

## Intro

Many of the ‘bluest’ cities and towns in America house a variety of universities and colleges. We began our data analysis investigation interested in investigating the impact Duke and other university students have on the elections of Durham and North Carolina. After parsing and exploring the data, we came away with a couple of questions to further pursue. How have NC Duke student registration numbers changed over time? How does this compare with the number of Dukes students who ended up voting in North Carolina? Likewise, we were also interested in looking into how political party affiliations and voting habits have changed over time.

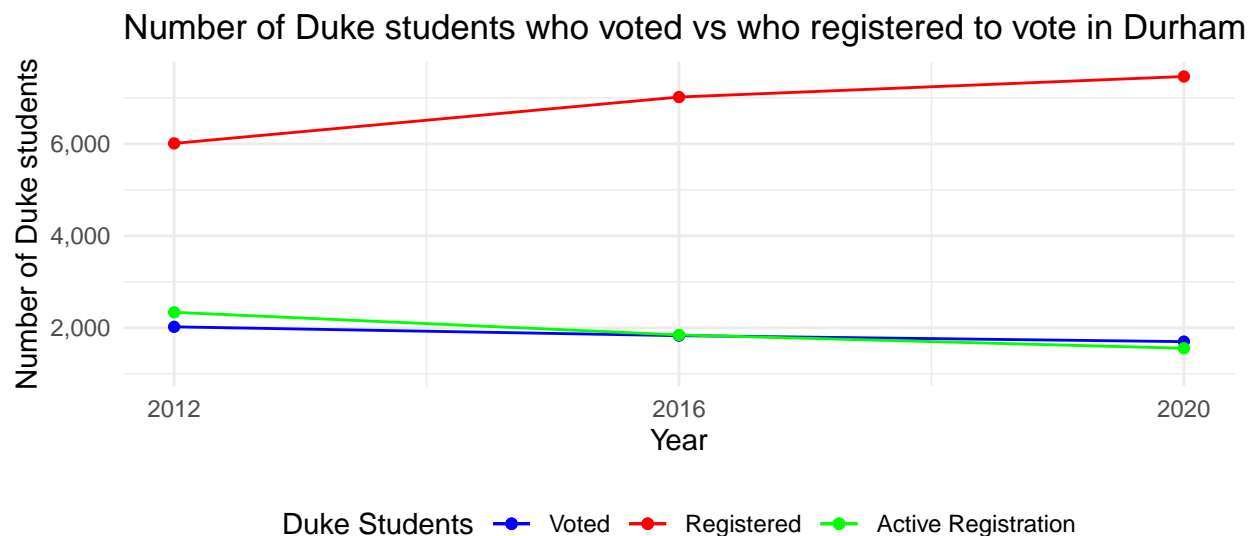
## Methodology

To begin, we needed data. We ended up using NC voter registration data and NC voter history data. However, nowhere in our data sets was there a column for Duke Student: Y/N. Therefore, we needed to find some sort of heuristic to approximate what constitutes a Duke student using the data we had available. After some trial and error, we ended up classifying Duke students as those whose mailing addresses were located on Duke’s campus. The specific methodology is as follows:

