

Map-a-Thon

Granite Staters Drawing Fair Voting Maps



Analysis of Proposed Senate Election Law & Municipal Affairs Executive Council Map SB241, as Amended (1188)

updated April 11, 2022



What is this document?

- The majority and minority in the New Hampshire Senate Election Law & Municipal Affairs Committee proposed 2020-2030 redistricting maps for the NH Senate and Executive Council.
- There are two bills now in the House:
 - SB 240 majority Senate map proposal, as amended
 - SB 241 majority Executive Council map proposal, as amended
- Two bills 'died' in the Senate:
 - SB 253 minority Senate map proposal
 - SB 254 minority Executive Council map proposal
- The Map-a-Thon Citizen Mapping Project's Mapping and Technical Team analyzed these proposals, comparing their partisan lean, communities of interest, compactness, and other best practices.

Map-a-Thon Glossary

Community of Interest (COI) Communities of interest can take many forms, but generally refer to groups of people united by shared interests. In the context of redistricting, communities of interest are those communities that share policy concerns, such as similar economic interests, a shared school system, or common resources. Our maps use boundaries of shared high school districts, shared water systems, and shared police and fire protection -- in addition to the boundaries of towns and city wards-- to inform the redistricting process. More information about communities of interest can be found by visiting NYU's Brennan Center

Compactness Compactness helps us measure the cohesiveness of a district. When drawing districts to represent a region, it is best practice to strive for a compact district, since non-compact districts are less likely to share communities of interests (2010's Executive Council & some 2020 NH Senate districts), and the wider area makes it harder for representatives to understand and serve the needs of constituents. Compactness is also used as a check against gerrymandering (see below), since gerrymandered districts tend to not be compact. The compactness scores reported in our analysis come from the DRA compactness calculation described here:

Contiguity Contiguity describes how municipalities in a voting district are geographically connected to each other. Contiguous districts are a requirement for all legislative districts in New Hampshire. This definition is sometimes stretched -- quite literally -- with the towns of Meredith and Gilford only connected in the middle of Lake Winnepesaukee, the towns of Strafford and New Durham connected in an inaccessible point in the woods, and the 2010 floterial district, Grafton 9, for which the elected rep has to travel out of the district to get to constituents on the other side of the district.

Dave's Redistricting Application (DRA) Dave's Redistricting Application, hosted at <https://davesredistricting.org> is a free online tool for creating, viewing, sharing, and analyzing redistricting maps. The mission of Dave's Redistricting is to, "empower civic organizations and citizen activists to advocate for fair congressional and egislative districts and increased transparency in the redistricting process." Map-a-Thon's maps and most supporting data are located there for public inspection.

Deviation Deviation refers to the degree to which districts have equal population. Ideally, every representative or other elected official in proportional representation will represent the same number of people, but a small amount of flexibility --deviation-- is permissible to account for unequal population distributions and compliance with other laws, such as the 1965 Voting Rights Act or the New Hampshire Constitution's mandate to keep town boundaries intact, and NH Supreme Court Rulings

Gerrymandering Gerrymandering is the practice of drawing district boundaries for partisan advantage. This leads to uncompetitive general elections and districts oriented toward party agendas rather than local interests. Gerrymandered districts often connect regions with little in common, leading to the splitting of cities, counties, and other communities of interest. The leading example of this in New Hampshire is 2010's Executive Council 2 and certain NH Senate districts

Splitting Because our maps are drawn with the goal of avoiding gerrymandering while keeping communities of interest intact, many parts of our analysis examine the number of communities of interest divided, or "splits," contained within a district. The ideal map minimizes the number of districts which cross other administrative boundaries to hold communities of interest intact. Our analyses examine the number of geographical splits necessary. For example, a state senator representing the towns of Dublin and Peterborough would split county lines while keeping a school district intact. Another way of examining splitting is to weight splits by population, the approach taken in the DRA county-splitting metric.

Partisan Lean Number of seats using past election data that are likely to be either Democrat seats, Republican seats, or Competitive seats.

