

Ohio Redistricting Competition – Competition Rules and Scoring

(revised with examples from model of current congressional districts)

Background and Purpose of Competition

The goal of the Ohio Redistricting Competition is to demonstrate that an open process based on objective criteria can produce fair legislative districts in Ohio. During the competition, it is our belief that a robust public conversation about the process can occur, leading to the development of the best possible redistricting recommendations for consideration by the Ohio General Assembly.

Although competition entrants will be redrawing only congressional district boundaries, the scoring factors involved can be applied to redistricting at any level of state or local government – most importantly, to General Assembly districts. Applying the factors at the congressional district level provides a demonstration of how they can be used to ensure fair and representative government.

The Ohio Redistricting Competition represents the culmination of over nine months of planning amongst the League of Women Voters of Ohio (LWVO), Ohio Citizen Action, Common Cause, Ohio Secretary of State Jennifer Brunner, Former State Representative Joan Lawrence, and State Representatives Dan Stewart and Vernon Sykes.

A Brief History of Redistricting in Ohio

While redistricting is an inherently political process, the Ohio Redistricting Competition provides a new tool in the ongoing effort to minimize undue political influence in the redistricting process. Of course, manipulating the boundaries of electoral districts to benefit an individual or a political party is a practice nearly as old as the American republic itself. “Gerrymandering” became part of the American political lexicon in 1812, when members of the Anti-Federalist Party, led by Governor Elbridge Gerry, altered legislative district boundaries in Massachusetts in an attempt to win more seats.¹ Since then, political manipulation of legislative districts has become increasingly detailed and effective through the use of computers and other mapping tools.

From 1851 to 1967, Ohio’s General Assembly districts were apportioned by county, not by population. In 1963, the United States Supreme Court ruled that this type of “county unit” system violated the United States Constitution.² The current process for apportionment and redistricting of legislative districts was enacted by Ohio voters on November 7, 1967. Under this process, a five-member Apportionment Board composed of the Governor, Secretary of State, Auditor of State, one appointee of the Speaker of the Ohio House of Representatives and legislative leader in the Senate of the Speaker’s

¹ Black’s Law Dictionary 708-09 (8th ed. 2004).

² *Gray v. Sanders*, 372 U.S. 368 (1963).

party, and one appointee of the legislative leaders of the minority party in the Ohio House of Representatives, is charged with redrawing legislative districts following each decennial census.

Redistricting for Ohio's congressional districts is controlled by the General Assembly. During the late 19th century, Ohio's congressional districts were redrawn many times as partisan control of the General Assembly frequently shifted between the major parties. The state's congressional districts were also configured to include an "at large" district during parts of the early and mid-20th century. In recent decades, the General Assembly has only redrawn Ohio's congressional districts following each decennial census.

Since the mid-1970s, a number of individuals and groups in Ohio have been concerned about excessive manipulation of legislative and congressional district boundaries to achieve political goals. Some of these individuals were state legislators, while others were affiliated with organizations such as the League of Women Voters of Ohio and Common Cause Ohio. Former State Representative Joan Lawrence and State Representative Vernon Sykes were leaders in this effort during the 1980s, sponsoring several proposals to reform the redistricting process. In 1990, the Center for Research into Governmental Processes, Inc., sponsored a statewide districting competition to increase public dialogue about the redistricting process – an important forerunner to this competition.

Procedure

In crafting proposed redistricting criteria, competition partners paid special attention to the need for balance between traditional redistricting principles long recognized by courts and modern redistricting principles that can help achieve fairer districts in Ohio. In the competition, these principles will be applied in a quantifiable manner to each proposed congressional plan.

For purposes of this competition, participants will be placed in the role of a redistricting authority in the year 2001. The 2000 Census data has just been received and Ohio's congressional districts must be re-drawn. The new districts must account for shifts in the state's population *and* the need to reduce the number of congressional districts (from 19 to 18 districts) because of national demographic trends.

Each plan must include **18 individually-numbered congressional districts** that combine to cover the entire area of the state. No portion of the state may be omitted. Furthermore, districts must be created by combining voting **precincts**. Although Census Bureau data is divided into smaller units (such as census blocks) and actual redistricting plans may split precincts, this competition will use precincts as the basic building block for districts.

