GeoCivics: Understanding Political Landscapes through the Humanities and Geospatial Technology



DR. SASKIA VAN DE GEVEL

ASSOCIATE PROFESSOR IN GEOGRAPHY

APPALACHIAN STATE UNIVERSITY

What are geographic questions? See samples below, with sources to investigate.

Location and Extent

What is the phenomenon or feature of interest? What is this place like?

Where is it located? Where does it occur?

Why is it where it is? Why does it not occur elsewhere? Could it be elsewhere?

How large an area does it cover?

Distribution and Pattern or Shape

Where is it in relation to similar features?

Why does it take a particular form or structure?

What kind of distribution does it portray?

Is there regularity in its distribution? What is the nature of that regularity?

Is it found throughout the world? Where are its limits? What is the nature of those limits?

Spatial Association and Interaction

What other phenomena are in the same area?

Do phenomena usually occur together in the same area? What else is there spatially associated with that phenomenon? Why?

What is the significance of the features or location?

What are the consequences of its location and associations?

Spatial Change

Has the feature always been there? When did it first emerge or become obvious?

How has it changed spatially through time?

What factors have influenced these changes?

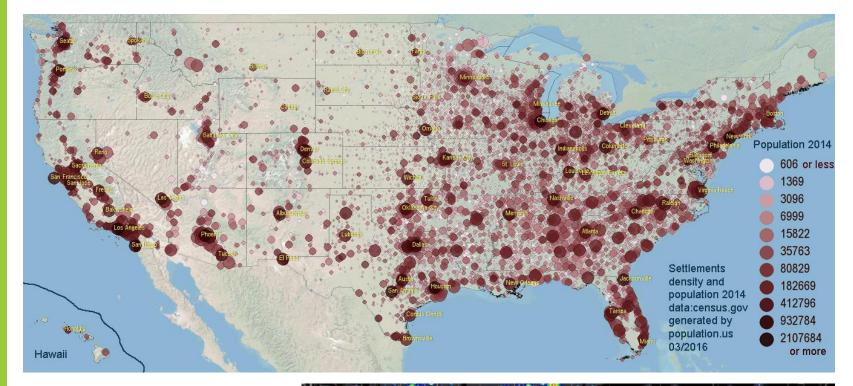
Why has it spread or diffused in this particular way?

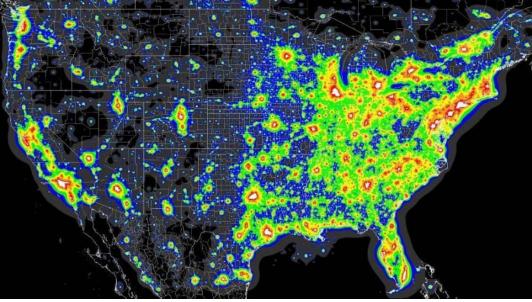
What geographic factors have constrained its spread?

http://ncge.org/geography-for-life

https://www.guilford.com/books/Teaching-Geography/Phil-Gersmehl/9781462516414/reviews https://www.nationalgeographic.org/education/programs/geo-inquiry/ Geography is the study of places and the relationships between people and their environments. Geography seeks to understand where things are found, why they are there, and how they develop and change over time.

https://www.nationalgeographic.org/encyclopedia/geography/





Objectives and Topics

TO UNDERSTAND THE APPORTIONMENT AND REDISTRICTING PROCESS IN THE UNITED STATES.

- Discuss the role of the decennial census in the apportionment process (next one is 2020)
- Review the criteria and guidelines for drawing electoral district lines
- Evaluate results of Supreme Court cases related to redistricting
- Consider whether it is possible to divide a state into districts mathematically
- Define gerrymandering and its positive and negative effects

TO IDENTIFY THE NEXT QUESTIONS TO ASK OR ACTIONS TO TAKE REGARDING THIS TOPIC.

