

J202 MASS MEDIA PRACTICES

ANALYZING INFORMATION

THIS WEEK IN LAB

PRACTICE USING AND ANALYZING DATA
TO FIND STORIES

Work with Excel to write a summary
of survey data

Talk about analyzing information

Plan media placement for a public
image campaign



Brian Stelter ✓

@brianstelter

Following



Here's the full statement from PricewaterhouseCoopers:

We sincerely apologize to “Moonlight,” “La La Land,” Warren Beatty, Faye Dunaway, and Oscar® viewers for the error that was made during the award announcement for Best Picture. The presenters had mistakenly been given the wrong category envelope and when discovered, was immediately corrected. We are currently investigating how this could have happened, and deeply regret that this occurred.

We appreciate the grace with which the nominees, the Academy, ABC, and Jimmy Kimmel handled the situation.



Billy Penn ✓

@billy_penn

Philly soda tax impact: We drank about 40 percent less in January.
billypenn.com/2017/02/23/phi...



9:16am · 23 Feb 2017 · Twitter Web Client

The Mayor's Office says the city earned \$5.7 million in soda tax revenue its first month in effect. So how many sugary beverages did we drink in January? And did the tax force Philadelphians to cut back as much as the city expected?

For starters, the \$5.7 million in revenue means 380 million ounces of sugary drinks were taxed in January. In terms of 12 oz. cans, that would be about 32 million. With our population of about 1.5 million, that's about 21 sugary sweetened beverages per person this month.

And if we're comparing January to recent averages for Philadelphia, soda consumption went down by about 40 percent. According to the Health Department, Philly consumes 7.68 billion ounces of sugary beverages a year, or 640 million ounces a month. The 380 million ounces is about 40 percent less than that average.

$$\frac{640 \text{ million gallons} - 380 \text{ gallons}}{640 \text{ million gallons}} = -41 \text{ percent}$$

39. As president, do you think Donald Trump should - support efforts to **repeal** the Affordable Care Act, also known as Obamacare, or not?

	Tot	Rep	Dem	Ind	Men	Wom	WHITE..... COLLEGE DEG	
							Yes	No
Yes/Should	43%	85%	9%	43%	48%	39%	46%	57%
No	54	12	88	54	50	58	52	39
DK/NA	3	3	3	3	3	3	2	4

	AGE IN YRS.....				WHITE.....			
	18-34	35-49	50-64	65+	Men	Wom	Wht	NonWht
Yes/Should	35%	42%	47%	47%	55%	47%	51%	22%
No	65	57	49	49	42	50	46	75
DK/NA	1	1	4	4	3	3	3	3

	ANNUAL HOUSEHOLD INCOME....			
	<30K	30-50	50-100	>100K
Yes/Should	41%	40%	50%	40%
No	58	57	47	59
DK/NA	1	4	3	1

TREND: As president, do you think Donald Trump should - support efforts to repeal the Affordable Care Act, also known as Obamacare, or not?

	Yes	No	DK/NA
Feb 23, 2017	43	54	3
Feb 08, 2017	46	50	4
Jan 12, 2017	48	47	5

THAT MEANS EFFECTIVELY
JUDGING WHERE WE GET
INFORMATION, EFFECTIVELY
ANALYZING THE INFORMATION
WE HAVE AND AVOIDING TRAPS
THAT PREVENT US FROM
EFFECTIVELY PRESENTING OUR
INFORMATION.

HOW CAN WE USE
DATA & NUMBERS
TO TELL STORIES?

DATA

How can we use it?

re_birf/Flickr Creative Commons



It's evidence that tells a story

FIND A STORY IN THE NUMBERS

WORKING WITH DATA

SIX STEPS FOR USING DATA

- Get
- Clean
- Interview
- Analyze
- Tell stories
- Visualize



IT STARTS WITH INFORMATION LITERACY

YOU ARE CONSIDERED INFORMATION
LITERATE WHEN YOU:

- Know when you need information
- Know where to find it
- Know how to evaluate it
- Know how to use it

IT STARTS WITH INFORMATION LITERACY



“Real journalism is work that goes through a process.”
— Tom Rosenstiel, American Press Institute

Home > News > BREAKING: "Tens of thousands" of fraudulent Clinton votes found in Ohio warehouse

NEWS

POLITICS

BREAKING: "Tens of thousands" of fraudulent Clinton votes found in Ohio warehouse

By *admin1* - September 30, 2016  46021  0

SHARE



Facebook



Twitter



INFORMATION FAILURES

- When people accept false information as fact
- When something true is not covered
- When importance is given to a subject being discussed
- When information is manipulated

BE SKEPTICAL BUT NOT CYNICAL

“Skepticism is about asking questions, being dubious, being wary, not being gullible.”

