Fair Districts Testimony
October 28, 2021
Catherine Turcer

Thank you co-chairs Speaker Cupp and Senator Sykes, and the rest of the members of the Ohio Redistricting Commission for the opportunity to give testimony on Ohio's next congressional district map. My name is Catherine Turcer and I am the Executive Director of Common Cause Ohio, a good government group located in Columbus Ohio, and also a member of the Fair Districts Ohio coalition.

I'm here today to present the three winning maps from the Fair Districts Congressional Mapping Competition. These maps not only comply with congressional district requirements set forth in both the US and Ohio Constitutions, they successfully create fair maps that keep communities together and prioritize regional interests. The result is three maps which are each vastly superior to Ohio's current congressional map on a number of specific criteria which will be detailed below.

In a word, these maps are not gerrymandered. If implemented, they would function to uplift the voices of all Ohioans, strengthen our democracy, and move our state forward. They represent not the wishes of one incumbent, political party, region, or interest group, but, the diverse voices of our state and our representational democracy.

I will now address several important issues regarding these maps, as follows:

1. The requirement for Equal population

2. The Voting Rights Act and opportunity for minority representation

3. The requirement to use Counties as building blocks, with few splits

4. The criteria used in Dave's Redistricting App to evaluate maps and using the efficiency gap to evaluate maps.

Equal population

To begin, the US Constitution and relevant case law holds that congressional districts must adhere to a population equality standard – commonly referred to as Equal Population. According to a Congressional Research Service brief on the legal framework for congressional redistricting, the US Supreme Court held in *Tennant v. Jefferson County Commission* (2012) that a congressional district population deviation of .79% is acceptable. Further, the Court emphasized that while states must strive for districts to have "as near as practicable" population, precise mathematical equality is not required.[1] 2021 census data shows Ohio's population is 11,799,448 with a congressional ratio of representation being 786,630 people. Using the .79% figure held in *Tennant*, Ohio's congressional districts have an allowable population deviation of

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[1] https://crsreports.congress.gov/product/pdf/LSB/LSB10639

6,214 people[2]. All three maps submitted by Fair Districts Ohio comply with this equal population standard.

Voting Rights Act & Minority Representation

Next, federal law and the Ohio Constitution require any congressional district map to comply with the Voting Rights Act, which in short, prohibits discriminatory voting practices or procedures, including minority vote dilution.[3] Currently, no court has expressly required Ohio to create majority-minority congressional districts,[4] however, Ohio has a history of taking racial data into consideration when developing new congressional districts. The three maps presented by the Fair Districts coalition protect the ability of minority voters to elect a candidate of their choice in parts of the state with a high density of minority voters, while simultaneously respecting municipal and county boundaries and equal population requirement Each of the winning maps include one majority-minority district and two opportunity districts.

Figure 1.

Minority Representation

	MAJORITY-MINORITY*	OPPORTUNITY DISTRICTS**
JOHN HAGNER	1	2
PAUL NIEVES	1	2
RILEY JONES	1	2
2012-2020 OH CONGRESSIONAL	1	1

* 50+% Minority voting age population
** between 35-50% Minority voting age population

Each of the winners of the Fair Districts Mapping Competition did some research in preparing their maps by reviewing community maps created by Ohioans using Districtr.org, free software created by Metric Geometry and Gerrymandering Group at Tufts University. This software enables citizen mapmakers to create maps describing their communities, sometimes called communities of interest. It is important to understand the most effective way to ensure representation is to hear from community members themselves.

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[2] Important to note that this is the total number cut both ways – meaning an individual district cannot be more or less than 3,107 from the ratio of representation.
[3] Ibid p.2
[4]https://www.lsc.ohio.gov/documents/reference/current/membersonlybriefs/134%20Redistricting%20in%20Ohio.pdf

Counties as building blocks

Further, the Fair Districts maps all comply with the new requirements for congressional districts set forth in Article XIX Section 2 of the Ohio Constitution. These requirements limit the total number of counties that can be split, and the number of times an individual county can be split.[5] Counties are the building blocks for congressional mapmaking. Additional requirements prescribed in Section 2 require Ohio's largest cities to remain whole, or as whole as possible if the municipality's population exceeds the congressional ratio or representation, the number of times two districts can share borders within counties, for districts to be compact, and for the map drawing authority to attempt to include at least one whole county in each district, except for when a county's population exceeds the congressional ratio of representation.[6] All three maps put forth by the Fair Districts coalition meet all of these requirements. Specifically, Article XIX Section 2(5) states, "of the eighty-eight counties in this state, sixty-five counties shall be contained entirely within a district, eighteen counties may be split not more than once, and five counties may be split not more than twice." Figure 2 shows the number of county splits included in each of the three Fair Districts maps, and also includes Ohio's current congressional map as a point of comparison. All three of the Fair Districts submitted maps utilize a minimal number of county splits. Additionally, the map submitted by Riley Jones is the only map submitted by Fair Districts to include a county that is split more than once.

Figure 2.

County Splits	
Hagner	**14** county splits a total of **14** times
Nieves	**12** county splits a total of **12** times
Jones	**14** county splits a total of **15** times
2012-2020 OH Congressional	**23** county splits a total of **32** times

