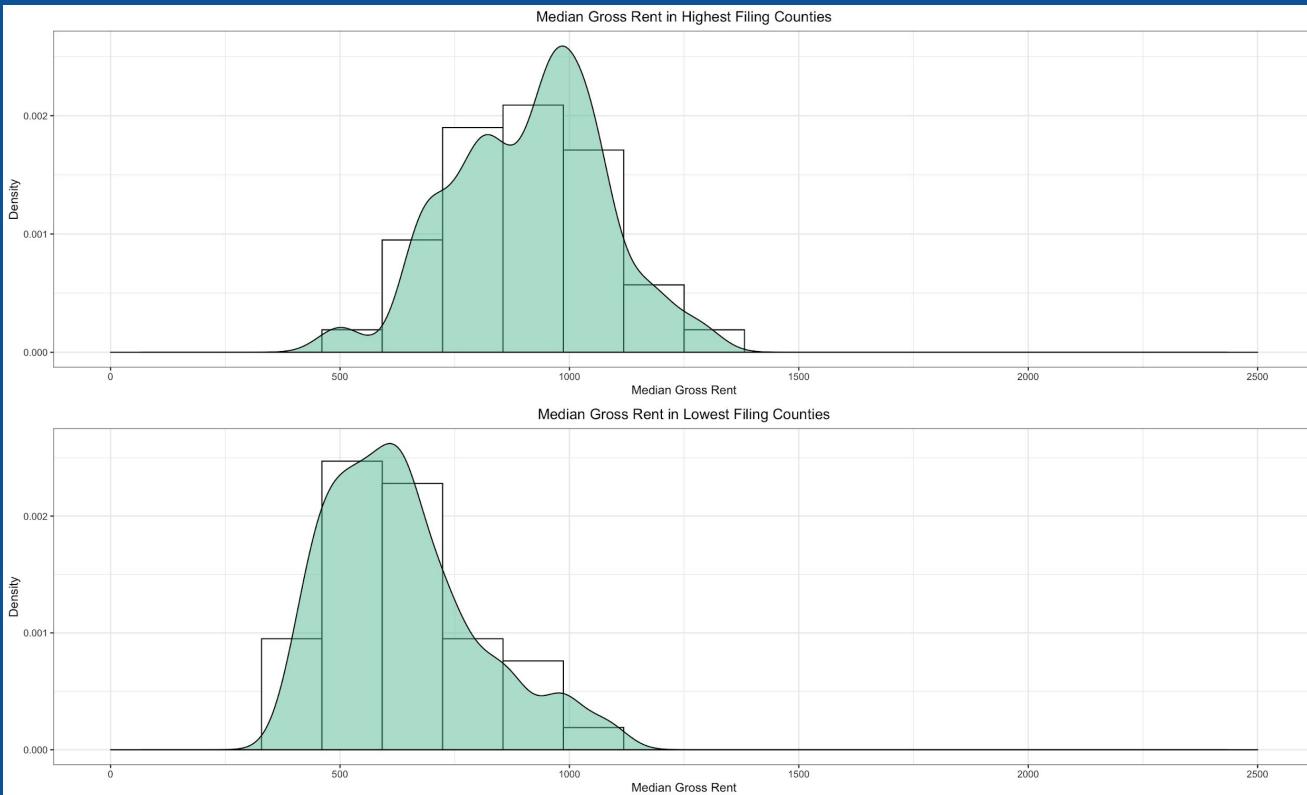
Unemployment Rate Doesn't Appear to Have Effect