This competition will test the use of four quantifiable factors in the redistricting process:

- (1) **Communities of Interest.** Counties, municipalities, and other government boundaries give Ohioans a sense of place and shared interests. This measure seeks to minimize the division of counties between districts, while opening a dialogue about the role of municipal, township and other community divisions given the rapid growth of suburban and exurban communities in Ohio.
- (2) **Compactness.** Sometimes referred to as the “look” of a district, compactness assures that bizarrely-shaped legislative districts are minimized. This measure helps promote fair representation within a district.
- (3) **Competitiveness.** Our democracy thrives when the marketplace of ideas is truly competitive, especially on Election Day. This measure seeks to maximize the number of legislative districts that could be won by either party, providing Ohioans with a stronger voice in choosing their representatives.
- (4) **Representational Fairness.** The counterbalance for competitiveness is assuring that a final redistricting plan does not unfairly bias one party over another. This measure seeks to minimize this outcome by comparing the partisan balance of legislative districts to the real world voting history of Ohioans.

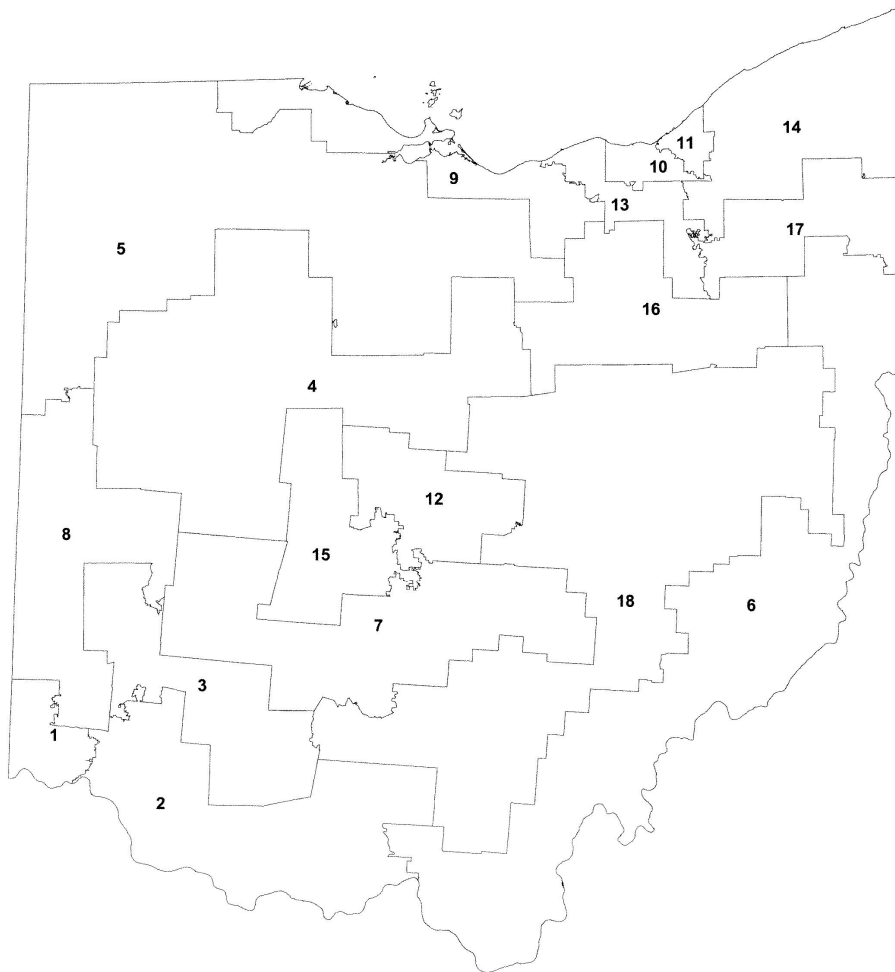
To demonstrate how the detailed rules will be applied, the staff of the Northern Ohio Data & Information Service (NODIS), led by Dr. Mark Salling, has modeled Ohio’s current congressional districts with the software that will be used for the Competition (referred to as the “current districts model”). Because this modeling was performed using whole voting precincts, rather than census blocks, the model varies slightly from the actual congressional districts as drawn by the Ohio General Assembly. Despite this variance, the model is useful to demonstrate application of the threshold and scoring criteria.

