

CS 571 - Data Visualization & Exploration

Group Activity 4: Determine the Task

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From coronavirus to bushfires, misleading maps are distorting reality

A picture may tell a thousand words, but a map can help to interpret hundreds of thousands of data points and 'show' a story in mere seconds. Studies have shown how the human brain is much more inclined to...



**Note that many maps are provided without context.
Your goal for this activity is to determine that context.**

Activity Instructions:

1. Create a shared Google Doc (add group member names in the title)
2. Study each of the following maps related to the 2016 U.S. presidential election
3. For each map visualization, write 2-4 sentences discussing the following:
 - a. What data are being encoded (data abstraction and visual encoding)?
 - b. What information **is** the visualization conveying?
 - c. What information **is not** conveyed by the visualization?

A brief, and very simplified description of the U.S. electoral process

- Elections are run at the county level. Counties tally votes and report the results to the state government
- The popular vote is counted at the state level, and the winner of the popular vote receives the state's electors (most of the time)
- The number of electors for each state is determined by the number of senators (always 2) and the number of congressional districts (proportional to the population of the state)
- There are 538 electors in total. A candidate must win the votes of 270 electors to win the election.

Visualization #1



Donald J. Trump
@realDonaldTrump



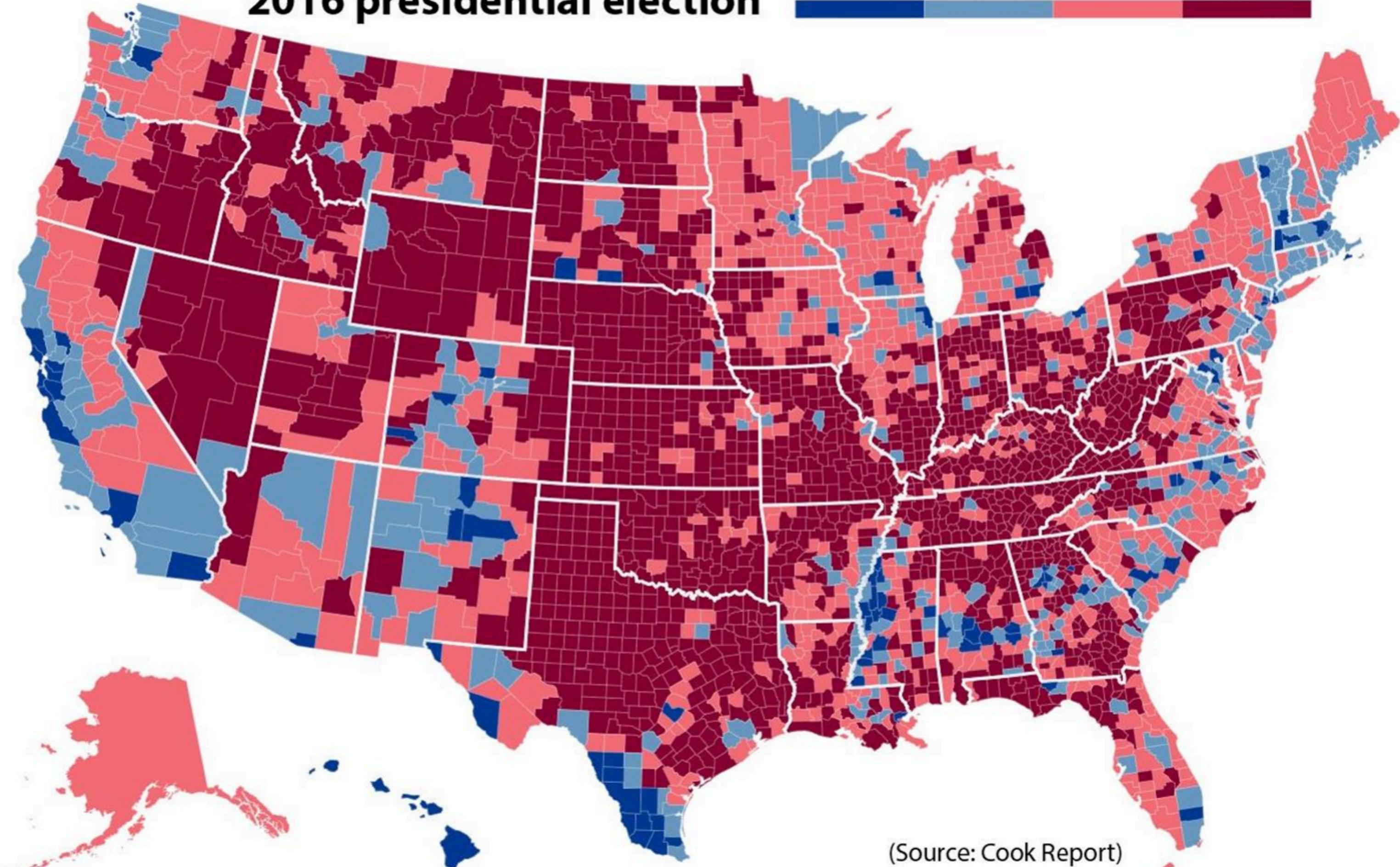
12:05 PM · Oct 1, 2019 · Twitter for iPhone