Analysis using Dave's Redistricting App

Finally, empirical evaluations of the three Fair Districts maps demonstrate they are objectively superior to Ohio's current congressional map. The following empirical evaluations were produced by the popular redistricting software tool Dave's Redistricting App; the evaluations show the Fair Districts submitted maps outperform Ohio's current congressional map on multiple metrics.
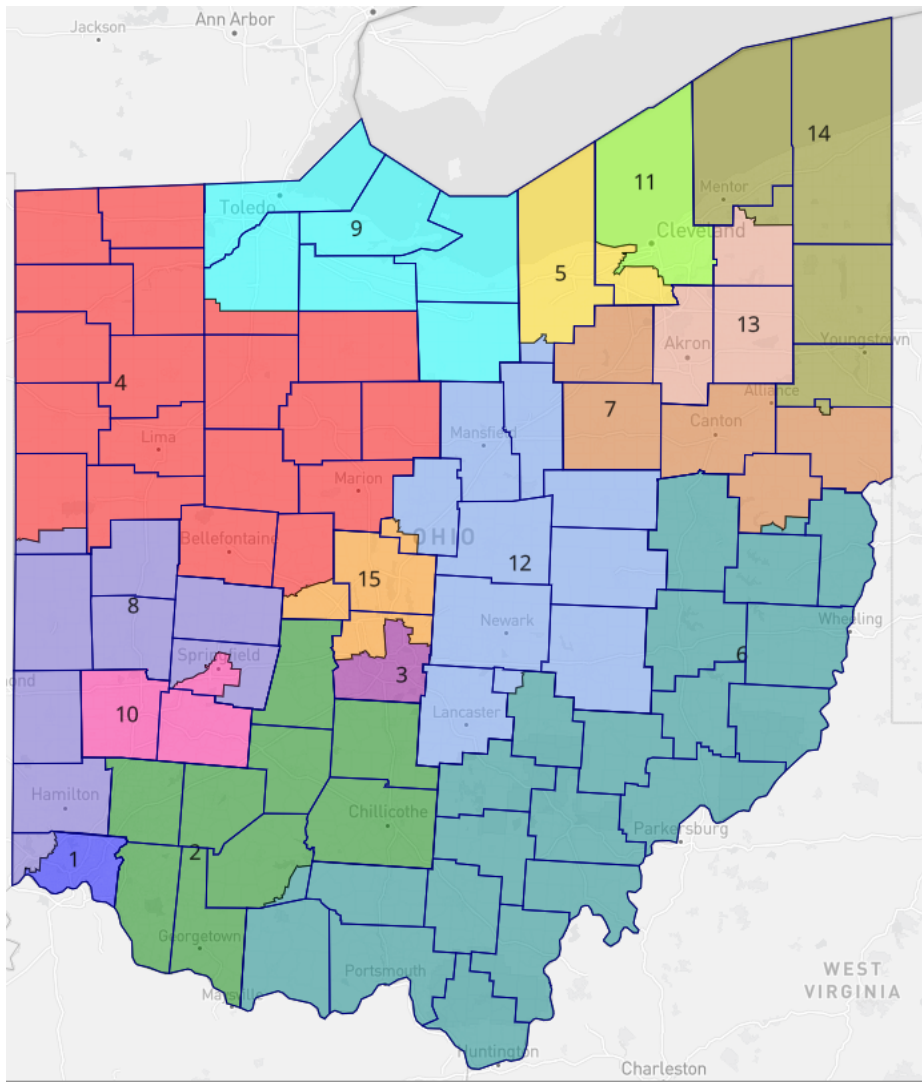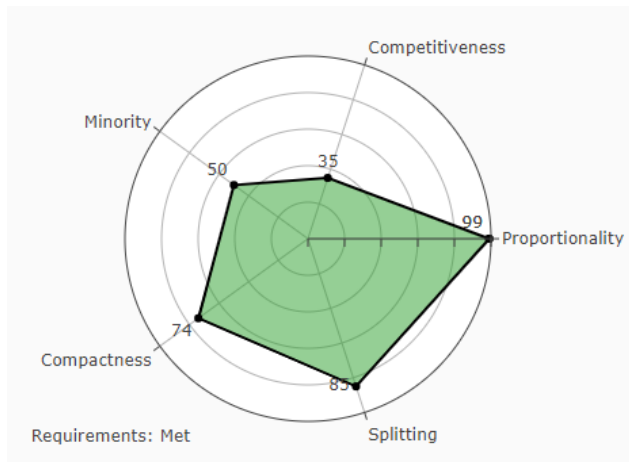
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[5] Ohio Constitution, Article XIX, Section 2(5)
[6] Ohio Constitution, Article XIX Section 2