— Tom Friedman, New York Times

We have a duty to get things right, but we make mistakes.

Just don't repeat them.

BE SKEPTICAL
BUT NOT CYNICAL

If your mother says she
loves you, **check it out.**

NOTHING IS BEYOND
CONFIRMATION.

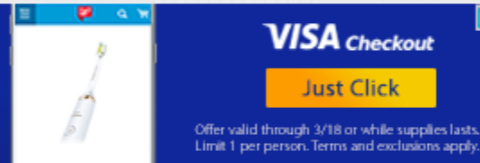
NEVER USE INFORMATION WHEN YOU CAN'T TELL WHAT THE SOURCE IS

- Authority
- Accuracy
- Objectivity
- Timeliness



David Michalczuk/Flickr Creative Commons

**\$10 off \$50 or more with
Visa Checkout at Walgreens.com**


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[Cite This Page](#)

02.08.2017

5,795,147

Wisconsin Population 2017

AdChoices

[Population Data](#)
[Wisconsin Map](#)

5,795,147

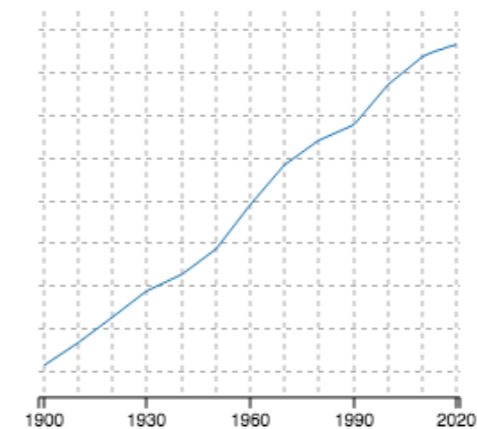
Wisconsin is part of the Great Lakes region of the country, located in the north Midwest. With a surface area of around 65,497.82 square miles, it is a relatively large state with a population to match -- it is the 23rd biggest state in the country, and in terms of population, it is the 20th most populous state in the US. The 2016 population of Wisconsin is estimated at 5,771,337. The state currently has a growth rate of 0.35%, which ranks 39th in the state.

The last census within the US was carried out in 2010, so in order to judge the population of Wisconsin in 2016, those figures have to be projected forward in the best way possible. Based on the state's growth rate, the population is now 5,771,337 in 2016, showing a 1.5% growth from the 2010 figure of 5,686,986.

Within the surface area of 65,497.82 miles, **there is an average of 105 people** for every square mile of Wisconsin land. That figure converts to 39.6 people for every square

Cities in Wisconsin

Rank	20
2017 Growth Rate	0.21%
Area in Miles (Rank)	65,496 (23)
State Capital	Madison
Statehood Year	1848
Red/Blue	Blue



