

## **Social, Educational, and Economic Factors that Influenced the Bernie Sanders Campaign**

### **Background**

In the 2016 election, Bernie Sanders ran for the Democratic position. He was widely known and supported by a new crowd of political activists. His ideas were very progressive and left winged, which targeted a specific group of people. Low cost health care, wealth distribution, higher wages, and most importantly free college were all a part of his idea to win the presidential election.

While Sanders did not win the Democratic seat, he did get great support from citizens across the country. These voters came from all aspects of the social, educational, and economic backgrounds. With this support came donations, the fuel that kept his campaign alive. It will be interesting to see where the donations came from more specifically and who the “target” audience was for donations.

### **State Outlines**

The states chosen for this comparison are Virginia and West Virginia. While these states are neighbors to each other and many people consider them to be similar, they are widely different. West Virginia is much less urbanized than Virginia and only has a population of 1.85 million. Virginia is much more urbanized, industrialized, and has a sprawling population of 8.32 million people in 2014.

The economies are also different in these 2 states. West Virginia is dominated by agriculture and mining. Livestock, timber, and poultry are the main producers in the agriculture field while coal and natural gas are the two producers in the mining field. Virginia on the other hand is much more diverse in its economy. While most people think of tobacco when thinking about agriculture in Virginia; livestock, soybeans, and poultry are all higher in production than tobacco. In manufacturing, the cotton and tobacco industries are at the top. Other large contributing fields include military presence, government agencies around the DC area, and fishing along the coast.

There is also a wide difference when it comes to political affiliation for these two states. West Virginia is primarily known as a red state with a background of mainly small towns. Its population is made of largely of white “blue-collar” workers. Virginia, on the other hand, is normally known as a blue state with a much more diverse population across its state. It is made of of more young college students, professionals, military personnel, and federal workers.

These are other things that need to be taken into consideration when discussing donations to the Bernie Sanders campaign.

The final difference in the 2 states is the amount of money donated to the Sanders Campaign. West Virginia made about 13,000 donations for 256,000 dollars. This is based off of their relatively small economy and right winged political affiliation. Virginia however, made 112,000 donations for 3.77 million dollars. This emphasizes their larger, wealthier economy and also points out the fact that they are a blue state.

## Objectives

The objective for this project was to find out who and where the highest donations came from. It can be used to see who donated the highest amount of money and who donated the highest quantity of times. While we are seeing where these numbers are the highest, we are also seeing where these numbers are the lowest. This could be used in the future if Sanders decided to run again or if another candidate runs with the same principles as him. It would be beneficial to cut out the areas with no donations and target areas with higher donation numbers. Campaign strategies might change based on the data analyzed from this report.

## Characteristics

We used some specific criteria to outline and emphasize the breakdown of who donated to the Bernie Sanders campaign.

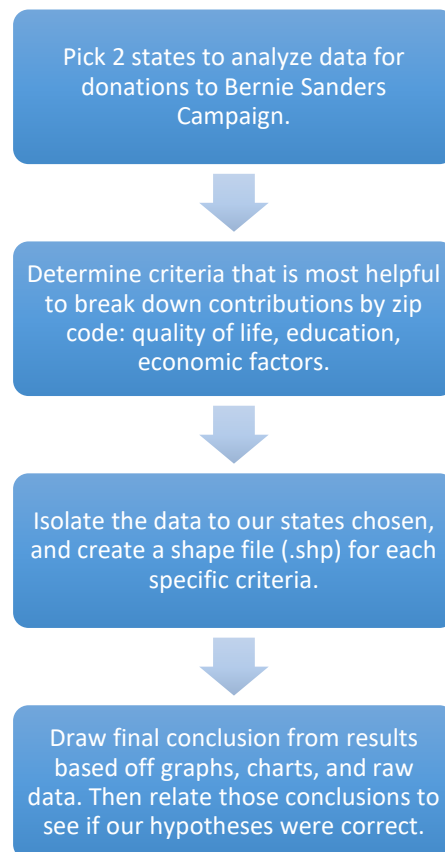
- 1) Quality of Life:
  - a) Net worth
  
- 2) Education:
  - a) Less than High School Degree
  - b) High School Degree
  - c) College Degree
  
