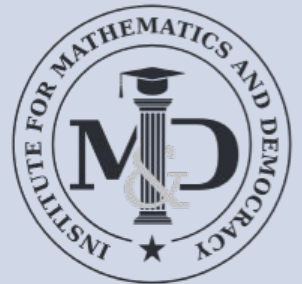


The Electoral College: A Mathematically Flawed System

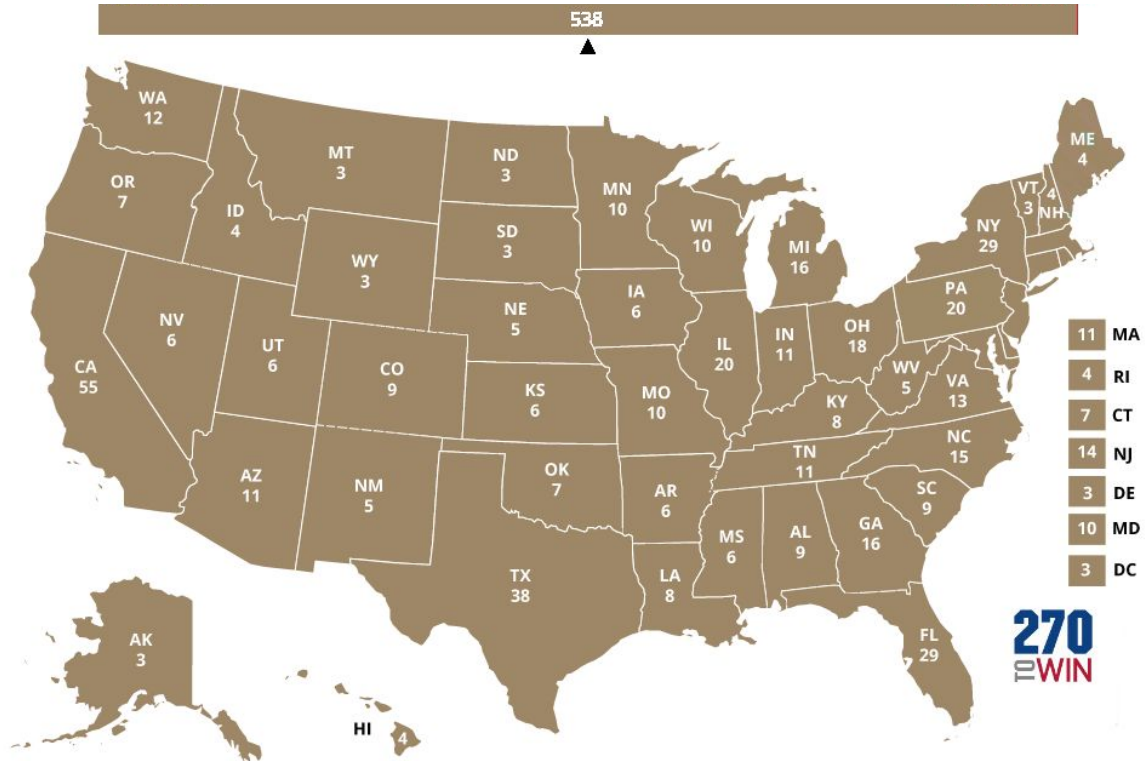
November 3, 2020

Eliza Zizka '22

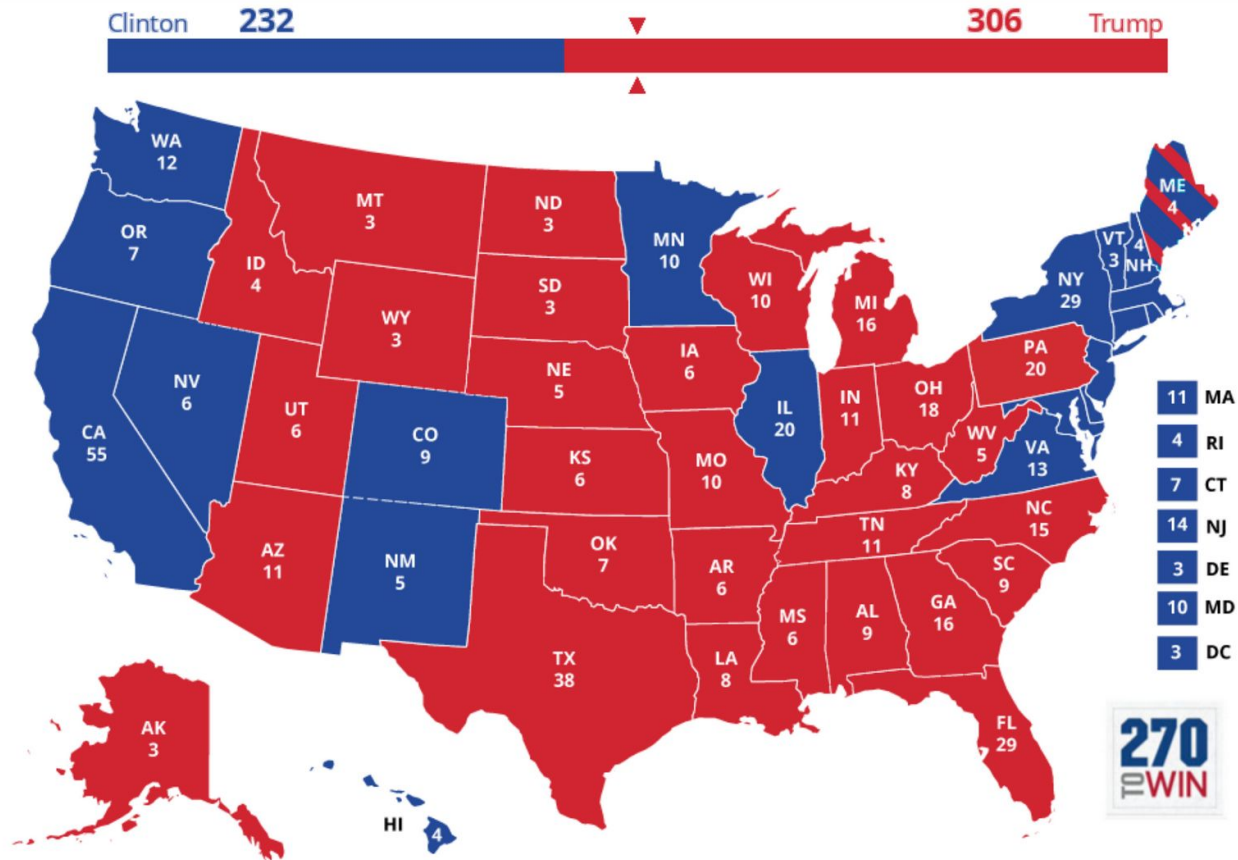


What is the Electoral College?

