

Growing Voter Engagement in Communities of Color

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Motivation

The United States is a country which was founded on a government elected by the people. It is a concept so integral to what it means to be an American that even the word “American” is often conflated with terms such as freedom of choice. As such, it is very surprising that among all other democratic, well-developed countries, the United States consistently places near the bottom in terms of voter turnout at an average of 60%. However, this value is not very useful by itself and in order to obtain a better idea of how to improve the United States’ voter turnout rate, one must also take into account race. In the United States, the racial groups with the highest average voter turnout are non-Hispanic whites and African-Americans with rates between 50-65%. On the other hand, Minorities such as Hispanics and all other racial groups not previously mentioned (i.e. Asian, Native American, Pacific Islander, etc.) consistently have a voter turnout rate between 30-45%. As such, the best way to move towards higher turnout rates must begin with increasing voter turnout among these groups. This is especially so given that Hispanics and other Minorities make up almost 17% of the American population, which translates to 43 million people, 30 million of which aren’t voting.

Goal

The goal of this project is to create an interactive map of Massachusetts to help guide groups seeking to increase voter engagement towards where they should focus their efforts in order to get more people of color out to vote. Our team, in conjunction with Amplify Latinx and BU Spark!, plans to accomplish this by analyzing voting and demographic data in order to find geopolitical subdivisions (i.e. wards, precincts, etc.) that have many people who can vote or can register to vote but don’t end up participating. As our team is responsible for creating only the groundwork for what will be a much larger project in the future, the scope of data analyzed will be limited to city council race results among Latinx voters within Boston Wards. However, the code shall be built with modularity in mind in order to allow for all political races within all the geo-political subdivisions within Massachusetts.

Data

Public Data Sets:

- Boston City Council Race Results (2017)
- Demographics by Towns: Lists all 353 towns in Massachusetts along with their total population and racial demographics.

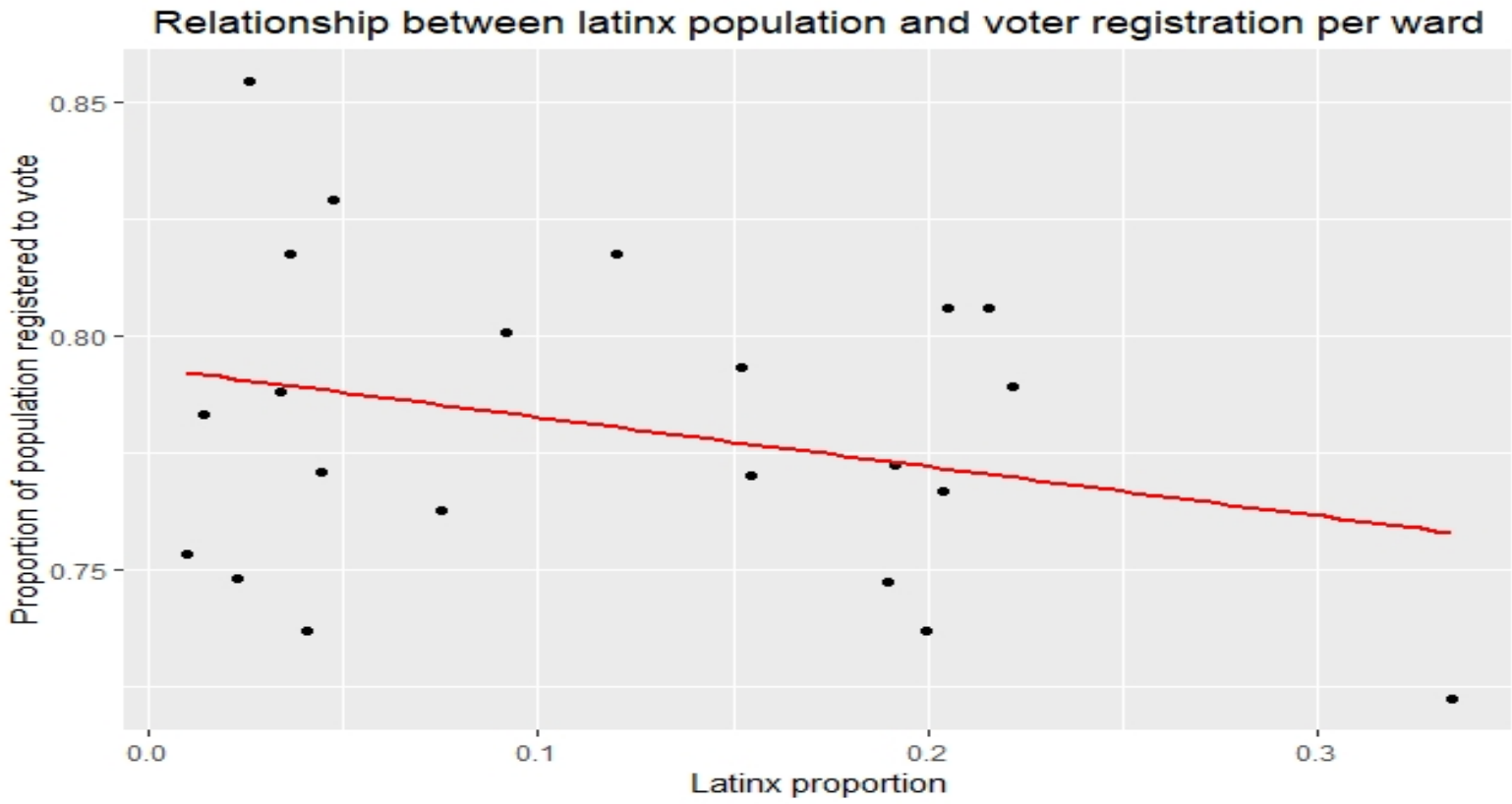
Private Data Sets:

- Registered Voter Demographics
- Non-Registered Voter Demographics
- Massachusetts Early Voting: Lists the total amount of registered voters in each town of Massachusetts along with the percentage of those voters who submitted an early voting ballot

Statistical Analysis

The first set of statistics used in the visualization comprise several values generated from a statistical analysis of the population data for registered and eligible voters. The values generated both for each ward and overall are:

- The proportion of the total population which are Hispanic
- Proportion of Hispanic people which are eligible
- Proportion of Hispanic people which are registered
- Average and standard deviation of Hispanic voters which are registered or eligible in each ward



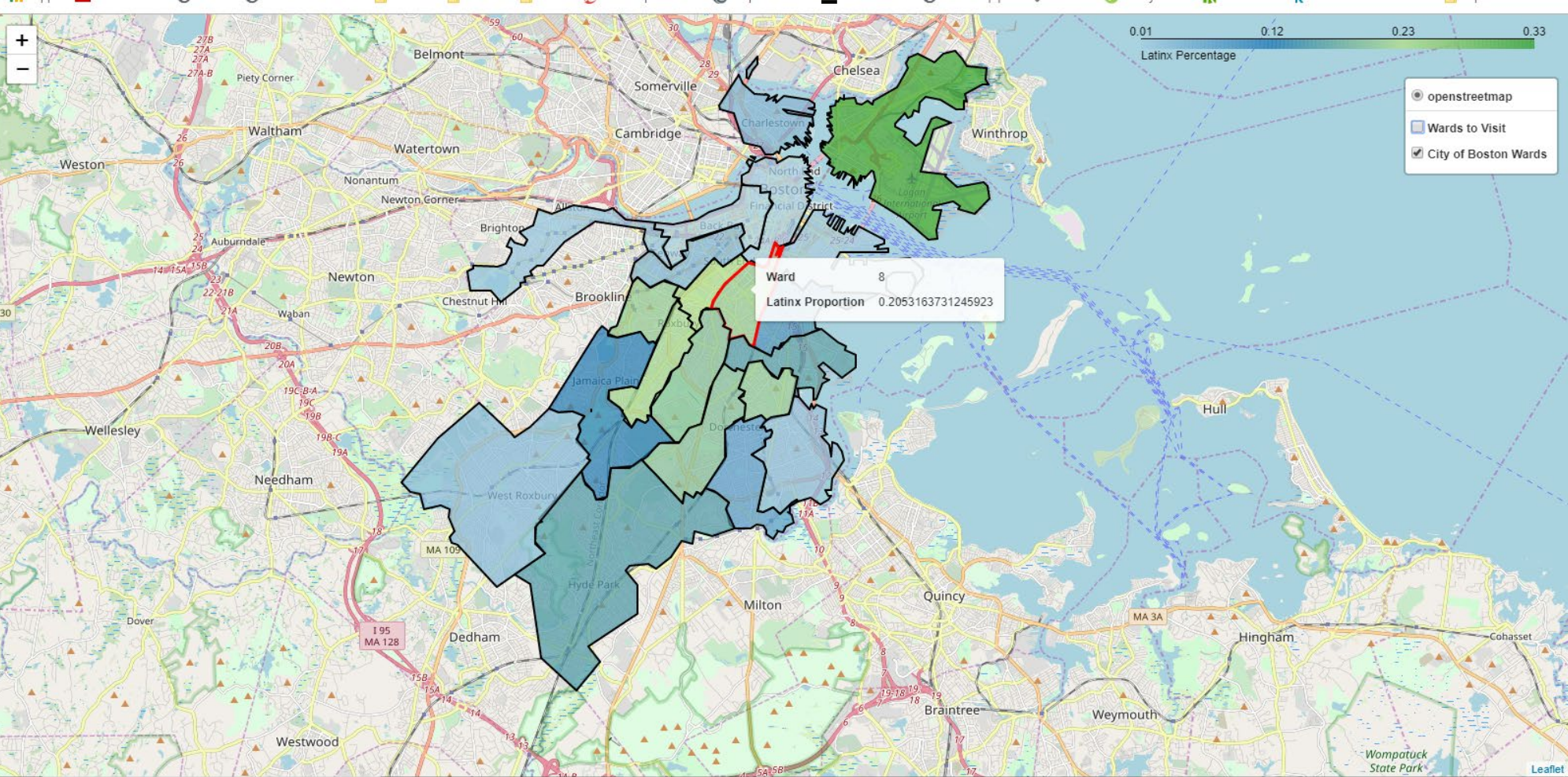
The second set of statistics were gathered using the City Council Race Results data set and reflects both the overall and by Ward difference in votes between the first and second place candidate. This was done in order to obtain the “flip goal”, minimum amount of people necessary to flip the race.