Threshold Criteria

First, there are several threshold criteria that every plan must meet. Plans that do not meet these criteria will be disqualified:

- (1) **Contiguity.** All districts within a plan must be **contiguous**, meaning that every part of a district must be reachable from every other part without crossing the district's borders. "Point contiguity" or "touch-point contiguity" where two sections of a district are connected at a single point is **not permitted**. Water contiguity is permitted for districts containing Lake Erie islands.³

Demo: The current districts model contains the following districts.



Thus, the current districts model would **pass** the contiguity criterion because all districts are composed of contiguous voting precincts.

³ As noted above, the Lake Erie islands may be omitted from the competition to aid the computerized scoring process.

(2) **Equipopulation.** All districts within a plan must have **nearly equal population.** Although the law does not require perfectly equal population, the courts have said that congressional districts must be as close to equal as is “practicable.” For purposes of this competition, each district must be within one half of one percent (0.50%) of the ideal population for a district.⁴ Ohio’s population in 2000 was 11,353,140. This means that the ideal congressional district population would be 630,730. Therefore in this competition, congressional districts may contain no more than 633,883 people and no fewer than 627,577 people.

Demo: The current districts model contains the following population totals.

District	Total District Population	Deviation from Ideal Population
1	631,682	0.15%
2	631,043	0.05%
3	631,056	0.05%
4	630,290	-0.07%
5	631,038	0.05%
6	630,860	0.02%
7	631,310	0.09%
8	628,988	-0.28%
9	634,604	0.61%
10	630,597	-0.02%
11	630,730	0.00%
12	631,018	0.05%
13	625,765	-0.79%
14	631,200	0.07%
15	630,023	-0.11%
16	630,499	-0.04%
17	631,671	0.15%
18	630,765	0.01%

Thus, the current districts model would **fail** the equipopulation criterion because Districts 9 and 13 exceed 0.50% deviation from the ideal population. This plan would be **disqualified** from the competition.⁵

⁴ Using voting precincts rather than census blocks to create districts will make it more difficult for competitors to design districts with perfectly equal (or nearly perfectly equal) population. If the results show that the 0.50% threshold standard disqualifies more than half of the submitted plans, the threshold will be increased to 1.00% deviation. Any actual redistricting plan (using census blocks) would be required to have a deviation significantly lower than 0.50%.

⁵ Because the General Assembly used census blocks, rather than voting precincts, in designing the current congressional districts and was able to split census blocks where necessary, the districts were actually perfectly equal in population based on 2000 Census data.

(3) **Federal Voting Rights Act.** All plans must **comply with the competition proxy for the Federal Voting Rights Act.** There have been many court cases addressing the Voting Rights Act and the measures required to comply with the law depend on the specific facts involved. However, for purposes of this competition, compliance with the Voting Rights Act will be assumed if competitors draw a minority-majority district in any area where a minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district.”⁶ For this competition, a valid plan must contain at least one minority-majority district, traditionally located in Cuyahoga County. Although various provisions of the Voting Rights Act protect numerous racial, ethnic, and language minority groups, for purposes of this competition participants will be supplied with Census Bureau data related to African-American population only.

Demo: The current districts model contains the following population totals.

District	Total District Population	Total African-American Population	Pct. African-American Total Population
1	631,682	173,551	27.47%
2	631,043	29,963	4.75%
3	631,056	107,030	16.96%
4	630,290	32,797	5.20%
5	631,038	6,929	1.10%
6	630,860	15,280	2.42%
7	631,310	47,538	7.53%
8	628,988	27,598	4.39%
9	634,604	88,578	13.96%
10	630,597	27,798	4.41%
11	630,730	352,259	55.85%
12	631,018	138,064	21.88%
13	625,765	75,514	12.07%
14	631,200	15,879	2.52%
15	630,023	45,726	7.26%
16	630,499	30,374	4.82%
17	631,671	74,132	11.74%
18	630,765	12,298	1.95%

Thus, the current districts model would **pass** the Federal Voting Rights Act criterion because District 11 is a majority-minority district.

