

What survey data and election results can tell us about voter suppression

Who loses votes? Can this bias election outcomes?

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What if everyone voted?

Guiding questions

1. How many Democrats and Republicans are there?

Given data constraints, we're really asking: How many Clinton and Trump voters are there?

2. How are they distributed geographically?

The answer lets us assign Electoral College votes.

Data

1. Cooperative Congressional Election Study (CCES): A survey of 64,000 Americans

Includes demographic data and 2016 vote choice for 40,000+ validated voters

2. American Community Survey (ACS): A Census Bureau survey of 175,000 Americans

Includes the same demographic data as the CCES 32,640 “cells”

Method

1. Train a predictive model on CCES data

- Multi-level logistic regression
- Predict vote choice with: age, gender, race, education, region and interactions between them

2. Use the model to predict voting habits for every eligible American

Via “post-stratification” on the ACS

ACS Post-stratification

1. Each "cell" (row) is one "type" of person

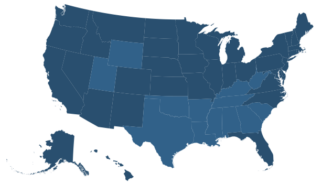
- One cell for white men ages 18–30 without college degrees who live in the Northeast
- Another for white men ages 18–30 without college degrees who live in the South
- Another for non-white men ages 18–30 without college degrees who live in the Northeast
- etc.

2. We know how many voters in that "cell" live in each state

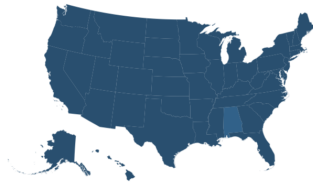
3. So we can say that x and $y\%$ of each "cell" vote for Clinton or Trump, then add up

Results

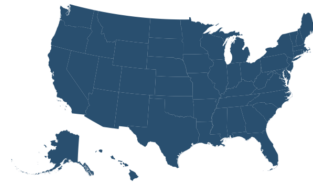
Black, Non-Hispanic
HS or less



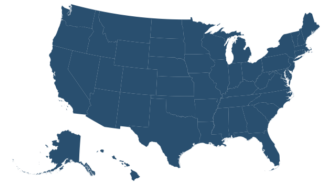
Black, Non-Hispanic
Some college



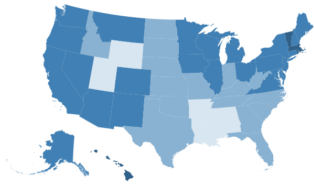
Black, Non-Hispanic
College



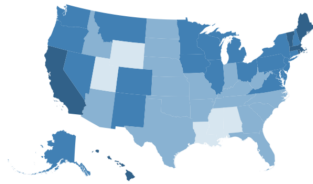
Black, Non-Hispanic
Post-grad



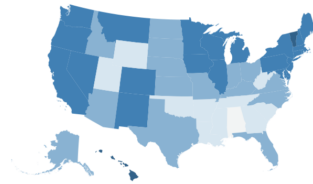
Hispanic
HS or less



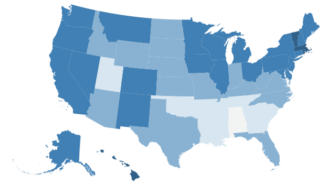
Hispanic
Some college



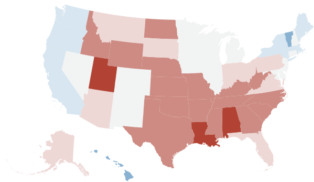
Hispanic
College



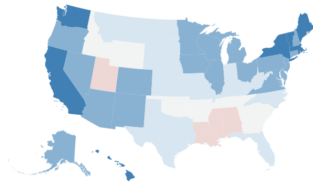
Hispanic
Post-grad



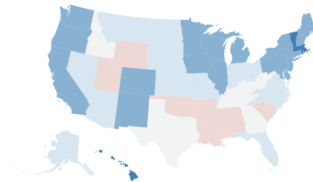
Other, Non-Hispanic
HS or less



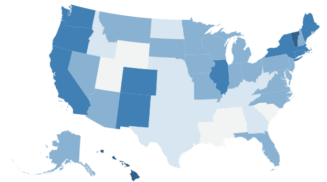
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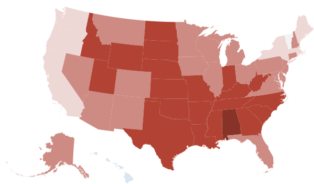
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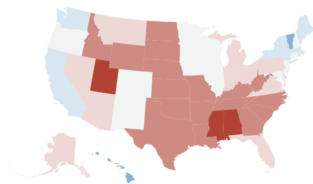
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Post-grad



