

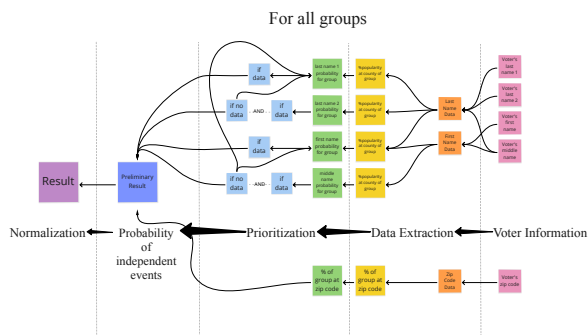
## Introduction

The Hispanic population is currently 26.4% of Florida's population, which makes understanding how they vote more important. Varying factors can influence voter behavior. The ones investigated in this project are the voter's Hispanic group, age, zip code population density and income salary with their party affiliation and voter activity. The results provided may determine trends amongst the Hispanic community in Florida.

Because testing a method with all of Florida's voters can be quite overwhelming, a smaller sample size, such as a county, is necessary for a faster debugging process. All preliminary results will be focused on Palm Beach County, which has 118,926 Active Hispanic Voters (AHV) out of the 260,003 Hispanics in the county.

## Methodology

Because Florida's voter file classifies all Hispanic voters under the broad term "Hispanic", further analysis must be performed to classify all voters as belonging to a Hispanic group.

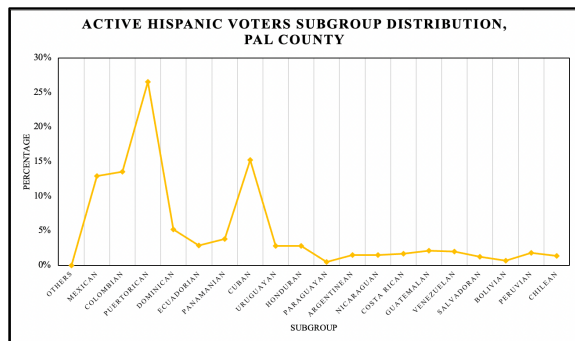


**Figure 1** Visualization of model. Given the voter file data and acquired name proportionalities [1] and zip code census data [2], the most probable Hispanic group is calculated.

The voters' date of birth is included in the voter file, as well as the party affiliation. The other elements, population density [4], income salary [3] and voter activity come from additional acquired data.

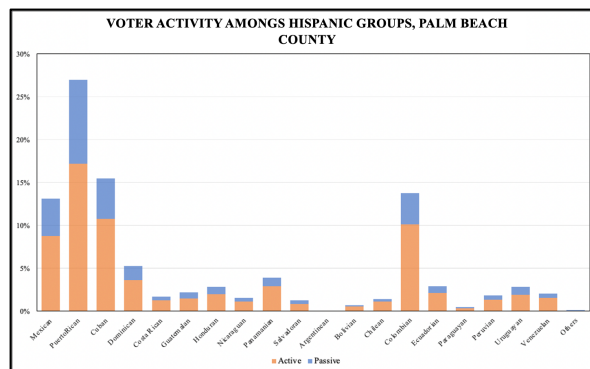
## Results

For the subgroup classification process, not all voters provided a highly confident result, which left with a sample of 18,298 AHV. This is 15% of the AHV in Palm Beach.



**Figure 2** General distribution of AHV in Palm Beach. The largest group of high-confidence AHV in Palm Beach are Puerto Ricans at 27%, followed by Cubans with 15% and Colombians with 14%.

Once the voters have been classified to a Hispanic Group, the analysis of the factors can commence.

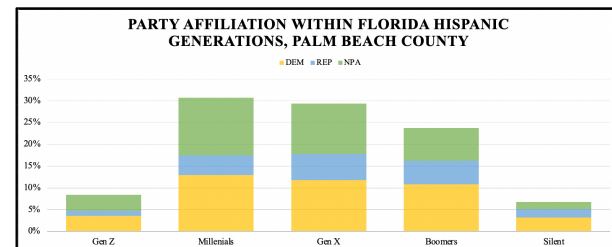


**Figure 3** Voter activity amongst Hispanic Groups at Palm Beach County. For the Hispanic groups, it was discovered the most active groups of voters overall are Puerto Ricans, Cubans, Colombians and Mexicans, respectively.

As far as party affiliation, most groups have a consistent trend: a high percentage of Democrat voters, a near equal amount of Non-Party affiliated voters and a small percentage of Republican voters, all relative to their population. However, certain groups deviate from the trend. Cubans have near equal percentages of Democrats, Republicans and Non-Party affiliated.

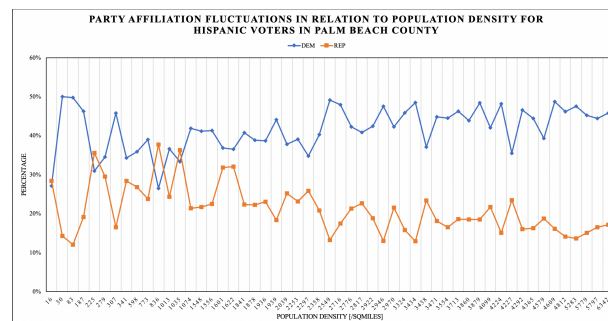
## References

1. Forebears. (2012, June 20). Retrieved April 1, 2021, from <https://forebears.io>
2. Hispanic Latino population by specific origin by county. (2010) Retrieved February 26, 2021, from [http://proximityone.com/hispanic\\_origin.htm](http://proximityone.com/hispanic_origin.htm)
3. *Soi tax stats - individual income tax statistics - ZIP code data (SOI)*. Internal Revenue Service. (n.d.). Retrieved November 1, 2021, from <https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-statistics-zip-code-data-soi>
4. World Media Group. (n.d.). *Florida Population Density Zip Code Rank*. USA.com. <http://www.usa.com/rank/florida-state-population-density-zip-code-rank.htm>



**Figure 4** Party affiliation distribution for generations. the most active overall were Gen X, Boomers and Millennials, respectively. The generations observed the same trend amongst the party affiliation as the Hispanic Groups did. They also saw an increase in their Non-Party affiliated voters the more recent the generation was.

The analysis of population density saw a faint increase in voter activity in high-density zip codes.



**Figure 5** Party affiliation per zip code population density in Palm Beach County. less densely populated areas, Democrats were still twice as likely to be ahead, yet it was the only time Republicans had the lead. After a crossover point at approximately 1,000 people per square mile, Democrats were consistently in the lead.

On the other hand, income salary saw high voter activity at higher incomes. As for party affiliation, it mainly followed the Hispanic population, which consistently is more affiliated with the Florida Democratic Party.

## Conclusions

While highly Democrat-leaning, the Hispanic community has factors that can turn those votes Republican. Republican-leaning Hispanic Groups are more active than their Democrat-leaning counterparts, such as Cubans being 15% more active than Puerto Ricans and Mexicans. Additionally, younger generations are choosing to forgo any party affiliation, showing an 11% steady increase from the Silent Generation to Millennials. Finally, Republican leads in low-densely populated areas can also turn the tide towards the Republican Party of Florida.