⁶ This standard is adapted from the United States Supreme Court decision in *Thornburg v. Gingles*, 478 U.S. 30, 49 (1986).

Scoring Criteria

Submissions will be scored on four criteria. Traditional redistricting principles (community preservation and compactness) will account for up to 200 points each, while modern redistricting principles (competitiveness and representational fairness) will account for up to 100 points each.⁷ Scoring will be based on the following quantifiable areas:

- (1) **Community Preservation.** For purposes of the competition, counties and municipalities will be used to demonstrate how a redistricting plan can be objectively evaluated for preservation of political subdivisions and communities of interest.

Each plan will be evaluated for the number of “county fragments” created by the plan. A “county fragment” exists where a county is divided between two or more congressional districts. The number of county fragments corresponds to the number of districts in that county – i.e., if a county is divided among two districts, that would be scored as two county fragments, but if a county is divided between three districts, that would constitute three county fragments.

There are some instances where a municipal boundary crosses a county border, such as the City of Columbus, which lies primarily in Franklin County but also encompasses small portions of Delaware and Fairfield counties. In combining 2000 Census data with voting precinct boundaries, there were 19 municipalities that crossed county boundaries.⁸ Competitors will be provided with a list of these cross-county places and **will not be penalized** for crossing a county boundary to keep one of these municipalities together. For example, if a plan keeps Delaware County whole within a single congressional district but places the small Delaware County portion of the City of Columbus in another district, this will not be considered a “county fragment.”

Additionally, congressional districts that are contained wholly within the boundaries of one county but do not cover the entire county will not be considered as “county fragments.” For example, Hamilton County had a population of 845,303 in the 2000 Census. Because this is larger than the ideal congressional district size, Hamilton County must be divided into at least two

⁷ In the case of a tie within a category, each of the tied plans will receive the same number of points for that category. Points will not be skipped due to tied plans. For example, if three plans finish best in the “community preservation” category with 30 county fragments and the next best plan has 28 county fragments, the three top finishers would each receive 200 points and the next best plan would receive 199 points.

⁸ The data developed by NODIS following the 2000 Census identified 67 municipalities or “census designated places” that crossed county boundaries. When these boundaries are adjusted to conform to voting precincts, the number of cross-county places is reduced to 19 municipalities and zero census designated places.

congressional districts. If a competitor chooses to create one district located entirely within Hamilton County and then allocate the remaining population to one or more other districts, only the additional districts that reach into Hamilton County will be counted as county fragments. If, however, a competitor breaks Hamilton County up and groups it with other counties (or portions of counties) without creating a district located entirely within the county, each portion would be counted as a county fragment.

Plans will be ranked based on the total number of county fragments, and the plan with the fewest county fragments will receive the highest score of 200 points with other plans scored in rank descending order (199 points for the plan with the second-fewest fragments per district, 198 points for the plan with the third-fewest fragments per district, and so forth).

Demo: The current districts model scores as follows on the community preservation criterion.

District	Number of County Fragments (partial counties included in district)
1	2 (Butler & Hamilton)
2	3 (Hamilton, Scioto & Warren)
3	2 (Montgomery & Warren)
4	1 (Wyandot)
5	4 (Ashland, Lucas, Mercer & Wyandot)
6	4 (Athens, Belmont, Mahoning & Scioto)
7	2 (Franklin & Ross)
8	3 (Butler, Mercer & Montgomery)
9	2 (Lorain & Lucas)
10	0 (Cuyahoga)
11	0 (Cuyahoga)
12	2 (Franklin & Licking)
13	4 (Cuyahoga, Lorain, Medina & Summit)
14	4 (Cuyahoga, Portage, Summit & Trumbull)
15	1 (Franklin)
16	2 (Ashland & Medina)
17	4 (Mahoning, Portage, Summit & Trumbull)
18	4 (Athens, Belmont, Licking & Ross)
Total	44

Thus, the current districts model contains a total of 44 county fragments. Note that Districts 10 and 11 are actually composed of fragments of Cuyahoga County, but because they are completely contained within the county, they are not considered “county fragments” for purposes of the competition scoring.