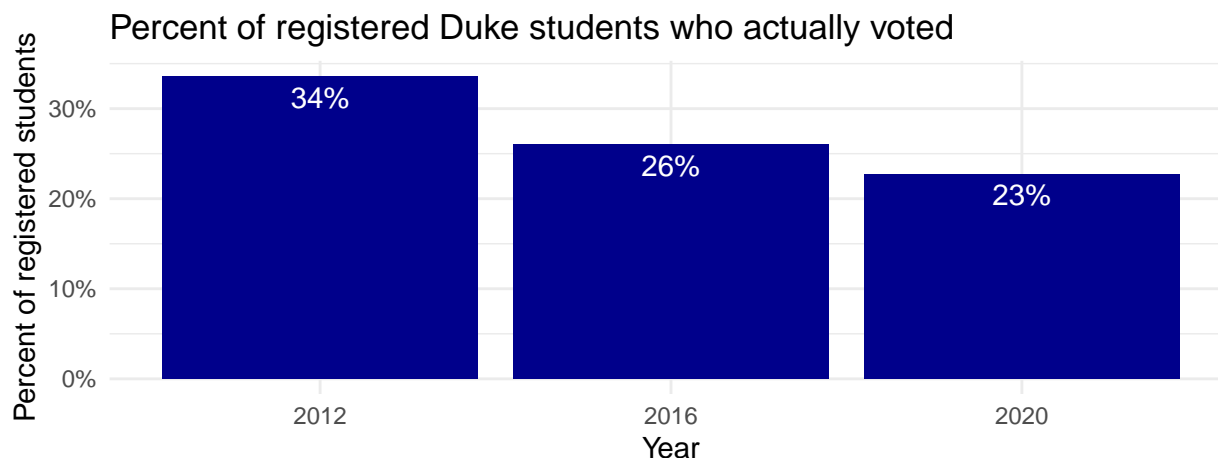
- The mailing address must specify a voter lives in a dorm named: “Bassett”, “Epworth”, “Few Quad”, “Gilbert Addoms”, “Giles”, “Jarvis”, “Maxwell”, “Mirecourt”, “Pegram”, “Randolph”, “Randolph Hall”, “Round Table”, “Southgate”, “Wayne Manor”, “Wilson”, or “Wannamaker”.
- Otherwise, the street name must be one of the following: “Duke University West Campus”, “Duke University East Campus”, “Towerview”, “Alexander”, or “Yearby”.
- Finally, we also looked at two special cases: Duke-owned apartment 300 Swift, and the few outliers that were located on Campus Drive.

All of these decisions were driven by an exploration of the data and looking at where high numbers of young people were concentrated near Duke’s campus. Because our analysis only looks at registered voters in Durham county, NC- we are not considering any of the students who may have decided to vote in their home county or state. After classifying who the Duke students were (within our methodology), we were ready to begin our analysis.

## Analysis



First, we looked into how many Duke students actively registered to vote during the presidential election years. Interestingly, it seems Duke students were the most motivated to register to vote in the 2012 election. It would be interesting to investigate further whether this is true- and dig into why, or if this can be attributed to the methodology we used to classify Duke students in 2012. Next, we looked at how many Duke students were registered to vote- whether that be because they actively registered or because a previous voter registration carried over. This value increased steadily over time, likely due to students forgetting to cancel their registration despite moving out of the county/state.



We also graphed the proportion of registered Duke students who voted in Durham, NC. Likewise, the number of those who took advantage of their voter registration status and voted decreased from 2012 to 2020.

### **Conclusion:**

Based on our analysis from 2012 to 2020, Duke students are both registering to vote and voting less in presidential elections in Durham county, NC. Perhaps they are less motivated by the candidate or have less access to the polls. Alternatively, it is also possible that over time, more Duke students are choosing to vote in their home state/county rather than using their Duke residence. This might be because they feel they will have more of an impact in other states or because they don't want to change their registration.

