

# 2020 Ohio U.S. Congressional Redistricting

Economic Impact Districts: Version IV

## Table of Contents

[Table of Contents](#)

[Summary](#)

[The Map](#)

[Statistics](#)

[Analysis](#)

[Conclusion](#)

[References](#)

- [1. Dave's Redistricting App](#)
- [2. Appalachian Ohio](#)
- [3. Columbus](#)
- [4. Northwest Ohio](#)
- [5. Dayton metropolitan area](#)
- [6. Cincinnati Tri-state area](#)

[Appendix I.](#)

[Appalachian Ohio Counties](#)

[Northwest Ohio Counties](#)

[Columbus Metropolitan Area](#)

[Cincinnati Tri-State area: Ohio Counties](#)

[Dayton Metropolitan area](#)

[Appendix II](#)

[District 3 Columbus, Franklin County](#)

[Appendix III](#)

[District 1 Cincinnati, Hamilton County](#)

[Appendix IV](#)

[District 11 Cleveland, Cuyahoga County](#)

# Summary

It is said that the art of compromise ends in a solution that no side likes, but everyone can agree upon.

The 3 Appalachian regions of Ohio were initially added as economic districts.

Columbus, Cleveland, the Cincinnati Tri-State region, and the Dayton Metropolitan area were considered as starting points.

Northwest Ohio has its own region.

[Appendix I](#) lists the counties in each region and the districts associated with them.

Changes were made to make districts compact and of equal population, Splits were then made to satisfy the 0.75% overall rule for equal population.

## The Map

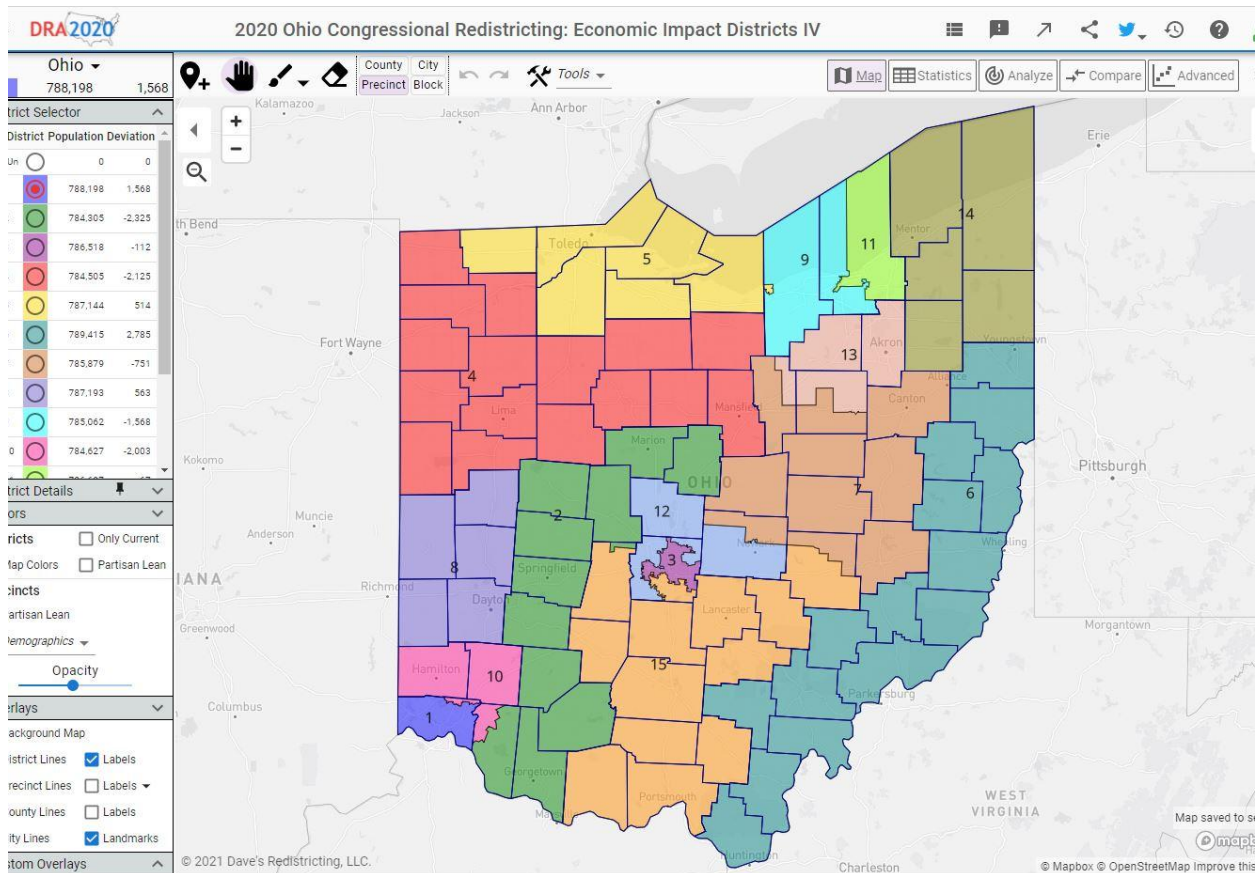
The result is a map of 15 U.S. Congressional Districts. The map is displayed in Figure 1. The map was started from the current Congressional Districts map, but not all District locations retain the same numbering as the current Congress.