Dave's Redistricting App uses five metrics to evaluate legislative districts: proportionality, competitiveness, minority representation, compactness, and splitting. Each district map is scored along these criteria, earning a numerical value for each metric, with higher numbers meaning better scores. Below, we include evaluations of the three Fair Districts maps, and Ohio's current congressional district map for the Commission's consideration.
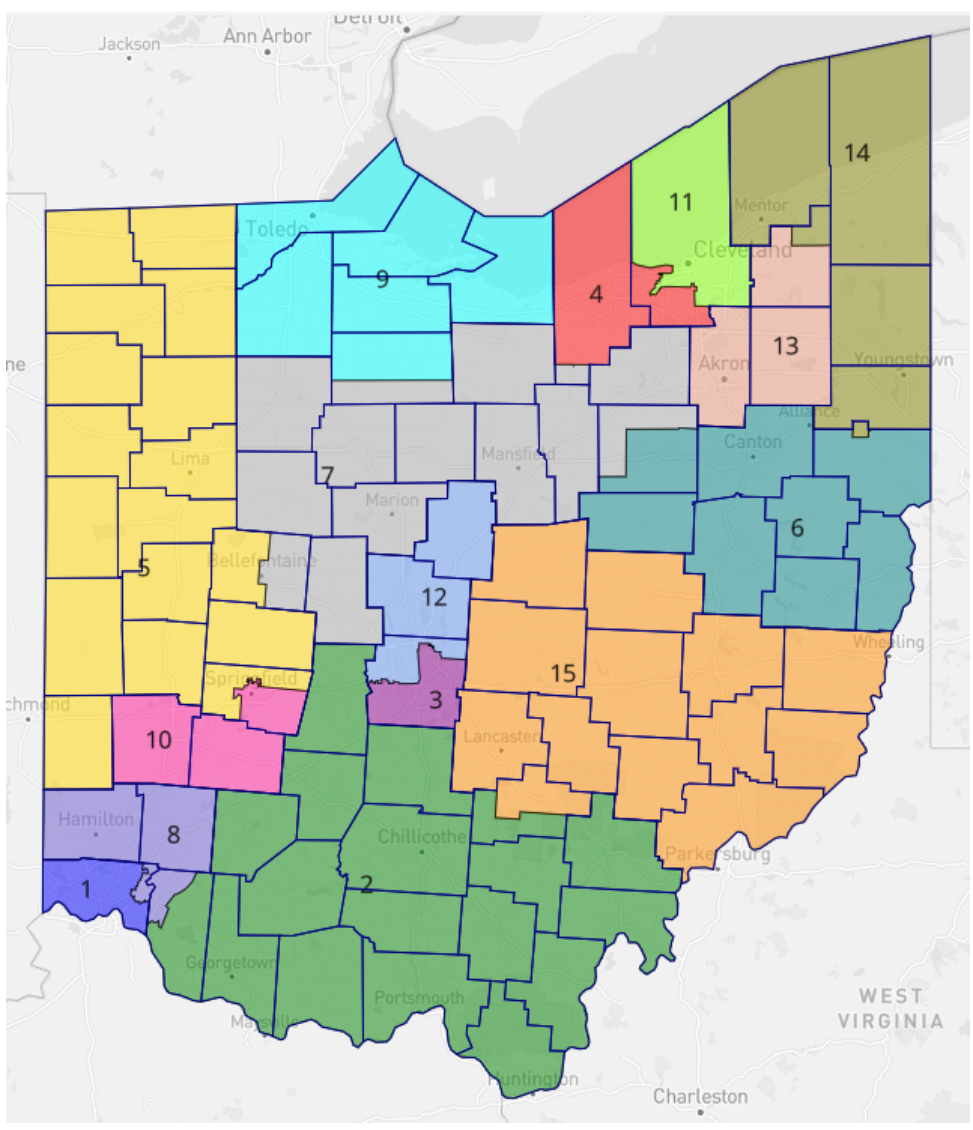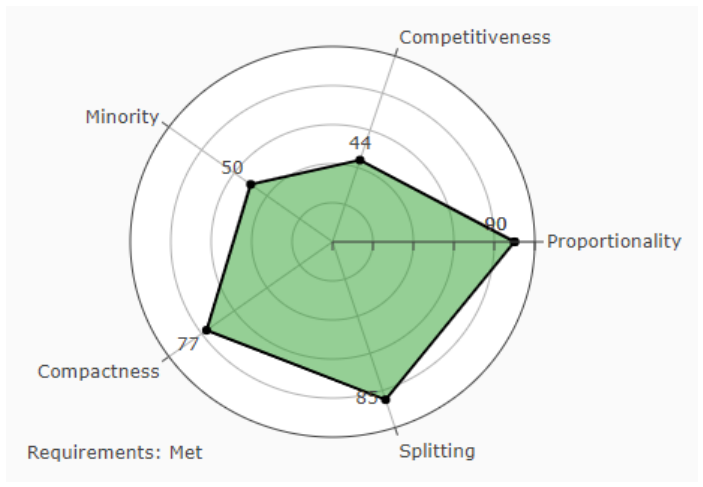
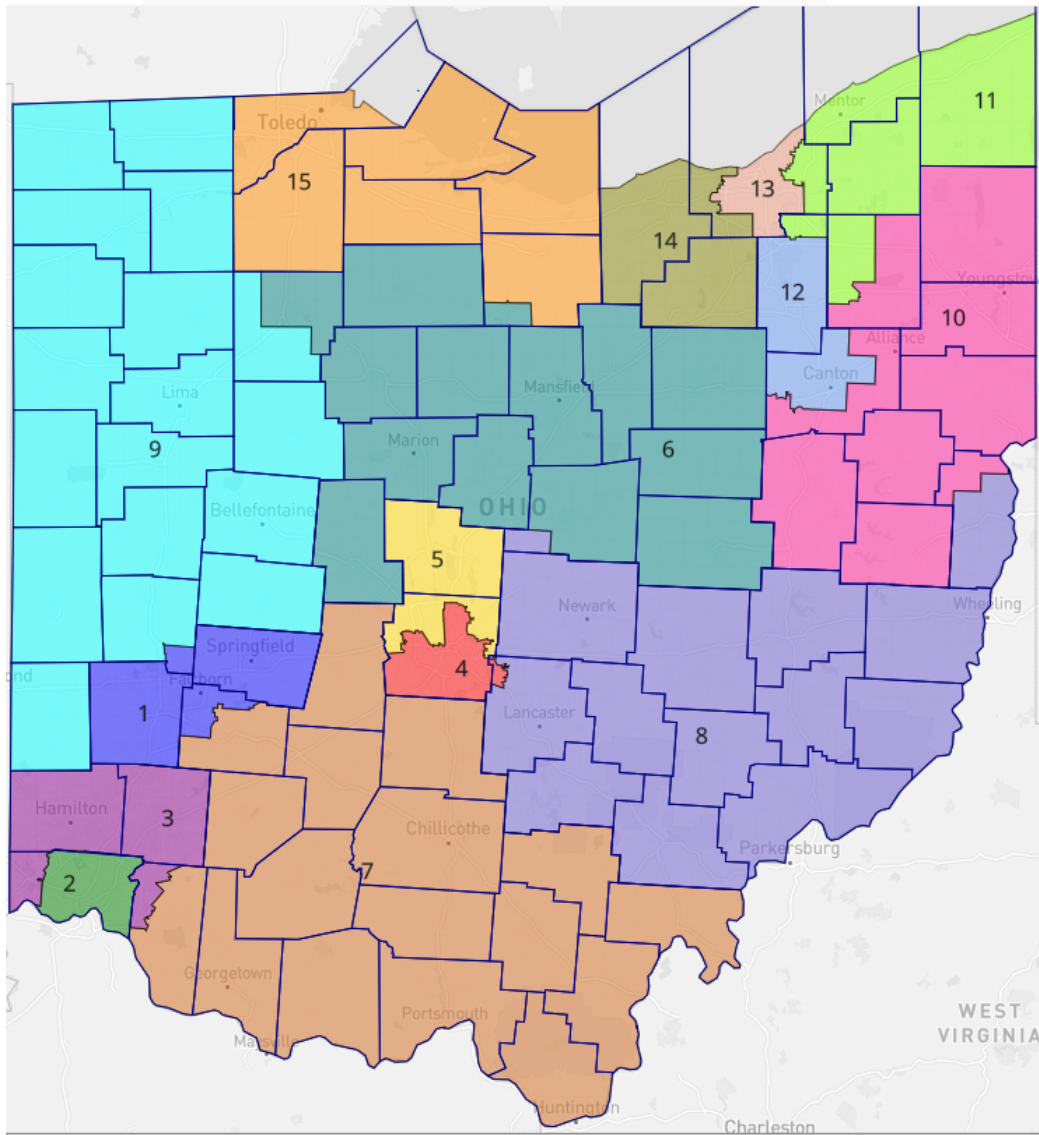**The Hagner Map: 346 Point Total**

https://davesredistricting.org/join/d0e96e3f-054c-42a0-9dbb-b14fbfdd2d40

The Nieves Map: 346 Point Total

The Jones Map: 325 Point Total

https://davesredistricting.org/join/5eabaeac-4368-4799-8a05-ec18055b9f7c
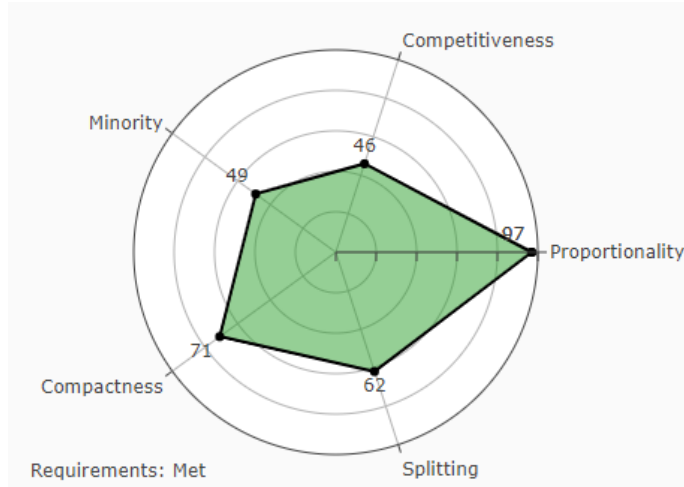
OH 2012 – 2020 Congressional: 121 Point Total

