Breakdown of Democracy in North Carolina

Artist's Statement

In Fall 2021, I took 84-324: Future of Democracy with Professor John Chin because the waxing and waning of the people's power means a great deal to me. For the course, there were five major papers, and Professor Chin had us choose a single region to write the papers about. I chose North Carolina, a state that I believe has seen its democracy put under strain recently. This paper was the third, and it focuses on gerrymandering as a democracy breakdown in the region.

Abstract

Partisan gerrymandering has been a prevalent issue in the state of North Carolina over the past decade, resulting in a chasm between how the people vote and how many representatives from each party are elected. For much of the 2010s, courts tried to mitigate this unfairness with limited success. After the 2020 election, the North Carolina Supreme Court court successfully ensured that a less biased map would be used for the 2022 elections. Thus, the changes in the number of seats won by each party had less to do with the will of the people and more to do with the outcomes of judicial elections and court rulings. Because control over the courts is determined by elections, there is a large chance that the state will relapse back to its 2010s-era propensity for malapportioned election outcomes.

Introduction

Gerrymandering is the practice of one party drawing congressional/legislative district lines in such a way that advantages themselves. Under fairly drawn lines, the breakdown of seats between the two parties would roughly match the statewide vote share. Gerrymandering distorts the breakdown by "packing" some of the opposition party into a few districts, then "cracking" the rest of them between the remaining districts. By doing so, it is possible to ensure that the partisan split of the districts in a state is different from the popular vote in the state.¹

Gerrymandering has existed for centuries as a method for states with one-party control to suppress the minority party. Both parties engaged in it routinely, and in the Jim-Crow south it was used to minimize African American representation. The Voting Rights Act of 1965 established several protections against this type of racial gerrymandering, but gerrymandering for partisan purposes remains legal in much of the country. In the wake of the 2010 elections, when Republicans won massive gains in legislative elections right before the redrawing of maps,

¹ Silver, Nate, Aaron Bycoffe, David Wasserman, and Ella Koeze. "The Gerrymandering Project." 538, January 25, 2018. https://fivethirtyeight.com/tag/the-gerrymandering-project/.

gerrymandering became a prominent tool of the GOP to maintain control of legislatures and the House of Representatives even when they lost the popular vote.

Gerrymandering is not new to North Carolina, but for the past decade the state has become an extreme hotbed of gerrymandering and attempts to undo it. For most of the past decade, the statewide vote share has been split relatively evenly between the two parties. However, the outcomes of congressional and legislative elections have been almost entirely predetermined by which side had drawn the most recent maps or won the most recent court battles. The key factors that enabled this political suppression are laid out in this paper as follows: a distribution of Democratic voters within the state that makes it easy to draw a gerrymander, a politicized legislature that was intent on sustaining its gains, and a court system that has only sometimes been successful in defeating gerrymanders.

As a consequence of this breakdown of democracy in North Carolina, further erosions to democracy were enabled. In 2013, after the Voting Rights Act of 1965 was largely gutted by the Supreme Court case of Shelby vs Holder, North Carolina was one of several states to pass a bevy of new voter suppression laws that previously would have been illegal. These laws helped the gerrymandered legislature further entrench their power.

The "Laboratories of Democratic Backsliding" project quantified this drop in democracy by compiling a series of quantifiable metrics such as ease of voter registration, voting wait times, vote by mail availability, gerrymandering, felon disenfranchisement, and so on. The combined metric is known as the State Democracy Index. Larger values indicate a healthier democracy, and smaller values indicate a less healthy one. Figure 1 shows this aggregate score for every state from 2000 to the near present. North Carolina, which is highlighted in the chart, had one of the most alarming plunges in its score around the time of the Shelby v. Holder decision, dropping from one of the highest scoring states to one of the lowest in a matter of months.

