

How Donald J. Trump Can Win the Popular Vote

(Through Statistical Analysis and Observation)

By Max Miller, Sam Warach, Brandon Allen, and TJ Evarts (TEAM 6)

A Quick Look at the Candidates

Clinton vs. Trump

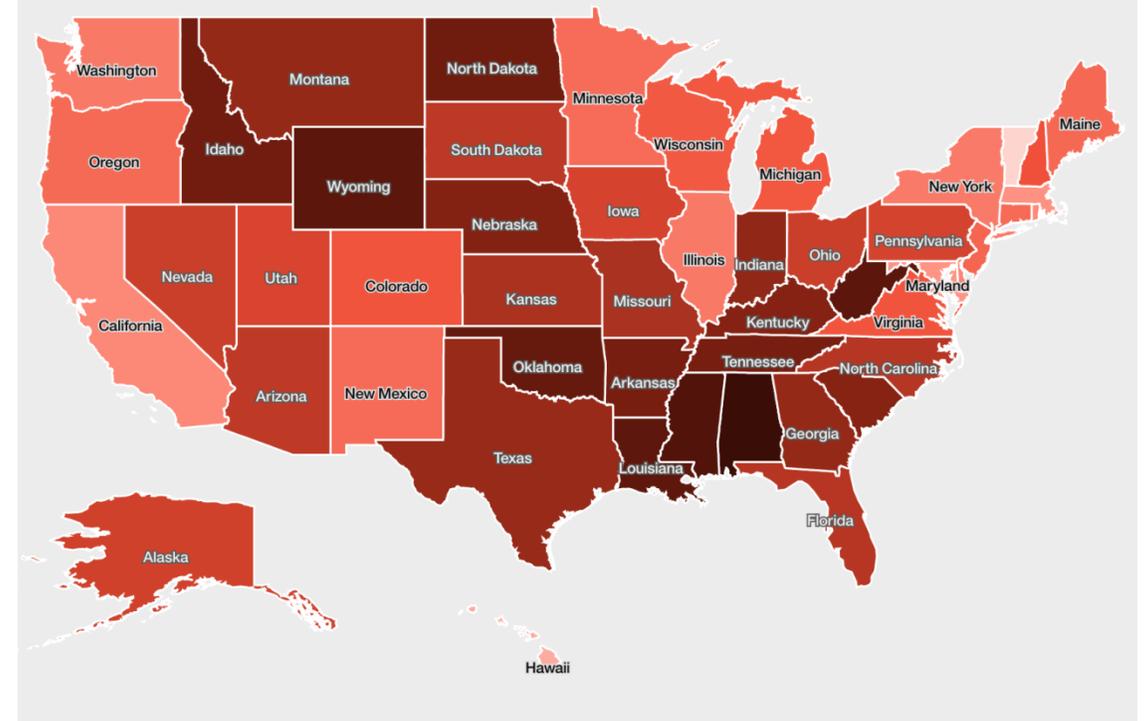
(Using data from the Polling by State dataset, converted using Datawatch, and processed by Watson Analytics)

Trump vs. Clinton: Where and When

Let's Look at the heat map

Trump holds **very moderately everywhere**.

He holds a core base of followers in almost every state (with the exception of Democratically strong states).

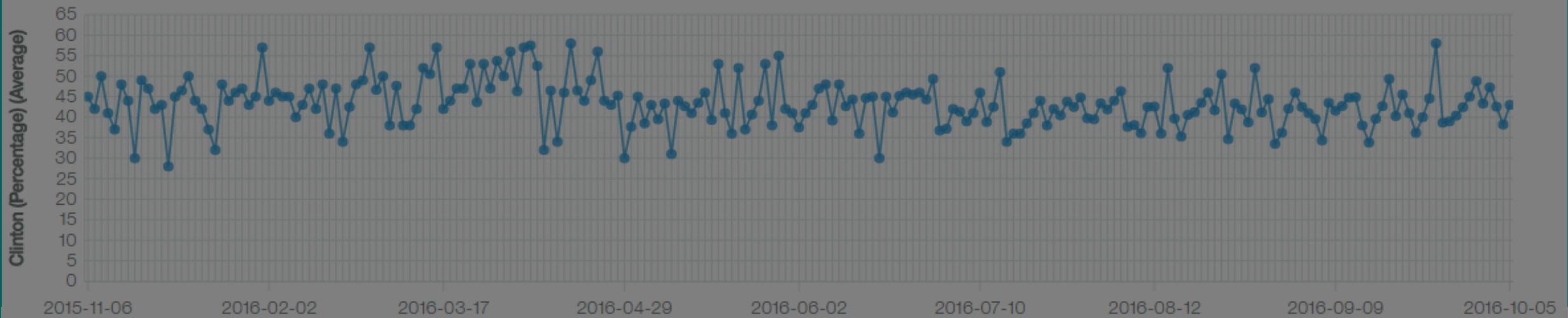


Trump (Percentage)