- ★ Electors: individuals elected by voters in states who then get together and elect a President
- ★ Votes per state based (kind of) on population
- ★ Plurality winner in each state gets votes (except Maine and Nebraska)
- ★ Winner-take-all weighted voting system

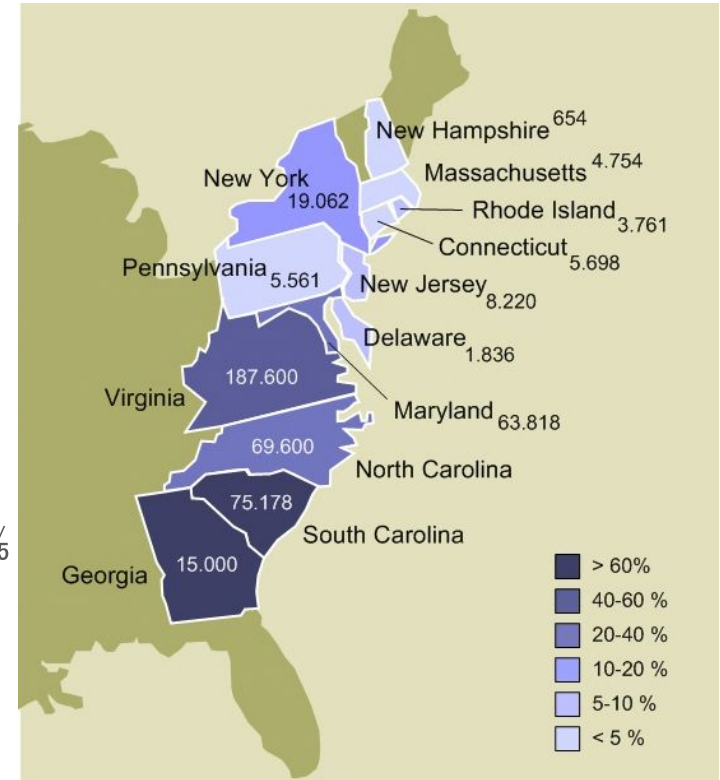


4 years ago...



