Electoral System vs. The Popular Vote

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Humboldt Mensa Forum
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vs.
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Question

What is an election?

An Election

The Electorate

Voters

An Election

Ballots

An Election

Who wins?

Ballots

The 2016 Presidential Election

The Electorate

Two Models

➢ States Model

➢ Electoral College Model

The States Model

In a presidential election the *electorate* consists of the 50 states plus the District of Columbia.

The *ballot* is not one-state, one-vote. Each state's ballot is weighted as described by the *electoral system* in the Constitution.

Electoral College Model

The President is elected by a majority vote of the electors.

538 electors

The Electoral College

The College consists of a slate of electors from each state. **The number of electors equals the number of members of Congress**—the number of representatives and senators.

Amendment XXIII (ratified 1961) allows the District of Columbia three electors.

The Electoral System

The electoral system is a *process*.

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- ✓ National Election Day   10 November 2016.

In a presidential election when you vote for candidate X you are voting for the slate of elector's pledged to candidate X.

The Electoral System

The electoral system is a *process*.

- ✓ National Election Day   10 November 2016.
- ✓ Electors Day   19 December 2016

The Electoral System

The electoral system is a *process*.

- ✓ National Election Day   10 November 2016.
- ✓ Electors Day   19 December 2016
- ✓ Submission Day   28 December 2016

Executive Department

State of California

<u>CERTIFICATE OF VOTE</u>

For

PRESIDENT and VICE PRESIDENT
of the
UNITED STATES OF AMERICA

2016

To the President of the Senate of the United States of America:

WE THE UNDERSIGNED, Electors for President and Vice President of the United States of America, being duly appointed for the State of California as displayed in the annexed Certificate of Ascertainment made and delivered by the Governor of the State of California, with any deficiency in the number of Electors supplied by election according to law, and having met the first Monday after the second Wednesday in December pursuant to the Constitution and laws of the United States and the State of California, do hereby certify that the following candidates received the following number of votes:

FOR PRESIDENT OF THE UNITED STATES

Hillary Clinton

NUMBER OF VOTES – 55
* * *

FOR VICE PRESIDENT OF THE UNITED STATES

Tim Kaine

NUMBER OF VOTES – 55
* * *

IN WITNESS WHEREOF, we have hereunto set our hands at Sacramento, California, on the first Monday after the second Wednesday in December, being the nineteenth day of December, 2016.

The Electoral System

The electoral system is a *process*.
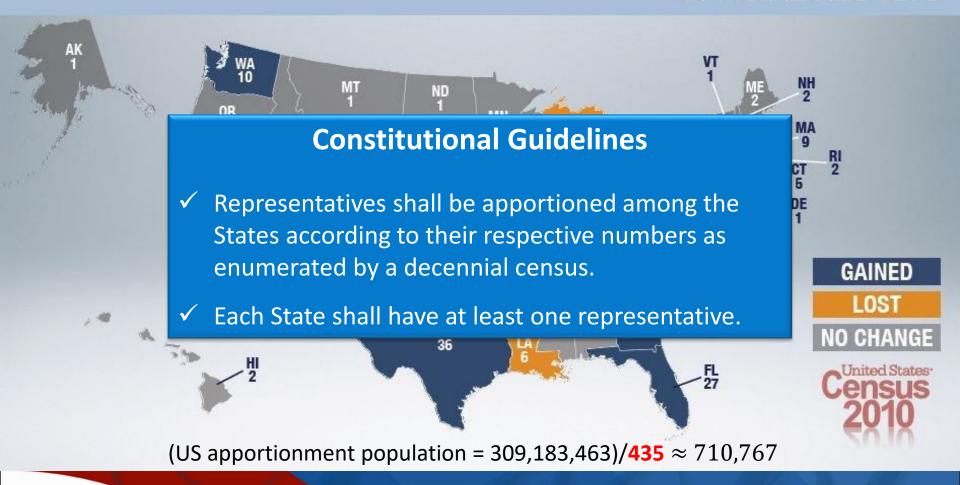
- ✓ National Election Day   10 November 2016.
- ✓ Electors Day   19 December 2016
- ✓ Submission Day   28 December 2016
- ✓ Decision Day   6 January 2017

The Electoral System

The electoral system is a *process*.