(2) **Compactness.** For purposes of the competition, the “compactness” of a district will be determined by a compactness ratio equal to the area of the district divided by the square of the perimeter of the district (Compactness Ratio = District Area / District Perimeter²). Plans will then be judged and rank ordered based on the median compactness ratio of the districts in each plan. The most compact plan will receive the highest score of 200 points, with other plans scored in rank descending order (199 points for the second-most compact plan, 198 points for the plan third-most compact plan, and so forth).

Because of the geographic complexity of Ohio’s state boundaries, certain precincts near Lake Erie will be adjusted through the creation of non-populated “water precincts” to remove potential “noise” in calculating compactness. Competitors will be required to assign these “water precincts” to a particular district – this process is explained more fully in the technical user’s manual.

Demo: The current districts model scores as follows on the compactness criterion.

District	District Area	District Perimeter	Compactness Ratio
1	11764168328.10	672322.57836700000	0.02603
2	73330275160.90	2045921.74144000000	0.01752
3	44962357949.90	1662455.46759000000	0.01627
4	129319719356.00	2386509.21861000000	0.02271
5	171696978779.00	3007948.89141000000	0.01898
6	146010976229.00	4029818.45098000000	0.00899
7	80312472672.70	2295677.77967000000	0.01524
8	56536051393.30	1774400.39154000000	0.01796
9	31258992893.60	2461457.43115000000	0.00516
10	5436981544.56	512699.40051700000	0.02068
11	3768384770.57	399039.49360400000	0.02367
12	28745142515.60	1193191.96144000000	0.02019
13	15028197882.80	1383589.90062000000	0.00785
14	50738220028.50	1349299.93853000000	0.02787
15	32947768581.10	1418613.78084000000	0.01637
16	48480930665.20	1347978.27796000000	0.02668
17	28794519761.80	1332702.67333000000	0.01621
18	191509690376.00	3811034.84123000000	0.01319

Thus, the current districts model has a median compactness ratio of 0.01774.

(3) **Competitiveness.**⁹ For purposes of the competition, the political competitiveness of the proposed new districts will be judged using the results of the 2000 presidential election to calculate projected political performance. Competitors will be provided with the presidential election data as part of the competition database.

For each proposed district in a plan, competitors must determine the “partisan differential” for the district. A district’s “partisan differential” will be calculated by subtracting the Democratic “partisan index” (for purposes of the competition, the percentage of major-party votes cast in that district for Al Gore in the 2000 presidential election) from the Republican “partisan index” (percentage of major-party votes cast in that district for George W. Bush in the 2000 presidential election).

Once the partisan differential for each district is calculated, plans will be assigned points based on the following schedule.

- 2 points for “heavily competitive” districts, with partisan differential of less than or equal to 5% (i.e., districts ranging from 50%-50% to 52.5%-47.5%)
- 1 point for “generally competitive” districts, with partisan differential of more than 5% but less than or equal to 10% (i.e., districts ranging from 52.6%-47.4% to 55.0%-45.0%)
- 0 points for “generally noncompetitive” districts, with partisan differential of more than 10% but less than or equal to 15% (i.e., districts ranging from 55.1%-44.9% to 57.5%-42.5%)
- -1 point for “heavily noncompetitive” districts, with partisan differential of more than 15% (i.e., districts split 57.6%-42.4% or greater).

The plan with the most total competitiveness points will receive the highest score of 100 points, with other plans scored in rank descending order (99 points

⁹ While the competition will be based on the simple presidential returns for 2000, we propose a more robust measure of competitiveness for any resulting amendment. Our recommended process relies on aggregation of elections returns over a 10 year period across multiple levels of office to reduce the possibility of a “wave” election unduly influencing a review of core competitiveness at the precinct level.

