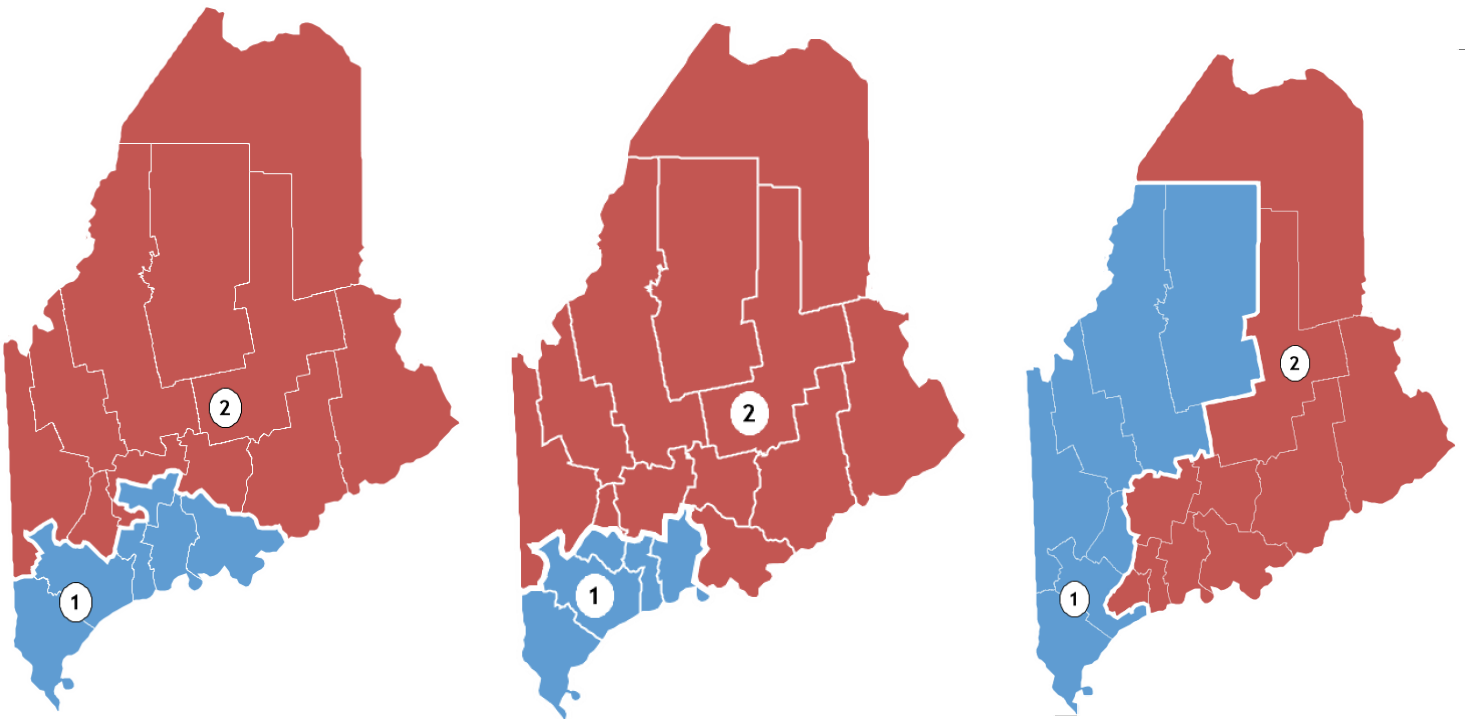


MAINE

Congressional Redistricting 2021

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January 3, 2021



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Introduction

Maine’s political penchant for compromise and bipartisanship characterized the state’s 2020-2021 redistricting process and undergird the three maps proposed in this report.

Maine is politically unique and its population is distinctively distributed, making the state an interesting case study in redistricting. Maine is one of only two states nationwide that apportions its electoral votes by Congressional District—in 2020 Donald Trump and Joe Biden split the state’s votes—and one of only two states that employs rank choice voting for federal and statewide elections.² Maine also offers an interesting partisan divide. The state’s more populous southern coast, from York to Freeport, is largely representative of New England’s traditional liberal enclaves. The state’s southernmost counties, for example, have not voted for a Republican Presidential candidate since George H.W. Bush in 1988.³ The state’s rural interior, however, is reliably conservative and exerts a strong influence over the state’s political orientation.

Maine has long been represented in Congress and in gubernatorial office by moderate centrists who embrace independent positions and put Maine’s interests over broader national Republican or Democratic priorities. Independence has been a central element to the political identities of Maine’s current and recent senators, including Susan Collins, Angus King, Olympia Snowe, George Mitchell, and William Cohen. Despite the state’s inclination toward moderation, Maine’s conservative heartland has a powerful voice. In 2010, for example, Mainers elected Republican Paul LePage to office. LePage, who held office for eight years and won re-election, once described himself as “Donald Trump before Donald Trump.”⁴ Centrist Democrat Janet Mills’ election to the governor’s house in 2018 restored the status quo. Today, the state’s partisan division remains strong with Maine’s coastal, southern, and more urban areas favoring Democrats while the interior, northern, and rural portions of the state lean heavily Republican. Critical to both redistricting and the state’s political future, southern Maine’s population has been growing since the 1990s while the state’s remaining population has stagnated or declined.

² Nebraska is the other state that splits its electoral votes. Alaska is the other state that uses full rank choice voting for state and federal elections.

³ The Bush family has a large compound in the southern coastal town of Kennebunkport, Maine.

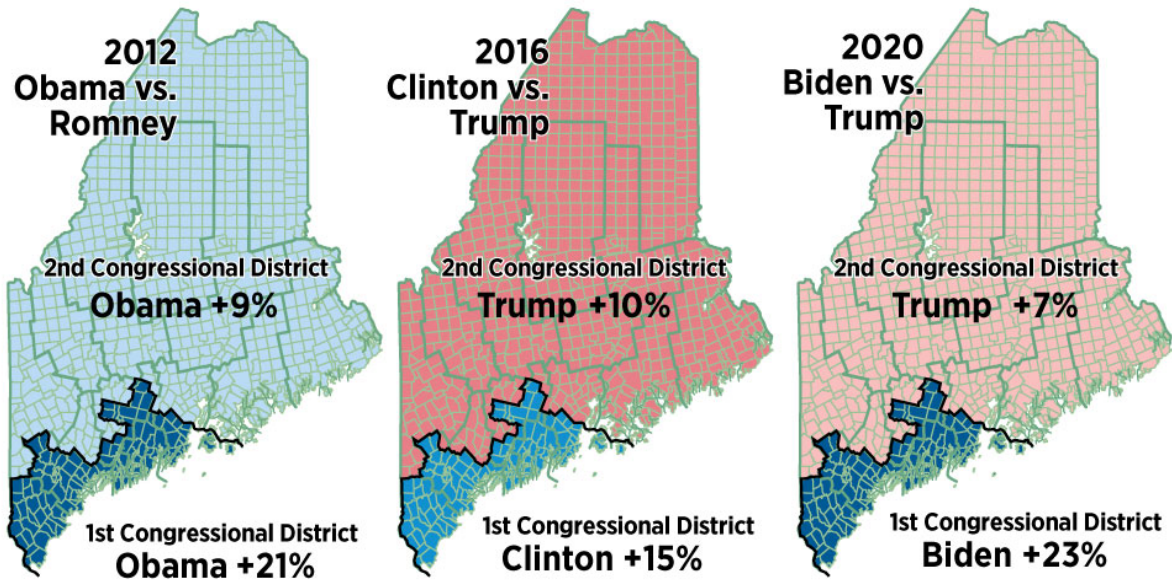
⁴ Colin Woodard, “Maine Braces Itself for Paul LePage,” *POLITICO*, Sept. 23, 2021 (available at <https://www.politico.com/news/magazine/2021/09/23/paul-lepage-is-back-and-maine-is-terrified-513745>).

The “Two Maines”⁵

Three Presidential Elections in the Two Maines

Percentage margin of victory

Democrat  Republican



SOURCE: Associated Press

STAFF GRAPHIC | MICHAEL FISHER

POPULATION CHANGE: 2010-2020

Maine’s population grew by 33,998 people (2.6% growth) between the 2010 and 2020 censuses.⁶ This growth was well below the nationwide average of 7.4% and was lower than Maine’s population growth from 2000-2010 (4.2%).⁷ Maine’s southern counties drove its population growth—Cumberland and York counties added over 36,000 people while northern counties lost over 5,000 people.⁸ Maine’s southern cities added residents, while the largest northern, inland cities—Bangor and Waterville—lost people.⁹ Based on these population changes, Maine needs to move around 23,300 people from District 1 to District 2 in this redistricting cycle.

Maine remains the whitest state in the country, although it became slightly more diverse over the last decade. The 2010 Census found that the state’s population was over 95% white, while the

⁵ Colin Woodard, “The ‘Two Maines’ Disagreed Again, But Trump’s Support Declined in Both,” *Portland Press Herald*, Nov. 5, 2020 (available at <https://www.pressherald.com/2020/11/05/the-two-maines-disagreed-again-but-trumps-support-declined-in-both/>).

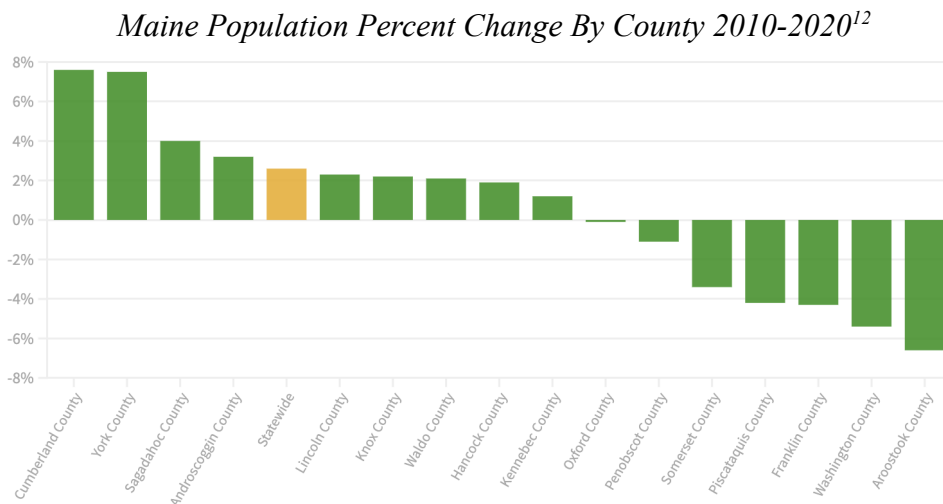
⁶ “Maine: 2020 Census,” U.S. Census Bureau, Aug. 25, 2021 (available at <https://www.census.gov/library/stories/state-by-state/maine-population-change-between-census-decade.html>).

⁷ Clarke Canfield, “Maine’s Population Grows 4.2%,” *Boston.com.*, Mar. 24, 2011 (available at http://archive.boston.com/news/local/maine/articles/2011/03/24/maine_population_grows_42_percent/).

⁸ Jessica Piper, “Maine’s Slim Population Growth Over Past 10 Years Driven Almost Entirely by Southern Counties,” *Bangor Daily News*, Aug. 12, 2021 (available at <https://bangordailynews.com/2021/08/12/news/maines-slim-population-growth-in-2020-census-driven-by-cumberland-york-counties/>).

⁹ *Id.*

2020 census measured the population to be just short of 91% white.¹⁰ Maine also has the third oldest population in the country behind D.C. and Vermont.¹¹



Source: U.S. Census Bureau • Chart by Jessica Piper for the Bangor Daily News

MAINE’S REDISTRICTING PROCESSES AND HISTORY

Process

A 15-member bipartisan advisory commission proposes state and Congressional maps to the Maine legislature. Maps need a two-thirds majority in both legislative houses and the governor’s signature for approval. If a majority cannot be reached or if the redistricting process is not completed within the statutory timeframe, Maine’s Supreme Court draws the state’s new map.¹³ As a result, the legislature is incentivized to work across the aisle and reach a consensus map on their own terms.

From 1975-2010, Maine did not follow traditional redistricting timelines. Instead, a 1975 amendment to the state constitution mandated that state legislature redistricting occur in 1983 and at “ten-year intervals thereafter.”¹⁴ Subsequent statutes put the state’s Congressional redistricting on the same timeline.¹⁵ As such, Maine redistricted in 1983, 1993, and 2003 and

¹⁰ Michael Casey, “Maine Becomes More Diverse But Still Whitest State in Nation,” *Associated Press*, Aug. 12, 2021 (available at <https://apnews.com/article/maine-census-2020-8d72d29af8c5e528b4197634bbdda8c1>).

¹¹ *Id.*

¹² Jessica Piper, “Maine’s Slim Population Growth Over Past 10 Years Driven Almost Entirely by Southern Counties,” *Bangor Daily News*, Aug. 12, 2021 (available at <https://bangordailynews.com/2021/08/12/news/maines-slim-population-growth-in-2020-census-driven-by-cumberland-york-counties/>).

¹³ “Maine,” *All About Redistricting* (available at <https://redistricting.ils.edu/state/maine/?cycle=2020&level=Congress&startdate=2021-09-29>).

¹⁴ See *Desena v. State*, 793 F. Supp. 2d 456, 458 (D. Me. 2011); Me. Const. art. IV, pt. 2, § 2; *In re 1983 Legis. Apport. of House, Senate, and Cong. Dists.*, 469 A.2d 819, 822-24 (Me.1983).