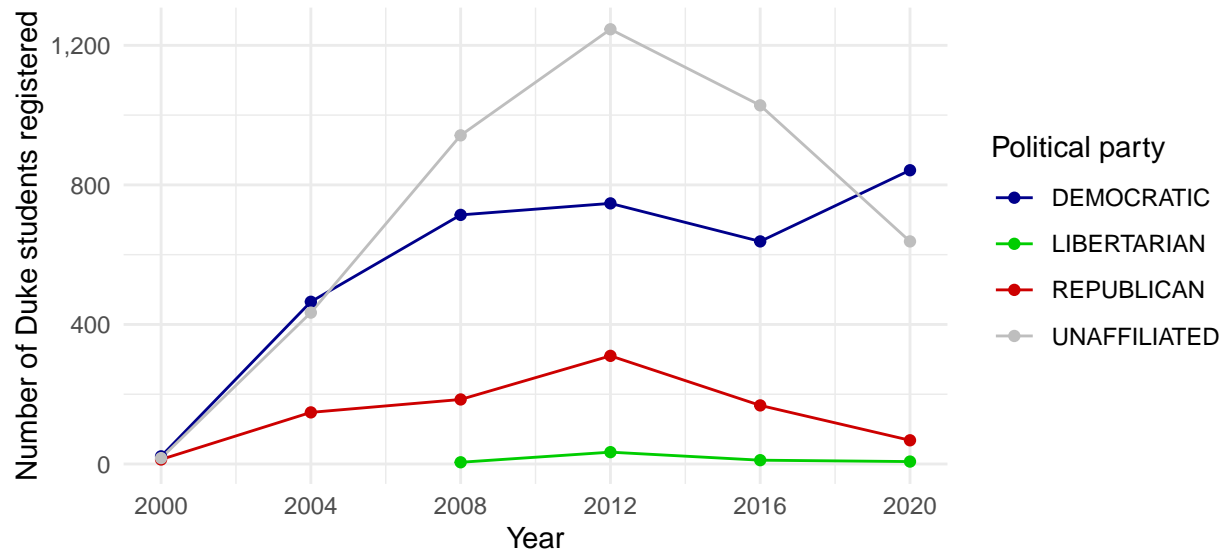
### **Next Steps:**

Regardless, with midterm elections coming up it is important for all the Duke students who are interested, to feel comfortable and empowered to register and then vote. Duke provides resources for students and faculty through the site Duke Votes. According to their homepage, those who have questions can contact Duke Votes chair, Daisy Lane, at [margarita.lane@duke.edu](mailto:margarita.lane@duke.edu). They provide several resources for those looking to get involved and/or register to vote.

If we had more time, we would like to further hone our methodology for determining who is a Duke student and investigate what caused the surge in registrations and voting in 2012.

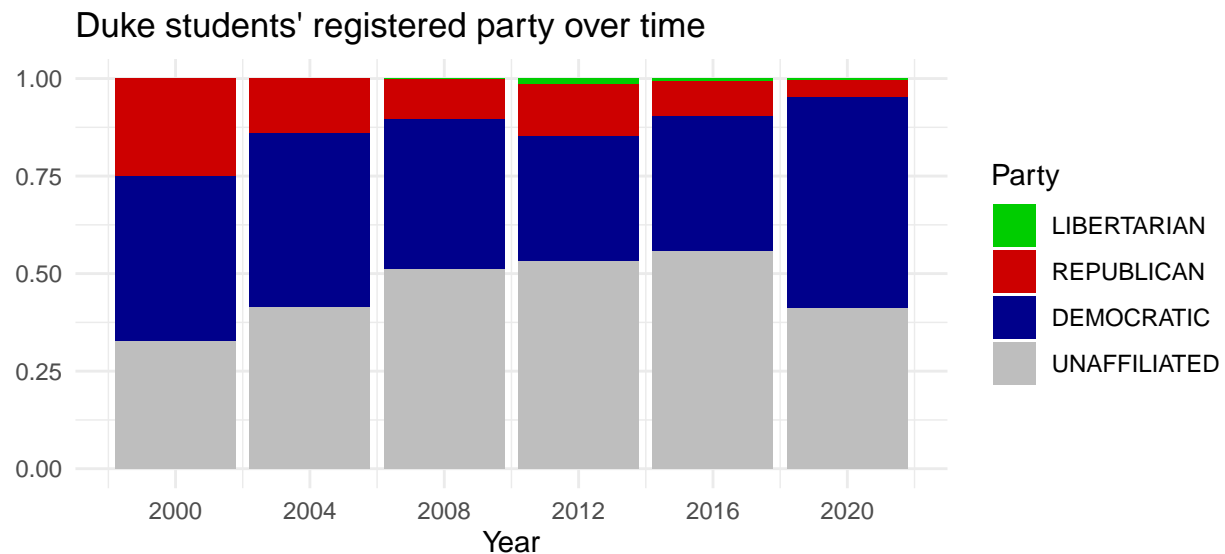
## Further analysis

We also looked into our secondary question of how Duke students' political party affiliations changed over time.



It seems that the number of Duke students registered as Democrats increased over time and the number of Duke students registered as unaffiliated decreased.

The same pattern can be seen in this filled bar chart.



Additionally we looked at voting method over time:

Duke students' voting method over time

