

Data Visualization and Story Telling

Study Group 15

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What will we discuss today?

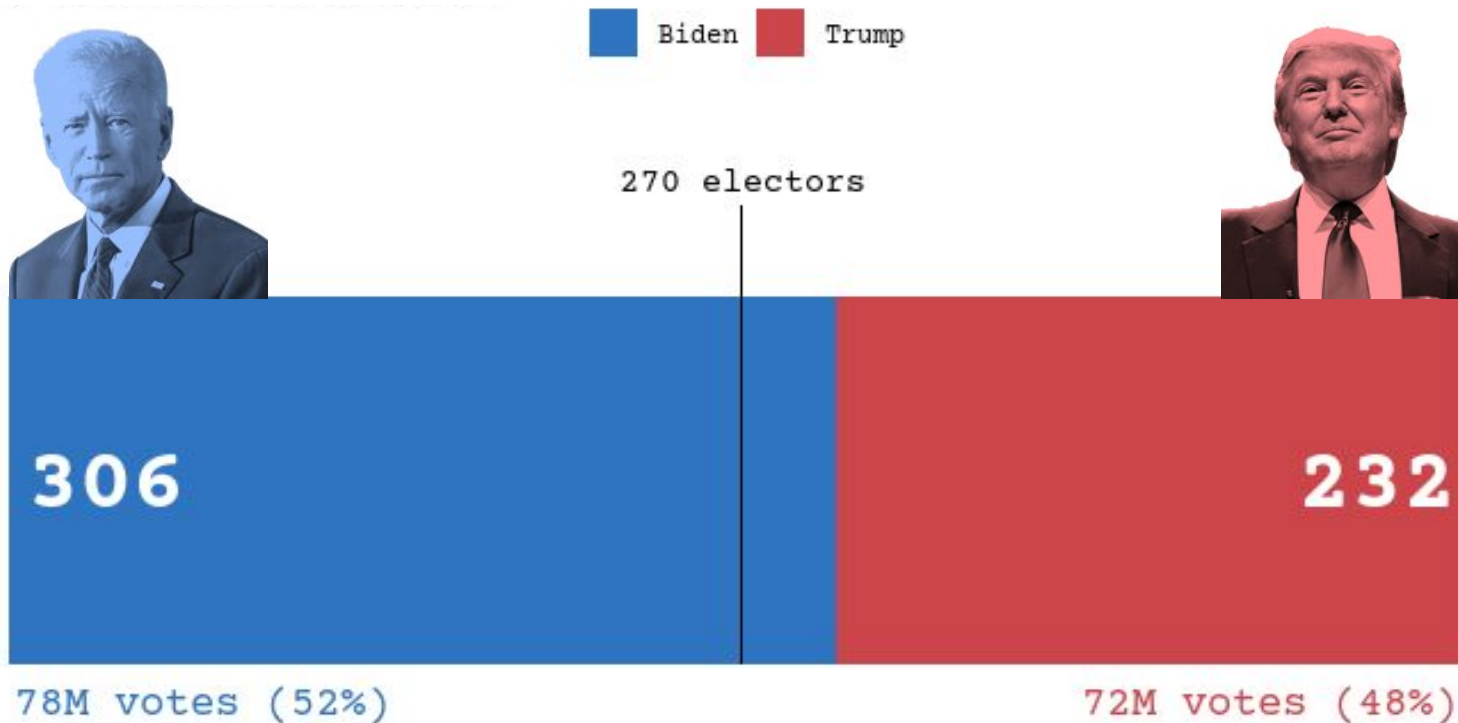
We analyse the US presidential election 2020 data and present our insights on the following:

1. The voting trend per county and how each candidate performed in individual counties.
2. Swing states and how they influenced the election decision.
3. Change in turnout rate and the outcome on election result.
4. Demographics data and how the results were influenced by factors such as race, income levels and type of employment.



Biden triumphs by 6M votes

2020 election vote counts



Counties do not reflect people

2020 election vote counts



By vote count:

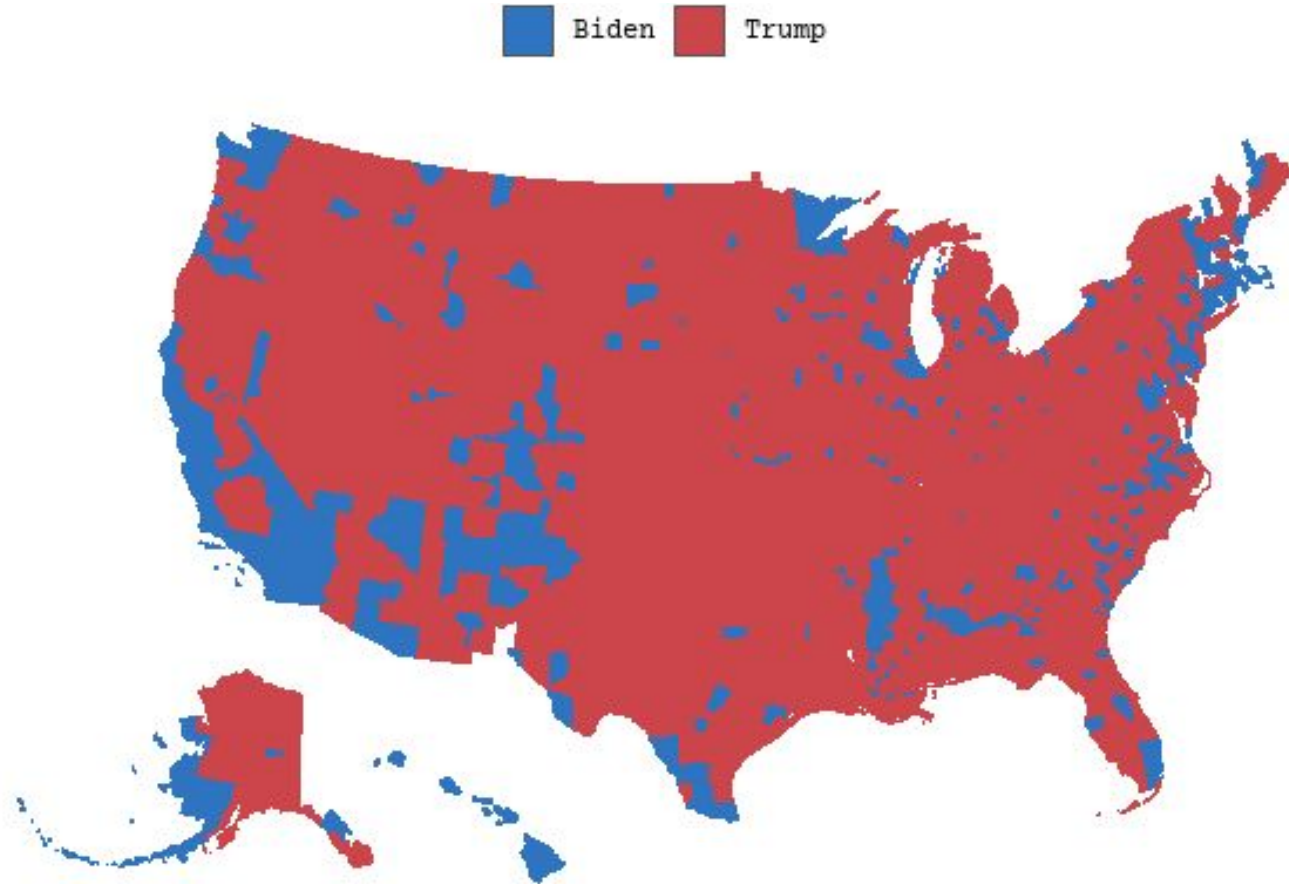


By counties:



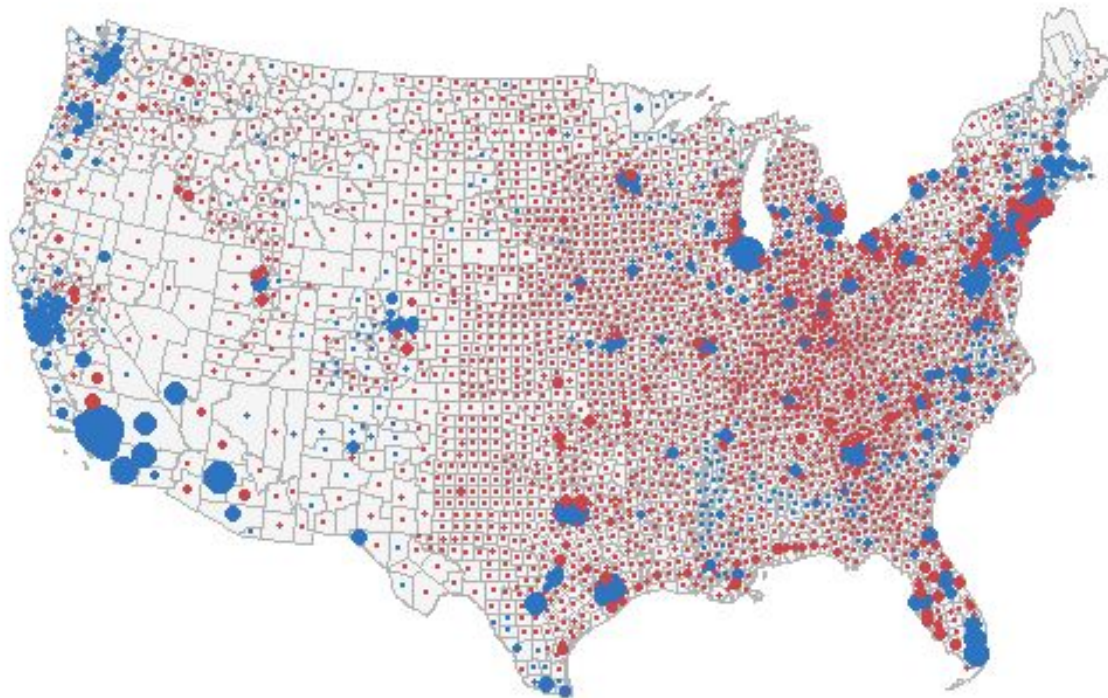
US turns red despite Trump loss

US county map by winner



Land doesn't vote - people do!

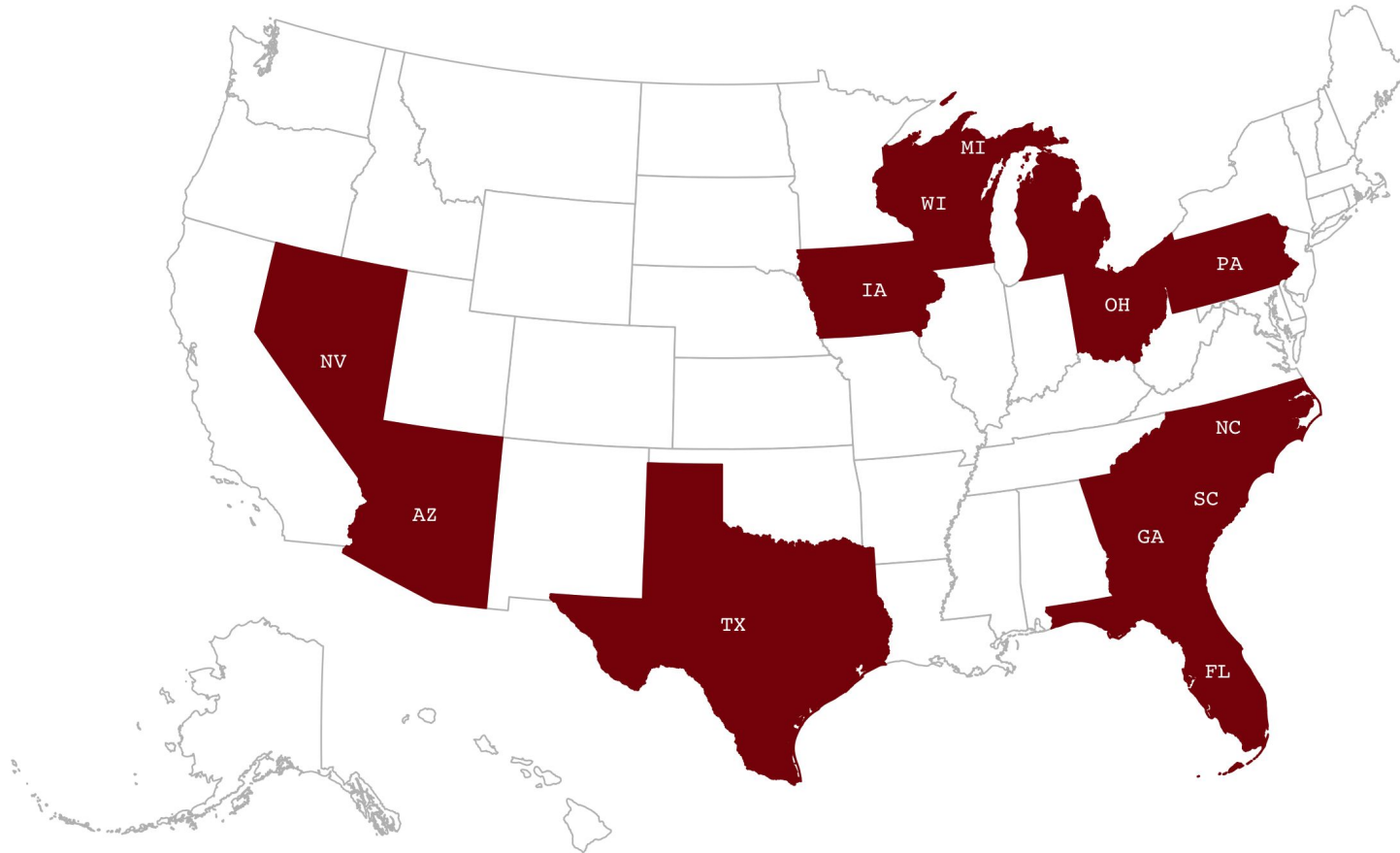
County winners scaled by population size



Swing States

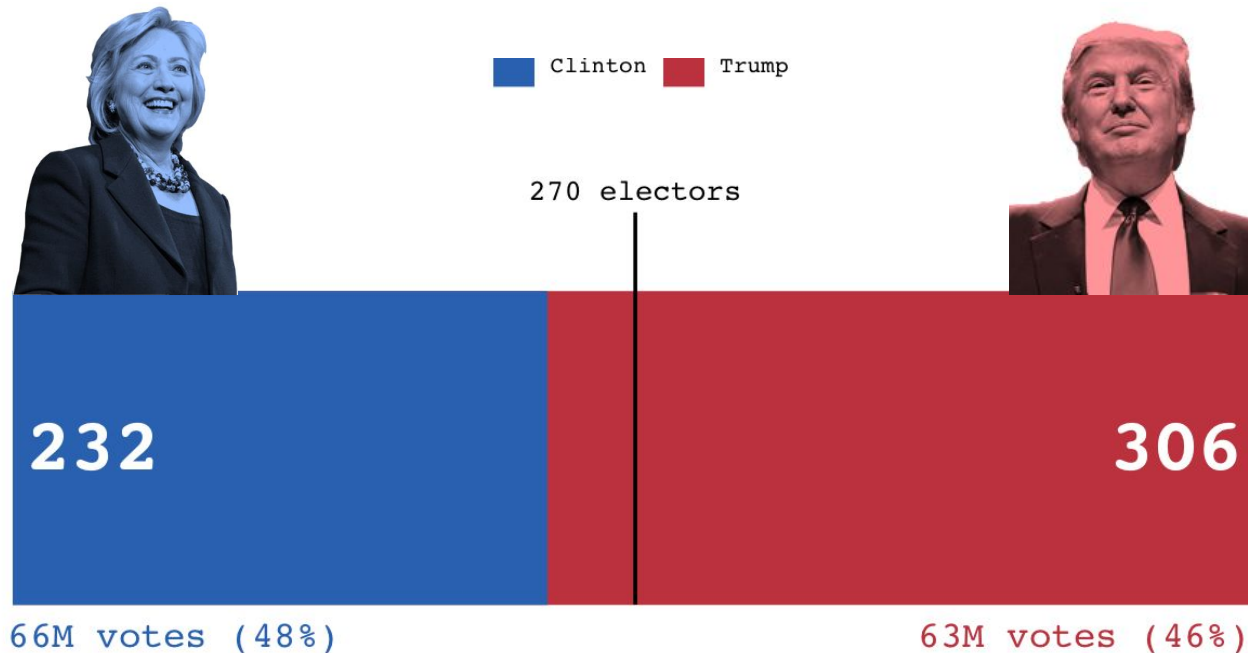
Which are the American Swing States?