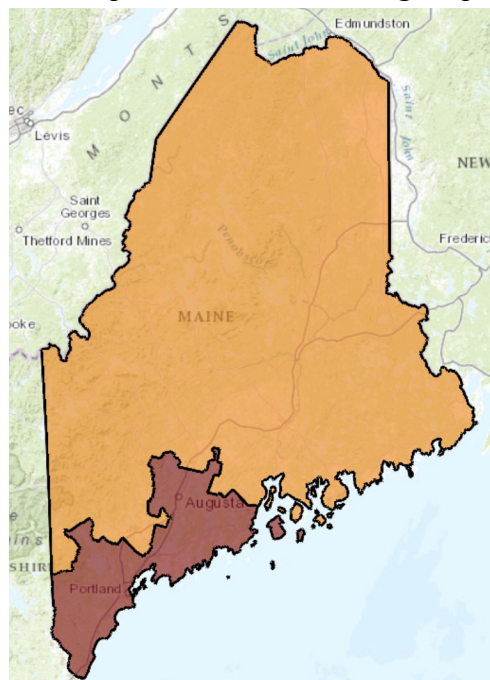
¹⁵ See Me.Rev.Stat. tit. 21–A, § 1206.

used these districts for the first time in the 1984, 1994, and 2004 elections. In June 2011, residents challenged the constitutionality of the statute linking Congressional redistricting timelines to state legislature redistricting.¹⁶ This challenge, *Desena v. State of Maine*, won out in federal court and subsequently Maine adopted a more regular Congressional redistricting timeline.

2000 Census Redistricting

Maine drew new maps based on the 2000 Census in 2003. This multi-year delay was a product of the state's pre-*Desena* redistricting timeline. During the 1990s, the population grew in southern Maine and continued to fall in the northern portions of the state. After the state's advisory committee was unable to agree on maps within their allotted time frame, Maine's Supreme Court penned the final maps.¹⁷ Although Maine's Republican Party sought to shift the Congressional districts from their north-south orientation toward an east-west orientation, these efforts were unsuccessful, and the state retained the 1st District in the south and the 2nd District in the north. In the 2003 redistricting, Maine split only one county (Kennebec County) and moved only one major city (Waterville) from the 1st District to the 2nd District.¹⁸

*Maine's post-2003 Redistricting Map*¹⁹



¹⁶ *Desena v. State*, 793 F. Supp. 2d 456 (D. Me. 2011).

¹⁷ Tom Bell, "Revised Voting Districts Approved," *Portland Press Herald*, Jul. 3, 2003 (available at <http://archive.fairvote.org/redistricting/reports/remanual/menews.htm>).

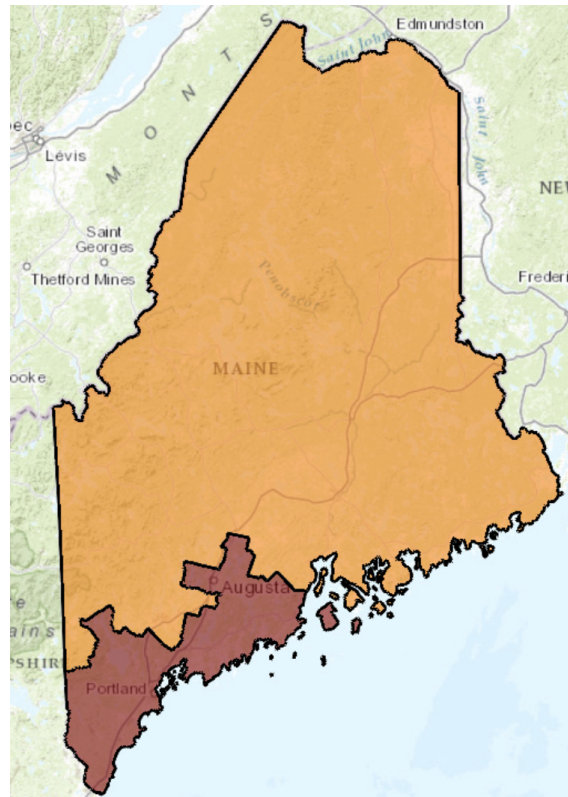
¹⁸ *Id.*

¹⁹ Jeffrey B. Lewis, Brandon DeVine, Lincoln Pritcher, and Kenneth C. Martis, "United States Congressional District Shapefiles," *UCLA* (available at <https://cdmaps.polisci.ucla.edu/>).

2010 Census Redistricting

From 2000-2010, Maine's population grew by 4.2%. This growth was more pronounced in the state's southeast, leading to an 8,669 person imbalance between the 1st and 2nd districts.²⁰ In 2011, the state undertook its first post-*Desena* Congressional redistricting, passing a near-unanimous map in September 2011. Under this plan, which Governor Paul LePage signed, the state again split only Kennebec County. The city of Waterville, which moved from the 1st to the 2nd district in the 2003 redistricting, shifted back to the 1st district. In the 2012 presidential election, President Obama won all four of the state's electoral votes and Democrats were re-elected in both the 1st and 2nd Congressional districts.

*Maine's Congressional Districts Since 2011*²¹



2020 Census Redistricting

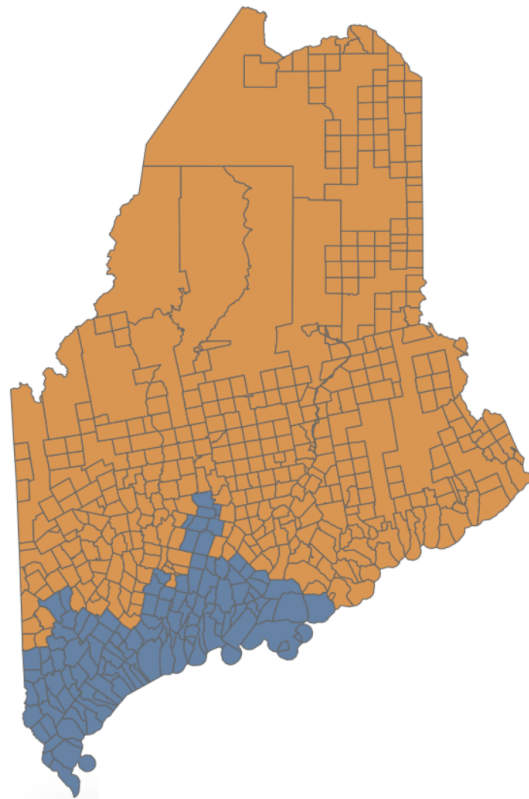
On September 29, 2021, Maine became the second state in the country to complete redistricting. Census delays complicated the state's redistricting process. After the Census Bureau announced that data would not be available for states by March 31st, it became evident that Maine's Redistricting Commission would not be able to complete map-drawing by June 11—the deadline

²⁰ Sheahan Virgin, "No More Gerrymanders: Transforming Maine into One At-Large Super District," *FairVote*, Aug. 23, 2011 (available at <https://www.fairvote.org/me-superdistrict>).

²¹ Jeffrey B. Lewis, Brandon DeVine, Lincoln Pritcher, and Kenneth C. Martis, "United States Congressional District Shapefiles," *UCLA* (available at <https://cdmaps.polisci.ucla.edu/>).

imposed by the state’s constitution.²² The Commission petitioned the Maine Supreme Court for an extension and received one, although the Court imposed a 45-day limit on the Commission once they were in receipt of the data.²³ This tight window raised concerns from the Maine League of Women Voters, which argued that the compressed timeline limited opportunities for meaningful public comment.²⁴ Lawmakers from both parties and members of the Governor’s office, however, were pleased with the state’s response to the challenges of the 2020 redistricting cycle.²⁵ Due to population changes, the Commission had to move 23,300 people from the 1st Congressional district to the 2nd district. The Commission kept Kennebec County split and opted to move Augusta, the state’s capital, from District 1 to District 2.

Maine’s Newly Adopted Map



²² Colin Woodard, “Maine Redistricting Thrown Into Confusion by Census Delay, Constitutional Catch-22,” *Portland Press Herald*, Apr. 18, 2021 (available at https://www.pressherald.com/2021/04/18/maine-redistricting-thrown-into-confusion-by-census-delay-constitutional-catch-22/?rel=related&_gl=1*2ohh1b*_ga*MTk3MTE5OTg5NC4xNjM2MDAwMzU4*_ga_ZYHMH0BHBB*M TYzNjA3MTc0Ny4yLjAuMTYzNjA3MTc0Ny4w&_ga=2.82393694.97907055.1636000358-1971199894.1636000358).

²³ Kevin Miller, “Maine’s Supreme Court Extends Deadline for Legislature to Redraw Voting Districts,” *Sun Journal*, Jul. 20, 2021 (available at <https://www.sunjournal.com/2021/07/20/maine-supreme-court-extends-deadline-for-redistricting/?rel=related>).

²⁴ Anna Kellar, “Lessons Learned From Maine’s Redistricting Process,” *Sun Journal*, Oct. 25, 2021 (available at <https://www.sunjournal.com/2021/10/10/anna-kellar-lessons-learned-from-maines-redistricting-process/>).

²⁵ Kevin Miller, “Maine’s Supreme Court Extends Deadline for Legislature to Redraw Voting Districts,” *Sun Journal*, Jul. 20, 2021 (available at <https://www.sunjournal.com/2021/07/20/maine-supreme-court-extends-deadline-for-redistricting/?rel=related>).

LEGAL COMPLIANCE

Constitutional Requirements

As established in *Wesberry v. Sanders*, each vote must carry equal weight such that “one man's vote in a Congressional election...be worth as much as another's.”²⁶ Absent “one-person, one-vote” population equality, states violate “our Constitution's plain objective...equal representation for equal numbers of people.”²⁷ In order to be Constitutionally compliant, Maine must then draw equally populated districts. Based on the 2020 Census, Maine has a population of 1,362,359, which it splits between two districts.

Maine’s population is almost 91% white, making it the most racially homogeneous state in the United States. Since minority voters represent such a small fraction of the state’s population, there is no minority group that is “sufficiently large and geographically compact” enough to “constitute a majority in a single-member district.”²⁸ On this basis, Voting Rights Act Section 2 considerations are not relevant to Maine’s redistricting process.²⁹

State Statutory Requirements

Under Maine law, the state’s districts should be “compact and contiguous territory” with as few political subdivisions splits as necessary.³⁰ To be contiguous, the state’s districts need to be physically adjacent such that a person can “travel from any point in the district to any other point in the district without crossing the district’s boundary.”³¹ To be compact, the districts should have geometrically uniform, smooth boundaries.³² To minimize subdivision splits, legislators should preserve whole counties, cities, towns, and voting districts rather than splitting them between districts.

²⁶ *Wesberry v. Sanders*, 376 U.S. 1, 8 (1964).

²⁷ *Wesberry v. Sanders*, 376 U.S. 1, 18 (1964); U.S. Const. art. I, § 2.

²⁸ *Thornburg v. Gingles*, 478 U.S. 30, 50 (1986).

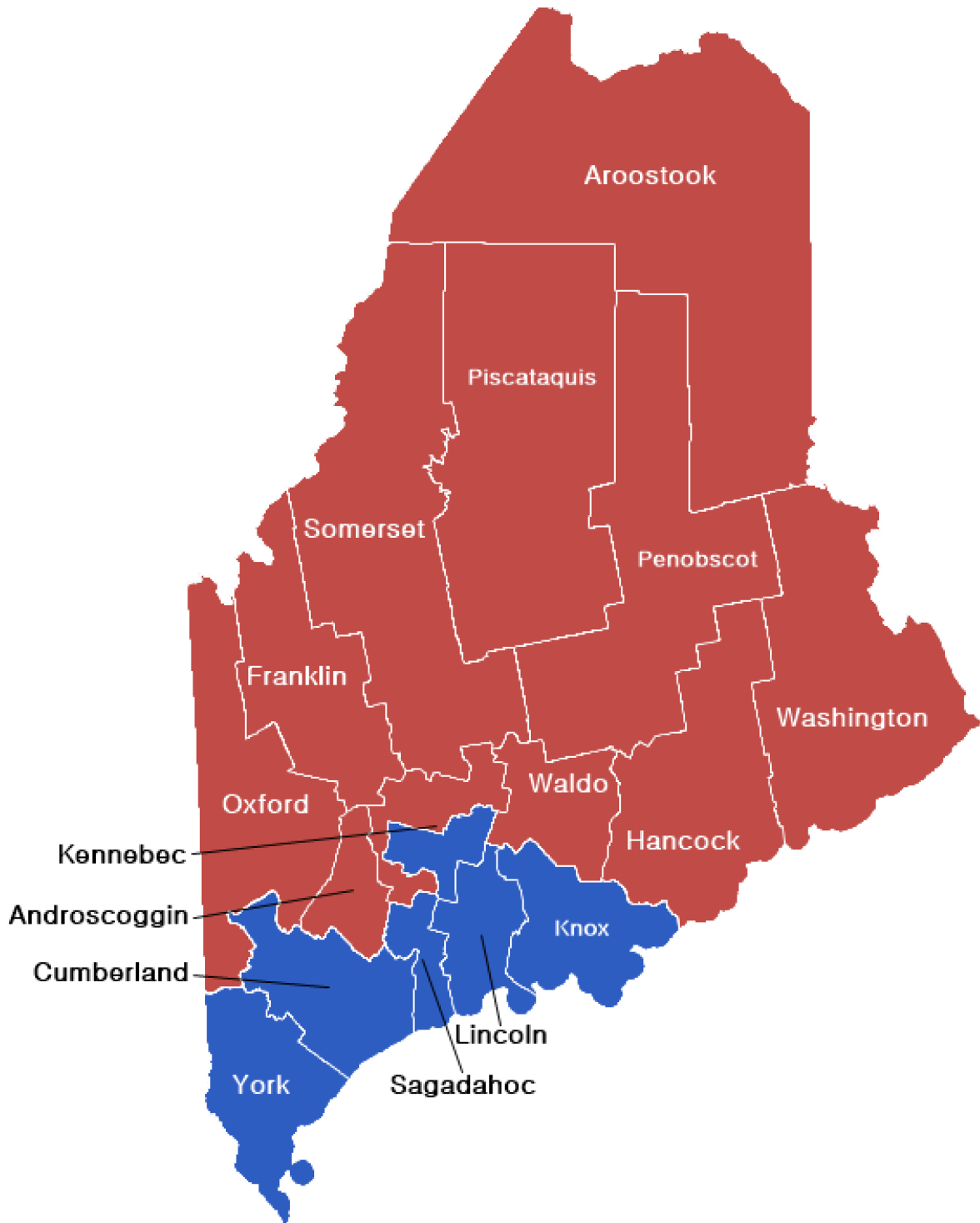
²⁹ Under *Bartlett v. Strickland*, 556 U.S. 1, 129 S. Ct. 1231 (2009), a minority group must comprise over fifty percent of the voting age population in a potential single member district.