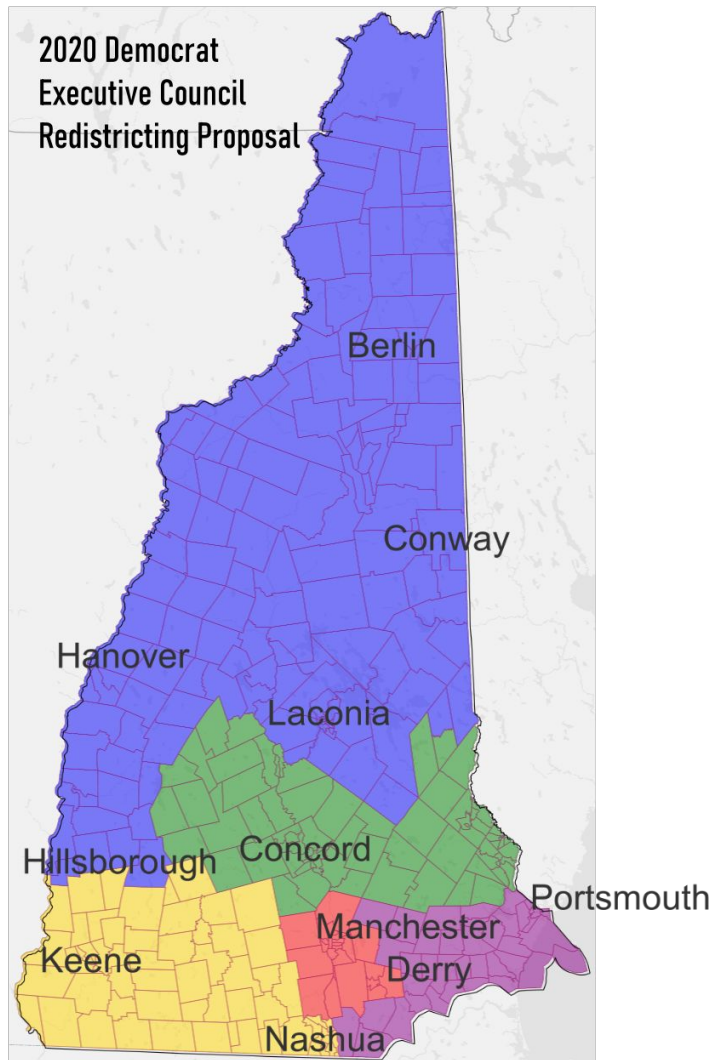


Takeaways on the Executive Council Proposals

- NH has five Executive Council districts. The 2010 NH Executive Council map was widely cited as gerrymandered, packing Democrat-leaning towns into the “dragon shaped” District #2, leaving the other districts Republican-leaning and less competitive.
- Partisan lean:
 - The majority proposed map ‘looks’ better than the 2010 map but is actually more partisan gerrymandered. It has three competitive districts but each lean Republican.
 - The minority map has a slight 3-2 majority lean, but overall is a more competitive map.
- Compactness:
 - The majority map has three districts that are not very compact because they reach to contain either Democrat or Republican towns in order to pack or crack Democrats.
 - The minority map has an excellent compactness score and does good job of retaining counties.