62.2K Retweets 235.6K Likes

Visualization #2

Share of vote in the 2016 presidential election

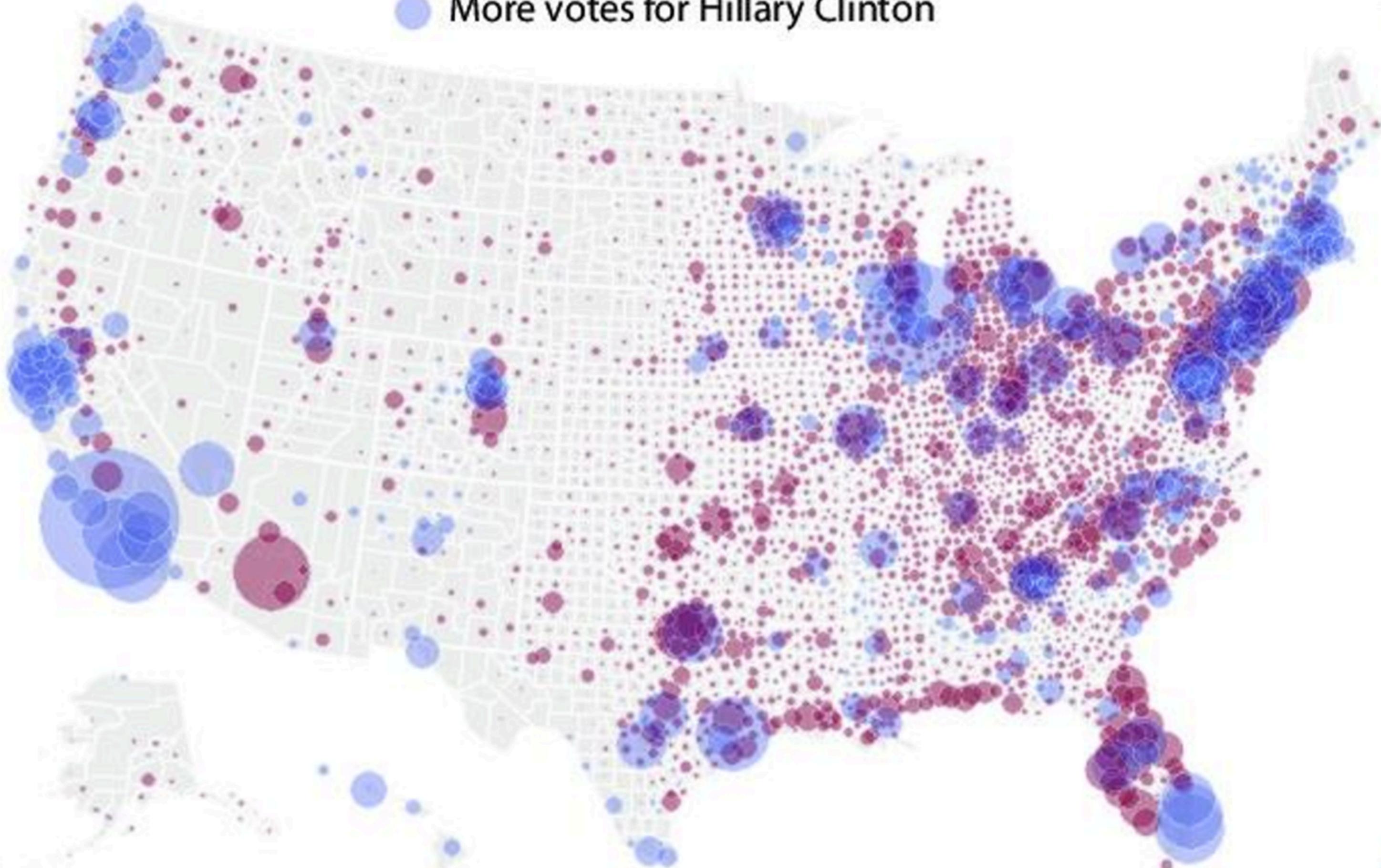
More Democratic More Republican



(Source: Cook Report)