- ✓ National Election Day   10 November 2016.
- ✓ Electors Day   19 December 2016
- ✓ Submission Day   28 December 2016
- ✓ Decision Day   6 January 2017
- ➢ Inauguration Day   20 January 2017

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AK
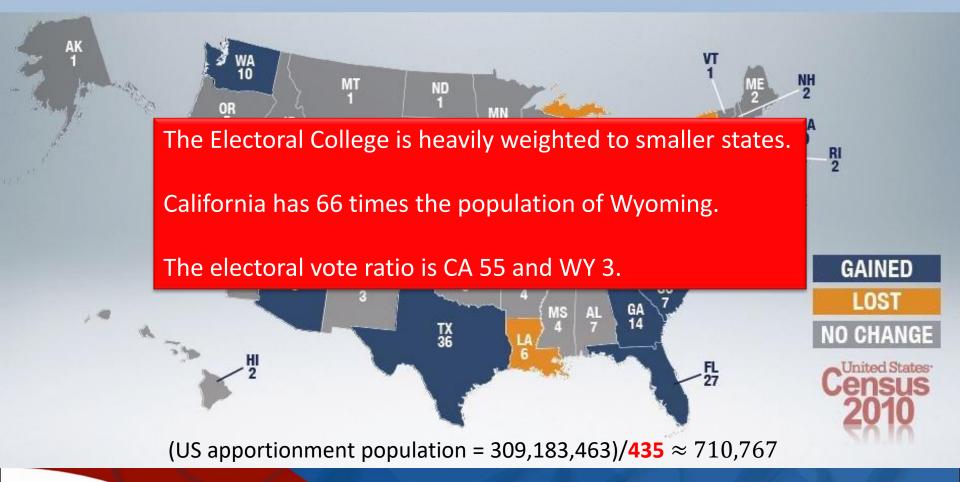1

WA
10

MT
1

ND
1

OR

HI
2

VT
1

ME
2

NH
2

MA
9

RI
2

CT
5

DE
1

36

LA
6

FL
27

GAINED

LOST

NO CHANGE

United States
Census
2010

Constitutional Guidelines

✓ Representatives shall be apportioned among the States according to their respective numbers as enumerated by a decennial census.

✓ Each State shall have at least one representative.

(US apportionment population = 309,183,463)/**435** $\approx$ 710,767

http://www.census.gov/2010census/data/apportionment-data.php

The Electoral College is heavily weighted to smaller states.

California has 66 times the population of Wyoming.

The electoral vote ratio is CA 55 and WY 3.

GAINED
LOST
NO CHANGE

United States·
Census
2010

(US apportionment population = 309,183,463)/**435** $\approx$ 710,767

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Distributing 435 seats among 50 states according to their respective populations is a math problem.

A Math Skill

How do I average two positive whole numbers?

What is the average of 8 and 12?

The Average

Example: ave(8,12) =

Maximum   ➤   max(8,12) = 12

Minimum   ➤   min(8,12) =   8

Arithmetic Mean   ➤   AM(8,12) = 10

Harmonic Mean   ➤ $\mathrm{HaM}(8,12) \; = \; \dfrac{2}{\frac{1}{8} + \frac{1}{12}} \; = 9.6$

Geometric Mean   ➤ $\mathrm{GeM}(8,12) \; = \; \sqrt{8 \times 12} \; \approx 9.8$

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Apportionment by Priority

Step 1. Give one seat to each state.

Step 2. Attach a priority number to each state.

Step 3. Award seats one at a time by priority until the desired House size is reached.

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Priority number
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$$\text{Priority number for a state with } n \text{ seats} = \frac{state\ population}{ave(n, n+1)}$$

Five Averages

ave

- Greatest Divisors   max
- Harmonic Means   HaM
- Equal Proportions   GeM
- Major Fractions   AM
- Smallest Divisors   min

The Last Seat

Who got the 435th seat?

	ave	435
Greatest Divisors	max	IL
Harmonic Means	HaM	MN
Equal Proportions	GeM	MN
Major Fractions	AM	NC
Smallest Divisors	min	WA

The Last Seat

Who gets the 436th seat?

	ave	435	436
Greatest Divisors	max	IL	WA
...nic Means	HaM	MN	CA
...portions	GeM	MN	NC
...jor Fractions	AM	NC	MO
Smallest Divisors	min	WA	PA

The distribution of seats in the House and thus the Electoral College depends on Congress's choice of averaging two numbers.

The Last Seat

Who gets the 436th seat?

		ave	435	436
•	Greatest Divisors	max	IL	WA
•	Harmonic Means	HaM	MN	CA
•	Equal Proportions	GeM	MN	NC
•	Major Fractions	AM	NC	MO
•	Smallest Divisors	min	WA	PA

The 2016 Presidential Election

The popular vote:

Hillary Clinton:	65,853,516	48.18%
Donald Trump:	62,984,825	46.09%
Others:	7,850,896	5.73%

Federal Election Commission
Official 2016 Presidential General Election Results

The 2016 Presidential Election

The popular vote:

Hillary Clinton:	65,853,516	48.18%
Donald Trump:	62,984,825	46.09%
Others:	7,850,896	5.73%

The Electoral College vote:

Hillary Clinton: 227

Donald Trump: 304

Others: 7

https://en.wikipedia.org/wiki/United_States_presidential_election,_2016

The Popular Vote

Arguably, on 4 other occasions in U. S. history the electoral and popular systems produced different results.