CHEVROLET
2017 TRAVERSE LT

BERGSTROM CHEVY MIDDLETON
SCHEDULE YOUR TEST DRIVE TODAY

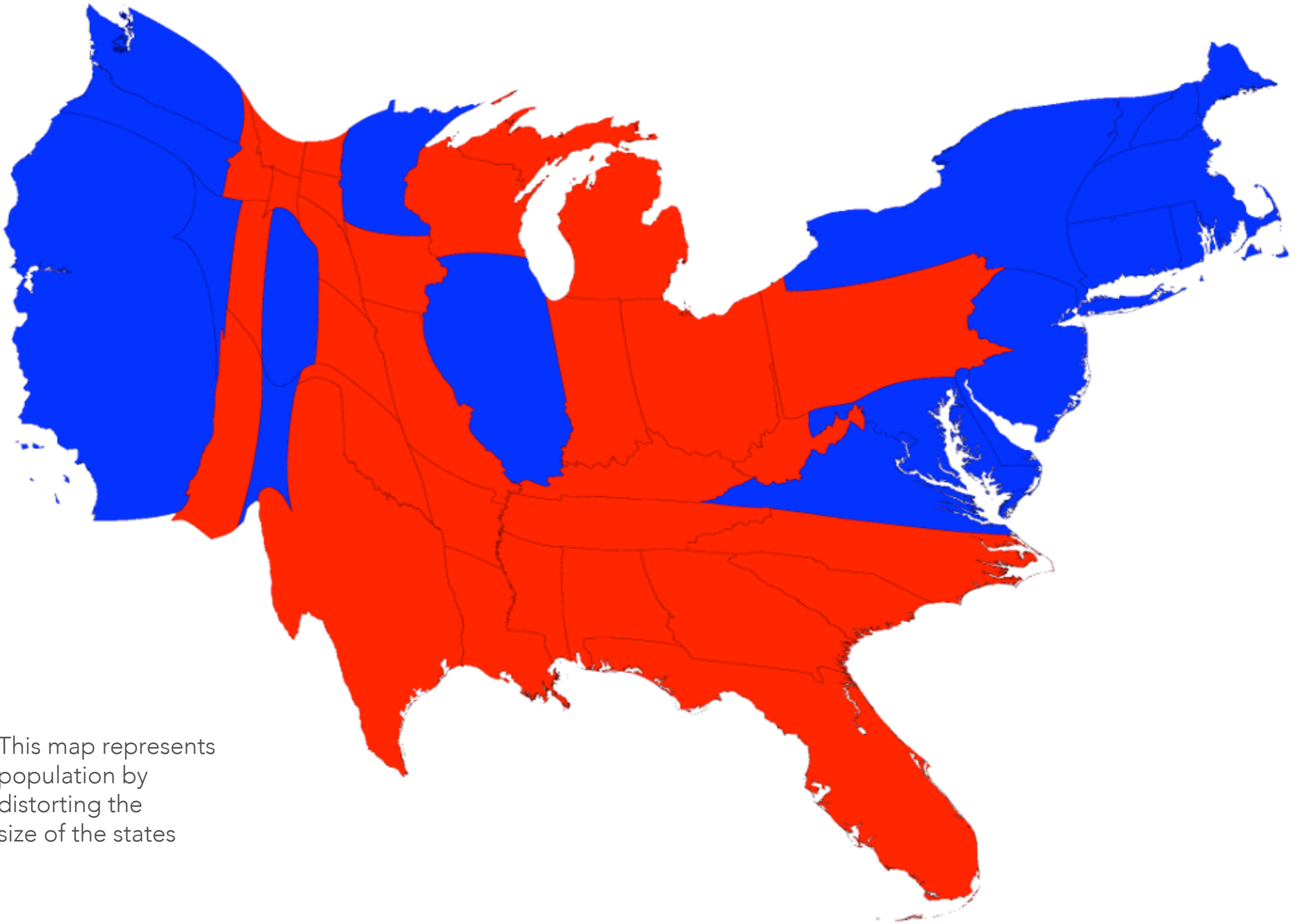
[*Full Offer Details](#) [See Special Offer](#)

