

# Growing Voter Engagement in Communities of Color

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## Introduction

Voter turnout among members of different groups of Americans varies widely, with Latinos and Asians generally lagging behind other groups. Blacks usually fall in between, with turnout usually ahead of other minorities but behind whites. Low levels of voting matter, because election results are supposed to reflect the preferences of all Americans. In addition, recent trends indicate that Latinos, if they vote at their full potential, have considerable capacity to influence election outcomes.

Amplify Latinx is a non-partisan, collaborative movement whose mission is to build Latinx economic and political power by significantly increasing Latinx civic engagement and representation in leadership positions across sectors.

## Data Source

### 1. Vote Builder by NGP VAN

This source provides us with state election data and voter-specific data for Republican districts in MA. This data is grouped by district and by party affiliation, and provides summary statistics for the past four elections for the following attributes: i. voter participation in the past four elections; ii. voter race; iii. voter sex.

### 2. PD43+

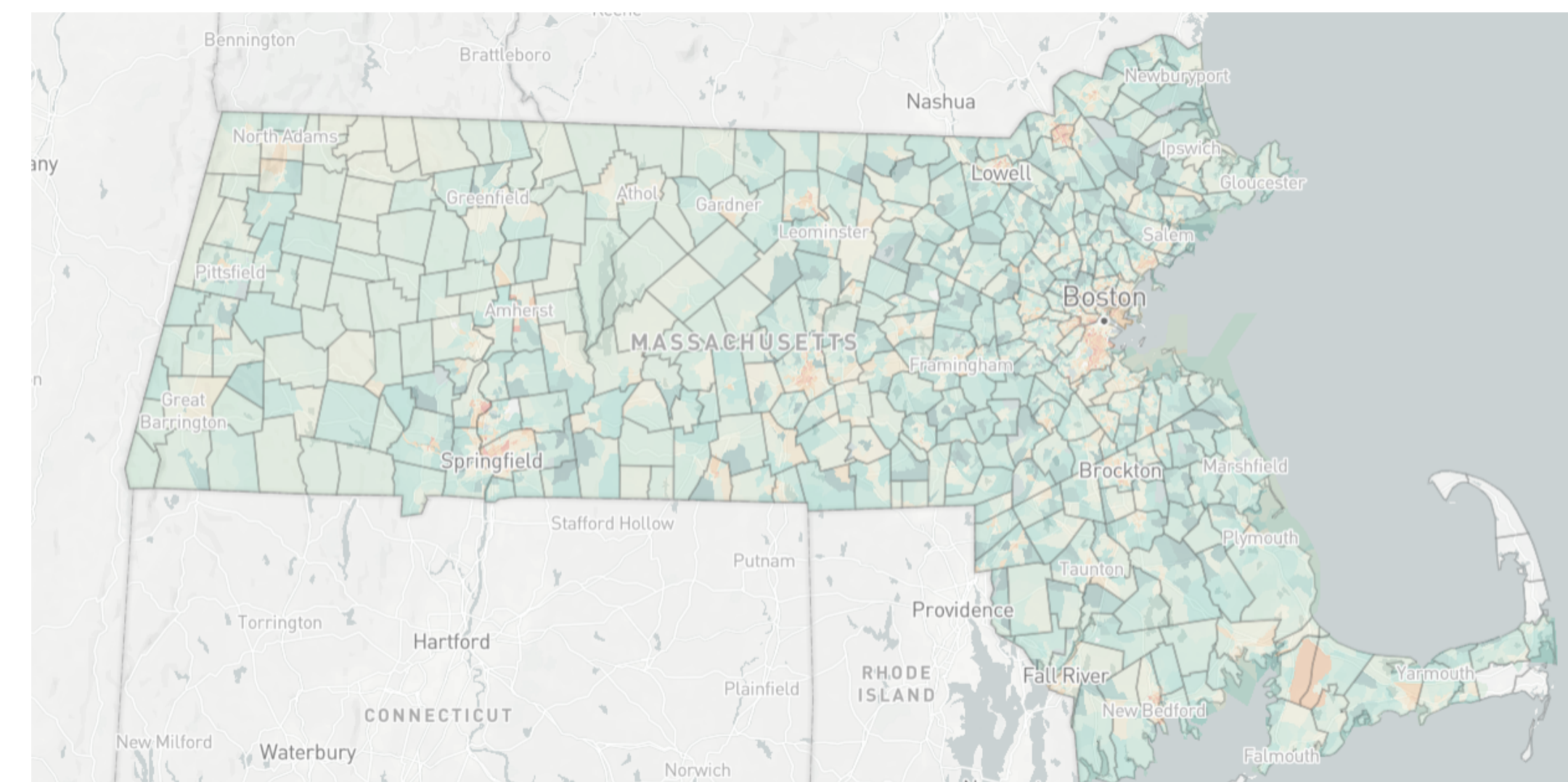
This source provides Massachusetts election statistics for all elections at the state/federal level since 1970. Our analysis uses the State Senate and House election results in 2017 in all districts.