**Let's examine the
line graphs.**

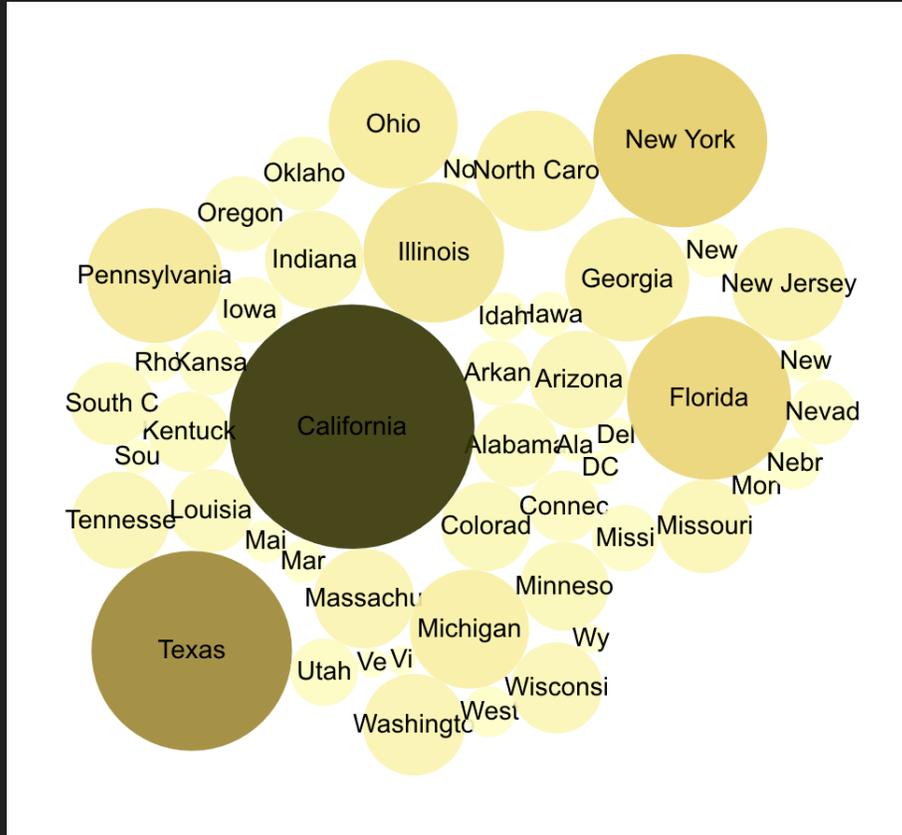
Clinton (Percent Voters) &
Trump (Percent Voters)
Vs.
Time



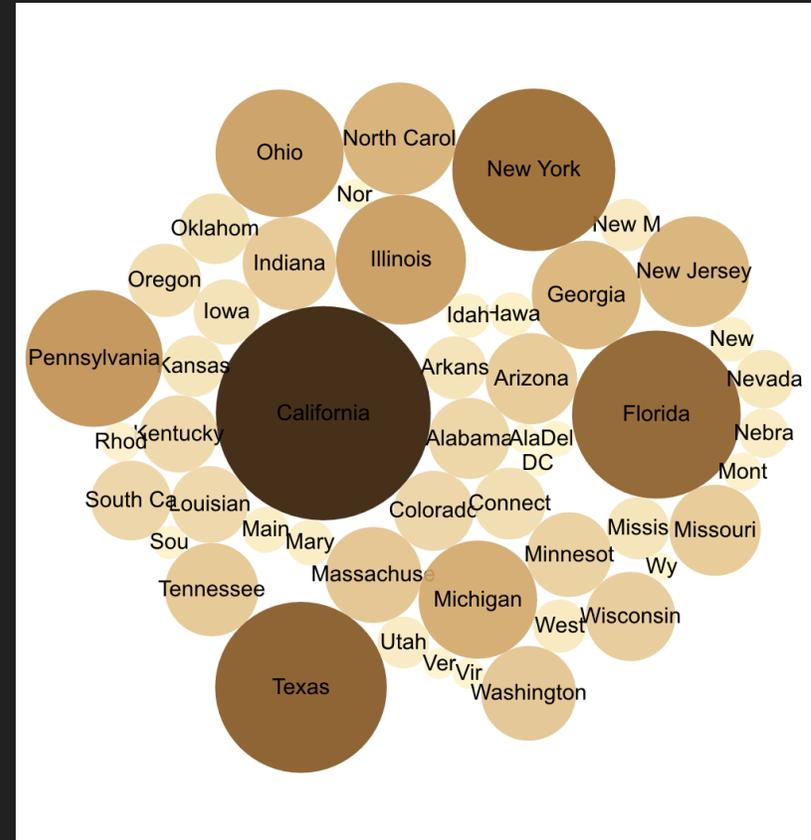
We'll come back to this later.