 Divide your state into districts based on current or future numbers of districts using 2010 Census data with geospatial technology

 Know who draws the district lines in your state for US Congressional districts and state legislative districts

 Consider any historical divides in your state and how they are reflected in and are affecting representative government

Discuss what else you need to know

Enumeration

United States Census

		C.TO	-			174		20.00 20	r other f county AND	2010	1	ELA YION	T	PERCH	Tion	10	REATION	-	(Pass of 1027)	ra			Landser Landsteine				1	JLA			SCH	EDU		1480	_	tion }	_	sach	44		Eo	T
Image: Section of the sectio				1	11		-	1015746	B		lunt	Ē,	Sum.			and the state	1				Tar In						10.74	THE PARTY	N -315	源目	NO.	All It		Ser a prost section over had an experiment when appendix and the sec	SPACE.				1			
[a] [and [a] 0 [PHP.]. [b] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2				1	1	The state of the s					-		The state of		1	140	Thursday 1			SEEF (Jan 14	- Ser		CO-BRANT IN	-	iller bester									Construction Construction of the Construction of			Taxable I	Castor and	-	and the second s		THE PART
Image C. Bounds T. E. M. 10. 30 S. 10. 10 Start D. 10							alm	••, l	Jilli	m X	He	and.	h	w	34 4	. 1.	Bit 50	Terro		11	S.		-	-	10	-	-	4	-	-	-			Owner			DA	56.7		\$2 25	on he	
13		-	+	+	-	-	Ξ		man		ω. De	fr.				1	55	allower of the	Cold Street of the	11	Se	And the second second	-		-	Ľ	-	is h	h	he	н	5	+	1.516.5			+	+		0	he	+
Print M. S	1	-	-	-	5	Ľ	-		Nillia.	1.4	Se	-				Fr.	0	Term	-	11	-	-		-	-	-	-	-	2		-		-				H	-	11	-	-	Ŧ
Image: Section 1 Under 1 / E Units (Section 1 / E Units (Section 2 / E Uni	6	37	11 4	R.	50.	L	Strai		i. The	+ 6	He		10h	w	44 h	K.	C-5 1	Terms	-	1	54	field	Cellow	r a	labo	hev	214	Jen -	-	-	-	1 40		marical Dorto	Tota	Barn	6.4	39.5	the second s	-		t
Image: Serie Biology (Series) Serie Biology (S	r	\vdash	+	-		-	-						HE.	3	44 h	h	641	alab		1634 101	54	effield	Colber	t a	labore	-1	117	h	- 1-	e be	H	-	+	1000	-		H	-	++*	0	-	+
Der 19 18 15. Der 19 10 15. Der 19 10 15. Der 19 10 15. Der 10 10 10. Der 10 10. <thder 10.<="" th=""></thder>		E			-			1	Jame				12	w	11 5	14	55	Tann		11	54	field	Colber	t a	labar	L	149														1	t
Comment Comment <t< td=""><td></td><td>-</td><td></td><td></td><td>50</td><td></td><td></td><td></td><td></td><td>10</td><td></td><td>and the second</td><td>TE</td><td>-</td><td>31 3</td><td>ŀ</td><td>17</td><td>Gene</td><td>ia.</td><td>18</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>1.1</td><td>-</td><td>maid</td><td>Tra</td><td>e Hom</td><td>Pu-</td><td>203</td><td></td><td></td><td></td><td>+</td></t<>		-			50					10		and the second	TE	-	31 3	ŀ	17	Gene	ia.	18									-	-	-	1.1	-	maid	Tra	e Hom	Pu-	203				+
Image: State of the s		27	10	1					cem	ma S!	ēω.	4	E	ω	91 h	h	#2 14	Allino	in	11			anders	T.		hes	141	nrh	h	- h-	H	2		Superintende	Cart	man	7	211.1	1	0 0	h	
Bartle J		-	-	-	-		-	_								4	144 3	Comer,	horis	55				Te	inneess	L- 2	161	mh	h	-h-	5	4	-				+	-		the state of the s	the second second	
 				12			-	Ni					14	ω	11 5	14.	33	Flori	de .	64						he i	161	1		1024		1000		and the local diversity of the local diversit	1	and a				1	ha	1