Constraint Satisfaction and Optimization

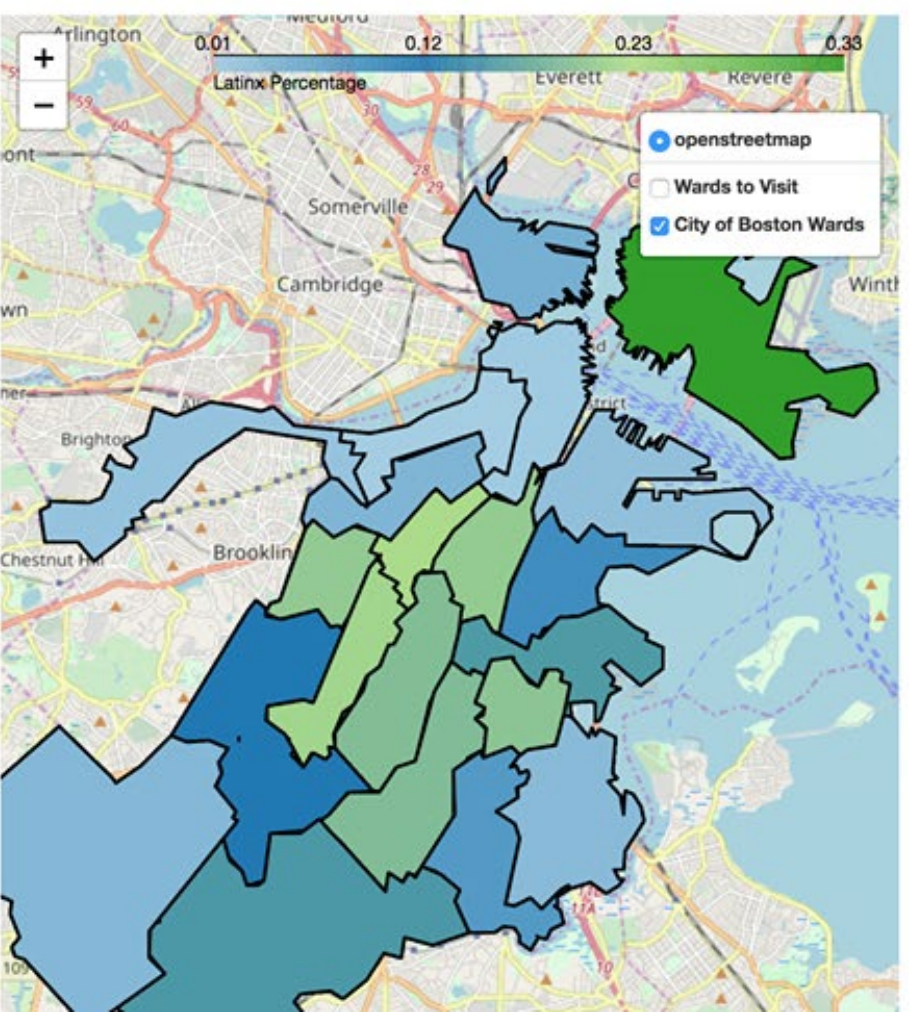
The algorithm for suggesting which areas to visit does so by first identifying which zones within this subdivision category meet certain constraint criteria. These criteria are the proportion of registered Hispanics within a Ward that didn’t vote in the Boston City Council Race in 2017. Then it generates an optimal result by minimizing the amount of zones that would need to be visited to flip the entire race through a Greedy Algorithm after sorting by descending amount of registered voters who didn’t vote.