https://davesredistricting.org/join/8e70e334-d954-4883-9bb5-2c778d0405ea
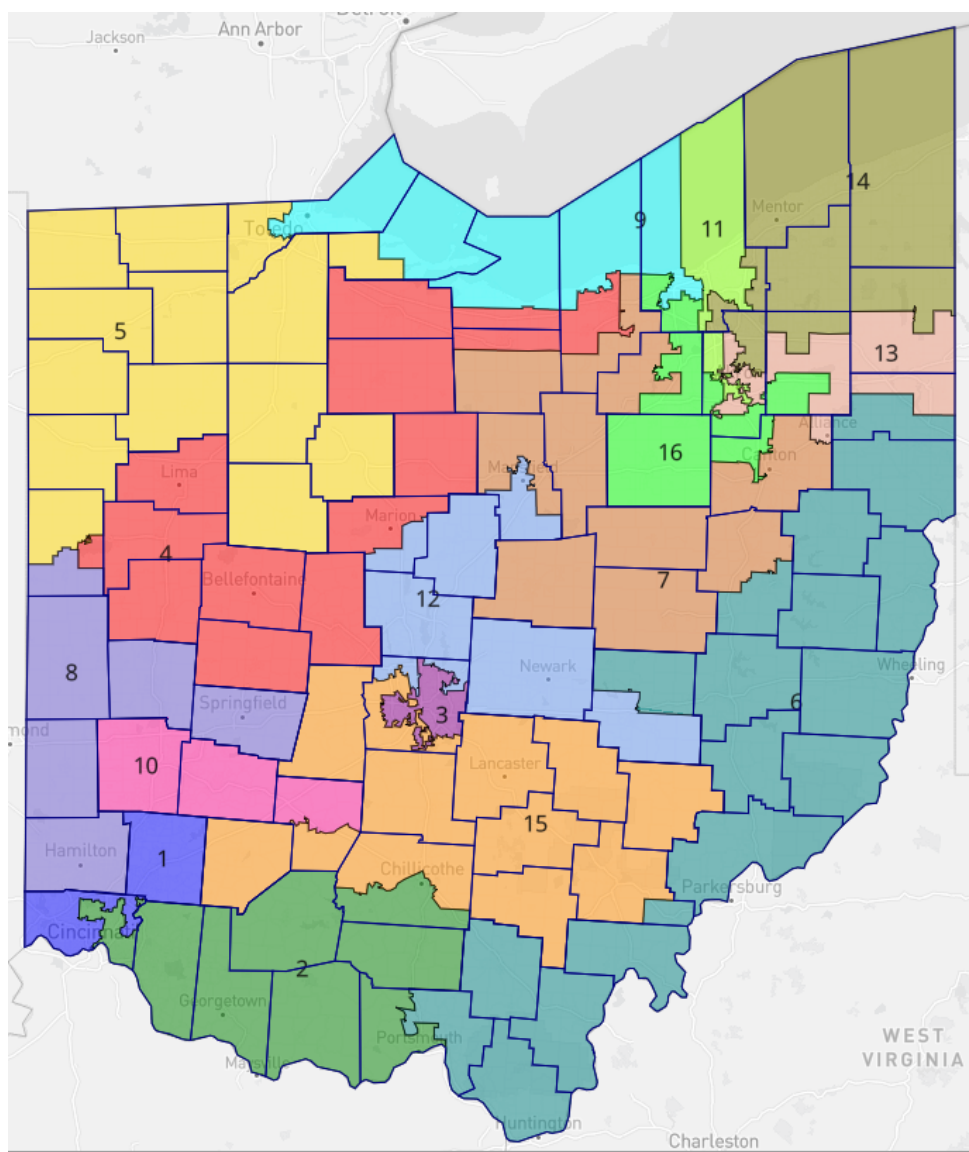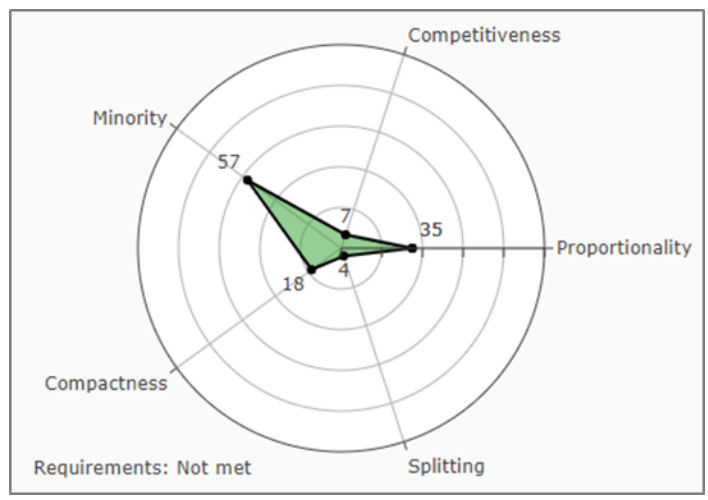
Figures 3 and 4 show the maps submitted by the Fair Districts coalition include several more competitive and hypercompetitive congressional districts compared to Ohio's current congressional map. For the purposes of these evaluations, competitive districts include a partisan index range between 55%-45%, and hyper-competitive districts have a partisan index of ±3%. Though competitiveness is not an enumerated requirement for Ohio's new congressional districts in the Ohio Constitution, one of the most important reasons millions of voters supported Issue 1 in 2018 was to create more competitive districts.

Figure 3.

Congressional Districts			
	Republican	Democratic	Competitive*
John Hagner	6	3	6
Paul Nieves	6	4	5
Riley Jones	6	3	6
2012-2020 OH Congressional	12	3	1

Figure 4.

Congressional Districts			
	Republican	Democratic	Hyper-Competitive*
John Hagner	7	7	1
Paul Nieves	8	6	1
Riley Jones	7	5	3
2012-2020 OH Congressional	12	4	0

The three Fair Districts maps also improve upon Ohio's current map in terms of minority representation. Currently, CD 11 is a majority-minority district stretching from Cleveland's east side and adjacent suburbs down I-77 through Richfield and into central Akron. The current congressional map also includes one minority opportunity district in CD 3. Common themes and outcomes emerge when evaluating the minority representation of the three Fair Districts maps. Specifically, all three maps create a coalition majority-minority district based in Cuyahoga County and the city of Cleveland, meaning the districts do not contain >50% BVAP, but rather *all* minority populations in the district reach the >50% VAP threshold. The other two minority opportunity districts established in all three Fair Districts maps are based in

Columbus and Cincinnati. All three maps created two coalition opportunity districts with the minority voting age populations falling between the 35%-50% VAP. Figure 5 illustrates the minority representation figures for each of these three districts and Ohio's current congressional map.

Figure 5.

Minority Representation			
	Cuyahoga County	Franklin County	Hamilton County
Hagner	**56.9% MVAP** **CD 11**	**47.2% MVAP** **CD 3**	**35% MVAP** **CD 1**
Nieves	**57.3% MVAP** **CD 11**	**46.9% MVAP** **CD 3**	**35% MVAP** **CD 1**
Jones	**51.3% MVAP** **CD 13**	**46.3% MVAP** **CD 4**	**35.4% MVAP** **CD 2**
2012-2020 Congressional Map	**61.9% MVAP** **CD 11**	**48.6% MVAP** **CD 3**	**N/A**

Finally, cracking and packing -- the building blocks of gerrymandering -- can be measured through *Efficiency Gap Analysis*. This analysis captures in a single number the extent to which district lines waste (crack and pack) one political party's voters more than the other party's voters. In other words, how many votes are "wasted" because one candidate gets excessively more votes than are needed for a simple victory (excess votes have been **packed** into the district) or "wasted" because a candidate has no chance of winning at all (the party's votes have been **cracked** across several districts so that none of the candidates have a chance of achieving a majority).[7] **The lower the number of a district's efficiency score, the fewer "wasted" votes it contains and thus the less gerrymandered it is.** Figure 6 shows the efficiency gap scores for all three of the Fair Districts maps and Ohio's current congressional map.