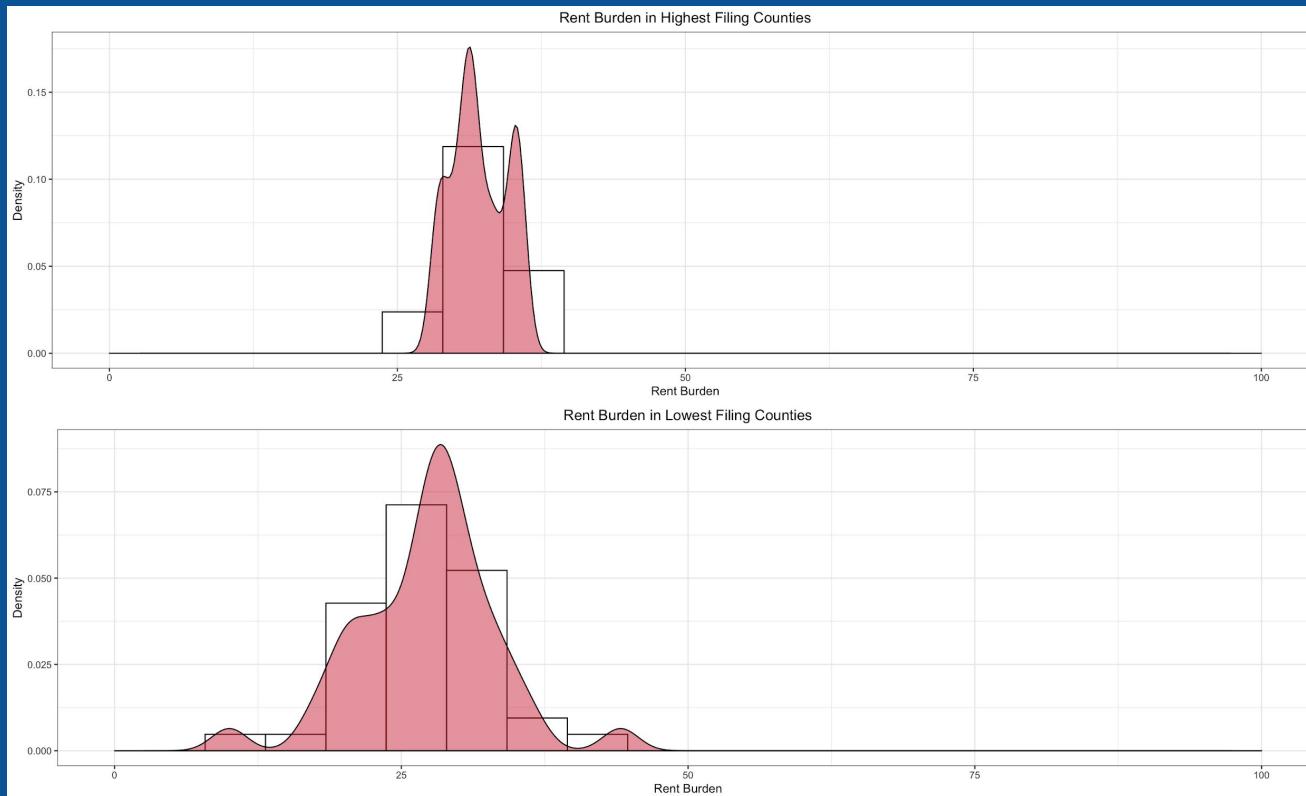
High Filing Counties Are Less Rural



Higher Filing Counties Pay More Rent

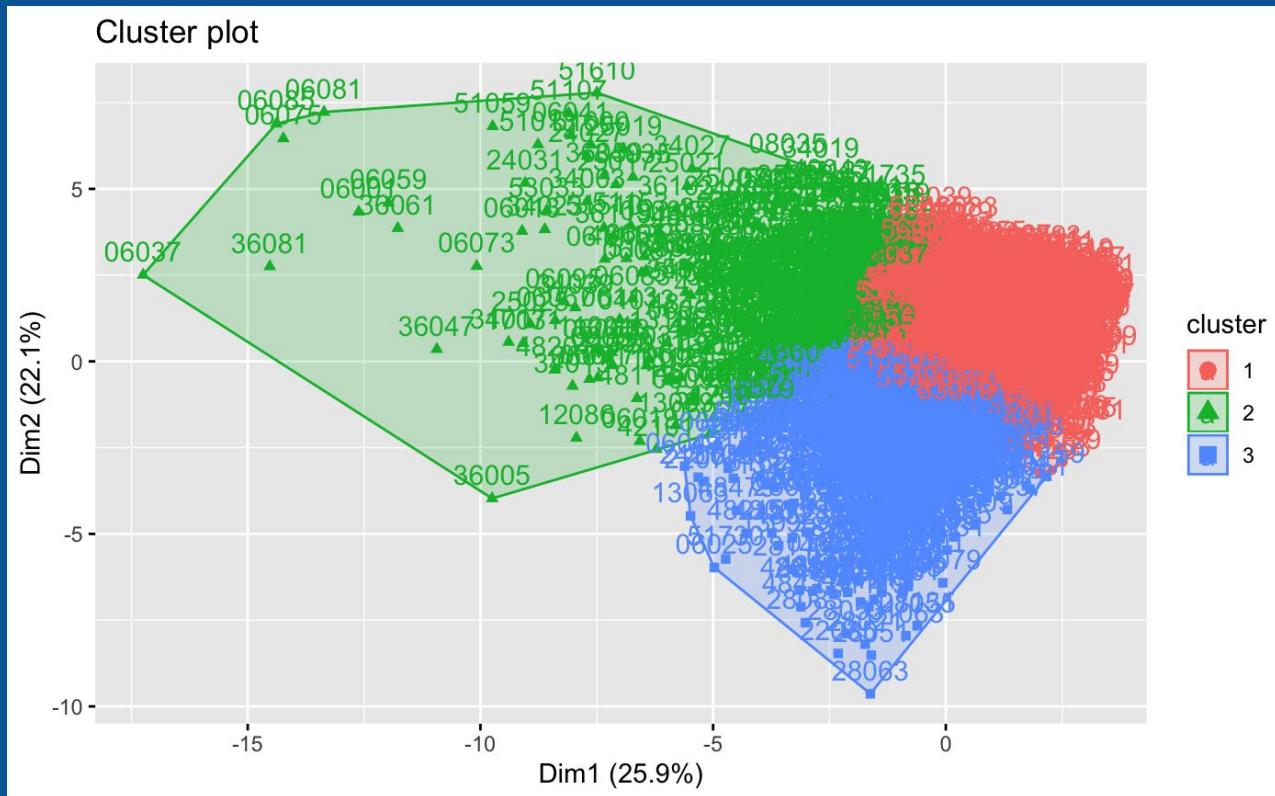