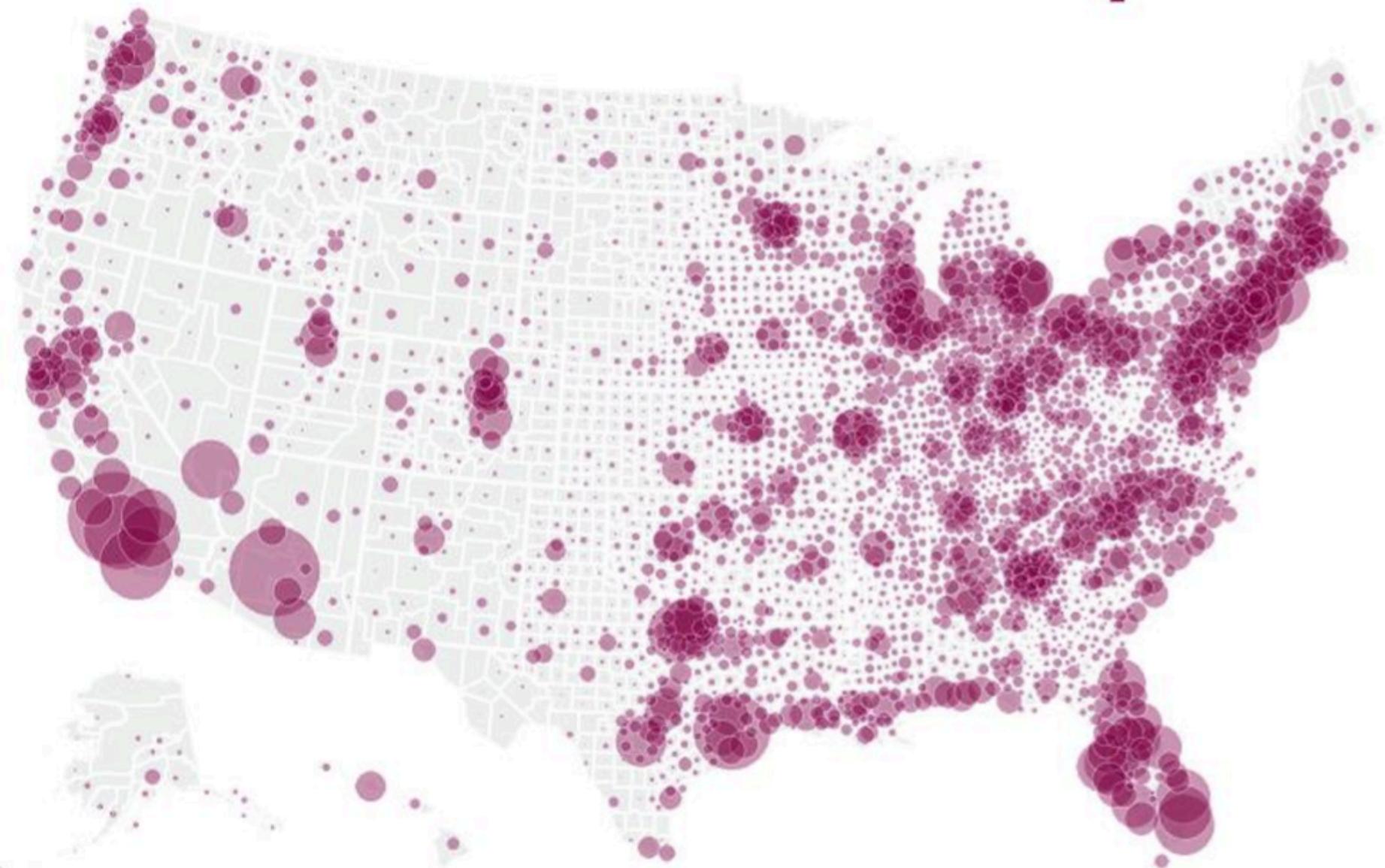
Visualization #3

- More votes for Donald Trump
- More votes for