NEVER USE INFORMATION WHEN YOU CAN'T TELL WHAT THE SOURCE IS

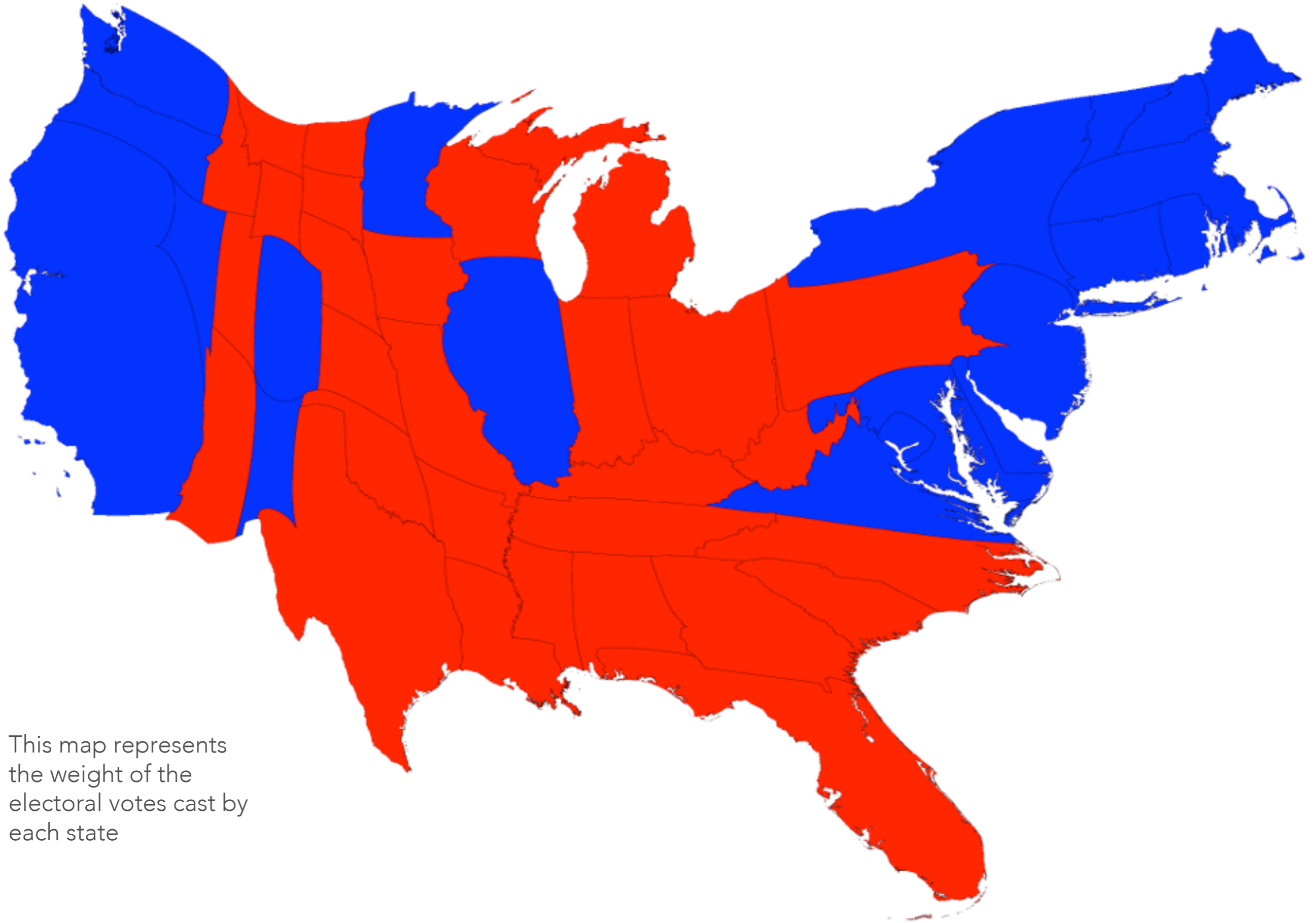
- Authority
- Accuracy
- Objectivity
- Timeliness



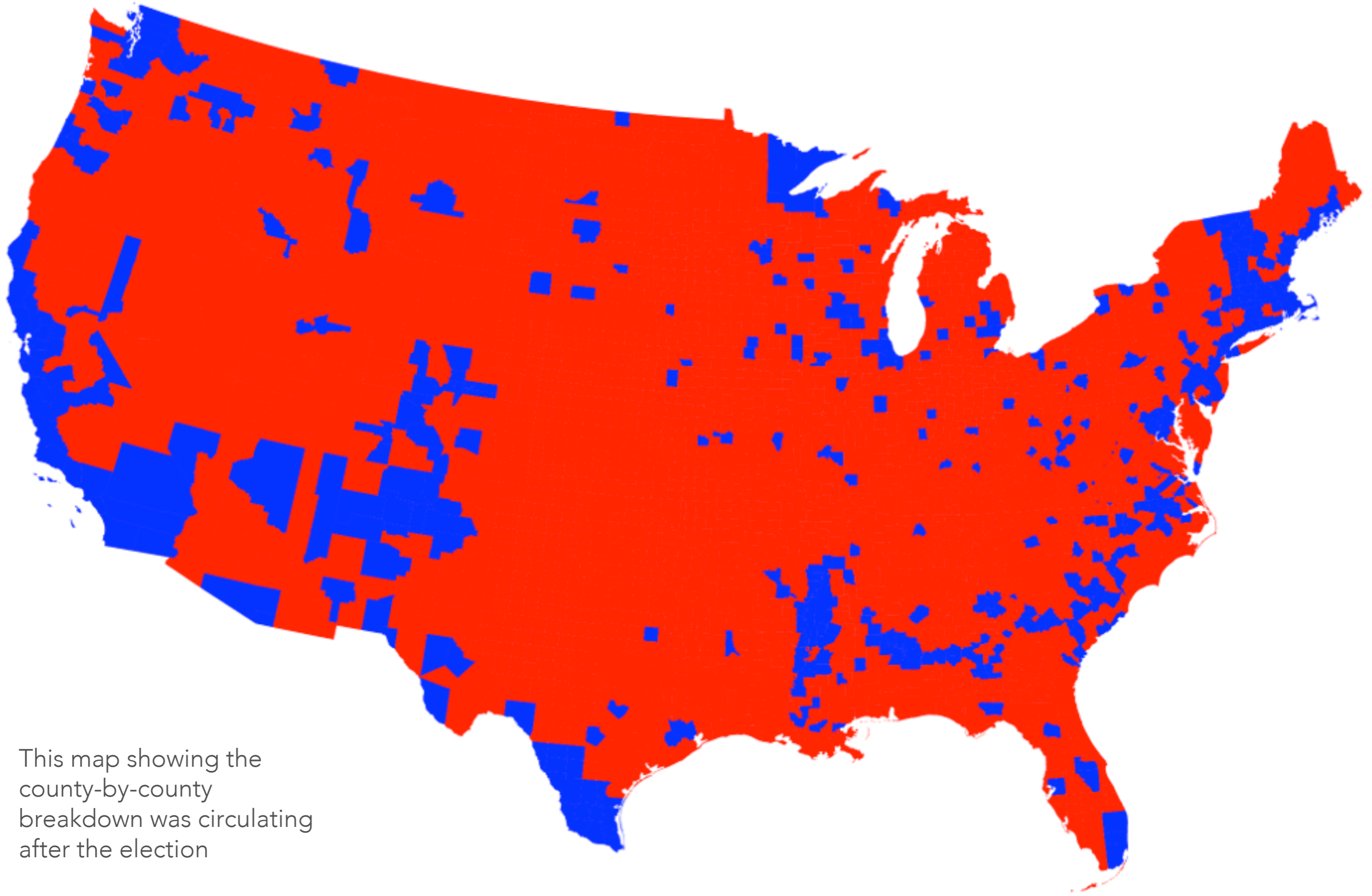
David Michalczuk/Flickr Creative Commons