Where the election actually happened



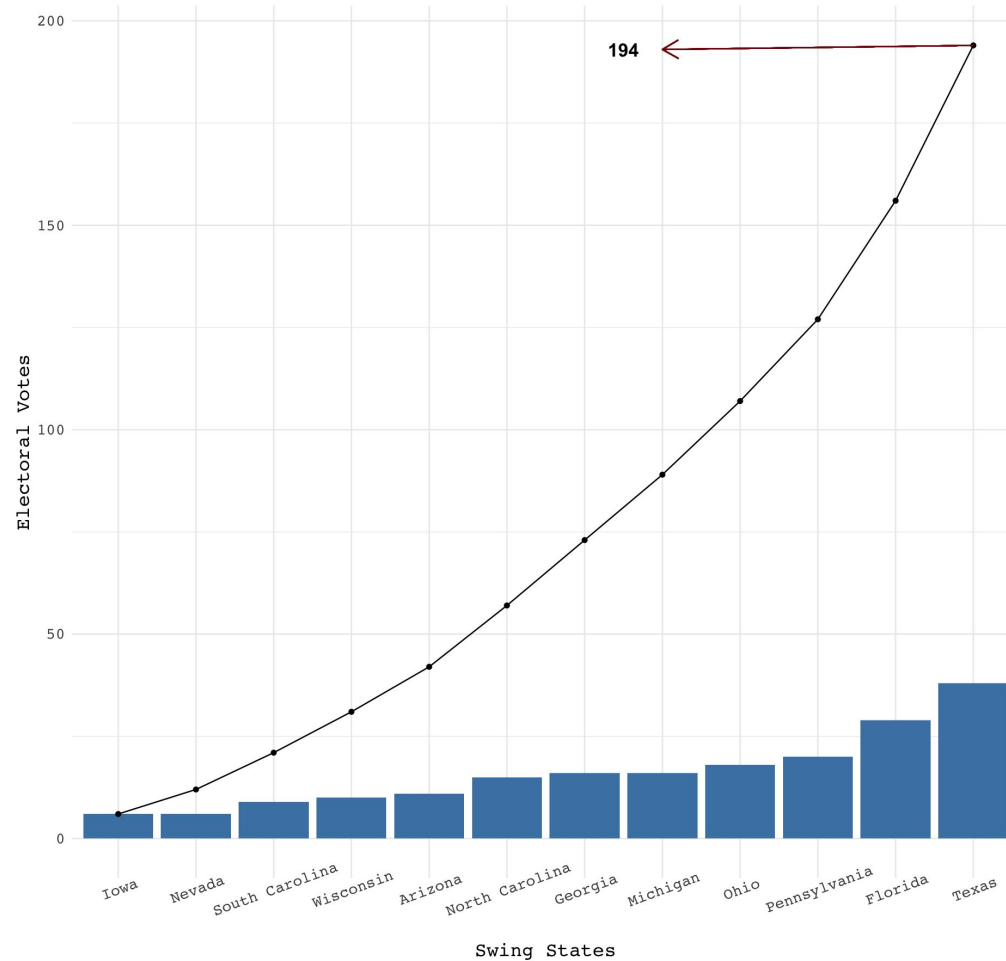
Trump won by 74 Electoral Vote Difference

2016 election vote counts



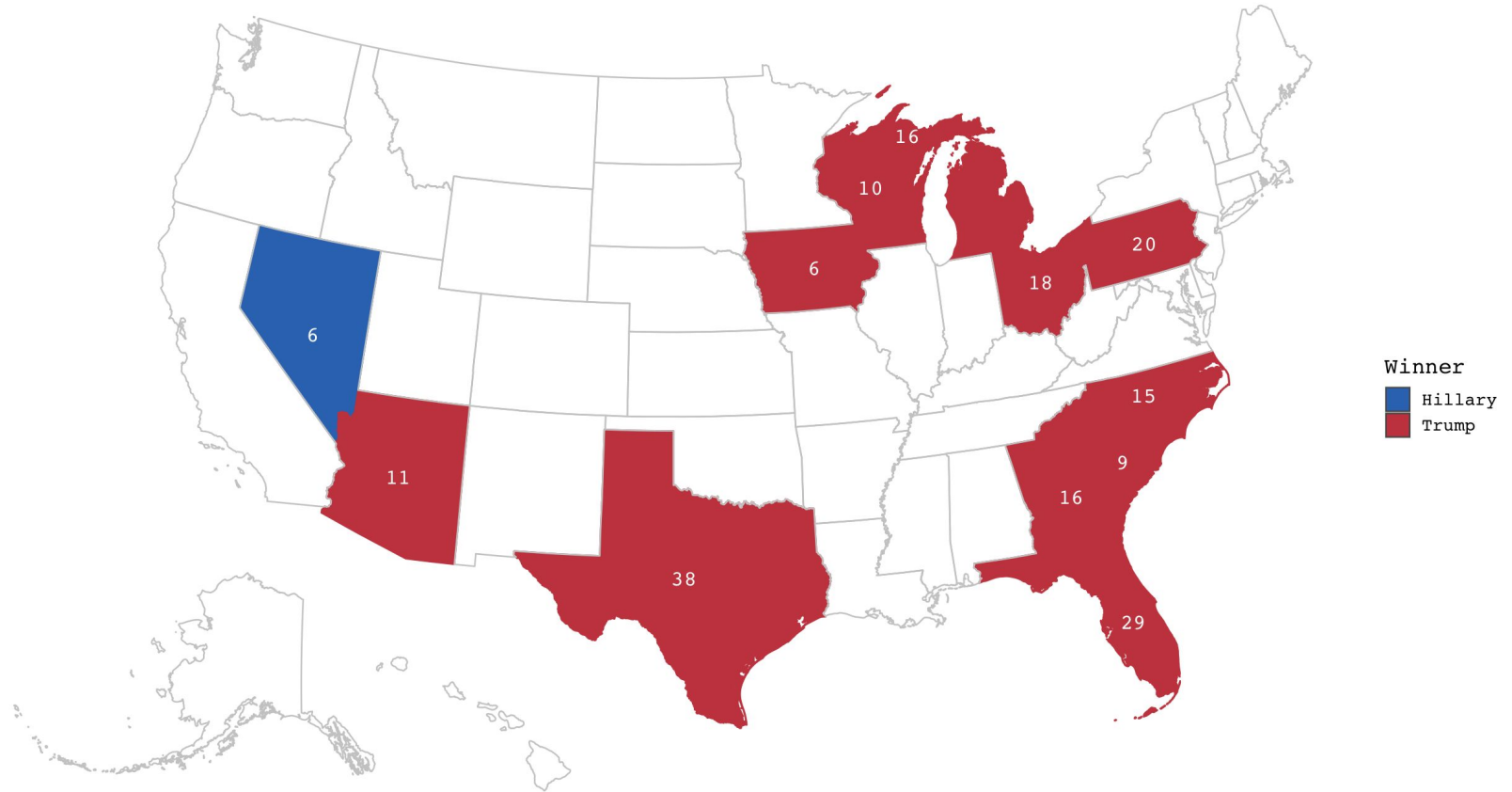
Swing States add up to 194 electoral votes