The browser based tool Dave's Redistricting App (DRA 2020) was used. ([Ref 1](#)). The map can be viewed at the following link.

<https://davesredistricting.org/join/28d670f2-1473-470a-a91e-372e8f4b240d>

[Reference 1b](#) describes DRA 2020 counts minority population from Census data and how the Composite Election data is treated.

All Figures are included as separate picture files. A separate file contains a spreadsheet of Statistics and Heatmaps for population and partisan voting.



**Figure 1. Ohio Congressional 15 Districts**

1. All the major cities are contained within their own district.
2. A majority-minority District 11 was maintained within Cuyahoga County. It includes the City of Cleveland. See [Appendix IV](#) for detailed views of District 11.
3. The City of Cincinnati is in one district. See [Appendix III](#) for more details of District 1.
4. Most of Columbus lies in a single District that has a significant minority population. This District was built by condensing the current District. (see [Appendix II](#) for details)
5. Four Districts have no split counties
  - a. District 4 in NW Ohio
  - b. District 14 in NE Ohio
  - c. District 8 in SW Ohio, Dayton.
  - d. District 6 in East to Southeast Ohio.
6. There is a minimal number of splitting
  - a. 9 counties are split once
  - b. Franklin County was split twice.

The following table is the list of split counties.

**Table I. Split Counties**

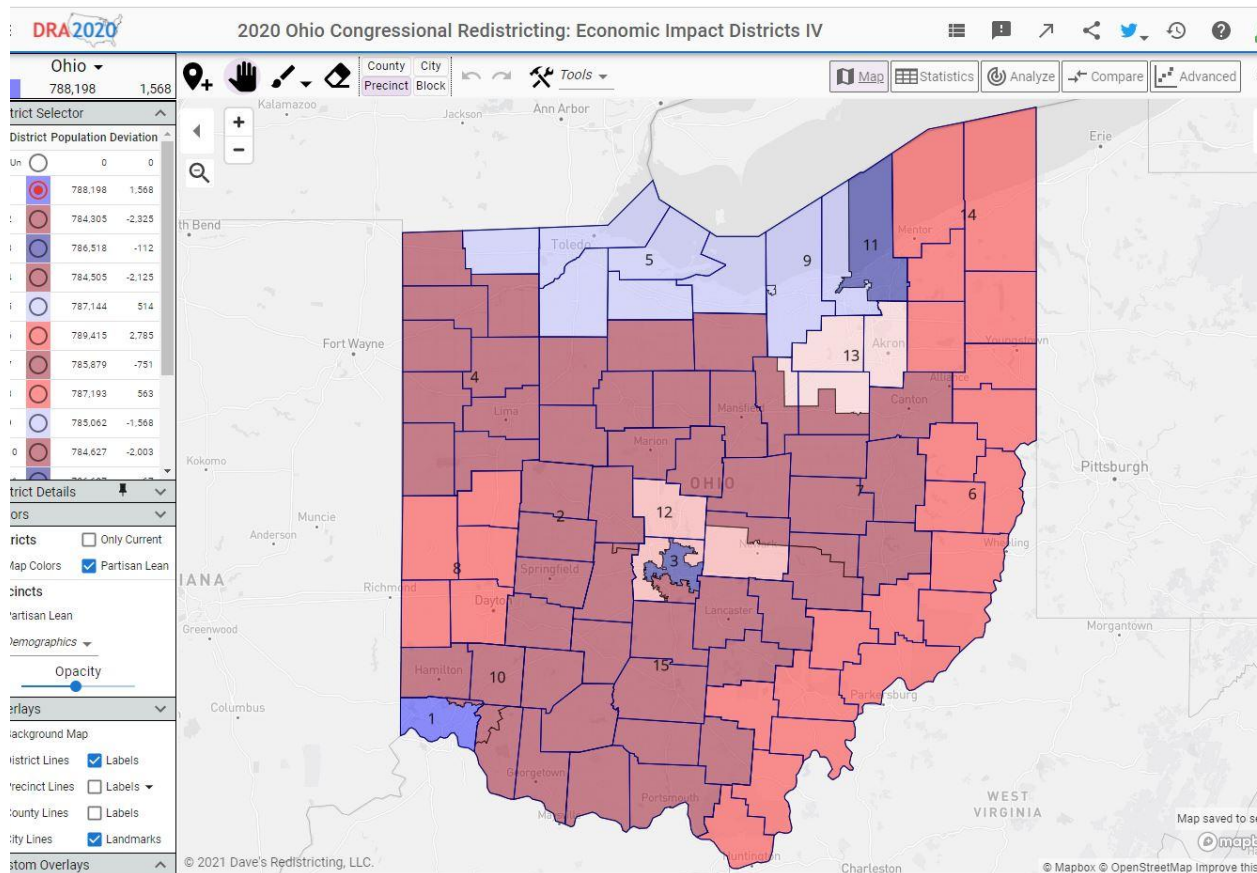
<b>Split Counties</b>	<b>Districts</b>
Ashland	7 & 13
Clermont	2 & 10
Cuyahoga	9 & 11
Franklin	3, 12, & 15
Hamilton	1 & 10
Licking	7 & 12
Lorain	5 & 9
Madison	2 & 15
Muskingum	7 & 15
Wayne	7 & 13