Hillary Clinton

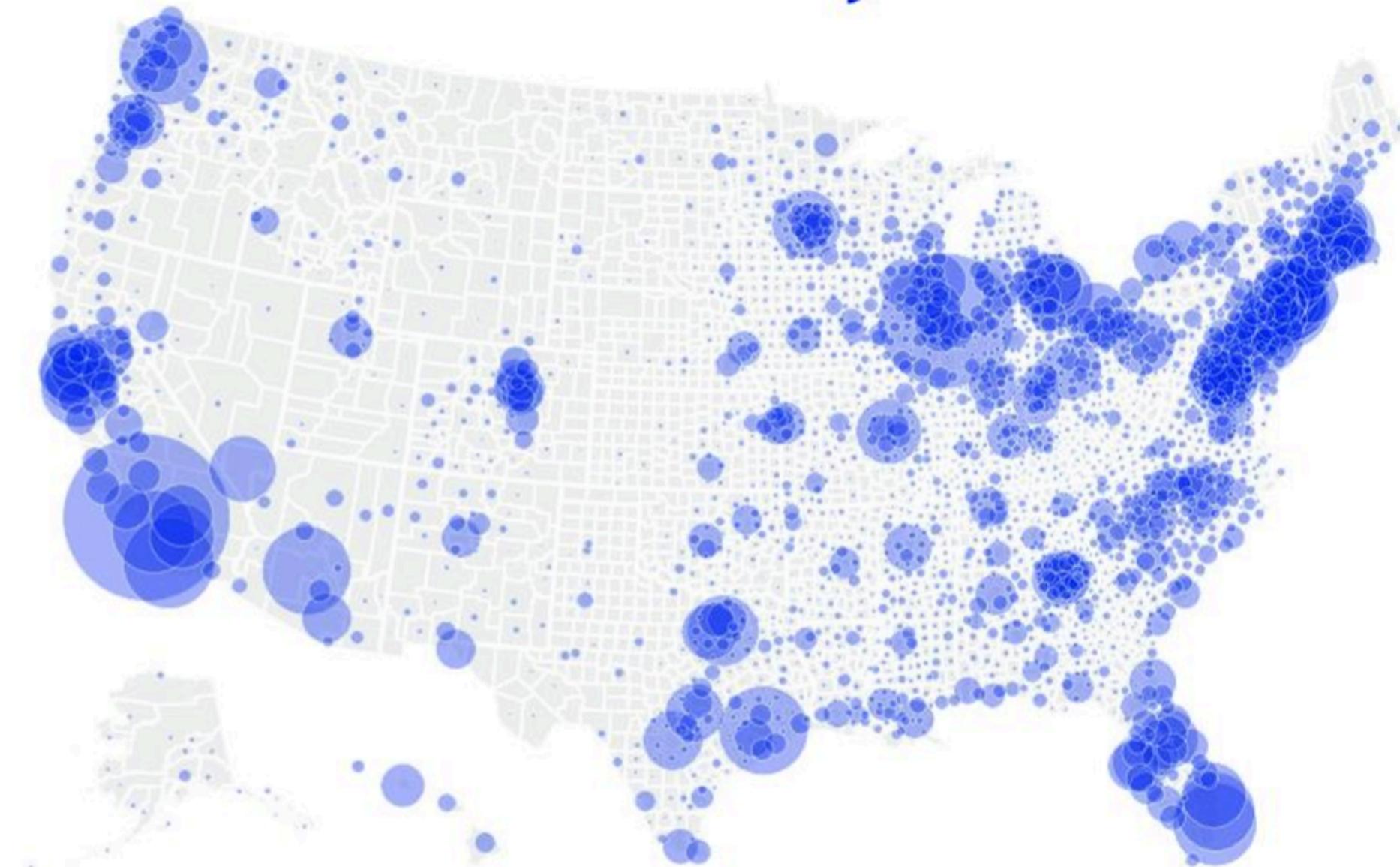


Visualization #4

Votes for Donald Trump