Cumulative increase of electoral votes in Swing States



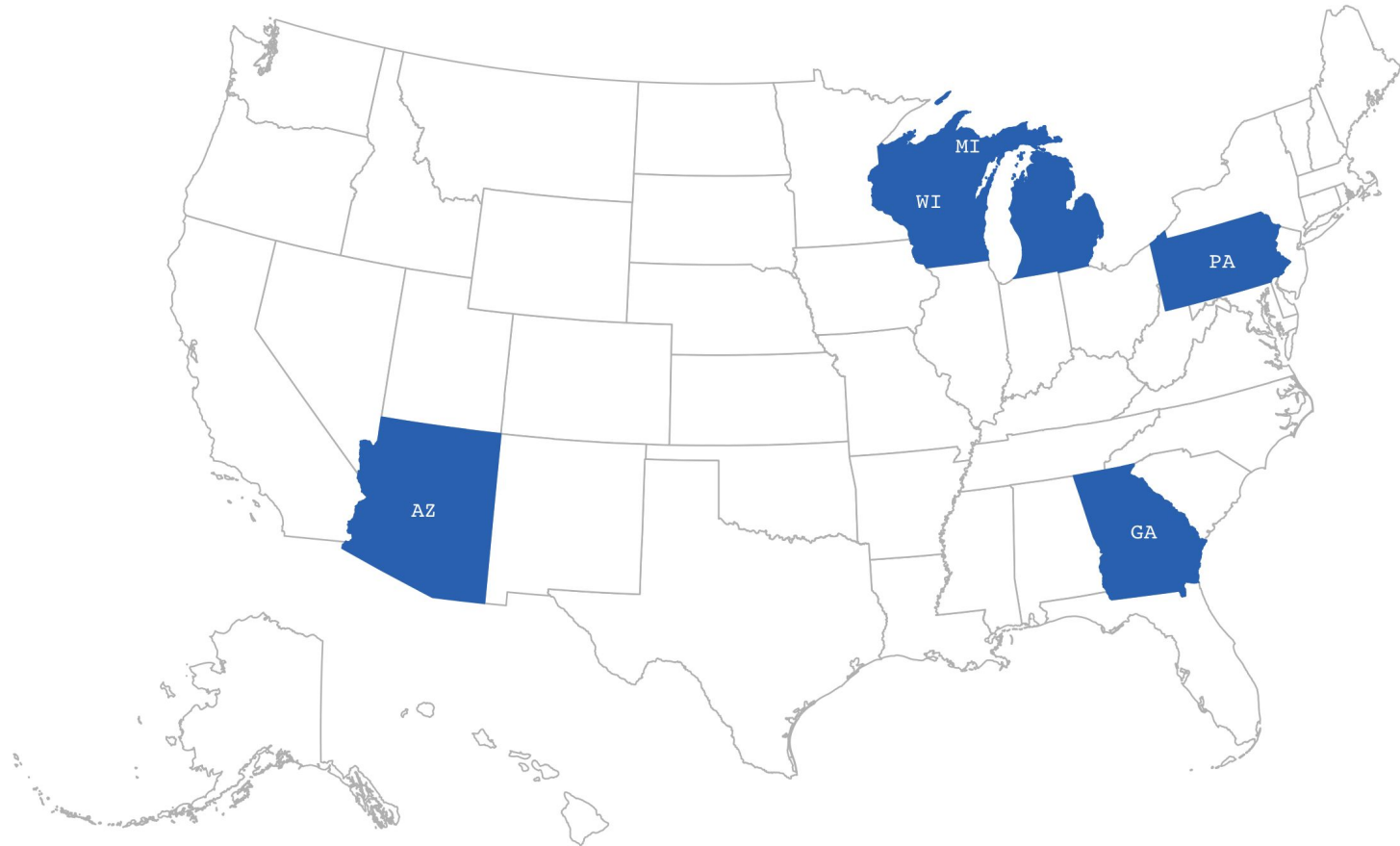
Trump won 188 electoral votes from Swing States in 2016