Rent Burden Concentrations



Identifying Similar Counties with K-means

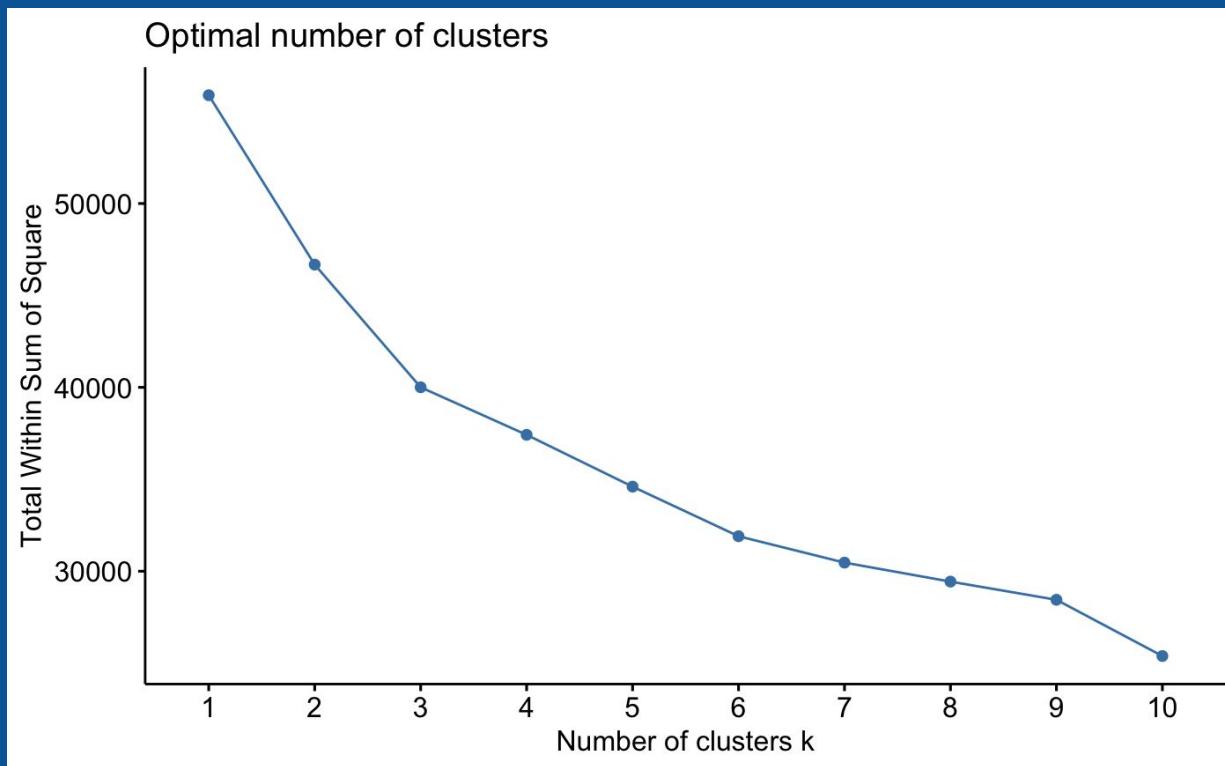
Hartigan-Wong with 3 Clusters