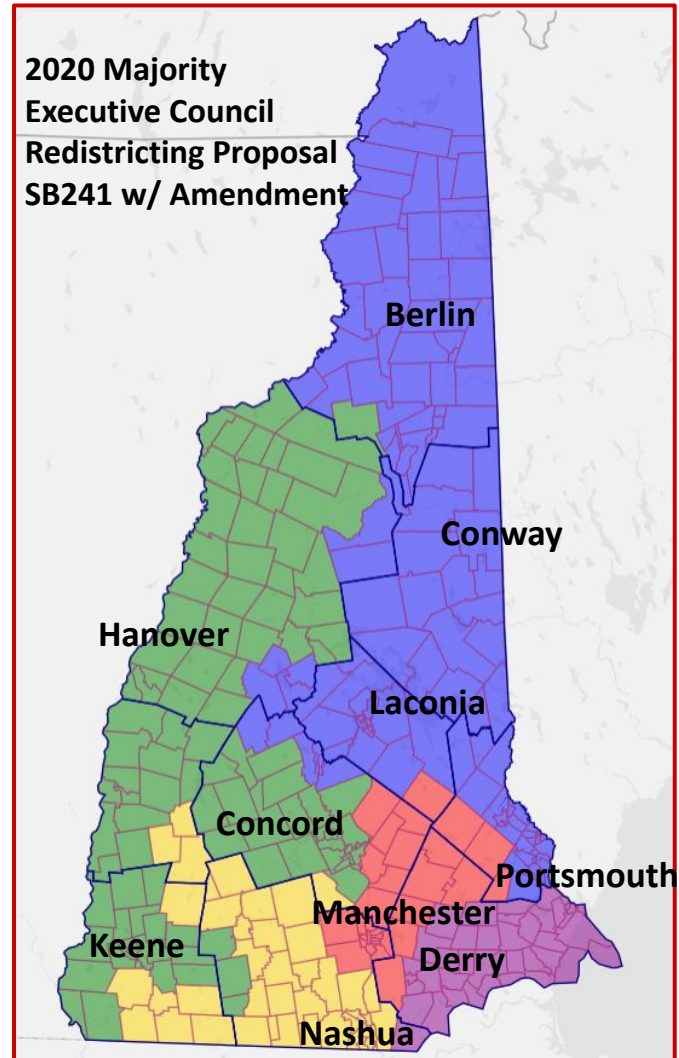
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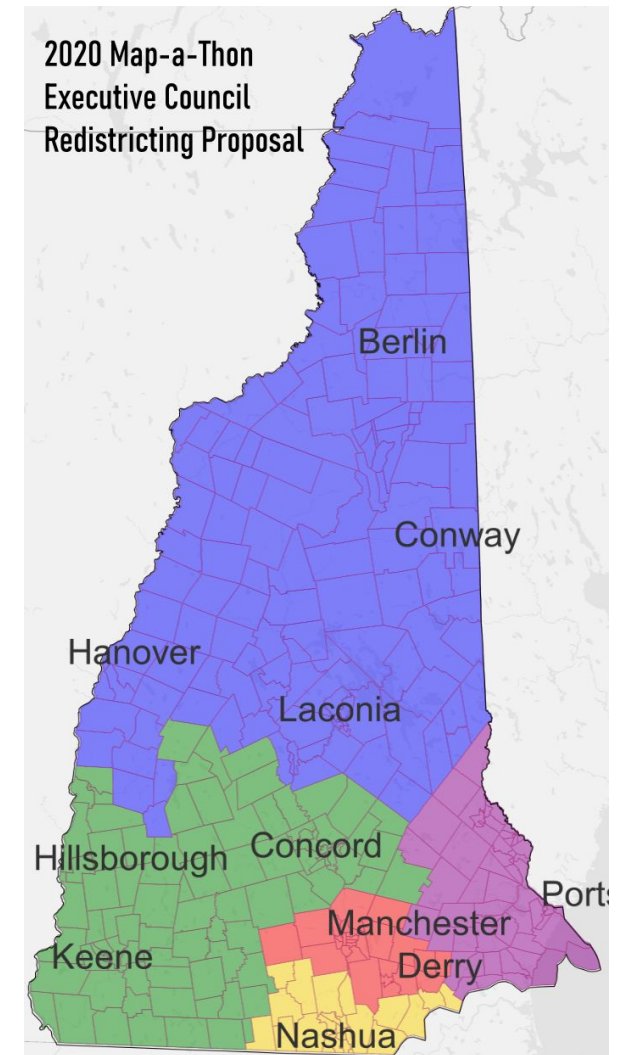
2020 NH Executive Council Map -
Minority Proposal

[Link to map on DRA mapping software](#)



2020 NH Executive Council Map -
Majority Proposal

[Link to map on DRA mapping software](#)