Outcome in Swing States in 2016 Elections



Joe Biden Flipped 5 States in the Elections

Flipped States from 2016 to 2020



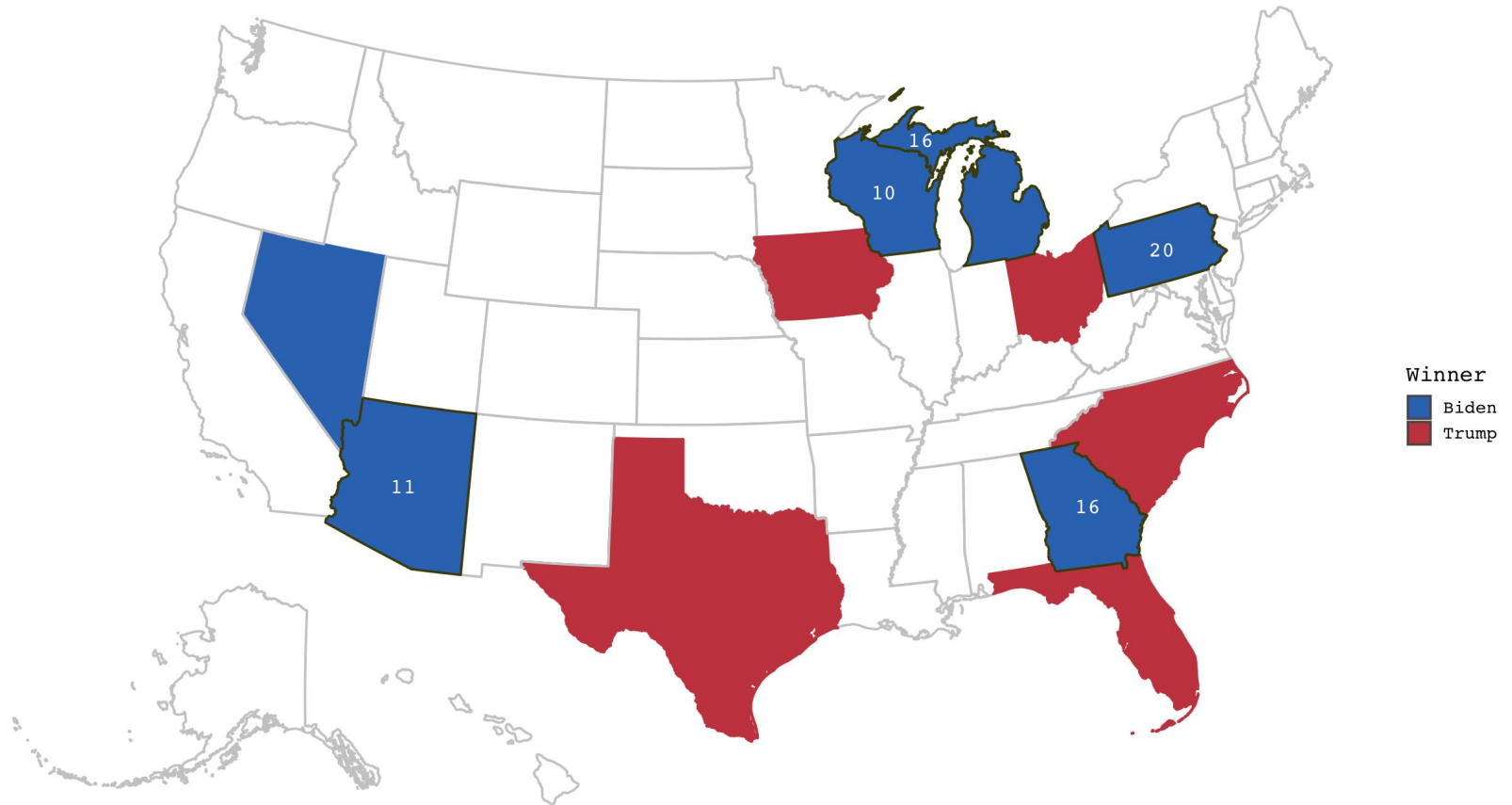
Donald Trump was not persuasive enough

Mr President did not manage to flip any states from 2016 to 2020



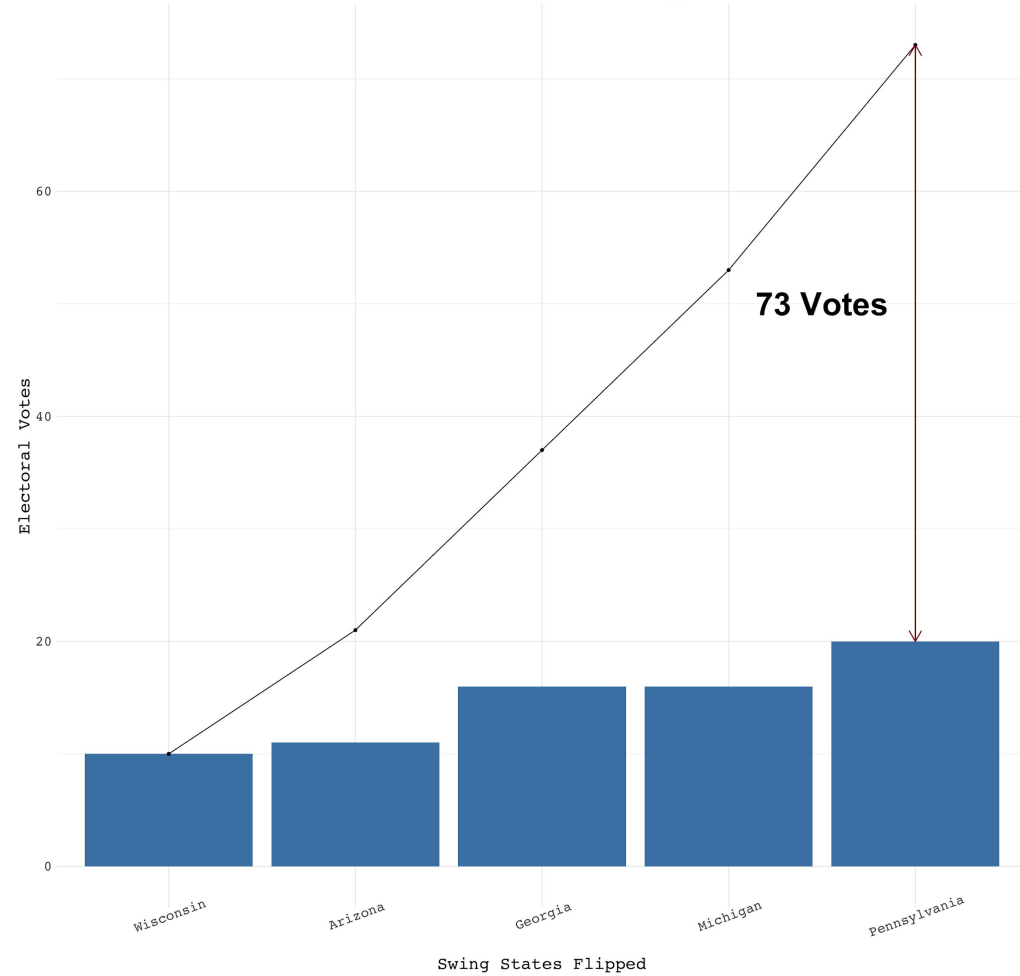
■ States Flipped by Trump

Flipped Swing States Highlighted Made The Difference in 2020



The Swing States Got Biden The Presidency

Cumulative increase of electoral votes in Swing States flipped