# Statistics

2020 Ohio Congressional Redistricting: Economic Impact Districts IV															
<div> <div>Map</div> <div>Statistics</div> <div>Analyze</div> <div>Compare</div> <div>Advanced</div> </div>															
Population			Shapes		Partisan Lean			Demographics (VAP)							
ID	Total	+/-			Dem	Rep	Oth	Total	White	Minority	Hispanic	Black	Asian	Native	Pac
Un	0				0.00%	0.00%	0.00%	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1	788,198	0.20%	✓	✓	53.78%	43.99%	2.24%	612,624	65.97%	34.03%	3.30%	25.62%	3.41%	1.63%	0.00%
2	784,305	-0.30%	✓	✓	30.63%	66.76%	2.60%	608,070	88.03%	11.97%	2.05%	5.19%	2.00%	2.22%	0.00%
3	786,518	-0.01%	✓	✓	70.61%	26.98%	2.41%	610,179	54.13%	45.87%	6.95%	31.53%	5.93%	2.02%	0.00%
4	784,505	-0.27%	✓	✓	27.61%	69.48%	2.91%	604,870	89.08%	10.92%	3.43%	4.45%	0.89%	1.73%	0.00%
5	787,144	0.07%	✓	✓	50.02%	47.13%	2.85%	616,817	77.58%	22.42%	5.76%	12.76%	1.83%	1.96%	0.00%
6	789,415	0.35%	✓	✓	39.43%	58.17%	2.40%	632,983	87.68%	12.32%	2.30%	6.88%	0.89%	1.83%	0.00%
7	785,879	-0.10%	✓	✓	35.42%	61.88%	2.71%	607,593	89.73%	10.27%	1.97%	4.83%	0.95%	2.02%	0.00%
8	787,193	0.07%	✓	✓	39.98%	57.57%	2.45%	611,656	77.21%	22.79%	2.69%	15.38%	2.49%	2.02%	0.00%
9	785,062	-0.20%	✓	✓	50.49%	47.08%	2.42%	629,733	83.68%	16.32%	5.70%	5.86%	3.05%	1.55%	0.00%
10	784,627	-0.25%	✓	✓	33.54%	64.15%	2.31%	598,636	81.23%	18.77%	4.14%	6.97%	5.30%	2.01%	0.00%
11	786,697	0.01%	✓	✓	76.63%	21.46%	1.91%	619,483	43.47%	56.53%	6.89%	44.99%	4.05%	1.47%	0.00%
12	786,575	-0.01%	✓	✓	46.25%	51.63%	2.12%	598,433	81.82%	18.18%	3.01%	5.62%	7.46%	1.62%	0.00%
13	786,872	0.03%	✓	✓	47.95%	49.61%	2.44%	619,477	81.52%	18.48%	1.99%	10.74%	3.38%	1.83%	0.00%
14	789,330	0.34%	✓	✓	43.36%	54.08%	2.56%	631,507	87.83%	12.17%	2.52%	5.66%	1.49%	1.77%	0.00%
15	787,116	0.06%	✓	✓	34.63%	63.02%	2.35%	605,490	87.12%	12.88%	2.01%	6.98%	1.25%	2.28%	0.00%
	<b>786,629</b>	<b>0.65%</b>	✓	✓	<b>45.25%</b>	<b>52.31%</b>	<b>2.44%</b>	<b>613,837</b>	<b>78.40%</b>	<b>21.60%</b>	<b>3.65%</b>	<b>12.91%</b>	<b>2.94%</b>	<b>1.86%</b>	<b>0.00%</b>

tes  
 The 0.65% population deviation is within the 0.75% threshold tolerated by the courts.  
 Eight districts lean Republican, three lean Democratic, and four fall in the 45–55% competitive range.  
 There is one majority-minority district.

Figure 2. Statistics



**Figure 3. Partisan Lean by District**

The Partisan Lean map and statistics page show that there are 2 Heavily leaning Democratic districts and 1 that lightly leans Democratic.

1. Heavy Democratic Lean
  - a. District 3 Columbus
  - b. District 11 Cleveland and part of Cuyahoga County.
2. Light Democratic Lean
  - a. District 1 Cincinnati and part of Hamilton County