PD43+ provides data on current and past incumbents name, sex, party, vote count, and vote percent for each individual district.

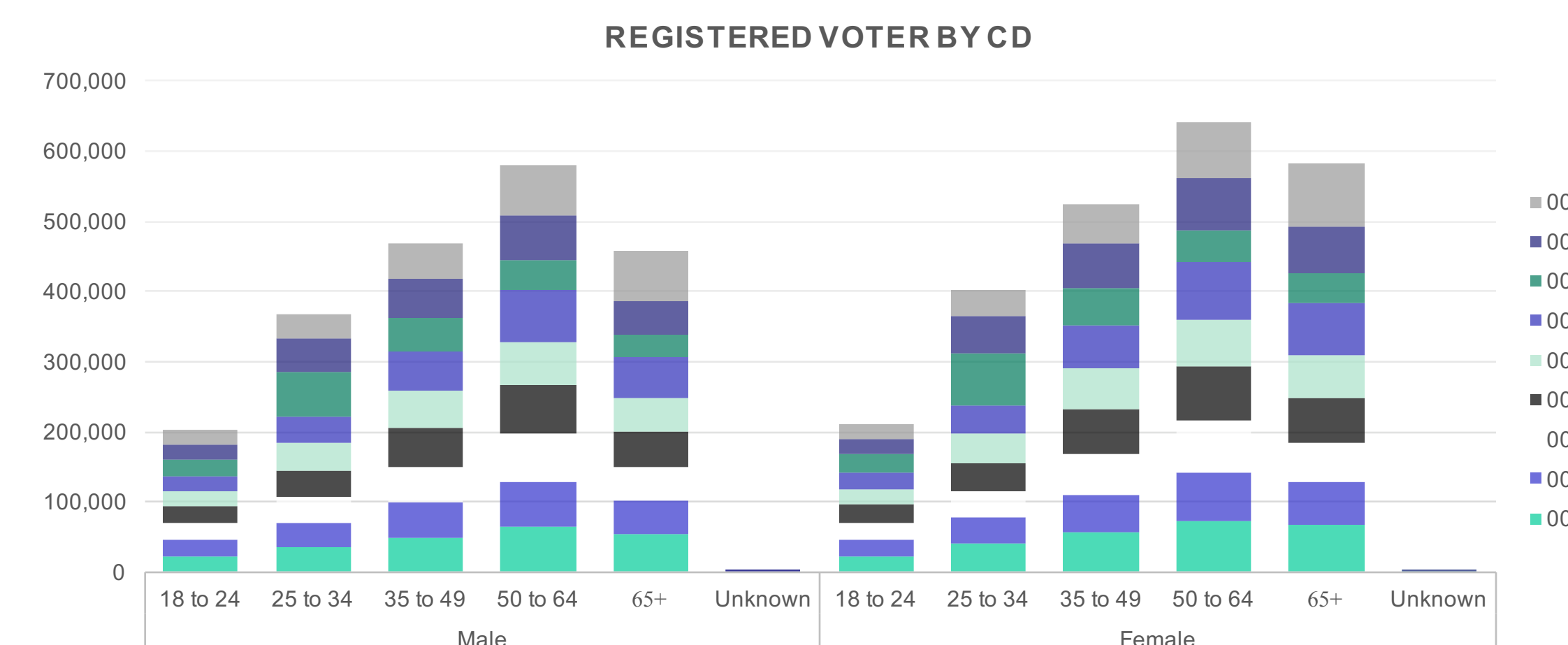
### 3. Census

The Census Bureau collects data about the economy and the people living in the United States from many different sources. Primary sources for additional data are federal, state, and local governments, as well as some commercial entities. We using the data of districts information and district vote statistic

The goal of our project is to identify the districts (down to the cities and towns) in Massachusetts where Amplify Latinx and its partners should deploy resources to increase voter engagement, specifically voter registration and voter turnout.



We also focus on the strength of the relationship between each age group in Boston for non-registered voter and registered voters. In order to solve this problem, we decided to try to calculate the correlation coefficient for each age group. We first fetch the data from a bunch of excel spreadsheets. Then, we aggregate the population data by different age group in each Congressional District. Last, we calculate the correlation coefficient for different age group and the total number, as well as the p-value. In this way, we can find out how strongly each age group is connected to the total non-registered/registered group.