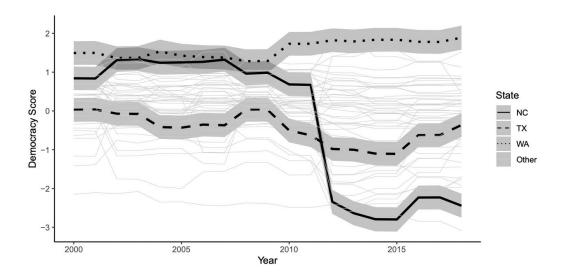


Figure 1: the "Laboratories of Democracy" State Democratic Index score for every state since the early 2000s, with North Carolina highlighted.²

Quantifying Gerrymanders

There are many ways to measure the fairness of a congressional map. Below, three of these metrics are highlighted, some of which are regularly used as evidence in court. Several other metrics are mentioned in Appendix D. No one of these metrics is fool-proof, but taken together they are able to paint a picture about which maps are or are not gerrymanders.³

Mean-Median

The gap between the partisanship of the median district and the statewide vote. For example, if +4, it means that the median district is 4% more Republican than the statewide vote share. This is one of the simplest ways to quantify a gap between the statewide outcome and the district distribution, but it is still possible to have an unfair map with a low mean-median gap if the statewide vote share is skewed towards one party. For example, if a state votes 60% Democrat and 40% Republican, and has 10 districts that all vote the same as the statewide vote share, then Democrats would win a disproportionate number of seats despite the median district perfectly matching the statewide mean.

Vote Bias

² Grumbach, Jacob M. "Laboratories of Democratic Backsliding," April 5, 2021.

³ "Dave Redistricting App." Accessed March 2, 2022. https://davesredistricting.org/maps#aboutdata.

The excess number of votes required half the seats. For example, if -8, it means that Democrats can still win half the seats even if they only win 42% of the votes statewide. This metric captures the intuitive notion that a party should only need to win half of the vote to win half of the seets. Again, this number only has meaning in states where the statewide vote share is close to evenly split.

Efficiency Gap

The difference between the number of "wasted votes" for each party (votes in seats they lost, or excess votes in seats they won). For example, if -10%, it means that Democrats wasted 10% fewer votes than Republicans. This metric captures how voters in packed and cracked districts have the effectiveness of their votes diminished, but the numbers can get warped or become meaningless if the state is strongly aligned with one party over the other (like Massachusetts, West Virginia, Hawaii or Idaho).

North Carolina Geography

Before discussing gerrymanders in any state, it is important to have the appropriate context. In theory, the statewide popular vote should roughly match the number of seats each party wins, but there are several mitigating factors. The size of a state determines the number of seats each state has, therefore smaller states can have large disparities between the popular vote and the seat split. North Carolina had 13 districts in the 2010s, and has 14 this decade, so it is big enough to eschew this problem.

Certain states have an underlying political geography that favors one party more than the other (this advantage is usually subtle). North Carolina arguably has a small GOP advantage in its underlying geography, but it is not significant enough to cause a great disparity in how seats are distributed.

Furthermore, a fair map should bear in mind the social and political geography of a state and keeping communities together when possible. What defines a community is quite subjective, but some states with nonpartisan redistricting methods attempt to quantify it by asking the people to help them define "communities of interest." They then try to keep these communities intact when drawing lines. North Carolina does not have any such system when drawing lines.

Below are several major clusters in North Carolina that a fair map would seek to keep intact. The list is not complete, but does include many of the areas that are often targeted by Republican gerrymandering.⁴

⁴ See Appendix A

Research Triangle: a trio of high population urban counties containing the cities of Raleigh, Durham and Chapel Hill. These areas are also home to major research universities (hence the name) and have similar politics (very democratic). Combined they have enough population for slightly more than two districts. In a Republican gerrymander, the excess is split between various other districts to prevent the creation of a competitive district.

Black Belt: a swath of largely rural counties with high African American populations, often kept together since the passage of the 1965 Voting Rights Act. Some gerrymanders may try to dilute the vote by mixing in more conservative rural areas nearby, thus creating a more competitive district, or combine it with Durham to reduce representation elsewhere.

Piedmont Triad: another trio of nearby cities (Greensboro, Winston-Salem, High Point) with slightly more than enough population for one district. In a Republican gerrymander, these communities are usually split between two or three districts to ensure that none of them vote for a Democrat.

Charlotte Area: Charlotte is a large city, and its African American communities are typically parceled into a VRA-protected district. In a fair map, these portions still get their own district, but the rest of the city and suburbs are kept in a single competitive district. In a Republican gerrymander, the suburbs are scattered between several districts.