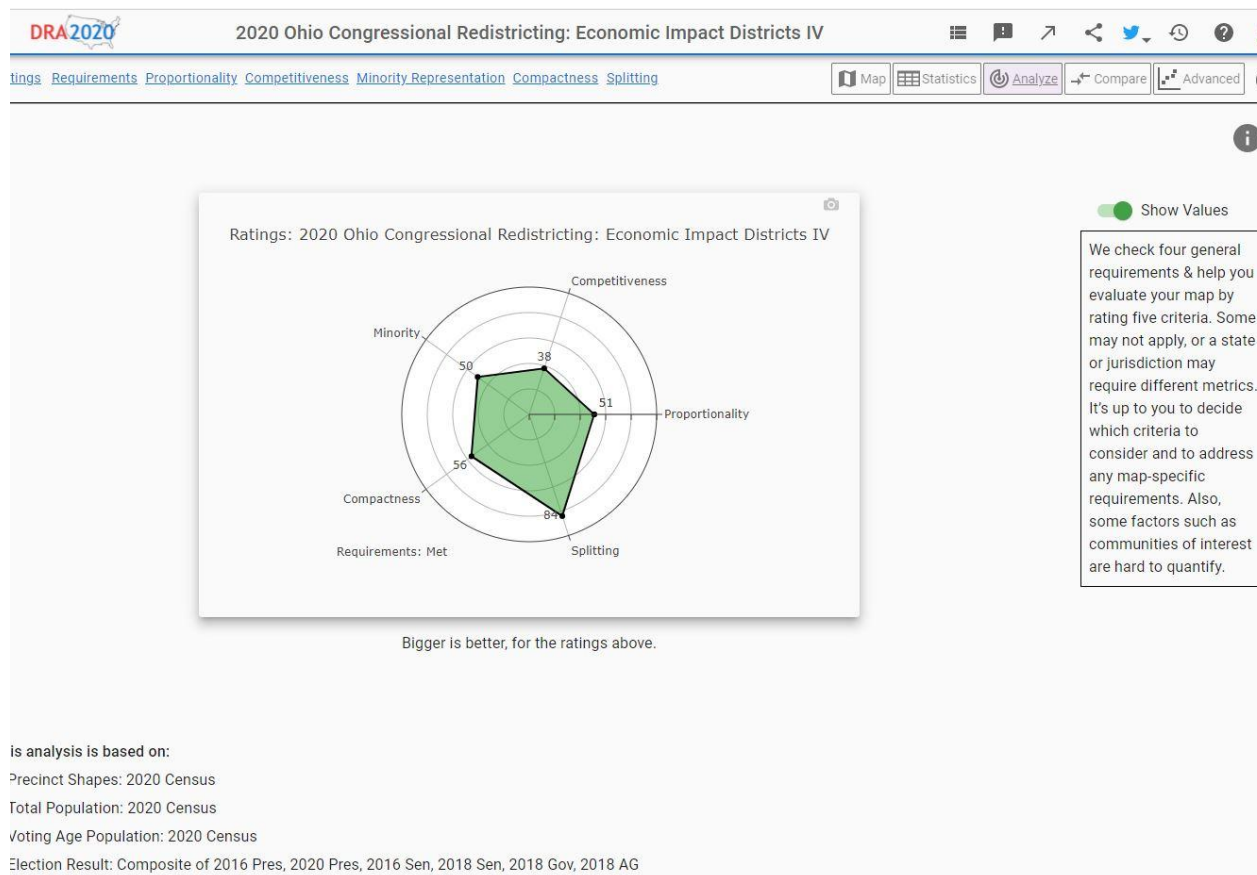
There are 8 Districts that lean Republican

1. Heavy Republican Lean
  - a. District 2 From Brown & Clermont Counties in SW Ohio vertically up to Marion & Morrow Counties in NW Ohio
  - b. District 4 Northwest Ohio
  - c. District 7 Stark, parts of Medina & Ashland County downwards
  - d. District 10 Counties near Cincinnati
  - e. District 15 South Appalachian region, South Central Ohio up towards Columbus
2. Light Republican Lean
  - a. District 6 Appalachian Region
  - b. District 8 Part of Dayton area and west
  - c. District 14 Northeast Ohio Appalachian region and neighboring counties.

Four Districts fall in the 45-55% competitive range

1. District 13 has the lowest difference in the Partisan Lean statistics. (see Figure 2); Summit, Medina, and part of Wayne County. It is the fairest.
2. District 5 is next; Counties in NW Ohio & along the Lake Erie shore plus the section of Vermillion in Lorain County
3. District 9 is next; Lorain County and part of Cuyahoga County
4. District 12 is next ; North & East of Columbus

## Analysis



**Figure 4. Analysis**

The Analyze page shows how the map is rated along 5 criteria. It is the front page of several and is best viewed on the App ([Reference 1a](#)) for details.

- Competitiveness 38
- Proportionality 51
- Splitting 84
- Compactness 56
- Minority 50



One could say that the reduction to 15 districts due to the 2020 Census resulted in the loss of 1 lightly leaning Republican district 16.

Based on the Partisan Lean map, the inclusion of Cincinnati into one district required by the Ohio Constitution resulted in an increase in potential Democratic districts to 5. There are currently 4 Democrats in Congress. Their geographical location has changed in Figures 1 & 2.

On the other hand, based on the statistics it is possible that only 3 Democratic seats might be elected.

The best guess is that there is a 50-50 chance of either 10 REP & 5 DEM seats, or 11 REP & 4 DEM seats in Congress. The Analyze page on Proportionality states "The number of Democratic seats closest to proportional is seven. The likely number of Democratic seats is 4.98. The likely number of unexpected Democratic seats (won) lost is 2.02."

The proposed map has fairer districts overall. The concentration of Democratic voting age population (VAP) in Districts 1, 3, and 11 and the requirement for cities to be made whole means that no matter what redistricting map is chosen, these 3 areas could favor Democrats.

## Conclusion

The map follows the spirit and letter of the new redistricting law. It satisfies the Constitutional requirement that Cities with population between 100,000 and 786,630 are wholly contained in a single district. The major Cities are in their own economic zone.

In addition, the Appalachian regions for the most part are in their own Districts.

Minorities have representation. District 11 is maintained as a majority-minority District containing Cleveland and wholly within Cuyahoga County. Significant minority population (VAP) is in Columbus' District 3.

The Commission could focus on defining District 3 Columbus first, then District 1 Cincinnati, and District 11 Cleveland. Once these are defined the public can use that as a base and develop suggestions for the rest of the districts.

Voters have expressed a desire to not have their counties and cities split into multiple pieces. This map does that. The map gives each part of Ohio an excellent and fair opportunity to elect members to Congress who will represent their interests.