History of the Electoral College

- ★ 1787 Constitutional Convention
- ★ Popular vote was considered, but Southern states objected because their large enslaved populations would give Northern states clear advantage
- ★ South wanted to preserve advantage given by $\frac{3}{5}$ compromise



Enslaved populations in the Colonies in 1770

First Electoral College

- ★ Electors usually nominated by state legislature
- ★ Each elector casts two votes for president for 2 different candidates from 2 different states
 - First place became president
 - Second place became vice president
 - Goes to House if there is no majority
- ★ Gave advantage to small states and slave-holding states
- ★ Failed in elections of 1796 & 1800

Twelfth Amendment (1803)

- ★ Federalists wanted to institute popular vote
- ★ Democratic-Republicans pushed through new system: separate votes cast for president and vice president
- ★ Majority rule: no “minorities governing majorities”
 - Under old system minority party could block a majority party candidate
 - 12 Amendment did away with minority party protection

Why 538?

$$435 + 100 + 3 = 538$$

House of
Representatives

Senate

DC (23rd
amendment)

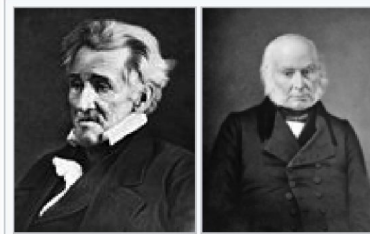
Mathematical Issues

Electoral vs Popular Vote



Electoral vs Popular Vote

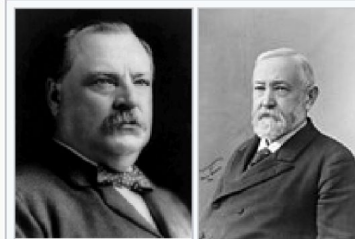
- ★ 4 other elections saw this trend
- ★ Looking at national popular vote rather than state-by-state vote aligns more with the role of the federal government today
- ★ Not very democratic when the president is someone a majority of voters do not prefer



Andrew Jackson (left) won 10.5% more of the popular vote than elected President **John Quincy Adams** (right) in 1824.



Samuel J. Tilden (left) won 50.9% of the popular vote and still had to concede to elected President **Rutherford B. Hayes** (right) in 1876.






Grover Cleveland (left) won 0.8% more of the popular vote than elected President **Benjamin Harrison** (right) in 1888.



Al Gore (left) won 0.5% more of the popular vote than elected President **George W. Bush** (right) in 2000.

Spoiler Effect

- ★ Third party candidates can determine result of the election
- ★ Florida 2000

	Presidential Candidate	Political Party	Popular Vote		Electoral Vote
	George W. Bush	Republican	2,912,790	48.85%	25
	Albert Gore Jr.	Democratic	2,912,253	48.84%	0
	Ralph Nader	Green	97,488	1.63%	0
	Patrick Buchanan	Reform	17,484	0.29%	0

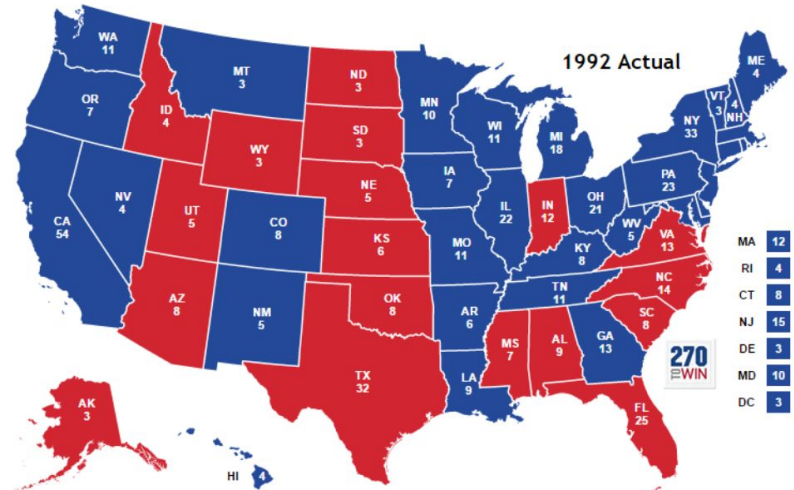
- ★ Goes against the principle that minority party shouldn't have control over majority choice

Plurality Wins

- ★ 1992: Bill Clinton only won by majority (versus plurality) in only DC and AR
- ★ 2016: Trump won 101 electoral votes (5 states) and Hillary Clinton won 50 electoral votes (7 states) by plurality
- ★ Could win presidency with 23-100% of vote. Again, clearly a problem!