³⁰ Me. Rev. Stat. tit. 21-A, § 1206.

³¹ “Where are the Lines Drawn?” *All About Redistricting* (available at <https://redistricting.ils.edu/redistricting-101/where-are-the-lines-drawn/>).

³² *Id.*

Plan 1: Least Change

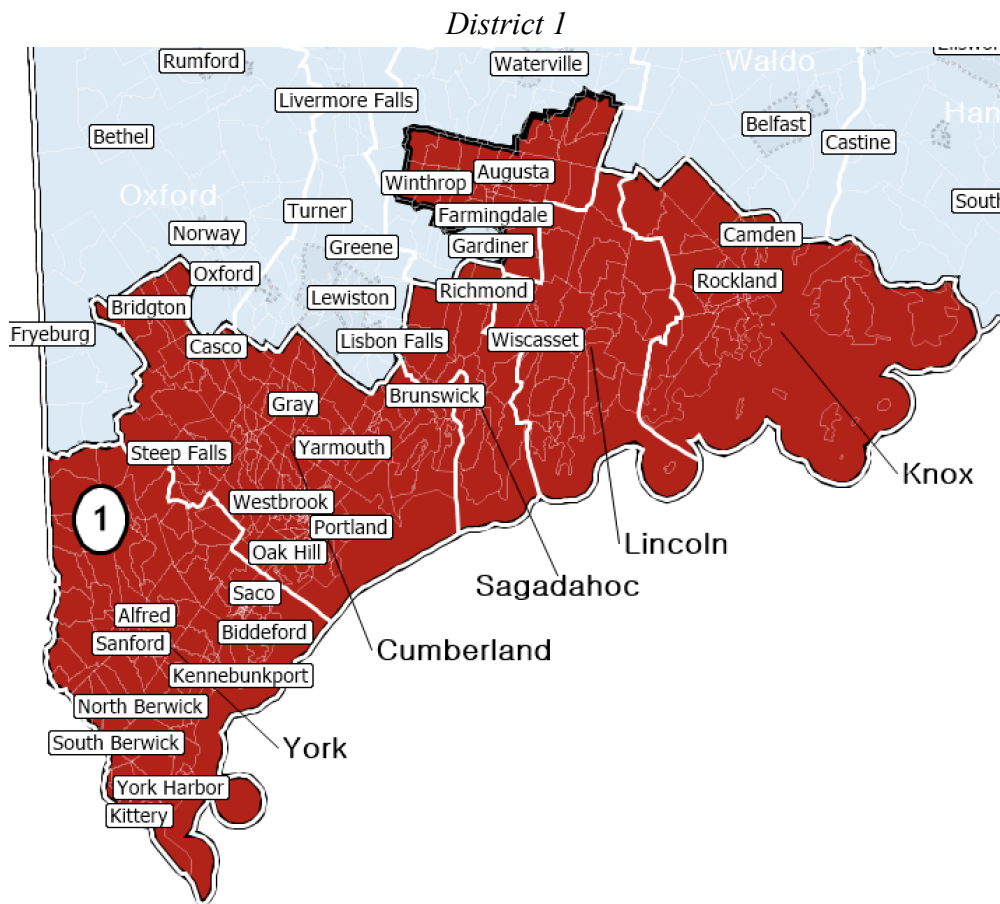


REDISTRICTING PRINCIPLES

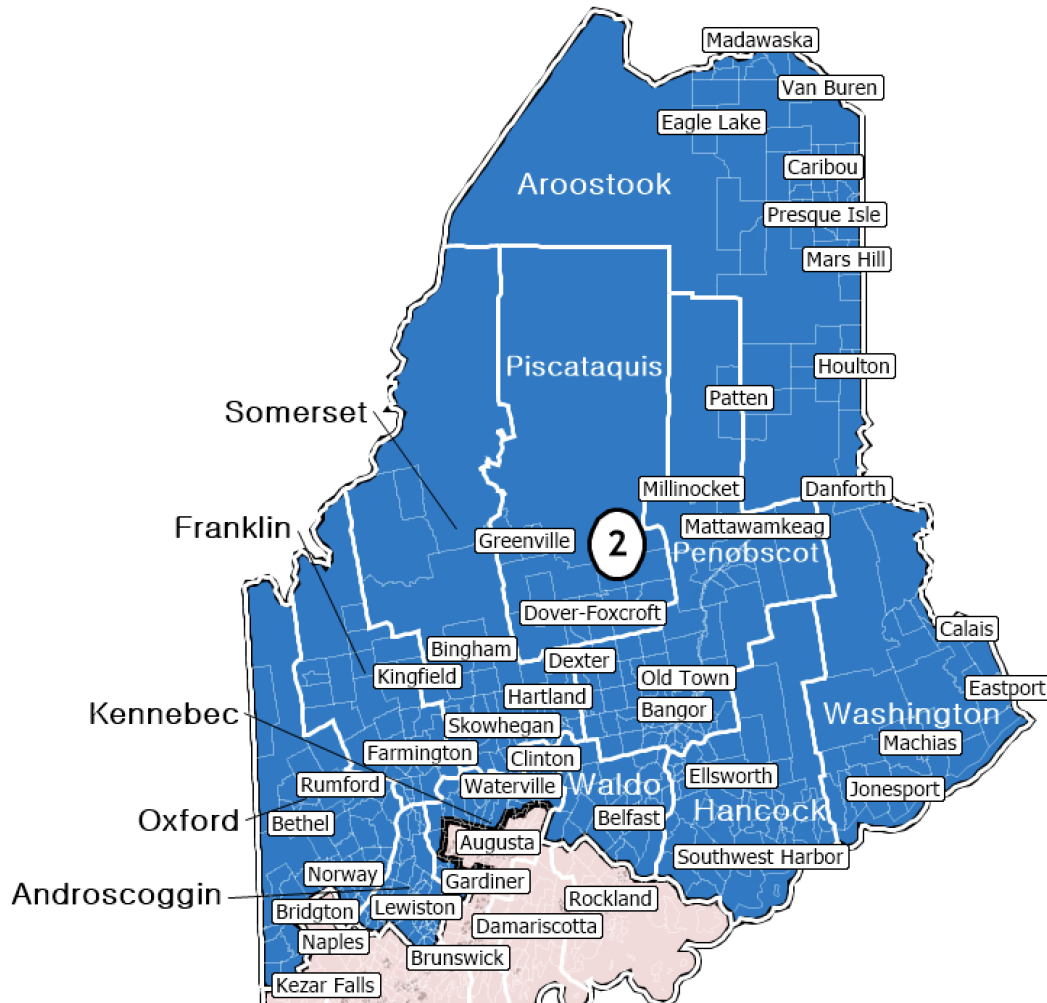
This “Least Change” map is guided by a very simple set of redistricting principles. First, this map seeks to adhere as closely as possible to the current Congressional map while accounting for Maine’s new population distribution. Second, this map is constitutionally and statutorily compliant, and as such must achieve perfect population distribution, contain compact districts, and minimize county splits. In drawing this map, I endeavored to minimize the number of people who would change districts. When shifts were necessary to rebalance the population between Maine’s two districts, I prioritized political subdivisions—specifically, I sought to preserve counties and keep cities and towns whole.

MAP SUMMARY

For over three decades, Maine has split Kennebec County. To minimize change, this map also splits Kennebec County. The only changes between the current Congressional map and this plan are in Kennebec County. In short, all population shifts are restricted to Kennebec County. Inside Kennebec County, I moved a couple very small municipalities and one city from District 1 to District 2. Specifically, the municipalities of North Vassalboro and Randolph moved into District 2, as did the city of Waterville, which is Maine’s 15th largest city. Part of West Gardiner moved into District 1.



District 2



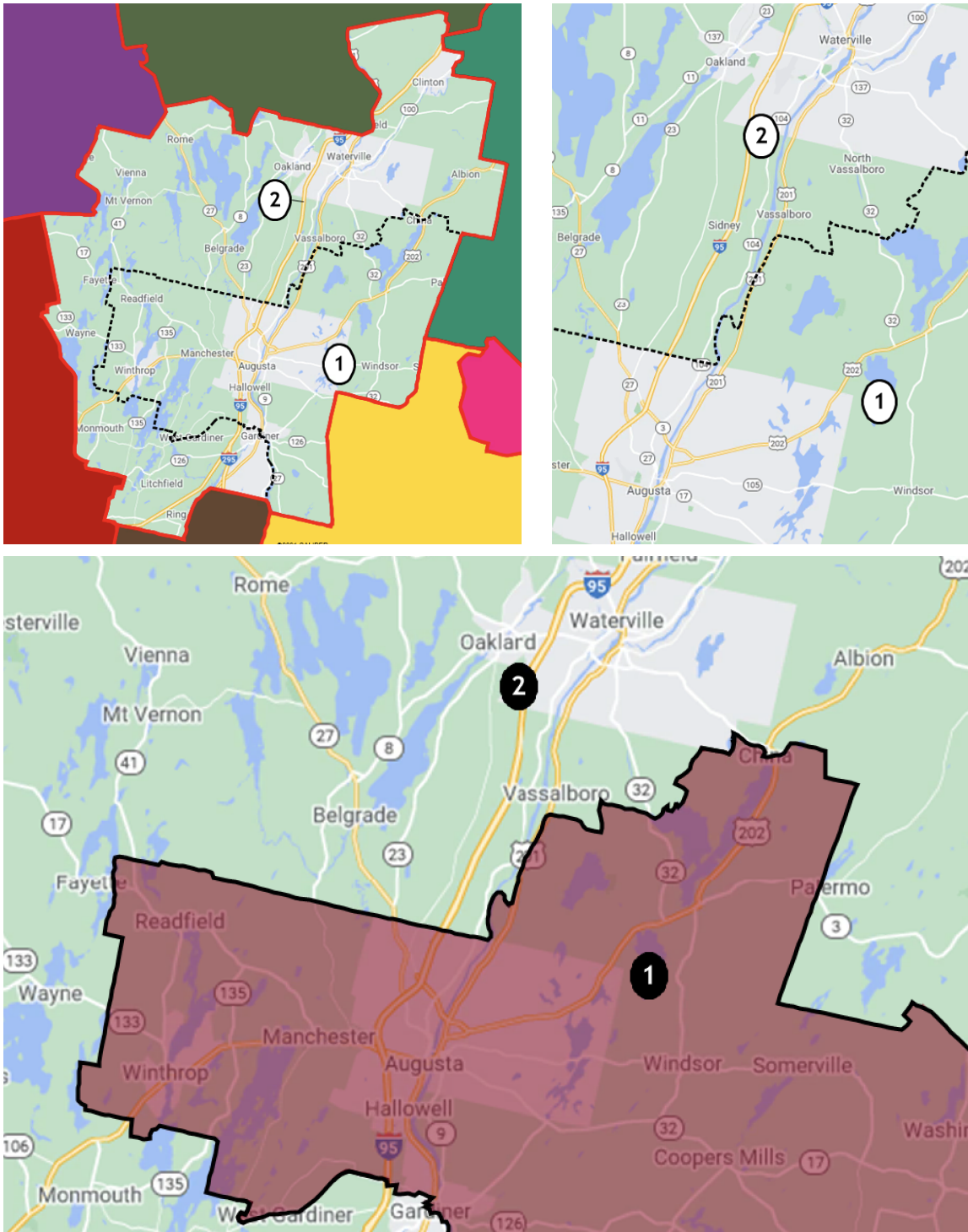
MAP EXPLANATION

After opting for a least change map instead of a radical new plan, the central question Maine's Redistricting Commission faced was whether to move the state capital, Augusta, or the large city of Waterville from District 1 to District 2. The cities are nearly equal in size—Augusta has around 18,000 people while Waterville has approximately 16,500. Moving one of these cities, plus a couple of very small municipalities, would avoid splitting dozens of small towns. I opted to move Waterville, rather than Augusta, for multiple reasons.

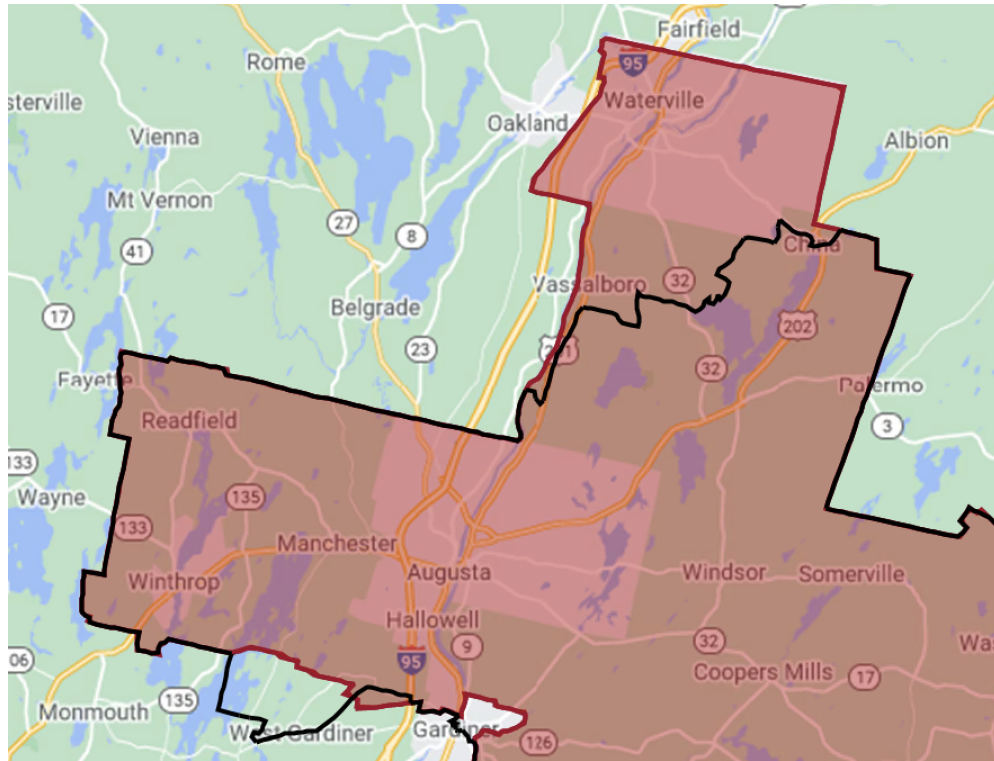
First, Waterville has previously been part of District 2. In the 2000 redistricting cycle, the Commission moved Waterville from the 1st to the 2nd District. In the 2010 cycle, Waterville moved back into the 1st District. Therefore, there is precedent for moving Waterville, and Waterville has less of an established presence in either district. Second, Augusta is the state's capital; it seemed more important to maintain continuity for Augusta than Waterville. Third, Augusta is geographically south of Waterville and thus resides more naturally in the southern 1st

District. Waterville, by contrast, is directly north of Augusta and made more sense, especially in preserving compactness, to join the 2nd District. Finally, both Waterville and Augusta lean Democrat. Although Waterville is slightly more liberal than Augusta, both cities would inject Democratic voters into the conservative 2nd District. Since the two cities share similar political orientations, I did not think that the benefits of moving Augusta—which is slightly more conservative—into a conservative district outweighed the previous factors I have outlined (i.e. consistency, compactness). I anticipate that after the 2030 census, almost all of Kennebec County will need to move into Maine’s 2nd District, meaning that both Augusta and Waterville will be in the 2nd District.