Future Work

Given how limited the scope of this project had to be in order to ensure it could be completed in a timely fashion, the best way to iterate upon this work would be to expand certain functions of the map. The two most useful features that could be added to the map would be the ability to choose which political race the statistics will be generated for and which geopolitical subdivision should be demarcated on the map. This would allow groups to receive campaigning suggestions for any political race that could be either as broad as towns or as specific as precincts. Additionally, giving the user the ability to modify the constraints used to generate suggestions would also greatly aid with voter turnout efforts in the case that a group wants to target different groups with different race or age demographics.

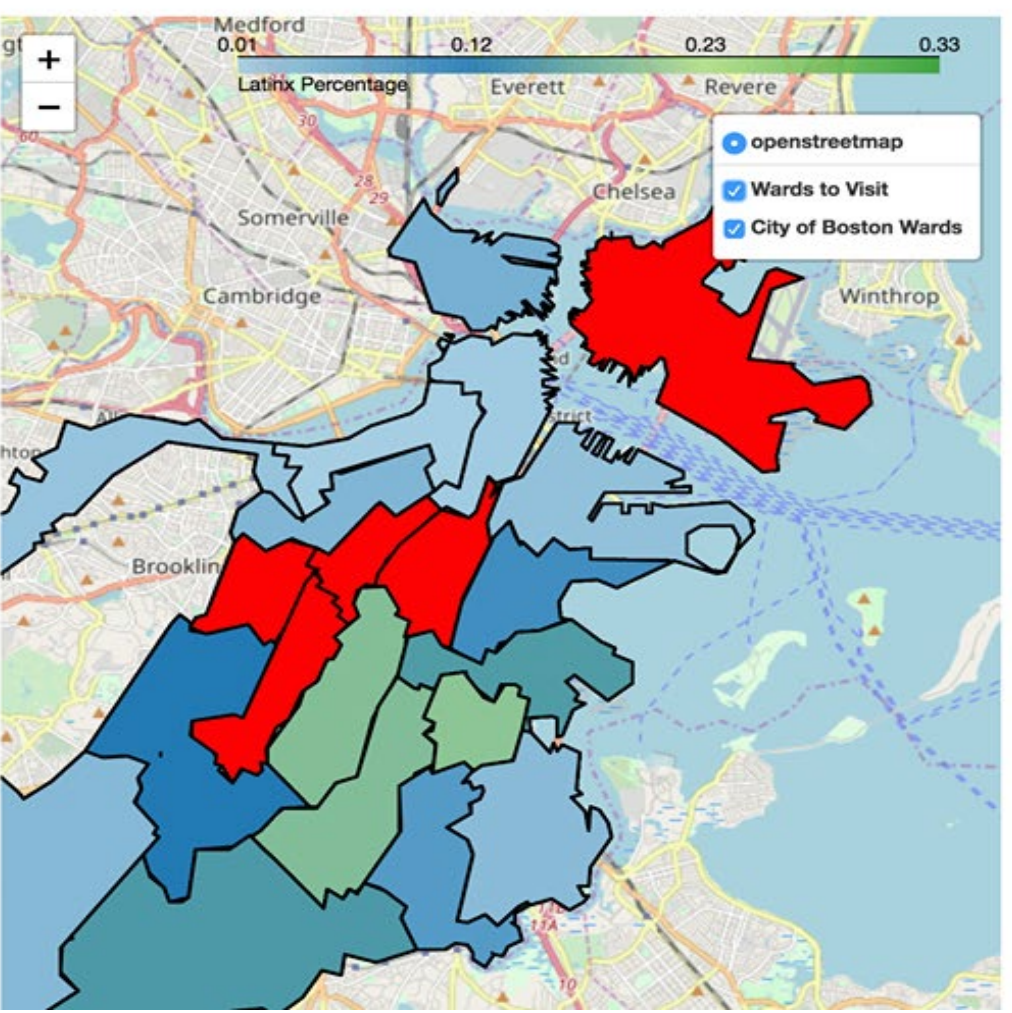


Enter Parameters Hispanic Ratio Flip Percentage Submit



Please Enter a minimum hispanic population threshold and a projected flip percentage

Enter Parameters Hispanic Ratio Flip Percentage Submit



These wards will be visited

- Ward: 1
Projected votes to flip: 1646
- Ward: 10
Projected votes to flip: 1325
- Ward: 9
Projected votes to flip: 1097
- Ward: 8
Projected votes to flip: 1077
- Ward: 11
Projected votes to flip: 708



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