Ages 18 - 44



Ages 45+

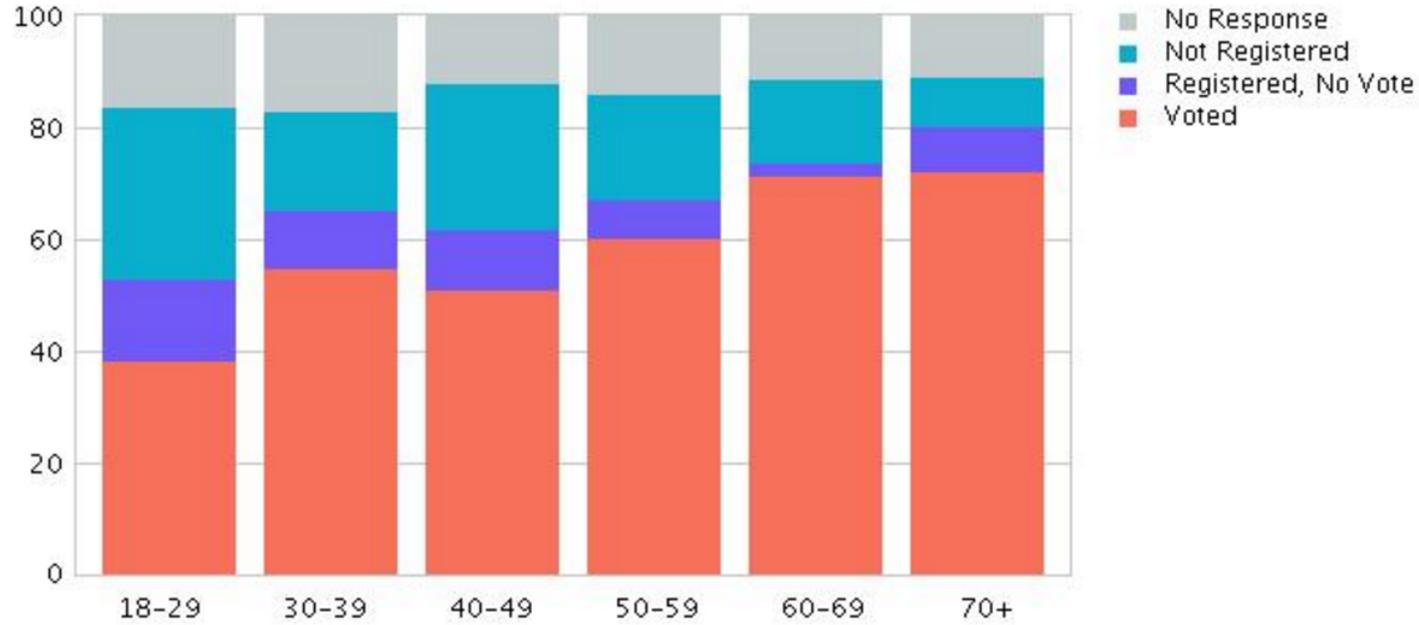


These bubble graphs show how the age ranges are distributed across the states

Age demographics tell us a lot about how a state will vote.

Voting and registration rates tend to increase with age. In the United States in 2012 only 41.2 percent of 18-to-24-year-olds voted, compared with 72.0 percent of those 65 and older. In Arizona in 2012, 43.0 percent of 18-to-24-year olds voted, which was not statistically different from the national average.

Voting and registration by age in Arizona: 2012



Source: Current Population Survey, Voting and Registration Supplement

[Click graph to view data in table format](#)

Taking data from the US Census, we can see that the older population disproportionately votes versus the younger population.

Using data from the 2012 Presidential election, and the US Census, we can say that around 70% of the United States will vote.