The Sandhills: another swath of largely rural counties (plus the city of Fayetteville) with large nonwhite populations, though these are far more conservative than the black belt due to the inclusion of the Native American Lumbee tribe. In a fair map, the region is mostly kept together in a single competitive district. In many Republican gerrymanders, it is split between two or three districts.⁵

Gerrymandering can be made easier or harder depending on the configuration of voters within the state. If one party is relatively evenly distributed, consistently winning different areas by smaller margins, then it is harder to pack many of them into a few districts. However, the configuration of regions mentioned above makes it relatively easy to do the opposite.

2010 Cycle: Initial Map and Beyond

In the 2010 election, Republicans gained control of the North Carolina legislature, which they have held since. They used their newfound majorities to draw legislative maps that would

⁵ Wolf, Stephen. "A Look at [North Carolina]'s Political Geography." *Daily Kos*, September 10, 2015. https://www.dailykos.com/stories/2015/9/10/1414999/-Why-North-Carolina-is-turning-blue-A-look-at-the-state-s-political-geography.

lock them into power. They also drew congressional maps that devastated congressional democrats (see Figure 1). The resulting map packed together some of the Democrats from Charlotte, Greensboro and Winston Salem into a single district, from Chapel-Hill, Raleigh, and Fayetteville into another, and Durham with much of the Black Belt in a third, with every remaining Democrat in the state sliced relatively evenly between the ten districts. The result was that even though Democrats' statewide vote share in North Carolina increased from 45.25% in 2010 to 50.60% in 2012, the number of seats they held fell from seven to four (and one of those four would be lost in 2014). The Republican party intended to capitalize on its 2010 gains to ensure that it would hold the house in 2012. Because of gerrymandering in states like North Carolina, they did just that despite losing the national popular vote in 2012.

In 2016, state courts ruled that North Carolina had to redraw its maps. The legislature drew maps with shapes that were less aesthetically unpleasing. However, in terms of partisanship, the new maps were just as bad if not worse than their predecessors (see Figure 3). This is because they had a chance to fine-tune their gerrymander with more recent election data, since the old lines had been drawn after the 2008 and 2010 elections. In fact, had the old lines stayed in place, Biden would have won some of the GOP held seats in 2020. The new map put much of Charlotte into one district, Chapel-Hill into another, and Durham and the Black Belt into a third, with the Piedmont Triad and the Sandhills split between six more districts.⁷

In 2019, the process occurred once more, but this time the state courts had more success in ensuring that the new maps had a smaller partisan skew (see Figure 4). The Piedmont triad was placed into one district, and Raleigh got its own congressional district separate from Chapel-Hill. This resulted in Democrats easily picking up two additional congressional seats in the 2020 election, but the new map still had some Republican skew.^{8,9}

Appendix B has images of each of these maps, and Appendix D has the gerrymandering quantitative metrics mentioned earlier for each of them.

2020 Cycle: New Maps

In 2020, the GOP retained their legislative majorities. This was largely because, despite several more rounds of court battles and map-redrawing, the legislative maps were still gerrymandered. They attempted to draw another gerrymander that would turn back the clock to

⁶ "2012 United States House of Representatives Elections in North Carolina." Accessed March 2, 2022. https://en.wikipedia.org/wiki/2012_United_States_House_of_Representatives_elections_in_North_Carolina.

⁷ "N.C. Legislators Complete Voting Map Redraw; Congressional Primaries Pushed Back." *Chicago Tribune*, February 19, 2016. https://www.chicagotribune.com/nation-world/ct-north-carolina-congressional-map-redistricting-20160219-story.html.

⁸ Parks, Miles. "A Surprise Vote, Thrown Phone And Partisan 'Mistrust' Roil N.C. As Maps Are Redrawn." *NPR*, September 16, 2019. https://www.npr.org/2019/09/16/760177030/a-surprise-vote-thrown-phone-and-partisan-mistrust-roil-n-c-as-maps-are-redrawn.