1. John Quincy Adams vs. Andrew Jackson   1824

2. Rutherford B. Hayes vs. Samuel Tilden   1876

3. Benjamin Harrison vs. Grover Cleveland   1888

4. George Bush vs. Al Gore   2000

Source: http://www.factcheck.org/2008/03/presidents-winning-without-popular-vote/

1876

Candidate	Party	Popular Vote	Electoral Vote
Ruth...for...Hayes (OH)	Republican	4,034,142	185
...en (NY)	Democratic	4,286,808	184
...Y)	Greenback	83,726	---

Lesson: Hayes's Electoral College win was an artifact of the method used for House apportionment.

The original apportionment from the 1870 census used one method.
The 1872 supplement act added nine seats but used a different method.
The methods agreed except for two seats.
　　　　Original method: IL and NY;
　　　　Supplement method: NH and FL.

2000

Candidate	Party	Popular Vote	Electoral Vote
George W. Bush (T...	...lican	5,443,633	271
Albert Gore (TN)	...tic	5,538,163	266
Ralph Nader (DC)	Green	250,017	---
Patrick Buchanan (VA)	Reform	149,115	---

Lesson: Bush's Electoral College win was an artifact of the size of the House.

House Size Effects

Consider the Electoral College vote based on House sizes 50 - 1000 using the current method of congressional apportionment:

smaller than 492 Bush wins,
larger than 597 except 655 Gore wins.

Between 492-597 there are 24 ties, Bush wins 53 times, and Gore wins 29 times.

http://www.thirty-thousand.org/pages/Neubauer-Zeitlin.htm

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2000

The 2000 election showed another potential problem. The number of electoral votes each state gets is tied to the decennial census. Although the election was in 2000, apportionment of the House was based on the 1990 census.

An election held in a census year is based on a population that is ten years old.

What would have been the result of Bush vs. Gore if the Electoral College were based on the 2000 census?

2000

In comparison with the 1990 census the 2000 census shifted 12 House seats affecting 18 states.

Accordingly, the electoral vote would have changed from

Bush 271 and Gore 266
to
Bush 277 and Gore 259.

Reform

Over the past 200 years, over 700 proposals have been introduced in Congress to reform or eliminate the Electoral College. There have been more proposals for Constitutional amendments on changing the Electoral College than on any other subject.

https://www.archives.gov/federal-register/electoral-college/faq.html#whyec

Today's Debate

Resolved: The electoral system should be replaced by a popular vote system.

A National Popular Vote

- Abolishing the electoral system requires a constitutional amendment.

- A uniform national vote procedure requires federal legislation concerning ballot access, suffrage, ballot structure, and election mechanics.

A
Moderate
Alternative

State Sovereignty

Keep voting as a state's rights matter.
Ballot access, ballot structure, suffrage, voting mechanics are left up to each state. Then count the certified popular vote in each state as is currently done.

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This is the approach
of the
National Popular Vote Bill.

National Popular Vote Bill

A State Act ratifying an interstate compact to elect the President and Vice-President of the United States by national popular vote.

➢ A state's slate of electors will be awarded to the candidate with a plurality of the national (instead of statewide) popular vote.

➢ The law will take effect when the compact of states enacting the National Popular Vote Bill reaches at least 270 electoral votes.

Should the electoral system be replaced by a popular vote system?

Should the U. S. move to a national popular vote for President and Vice-President?

Democracy

What is an Election?

One Person — One Vote

We the People of the United States, . . .

http://www.theconstitutionproject.com/portfolio/one-person-one-vote/

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Thank You

Gerrymandering

Illinois 4th congressional district.

Gerrymandering

Apportion into five districts.

Gerrymandering

Gerrymandering

Gerrymandering

U.S. Census Bureau
PRIORITY VALUES FOR 2010 CENSUS

HOUSE SEAT	PRIORITY VALUE	STATE ABBREVIATION	STATE SEAT
51	26404774	CA	2
52	17867470	TX	2
53	15244803	CA	3
54	13732760	NY	2
55	13364865	FL	2
56	10779704	CA	4
57	10315788	TX	3
58	9096490	IL	2
59	9004938	PA	2

https://www.census.gov/population/apportionment/files/Priority%20Values%202010.pdf