2020 NH Executive Council Map -
Map-a-Thon Proposal

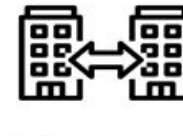
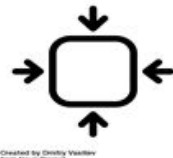
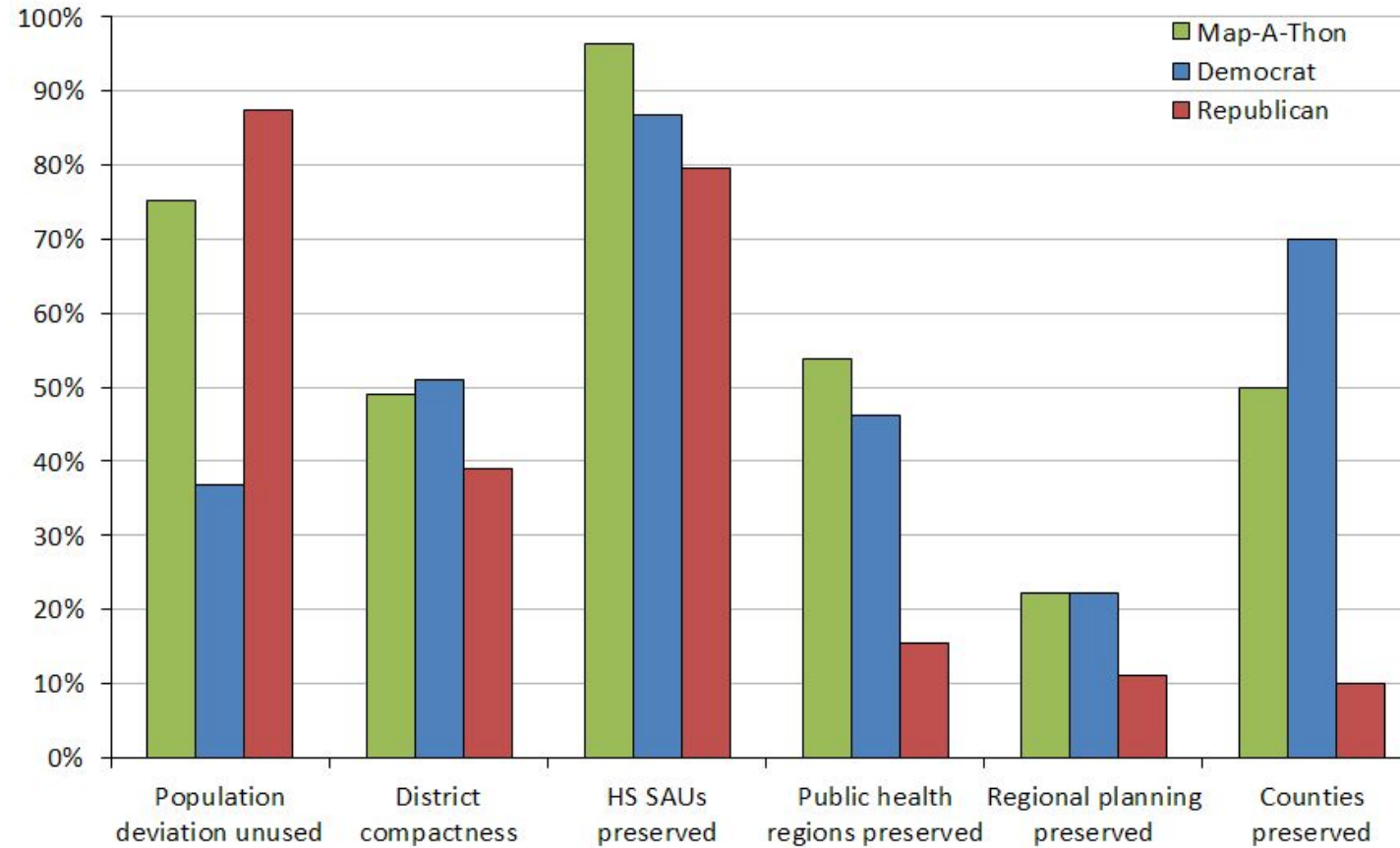
[Link to map on DRA mapping software](#)

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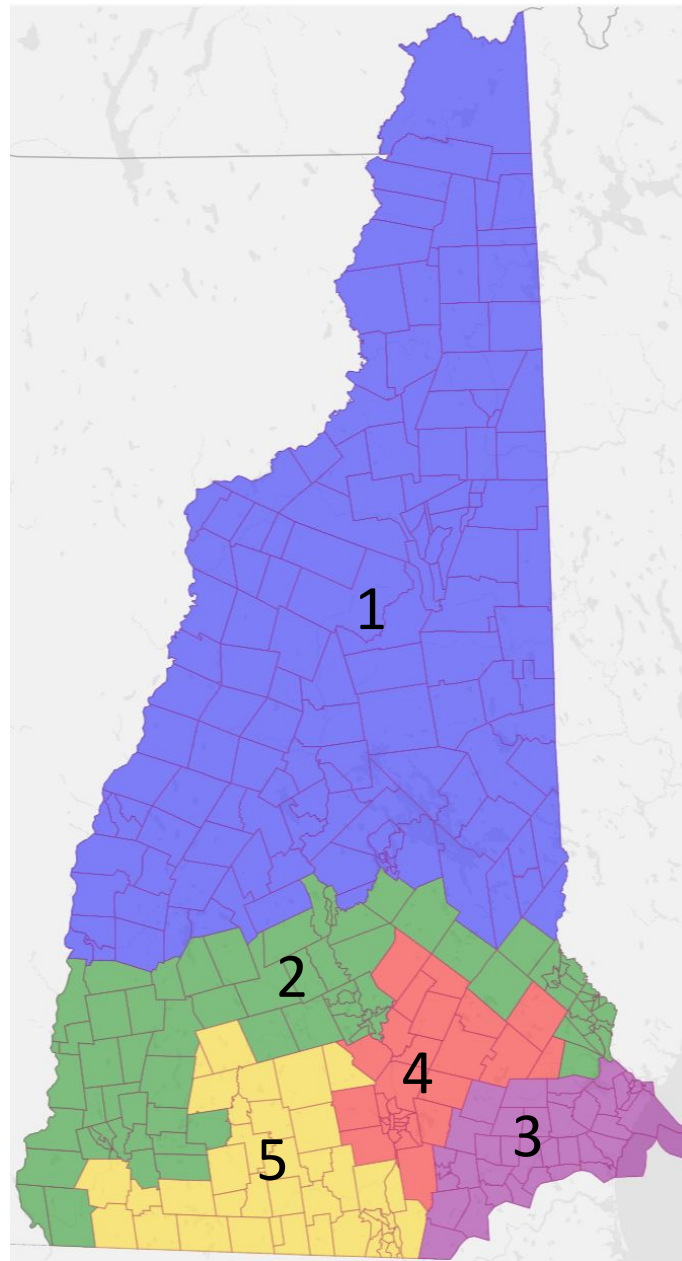