Our specific recommendation is as follows: Scoring begins with calculation of “aggregate votes” by precinct. Aggregate votes equals the sum of the votes for Republican and Democratic candidates in all competitive general election races (i.e., with a Republican and a Democratic candidate) in even numbered years, beginning with year ending in “2” following creation of last redistricting plan (e.g., for 2011 remap, this pool would include results from general elections in 2002, 2004, 2006, 2008, 2010). Partisan index equals the total votes for all candidates of that party divided by aggregate votes cast for all major party candidates (multiplied by 100 to get a percentage).

for the plan with the second-most competitiveness points, 98 points for the plan with the third-most competitiveness points, and so forth).

Demo: The current districts model contains the following competitiveness data.

District	Republican Presidential Votes	Republican Partisan Index	Democratic Presidential Votes	Democratic Partisan Index	Partisan Differential
1	136,804	53.0%	121,085	47.0%	6.1%
2	175,409	64.6%	96,143	35.4%	29.2%
3	130,477	53.8%	112,088	46.2%	7.6%
4	155,065	64.1%	86,844	35.9%	28.2%
5	158,166	61.3%	99,895	38.7%	22.6%
6	129,692	50.9%	125,300	49.1%	1.7%
7	137,648	57.2%	102,861	42.8%	14.5%
8	154,604	62.8%	91,468	37.2%	25.7%
9	98,538	42.6%	132,781	57.4%	14.8%
10	96,588	44.1%	122,186	55.9%	11.7%
11	38,375	18.2%	172,137	81.8%	63.5%
12	129,826	53.0%	115,067	47.0%	6.0%
13	110,502	45.4%	133,148	54.6%	9.3%
14	141,775	54.1%	120,266	45.9%	8.2%
15	117,130	54.4%	98,197	45.6%	8.8%
16	141,257	55.7%	112,216	44.3%	11.5%
17	88,393	36.9%	150,919	63.1%	26.1%
18	132,703	57.4%	98,383	42.6%	14.9%
Statewide¹⁰	2,272,952	52.1%	2,090,984	47.9%	4.2%

Thus, the current districts model scores as follows on the competitiveness criterion.

Competitiveness Category	Number of Districts	Points
Heavily Competitive Districts	1	2
Generally Competitive Districts	6	6
Generally Noncompetitive Districts	5	0
Heavily Noncompetitive Districts	6	-6
Competitiveness Score		2

¹⁰ The electoral data used for the Ohio Redistricting Competition excludes votes for third-party candidates in order to simplify the scoring procedure. The electoral data also varies slightly from the actual results due to certain difficulties in translating votes that are tabulated by county into precinct-based data. This variance is minor and amounts to a difference of three-tenths of one percent in each party's share of the statewide major-party vote.

(4) **Representational Fairness.**¹¹ For purposes of the competition, representational fairness will be determined by calculating the “electoral disproportionality” of each plan. Electoral disproportionality is minimized (and representational fairness is improved) when the percentage of districts a party would win closely mirrors that party’s percentage of the statewide vote.

In the competition, each newly-created district would be assigned a likely outcome using the partisan indexes calculated to determine competitiveness (e.g., a district that voted 55% for George W. Bush would be scored as a “Republican district”). Any “perfectly competitive” districts will be excluded from the calculation because they could not be assigned a likely outcome.

Based on these projections, each party would be assigned a likely percentage of the newly-drawn seats. The likely percentage of seats for each party would then be subtracted from the statewide partisan index for that party to create an electoral disproportionality subtotal for each party.

The absolute value of the two parties’ electoral disproportionality subtotals would be added and divided by two to determine the electoral disproportionality index for each plan. Plans would then be rank-ordered from lowest electoral disproportionality index to highest (thus, the closer to zero, the higher the rank order for the plan).

For example, based on the political data to be used in the Ohio Redistricting Competition, the Republican candidate received approximately 52.1% and the Democratic candidate received approximately 47.9% of the major party vote in 2000. If a proposed redistricting plan contained 12 projected Republican districts (66.7% of seats) and 6 projected Democratic districts (33.3% of seats), the electoral disproportionality would be calculated as follows:¹²

Republicans: $52.1\% - 66.7\% = -14.6$

Democrats: $47.9\% - 33.3\% = 14.6$

Electoral Disproportionality = $([-14.6] + [14.6])/2 = 14.6$

Therefore, the electoral disproportionality for this plan would be 14.6. The plan with the lowest electoral disproportionality (i.e., closest to zero) will receive the

¹¹ Our recommended process in a real-world redistricting process would utilize the competitiveness calculations discussed in the previous footnote to determine electoral disproportionality.