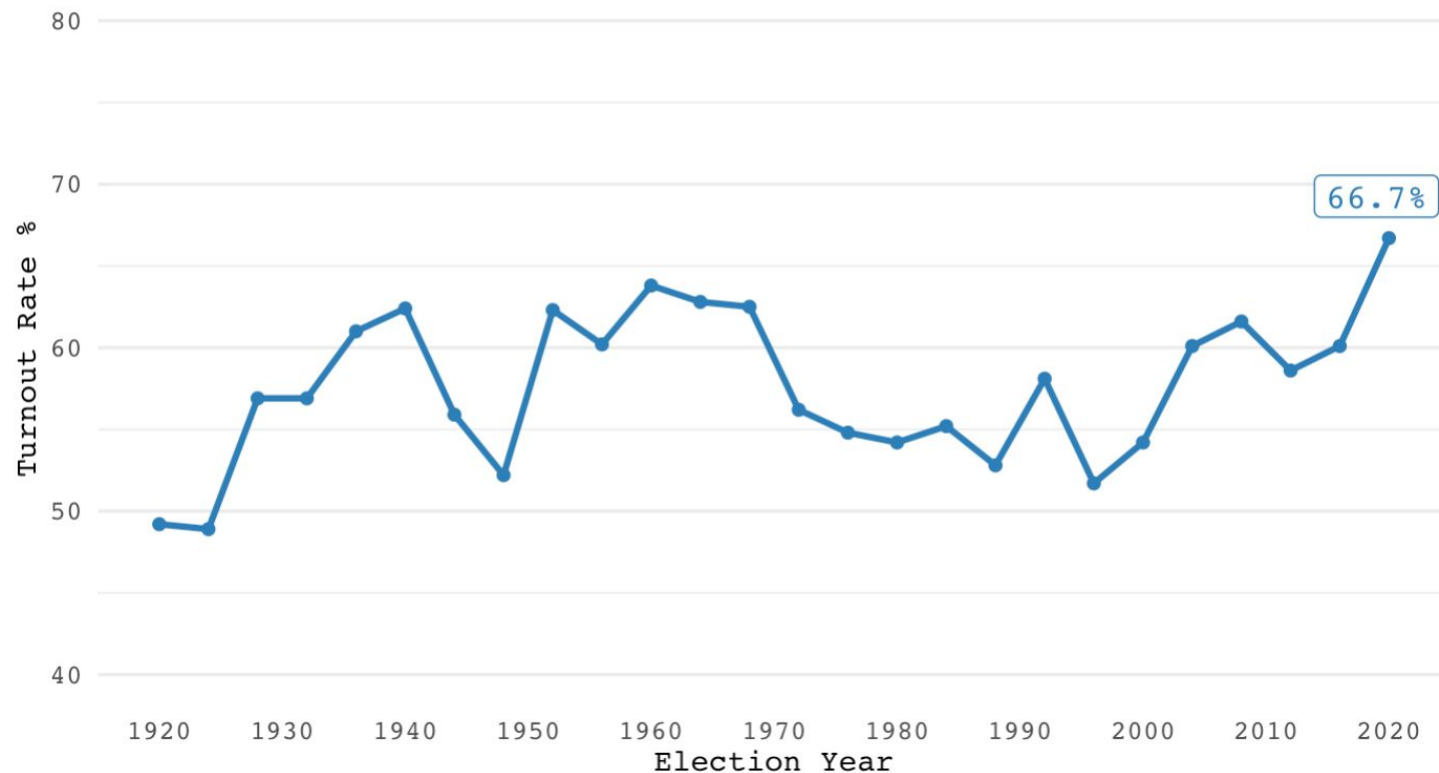


Turnout Rate

How many eligible voters will vote in the election

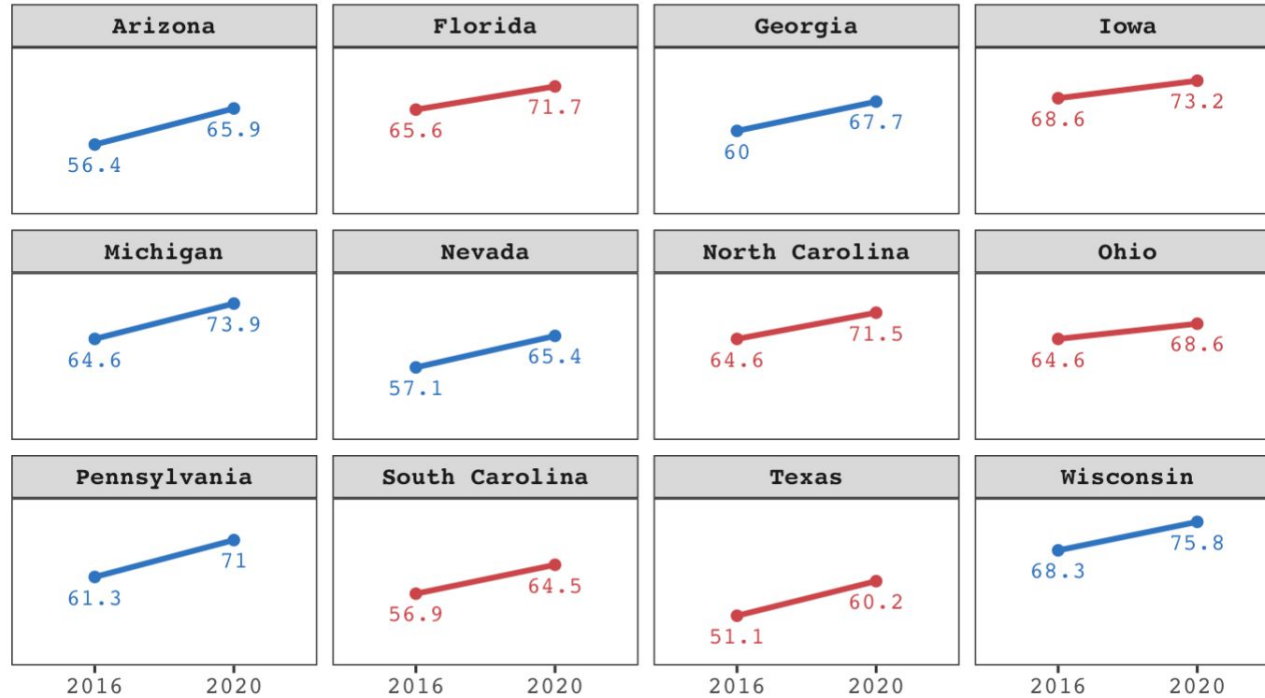
The U.S. experienced highest turnout rate in over a century

1920-2020 Voting eligible population turnout rates



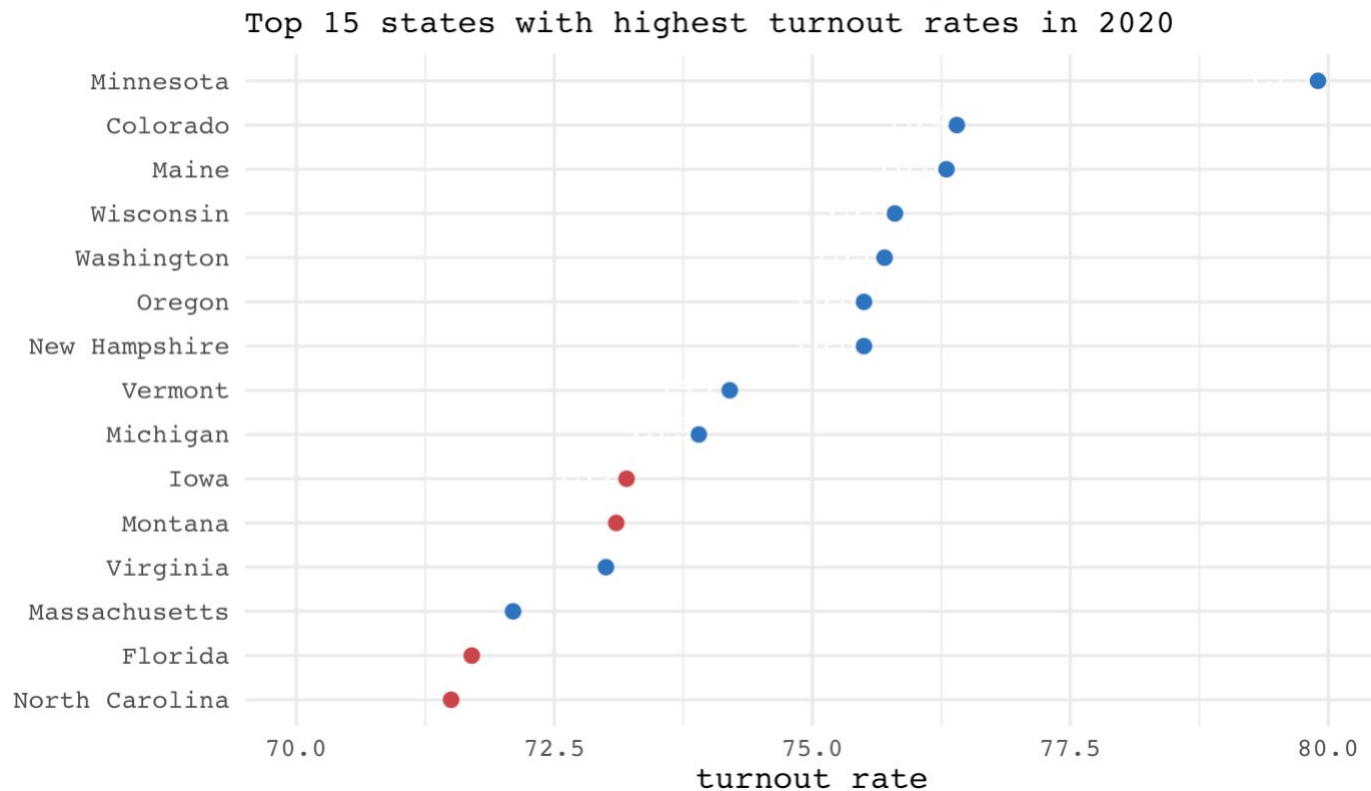
Turnout on the rise in key battlegrounds

From 2016 to 2020 presidential election



- Mail-in ballots expanded because of complications introduced by covid-19 pandemic
- Go vote campaign encouraging American people to vote