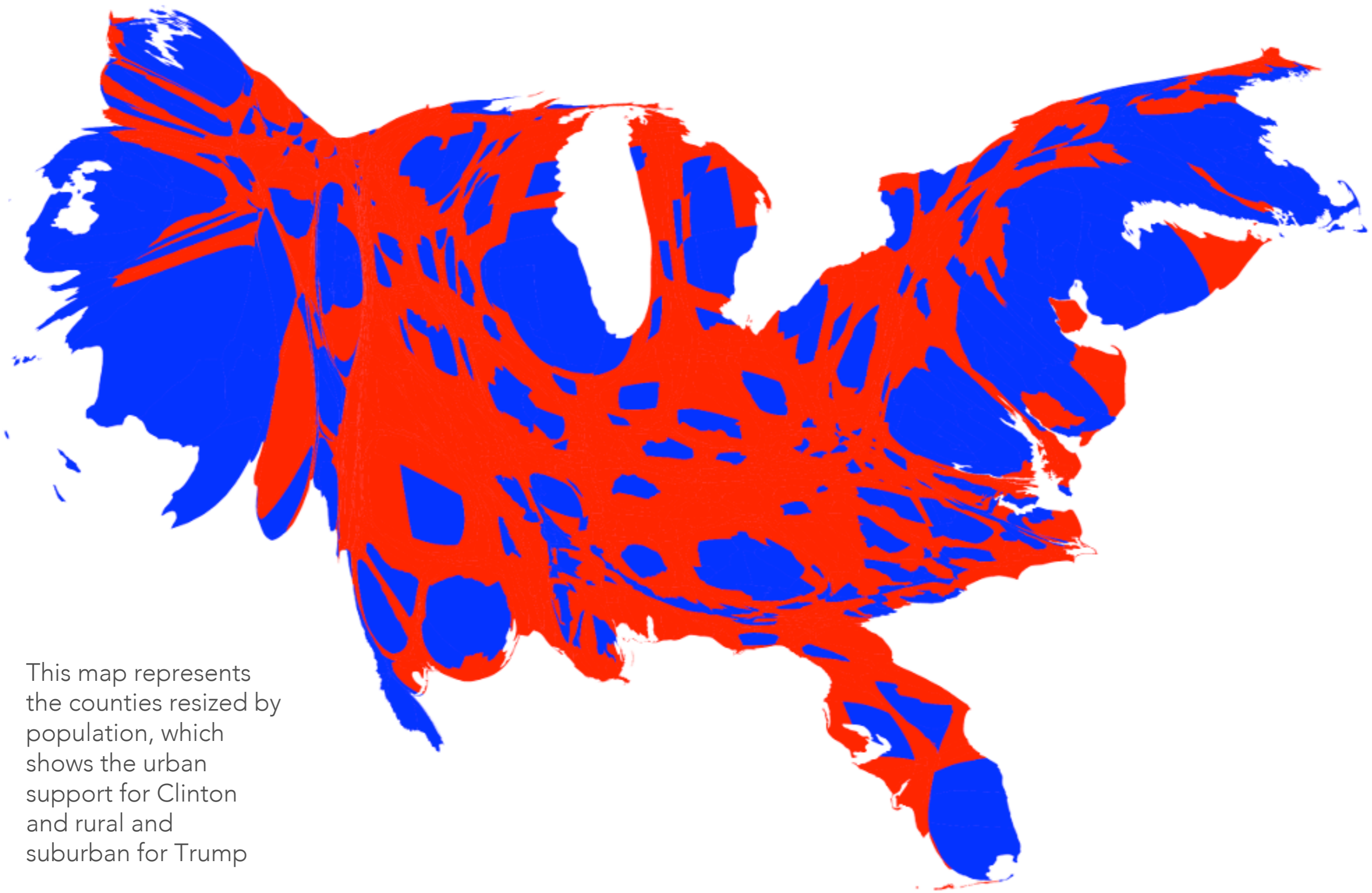
This map represents population by distorting the size of the states