Votes for Hillary Clinton



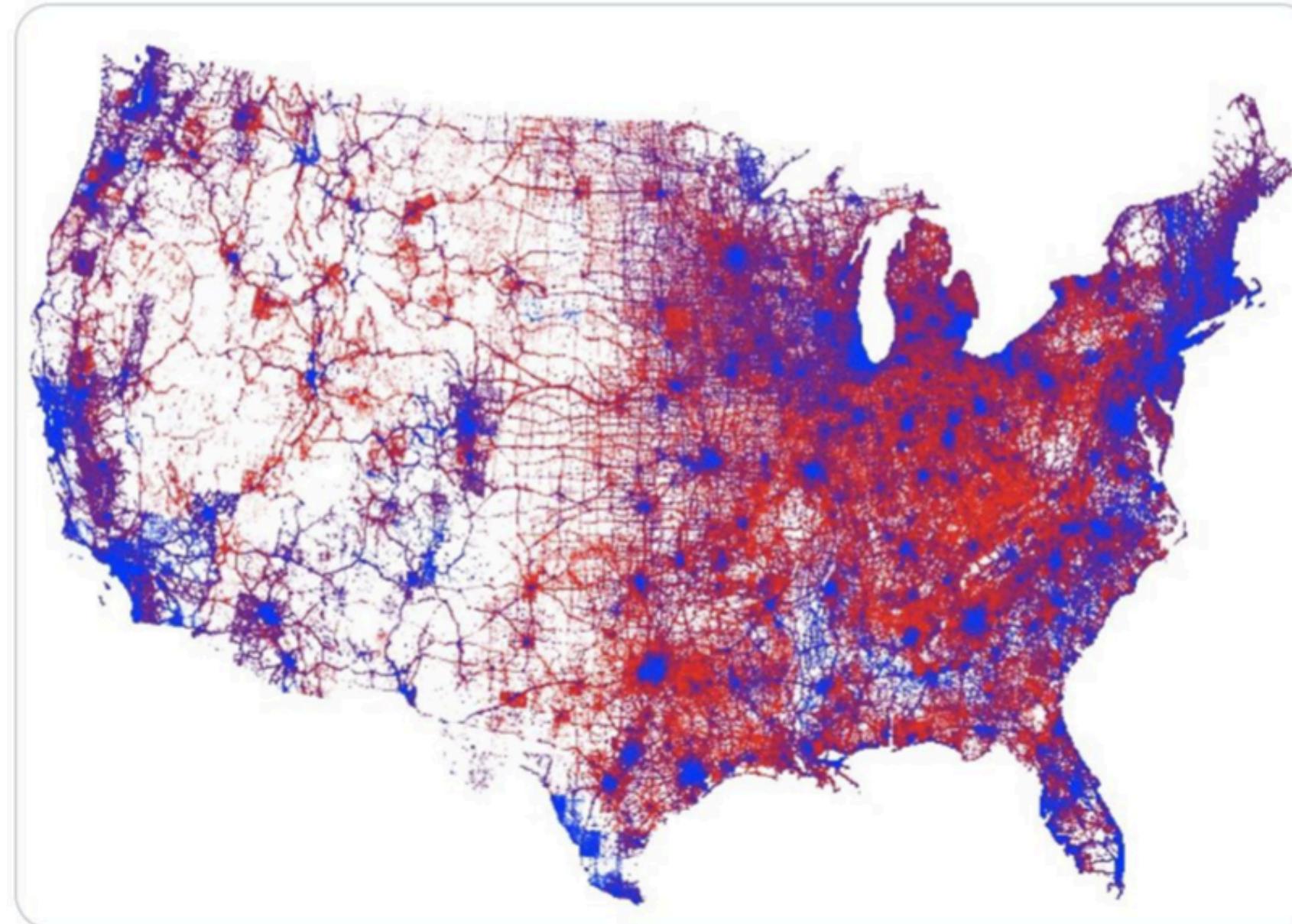


Kenneth Field
@kennethfield

...