- 3) Economic Conditions:
  - a) Income
  - b) Rural vs Urban

## Hypotheses

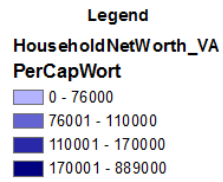
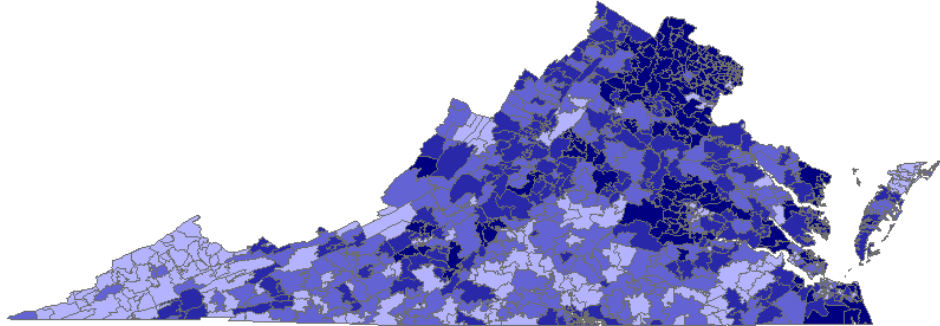
**Hypothesis for Amount per Donation:** We hypothesize that zip codes with a net worth and income per capita in the 75<sup>th</sup> percentile in addition to a population having more than 50% having earned a college degree donated greater than or equal to \$27 per donation.

## Methodology

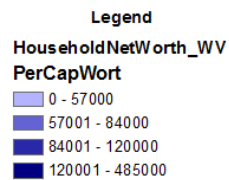
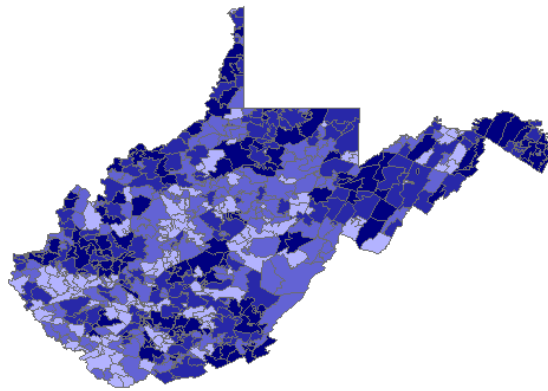
We selected 2 states that we thought would have interesting demographics and differences in donations to the Sanders Campaign. From here we used different layers to see where the donations lied in the states and different files to compare them.



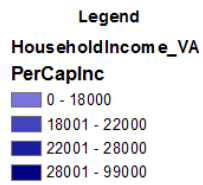
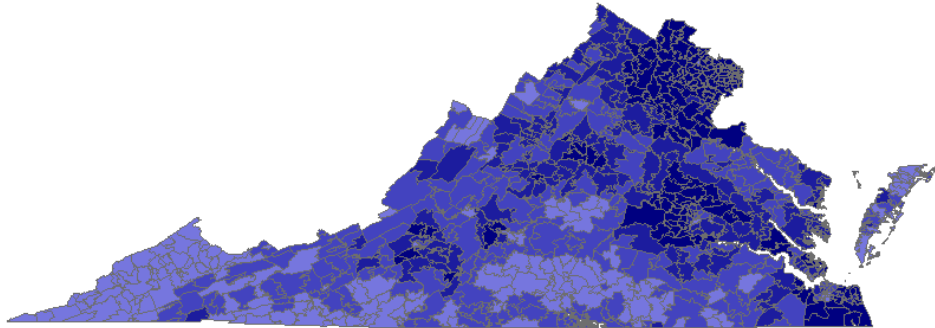
## Net Worth per Capita - VA



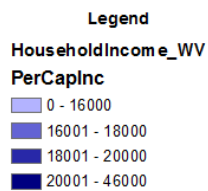
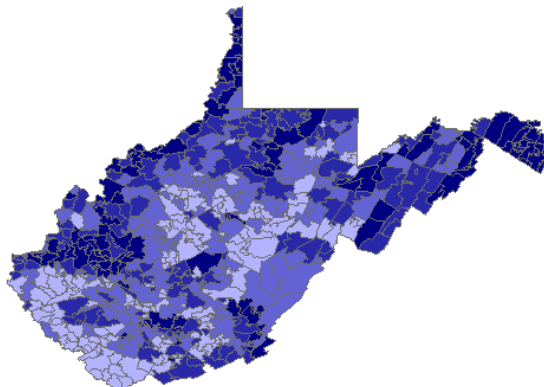
## Net Worth per Capita - WV



