

Testimony by Robert Williams to the Pennsylvania House State Government Committee, Tuesday 19 October 2021

Thank you, Representatives, for the opportunity to speak. I am Rob Williams and live in Tredyffrin Township, Chester County. Tredyffrin is located at the northeast corner of Chester County and shares boundaries with both Delaware and Montgomery Counties. This location information will be important in my testimony.

I am an amateur mapper and active in the Draw the Lines competition. I was awarded Honorable Mention for my 50-seat Senate map. In addition, during summer 2020 I mentored two college students in their first districting maps for Draw the Lines.

Analogy – Football

Many of us are now closely watching America's fall sport – Football. In Pennsylvania, you may be a Steelers or an Eagles fan. Or you may root for Pitt, Penn State or Temple. No matter your loyalty, we all enjoy a great contest between two good rivals.

But what if the rules of the game are not fairly applied to both teams? We all expect the home team must move the ball 10 yards for a first down. But how would the game change if the visiting team must gain 20 yards for a first down? Or only the visitors get only 3 plays to get the first down whereas the home team is allowed the traditional 4 plays. Such lopsided contests may be hugely popular for home team audiences. But in short order the fans stop showing up to these boring mismatches. Then sponsors stop spending money. And then the visiting team just refuses to even show up.

This is the effect of partisan gerrymandering. Such games are inherently unfair. We don't tolerate this in sports. We shouldn't tolerate this in our elections. And like the football games, if the rules are biased to one team, the teams and fans will stop showing up. With unfair gerrymandering, this erodes democracy in Pennsylvania.

Community of Interest maps

What is new for the 2021 redistricting cycle is the number of citizen maps that will be submitted as part of the legislative process. Thanks to the broad availability of online mapping software, over 7,000 Pennsylvanians created district maps through Draw the Lines contests. Like me, I expect many hundreds if not thousands will submit maps to the State Government Committee in the coming weeks.

How can you in this House Committee manage such volume? Which of these maps do you start with?

The best approach is to set all the citizen maps aside. Do not use these maps at the start of redistricting. These should only be used as a final check, used only to finely tailor the district boundaries to correct for split communities of interest. The same is true for minority demographics. These data are the most important of communities in order to comply with the Federal Voting Rights Act. But never they should never be the starting point for creating maps.

The Method

Below I offer a simple redistricting approach. This approach creates plans that can be readily upheld by the courts.

Plans start with adhering to the 4 redistricting principles stated in the Pennsylvania Constitution – district must be compact, contiguous, equal population for Congressional district, and avoid splitting political boundaries.

Inputs

What is most important is what data you DO NOT use at the start. The only data needed is:

1. The target population - 765,402 people per Congressional district (per 2020 reapportionment)
2. Only 2 geographies
 - Geographies of political units of counties, townships and boroughs, and precincts.
 - Physical geography of rivers and mountain ridges.

There are another 3 geographies once all of the districts are drafted, but I explain them later.

The Process

Plans start at the top with whole counties and groupings of whole counties. The first set of 17 draft Congressional districts comprise of groupings of the 67 Pennsylvania counties with roughly the target population. Where I live, Chester (530,795), Delaware (569,779) and Montgomery (838,897) Counties would be initially drawn each as one district.

Next, neighbor to equalize populations in each district, whole townships and wards are moved from one district to its neighbor. Townships from Lancaster and Berks will be added to Chester and Delaware Counties. Montgomery County sheds townships to Lehigh and Bucks Counties. Move only whole townships and boroughs. Do not move lower-level precincts.

This next step is the most important. To equalize population between two districts, swap townships only along their shared border. Move one whole township, then the next adjacent township, then the next in a single layer adjoining the boundary. When the first layer is done, start a second layer of townships. Continue to work the two-county boundary, layer by layer. This approach assures compactness and contiguity.

Finally, when adding one more township exceeds the district target population, Stop. Only now is it time to move precincts from one township to add to the neighboring district until the populations are equalized. Again, add precincts one layer at a time. Do not split any more townships.

Output

Once the overall draft plan is created, it is time to look at two other geographies – demographic and Communities of Interest. Now is time to look at the hundreds of maps submitted.

The districts created using this top-down method likely already comply with racial requirements of the Voting Rights Act (VRA). If not, if racial, ethnic or communities of interest are split, one can fine tune the at the precinct level to achieve these redistricting objectives.

As an example, if a split community footprint or an opportunity to satisfy the community's request. Fine tuning with individual precincts can provide relief.

Note, we DO NOT use the 5th geography - partisan voter registration or past voting patterns.

Outcome

Last summer the two college students I coached used this method to create maps for Draw the Lines in a few short weeks. In fact, one did theirs during an all-nighter. The result - these students split 1st Place for the College Division. The method is that simple.

By using this simple method, splits in political units are minimized and districts remain compact. For this reason, it is also a method that the courts can understand is judicially manageable.

Parting ideas

We all look forward to great match-ups during the coming season with eager contenders and great play books. Now I am talking again about football – all athletes use the same playing fields, equipment, and same rules apply to all. We expect fair competition.

When establishing and implementing rules in Pennsylvania for Congressional redistricting, we expect an even playing field. Just as the athletes compete on skills, endurance, and teamwork, let the political candidates compete on their personal leadership, policy positions and grass roots organizing.

Thank you for your attentions.