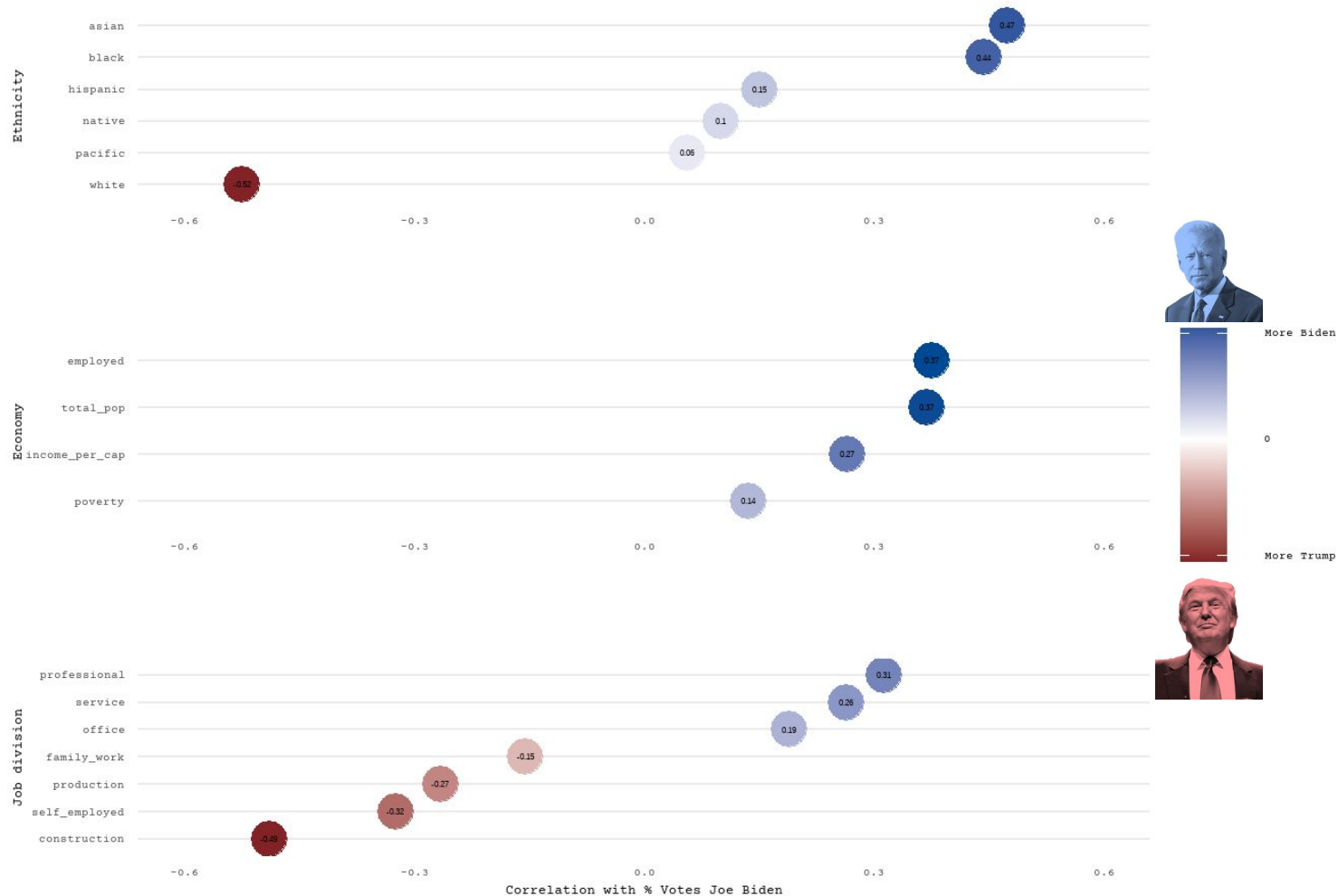
Biden won high turnout rate states



Demographics

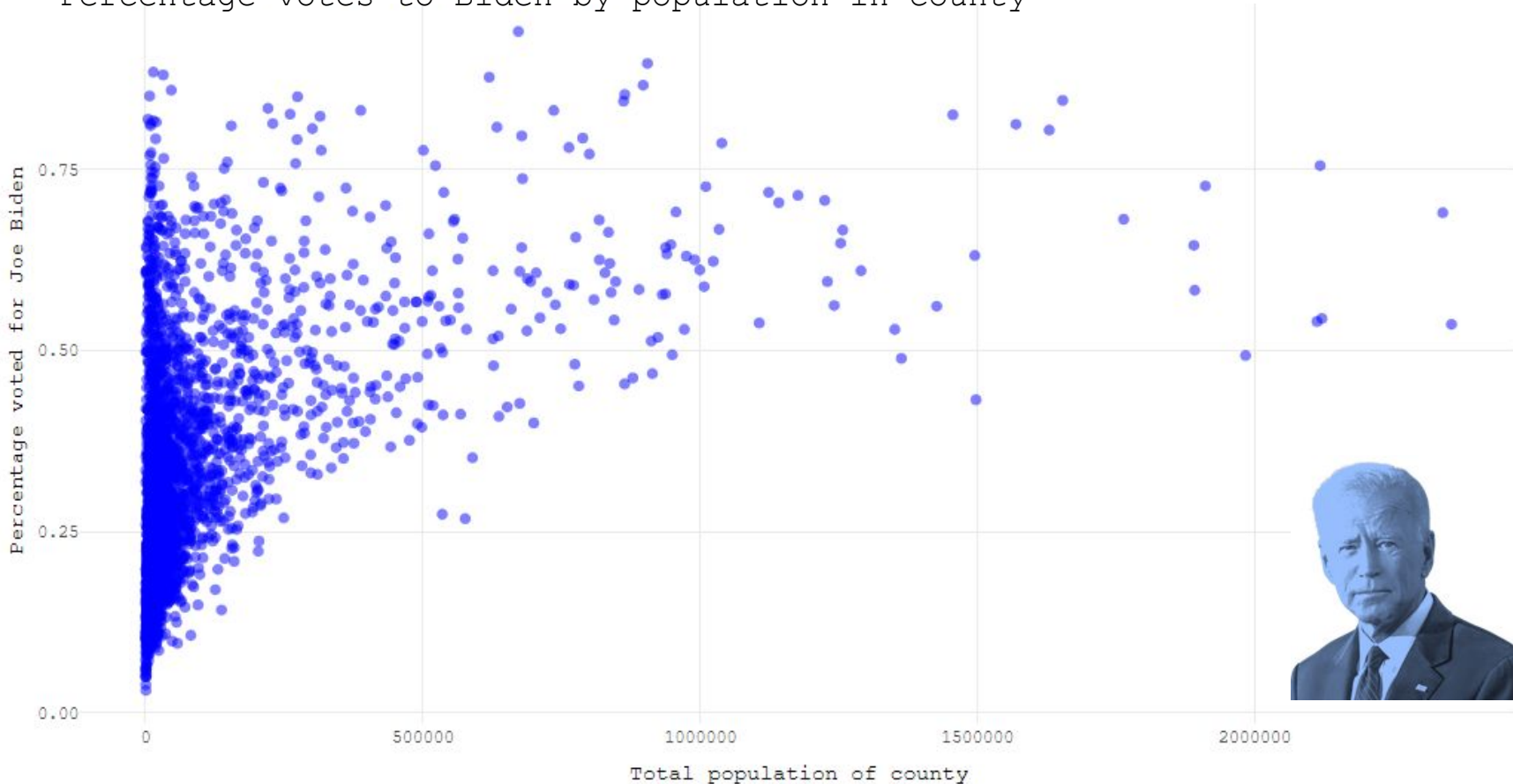
Blacks and Asians Voted Biden, People Working in Construction or Production did not