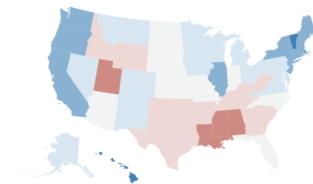
White, Non-Hispanic
HS or less



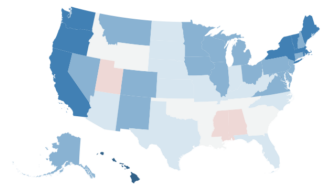
White, Non-Hispanic
Some college



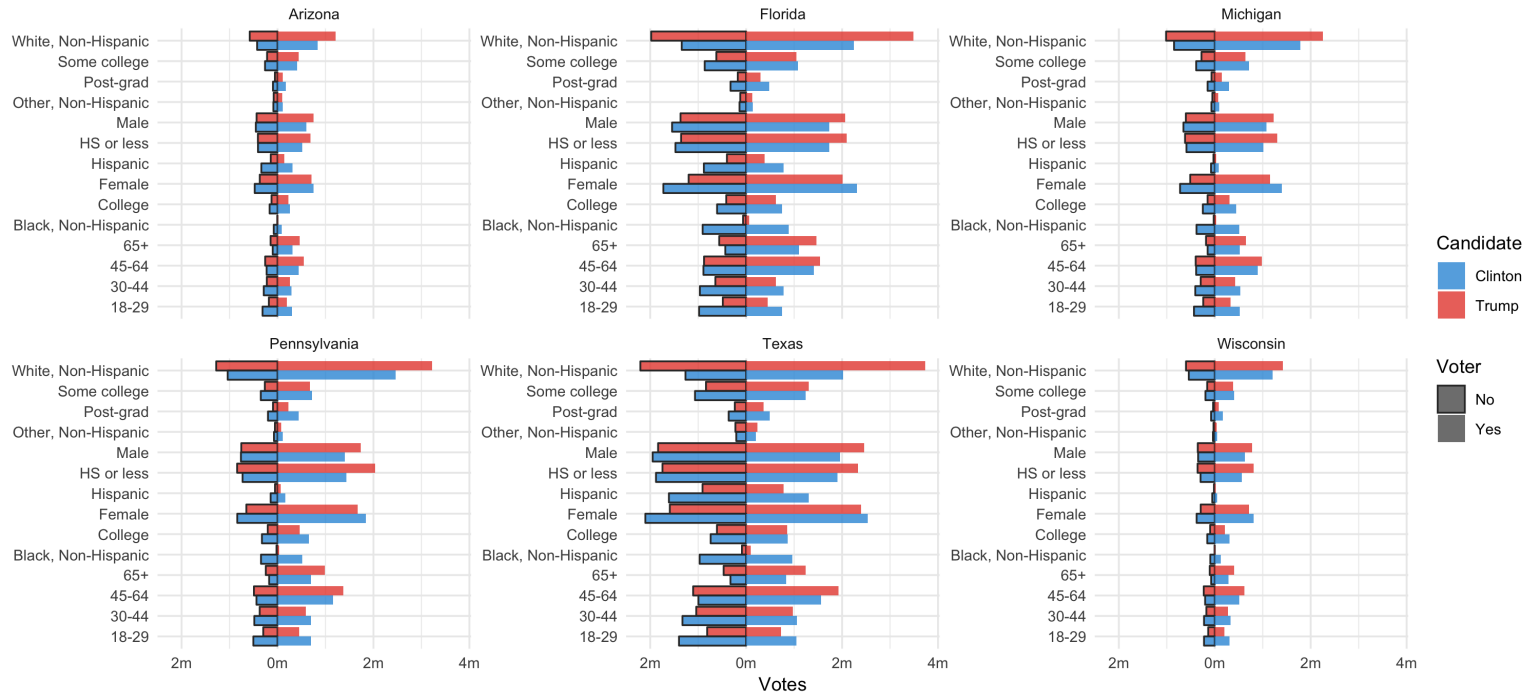
White, Non-Hispanic
College



White, Non-Hispanic
Post-grad



Results



Results: If everyone voted

What does this tell us about
voter suppression?

Voter suppression

– We can modify the percentage of each group that turns out to vote, then re-predict the election

- What if only all whites vote?
- All non-whites?
- Whites without degrees? Etc.

– Democrats do better when non-whites turnout; Republicans have a vested interest in keeping turnout rates low

- Especially in southern states with large minority populations
- Or on college campuses

Suppression of whites votes

Suppression of POC votes

Considerations

What this doesn't tell us:

- That Clinton/Trump/etc would have won if certain x, y or z restrictions had been put in place
- Downstream effects (AKA party positions and coalition changes)

The balancing act:

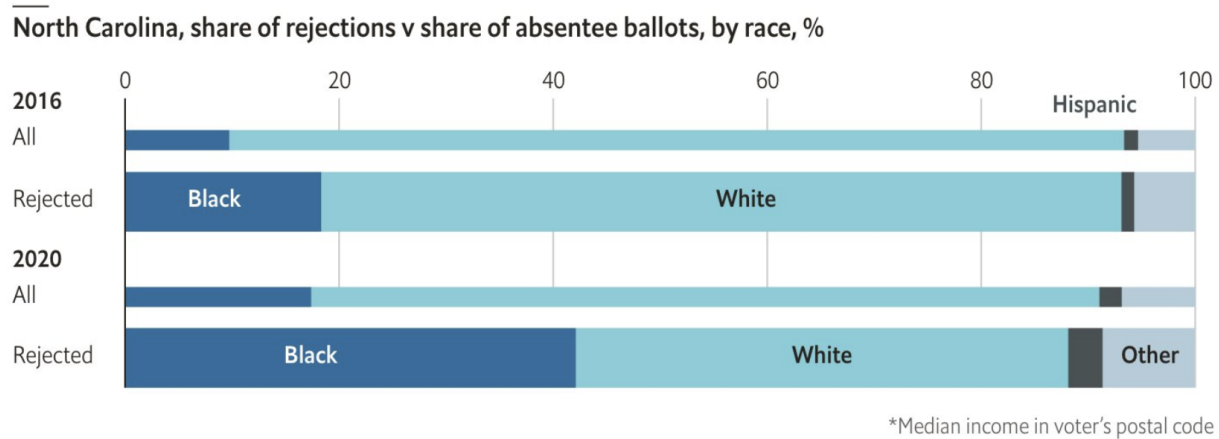
- There are a ton of white, non-college educated voters in the Midwest that tilt national scales if we increase turnout
 - Especially because increases in turnout are not uniform
 - And because of their geographic distribution, small relative increases in white turnout can tip the Electoral College to Republicans (see: 2016)
 - But on the other hand, some organizations are explicitly targeting non-whites and young voters for turnout purposes

Application to 2020

Application to 2020

1. Use YouGov data and MRP for turnout, vote choice, and vote method
2. Train models on NC ballot rejections to predict rejection likelihood
3. Calculate vote rejections for all absentee votes
4. Tally up lost votes for each party

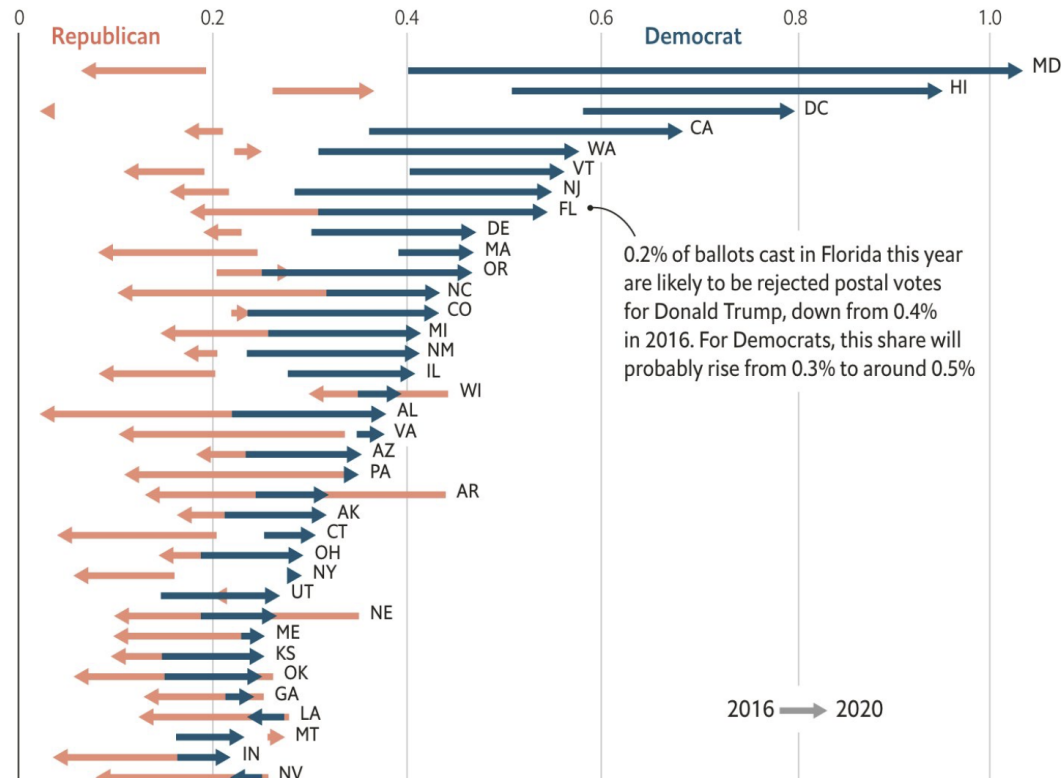
Model NC rejection rates



Calculate partisan impact

→ More Democrats are voting by mail, creating a partisan gap in rejections

Estimated share of votes lost due to ballot rejections, presidential elections 2016 v 2020, %



Thank you!

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These slides were made with the xaringan package for R from Yihui Xie. They are available online at <https://www.gelliottmorris.com/slides/2020-10-22-ut-austin/>