# References

## 1. Dave's Redistricting App

A free browser based app to create, analyze and share redistricting maps for any state or community.

- a. [DRA 2020 \(davesredistricting.org\)](https://davesredistricting.org/) Home Page
- b. [DRA 2020 About Data](#)

## 2. Appalachian Ohio

[Appalachian Ohio - Wikipedia](#)

## 3. Columbus

[Columbus metropolitan area, Ohio](#)

## 4. Northwest Ohio

[Northwest Ohio](#)

## 5. Dayton metropolitan area

[Dayton metropolitan area](#)

## 6. Cincinnati Tri-state area

[Cincinnati metropolitan area - Wikipedia](#)

# Appendix I.

## Appalachian Ohio Counties

See [Reference 2](#).

Appalachian Ohio Counties					
East Central Ohio		Southeast Ohio		Southern Ohio	
County	District	County	District	County	District
Ashtabula	14	Monroe	6	Vinton	6
Trumbull	14	Noble	6	Gallia	6
Mahoning	6	Washington	6	Jackson	15
Columbiana	6	Morgan	6	Lawrence	6
Carroll	6	Athens	6	Ross	15
Jefferson	6	Meigs	6	Pike	15
Harrison	6	Perry	15	Scioto	15
Belmont	6	Hocking	15	Highland	2
Tuscarawas	7			Adams	15
Guernsey	7			Brown	2
Holmes	7			Clermont	2 & 10
Coshocton	7				
Muskingum	7 & 15				

District	Percentage of Appalachian Counties
2	7.8%
6	46.9%
7	14.1%
10	1.6%
14	6.3%
15	23.4%

## Northwest Ohio Counties

See [Reference 4](#).

Northwest Ohio	District
Fulton	5
Lucas	5
Ottawa	5
Sandusky	5
Wood	5
Allen	4
Auglaize	4
Defiance	4
Hancock	4
Hardin	4
Henry	4
Huron	4
Mercer	4
Paulding	4
Putnam	4
Seneca	4
Van Wert	4
Williams	4
Wyandot	4
Marion	2
Morrow	2

## Columbus Metropolitan Area

See [Reference 3](#).

Columbus Metropolitan Area	District
Delaware	12
Fairfield	15
Franklin	3, 12, & 15
Hocking	15
Licking	7 & 12
Madison	2 & 15
Morrow	2
Perry	15
Pickaway	15
Union	2

## Cincinnati Tri-State area: Ohio Counties

See [Reference 6](#).

Cincinnati Tri-State Area	District
Hamilton	1 & 10
Butler	10
Warren	10
Clermont	2 & 10
Brown	2
Clinton	2

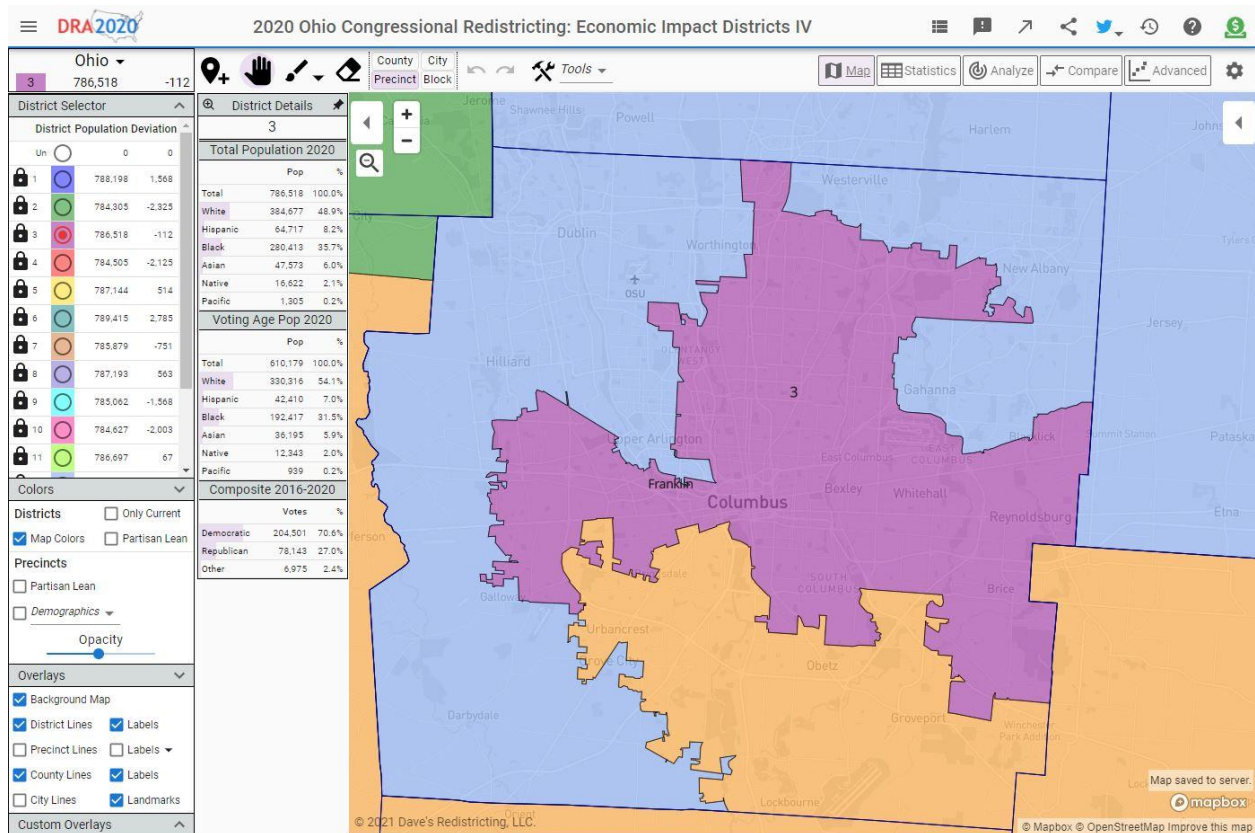
## Dayton Metropolitan area

See [Reference 5](#).

