## Project Title

## Red County, Blue County: Are There Correlations Between a County's Demographics and How It Votes?


#### Abstract

Objectives/Goals Abstract The goal of my project is to see if correlations exist between a county's demographics and whether the majority of the county votes conservative or liberal in elections. My hypothesis is that if a county has a larger and more ethnically diverse population, a higher median income and a higher high school graduation rate, then the majority of the county will tend to vote liberal.

\section*{Methods/Materials}

I obtained demographic data from the US Census Bureau for all of the counties in California, Missouri and Virginia. I then compared the data to how each county voted on a specific ballot measure using a modified box-and-whisker plot. I then graphed the data. The measures I analyzed were chosen because they were hot topic issues and had clear conservative or liberal positions.

\section*{Results}

In two of the three states which I analyzed, counties with a larger population usually voted liberal and counties with a smaller population typically voted conservative. In two of the three states, counties with a more ethnically diverse population often voted liberal and counties with a less ethically diverse population mostly voted conservative. In two of the three states, counties with larger median incomes mainly voted liberal and counties with smaller median incomes generally voted conservative. Lastly, in all three of the states, counties with higher high school graduation rates normally voted liberal and counties with lower high school graduation rates largely voted coservative.

\section*{Conclusions/Discussion}

My hypothesis was mostly correct. I found four correlations between how counties vote and their demographics. A county's population, ethnic make-up and median income moderately correlate to whether the county votes conservative or liberal. A county's high school graduation rate, however, correlates even more strongly to whether the county votes conservative or liberal.


## Summary Statement

The goal of my project was to see if correlations existed between a county's demographics and whether the county voted liberal or conservative.

## Help Received

Mr. Schwing and my science teacher helped with board display and an analysis question. Parents helped layout board.

