538 Election Data for the 2023/2024 Election Cycle

Kaitlyn Zhang

Background:

- The results of the 2016 election were surprising for many people.
- Despite many credible pollsters predicting a relatively easy win for Democratic nominee Hillary Clinton, the Republican nominee Donald Trump won the electoral college by a comfortable margin.
- 538 predicted a 71.4% chance of Clinton winning and Trump was only given a 28.6% chance (Silver 2016).
- Despite this, Nate Silver, the founder of 538, says that they "...think our model did a good job in 2016" (Silver 2020).
- He argues that although they predicted Clinton would win, their forecast for Trump was much higher than other organizations. In fact, on October 31, 2016, 8 days before the 2016 election, Nate Silver (2016) pointed out that there is an increased chance of the popular vote splitting with the electoral vote.

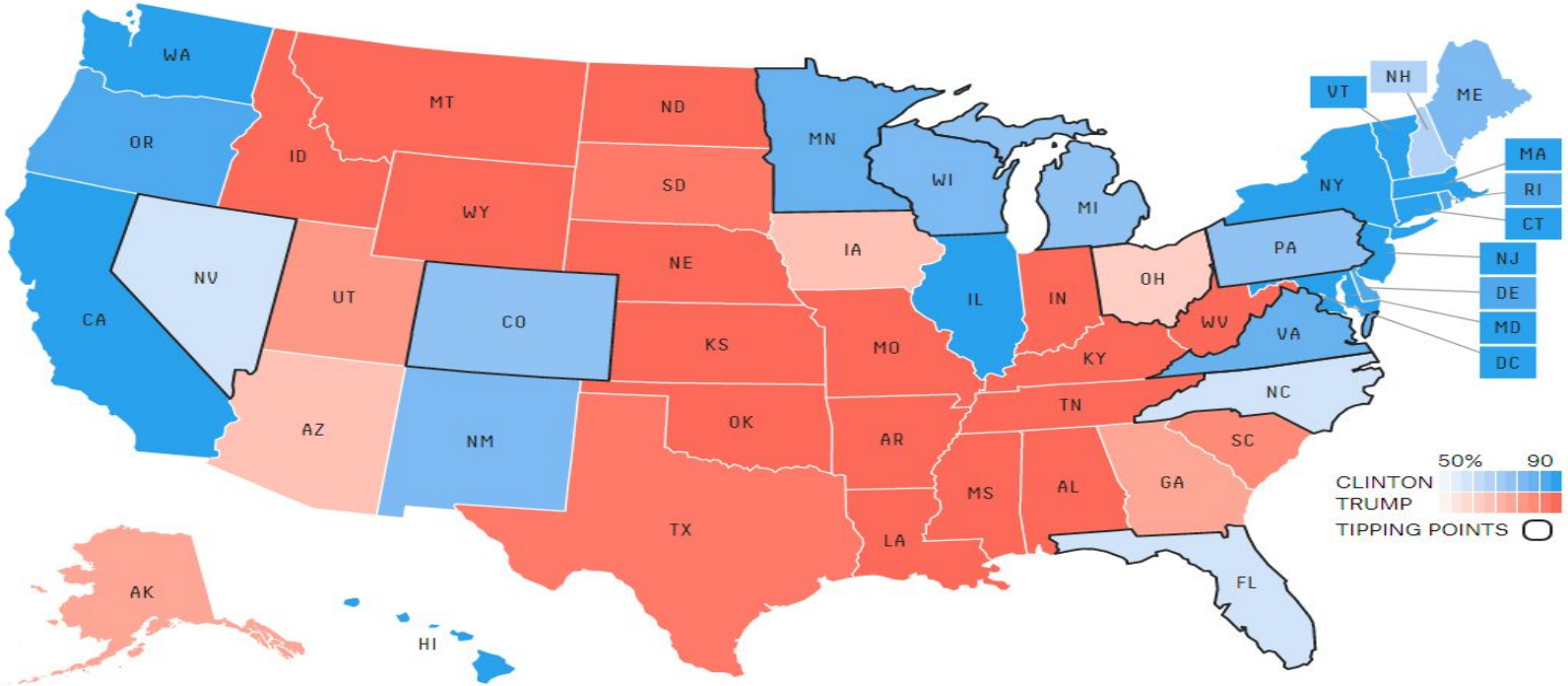
Chance of winning

Hillary Clinton

71.4%

Donald Trump

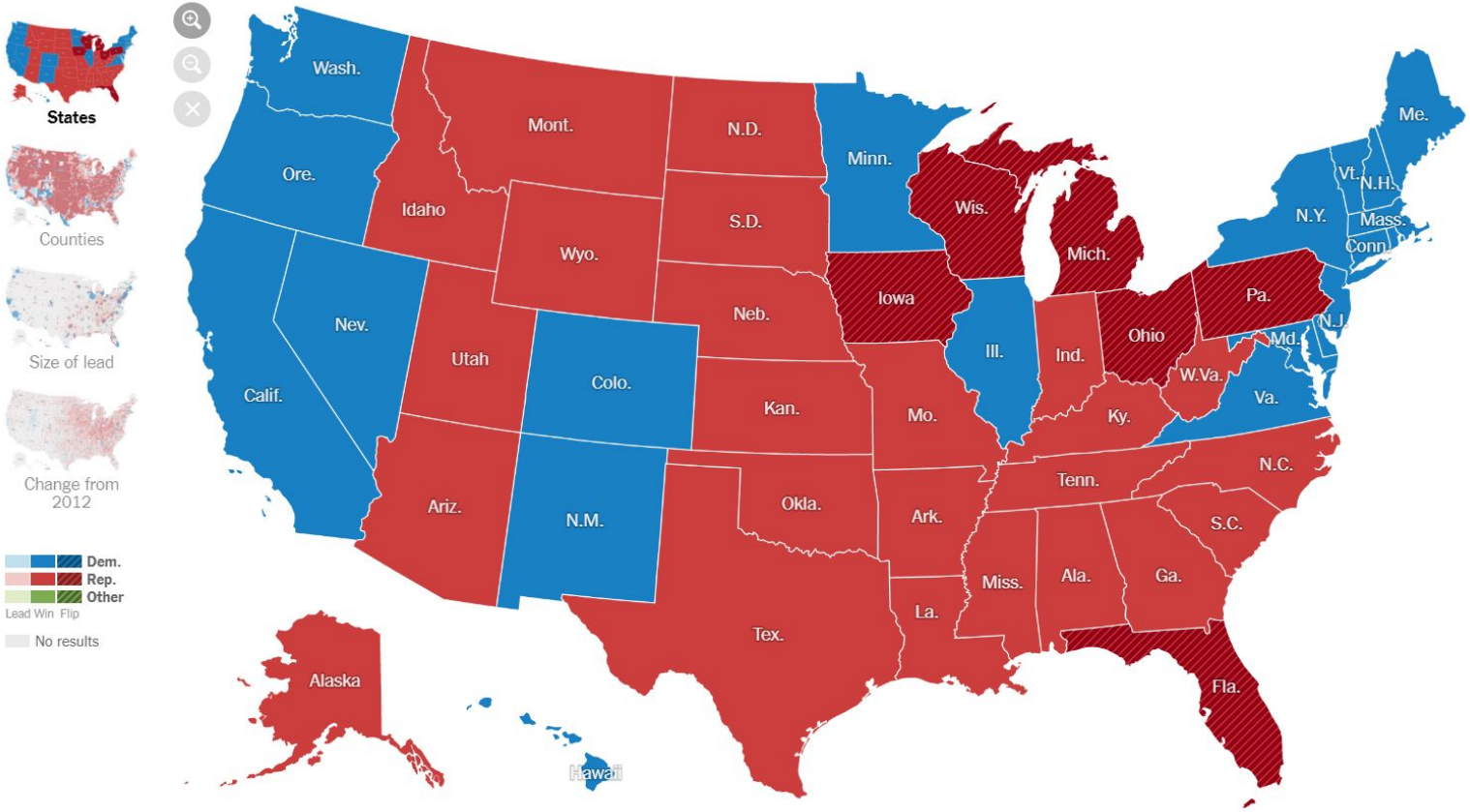
28.6%



232 Hillary Clinton

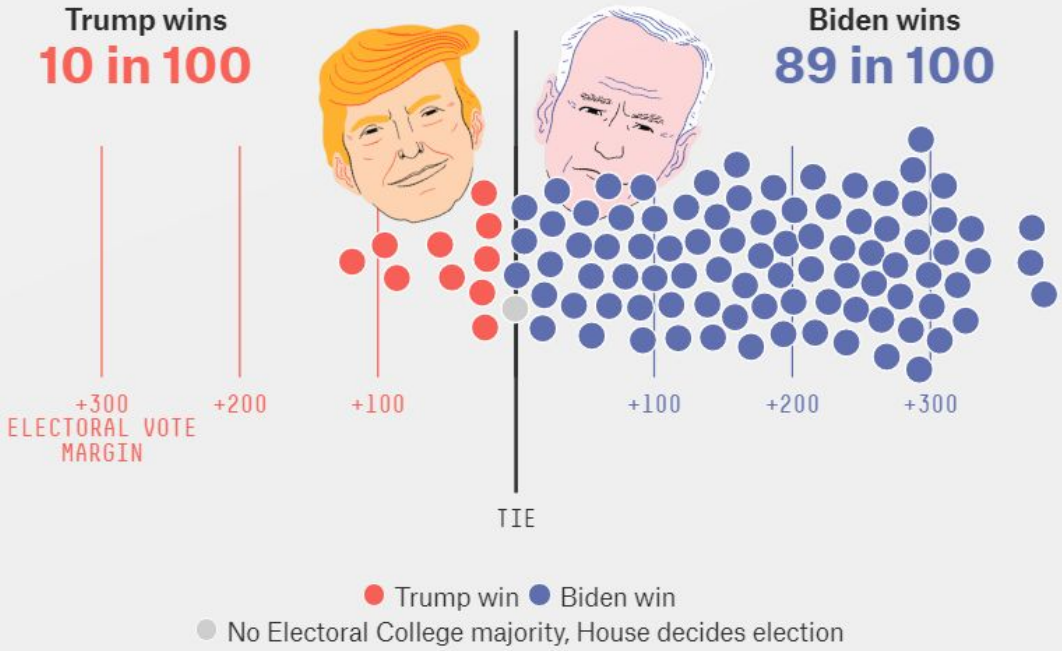
Donald J. Trump **306**

65,853,625 votes (48.0%) | 270 to win | 62,985,106 votes (45.9%)



Biden is *favored* to win the election

We simulate the election 40,000 times to see who wins most often. The sample of 100 outcomes below gives you a good idea of the range of scenarios our model thinks is possible.



Background

- I wanted to explore the data that 538 provides
- Scaled up this database can be used to accurately predict elections
- The analysis is only as good as the data itself. 538 uses data collected by polling organizations to make their forecasts
- 538 gives their pollster's a rating

Our pollster ratings are based on a metric called Predictive Plus-Minus. This metric is based on several key factors, including:

- Simple error for polls (i.e., how far away the poll results are from the actual election margin).
- How well other pollsters performed in the same races (i.e., whether this pollster is as good as, better than or worse than others).
- Methodological quality (i.e., whether this pollster is conducting polls in accordance with professional standards).
- Herding (i.e., whether this pollster appears to just be copying others' results).

Background

- Controlling for factors such as pollster reliability can make a forecast more accurate
- Exploring what data each polling organization provides can help analysts can use to make more accurate election predictions
- “Over the years, the methodology for these ratings has evolved, but the fundamental principle has remained the same: look at all the polls we have that were conducted within three weeks of an election, and try to determine how accurate each pollster has been and might be in the future.”

Purpose

To make the data behind 538's polished forecasts more accessible

To explore what variables each pollster provides, and what makes them accurate or not

general_polls

poll_id
pollster_id
pollster
start_date
end_date
sample_size
cycle
office_type
stage
dem
rep

- General Election polling, looking to see if voters would vote Democrat or Republican
- Date Range: 11/18/22-4/20/23
- Election Cycle: 2024
- 24 rows, 11 columns
- https://zhangkaitlyn1.shinyapps.io/general_polls

gov_polls

poll_id
pollster_id
pollster
state
start_date
end_date
sample_size
cycle
office_type
stage
party
answer
pct

- Polled for voters' Governor preferences across states
- Date range: 3/2/2023-4/20/2023
- Polled for both general elections and jungle primary elections