⁹ Rakich, Nathaniel. "North Carolina's New House Map Hands Democrats Two Seats — But It Still Leans Republican." *538*, December 6, 2019. https://fivethirtyeight.com/features/north-carolinas-new-house-map-hands-democrats-two-seats-but-it-still-leans-republican/.

before the 2020 redraw (see Figure B1). The new map would have re-cracked the Piedmont Triad and made the Black Belt district far more competitive, thus making it likely that Democrats would be down to three seats after 2022 elections. However, the North Carolina Supreme Court put an end to this map more quickly than it had the previous few times.¹⁰

The legislature tried again with a map where Joe Biden won 5 of the 14 districts, and another 3 were barely won by Donald Trump (see Figure B2). However, this map still divided the Piedmont triad between multiple districts, and likely would have had the same outcome in 2022 as the discarded map. Thus the court discarded this proposal in favor of a map drawn by a special master (see Figure B3). The new map made the Charlotte suburbs into a blue district, something no map mentioned so far had come close to doing. It also kept the Piedmont Triad mostly intact, and made a swing district out of the southern Raleigh suburbs. Now, the most likely outcome is that Democrats gain one to three districts on top of the five they currently hold.¹¹

Appendix C has images of each of these maps, and Appendix D has the gerrymandering quantitative metrics mentioned earlier for each of them. Figure 2 shows how the three partisan fairness metrics mentioned so far changed across the six maps mentioned.

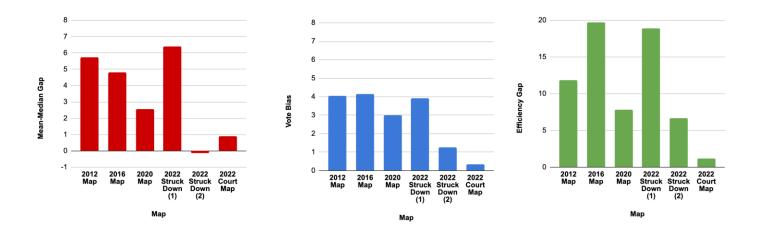


Figure 2: the mean-median gap, vote bias, and efficiency gap for the six maps mentioned so far. By convention, positive values refer to a GOP bias, and negative values refer to a Democratic bias. Values near zero indicate maps that are "fair" according to the metric.

The data shows a clear difference between the four Republican gerrymanders in the table and the two court-drawn maps. It is clear that the 2022 court map resulted in a huge decrease in the partisan unfairness metrics compared to the maps of the previous decade. It is also clear that

Mutnick, Ally. "North Carolina Supreme Court Strikes down GOP-Drawn Congressional Map." *Politico*, February 4, 2022. https://www.politico.com/news/2022/02/04/north-carolina-congressional-map-struck-down-00005974.

¹¹ Doran, Will. "NC Political Maps Are Official and Election Can Begin, after Court Rulings." *News & Observer*, February 24, 2022. https://www.newsobserver.com/news/politics-government/article258665653.html.

the 2016 redraw made things worse. The 2020 redraw made a marked improvement, but when compared to the 2022 map, it was still a quantifiably unfair map.

Discussion: Wars for the Court

Despite the Republican party attempting to repeat its gerrymandering successes in the previous decade, fair maps have prevailed for the moment. Though this battle for representation may resume in a few years, it is worth looking back at this decade of cartographical chaos in North Carolina to reflect on its distressing message. A state with closely divided partisanship went through a decade where, more often than not, a person's vote for Congress was inconsequential. The voice of the people was practically irrelevant outside of primaries, since the outcome of every district's election was practically pre-ordained, and locked into a rather lopsided ratio.

Most disturbingly, the usurping of the popular will via gerrymandering was not ended directly by the will of the people but by the will of the courts. Those same courts are elected in partisan elections, and one day may not stand up against a gerrymander. Even if they do, it is possible that a redrawn map may be another gerrymander due to the legislature's insistence to give as little ground as possible (as was the case in 2016 and 2020). If the past decade has shown anything, it is that the legislature is persistent in its efforts, and will likely continue in future.