1992 Election Results

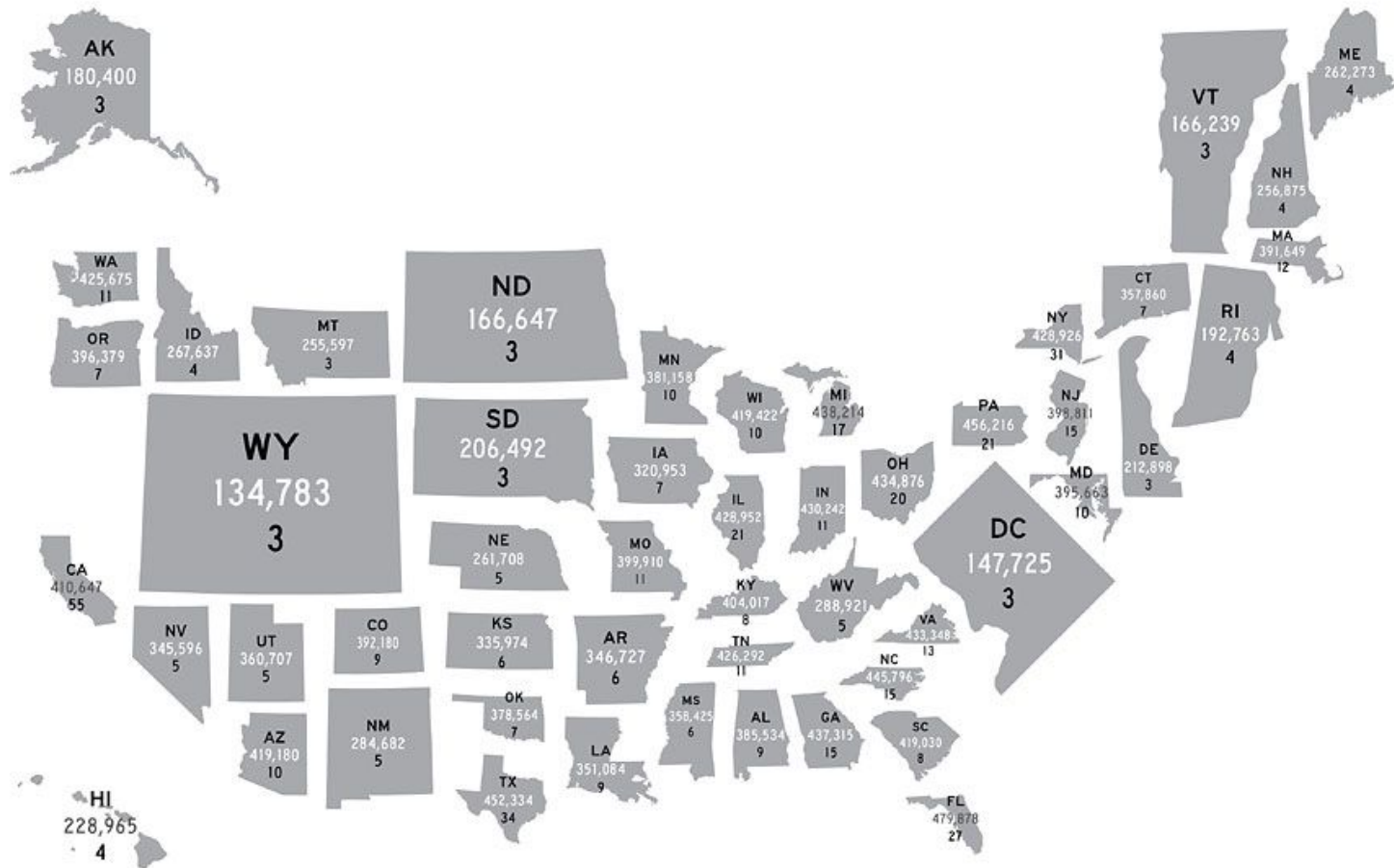
	Candidate	Party	Electoral Votes	Popular Votes
✓	William J. Clinton	Democratic	370	44,908,254
	George Bush (I)	Republican	168	39,102,343
	Ross Perot	Independent	0	19,743,821