Projected Voter Turnout

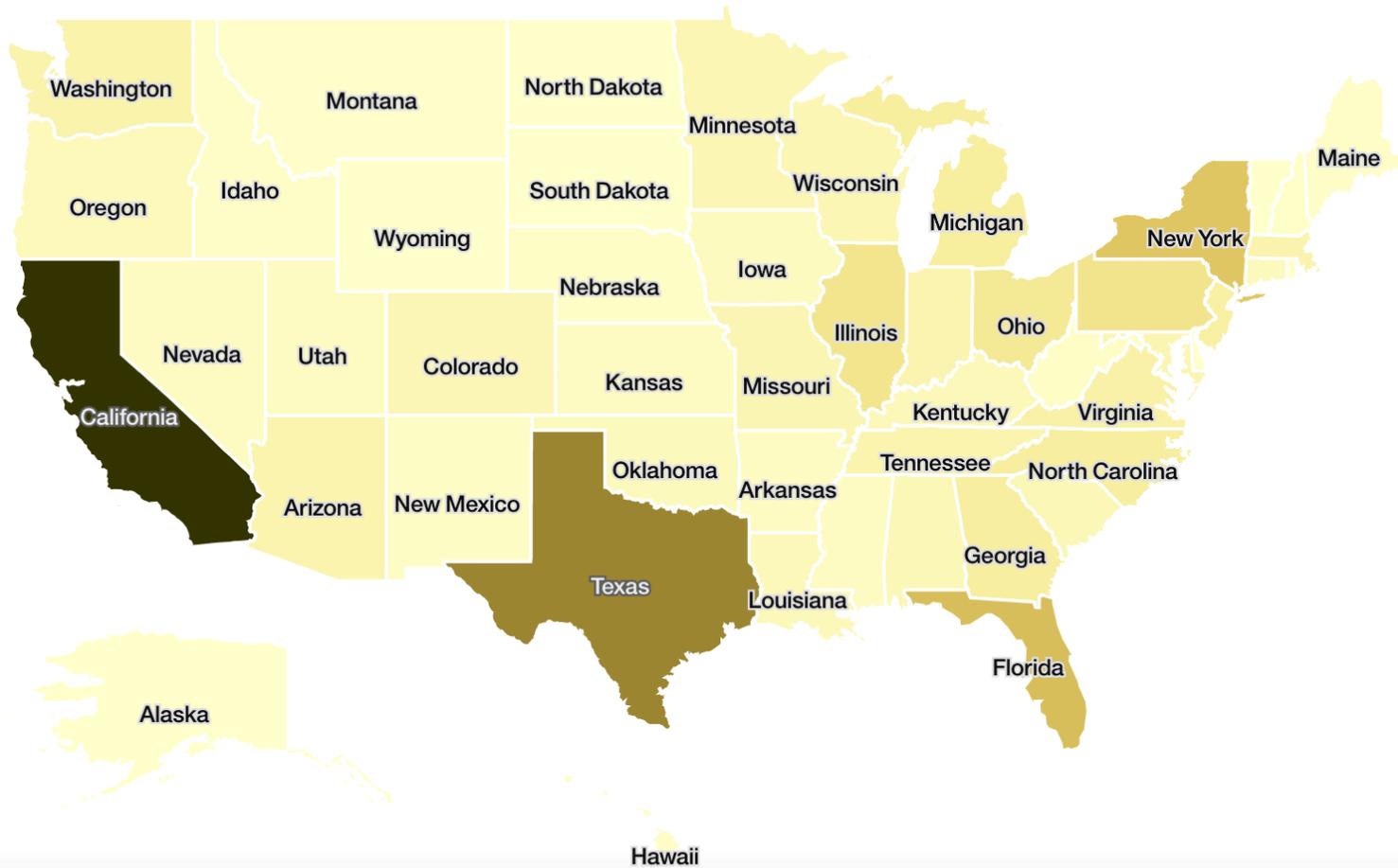
~45% People ages 18-44
will vote (US Census)

+

~75% People ages 45+
will vote (US Census)

(That's a ratio of 5 young : 8 older voters)

Using Watson, we can reference this data with the US Population to estimate that 134,000,000 people will be voting in the 2016 election.