¹²In the event of a perfectly competitive plan, with each district at 50%-50%, the calculation would take place as follows:

Republicans: $52.1\% - 50\% = 2.1\%$

Democrats: $47.9\% - 50\% = -2.1\%$

Electoral Disproportionality = $([-2.1] + [2.1])/2 = 2.1$

highest score of 100 points, with other plans scored in rank descending order (99 points for the plan with the second-lowest electoral disproportionality, 98 points for the plan with the third-lowest electoral disproportionality, and so forth).

Demo: Based on the competitiveness data, the electoral outcome in the current districts model would be projected as follows.

District	Republican Partisan Index	Democratic Partisan Index	Projected Party Winner
1	53.0%	47.0%	Republican
2	64.6%	35.4%	Republican
3	53.8%	46.2%	Republican
4	64.1%	35.9%	Republican
5	61.3%	38.7%	Republican
6	50.9%	49.1%	Republican
7	57.2%	42.8%	Republican
8	62.8%	37.2%	Republican
9	42.6%	57.4%	Democrat
10	44.1%	55.9%	Democrat
11	18.2%	81.8%	Democrat
12	53.0%	47.0%	Republican
13	45.4%	54.6%	Democrat
14	54.1%	45.9%	Republican
15	54.4%	45.6%	Republican
16	55.7%	44.3%	Republican
17	36.9%	63.1%	Democrat
18	57.4%	42.6%	Republican
Statewide¹³	52.1%	47.9%	

Thus, the current districts model scores as follows on the representational fairness criterion.

	Number of Districts	Percentage
Projected Rep. Districts	13	72.2%
Projected Dem. Districts	5	27.8%
Statewide Rep. Index		52.1%
Statewide Dem. Index		47.9%

¹³ The electoral data used for the Ohio Redistricting Competition excludes votes for third-party candidates in order to simplify the scoring procedure. The electoral data also varies slightly from the actual results due to certain difficulties in translating votes that are tabulated by county into precinct-based data. This variance is minor and amounts to a difference of three-tenths of one percent in each party's share of the statewide major-party vote.

Electoral Disproportionality =
([Pct. Projected Rep. Districts – Statewide Rep. Index] + [Pct. Projected Dem.
Districts – Statewide Dem. Index])/2
Electoral Disproportionality = ([72.2-52.1] + [27.8-47.9])/2 = 20.1
Based on this data, the current districts model has an electoral disproportionality
score of 20.1.

Aggregate Scoring

Each plan will be rank-ordered for each of the four scoring criteria described above. The total aggregate score for each plan will be determined by combining the individual category scores for each plan. However, any plan falling into the bottom 25% of any category would be disqualified.¹⁴

The top 25% of submitted plans, or top 5 plans, whichever is less, based on total score, will be declared the winners of the competition.¹⁵

Submitting a plan

All competitors must submit the following documents reflecting the composition of their final plan:

- (1) A state map showing the boundaries of the 18 congressional districts, and district maps for each proposed congressional district. ArcGIS software can generate the required statewide and district maps.
- (2) An ArcGIS file containing shape files for each proposed district.
- (3) A spreadsheet listing all of the counties and precincts statewide indicating to which district each precinct has been assigned. The ArcGIS software can assist in generating this data.
- (4) A spreadsheet listing the demographics, number of county fragments, area and perimeter, and political data for each district in the plan. Competitors will be provided with a blank form spreadsheet to be used for this portion of the submission.

Further technical details related to submission of plans will be included in the forthcoming user's manual for the Competition.

¹⁴ If this results in more than 25% of total plans being disqualified, the ineligibility threshold would be halved (12.5%).

¹⁵ In an actual redistricting process, these plans would qualify for review by an apportionment board or commission. That entity would be required to adopt one of the qualifying plans.