Dayton Metropolitan area	District
Montgomery	8
Greene	2
Preble	8
Miami	8

## Appendix II

### District 3 Columbus, Franklin County

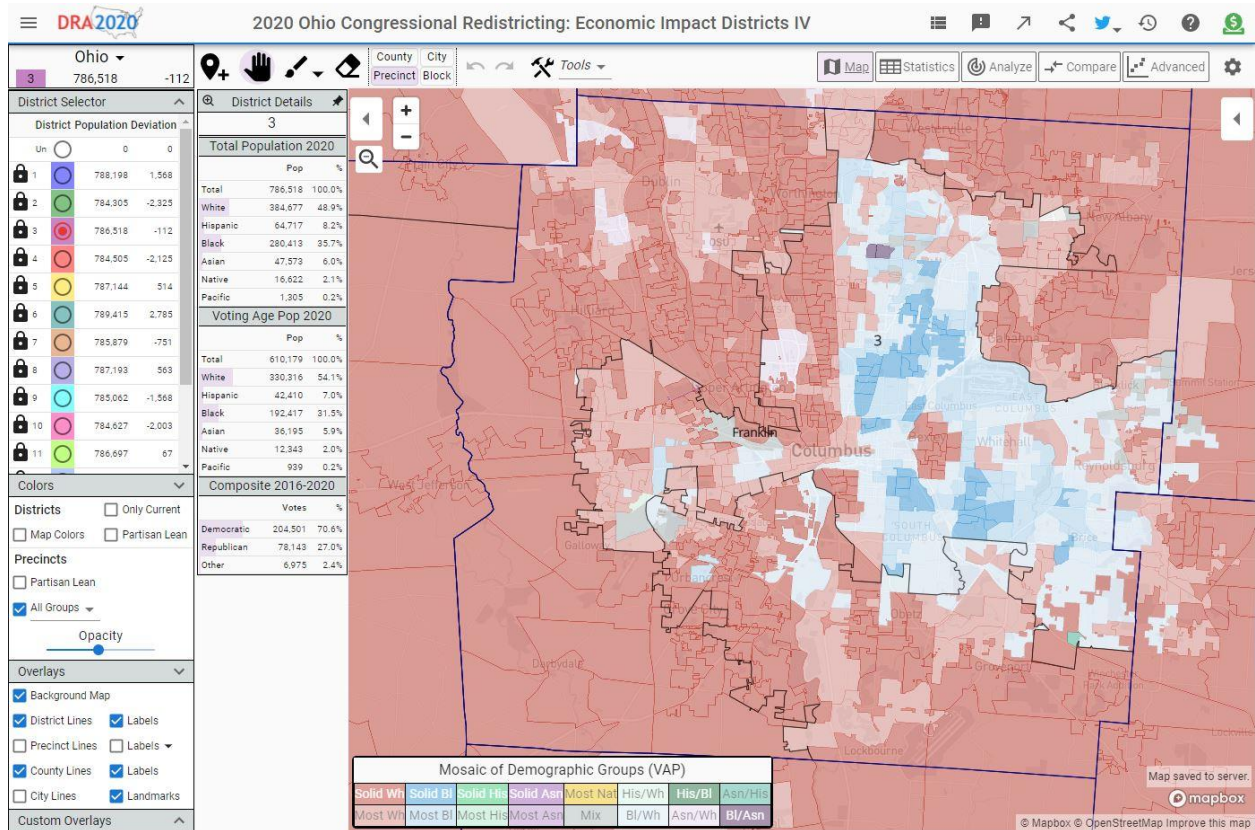


**Figure II-1. District 3 Map: Columbus in Franklin County**

Columbus has a lot of pieces that intersect. The major effort was to find a new district that was contiguous. Work concentrated on increasing the number of Precincts that were in the City of Columbus, while shrinking the population count to the required number. This was done to satisfy the requirements of the new Constitution. The original district contained parts of the following suburbs. They were removed and are now in the listed district.