Bit Control No. 10 No. 10 <td>4</td> <td>34</td> <td>1051</td> <td>IR.</td> <td>48.</td> <td>2</td> <td>alpe</td> <td>.1</td> <td>sol</td> <td>m. 6</td> <td>He</td> <td>and .</td> <td></td> <td></td> <td></td> <td>i fin</td> <td>C4 1</td> <td>Litter</td> <td>nia</td> <td>19</td> <td>na Se</td> <td>m Plac</td> <td>-</td> <td>-</td> <td>2.447.00</td> <td>h-X</td> <td>OAC S</td> <td>jue -</td> <td>-</td> <td>-</td> <td>-</td> <td>140</td> <td>-</td> <td>attorney</td> <td>am a</td> <td>How</td> <td>04</td> <td>122 2</td> <td></td> <td></td> <td></td> <td></td>	4	34	1051	IR.	48.	2	alpe	.1	sol	m. 6	He	and .				i fin	C4 1	Litter	nia	19	na Se	m Plac	-	-	2.447.00	h-X	OAC S	jue -	-	-	-	140	-	attorney	am a	How	04	122 2				
Both Start Elevant Elevant Elevant Company	1	-	+		-		-											Terms	- PP	1	S			-	-	- 0	10	nr h	1	h	S	2	1			<u></u>	H		16	-		
Common Production Count Production		_		_			-		aran	line	12	حالله	1. F	ω	4 2	1	0	Terre		11	-	-				-	-						_	0					1			F
Linit S10 State Linit S10 Linit S10 <thlinis10< th=""> LiniS10 <thlinis10< td=""><td>ł</td><td>134</td><td>13 23</td><td>20</td><td>7 150</td><td>Н</td><td>Ullia</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>h</td><td>5-170</td><td>Georg</td><td>-</td><td>11</td><td></td><td></td><td></td><td>-8</td><td>ingia</td><td>h 12</td><td>37</td><td>t.</td><td>1ª</td><td></td><td>-</td><td>1 45</td><td>-</td><td>Chargenet</td><td>auno</td><td>Him</td><td>PA</td><td>12.2.3</td><td></td><td></td><td></td><td></td></thlinis10<></thlinis10<>	ł	134	13 23	20	7 150	Н	Ullia	-								h	5-170	Georg	-	11				-8	ingia	h 12	37	t.	1ª		-	1 45	-	Chargenet	auno	Him	PA	12.2.3				
Init S1 0 S200 Deal of the second se		E					-		Jos	ph b	Se.	5	24	W	18 2	4	Hat	Georg	via.	79	a	thants	Fulton	4	Lorgia	- 7	132	nor b	1	che	S	6		1.2.11	-				1	0 0	The	-
Internet of Jamphon (1) Internet of Jamphon (1) <thinternet (1)<="" jamphon="" of="" th=""> <thinternet jamp<="" of="" td=""><td>+</td><td>10</td><td>15</td><td>10</td><td>9000</td><td>1</td><td>1</td><td>22.2</td><td>mil</td><td>in C</td><td>Se NL</td><td>1</td><td>3</td><td>W</td><td>16 5</td><td>÷</td><td>HI Y</td><td>geory</td><td>in .</td><td>19</td><td></td><td></td><td>Fulto</td><td>- 4</td><td>engia</td><td>he /</td><td>121</td><td>nor h</td><td>e he</td><td>e he</td><td>2</td><td>148</td><td>-</td><td>Burner</td><td>Fat</td><td>SEE</td><td>6</td><td>46 7</td><td></td><td>2 24</td><td>he</td><td>1</td></thinternet></thinternet>	+	10	15	10	9000	1	1	22.2	mil	in C	Se NL	1	3	W	16 5	÷	HI Y	geory	in .	19			Fulto	- 4	engia	he /	121	nor h	e he	e he	2	148	-	Burner	Fat	SEE	6	46 7		2 24	he	1
Orderson of Damaghan (1)		Ľ				Ē	r_	-	a	- 16	e W	t.	E	w	45 h	1	84 30	Term	m	11					_	L	K	mh	-h	h	H	5		- ins	arring		TT'	1	4	0 0	14	
		-		-	Qaaa		-		Re	-	RD.	ighte	144	w	11 4	144	1431/1	Tem	un.	1/1	5.		1.50	-		h-	-	-b	-	he	5	140	-	Business	8.11			185 11	and the second second			
2			15	TV.	1000	Ĩ.			Elve	ahe			1/IE	w	39 h	1		Kan	in an	79	B.				-	h	1	hank	d he	-h-	H	F		manager	around 1	-per-	1	Ser.	4	0 0	2 lbu	-
GR 111 55 0 5000 110 500 111 500 100		F	+	-		H		•	han				130	ω	16 5		12/0			25	5	100 C 100 C 100 C 100 C	-	1	-	2	-	n- h	e h	e be	S	6	-		1		++	+	0	0	he	4
111 57<0		-					Ξ					-				Ľ	22			91	50		-	-	-	T		1	1						1.5.		tt				+	t