Figure 6.

Efficiency Gap Analysis	
Hagner's Map	4.0%
Nieves' Map	4.4%
Jones' Map	3.3%
2012-2020 Ohio Congressional Map	14.1%

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[7] https://www.caliper.com/glossary/what-is-the-efficiency-gap-measure.htm

It's clear that each of the maps presented today keep counties together. Districts are compact and the maps are proportional. Each of the mapmakers was thoughtful about the choices he made. In the submission of my written testimony, I included the narratives that accompanied the maps. These descriptions provide greater insight into the challenges of keeping communities together and highlight that while there are trade-offs, it is possible to create maps that keep counties together and do not unduly favor one political party over the other.

Notable Features of John Hagner's map:

- The map is purposeful in keeping the counties of the Appalachian region in a single congressional district as a community of interest (District 6)
- Creates District 3 (Columbus area) to maximize opportunity for minority representation, while respecting county boundaries and legal population parameters
- Shows truly impressive precision in population numeracy. All districts are +/- **3 people** of the target population of 786,630

Notable Features of Paul Nieves' map:

- Districts are visibly compact and certainly contrast with the existing congressional map
- No county is split more than a single time
- Fair Districts Ohio community maps were used to identify communities of interest in order to aid in creating meaningful congressional districts

Notable Features of Riley Jones' map:

- Does exceptionally well in following municipal boundaries, particularly those within Franklin County
- Unifies the Akron-Canton corridor by keeping them in a single district

Each of the winners participated in two webinars. In the first webinar on October 13, the mapmakers demonstrated their district lines and explained their choices. Members of the public provided suggestions to improve the maps. On October 20, the winners participated in a second webinar in which they made changes in response to the recommendations. This process highlighted the benefit of public participation in the mapmaking process and how maps can be significantly improved with public input.

Changes to maps – Demonstrating the process that the Ohio Redistricting Commission is supposed to follow.

- *John Hagner:*
    - In his original map, John elected to instead keep the Somali population whole – but that divided Westerville and Gahanna into two congressional districts. He made changes to keep Westerville and Gahanna whole.

- *Paul Nieves:*
    - Made edits so that fewer rural counties were split.

- *Riley Jones:*
    - Made changes so that the Cincinnati area district follows municipal lines entirely.
    - Eliminated a county split in the Dayton-Springfield district.
    - Made change so that Cuyahoga County is split only once.

Conclusion

With dedication and time, attention to detail, respect for all Ohio voters, and the necessary expertise, it is clearly possible to create fair, functional, constitutionally compliant congressional maps for Ohio. We hope our official mapmakers are inspired and encouraged by the work of these citizen mapmakers and will rise to the challenge ahead of them for the sake of all Ohio. We admonish you to step up and get started on this monumentally important and urgent task as soon as possible.

Overall Narrative from John Hagner

Link to 1st place map created by John Hagner:
https://davesredistricting.org/join/d0e96e3f-054c-42a0-9dbb-b14fbfdd2d40

My goal in drawing these maps was to use the new criteria to draw the fairest map possible. Centuries of segregation and redlining, and more recent educational polarization, mean that voters are not evenly distributed across the state. Democratic areas tend to be more Democratic than Republican areas are Republican, which means "fairest" isn't the same thing as "neatest and tidiest". I tried to balance proportionality, compactness, and competitiveness, while staying focused on minimizing city and county splits and true to both the letter and spirit of the law.

I think for the most part these maps are successful in that attempt. In the US House seats, 9 out of 15 voted for one of the four most recent top-of-the-ticket Democrats (Biden, Cordray, Brown, Clinton), and 11 out of 15 voted for one of the four most recent top-of-the-ticket Republicans (Trump, DeWine, Renacci, Trump). 4 of the 15 were within 5% in the 2018 Governor's race, the closest of those four elections. In the Ohio House, 53 out of 99 were carried by a recent statewide Democrat, and 66 were carried by a recent statewide Republican. 20 of 99, more than a fifth, split their ballots between statewide candidates, and the 2018 Governor's race was within 10 points in 23 of them. In the Ohio Senate, 17 of 33 were carried by a recent statewide Democrat, 23 of 33 were carried by a recent statewide Republican. Seven split their tickets. All of these slightly under-represent Democrats, which is unfortunate, but the splitting and compactness standards in the Ohio Constitution don't allow for true proportionality in a world where Democratic votes are more concentrated than Republicans. The maps are substantially more reflective of the will of Ohioans than the current ones, of course.

Fairer maps are possible without sacrificing minority representation. On the Congressional map, CD 11 is a plurality Black district entirely contained within Cuyahoga County, and CD 3 avoids splitting the Black communities of Central Ohio. This State House map has five majority Black districts in Cuyahoga County, along with one coalition district with a large Hispanic community. There are three majority Black districts and another plurality Black district in Franklin County, two more than there are now, and two in Hamilton County. Montgomery County and Lucas County each have one majority Black district, and Summit County has a majority People of Color district. Black communities in Stark and Mahoning Counties, and Hispanic communities in Lorain, are kept together in single districts. All in all, 11 State House districts are majority Black, up from the current number, three more are majority-minority, and minority communities have opportunities to elect their candidates of choice in many more.

Congressional Notes

The basic shapes of the Congressional districts are based on the existing map, but made fairer and more representative. CD 11 can continue to be a fully VRA compliant district where Black voters can elect their candidates of choice while staying entirely in Cuyahoga and containing the entire city of Cleveland, in line with the Ohio Constitution. CD 1 and CD 3 are wholly contained in their counties, keeping cities whole and minority communities together, while CD 15 reflects the growing suburban communities in Central Ohio.

The map has five competitive seats, with three true toss-ups in CD 5 (Western Cuyahoga and Lorain), CD 9 (Toledo, Wood Co, North Coast), and CD 13 (Summit, Portage, Geauga). CD 14 (Mahoning Valley, Ashtabula, Lake) and CD 10 (Montgomery, Greene, Clark) would usually elect Republicans, but in the right circumstances are competitive as well. The remaining Republican seats are reorganized to make more geographic sense, with northeast Ohio, central Ohio, Appalachian Ohio, southwest Ohio, and northwest Ohio all having districts contained within them. The numbering system reflects the current map – current district 5 was broken up fully, and its number used for the new district closest to current district 16.