- Gahanna 12
- Westerville 12
- Worthington 12
- Obetz 15
- Groveport 15
- Grove City 12 & 15
- Urbancrest 15

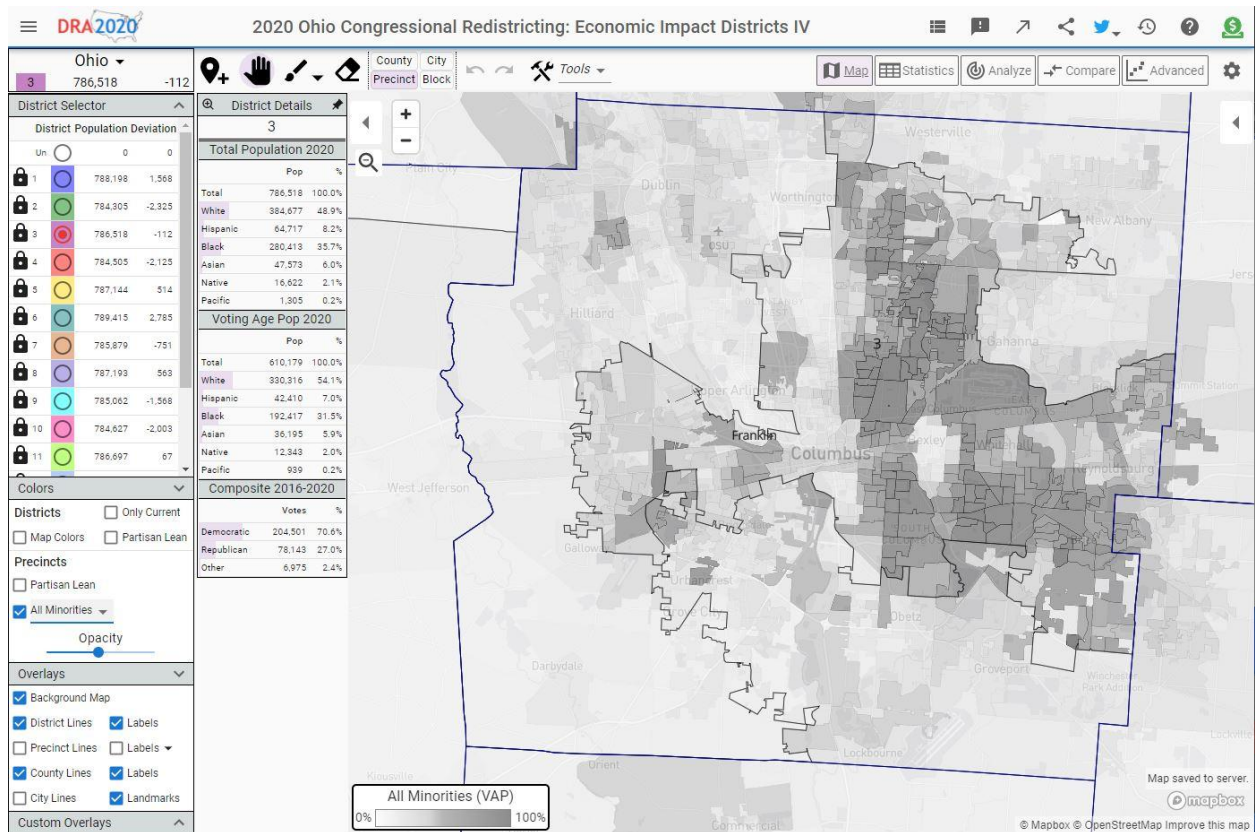
It is suggested that the Commission could settle on an acceptable District 3. The splitting of Franklin County into 3 districts makes it easy to rebalance the other 2 to within acceptable population bounds. Public input could build around the accepted District 3.



**Figure II-2. District 3 Columbus: Distribution of Demographic Groups**

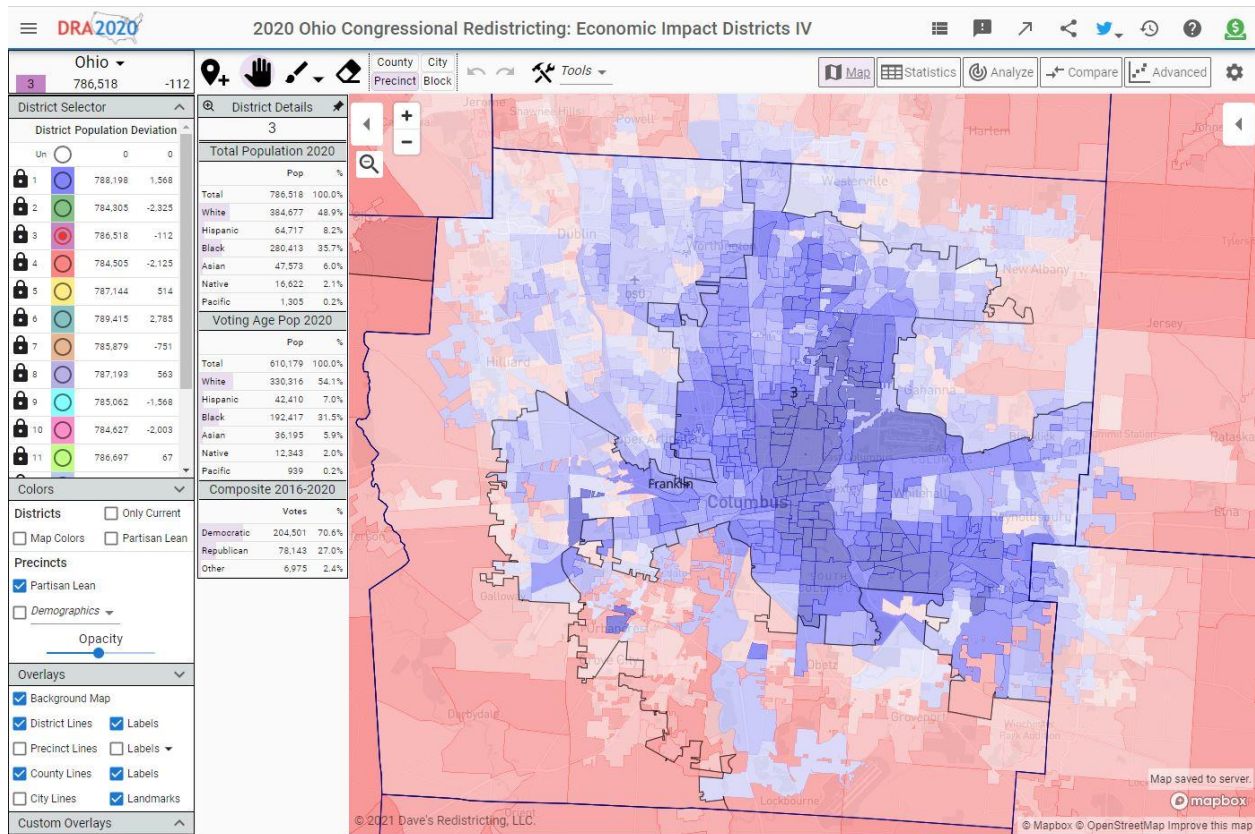
This figure II-2 maps the relative concentration of all demographic groups as a portion of the Voting Age Population (VAP). The data for the entire district is on the District Details pinned to the left of the map.