- William C. Son 2 In W 11 S (p 5 5) Tennessee (7) Son Plan (p 7 2 2) 372356 0 (17590, p m 2) (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9	ш	15	50	5000	1		. C	une	line	lite	nd _	01	w	40 h	K.			-	41	50			-	1							1 40	-	Secretary	Stul A	Sunday	1.4	121 21				
The second of	ŀ	-	$^{+}$	1			-				IS.	fr.	1	w	11 5		55			1/	-20		1	-	-			par ye	-	-	н.	-			1	-	H	1	+1	10	-n-	1
Supplex Character File W1 > file Supplex Number of the supplex <td></td> <td>34</td> <td>235</td> <td>60</td> <td>1500</td> <td>h</td> <td>- D.</td> <td>nale</td> <td>, Ro</td> <td>4 K.</td> <td>lite</td> <td></td> <td>10</td> <td>w</td> <td>37 4</td> <td>. N.</td> <td>1 120</td> <td>Π.</td> <td></td> <td>41</td> <td>Sa</td> <td></td> <td>100</td> <td></td> <td>_</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>1 40</td> <td>-</td> <td>Publisher</td> <td>Dily</td> <td>Paper</td> <td>٤.</td> <td>347</td> <td></td> <td></td> <td></td> <td>Ŧ</td>		34	235	60	1500	h	- D.	nale	, Ro	4 K.	lite		10	w	37 4	. N.	1 120	Π.		41	Sa		100		_	-	-					1 40	-	Publisher	Dily	Paper	٤.	347				Ŧ
Supplex Character File W1 > file Supplex Number of the supplex <td></td> <td></td> <td>+</td> <td>4</td> <td>-</td> <td>H</td> <td>-</td> <td></td> <td>He</td> <td>ahd.</td> <td>90.</td> <td>11</td> <td>1 F</td> <td>3</td> <td>36 5</td> <td></td> <td>44</td> <td>years</td> <td>pe .</td> <td>197</td> <td>S</td> <td>- House</td> <td>-</td> <td>-</td> <td>-</td> <td>h-</td> <td>-6</td> <td>m h</td> <td></td> <td>-he</td> <td>H.S</td> <td>4</td> <td>1</td> <td>1.1.1</td> <td>1</td> <td></td> <td>H</td> <td>+</td> <td></td> <td></td> <td></td> <td>1</td>			+	4	-	H	-		He	ahd.	90.	11	1 F	3	36 5		44	years	pe .	197	S	- House	-	-	-	h-	-6	m h		-he	H.S	4	1	1.1.1	1		H	+				1
She - Frank W Son In W Hole Hole Frank W Son In W Hole H	۰.		1		1		-		me	the	20.	hte	F	w	13 9	4	89	Terro	-	91	5.	-		-		1		-	1	-			_			-	\square	-	1	T	-	F
SUPPLEMENTARY QUESTIONS Note official of the set	1.	-	+	+	-	H		-					DL	5	10 5	ť	4 3	Tem		19/	- 5	Hu	-	+		ha	-	+	+	+	-	-	-		-		H	-	++	+	+	t
						RY	Т			and the second second		_	والمتحادث	-		17		11		T	-		709 78		-	D AND	over				172.6		THE COLUMN	FOR C	-	MLT-30 F		198 28 m	NUE CO	LTION .	1	-
Schlemen Willing L. Neur Under Blinsing English, Under W. 1 Mar 9 Mar 1 / /////////////////////////////////	÷		hum	raind	in Lines	H sal	_	_					4775	-	In Posses	Lar Y	ARTE		TOLANS	-	Read to it	tit Inga	-	SPECIAL OF	OFFICE ATTOR, 1	in series.	-	the set wo	attant in a	Attel	11		1									T
Schlommen Willing L. Neur Under Blinsis English, Up to 1 Julie 9 min 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				10.00			12			Subscription	1	frand on the	State and		the sector		. 1	1.10	1 .				STER DEP	And Press	the web repet		See * la	SL # wa	lass In		1	1	-	12 11 11		1 1	Lange and	1	2 2	12	-	
Schlommen Willing L. Neur Under Blinsis English, Up to 1 Julie 9 min 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								1.0					100		-	-	CE Case	2	1	1	1	编辑	-			-	-	-	-	-	A STATE	1				-1'	4			-		
Philippin Lilling Ling Link alling Singlish with the man and the second states and the second			_	30	-	_	-			-	37	-	1.00			-	8	32 4	1 41	11	-	4 4	-		-	-	-	47		1	-	-	18 1	1 # 8 0	100	del	-	U.	+	v	1 1	ф
	20	hb		2.1		-	he	- 4	ante	R	ino	9	-	2	tin	-	-	4-1	e w	1	1	- 0	hone	-	-	-	-	-	-		1	-	12	91 10	130	18	+	-	1	1.47	0.12	+