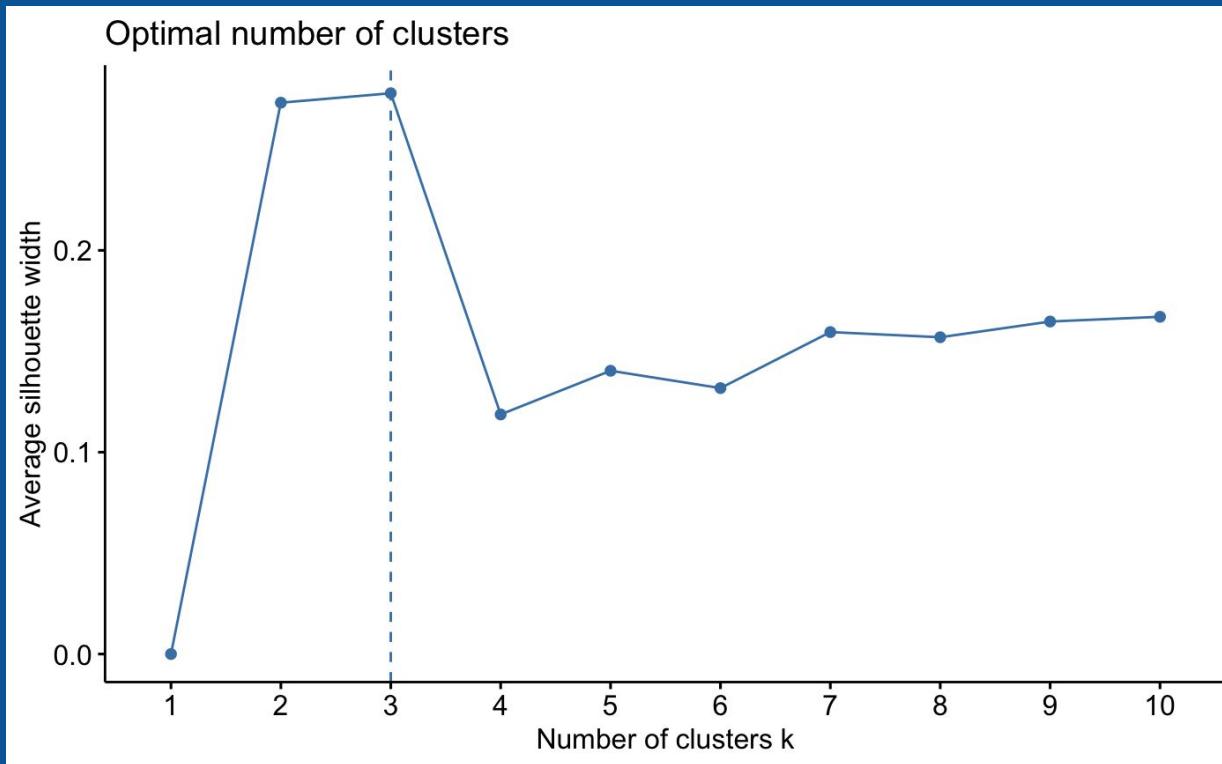
Variables Used for Classification

- Demographics of each county
 - Race
 - Income
 - Population
 - Poverty