State Representation

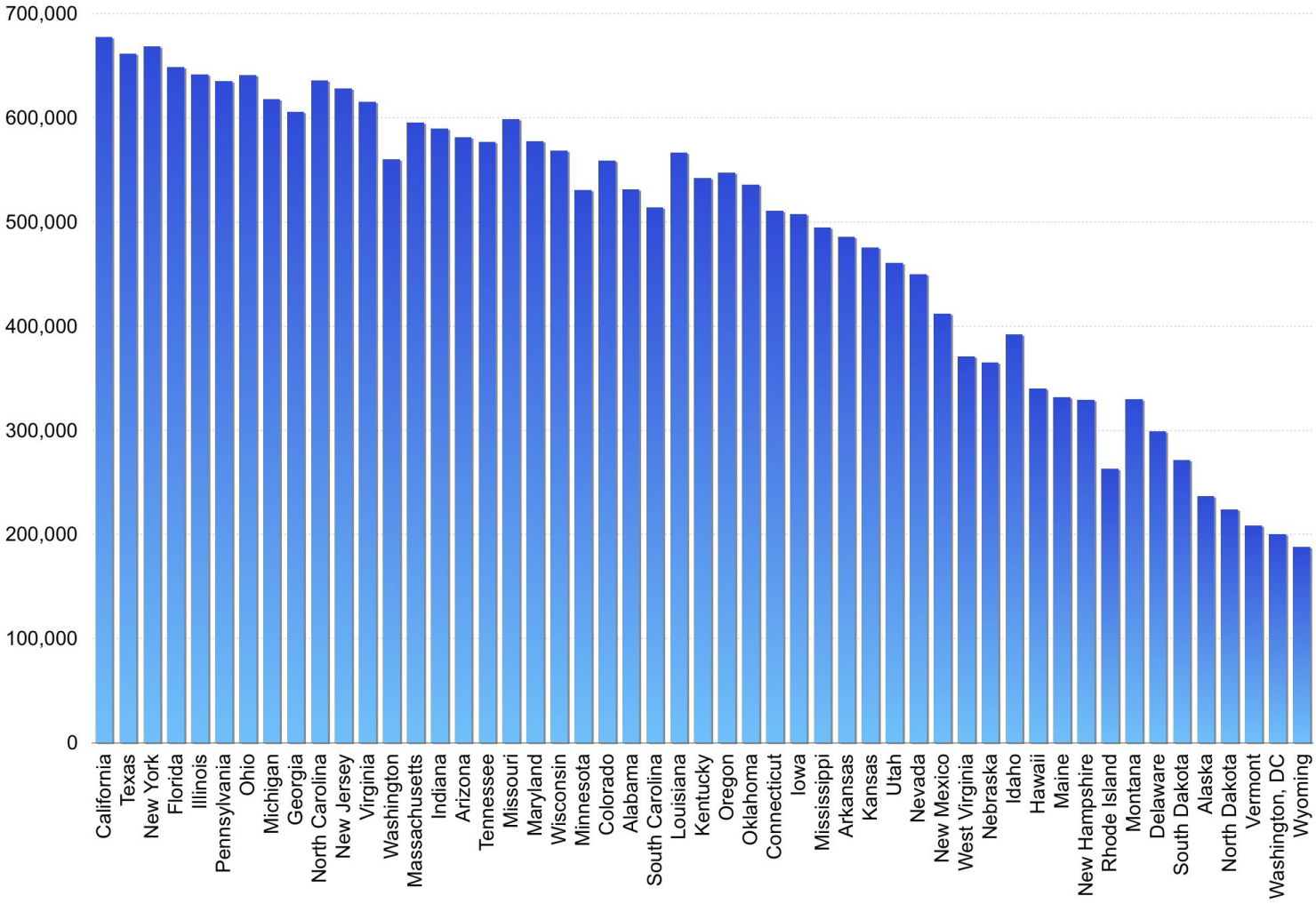
- ★ Do bigger states or smaller states have more representation?
- ★ Because of minimum representation requirement and +2 senators, small states wield much more power
- ★ A Wyomingite's vote counts more than 3 times as much as a Californian's vote!
- ★ Violates "one person, one vote"

State	Population	Number of ev's	Population per ev
California	39,000,000	55	709,000
Wyoming	585,000	3	195,000