1

Census Technology How to process and tabulate data

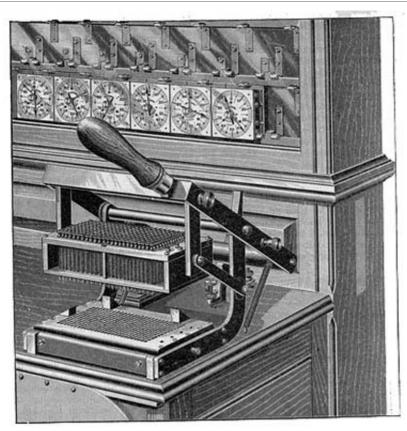


Fig. 8 - Circuit-Closing Press, Hollerith's Electric Sorting and Tabulating Machine.



2018 Census Test **Begins in Providence**

Respond online, by mail or by phone.





U.S. Department of Commerce **Economics and Statistics Administration** U.S. CENSUS BUREAU census.gov

APPORTIONMENT

2010 OFFICIAL RESULTS

LOST

Illinois -1

lowa -1

Louisiana -1

Michigan -1

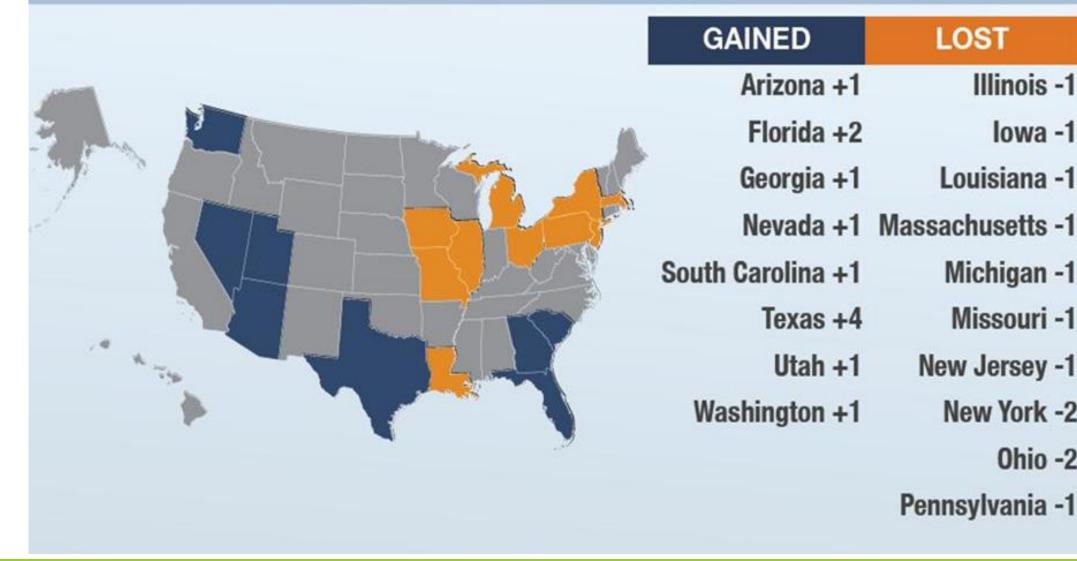
Missouri -1

New York -2

Ohio -2

New Jersey -1

Pennsylvania -1



Apportionment

Apportionment is the first part of the process, following the reporting of the results of the Census to the United States Congress.

"Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers." US Constitution

Each state must have at least one representative.

Wyoming, 564,460 people per representative North Carolina, 733,499 people per representative California, 702,905 people per representative Evolved from the Connecticut Compromise of 1787, which established equal representation in the Senate and proportional representation in the House.

