

Maps and Written Comment for Senate SGC Hearing
Congressional Redistricting Nov. 10, 2021

My name is Michael Waxenberg. I have been a Pike County homeowner for 32 years. By profession, I manage technology risk. Avocationally, I have created prize-winning Congressional and Legislative maps for Draw the Lines and Fair Districts PA. I am also active with the Princeton Gerrymandering Project and Common Cause PA's redistricting project team. I previously testified on Congressional redistricting before the House State Government Committee, and on Legislative maps before the LRC. In those appearances and in these remarks, I speak only for myself.

In the following paragraphs, I will touch briefly on my own Congressional district, the Eighth. I will then move on to my main topic: the statewide map, and more specifically, possible adjustments to the Draw The Lines Citizens' Map.

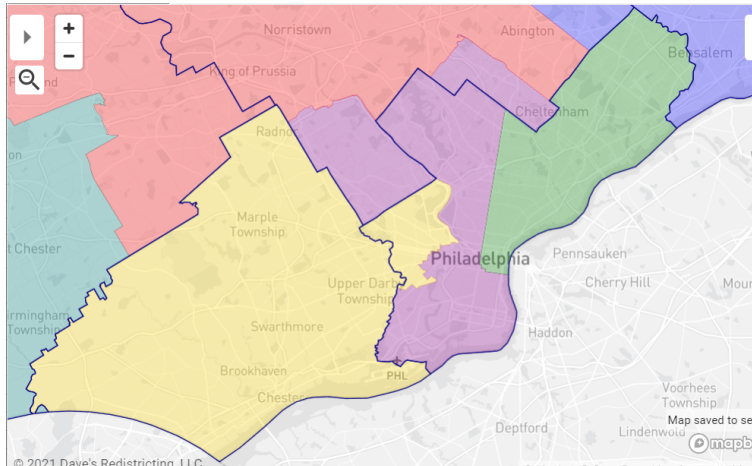
In [my appearance before HSGC on October 18th](#), I spoke at length about Northeastern Pennsylvania. My focus was on the two communities that form the core of CD8: the Wyoming Valley and the Poconos. In short, I endorsed DTL's draft of the Eighth District. Their version is compact, logical, highly competitive, and closely resembles the current CD8 as drawn by the Pennsylvania Supreme Court, adjusted to meet a higher target population figure. My full remarks begin on page 21 of the linked transcript.

After discussing NEPA, I urged the House Committee to use the Citizens' Map as a starting point for their deliberations. I congratulate Mr. Thornburgh and Mr. Villere for their efforts in creating that map. I hope their testimony will convince you of the map's utility - not just as a starting point, but also as a source for solutions to the thorniest challenges of contracting eighteen districts into seventeen.

As a supplement to their testimony, I would like to present a few alternative solutions to a few of those challenges. These ideas are not necessarily improvements. They simply represent ways the Committee could pursue different priorities within the Map's framework. The concepts I will discuss apply to any Congressional map, not just DTL's. Also please note that the districts created by these changes deviate from the target population by no more than one person. A few slightly larger variances were inherited from the DTL map. In the [consolidated map that combines all of these suggestions](#), no district varies by more than one person. Lastly, note that I have treated the tiny, non-contiguous piece of Chester County as integral to the County.

The first value the Committee might choose to promote is minority representation. The DTL Citizen's Map performs respectably in this regard, with one majority Black district and an additional minority-coalition district, both in Philadelphia. The coalition district contains a small part of southern Montgomery County, including the city of Cheltenham.

As you know, evaluation of maps for minority representation is an evolving discipline¹, and no formula can capture all the relevant factors. Nonetheless, I was curious whether it would be possible to raise the DTL map's lackluster Minority Representation score by adding another minority-opportunity district. In this example, I joined Delaware County to part of West Philadelphia and shifted Cheltenham from the Third District to the Second. These changes raise the Minority Representation score by 50%, from 38 to 57. The score might be raised further by splitting municipalities more aggressively.



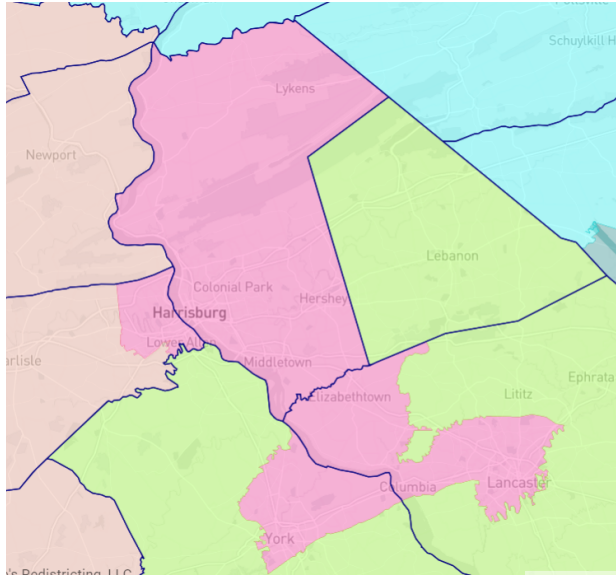
There is no loss of compactness, but the splitting score does fall somewhat. See <https://davesredistricting.org/join/6bedf69c-76a2-4ea0-87bc-619b30ad968c>.