Proposed Kennebec County Split



Current district lines (red lines, red overlay) and proposed lines (black lines)



COMPACTNESS

Although the central goal of this map was to address population shifts while making the most minimal of changes to existing district lines, compactness was an additional consideration. As detailed above, my decision to move Waterville, rather than Augusta, from District 1 into District 2 was partially due to compactness considerations. The table below lists a number of scales used to measure compactness. The Reock measure, for example, calculates compactness by determining the smallest possible circle that would encompass the entire district. Reock scores range from 0-1 where 1 is perfect compactness. District 2 is more compact than District 1 using every scale. The state's mean score of .43 indicates that Maine's current district map is already fairly compact. As stated in the tables, both the proposed map and the current map share the same Reock compactness score, which speaks to the minimal changes in this "least change" map.

Proposed Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.36	1.58	1.84	0.18
Max	0.49	1.99	2.37	0.30
Mean	0.43	1.79	2.11	0.24
Std. Dev.	0.09	0.29	0.37	0.08
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.36	1.99	2.37	0.18
2	0.49	1.58	1.84	0.30

Existing Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.36	1.60	1.86	0.17
Max	0.49	2.02	2.40	0.29
Mean	0.43	1.81	2.13	0.23
Std. Dev.	0.09	0.30	0.38	0.08
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.36	2.02	2.40	0.17
2	0.49	1.60	1.86	0.29

POLITICAL SUBDIVISION SPLITS

The proposed map closely follows Maine’s existing map and, like the current map, splits only Kennebec County. Of the 155 towns in the Maine dataset, this map splits just two towns: Gardiner and Kezar Falls. 94.5% of Gardiner is in District 2 and the remaining 5.5% is in District 1; 59% of Kezar Falls is in District 2 with the remaining 41% falling in District 1. Maine has three subdivisions for grouping citizens: county, census tract, and census block group, deviating from the traditional redistricting units of county, voting district, and census block. This least change map splits twelve census block groups.

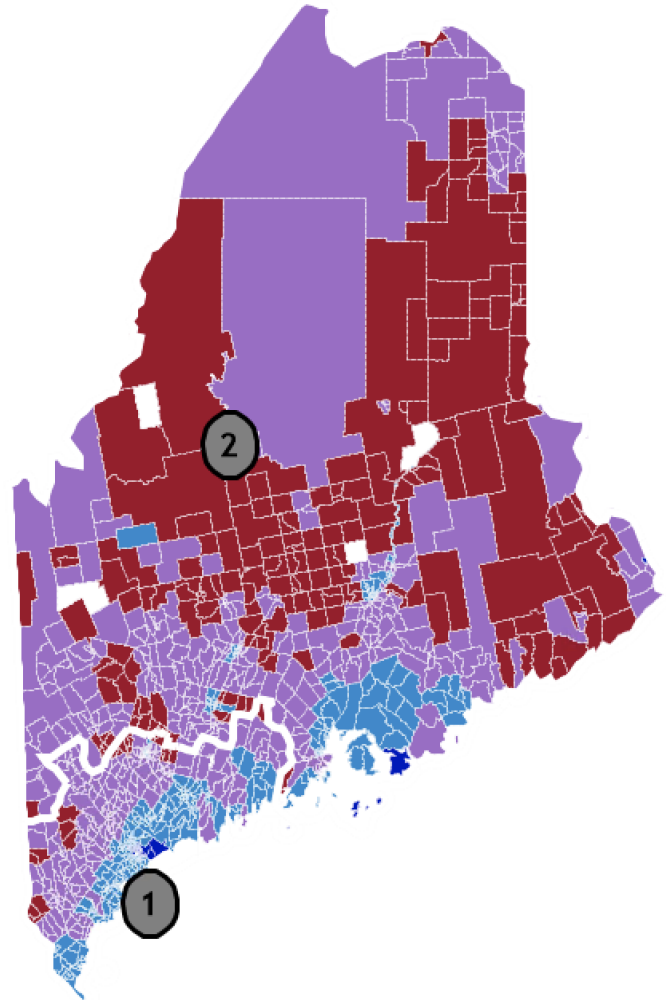
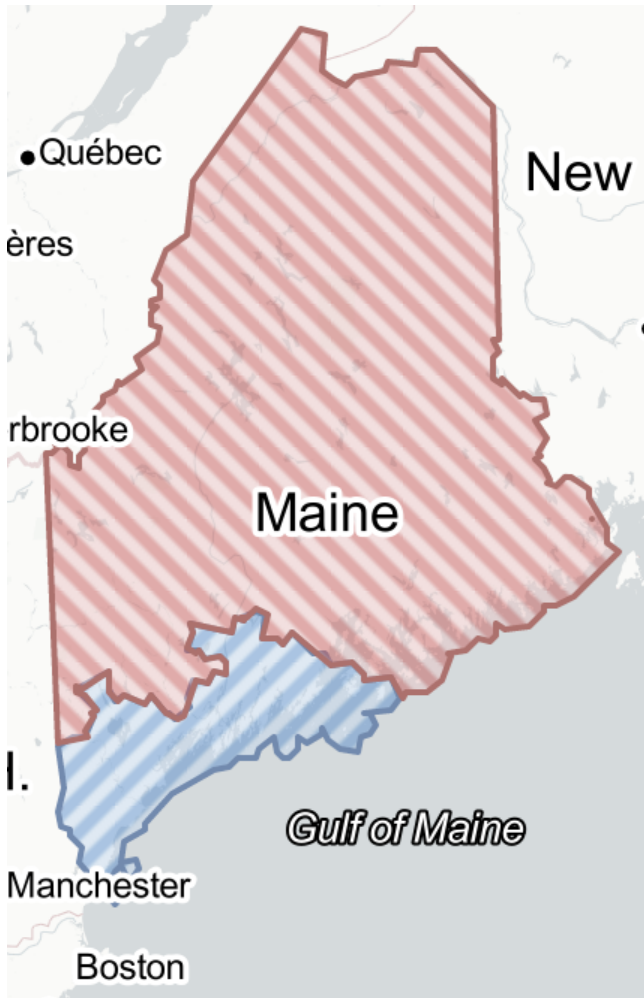
PARTISAN CONSIDERATIONS

Based on Planscore scoring, this map has a 0.0% partisan bias score, which matches the current map. Planscore estimates that a Democratic candidate would have an 85% chance of winning District 1, while a Republican candidate would have an 80% chance of winning District 2. It is worth noting that Maine is a much more centrist state than it is solidly red or blue. Even though the 2nd District is squarely red, it is currently represented by a Democrat, Jared Golden. Likewise, although the state supported Joe Biden in the 2020 election, it firmly re-elected Republican Senator Susan Collins in the same election. In short, this map may appear to show one clear Democratic seat and one clear Republican seat, but the reality on the ground is far more complex and far more centrist.

Maine’s population shifts over the past two decades have been representative of the country at large: Maine’s population is growing in the urban, midcoast region around Portland and is receding in rural areas. As a result, the state’s 2nd District is growing more blue with every redistricting cycle. This cycle is no exception, although 2nd District does appear safely red for now.

Planscore

2020 Presidential Vote Distribution Map³³

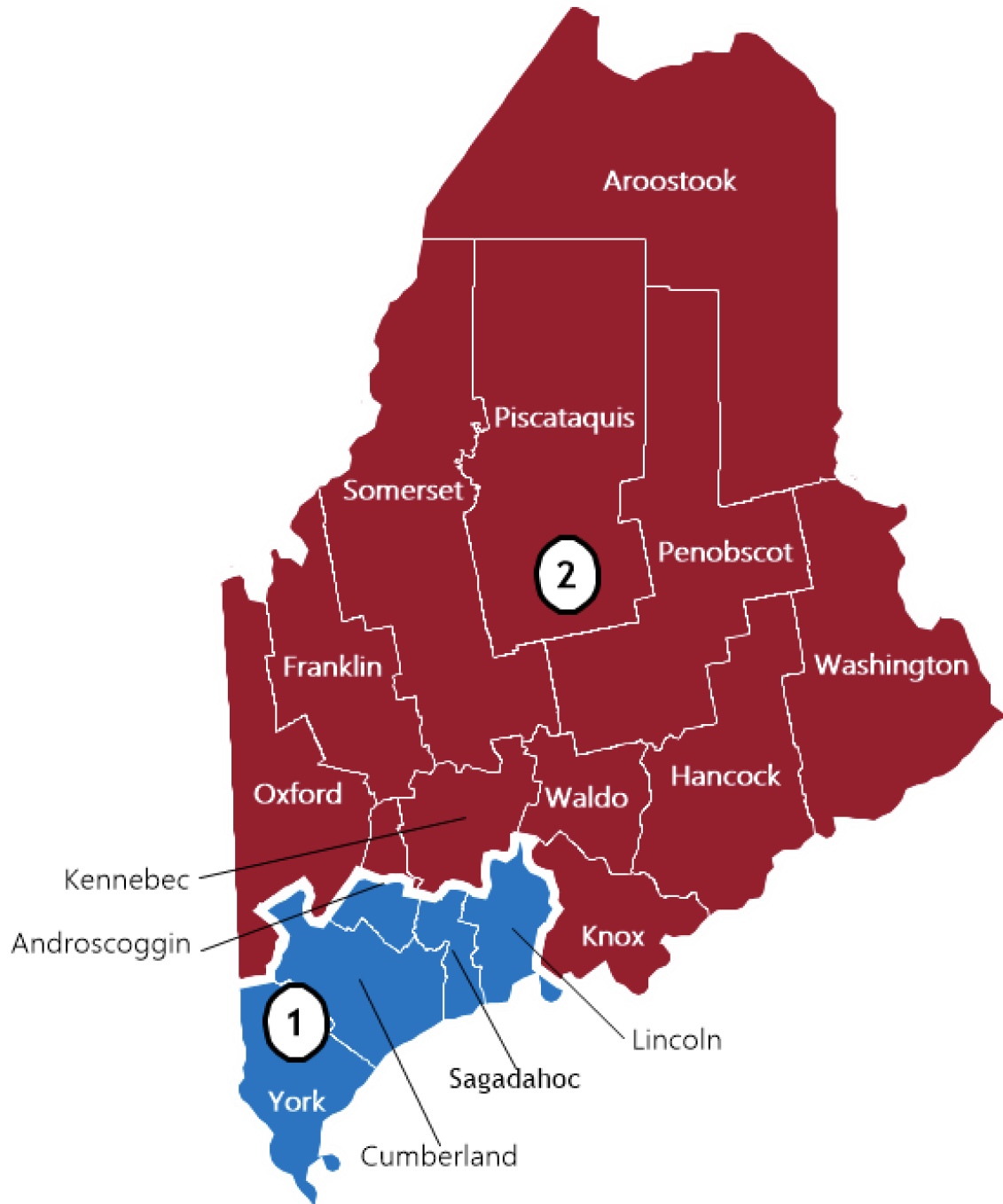


TENSIONS AND TRADEOFFS

As detailed, the central question in drawing Maine’s least change map this cycle was whether to move Waterville or Augusta to the 2nd District. Waterville makes the most geographical sense as it is directly north of Augusta just as Maine’s 2nd District is north of its 1st District. Politically, however, Augusta is slightly less liberal than Waterville, making its voters more similar than Waterville’s voters to the current residents of the 2nd District. Ultimately, I decided to move Waterville for a number of reasons. For one, Waterville has a longstanding history of moving between the two districts. In addition, neither Waterville nor Augusta voters really map onto the 2nd District in partisan terms. Both cities have left-leaning voters, so the partisan point is less compelling. Third, Augusta is the state capital and would benefit from less variation.

³³ These maps indicate voter choices in the 2020 election. Dark red areas had higher proportions of Trump voters while dark blue areas had the highest proportion of Biden voters. Purple indicates areas where votes were more evenly split between the two candidates.