NH Executive Council Maps with Communities of Interest



	2020 Exec Council Votes			
District	Democrat	Republican	Other	Competitiveness
1	48.3%	51.7%		Competitive
2	54.5%	45.5%		Competitive
3	47.3%	52.7%		Competitive
4	44.3%	55.7%		Leans Republican
5	49.2%	50.8%		Competitive
Total Vote Share	48.7%	51.3%		
Seats Won	1	4		

This is the 2010 map that the Republicans initially proposed. It is a perfect example of gerrymandering with District 2 being “packed” with Democrats from Keene to Dover. This map splits 7 counties, 19 High School SAUs and has a compactness score of only 37.



2010 NH Executive Council Map

[Link to map on DRA mapping software](#)

<<<2010 Map<<<

Pros:

Manchester, Nashua, & Concord in their own districts

4 somewhat competitive districts

Low pop.deviation (2.27%)

Cons:

19 split High School SAUs

7 split Counties

37 Compactness score (DRA)

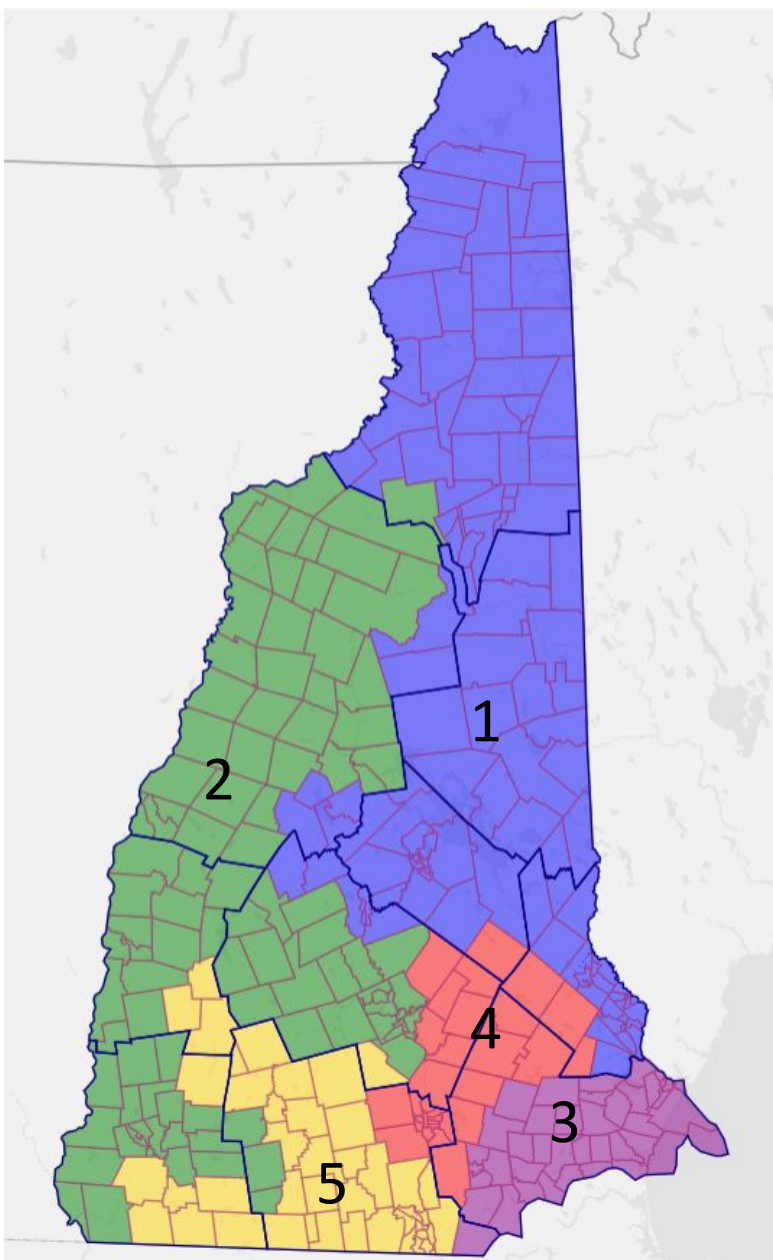
Gerrymanders Democratic-leaning towns into one district