When the Democrats flipped the court in 2016, it became the new Democratic governor's primary tool in his political war with the legislature (who had removed many of his powers in the period between his election and his inauguration). ¹² In 2018, the power struggle between the governor and the legislature boiled over into a state Supreme Court election. Democrats sought to win the seat of a Republican justice to expand their majority on the court and ran candidate Anita Earls. What followed was a series of petty moves by the legislature targeting Earls. They removed the judicial primaries and made the races partisan hoping that multiple Democrats would run and split the vote while the incumbent coasted to reelection. When Earls was the only Democrat to run, but another Republican entered the race, they tried (and failed) to pass a law that required the other Republican to be listed as an independent on the ballot. They also ensured that Earls would appear last on the ballot. At the same time, they placed several constitutional amendments on the ballot that would have enabled them even more egregious power grabs such as packing the court. Ultimately, these measures backfired and Earls won the race while the amendments were defeated. ¹³

¹² Wolf, Stephen. "Voting Rights Roundup: North Carolina Republicans execute legislative coup against democracy itself" *Daily Kos* (blog), December 17, 2016.

¹³ Wolf, Stephen. "N. Carolina Elections Are a Huge Win for Democracy, Paving the Way to Strike down GOP Gerrymandering." *Daily Kos* (blog), November 6, 2018. https://www.dailykos.com/stories/2018/8/31/1792463/-Voting-Rights-Roundup-Michigan-college-students-sue-over-GOP-s-thinly-veiled-voter-suppression-law.

Democrats' victories in 2018 enabled their triumph over Republican gerrymandering in 2022, however this is not a sustainable method of keeping gerrymandering at bay. There are more state Supreme Court elections in North Carolina this year, and if Republicans win them then they will be able to ignore any challenges to unfairly drawn maps. For now, it appears that North Carolina is always one election outcome away from going right back to the disproportionate maps of the previous decade.

Appendix A: North Carolina Political Geography

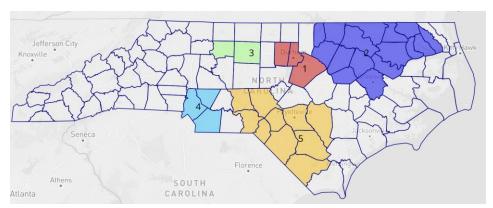


Figure A1: map of the five regions often targeted by Republican gerrymandering mentioned earlier in the paper. The counties included in each colored region are approximations to be used when visually comparing how maps group/divide these regions between various districts. **Key:** 1 - Research Triangle, 2 - Black Belt, 3 - Piedmont Triad, 4 - Charlotte Area, 5 - Sandhills

Appendix B: 2010 Cycle Maps

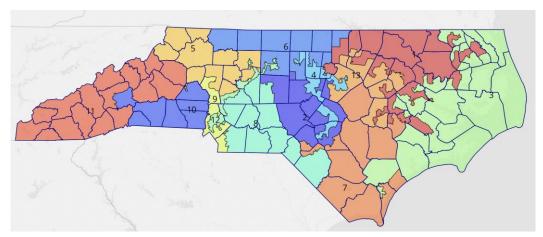


Figure B1: map of North Carolina congressional districts used in the 2012 and 2014 elections.

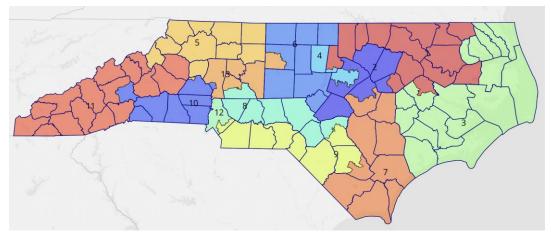


Figure B2: map of North Carolina congressional districts used in the 2016 and 2018 elections.

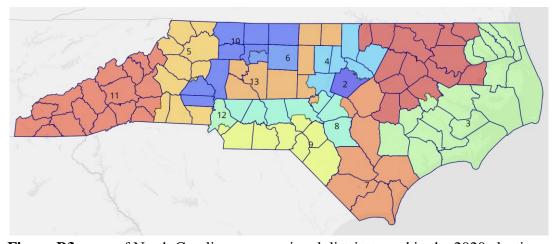


Figure B3: map of North Carolina congressional districts used in the 2020 elections.

Appendix C: 2020 Cycle Maps

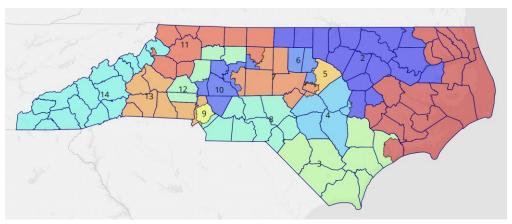


Figure C1: map of North Carolina congressional districts passed by the legislature for the 2022 cycle.