Legislative Notes

Unlike with the Congressional lines, the House lines started as a blank slate. I tried to line up the numbers where possible with existing lines, but the extreme gerrymandering of the current lines and the population shift south and west makes that imprecise.

In the urban centers, the first priority was maximizing the number of Black majority districts, and the second priority was minimizing county and city splits. Only three cities in Cuyahoga are split at all: Cleveland, because it has to be, Cleveland Heights, for VRA reasons, and Middleburg Heights, for population balancing. In Summit County, one district is entirely within Akron, and no other cities are split. In the Valley, Warren and Niles are kept together in one district, with Youngstown in another. In Stark, all of Canton is in one district, and the cities of Lorain and Elyria are kept entirely in their districts in Lorain County.

In Central Ohio, three Black majority and one Black plurality seat are possible without splitting any city except Columbus, which has to be split. Grove City, Hilliard, Dublin, Upper Arlington, Westerville, Worthington, New Albany, Gahanna, Reynoldsburg, Whitehall, and Bexley are all kept together, as are the Delaware County precincts of Columbus and the city of Delaware.

In Hamilton County, the only split cities are Cincinnati, which must be, and Woodlawn, which is required for VRA compliance. In Butler, West Chester, Hamilton, and Middletown are all kept whole within their districts, and Dayton is only split once in Montgomery.

Neater and cleaner lines would be possible if more cities and counties could be split. The most exotic lines on this map – the panhandle of HD 92 in Pickaway and Licking Counties, the forked tongue around Maumee in HD 46, the snail antennae of HD 41 – are that way because cleaner lines would require additional splits in cities that are avoidable if you don't mind some squiggles. In smaller counties that needed to be divided, care was taken to keep towns whole. Again, slightly neater lines could be achieved without that, but the spirit of the law on splits is very clear.

OH 2022 Congressional Map Explanation

Riley Jones

Link to 3rd place map created by Riley Jones:
https://davesredistricting.org/join/5eabaeac-4368-4799-8a05-ec18055b9f7c

The map I have submitted for this competition is foremost based upon my own personal understanding of Ohio's political and cultural landscape. I am a young adult and have lived most of my life in Loveland, a Cincinnati suburb. I attended high school in Montgomery, another Cincinnati suburb, and recently graduated from The Ohio State University in Columbus. I do not claim to be a political scientist, statistician, or expert in map-making. I do, however, consider myself to be a life-long resident of Ohio with a good grasp on the various cultural regions that make up the state. It is solely with this knowledge, background, and a clear conscience - focused on the fair representation of the Ohio electorate - that I drew this proposed map.

Most Ohioans have heard the term "Ohio's three Cs" to refer to three major cities known well within and outside of the state – Cincinnati, Columbus, and Cleveland. Perhaps lesser known, but no less important, cities within the state are Toledo, Dayton, Akron, Canton, and Youngstown. Ohio's political landscape is interesting due to the fact that outside these named cities, Ohio is vastly rural and Republican-leaning. There is little to no evidence of Democrat-leaning or competitive rural regions of the state that are extant in other Midwestern states such as Wisconsin, Iowa, and Minnesota. Over the years it seems that the Ohio electorate has self-sorted itself into heavily Democratic urban centers surrounded by heavily Republican rural areas. This unique political makeup of the state presents a challenge to map-drawers who want to ensure Democratic voters have proper Congressional representation without utilizing gerrymandering tactics, such as splitting large urban centers to extend their influence across multiple districts, that we are trying to put an end to.

I took an iterative approach to my map to ensure that it is both fair and meets the redistricting requirements set forth by state law. First, I started with the big cities – Cincinnati, Columbus, Cleveland, Toledo, and Dayton – and tried to see if I could create a single district out of either the city alone, the county the city is primarily located in, or a collection of counties including and surrounding the city. I then moved to each city's respective suburbs and attempted to group those together in a single district. What I

was then left with was Ohio's rural regions, where I focused on making districts which were compact and primarily composed of whole counties with very little splitting. I then followed up this process by fine-tuning each district, trimming/adding precincts and minimizing county splitting until I arrived at an overall map that I believe "makes sense" and statistically does a much better job at representing the Ohio electorate than the present map.

The politics of any state are transient and subject to change with each election cycle. However, COIs are more constant, reliable, and permanent fixtures of daily life which are more familiar and tangible for the electorate. For this reason, I was content with falling short of a 100% rating for political proportionality (my map is 5.21% disproportional in favor of the Republicans) in favor of protecting the grouping of COIs. The political landscape of Ohio naturally lends itself to have a slight Republican bias in Congressional representation since Republican-leaning precincts cover a much greater surface area of the state.

In this map, 13 counties are split once, and only one county, Cuyahoga, is split twice.

I would like to conclude my narrative with a brief description of the "under the hood" thinking that went behind the drawing of each district.

Ohio 1st – The Greater Dayton Area. This district includes all of Montgomery County, all of Clark County, and small pieces of Greene and Miami County. The cities of Dayton and Springfield are the large population centers of main focus within the district, and all the suburbs in between such as Kettering, Fairborn, and Beavercreek are included. This has the potential to be a competitive district but is more Republican leaning according to recent election data.

Ohio 2nd – The City of Cincinnati. This district includes all of Cincinnati as well as immediately surrounding communities such as Norwood, Blue Ash, Colerain, and Indian Hill. This district was the outgrowth of trying to make one district out of Hamilton County. Hamilton County is too populous to be one district, however, so the western end of the county, which is more sparsely populated and Republican-leaning, was taken off and included in the 3rd district. This district would be reliably Democratic but has the potential to be competitive due to Cincinnati's record of leaning Republican in some races.

Ohio 3rd – Cincinnati Suburbs and Miami Valley. This district is a mix of rural areas in Warren County, rustbelt communities in Butler County, and some remaining Cincinnati suburbs such as Mason, Loveland, and Milford. I would consider all these communities to be within the "Cincinnati Area" and similar in nature enough to constitute their own district, which is likely to be dominated by the working class. This would be reliably Republican.

Ohio 4th – Columbus + Southern Suburbs. The city of Columbus is too big to be its own district, so it had to be divided in a rational way that would not dilute its political sway in the central Ohio region. This district includes just about all of the City of Columbus, with the important exclusions of The Ohio State University and surrounding neighborhoods such as the University District, Victorian Village, Italian Village, and Upper Arlington (which is a separate municipality entirely). It also includes all of the southern half of Franklin County with communities like Grove City and Groveport, as well as Pickerington in neighboring Fairfield County. This district also includes just about all of Columbus's Black community. This would be reliably Democratic.

Ohio 5th – Columbus + Northern Suburbs. This district includes the remainder of the City of Columbus (mainly the areas around the northern stretch of High St. and OSU Airport) and all of Columbus's northern suburbs such as Dublin, Westerville, Powell, Hilliard, and Worthington. This district also includes all of Delaware County which, from my experience at Ohio State, can be acceptably included in the "Columbus Area". This district would be competitive with a Democratic lean.