	2020 Exec Council Votes			
District	Democrat	Republican	Other	Competitiveness
1	46.2%	53.8%		Competitive
2	57.4%	42.6%		Leans Democrat
3	47.3%	52.7%		Competitive
4	43.9%	56.1%		Leans Republican
5	48.4%	51.6%		Competitive
Total Vote Share	48.7%	51.3%		
Seats Won	1	4		

The Republican proposal for the Executive Council may look better than the 2010 “Dragon” map but it is in fact more of a partisan gerrymander than the 2010 map. It splits even more counties than the 2010 map, from 7 to 9, with only Carroll county not being split in this map. It does improve on high school SAU splits going from 19 to 17 but it is clear that keeping COIs together was not the goal with this map.

More Democrats are packed into District 2. This is accomplished by putting Concord, Keene, Hanover, and other heavily Democrat towns into District 2, resulting in it being 4.2% more Democrat.

As a result, District 1 becomes 4.2% more Republican, District 4 becomes 0.8% more Republican and District 5 becomes 1.6% more Republican. District 3’s partisan lean remains the same.



2020 NH Executive Council Map - Majority Proposal

[Link to map on DRA mapping software](#)

← Republican Proposal

Pros:

- Very low population deviation (1.26%)
- 3 somewhat competitive districts
- Manchester, Nashua, and Concord in their own districts

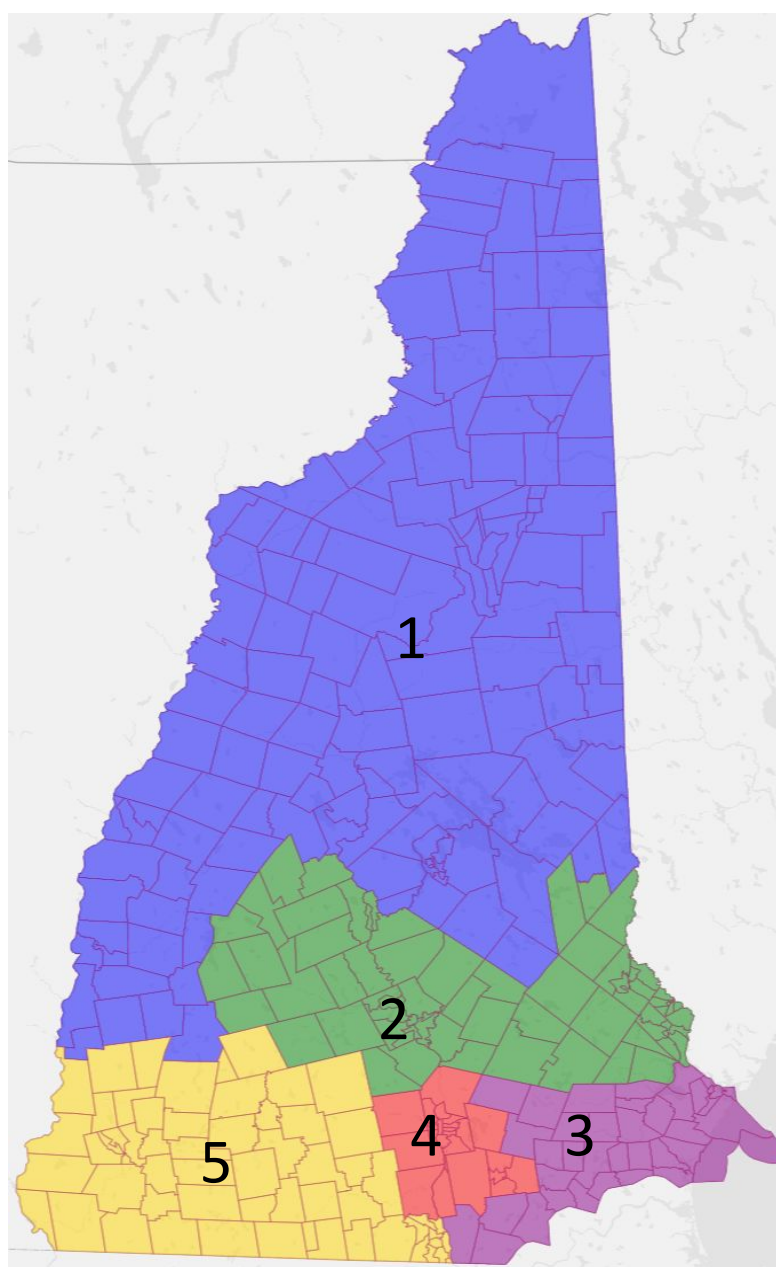
Cons:

- 17 split high school SAUs
- 9 of 10 counties split
- 39 Compactness score (DRA)
- Gerrymanders Democrat-leaning towns into one district. (This gerrymandering deprives Republican voters of any realistic ability to have a voice in choosing a Council member by creating a safe Democratic seat)

	Map-A-Thon	Minority	Senate Proposal
Population deviation	2.47%	6.32%	1.26%
District compactness	49	51	39
Counties split	5	7	9
HS SAUs split	3	11	17
Competitive districts (2020 election)	4	5	3

District	2020 Exec Council Votes			Competitiveness
	Democrat	Republican	Other	
1	47.7%	52.3%		Competitive
2	51.4%	48.6%		Competitive
3	47.0%	53.0%		Competitive
4	45.0%	55.0%		Competitive
5	52.4%	47.6%		Competitive
Total Vote Share	48.7%	51.3%		
Seats Won	2	3		

The Democrats' proposal for the Executive Council districts has five relatively competitive districts, with District 1 as a very competitive district. This map overall has a slight lean towards Republicans but is overall very competitive. The map appears to have been constructed to keep counties together and does an excellent job at this by keeping 7 of the 10 counties together. In doing this it does a competent job of keeping High School SAUs together, but it was clear that this was not the initial intent of this map. The compactness of these districts is very good with a score of 51 from DRA.



2020 NH Executive Council Map - Minority Proposal

[Link to map on DRA mapping software](#)

Democrat Proposal

Pros:

- 7 of 10 counties preserved
- 51 compactness score (DRA)
- All districts are somewhat competitive
- Manchester, Nashua, and Concord in their own districts

Cons:

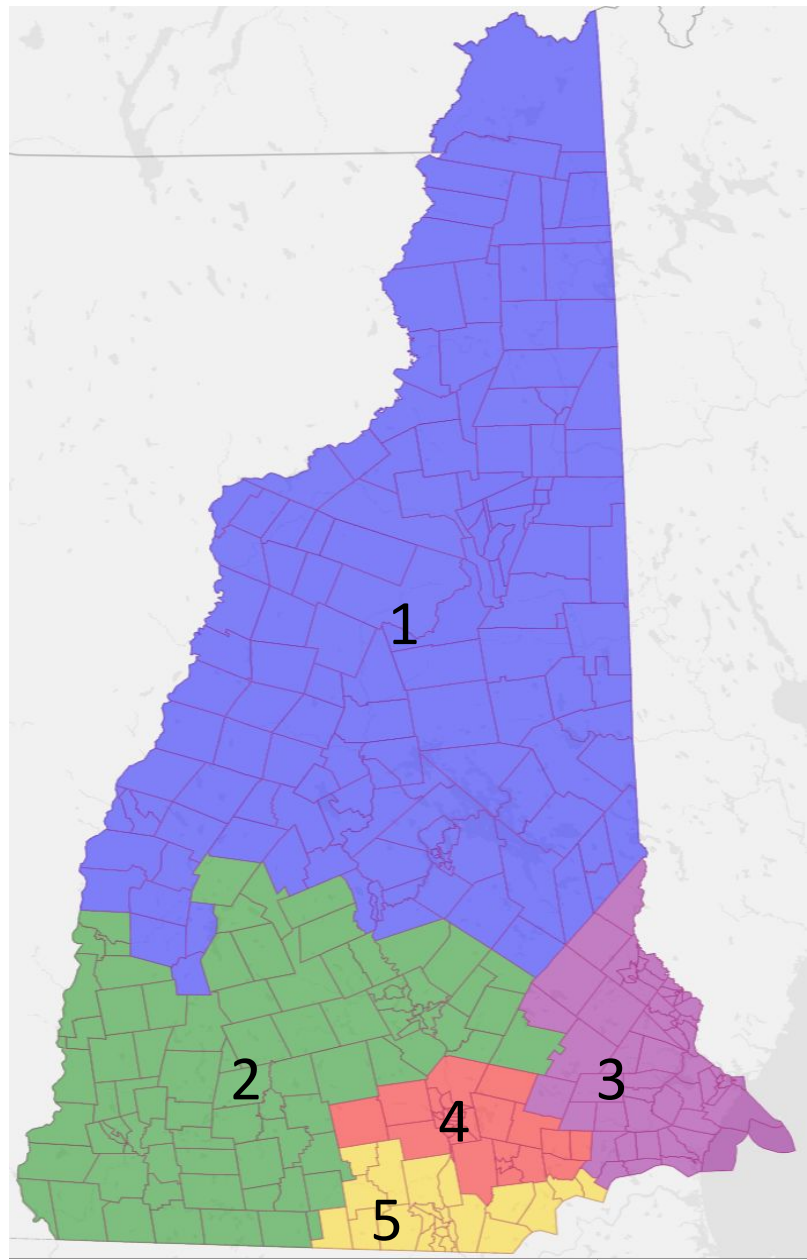
- Relatively high population deviation (6.32%)
- 11 split High School SAUs