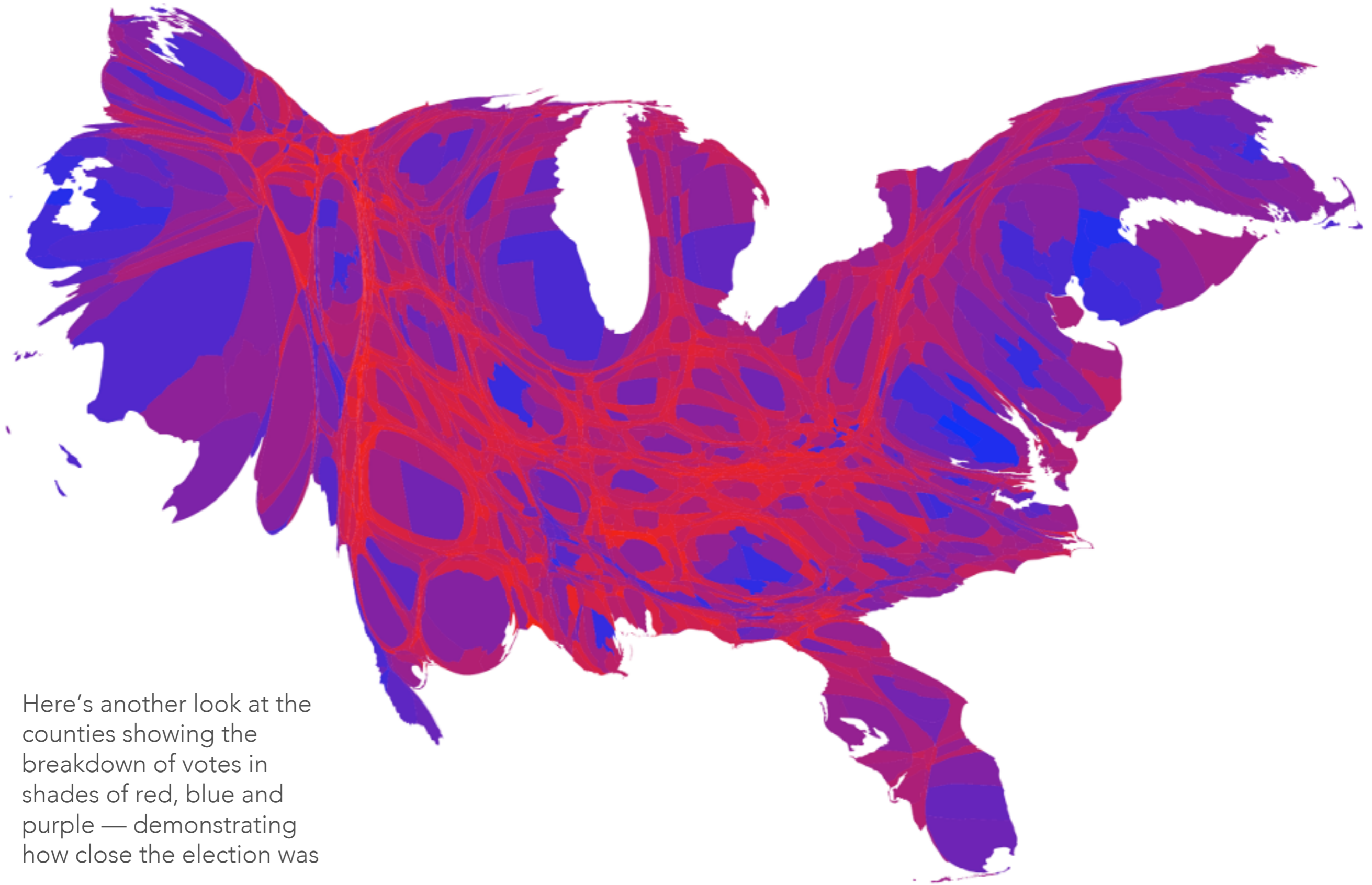
This map represents the weight of the electoral votes cast by each state