Ohio 6th – North-Central Ohio. This district encompasses most of the rural counties between Columbus and the Lake Erie shore. Within this district are larger communities such as Mansfield, Wooster, Ashland, and Upper Sandusky. Reliably Republican.

Ohio 7th – Southern Ohio. Another rural district encompassing Ohio's southern counties along the Ohio River and further inland towards Columbus. Communities include Portsmouth, Chillicothe, and Xenia. Reliably Republican.

Ohio 8ᵗʰ – Eastern Ohio. This district not only includes most of Ohio's Appalachian counties bordering West Virginia, but also large communities east of Columbus such as Newark, Zanesville, Lancaster, and Athens. Athens is heavily Democratic due to the presence of Ohio University, but it is impossible to group it with other Democratic areas in Columbus without blatantly gerrymandering the area. Reliably Republican.

Ohio 9ᵗʰ – Western Ohio/I-75 Corridor. This vertically-oriented district extends from Preble County west of Dayton to Williams County on the border with Michigan. It groups together towns and cities of various sizes that are grouped nearby I-75 and share a similar rural, "small-town America" feel. This would be the most Republican-leaning district in the state.

Ohio 10ᵗʰ – Youngstown Area. This district includes all of Youngstown and its surrounding communities such as Warren and Niles. To increase the district's population, more rural and working-class counties south of the area are included. Similar to Athens, it is hard to group the Democratic stronghold of Youngstown with other Democratic areas nearby. This district nonetheless is united by a coalition of farmers and the working class. Opposite to the proposed 2ⁿᵈ District, this district would be reliably Republican but could enter into competitive territory.

Ohio 11ᵗʰ – Northeast Ohio. This district includes Lake and Ashtabula Counties, as well as taking slices of Cuyahoga, Summit, and Portage Counties. The aim of this district was to include many of Cleveland's suburbs and communities along or near the Lake Erie shore to the east of the city. Suburbs included are Twinsburg, Shaker Heights, Mentor, Kent, and Solon. This district would be extremely competitive as it is nearly split even politically.

Ohio 12ᵗʰ – Akron-Canton Area. Most people in Ohio have likely heard these two cities referred to together as one region rather than each city individually. I felt it was important to fit these two cities in one district considering their similarities in industry and size. This would be another very competitive district.

Ohio 13th – The City of Cleveland. This district includes all of the City of Cleveland and immediately surrounding communities. Notably, Cleveland's Black communities such as Euclid and East Cleveland are also included. This would be the most Democratic-leaning district in the state.

Ohio 14th – Lakefront Communities West of Cleveland. I wish I had a better name for this district. However, it was the goal to include communities along Lake Erie in the greater Cleveland area such as Lakewood, Rocky River, Avon Lake, and Lorain in one district. This district also reaches into transitional areas from suburban to rural within Lorain and Medina Counties. This district would be very competitive.

Ohio 15th – Toledo/Sandusky Area. This district is based around Toledo, whose county, Lucas County, is not big enough to be a district on its own. Therefore, more lakefront counties are included such as Ottawa, Erie, and Sandusky Counties. This district would lean Democrat but could easily become competitive.

Narrative Contestant Paul Nieves

Link to 2nd place map created by Paul Nieves:
https://davesredistricting.org/join/824d95df-0cf0-4e78-a7f6-641baeebbcbf
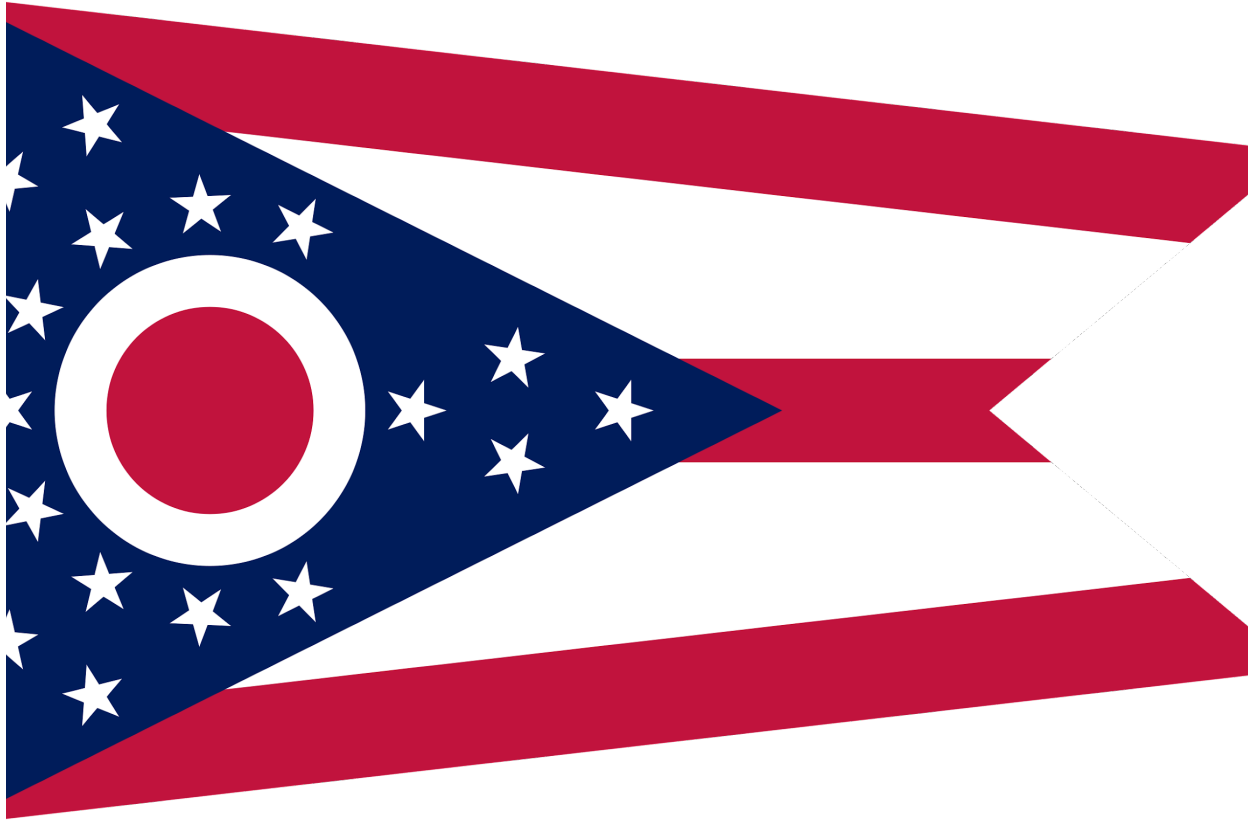
Fair Districts Ohio - Congressional Mapping Competition

09.13.2021

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Overview

My goal in drawing up Ohio's Congressional Districts was to create a proportional map with minimal partisan bias to the extent Ohio law, and the state's political geography would allow. What you'll notice is that this plan has negligible partisan bias, meaning that it doesn't favor any party, according to the analytical measurements utilized in Dave's Redistricting App. The analysis section is broken up into 5 categories that measure fairness. Also, The map's population deviation is within the legally acceptable range and incumbency wasn't considered. This narrative will detail how my map plan encompasses a balance of compact, fair districts that ensures competitiveness, and protection of communities of interest (COI), including minority groups, with minimal county splitting.