	Map-A-Thon	Minority	Senate Proposal
Population deviation	2.47%	6.32%	1.26%
District compactness	49	51	39
Counties split	5	7	9
HS SAUs split	3	11	17
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District	2020 Exec Council Votes			Competitiveness
	Democrat	Republican	Other	
1	47.3%	52.7%		Competitive
2	50.6%	49.4%		Competitive
3	53.1%	46.9%		Competitive
4	43.8%	56.2%		Leans Republican
5	48.0%	52.0%		Competitive
Total Vote Share	48.7%	51.3%		
Seats Won	2	3		


The objective of the Map-a-Thon map was to produce a competitive districts while also respecting / preserving COIs such as high school SAUs, shared emergency services, and public health regions.

This map preserves the greatest number of counties, splits only 3 high school SAUs, and yields competitive districts while keeping population deviation to a low 2.47%.



2020 NH Executive Council Map - Map-a-Thon Proposal

[Link to map on DRA mapping software](#)


Map-a-Thon Proposal

Pros:

- Low pop.deviation (2.47%)
- 4 somewhat and 1 very competitive districts
- 3 split high school SAUs
- Manchester, Nashua, and Concord in own districts
- 49 compactness score (DRA)

Cons:

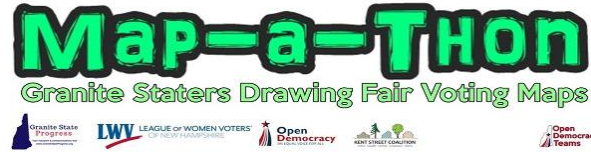
- 5 of 10 counties split (the lowest of all proposals)
- Some odd-shaped districts, but follow SAU lines

	Map-A-Thon	Minority	Senate Proposal
Population deviation	2.47%	6.32%	1.26%
District compactness	49	51	39
Counties split	5	7	9
HS SAUs split	3	11	17
Competitive districts (2020 election)	4	5	3



Frequently-asked Questions

- **Why can't a redistricting satisfy all of the legal and other requirements?**
It's a balancing act since the objectives are not fully compatible with each other; for example, creating districts that both respect town and ward lines, and contain an equal number of residents.
- **Why are competitive districts better than those with a predicted partisan lean?**
In a competitive district, candidates must appeal to voters of both (or all) political parties, including independents. In districts with a clear partisan lean, candidates need only appeal to voters of their own party, as determined in the party primary elections.



What actions should I take?

- The NH House Special Committee on Redistricting has a hearing on Thursday, April 14th in the Legislative Office Building, Room 201-203.
- The NH Senate map (SB240) will be discussed at 10:00AM, the Executive Council map (SB241) at 10:30AM.
- You may write or submit testimony to the committee [HERE](#) or at: HouseSpecialCommitteeOnRedistricting@leg.state.nh.us
- We also suggest contacting and/or sending your testimony to your own NH House representative: <http://www.gencourt.state.nh.us/house/members/>
- Hold signs outside the Legislative Office Building (or outside rooms 201-203 if raining) Thursday, 9-10AM.

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About the Map-a-Thon:

https://www.opendemocracynh.org/nh_map_a_thon

See this Report [on the Web via Google Slides](#)

Download our previously-released analysis on NH House and Congressional maps:

<https://www.opendemocracyaction.org/maps>