Total Voters



Total Voters By State in the United States

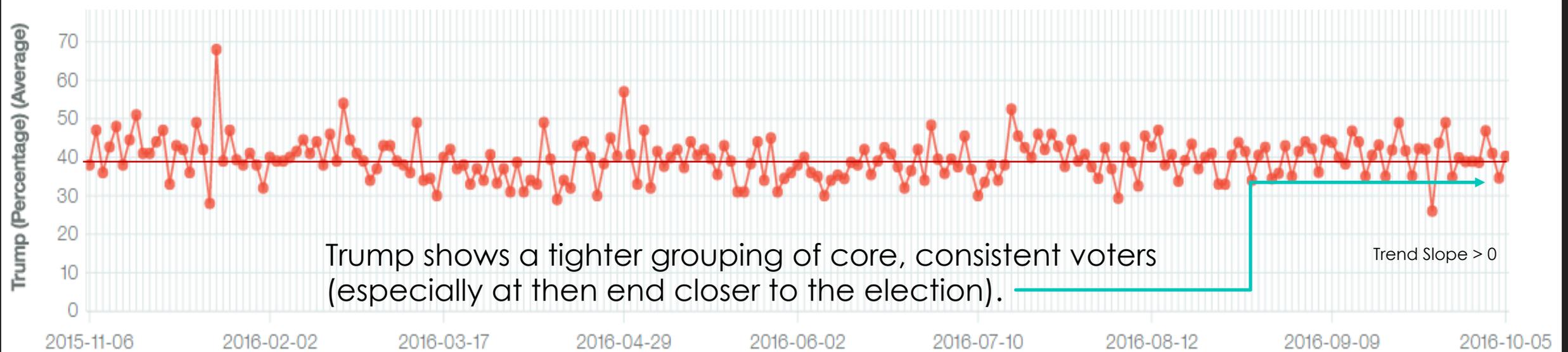
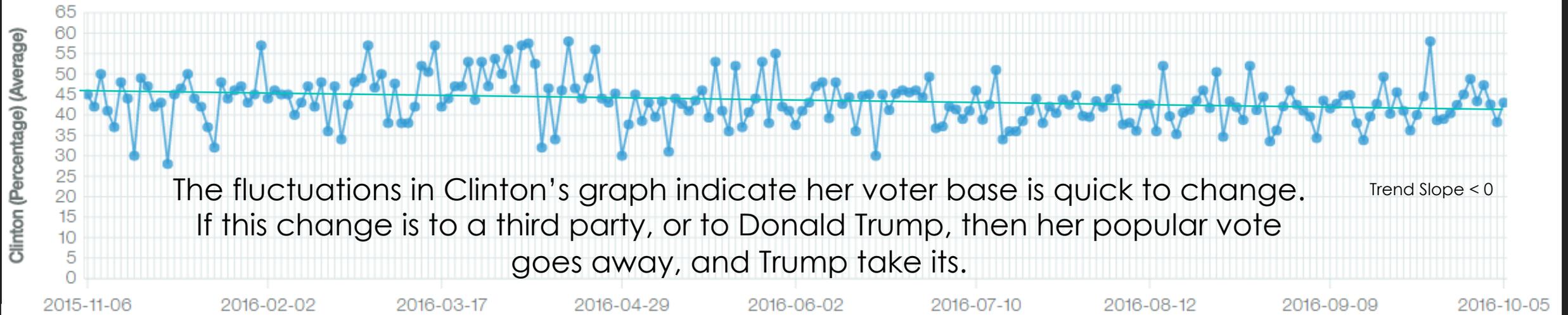
Using Watson, we can compute the total voters for each candidate:

Trump: **51,654,693** votes

Clinton : **57,266,892** votes

Clinton wins by **5,612,200** votes. That's only 4%!
(If they voted today)

But what about the line graphs?



Implications of Data

- Now more than ever, the parties are seeing a divide, where Clinton (Democrat) voters are quick to change their opinion of their party's candidate (Line Plot), and move to a third party, as evident by the change in Clinton's plot, and the relative consistency of Trump's.
- The popular vote can give an good visual of the opinions of the United States public, and can even show a even divide between the ideologies of voters.
- Trump's support has remained relatively consistent despite the volatility of his campaign and campaign strategy.
- Election data can help uninformed voters begin to understand the candidates, and help them choose whom they would most want to see in office based on public polls, such as the ones analyzed with Watson in this study.

Conclusion:

- **Quantitatively:** Hillary Clinton wins the election by 4% based off of metrics analyzed through IBM Watson Analytics.
- **Qualitatively:** By observing trends in the line plot visualizations of both Trump's percent vote per state and Clinton's percent vote per state, a trend occurs where Trump keeps a steady flow of voters, while Clinton has more sporadic ups and downs to her voter counts per state over the election cycle. From this data, it may be concluded that Hillary Clinton could conceivably lose the popular vote to Donald Trump, especially if her voters move to a third party.

**All graphs and data
processed with IBM Watson
Analytics. Database access
computed through
Datawatch.**

Thank you to the UNH ECenter.

Happy Voting!

*NOTE: Unfortunately, we were not able to include any of the social media search data due to heavy load on the servers.

**We would like to thank
the Cold Brew
Caffienator for keeping
us working on this until
3am.**