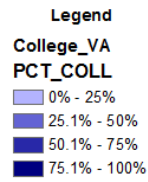
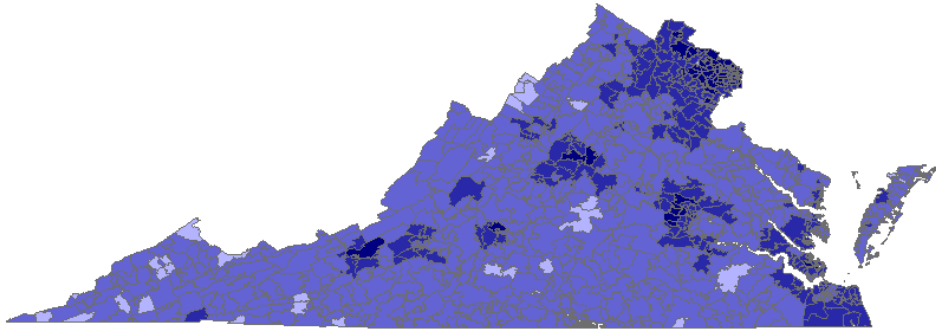
## Income per Capita - VA



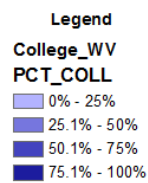
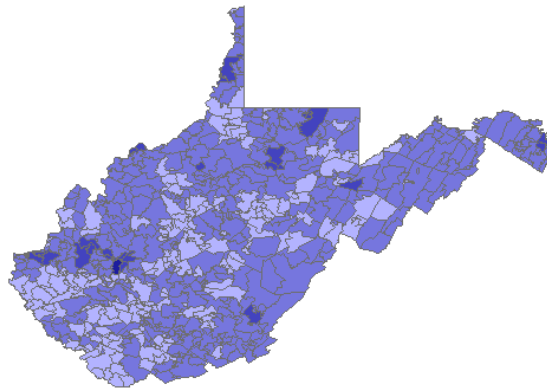
## Income per Capita - WV