 - Unemployment
 - Excluded eviction filings
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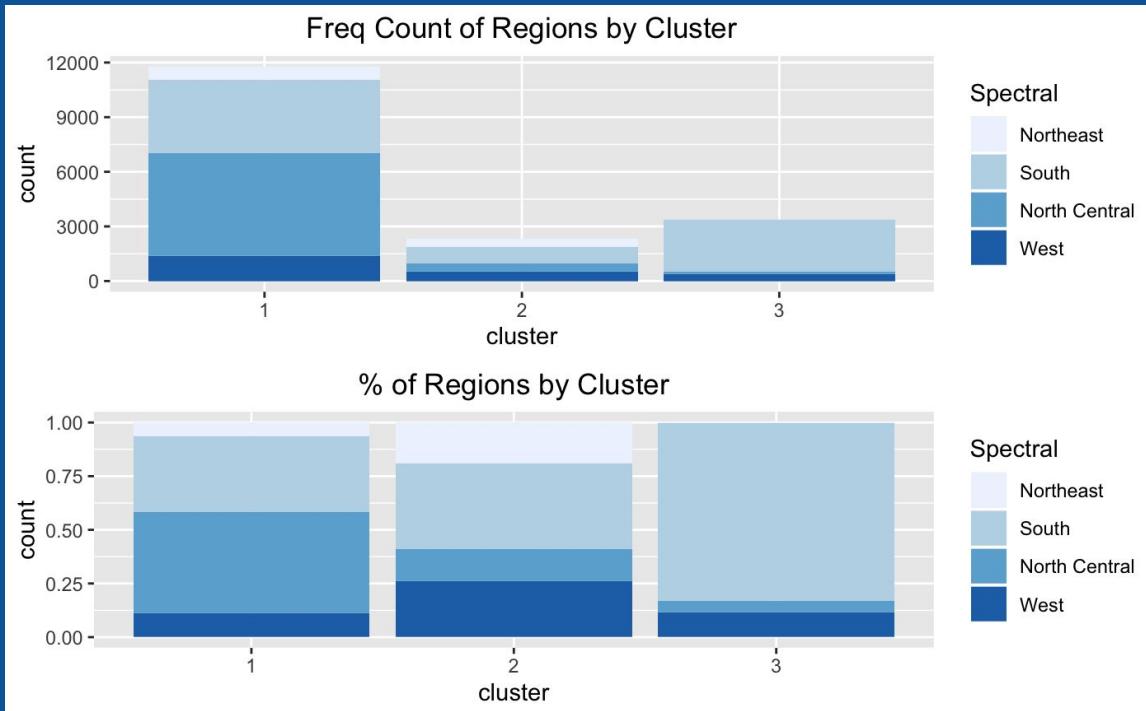
The Elbow Method