Plan 2: Compact Good Governance

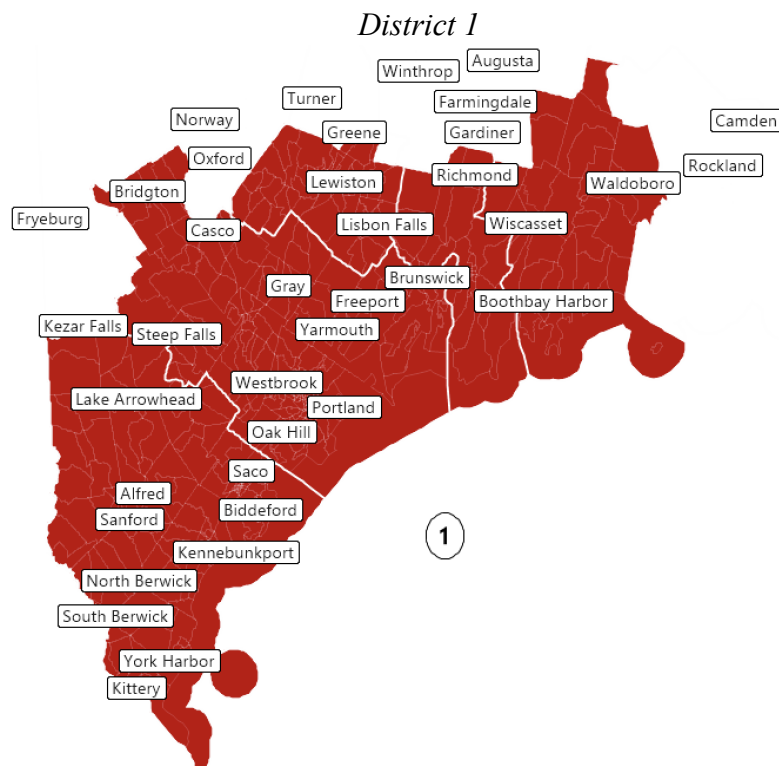


REDISTRICTING PRINCIPLES

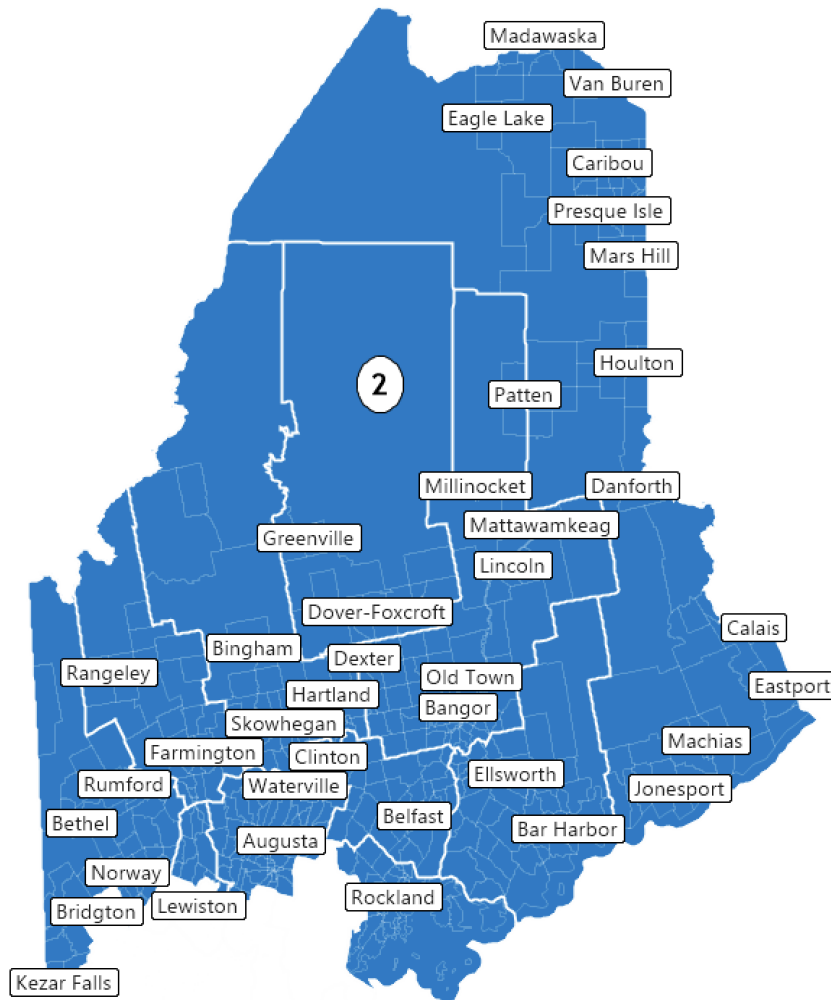
This “Good Governance” map was drawn with a number of principles in mind. First, the map had to be constitutionally and statutorily compliant. Second, I drew this map with compactness in mind. Maine’s population distribution makes compactness difficult to achieve, but this map maximizes it. Third, I sought to minimize political subdivision splits to the extreme. Finally, while following the above principles, I also attempted to perfectly capture the “two Maines.” While this phrase may be foreign to non-Mainers, it is commonly used throughout the state to refer to the political, economic, and geographic divide between the state’s southern coast (urban, liberal, more wealthy) and its interior (rural, conservative, and more impoverished). This map strives to place those two Maines within their own districts, while maximizing compactness and minimizing splits to the highest degrees possible.

MAP SUMMARY

This map splits one county, Androscoggin County, while achieving a 0.0% partisan bias score on Planscore. The 1st District encompasses the Portland metro area and the state’s southern corner. The 1st District then extends up the coast, capturing the midcoast region running from Portland to Wiscasset. District 2 covers the rest of the state, including its northern coast and the entirety of Kennebec County. This map splits exactly one county, and of the 155 towns in the Maine dataset, this map splits only two: Greene and Kezar Falls. Compactness was an objective with this map, and the map is quite compact, averaging a 0.45 Reock score. Politically, it is exceedingly fair and receives a 0.0% partisan bias score from Planscore, which matches the current map.



District 2

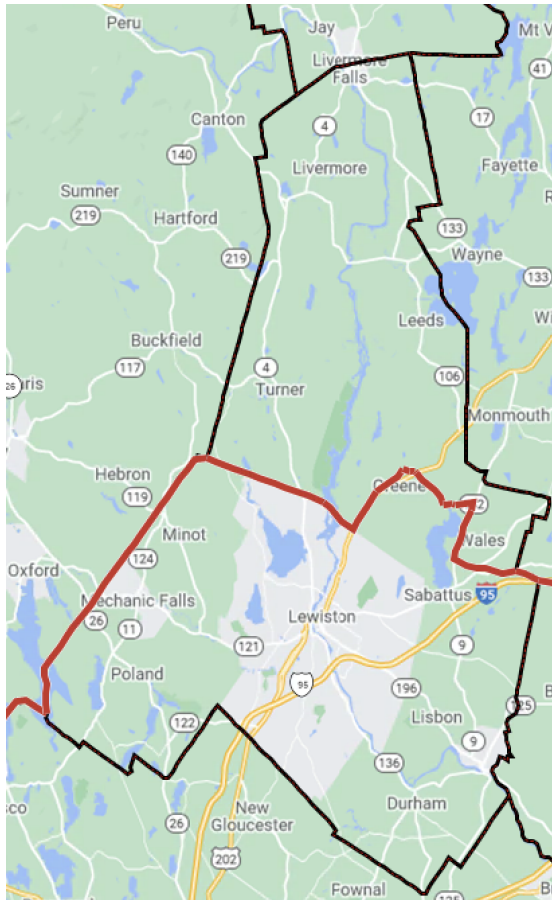


MAP EXPLANATION

I drew this map with the goal of creating compact districts that encompassed politically similar groups without splitting counties or cities. Since I wanted to preserve the major communities of interest in the state, I drew my first district around the Portland and midcoast areas, which left the state's rural interior to form the second district. I could have drawn a truly coastal map, which would also have accurately captured Maine's communities, but to do so would have been to sacrifice compactness. I opted, instead, to place the 1st District in the state's southern corner where it would absorb Portland and truly capture most of "liberal" Maine. These counties are also smaller and much more compact. To the extent that the 1st District lacks any compactness, this variation is due to county lines; the boot-shaped protrusion on the top of the 1st District is the Cumberland County line.

I split Androscoggin County for compactness reasons, but also because it is becoming more and more clear that Kennebec County will eventually shift entirely into the 2nd District should Maine continue splitting only one county. This map simply hastens that progression. Once Kennebec has fully shifted, perhaps as soon as 2030 but more likely in 2040, Androscoggin could be a natural place to split. In terms of splits within Androscoggin County, I decided to split the small town of Greene because I knew that doing so would yield the fewest overall number of political subdivision splits and because the split would enhance the district's compactness and overall shape.

Androscoggin County Split



COMPACTNESS

Compactness was a driving principle behind this map, and both districts are fairly compact despite closely adhering to Maine's slightly irregular county lines. As is evident in the table below, District 2 is more compact than District 1, and the two districts achieve a mean Reock score of .45, which is slightly above the mean Reock score in my proposed least change map. I drew a number of maps with varying configurations to test different compactness scores, but this was consistently the most compact map that preserved political subdivisions.

Proposed Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.38	1.52	1.79	0.24
Max	0.51	1.71	2.06	0.31
Mean	0.45	1.62	1.93	0.28
Std. Dev.	0.09	0.13	0.19	0.05
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.38	1.71	2.06	0.24
2	0.51	1.52	1.79	0.31

Existing Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.36	1.60	1.86	0.17
Max	0.49	2.02	2.40	0.29
Mean	0.43	1.81	2.13	0.23
Std. Dev.	0.09	0.30	0.38	0.08
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.36	2.02	2.40	0.17
2	0.49	1.60	1.86	0.29

POLITICAL SUBDIVISION SPLITS

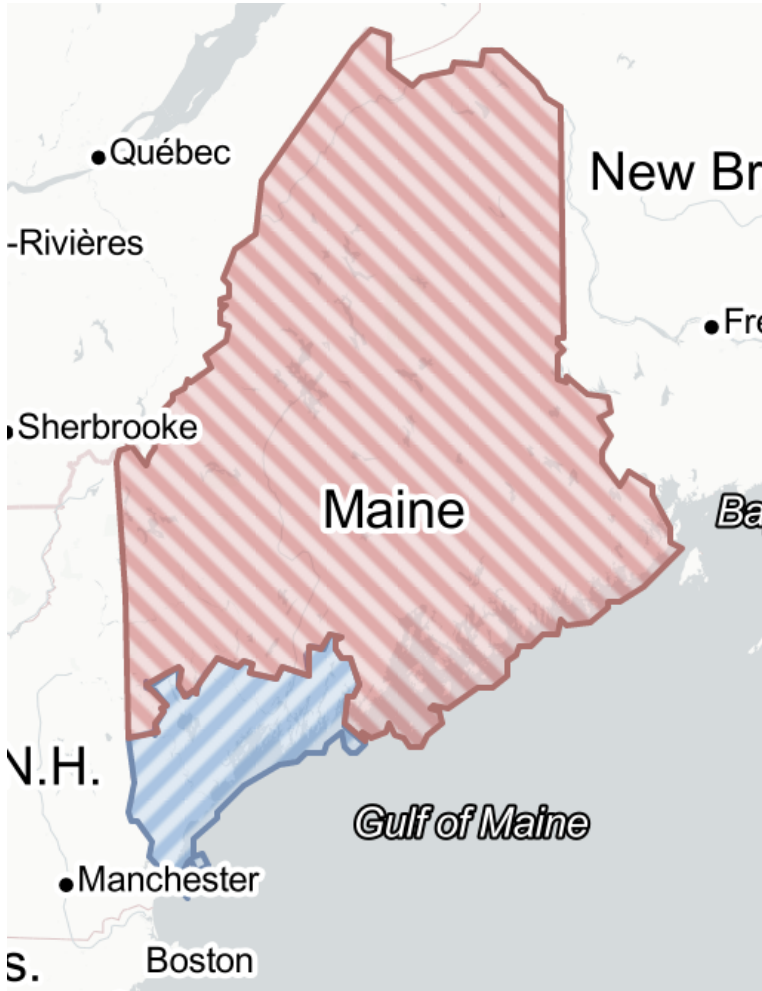
The proposed map minimizes political subdivision splits to the greatest degree possible. As detailed, this map splits only one county and avoids splitting cities. All of the map’s splits occur within Androscoggin County and each was requisite to achieve equal population. This map preserves the state’s largest political and geographic subdivisions. Specifically, it keeps the Portland area in District 1 along with all of York County, southern Maine, and the southern coastline. Augusta and Waterville are both in District 2, which could strike some as contradictory given their more leftward lean, but Waterville, Bangor, and Augusta have traditionally been the largest towns of “northern Maine” despite not being very far north. It is not out of place to draw Waterville and Augusta into District 2; anyone who is familiar with Maine will tell you that both towns are very distinct from Portland and its suburbs, including Scarborough, Westbrook, Biddeford, and Falmouth. As such, removing both cities from District 1 does not compromise subdivisions or communities of interest.