I should emphasize that the DRA Minority score is not definitive. The Committee will need to define its criteria in this area, and those criteria may vary across districts. Recent scholarship suggests that DRA's approach is defensible.

My next suggestion concerns a topic on which Draw the Lines has received a high volume of citizen comments: the absence of a competitive "Capitol District" based on the current PA-10. Mappers face a significant challenge in this area. PA-10 is marginally competitive already, and simply expanding the district would make it less so. DTL redrew the Tenth, Eleventh and Thirteenth Districts in a way that makes all three uncompetitive, and splits the growing minority population of South-Central Pennsylvania. This area seems to be the least well-received aspect of the Citizens' Map.

A true purple district, with credible minority influence, requires reaching east to incorporate Lancaster City. In this example, I sacrificed some compactness to keep Dauphin County whole.

¹ See, for example, Hicks, William D. et.al. *Revisiting Majority-Minority Districts and Black Representation*. Political Research Quarterly, Vol. 71, No.2 (Nov. 2017).



See <https://davesredistricting.org/join/44645679-1509-44ce-9bff-848b1197b69a>

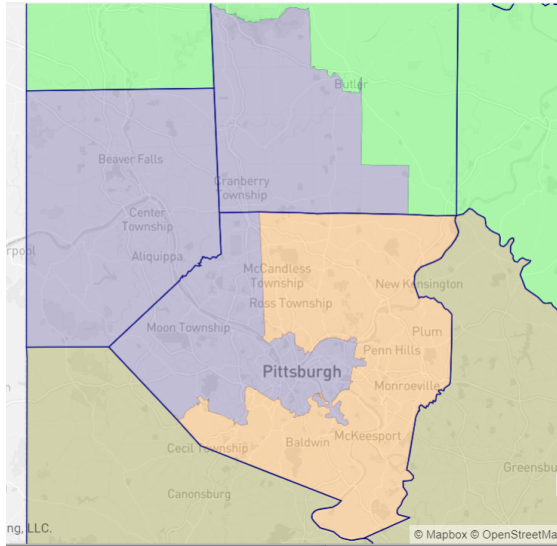
Other variations on this theme create a more compact district from pieces of Cumberland, Dauphin, York, and Lancaster. So there are different paths to the same goal; but should that goal be pursued?

The key question here is the value attached to proportionality, responsiveness, and competitive districts. In 2018, the Supreme Court of Pennsylvania seemed to signal that the State Constitution may require mappers to seek some degree of proportionality, even at the expense of traditional criteria. Notably, the Tenth District offers the best opportunity to offset the bias implicit in the state's political geography - known to mappers as "The Two-and-Six."² By most metrics, this change to South Central PA reduces the Citizens' Map's bias by about half.

The last idea I will share concerns the division of Pittsburgh. DTL departed from the Supreme Court's approach by splitting the city. That split is certainly defensible. As others have noted, a map that limits population variances to one person will inevitably split *some* municipalities, and large cities enjoy no special status. The 2018 map was drawn around the city in a manner that no longer seems necessary with the retirements of Representatives Lamb and Doyle.

If you do choose to keep Pittsburgh intact, though, there are several ways to reduce the partisan impact. I have provided an unconventional example that weds Pittsburgh with Western Allegheny, plus Beaver County and the most suburban parts of Butler County, then reconfigures the region accordingly. The arrangement of suburbs is flexible. The key point is that an intact Pittsburgh need not be part of an all-Allegheny district.

² The numbers refer to a votes bias of 2% and a seats bias of 6%, indicating that Democrats need about 2% of "extra" votes to capture half the seats, and that Republicans can expect to win an extra 6% of the seats in an election where the two-party vote divides evenly. These are rough statistical probabilities, and many caveats apply with only seventeen seats at stake.



See <https://davesredistricting.org/join/14030eed-37d3-40de-81c4-a18ba32a3c92>

What is the cumulative effect of these changes? The table below summarizes key DRA metrics:

Map	Compact	Splits	Competitive Districts	Minority Rep.	Proportionality	Votes Bias	Seats Bias
2018 SCOPA	64	56	35	47	78	2.41	7.35%
DTL Citizens'	69	52	32	38	95	2.10%	6.61%
DTL Amended	61	46	41	57	99	0.75%	2.33%

In aggregate, these changes involve moderate sacrifices of compactness and splitting for gains in other areas. Much of the cost is attributable to the meandering Capitol District, which also accounts for most of the gain in proportionality and reduction in bias. As described earlier, the change in DelCo and Philadelphia provides the main improvement in minority representation, although the diverse Capitol District might offer some long-term benefits as the South Central region continues to evolve.

The Draw The Lines Citizens' Map offers an excellent starting point for the Committee's deliberations. As I hope these examples have shown, the Citizens' Map can also accommodate changes to reflect different priorities and values.

Many thanks for your attention

Michael Waxenberg