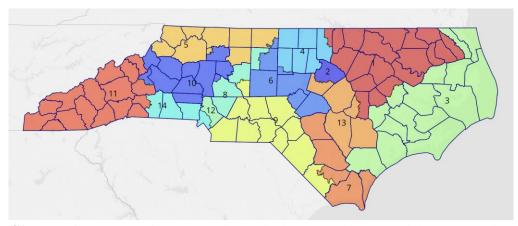


Figure C2: map of North Carolina congressional districts passed by the legislature to use in the 2022 cycle after the previous map was struck down by the state Supreme Court.

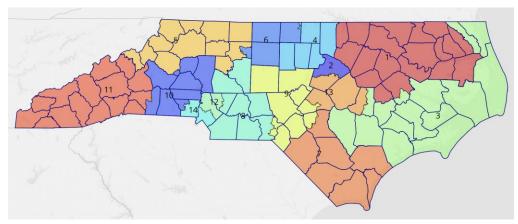


Figure C3: map of North Carolina congressional districts to be used in the 2022 elections after the state Supreme Court rejected the previous two maps.

Appendix D: Partisan Fairness Metrics & Data

Below are the definitions of several other map fairness metrics besides the three mentioned so far, as well as their values for all six maps mentioned in the paper:

Seat Bias

The difference in seats if the statewide vote share is 50-50. For example, if +10, it means that if the statewide vote is evenly divided between the two parties, Republicans will win 60% of the seats. This metric captures the intuitive notion that if the state is evenly split, the districts should be as well. However, this number only has meaning in states where the statewide vote share is close to evenly split.

Proportional Deviation

The difference between the number of seats a party is expected versus the amount of seats they should according to the statewide vote share. For example, if +15, it means that Republicans are expected to win 15% more of the seats than they should, given their statewide vote share. This metric captures the most fundamental intuition behind gerrymandering, i.e. "party X should have won X of the seats based on their vote share, but won Y instead." However, it relies upon agreeing on how much of the statewide vote share each party wins, which can vary from election to election even within the same year.

Reock Compactness

The ratio between the area of each district and the area of the smallest circle that encloses it. Values near zero indicate districts that are concave or have large protrusions, while values near 1 indicate more circular shapes. It successfully flags certain kinds of strangely shaped districts, but would fail to detect something like a spiral-shaped district.

Polsby-Popper Compactness

The (scaled) ratio between the area of each district and the perimeter. Values near zero indicate districts with very jagged boundaries, and values near 1 indicate smoother boundaries. It successfully flags districts with unnatural edges, but is more sensitive to the granularity of the boundaries than to the overall shape of the district.

County Borders

Often, gerrymanders split up districts across many counties, splitting the counties along the way. Thus, maps where very few counties are split are potentially fairer. This metric successfully flags maps with many county splits as potential gerrymanders, but does not work so well in states where it is possible to draw a partisan gerrymander without splitting too many counties. It is also an unhelpful metric in states like Arizona or Nevada where a single county contains a majority of the population.

Мар	Mean- Median	Efficiency Gap	Seat Bias	Vote Bias	Proportional Deviation	Reock	Polsby- Popper	County Splits
2012 Map	5.73	11.88	11.78	4.05	12.57	0.2861	0.127	40
2016 Map	4.81	19.72	19.29	4.15	20.41	0.3371	0.2447	13
2020 Map	2.57	7.85	7.89	3.01	8.53	0.3512	0.2933	10
2022 Struck Down (1)	6.39	18.89	18.39	3.92	19.58	0.3813	0.2974	11
2022 Struck Down (2)	-0.14	6.68	5.28	1.25	7.37	0.3548	0.2932	14
2022 Court Map	0.89	1.18	0.88	0.35	1.87	0.4155	0.3234	13

Table D1: values for the various metrics of fair maps described above for six North Carolina congressional maps. The first three are from the 2010 cycle (when North Carolina had 13 districts). The last three are new maps from this cycle (with 14 districts). All partisan metrics were calculated using the 2020 election results. By convention, positive numbers indicate a GOP bias and negative numbers indicate a Democrat bias. ¹⁴

¹⁴ "Dave Redistricting App." Accessed March 2, 2022. https://davesredistricting.org/maps#aboutdata.