Correlation between Demographics and Votes for J.Biden



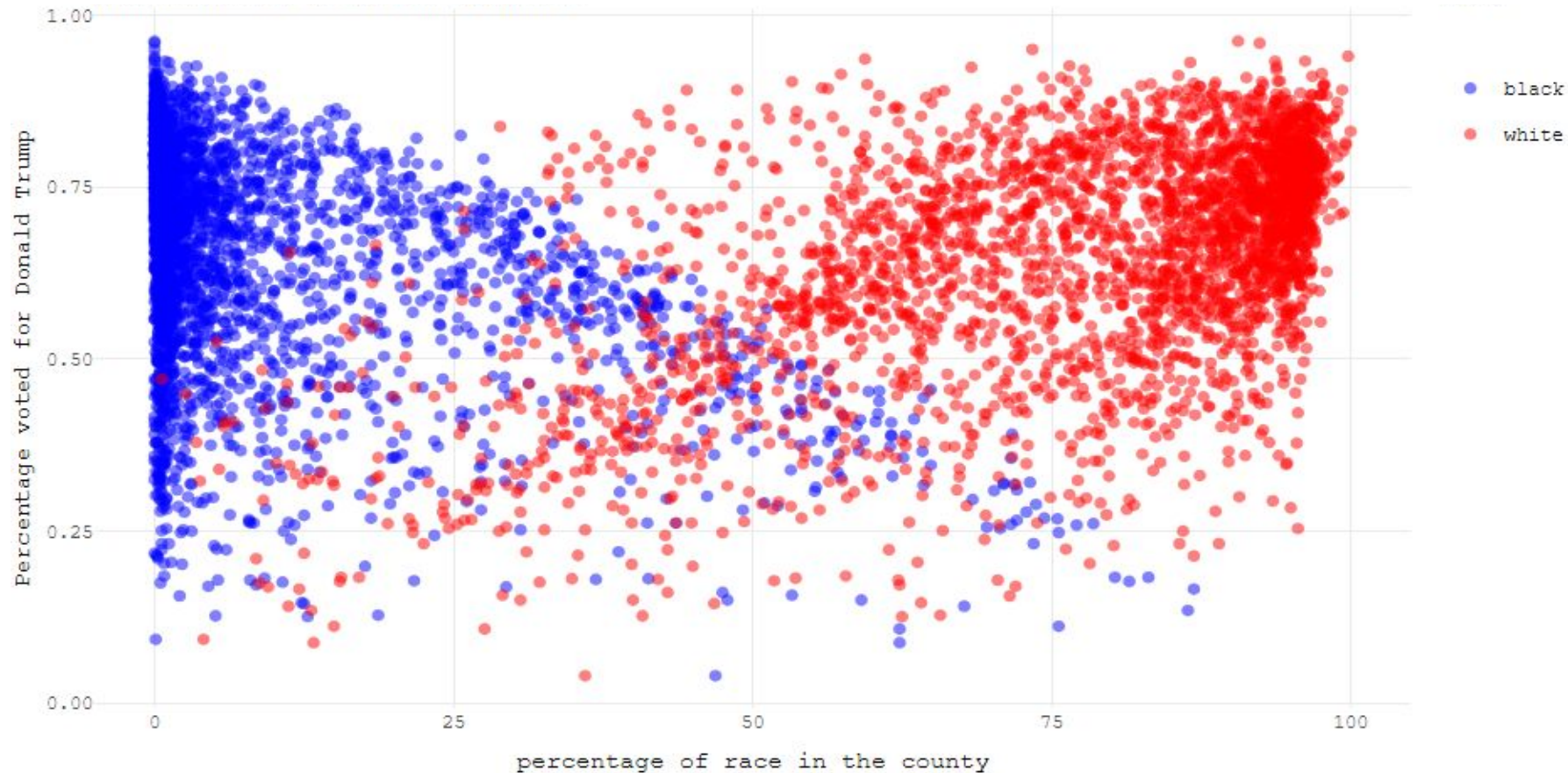
Biden wins in counties with more people!

Percentage votes to Biden by population in county



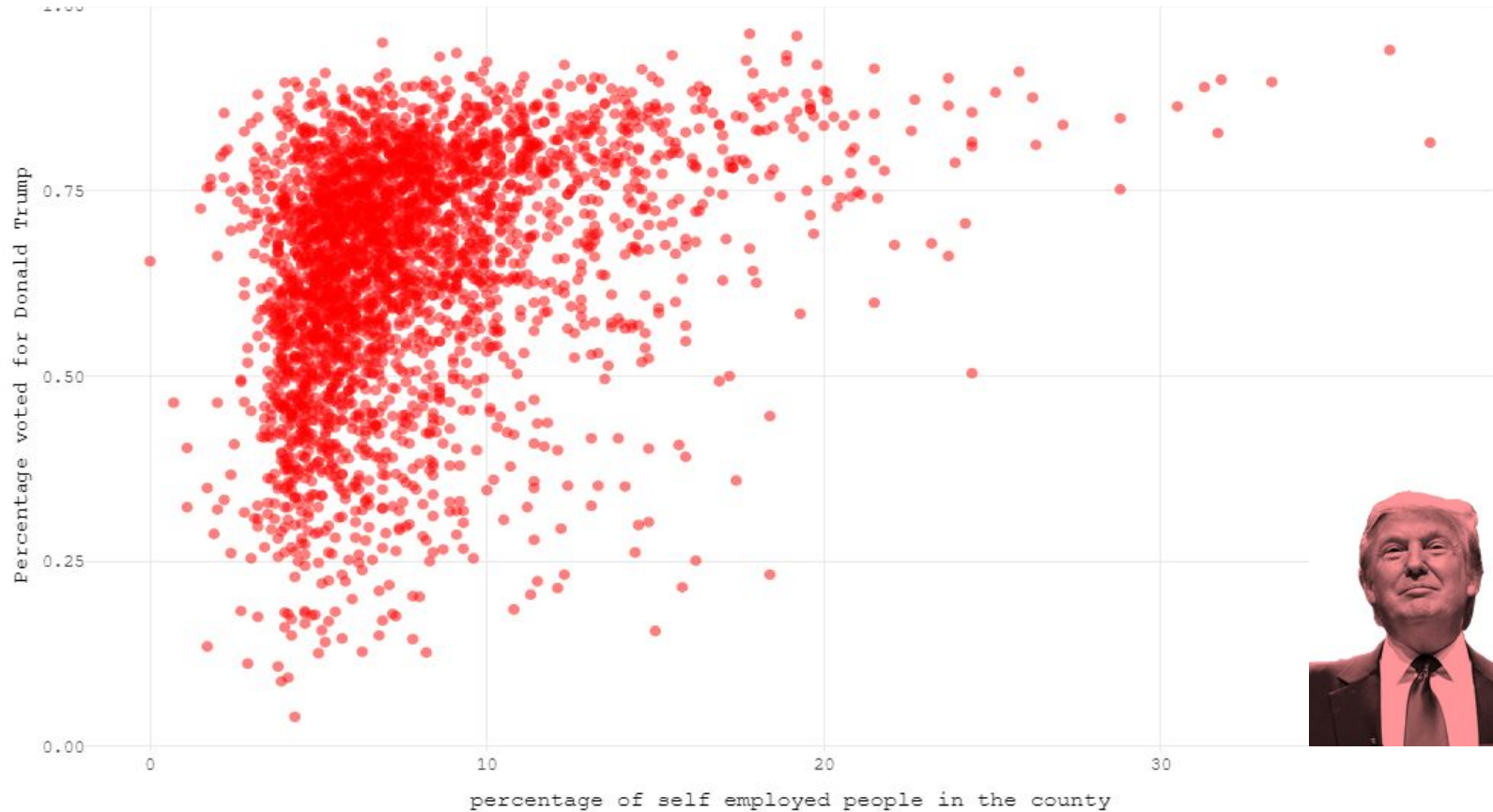
White people vote more for Trump?

Percentage votes to Trump split by race



But who did actually vote for Trump?

Percentage votes to Trump by self employed percentage in county



Conclusions

United States Election Behavior Analysis

- Land does not vote - people and (electoral votes) do
- The swing states got Biden the presidency
- The US got highest voter turnout rate in 2020 election
- Biden won states with high turnout rate
- Demographics played a role - Counties with high percentages of Black people voted Biden; the opposite happen for White people
- Counties with high % of self employed people voted Trump, so did the ones with lower income



Reference

- United States Election Project:
<http://www.electproject.org/home/voter-turnout/voter-turnout-data>
- Statista:
<https://www.statista.com/statistics/1184621/presidential-election-voter-turnout-rate-state/>
- Electproject.org: <http://www.electproject.org/2020g>
- Kaggle: <https://www.kaggle.com/etsc9287/2020-general-election-polls>