Visualization #5

Fair bit of data wrangling but finally...a 1 dot = 1 vote dasymetric dot density 2016 Presidential election map from [@ArcGISPro](#). 65,844,61 blue dots. 62,979,636 red dots. Count 'em! (note: this is just a rough screengrab, will webify & make pretty)



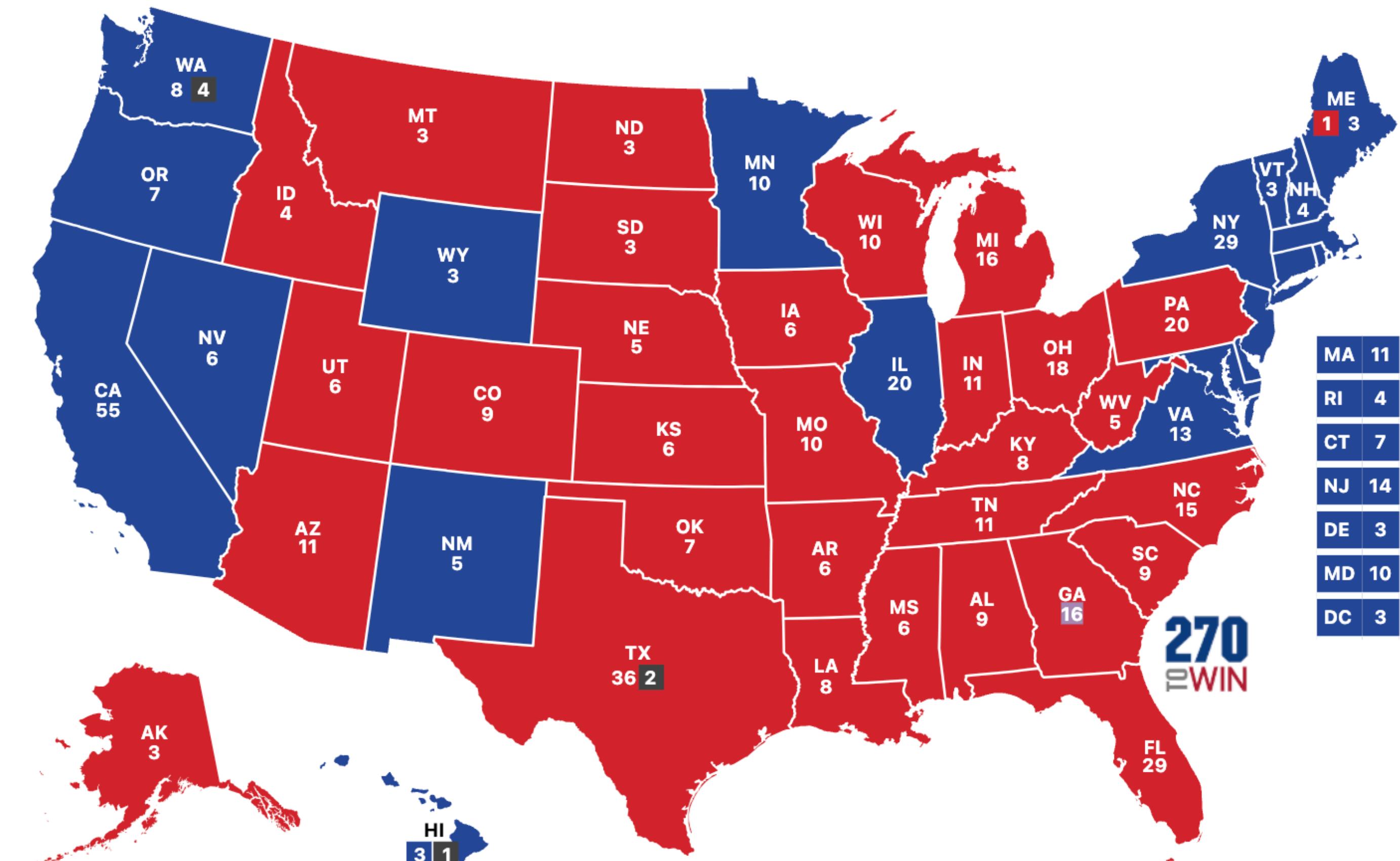
8:04 PM · Mar 5, 2018 · TweetDeck

4.1K Retweets 857 Quote Tweets 10.1K Likes

Clinton (D) 221

310 Trump (R)

Visualization #6



Electoral college votes for 2016 election

Visualization #7

State size adjusted by electoral votes it contributes to the election