The Silhouette Method

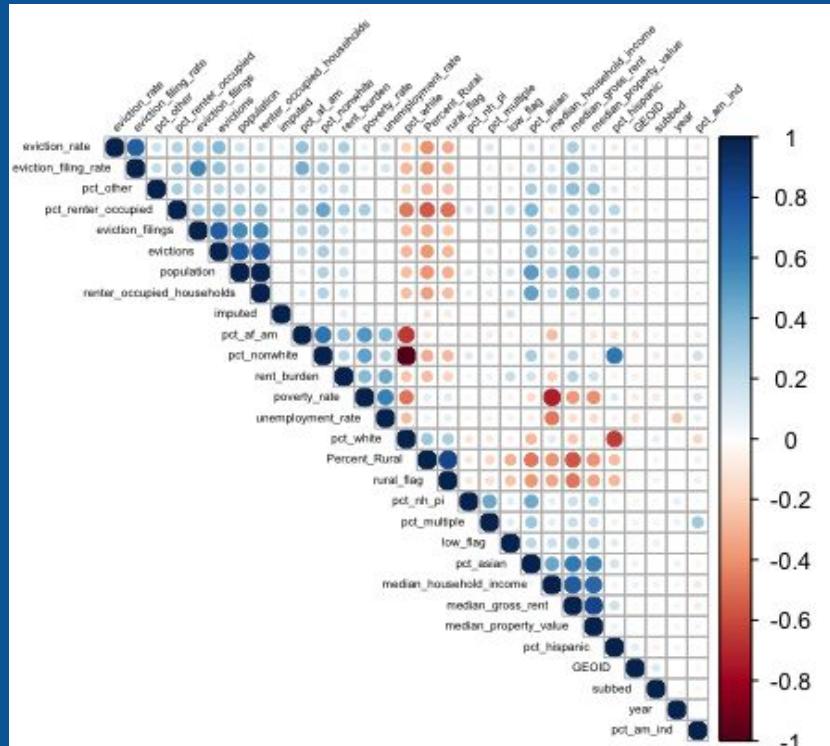


Most in Cluster 1, Majority South in Cluster 3



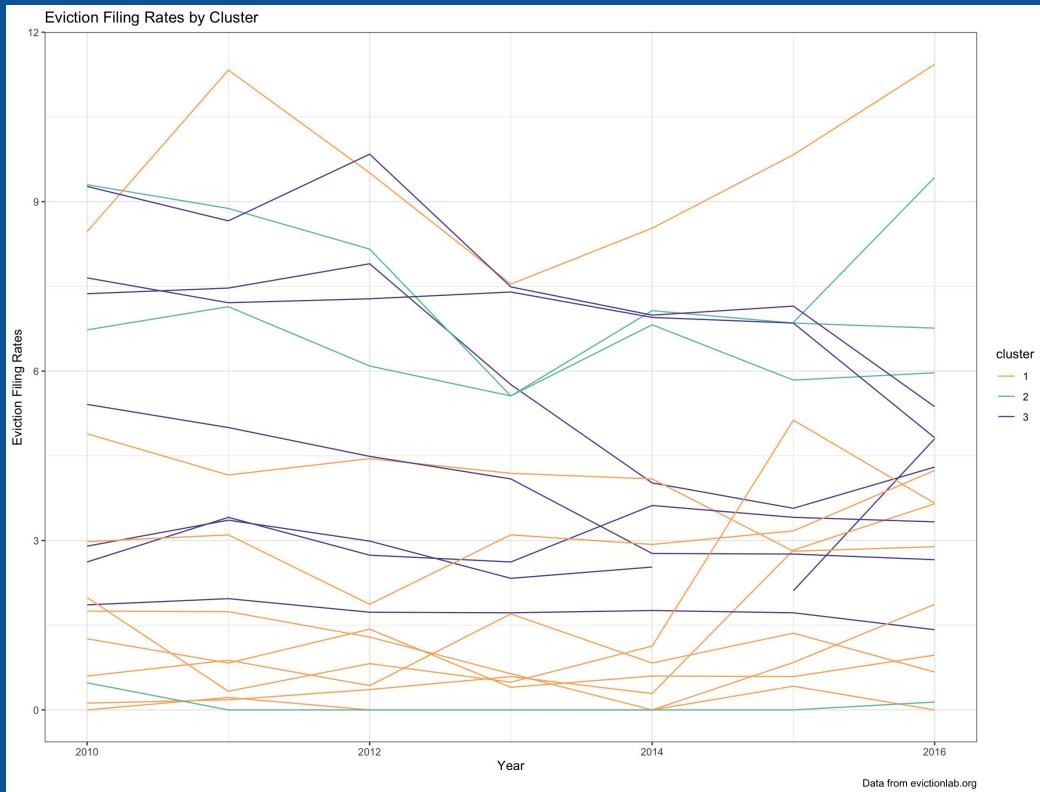
Conclusions

Rent, Rural, and Race Most Associated with Filings



- Rent Burden, % Rural, and % African American are most associated with eviction filing rates

Similar Areas ≠ Similar Impact



- When we plotted the filing rates of similar counties, we found very different trends in rates

Paradox of the South

- All of the highest filing counties are located in the South
- Yet, the majority of lowest filing counties are also in the South