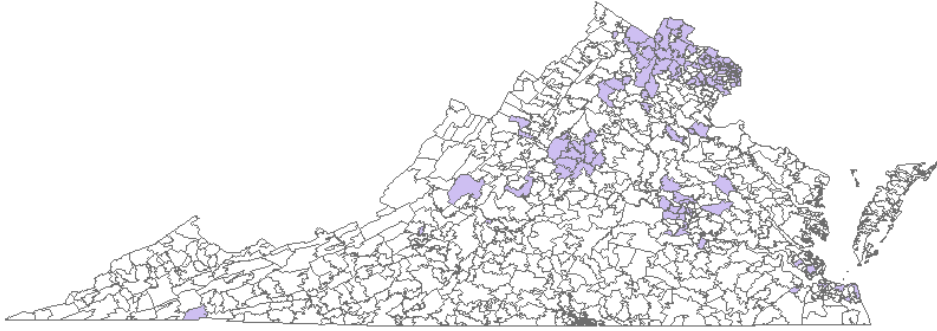
## College Education - VA



## College Education - WV

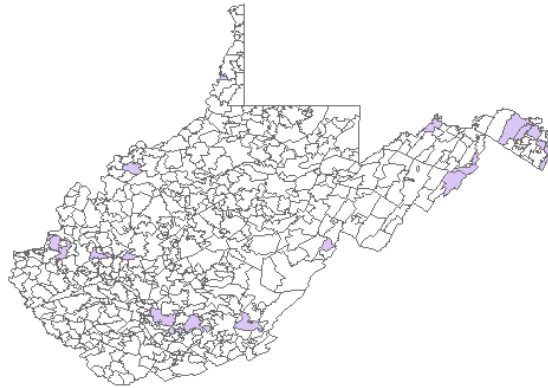


# Hypothesis - VA



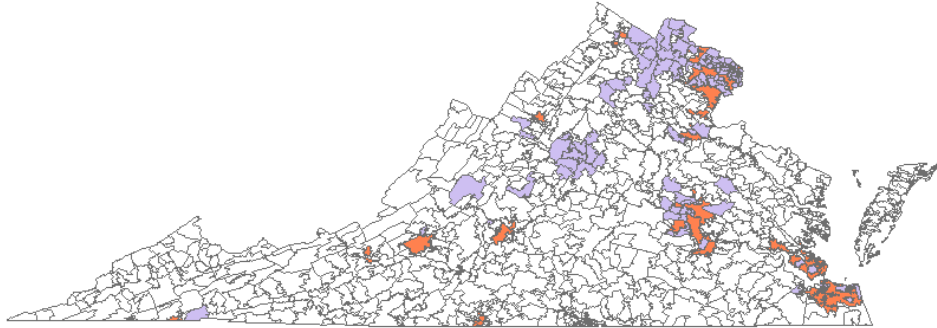
**Legend**  
VA\_Hypo

# Hypothesis - WV



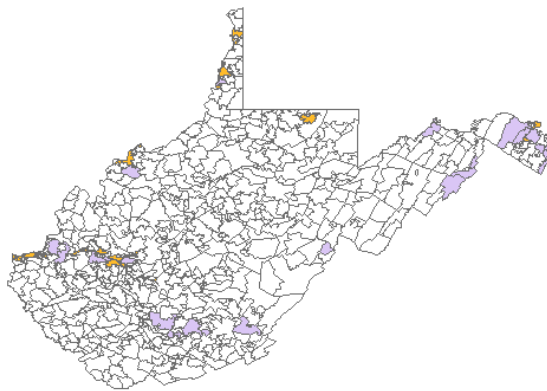
**Legend**  
WV\_Hypo

## Hypothesis vs. Urban - VA



**Legend**  
VA\_Hypo  
UrbanArea\_VA

## Hypothesis vs. Urban - WV



**Legend**  
WV\_Hypo  
UrbanArea\_WV



## Discussions

It is known from previous studies that white, blue collar working Americans were the most likely demographic to vote for Donald Trump. We can infer that white, blue collar working Americans had little correlation with contributions to the Bernie Sanders campaign; this, in part, is the reason these measures were not included in our study. Instead we focused on measures that we were uncertain of how they affected the Bernie campaign.

We chose the states we did because of the drastic contrast in measures between the two states. Virginia is a state with a much higher level of education than West Virginia, as well as higher percentage of urban areas and net worth. Age was left out of our study because of lack of consistent data available. Since the most recent age census taken is at least 6 years old, we would be missing a portion of age groups that would be needed to fully analyze the data set and find correlation to donation amounts.

As expected Virginia had a much higher quantity of donations than West Virginia; as well as total amount donated. It was found that the people of Virginia donated a total of \$3.77 million through 112,000 individual donations. Virginia had around 8.6 times more individual donations throughout the campaign than West Virginia and around 14.7 times more total amount donated to the Sanders campaign than West Virginia. We expected Virginia's numbers to be greater than West Virginia; however the scale of our results were unexpected. This great difference in donation amounts could be because of population density. Virginia is a state with much more urban area and a much greater population. Urban areas have a higher concentration of educated people. The fact that the majority of donations comes from urban areas from individuals with a college degree supports our hypothesis.

Race was also a measure we chose to ignore. One reason being the relative homogenous distribution of race throughout our two chosen states. Both states are a predominately white so we felt that any conclusions that could be made may not accurately depict how race affected the contributions to the Bernie Sanders campaign. A state like Florida would have a larger distribution of race; this would create a better depiction of how race affected the Sanders campaign.

Instead we looked at measures where we knew reliable data was available. We wanted to know what demographic contributed over the national average donation of \$27. We looked at each states income and net worth that were originally broken up by households. We wanted to look at both income and net worth but per capita. To do this we took the income and net worth of each state and divided it by people per household of each relative state. However, our data containing people per household also included infants and children. This means that our data potentially has children with an income/net worth which is inaccurate.

## Conclusions

### **Virginia:**

In summary, our hypothesis of zip codes with a net worth and income per capita in the upper 75<sup>th</sup> percentile who earned a college degree totaling to 121 zip codes of the total 163 zip codes that had an average donation of at least \$27. Our designated hypothesis accounted for 74.23% of the zip codes that exceeded the national average donation amount of \$27 which further confirmed our hypothesis for much of the population. Additionally, the 121 zip codes aligning with our hypothesis are among the 846-total amount of zip codes in the state of Virginia. The zip codes of our hypothesis make up 14.3% of the state's zip codes which relates to the entire state level opposed to our specific hypothesis.

### **West Virginia:**

To conclude, our hypothesis of zip codes with a net worth and income per capita in the upper 75<sup>th</sup> percentile who earned a college degree totaling to 19 zip codes of the total 33 zip codes that had an average donation of at least \$27. Our designated hypothesis accounted for 57.57% of the zip codes that exceeded the national average donation amount of \$27 which further confirmed our hypothesis for much of the population. Furthermore, the 19 zip codes coinciding with our hypothesis are among the 579-total amount of zip codes in the state of West Virginia. The zip codes of our hypothesis make up 3.28% of the state's zip codes which relates to the entire state level opposed to our specific hypothesis.

## Works Cited

Stewart, Carolyn. "US Census Bureau Publications - Census of Population and Housing." Census of Population and Housing - Publications - U.S. Census Bureau. <https://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf> N.p., 19 Aug. 2011. Web. 08 Apr. 2017.