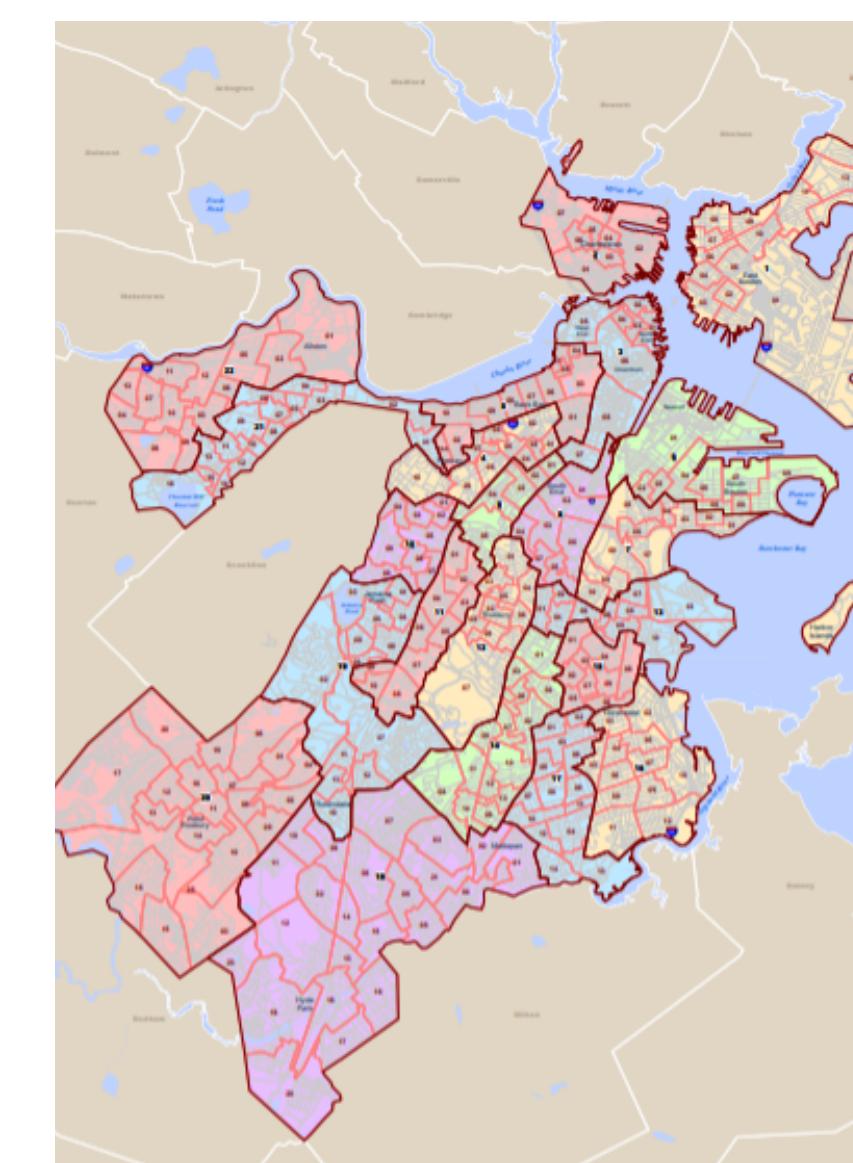


For specific define the demand, with the help of our partner, we addressed to identify how many potential voters there are in colored people.

To achieve the goal, we define specific questions:

1. What is the difference between eligible people and registered voters?
2. How many registered voters are actually voted?
3. What is the percentage of young people among the voters?

## Our Work



4. What is the difference between the number of people who voted for the winning candidate and the number of people who voted for the candidate with the second-largest number of votes?

This analysis is to answer the question: if every Latinx person who was registered had actually voted, would that have flipped the race? If ever Latinx person who was eligible to vote had registered to vote and then voted, would that have flipped the race?

In order to refine the demand, and fulfill our partner's request, we only pay attention to Latinos in 22 wards of Great Boston Area in this project. But the same method can be applied to other race and other districts.

## Results

After processing and selecting all data we have gathered. We build a web-based page for visualization of voter and election data in Boston city and its 22 wards.

In this page, user can see the registered-eligible voters amount, voted-registered voters amount and the difference between the first two winning candidates on city scale, as well as ward scale.

By clicking the ward on the map, user can see the bar chart and pie chart of different age groups, which helps visualize the proportion.

We also created a couple of Restful API which can fetch the numerical data by ward level. Through these API, user can access:

- i. all the data for ward
- ii. the election data and gap of the first two candidates for ward
- iii. the voters' distribution data for ward