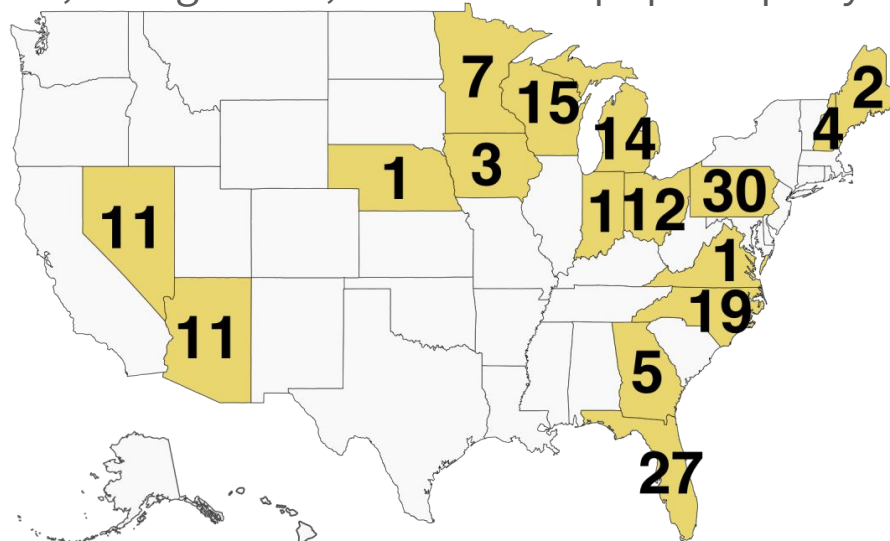
*from 2008

2010 Census Population per Electoral Vote



Can we change the system?

- ★ Need an Amendment: $\frac{2}{3}$ of Congress and $\frac{3}{4}$ of states
- ★ In 1969, a proposed amendment passed the House with 82% approval but was defeated by filibuster in the Senate
- ★ Benefits small states, swing states, and the less popular party



All 163 campaign events of 2020 were in 16 states (Aug 28 to Oct 29)

Majority Rule Principle

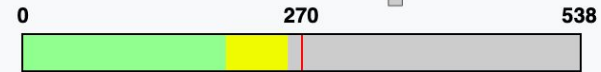
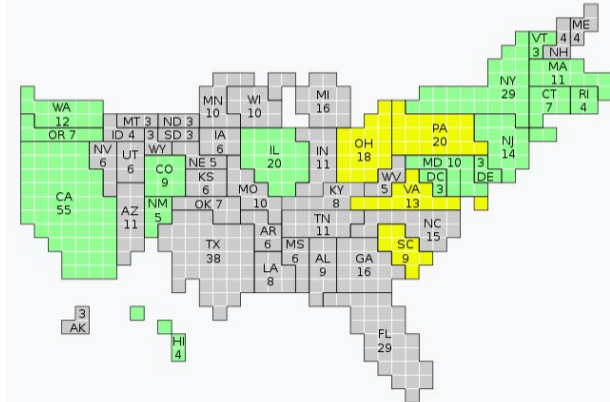
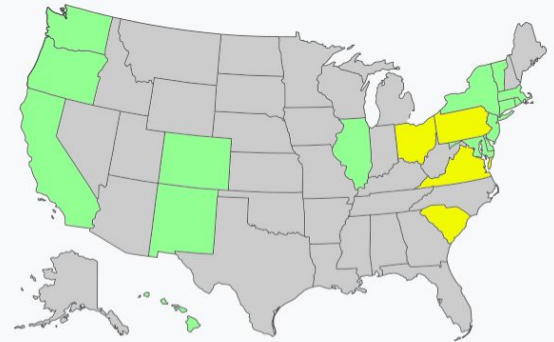
“No candidate receives all of a state’s electoral votes unless the candidate gets a majority of the state’s popular votes”

- ★ Run-off or Ranked choice elections
- ★ Apportion electoral votes
- ★ Vote by district





Other Solutions

- ★ Wyoming rule: add more electoral votes
 - Total US population/WY population ≈ 547
 - 650 electoral votes
- ★ National Popular Vote Interstate Compact
 - States who have agreed to give their electoral votes to the candidate who wins the national popular vote
 - Needs 270 to have legal force

Status as of October 2020:



Each square in the *cartogram* represents one electoral vote.

-  **Enacted** – 196 EVs (36.4% of Electoral College)*
-  **Pending** – 60 EVs (11.2%)
-  **Neither enacted nor pending** – 282 EVs (52.4%)^[1]
-  **Threshold for activation** – 270 EVs (>50%)

Conclusion

- ★ Electoral College was created to protect an oppressive system
- ★ Today, it leads to election results that don't align with democratic principles
- ★ It is our duty to change the systems of our government, especially when the math supports a change!

Thank you!



Special thanks to Professors Chang and Volić, as well as Minerva Johar,
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