

Reversing the Polls: Mapping the American Political Landscape

Project 2, Group 1 Proposal: Ramiro Cadavid, Jennifer Mahle, Alex West

The United States political landscape has changed drastically in the past decade. Premises once thought to be “given” proved themselves false in the November 2016 election. Pundits across the country and on both sides of the political spectrum were proven wrong, and we are all still trying to make sense of the new reality. Our group members are located in three locations that afford unique perspectives: Alex in Michigan, a state that surprised everyone (unless you lived there) by flipping from blue to red, Jennifer in Washington DC, which voted overwhelmingly democratic and must host an administration it does not support, and Ramiro in Medellin, Colombia, looking in from the outside and asking the most difficult questions of all: what happened, and how?

This is not a new area of research. There have been so many attempts to tackle this phenomenon from almost every angle. Journalists, academics, and data scientists have taken swings at it, with mixed results. We are not proposing that this attempt will answer the question at all, rather, we are proposing to zoom out even further, and attempt the use this project to describe the American political landscape to outsiders, utilizing 2012 and 2016 election results, US Census demographic data, and Bureau of Labor Statistics employment data to tell a story.

Research Questions:

We will first start by looking at which states voted democratic or republican in 2012 and 2016. Which states flipped from democrat to republican, and vice versa? Then we will compare that to state-level employment in key categories and other metrics in 2012 and 2016. Did changes in voter turnout, types of employment, or level of education coincide with changes in voting behavior between 2012 and 2016? We intend to look at voting behaviors in 2012 and 2016 by sex, age, race, employment status, class of worker, disability status, family members, family income, marital status and veteran status to understand state-level changes in voting patterns.

Data Sources and Methods:

The research questions described above will be answered using employment and voting data from three different U.S. government sources, joined by the state variable. [Election results](#) data from the Federal Elections Commission for the years 2012 and 2016 will be used to describe the state of voting in the last two elections and the main changes and trends observed between them. We will use the following variables from this source: state name, presidential popular vote and presidential electoral vote.

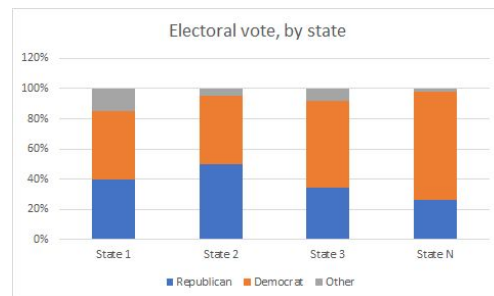
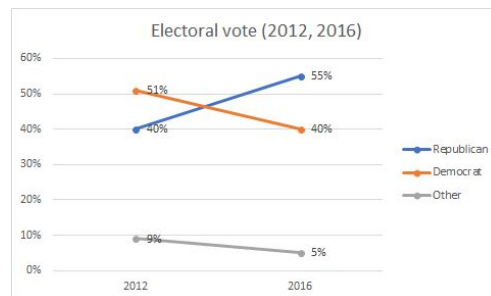
[Voting and registration](#) data from the Census Bureau will be used to describe the main socio-demographic and economic characteristics of voters and their voting patterns, and to

explore the relationship between these characteristics and the elections results. To explore these patterns, we will use reported voting and information segmented by sex, age, race, employment status, class of worker, disability status, family members, family income, marital status and veteran status.

Finally, we will use [Occupational Employment Statistics](#) (OES) data from the Bureau of Labour Statistics, that contain annual estimates of employment and wages for over 800 occupations at the national and state level. We will use the subset of 2012 and 2016, focusing on the following fields that might explain the results of this election and help segment the results geographically: state name, Standard Occupational Classification (SOC) code, SOC occupation level, estimated total employment, percent of industry employment in the given occupation, number of jobs (employment) in the given occupation per 1,000 jobs in the given area, and hourly and annual wages for the 10th, 25th, 50th, 75th and 90th percentiles.

Preliminary Plots/ Figures/ Tables:

- Description of voting results
 - Presidential election results, by party, year and state



- Voting results and socio-demographic variables
- Voting results and economic variables

Outline of Final Paper:

The final report will introduce the problem, and cover the basics of the research that already exists, setting the stage for what this project will cover. It will then present the research questions, detailed analysis, and findings. Following the analysis will be a complete overview of the process taken to obtain the findings, discussing data sources, cleaning, and challenges faced. Finally, the conclusion will take the analysis one step further, discussing why it's important to explore questions like this, and possible further areas of research.