PARTISAN CONSIDERATIONS

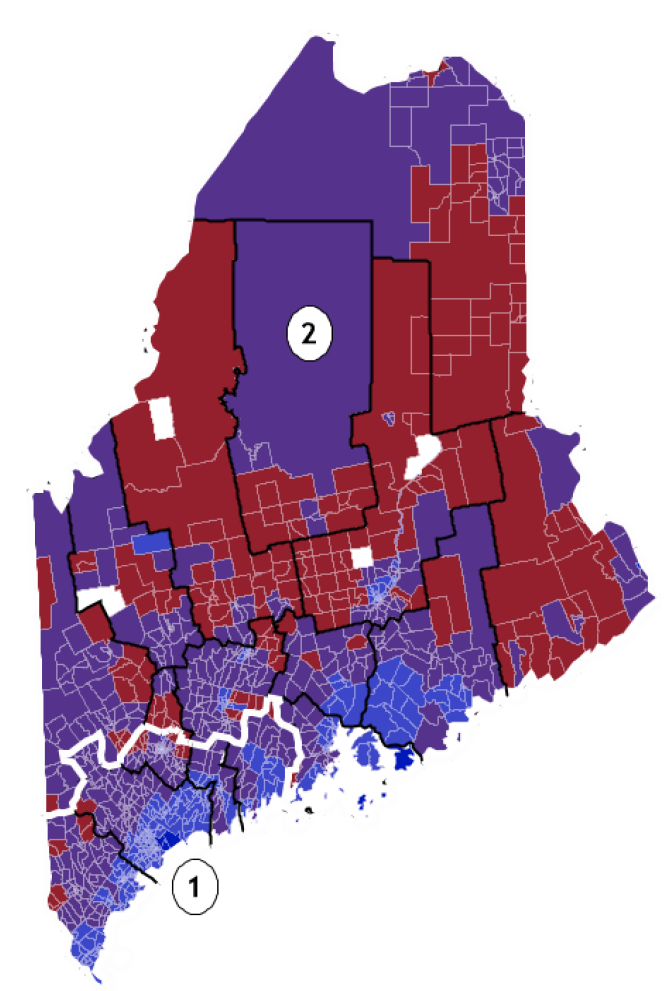
In capturing the “two Maines,” this map reflects their partisan differences. The map is fair based on Planscore ratings—it has a 0.0% partisan bias score (comparable to the current map)—and largely places the state’s more liberal voters within District 1. While partisan considerations were much more of a factor in drawing the third map in this report (a pro-Democrat gerrymander map), I did want the districts in this map to keep communities of interest intact. The state’s liberal south is very distinct from both the midcoast and the state’s interior. In an ideal world, each region would be their own district but that would require Maine to add an additional Congressional seat. Since the vast majority of Maine’s conservative voters are inland while the state’s liberal voters are in the south and along the midcoast, the districts drawn here did yield very partisan divisions. According to Planscore projections, there is an 85% chance that District 1 would go Democrat and an 80% chance District 2 would elect a Republican. In examining the

2020 presidential results, District 1 voters cast almost exactly 100,000 more ballots for Joe Biden than they did for Donald Trump.

Planscore



2020 Presidential Voter Distribution

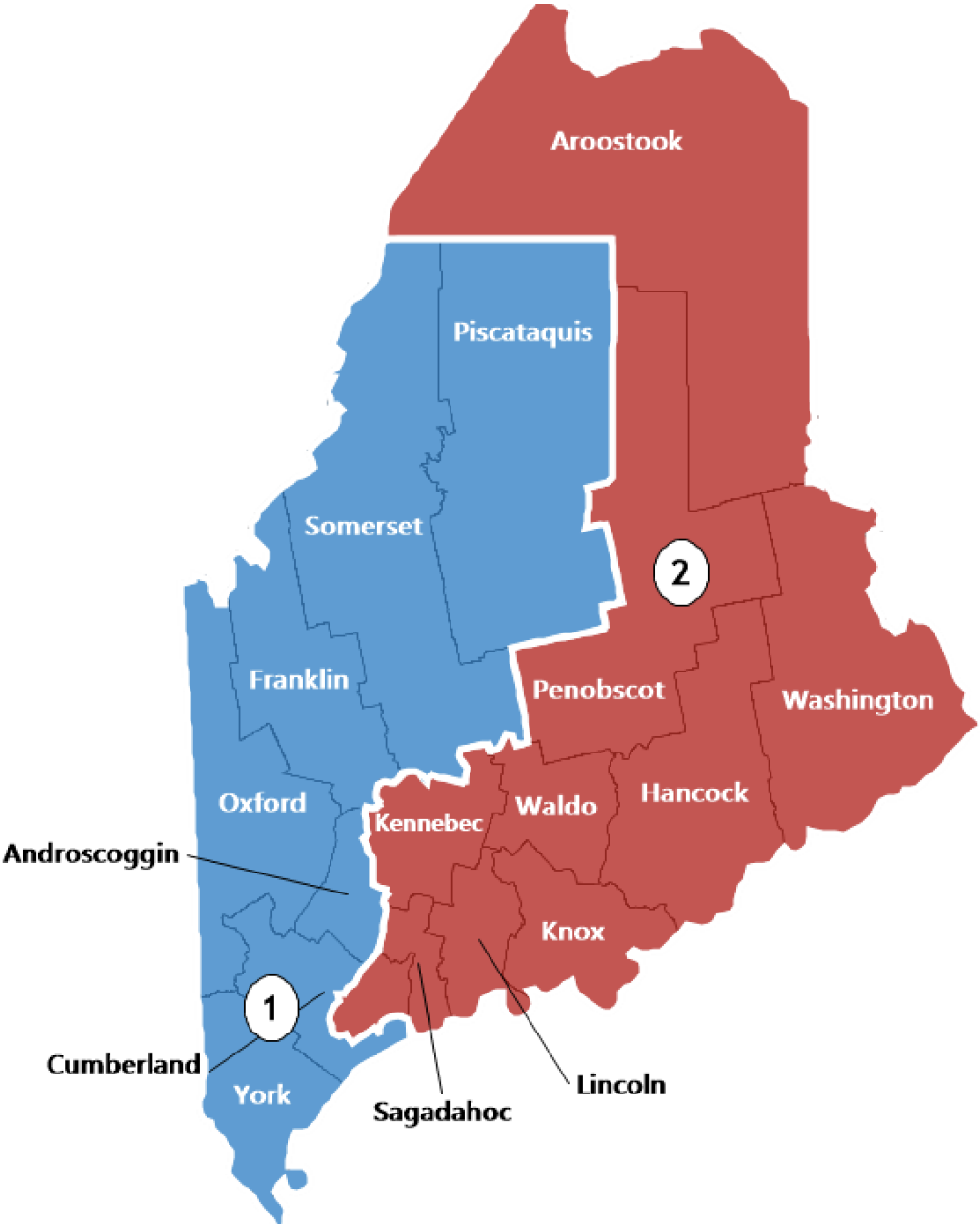


TENSIONS AND TRADEOFFS

The central tradeoff in drawing this plan was whether to extend the 1st District up the coast instead of striking inward; in short, there was a tradeoff between compactness and preserving the entire midcoast region. I opted for a compact district that would capture the vast majority of southern Maine but not the full midcoast. While I would have liked to extend further along the coast, it was not possible to do so while minimizing political subdivision splits and maintaining equal population. Another tradeoff worth mentioning is more political in nature. This map splits Androscoggin County, which is the county where Maine's current Congressman for the 2nd District (Jared Golden) lives. Under this map, Golden would be pulled into the 1st District. Golden's town, however, is more closely aligned, both politically and geographically, with the 1st District. In short, absent Golden's residency, moving his town would make sense on a number

of levels. Golden is a rare Democratic winner in the 2nd District and narrowly defeated incumbent Republican Bruce Poliquin in 2020. Ultimately, partisan considerations did not motivate this plan's design; instead, this map reflects compactness and communities of interest.

Plan 3: Pro-Democrat Gerrymander



REDISTRICTING PRINCIPLES

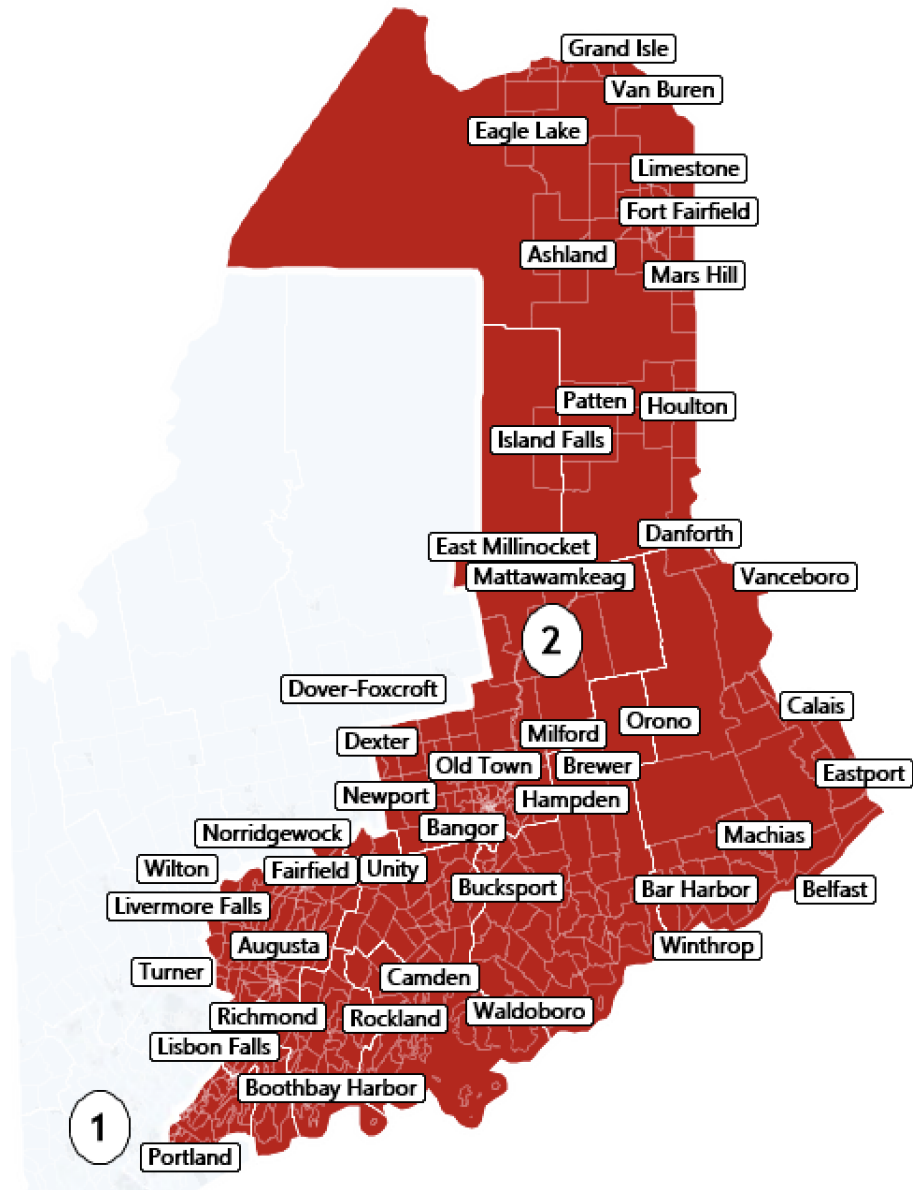
Unlike the prior maps, this map is explicitly partisan in design. I drew this map with the express intent of maximizing the Democratic Party's ability to win both of the state's Congressional districts.³⁴ In short, this is a gerrymandered map. While increasing Democrats' chances was my overarching priority, I did consider compactness and political subdivisions. This map splits only one county—Cumberland—while giving Democrats likely majorities in both districts. My least change map (Map 1) gives Democrats an 85% chance of winning District 1 and Republicans an 80% of winning District 2. My compact good governance map (Map 2) gives Democrats an 84% chance of winning District 1 and Republicans a 77% chance of winning District 2. This plan (Map 3), by contrast, gives Democrats a 58% chance of winning District 1 and a 56% chance of winning District 2.

MAP SUMMARY

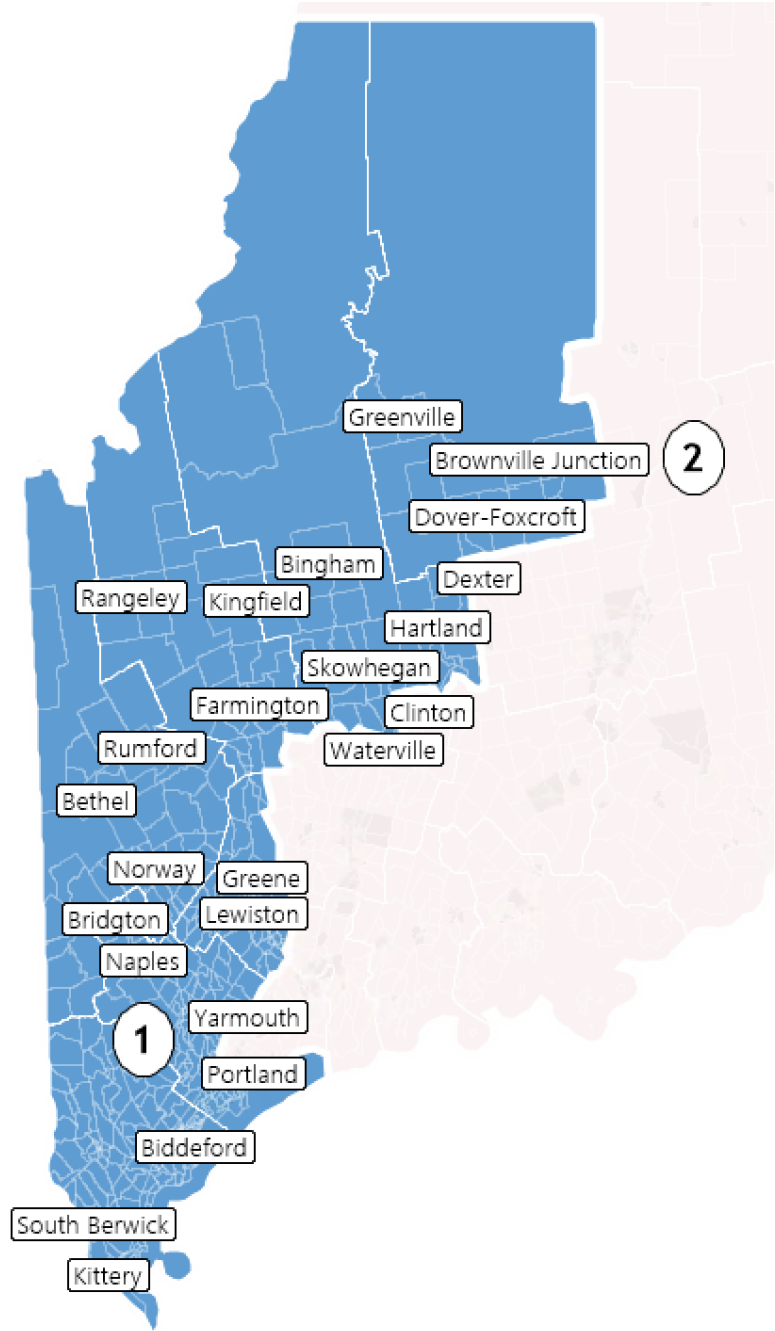
This map draws two districts that run north-south, splitting the state down the middle. The proposed map splits one county and two towns, including Portland. In contrast to Maine's traditional maps, this map draws two large districts, each nearly equivalent in size. This division was needed so that each district could capture both interior, conservative voters and liberal, coastal voters in the south. The Portland area is necessarily split because it contains the majority of the state's population and its largest concentration of liberal-leaning voters. It is not possible to draw a pro-Democrat gerrymandered map in Maine without splitting the Portland area. This map is less compact than Maine's current map and my other map proposals, in part because of the large geographical size of each district. Maine's actual 2nd District is already among the largest geographical districts in the country. In looking at Maine's data from the 2020 Presidential election, this map would near-perfectly split the state's Biden voters. According to Planscore data, District 1 under this gerrymandered map would have contained 217,482 votes for Joe Biden, while District 2 would have yielded 217,586 Biden votes. Trump votes numbered slightly higher in District 2 (182,382 v. 178,355).