This map showing the county-by-county breakdown was circulating after the election



This map represents the counties resized by population, which shows the urban support for Clinton and rural and suburban for Trump



Here's another look at the counties showing the breakdown of votes in shades of red, blue and purple — demonstrating how close the election was

EVIDENCE

- Use it to support conclusions and themes
- Ensure that it is accurate
- Analyze it free of bias
- Present it in context

EVIDENCE

WHAT KIND DO WE USE?

- Anecdotal
- Scientific
- Interviews
- Observation

SURVEYS

- sampling error
- random samples
- range of error based on size
- larger sample = smaller range
- results correct +/- number of percentage points
- usually made with 95% confidence

Approval Ratings +/- 3

59

App: 56%

53

47

Disapp: 44%

41

SURVEYS

- non-sampling error
 - poor response rate
 - poor questions
 - poor answer options
 - poor interviewer skills
 - poor interviewing environment

Wouldn't you oppose efforts to
decrease affirmative action
efforts on campus?

BAD QUESTION

Think about affirmative action efforts on campus. Do you favor such efforts, oppose such efforts or have no opinion?

BETTER QUESTION

Chancellor Rebecca Blank sees
diversity as a top issue on campus. Do
you agree?

BAD QUESTION

On a scale of 1 to 7 with 1 being not at all important and 7 being extremely important, how important an issue is diversity on campus?

BETTER QUESTION

Do you favor or oppose proposed cuts to state funding of the UW and the effect they will have on diversity?

BAD QUESTION

Do you favor or oppose the proposed \$250 million cut in state funding to the UW?
(If favor) If the cuts meant a loss of funding for diversity efforts, would that strengthen your support, weaken your support or not change your support

BETTER QUESTION

FOCUS GROUPS

- test concepts and mockups
- develop questionnaires
- generate ideas
- position product
- assess usability

FOCUS GROUPS TECHNIQUES

- survey
- in-depth interview
- product tests
- ranking exercises
- comparison games
- role-playing
- free-form discussion

WE POLLED PEOPLE

CALCULATIONS YOU

BETTER KNOW

MEASURES OF CENTRAL TENDENCY

- mean (average) = $\text{sum}/\#$ of items
- median = middle number of ordered set
 - outliers

PERCENTAGES

- x/y , where x is the portion and y the whole population
 - 43 subjects of 210 in focus group chose Oreos
 - $43/210 = .205$
 - 20.5% of subjects chose Oreos

PERCENT CHANGED

- percent changed = change/original value
- consumer recognition of the brand jumped from 15% to 25%
- change of 10 percentage points
- but percent changed much more
- $10/15 = .66666666$ (67%)

RATES

- percentage with a standard baseline
- murders last year: Milwaukee = 111, Madison = 3
- population: Milwaukee = 596,974, Madison = 208,054
- murder rate per 100,000 residents
- Milwaukee = $111 / (596,974 / 100,000) = 18.6$
- Madison = $3 / (208,054 / 100,000) = 1.4$

CPM

- cost per thousand
 - $\text{ad cost}/(\text{audience}/1000)$
 - Sports Illustrated
 - \$203,000 for full-page ad
 - 3,212,000 audience
 - $\text{CPM} = 203,000/(3,212,000/1,000) = \63.20
- CPP

COUNTS

- instances of a variable

The screenshot shows the Microsoft Excel interface. The formula bar at the top displays the formula `=COUNTIF(C$3:C$26,"1")` for cell C28. The spreadsheet contains the following data:

	A	B	C	D	E
1	Ads in personality magazines				
2		Advertiser	Category		
3		Covergirl	1		
4		Victoria's Secret	2		
5		Neutrogena	1		
6		Neutrogena	1		
7		Skyy	3		
8		L'Oreal	1		
9		L'Oreal	1		
10		Match.com	4		
11		Revlon	1		
12		Covergirl	1		
13		Olay	1		
14		WB	5		
15		Olay	1		
16		Bebe	2		
17		Payless	2		
18		Reach	6		
19		Covergirl	1		
20		Splenda	7		
21		Matrix	1		
22		Covergirl	1		
23		TIVO	4		
24		L'Oreal	1		
25		Vegas	9		
26		Covergirl	1		
27					
28	Covergirl	5	14	1=beauty	
29	L'Oreal	3	3	2=apparel	
30	Olay	2	1	3=alcohol	
31			2	4=services	
32					
33					