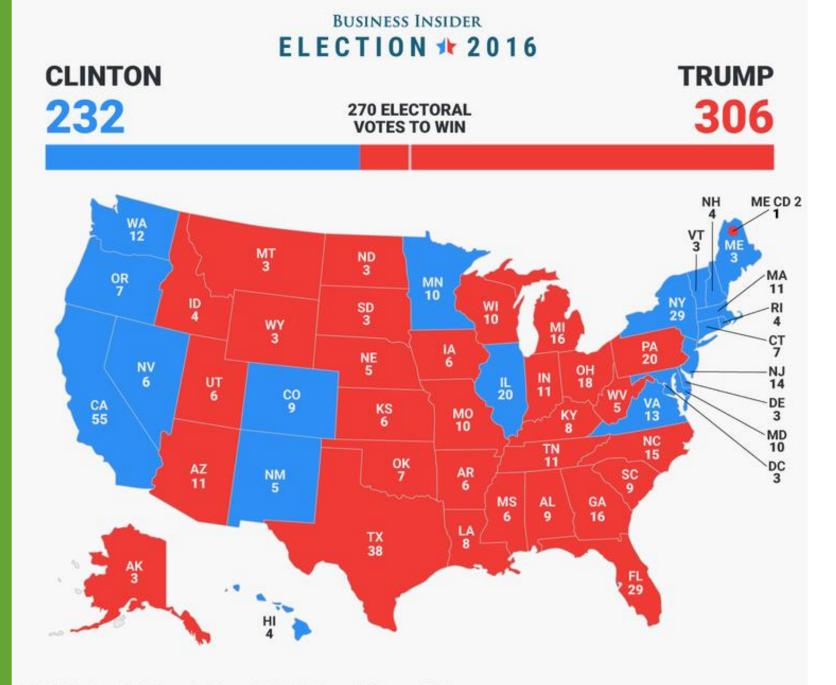
Reapportionment increases or decreases the number of seats each state has in the House of Representatives.

More representation for a state means more influence in the legislature and in the presidential election cycle.

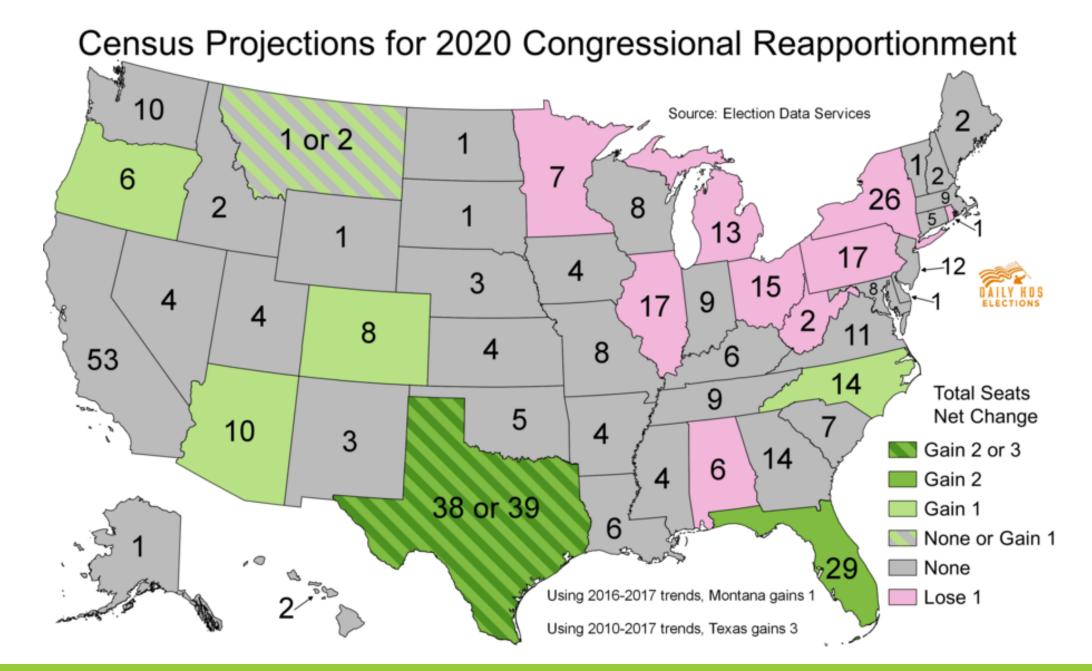
The number of representatives affects the number of electoral votes in the Electoral College.

How many votes does each state have in the Electoral College?

The number of senators (2) plus the number of representatives.