- Jungle primary elections are when all candidates are in the same primary elections regardless of political party
- 2023/2024 cycle
- 19 rows, 13 columns
- https://zhangkaitlyn1.shinyapps.io/gov_polls/

house_polls

poll_id
pollster_id
pollster
methodology
state
start_date
end_date
sample_size
cycle
office_type
seat_name
stage
answer
pct

- Polled for voters' preferred house representative in different states
- Date Range: 3/5/2023-4/2/2023
- Election cycle: 2024
- 6 rows, 14 columns
- https://zhangkaitlyn1.shinyapps.io/house_polls/

primary_polls

poll_id
pollster_id
pollster
methodology
start_date
end_date
sample_size
cycle
office_type
party
answer
pct

- Polled for voters' preferences on Presidential candidates at the primary level
- Date range: 4/21/2023-4/25/2023
- Election cycle: 2024
- 19 rows, 12 columns
- https://zhangkaitlyn1.shinyapps.io/gov_polls/

president_ polls

poll_id
pollster_id
pollster
methodology
start_date
end_date
sample_size
cycle
office_type
stage
party
answer
pct

- Polled for voters' presidential candidate preference at the general election level
- Date Range 4/24/2023-4/25/2023
- Election cycle; 2024
- 16 rows, 13 columns
- https://zhangkaitlyn1.shinyapps.io/president_polls/

Limitations

- Smaller amount of data, there is much more data available (like, a lot) so I will possibly scale this database up in the future
- No primary keys, election polls often about more than one election/election cycle, so pollster, poll_id, and pollster_id are not unique to each row
- I had to change the data I was using several times due to it being too large/not enough tables

Data Source:

- Our Data | FiveThirtyEight
- Updates frequently as new polls come out
- Includes recent data as well as historical data
- Scaling the database up to include historical data is a possibility in the future