- This is likely due to a combination of lower median incomes in the South, and a higher rural population

Further Analysis Opportunities

- With more data about the renters and those evicted, we can explore associations between eviction filings and:
 - Race
 - Gender
 - # of Bedrooms
 - # of Roommates
 - Monthly Rent/Monthly Earnings

Shiny App

Shiny App

Eviction Filings in the United States

Select a Year:

Select a Dataset to View:

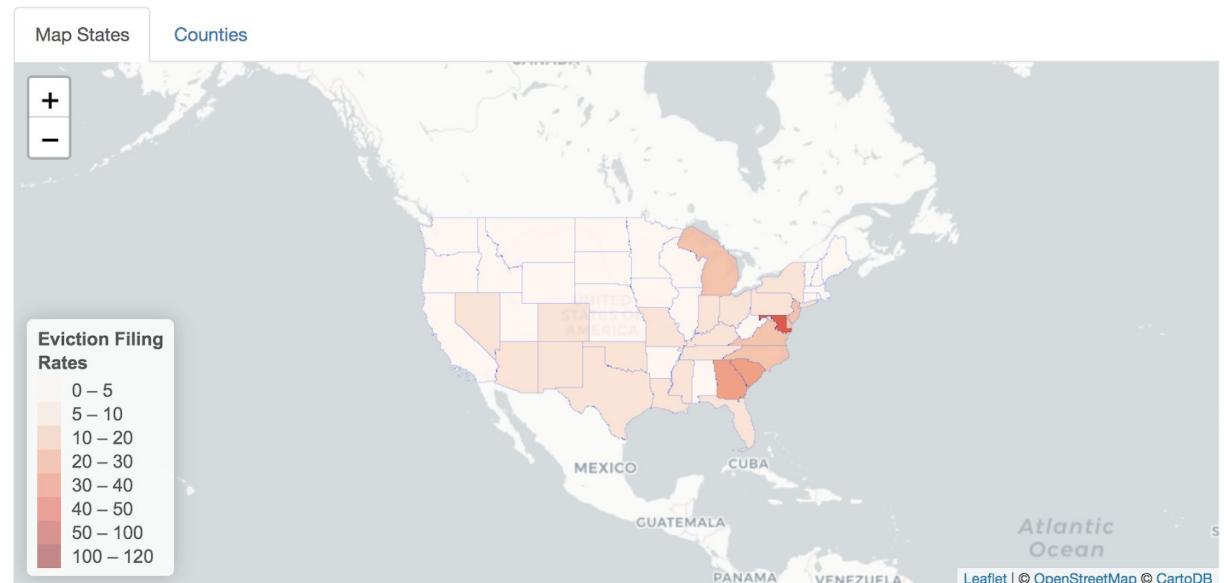
 Eviction Filing Rate
 Percent Renter Occupied

Select a State:

Select a County:

Y Variable

Create a Trendline



Thank You

Any questions?