³⁴ Under *Rucho*, this political gerrymander is legal. See *Rucho v. Common Cause*, 588 U.S. ___ (2019).

District 1



District 2

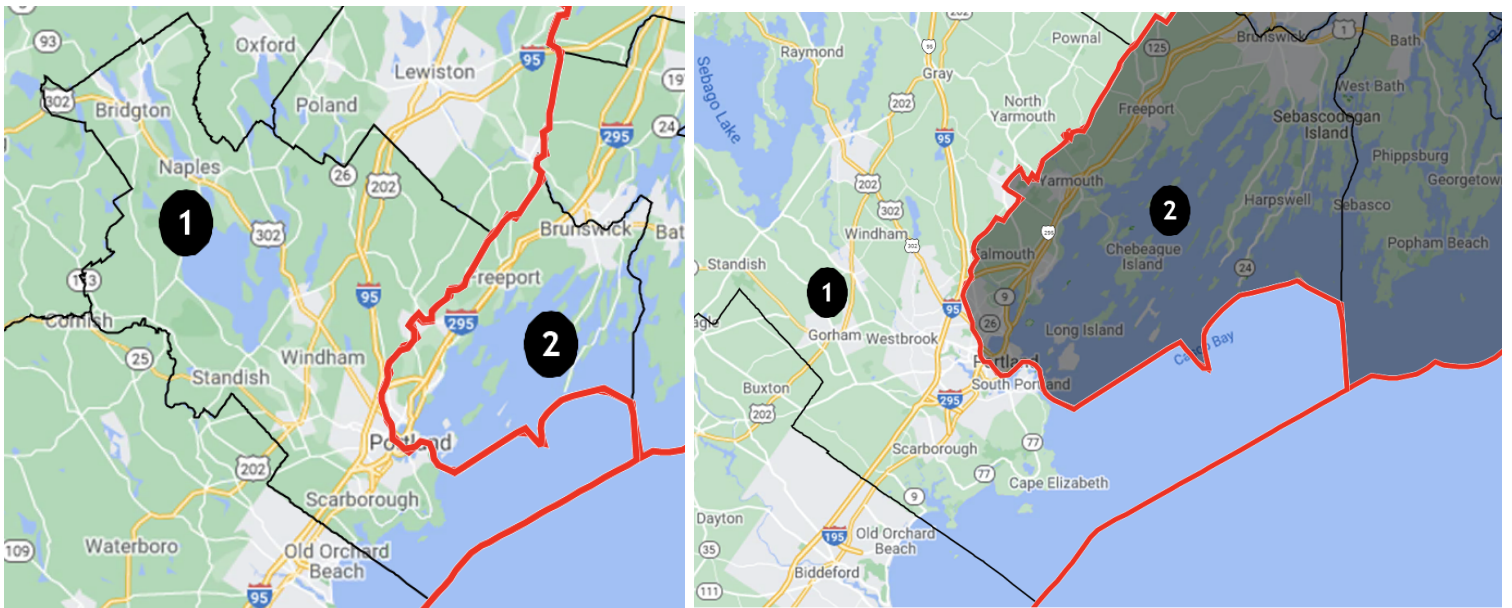


MAP EXPLANATION

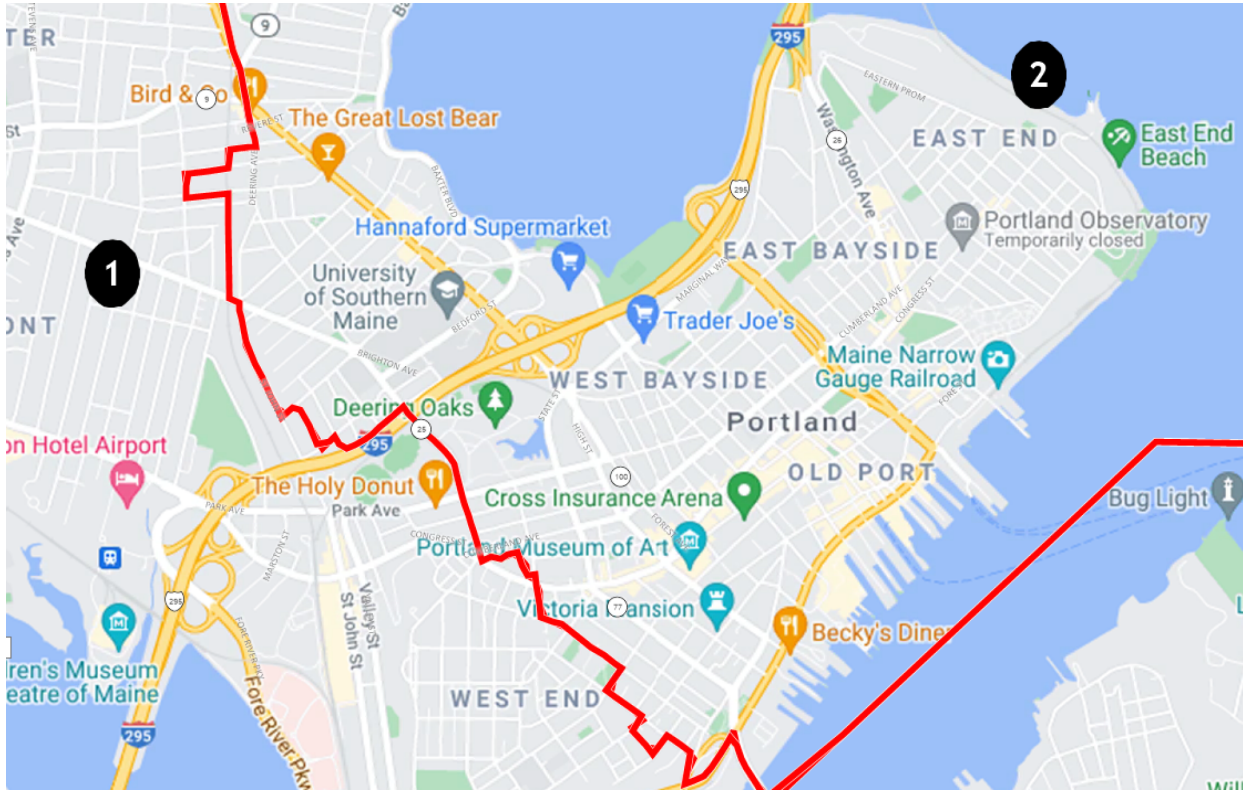
In order to draw a Democratic-gerrymander map of Maine, I knew that I would need to split Cumberland County. Cumberland County is the most populous county in Maine and it also contains the highest concentration of the state's liberal voters, most of whom are located in Portland. Cumberland is the epicenter of Maine's Democratic vote—voters are packed in here and radiate outward, becoming gradually more dispersed as the distance from Portland grows. After splitting Cumberland County and Portland, I continued moving that split upward along county lines to avoid political subdivision splits. To achieve equal population while balancing out Democratic and Republican voters, I could not draw east-west oriented districts; doing so would have made the southern district too liberal. Instead, I tried to draw fairly parallel north-south districts so as to avoid irregular, non-compact shapes. The proposed map does contain some jagged edges but these are a product of Maine's county lines. Once I established that Cumberland had to be split and that districts would run north-south, I focused on evenly distributing counties to achieve population equality.

It is exceedingly unlikely that Maine's Redistricting Advisory Commission would ever draw a map this blatantly gerrymandered. The state has a strong tradition of adopting bipartisan, fair maps that largely maintain existing district lines. However, I think it is useful as a political exercise to see exactly what a Maine pro-Democrat gerrymander might look like, especially as the state's population changes. Maine maps with districts that are horizontally oriented, running east-west, would favor Republican candidates by optimally confining liberal voters to the south. Alternatively, a map drawn with vertical districts running from the north to south, like this map, would evenly split Maine's Democrats, enabling them to dilute Republican influence away from the coasts.

Cumberland County Split



Portland Split



COMPACTNESS

This map is less compact than my other Maine maps in part because the other maps have a very compact 1st District, whereas the 1st and 2nd District alike here are sprawling. While compactness was not a central principle in drawing this map, I did intentionally apportion counties to try to eliminate jagged edges and large protrusions.

Proposed Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.27	1.76	2.04	0.22
Max	0.34	1.89	2.11	0.24
Mean	0.31	1.83	2.08	0.23
Std. Dev.	0.05	0.09	0.05	0.01
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.27	1.76	2.04	0.24
2	0.34	1.89	2.11	0.22

Existing Map

	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
Sum	N/A	N/A	N/A	N/A
Min	0.36	1.60	1.86	0.17
Max	0.49	2.02	2.40	0.29
Mean	0.43	1.81	2.13	0.23
Std. Dev.	0.09	0.30	0.38	0.08
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper
1	0.36	2.02	2.40	0.17
2	0.49	1.60	1.86	0.29

POLITICAL SUBDIVISION SPLITS

This map does minimize political subdivision splits, splitting only one county and two towns. However, the split county—Cumberland—and one of the two split towns—Portland—are the state’s most dense. As explained above, any pro-Democrat gerrymandered Maine map will split Cumberland County, but in an ideal world it would be preferable to avoid splitting the state’s most prominent and populous regions.

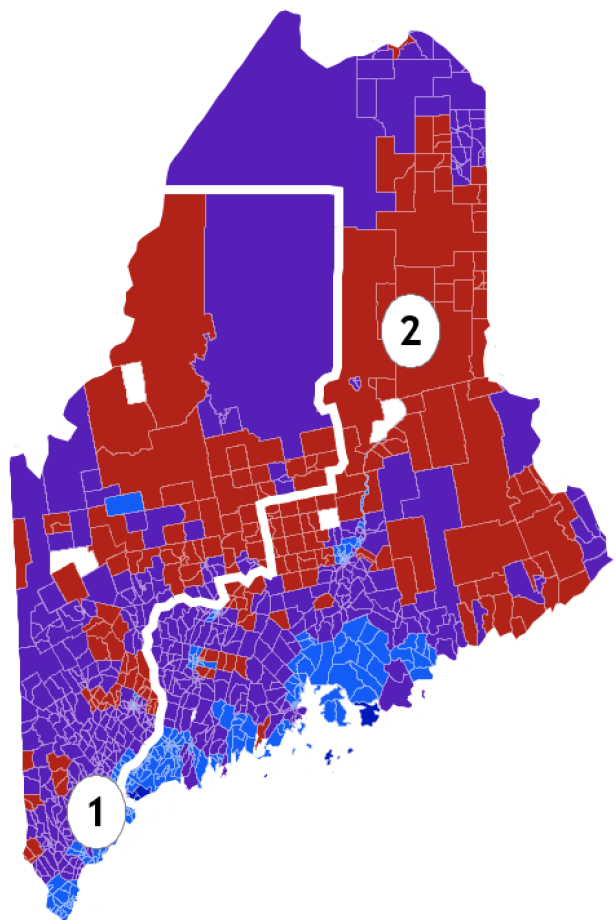
PARTISAN CONSIDERATIONS

Partisan considerations were at the forefront of this map. Since Maine’s Democrats are highly concentrated in a relatively small geographical area, I focused on dividing those voters with equal weight, knowing that they would balance the Republican voters scattered throughout a much larger geographical area. As detailed above, I established that Cumberland needed to split. After drawing that conclusion, I simply had to divide counties and populations evenly to minimize county splits. The images below capture Maine’s partisan divide and demonstrate how difficult it would be to draw a pro-Democrat gerrymander if the state continues drawing its 1st District in the southwest corner of the state. Although this map is a gerrymander, Planscore still gave it a 0% partisan bias score.

Planscore



2020 Presidential Voter Distribution Map

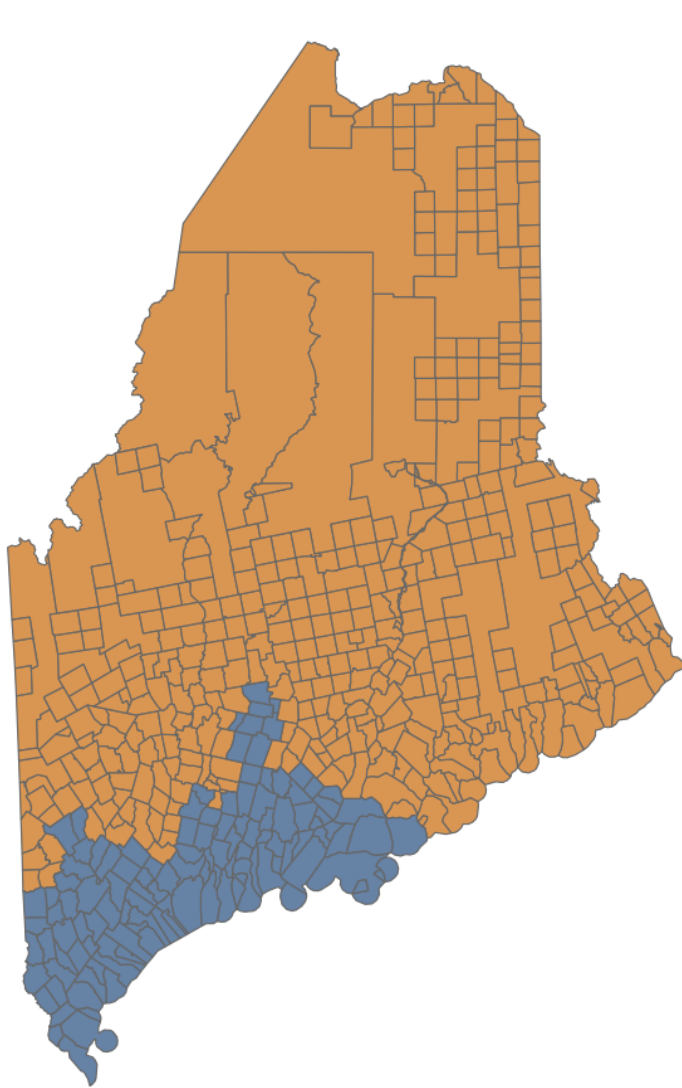


TENSIONS AND TRADEOFFS

The most substantial tension in this map concerned splitting Portland. It is not optimal to split the state's biggest city, especially when the city does constitute a unique community. Portland is Maine's only true "city," distinguishing it from the rest of the state in a number of ways. In an ideal world, it would be optimal to keep Portland whole, but that proves antithetical to maximizing Democrats' competitiveness.