AUDIENCE COMPOSITION

- % of an outlet's audience that fits a characteristic
- gender, education, income, lifestyle

COMPOSITION INDEX

- compares a comp percentage against expectation for whole population (100)
- TIME magazine:
 - men: 55.5% (116 index)
 - women: 44.5% (86 index)

OTHER ENTITIES' BUDGETS

- municipal

D5 $= (C5 - B5) / B5$

wk5_budget.xls

	A	B	C	D
3	REVENUE			
4				
5	TAXES	\$79,351.00	\$81,882.03	3%
6	SPECIAL ASSESSMENT	\$0.00	\$0.00	0%
7	MOBILE HOME FEES/LOTTERY CREDIT	\$4,500.00	\$4,000.00	-11%
8		\$83,851.00	\$85,882.03	2%
9				
10	INTERGOVERNMENTAL REVENUE			
11	STATE SHARED REVENUE	\$152,588.00	\$152,528.00	0%
12	FIRE INSURANCE DUES	\$700.00	\$825.00	18%
13	STATE TRANSPORTATION	\$20,956.00	\$24,099.97	15%
14	RECYCLING GRANT	\$0.00	\$0.00	0%
15		\$174,244.00	\$177,452.97	2%
16				
17	REGULATION AND COMPLIANCE			
18	BEER/LIQUOR LICENSE	\$800.00	\$1,000.00	25%
19	CIGARETTE & BARTENDER LICENSES	\$140.00	\$150.00	7%
20	REFUSE & MOBILE HOME LICENSES	\$140.00	\$140.00	0%
21	BUILDING PERMITS	\$500.00	\$500.00	0%
22	PARKING FINES	\$0.00	\$0.00	0%
23	INSURANCE REFUND-WAUSAU	\$500.00	\$225.00	-55%
24	FIRE PROTECTION-TOWNSHIP	\$4,000.00	\$4,000.00	0%
25	REFUNDS/DIVIDENDS	\$0.00	\$0.00	0%
26	REFUSE COLLECTION FEES	\$22,000.00	\$22,000.00	0%
27	OTHER	\$0.00	\$0.00	0%
28	PROCEEDS LONG-TERM DEBT (WATER-SEWER)	\$20,550.00	\$18,550.00	-10%
29		\$48,630.00	\$46,565.00	-4%
30				
31	USE OF MONEY & PROPERTY			
32	INTEREST ON INVESTMENTS	\$3,000.00	\$2,000.00	-33%
33	RENTAL INCOME-HALL	\$1,200.00	\$1,200.00	0%
34	RENTAL PROPERTY	\$5,000.00	\$5,000.00	0%
35	PRIOR YEAR BALANCE	\$12,500.00	\$12,000.00	-4%
36	PARK RENTAL	\$500.00	\$250.00	-50%
37		\$22,200.00	\$20,450.00	-8%
38				
39		\$328,925.00	\$330,350.00	0%
40				

USING DATA IN WRITING

ANALYTICAL SKILLS

To understand the misinformation ecosystem, here's a break down of the types of fake content, content creators motivations and how it's being disseminated

7 Types of Mis- and Disinformation

False Connection

When headlines, visuals or captions don't support the content

False Context

When genuine content is shared with false contextual information

Manipulated Content

When genuine information or imagery is manipulated to deceive

Satire or Parody

No intention to cause harm but has potential to fool

Misleading Content

Misleading use of information to frame an issue or individual

Imposter Content

When genuine sources are impersonated

Fabricated Content

New content, that is 100% false, designed to deceive and do harm

confuse evidence by focusing on self

PERSONALIZATION

believe evidence is more extensive

OVERESTIMATION

things can be related without one
causing the other

CORRELATION VS. CAUSATION

flaws of eye witnesses

FAULTY RECOLLECTION

accuracy doesn't always equal truth

CONTEXT

give misimpression by equalizing
quality or quantity of evidence for
opposing sides of an issue

FALSE EQUIVALENCE

swaying information to support a
particular political, social or economic
point of view

IDEOLOGICAL BIAS

tilted information resulting from
disparities in representation based on
race, gender, religion,
socioeconomic status, etc.

COMPOSITIONAL BIAS

infer thoughts, feelings, emotions
without sufficient evidence

MIND-READING