References

- Silver, Nate, Aaron Bycoffe, David Wasserman, and Ella Koeze. "The Gerrymandering Project." 538, January 25, 2018. https://fivethirtyeight.com/tag/the-gerrymandering-project/.
- Wolf, Stephen. "A Look at [North Carolina]'s Political Geography." *Daily Kos*, September 10, 2015. https://www.dailykos.com/stories/2015/9/10/1414999/-Why-North-Carolina-is-turning-blue-A-look-at-the-state-s-political-geography.
- "2012 United States House of Representatives Elections in North Carolina." Accessed March 2, 2022. https://en.wikipedia.org/wiki/2012_United_States_House_of_Representatives_elections_in_Nort h Carolina.
- "N.C. Legislators Complete Voting Map Redraw; Congressional Primaries Pushed Back." *Chicago Tribune*, February 19, 2016. https://www.chicagotribune.com/nation-world/ct-north-carolina-congressional-map-redistricting-20160219-story.html.
- Parks, Miles. "A Surprise Vote, Thrown Phone And Partisan 'Mistrust' Roil N.C. As Maps Are Redrawn." *NPR*, September 16, 2019. https://www.npr.org/2019/09/16/760177030/a-surprise-vote-thrown-phone-and-partisan-mistrust-roil-n-c-as-maps-are-redrawn.
- Rakich, Nathaniel. "North Carolina's New House Map Hands Democrats Two Seats But It Still Leans Republican." *538*, December 6, 2019. https://fivethirtyeight.com/features/north-carolinas-new-house-map-hands-democrats-two-seats-but-it-still-leans-republican/.
- Mutnick, Ally. "North Carolina Supreme Court Strikes down GOP-Drawn Congressional Map." *Politico*, February 4, 2022. https://www.politico.com/news/2022/02/04/north-carolina-congressional-map-struck-down-00005974.
- Doran, Will. "NC Political Maps Are Official and Election Can Begin, after Court Rulings." *News & Observer*, February 24, 2022. https://www.newsobserver.com/news/politics-government/article258665653.html.
- Wolf, Stephen. "Voting Rights Roundup: North Carolina Republicans execute legislative coup against democracy itself" *Daily Kos* (blog), December 17, 2016.
- Wolf, Stephen. "N. Carolina Elections Are a Huge Win for Democracy, Paving the Way to Strike down GOP Gerrymandering." *Daily Kos* (blog), November 6, 2018. https://www.dailykos.com/stories/2018/8/31/1792463/-Voting-Rights-Roundup-Michigan-college-students-sue-over-GOP-s-thinly-veiled-voter-suppression-law.
- "Dave Redistricting App." Accessed March 2, 2022. https://davesredistricting.org/maps#aboutdata. Grumbach, Jacob M. "Laboratories of Democratic Backsliding," April 5, 2021.
 - https://uc397da4bf438809813e3111f57c.dl.dropboxusercontent.com/cd/0/inline2/Bf2fPzpJoZkN 9_dBeQYA6pV_FTCbY5h-1NKNL9SW1R3Nkl40bqIZFCQbWashj7OjuQrJok-CrywMT4GDLfN
 - $giTKe3USIIu0JgMr0tofq8nAsqMngFwrZB0Z5D0jExnnnA0WK7XuPh6eRI_NR7Gvwn-F4eZR3zYj4wTc9GmwxdAklg0yUcd1GnuBJOyUYmfes1v1lkMrqjOpq52TKA-f0zQbPRSqlA8gMurLc9eKtqUnCufuRQ6Rhpltwpfq5_q5yUeLCFcXNo0I2zv-5uidw0N3_e-pWPoDYqfW0CTLpmR-s1wMy-3lyqOOX9Ykw-KJdhUrMKekbPMFm4pcHKEIZ7W-hFwpvwN7u5rO4V9ZBiSUDXcZuSd6BPoXH9Ym5fsGvsM/file.$