Analysis

I. Partisan Fairness/Proportionality

Both the Partisan and Turnout Biases are effectively 0, and the map's other Bias Measures indicate that this map doesn't favor one party or the other. This helps contend with the state's Geography Bias which hurts Democrats. A perfectly proportional map would have 7 districts for Democrats. However, the state's political geography benefits Republicans, virtually yielding them an extra district/seat.

Partisan Bias	-.04%
Turnout Bias	-.05%
Votes Bias	-.59%

Seats Bias	-1.48%
Efficiency Gap	1.70%

II. Competitiveness

There are multiple competitive districts across the state that are likely to remain competitive throughout the decade even with current trends. Districts 4, 9, & 13 have similar partisan leanings; their composite scores average to 3.3% in Democrats' favor. Districts 10, 12, and 14, have slightly stronger partisan leanings, however none are more than 7.4%. This is accomplished via a combination of large and small cities in their respective regions. For example, Toledo and other small cities throughout the Lake Plains in the 9th, Dayton and Springfield in the 10th, and the Youngstown and Warren areas in the 14th, keep these districts competitive even as other parts of the district trend Republican.

On the other side of the spectrum, Morrow County helps to keep the 12th district competitive, as the rest of the district trends towards Democrats, while also keeping the district from dividing another county.

Furthermore, the 10th becomes a bellwether district, meaning that its partisanship, based on the composite score, which includes Pres 2016, 2020, Sen. 2016, 2018, Gov. 2018, & Att. Gen. 2018 election results, lines up exactly with the statewide composite score.

III. Compactness/Splitting

These districts are visibly compact, certainly contrasting with the current map. Its Polsby-Popper Score is 0.4114, and many districts have higher individual scores. Most of the oddly shaped district lines are due to the state's boundaries such as the Ohio River and the Lake Erie shoreline, or municipal boundaries like those of Cleveland.

Only 12 counties are split and no county is split more than once. Columbus, being more populous than a district's ideal population, is the only major municipality split, and is in accordance with Ohio Constitution Article XIX, Section 2, Division (C)(2). There are a few other municipal splits, like Bellfontaine and Salem, but these cities traverse multiple townships. The only other noticeable split is in Clermont County's Union township, which still follows the Withamsville boundary. Additionally, there's minimal cracking or packing, which may be obvious, but is also evident from the map's Declination of 62°.

IV. Minority Representation

The 11th can still elect a Black Congressperson with a plurality Black Voting Age Population (VAP). The 3rd is now plurality White, and although it retains a mostly White VAP, it elected a Black Representative when the district had a larger White VAP in 2012. Cincinnati's Black communities are kept within the 1st district, which slightly increases the district's Black VAP.

V. Communities of Interest

Finally, these districts follow regional boundaries to the extent practicable, with the most consistent boundaries being Metropolitan and Micropolitan Statistical Areas (MSAs), as per the Census. Other aspects used to determine COIs included: Fair Districts Ohio Community Maps, geographic regions, media markets, connectedness (major roadways), and some areas, as defined by the League of Women Voters®, with "shared socio-economic, ethinc, geographic" interests.

Trying to adhere to all of this criteria can be very challenging, but luckily many aspects overlap. For instance, most of the 14th district is comprised of the Ashtabula and Youngstown MSAs, which overlaps with the Youngstown Media Market. These areas have similar income levels, and main industries, manufacturing, healthcare, and retail, as well as a major roadway, Ohio State Route 11, which runs through it from one end to the other. Additionally, the

entire Eastgate Regional Council of Governments is in the district, according to the Ohio Department of Development.

Some larger districts must cross over into different regions. However, these districts have major highways that run straight through them, like the 15th, which connects Cambridge and Zanesville to the Columbus suburbs and exurbs via I-70.

While these are but two examples, all of the districts adhere to these criteria to the greatest extent practicable.

Summary

Overall, my district plan: is proportional, compact, and respects communities of interest, and creates new competitive districts throughout the state.

Districts Overview - Below is a brief description of each district

1. A Democratic leaning district in Hamilton County that keeps Cincinnati whole and splits no municipalities.

2. A solidly Republican Southern Ohio district including the counties of: Adams, Athens, Brown, Clermont (part), Clinton, Fayette, Gallia, Highland, Hocking (part), Jackson, Lawrence, Madison, Meigs, Pickaway, Pike, Ross, Scioto, and Vinton.

3. A solidly Democratic district, which is now a plurality White in Franklin County that more neatly respects municipalities.

4. A competitive district in the Cleveland CSA Counties include: Cuyahoga (part) and Lorain (part).

5. A large rural Western Ohio district that keeps its small cities together. The most Republican leaning district. Counties include: Allen, Auglaize, Champaign, Clare (part), Darke, Defiance, Fulton, Henry, Logan (part), Mercer, Miami, Paulding, Preble, Putnam, Shelby, Van Wert, and Williams.

6. A solidly Republican, primarily Appalachian district. Counties include: Carroll, Columbiana (part), Harrison, Holmes, Jefferson, Stark, Tuscarawas, and Wayne (part).

7. A solidly Republican North Central Ohio district that takes in its small cities. Counties include: Ashland, Crawford, Hancock, Hardin, Huron, Logan (part), Lorain (part) Marion, Medina, Richland, Seneca (part), Union, Wayne (part), Wyandot.

8. A solidly Republican suburban and exurban district in Cincinnati MSA. Counties include: Butler, Clermont (part), Hamilton (part), and Warren.

9. A competitive Lake Plains district mostly in the Toledo MSA. Counties include: Erie, Lucas, Ottawa, Sandusky, Seneca (part), and Wood.

10. A competitive district mostly in the Dayton MSA. Counties include: Clark (part), Greene, and Montgomery

11. A plurality Black district kept in Cuyahoga County. The most Democratic leaning district. Splits no municipalities.

12. An urban/suburban, Democratic trending competitive district in the Columbus MSA. Counties include Delaware, Franklin (part), and Morrow.

13. A competitive Northeast Ohio district mostly in Akron MSA. Counties include: Geauga (part), Portage, and Summit.

14. Another competitive Northeast Ohio district that's trending Republican. Counties include: Ashtabula, Columbiana (part), Geauga (part), Lake, Mahoning, and Trumbull.

15. A solidly Republican suburban/exurban district mostly in Columbus MSA that takes in smaller cities heading west toward the Ohio River. Counties include: Belmont, Coshocton, Hocking (part), Fairfield, Guernsey, Knox, Licking, Monroe, Morgan, Muskingum, Noble, Perry, and Washington.

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