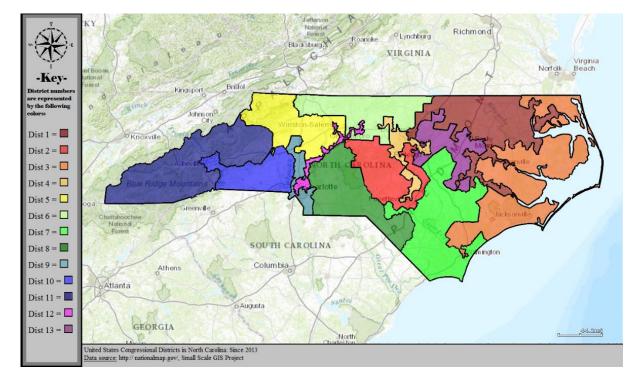


SOURCES: Associated Press, Fox News, CNN, NBC News, CBS News, ABC News



Redistricting

- Redrawing of the boundaries of the districts within each state based on census results
- Follows the process of reapportionment
- States gaining or losing significant population in comparison to other states will have more changes than those that are stable
- District boundaries may also change due to population migration within a state
- Congressional district lines are also used to define other political and economic regions, such as state university regents and state school board members.



Q

Search UCCS

GeoCivics

.

State Resources Apportionment and Redistricting Civics and Government Geography

Home / State Resources / North Carolina

North Carolina

Education Materials

- North Carolinians on the Move
- North Carolina ArcGIS Online Redistricting Exercise
- North Carolina Redistricting Instructions
- Find a Giant Map from the North Carolina Geographic Alliance

Organizations and Resources

- End Gerrymandering Now
- Political Polarization in North Carolina, Katherine F. Perry

Contact

• Saskia van de Gevel

https://www.uccs.edu/geocivics/

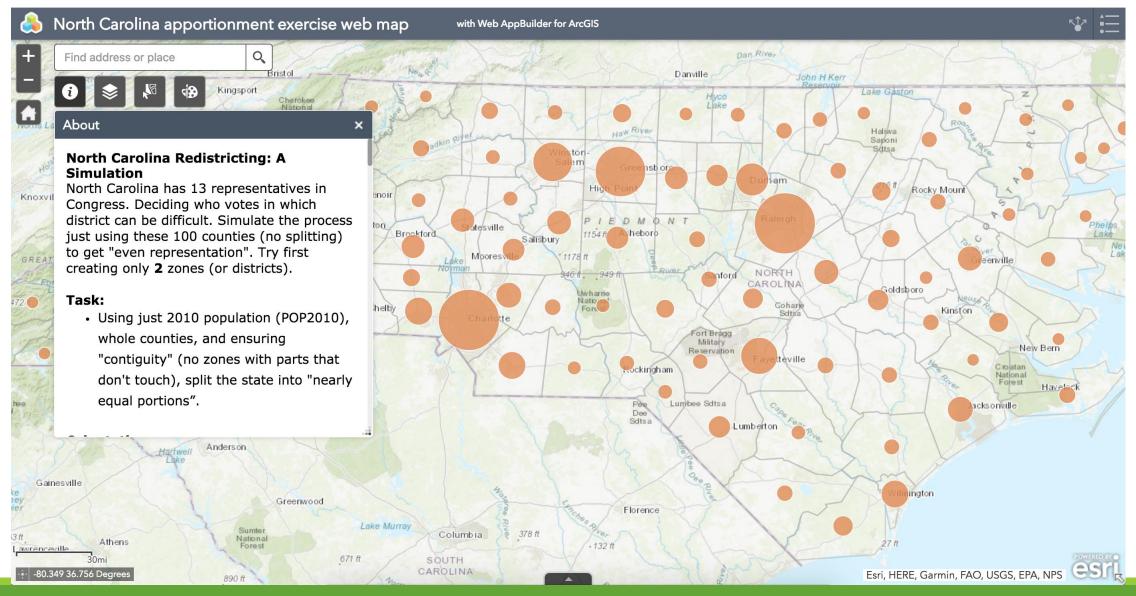
Start on the Giant State Map



Video of the Giant Map Exercise

https://www.youtube.com/watch?v=AmQczhqlyso

Then use ArcGIS Online lesson to redistrict your state



Contact us with any inquiries:

Rebecca Theobald, <u>geocivics50@gmail.com</u> Anita Palmer, <u>anita@gisetc.com</u> Andy Mink, <u>amink@nationalhumanitiescenter.org</u> Saskia van de Gevel, <u>gevelsv@appstate.edu</u>

Find additional resources on the GeoCivics website. https://www.uccs.edu/geocivics/