For my project I had initially no idea on what I should do, I had an idea that maybe I could find some correlation between large amounts of crime, low amounts of education and the rate of re-election of our incumbent politicians. I had expected to find a diamond in the rough, and prove that our voting system was broken and had been infiltrated by high-school drop-outs and criminals. I actually found that nothing, not even the number of people actually voting, was correlated with the incumbency re-election rate. So I scrapped that idea, not willing to delete my binary incumbency data, but going on a new road anyways. One night I randomly thought of ACT/SAT scores, and thought that this could possibly correlate with my toilsome incumbency data...alas this too was not correlated. I wonder what actually is correlated with the percentage of our wise, good-hearted politicians being re-elected. Anyways, now that that horse finally died I found that I actually had rounded up quite a large amount of data that was actually correlated, but I was asking the wrong question. Rounding up all that data was actually quite easy, once you knew what to look for. Mostly I found my information on census.gov, and other .org or .gov sites, I took a lot of political information from politico.com as they have a real-time election result page.

So essentially I decided to find out which state would be the safest, smartest, and have the most promise for my family. I found which states had the most poverty, unemployment, education, crime, and active voter-ship (which to me indicates an active/healthy community), I divided these variables into our political dichotomy and spun my terrible incumbency data into the mix. When organizing my project I tried to make it as user-friendly and fast as possible...I thought of many ways of improving the flow of the project after I had finished making everything, I would like to know the p-value associated with God's humor. Anyways, so I started studying which of my variables could possibly help influence and, dare I say, predict how a state would do with SAT and ACT test scores.

For interesting descriptive statistics I didn’t find much, but for one I was surprised to find that the mean of GOP voters was 50% and DFL voters 48%, while the median of each is 48% and 50% respectively. I shouldn’t be too surprised as each have a CV of .2 and over. My other surprise came with my incumbency data, I did not realize how many states have a 100% re-election rate, I wouldn’t be surprised to find out how long this trend has been going on.

I found many interesting correlations, the paradox between Democratic/Republican voters, ACT and SAT scores was thrilling. I have some speculation as to why ACT scores increase as DFL voters increase, and how ACT scores decrease as Republican voters increase. Or how SAT scores increase as Republican voters increase, and decrease as Democratic voters increase. However that niche remains speculation, and in the interests of this project, a mystery. There are some close calls, some other variables were almost correlated with voting choices, but not close enough to speak more of. Next we have Unemployment, it has a moderate positive correlation with population size, which isn’t a surprise, however it was interesting to find a moderate negative correlation with the rate of high school graduation, it wasn’t very surprising, but interesting anyways. Another interesting item was the moderate positive correlation between percentage of people actually voting and high school graduates. I should have known that the graduation rates would have a possible connection with the rate of voter-ship, still very interesting. The number of violent crimes reported having a considerable negative correlation with the rate of high school graduates was a surprise, but it looks likely that the more education we have, the less violence we have (reported). Also, the more education we have the less poverty we have, and property crimes reported. Education just means less crime, less poverty, less unemployment, and more activism, that was very interesting to find out.

For my hypothesis tests, I was absolutely sure I could prove that Democratic states were better to live in. I found it very interesting to find that despite all my data, correlations, and easy to see information stating how bad some of the “red” states were (like Texas), my hypothesis were still unable to be proven due to P-values of too much value. I was interested to find that some Democratic states had such low education and high reports of violent crime (Illinois) but I guess Chicago does that to a state. It was interesting to find that my hypothesis about ACT scores, Poverty and how a state voted turned out to be so easily proven. From this perspective it seems like it really makes a difference on how people vote, but this could also reflect how educated people make educated decisions (if only more people voted for a third party, that would make an amazing study).

I began my regression analysis by using the step-analysis excel file, and I found that I had multiple interesting r-sq. So I made multiple regressions, and displayed them in the regressions tab. I had initially planned on making an analysis for each, however I quickly found how much time this would take and was relieved to find I only needed to analyze one. I was interested to find that three independent variables were correlated enough to be predictors for ACT scores. I was thrilled to have such interesting data to rummage through. For further description of this analysis, I encourage you to read the analysis found here.

In conclusion, it seems obvious that our country needs more education to help deter poverty. We also need a more multi-faceted decision making system to break the dead-lock we always seem to be in. We are all in the same crashing airplane fighting over who should be flying, it’s easy to see that with more education we would be able to see how foolish that image is. I has been my pleasure to present this for you, I sincerely hope it was worth the time.