A second tension concerned splitting Maine's midcoast region and northern interior. The midcoast is a community of interest distinct from the rest of the state, as is the state's wooded northern interior. Both regions have distinct economies, populations, economies, and cultures. Maine's current map does preserve the northern interior but partially splits the midcoast. This map splits both. Again, the split on this gerrymandered map can be attributed to Cumberland County's central geographical position in the state and its dense, left-leaning population.

Maine's Adopted Plan³⁵



District
 1
 2

Population
 CD1: 681,179
 CD2: 681,180

CD1 Towns

Albion	2006
Benton	2715
China	4408
Clinton	3370
Litchfield	3586
Pittston	2875
Unity	36
Vassalboro	4520
Waterville	15828
West Gardiner	3671
Windsor	2632
Winslow	7948

CD2 Towns

Augusta	18899
Belgrade	3250
Chelsea	2778
Farmingdale	2995
Fayette	1160
Gardiner	5961
Hallowell	2570
Manchester	2456
Monmouth	4066
Mount Vernon	1721
Oakland	6230
Randolph	1743
Readfield	2597
Rome	1148
Sidney	4645
Vienna	578
Wayne	1129
Winthrop	6121

CD 1 Counties

Cumberland	303,069
Knox	40,607
Lincoln	35,237
Sagadahoc	36,699
York	211,972

CD 2 Counties

Androscoggin	111,139
Aroostook	67,105
Franklin	29,456
Hancock	55,478
Oxford	57,777
Penobscot	152,199
Piscataquis	16,800
Somerset	50,477
Waldo	39,607
Washington	31,095

³⁵ Maine Legislature, “Adopted Congressional Map” (available at <https://legislature.maine.gov/doc/7142>).

ADOPTED PLAN EXPLAINED

On September 29, 2021, Maine formally adopted its new Congressional districts, which will go into effect for the first time in the 2022 midterm elections. Maine’s 15-member bipartisan advisory commission—also referred to as a Reapportionment Commission—reached unanimous consensus on the map, which later passed the legislature and was signed by Governor Janet Mills.

The final, adopted map largely resembles the state’s previous map and can be classified as a least change map. The most significant change on this least change map is Augusta’s move into the 2nd District. A couple of small municipalities shifted from the 2nd District to the 1st. Overall, around 3,000 Democratic votes moved into the 2nd District, making it marginally more liberal, even though the District’s overall orientation remains solidly red. Of the three plans I put forth, Maine’s adopted plan very closely resembles my least change plan (details below).

MOTIVATIONS

Maine’s newly adopted map is largely a product of history—at its core, this is a least change map that reflects longstanding, historical districting patterns. The Commission’s decision to split Kennebec County, for example, traces back to Maine’s gerrymandered maps of the 1960s, where Republicans sought to divide the state’s Democratic strongholds in York and Portland.³⁶ Those 1960s lines have been partially kept intact to present, although population growth in the south has solidified the 1st District as solidly Democrat.

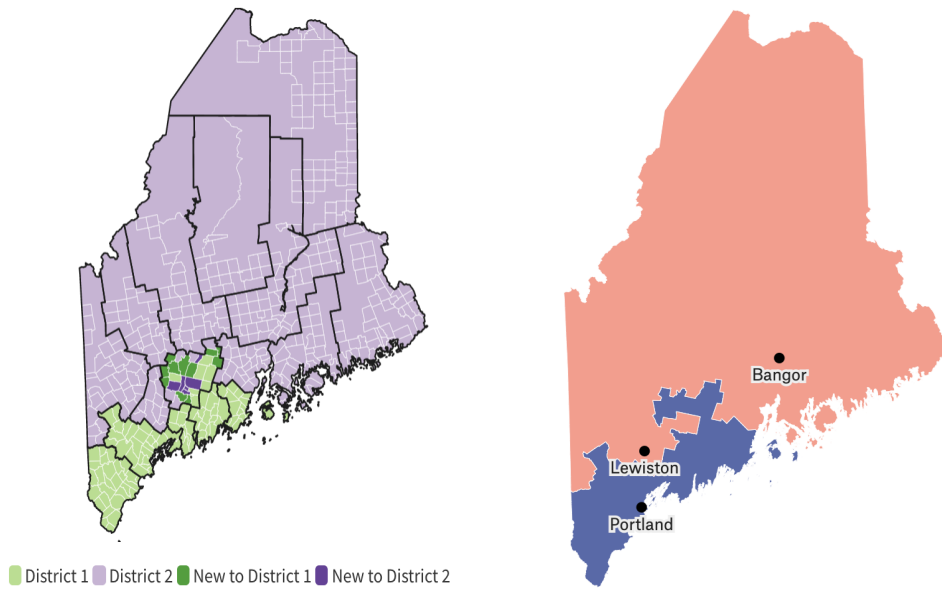
According to reports, Democrats in the state legislature did seek to move Waterville, not Augusta, into the 2nd District this cycle, but Republicans were quick to quash this effort.³⁷ At one point, Democrats even put forth a plan where both Augusta and Waterville would move to the 2nd District.³⁸ This would have been an explicitly partisan decision. Republicans, by contrast, sought to move Augusta alone into the 2nd District, while keeping Waterville in the 1st. Again, political motivations were at play, as Republicans tried to limit Democratic voters’ movement into the district.

³⁶ Jessica Lowell, “Shifting lines: Redistricting in Kennebec County Splits its Towns Again,” *Central Maine*, Oct. 9, 2021 (available at <https://www.centralmaine.com/2021/10/09/shifting-lines-redistricting-in-kennebec-county-splits-its-towns-again/>).

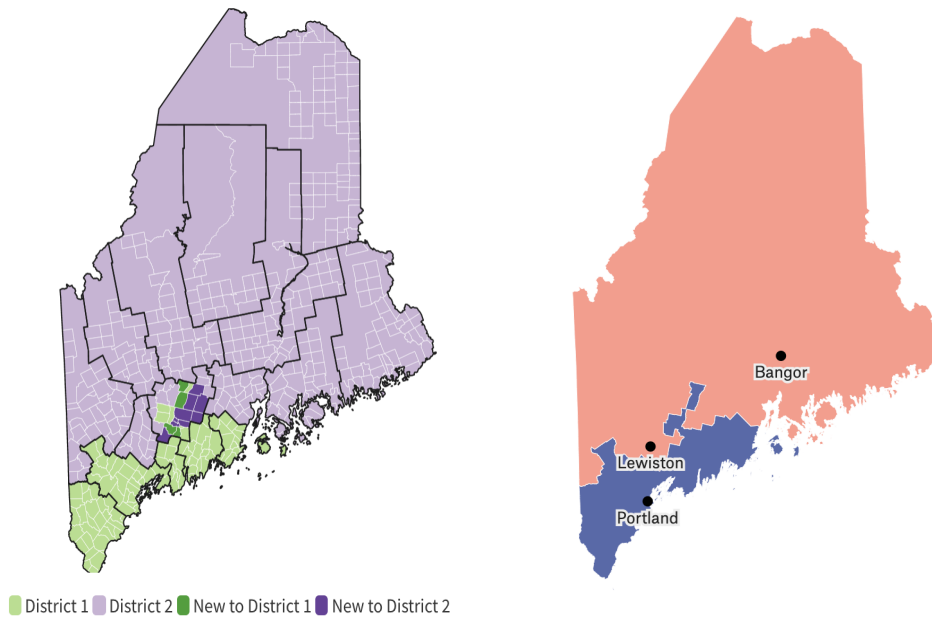
³⁷ Steve Mistler, “Maine Redistricting Panel Reaches Deal On New Legislative And Congressional Maps,” *Maine Public*, Sep. 27, 2021 (available at <https://www.mainepublic.org/politics/2021-09-27/maine-redistricting-panel-reaches-deal-on-new-legislative-and-congressional-maps>).

³⁸ “Maine Republicans, Democrats Argue Over Waterville in Redistricting Debate,” *WGME*, Sep. 17, 2021 (available at <https://wgme.com/news/local/maine-republicans-democrats-argue-over-waterville-in-redistricting-debate>).

*Democrats' Proposed Congressional Map:*³⁹



*Republicans' Proposed Congressional Map:*⁴⁰



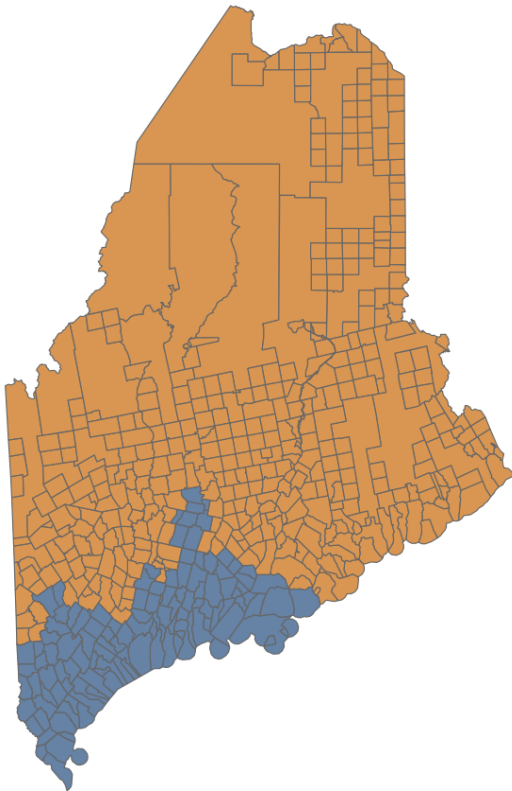
³⁹ “What Redistricting Looks Like In Every State: Maine,” 538, Dec. 24, 2021 (available at https://projects.fivethirtyeight.com/redistricting-2022-maps/maine/republican_proposal/); Jessica Piper, “Augusta Would Move to the 2nd District Under Bipartisan Redistricting Deal,” *Bangor Daily News*, Sep. 23, 2021 (available at <https://bangordailynews.com/2021/09/23/politics/augusta-would-move-to-the-2nd-district-under-bipartisan-redistricting-deal/>).

⁴⁰ *Id.*

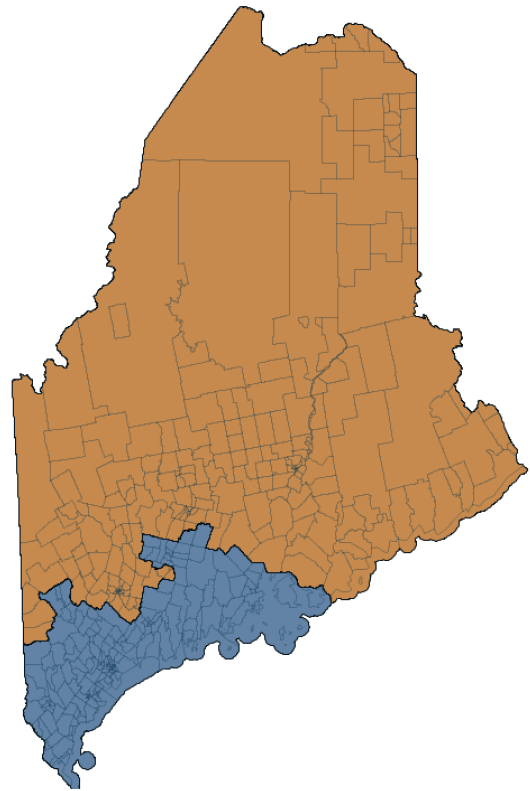
COMPARISON TO MY PROPOSED MAPS

Maine’s adopted plan deviates by a matter of miles from my proposed least change plan. Unsurprisingly, Maine did not adopt a heavily gerrymandered plan akin to my “pro-Democrat gerrymander” map (Map 3), nor did it decide to shift away from traditional splits by adopting something similar to my compact good governance map (Map 2). Maine’s adopted map and my least change map have one point of deviation. While both maps split Cumberland County, Maine’s adopted map moves Augusta from the 1st to the 2nd District, while my proposed map moves Waterville from the 1st to the 2nd District. As described above, the state legislature likely made this choice on political grounds—one of the two cities had to move and Republicans were steadfast about not moving Waterville. Otherwise, the two plans are virtually identical. When Maine undertakes its next redistricting in 2031, Waterville will likely also move into the 2nd District.

Adopted Plan



Proposed Least Change Plan



CONCLUSION

Maine is a politically distinct state, both in its approach to elections (ranked choice voting, split electoral votes) and in the political leanings of its voters themselves. One constant, however, is Maine’s commitment to independence and integrity. Maine’s approach to redistricting and the

results of the 2020 redistricting cycle reflect this commitment. The maps presented in this report are fair as well—each received a 0% partisan bias rating on Planscore—while prioritizing different redistricting principles.