**Figure II-3. District 3 Columbus: All minorities as a percentage of Voting Age Population**

The minority grouping of Voting Age Population is useful in monitoring adherence to the Voting Rights Act restrictions on redistribution of districts. District 3 has a significant minority voting age population. (See Figure 2. Statistics)

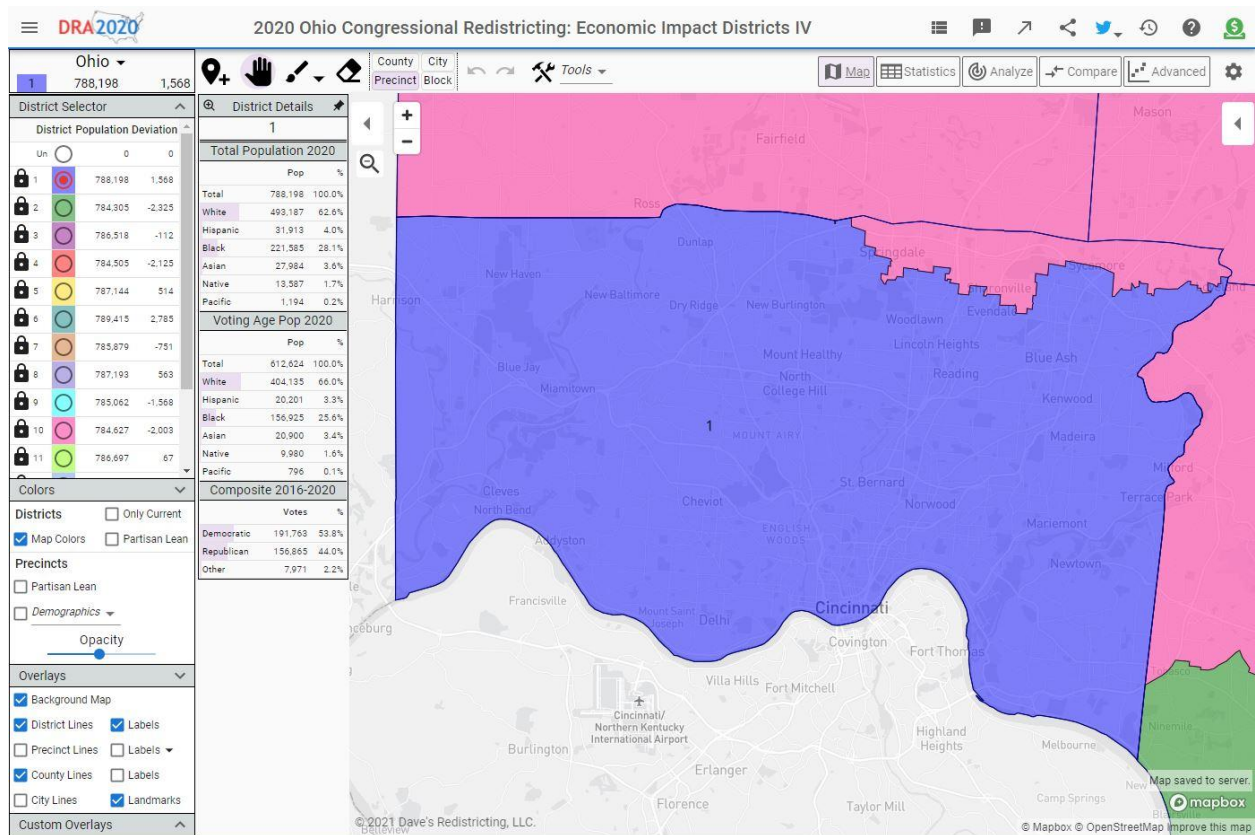


**Figure II-4 District 3 Columbus: Partisan Lean by Precinct**

Dave's redistricting App uses a Composite of Elections from 2016-2020 to determine how each precinct votes. ([see Reference 1b](#)) Democratic majorities are shades of blue. Republican majorities are shades of red. The overall data is at the bottom of the pinned District Details panel at the left of the map. .

# Appendix III

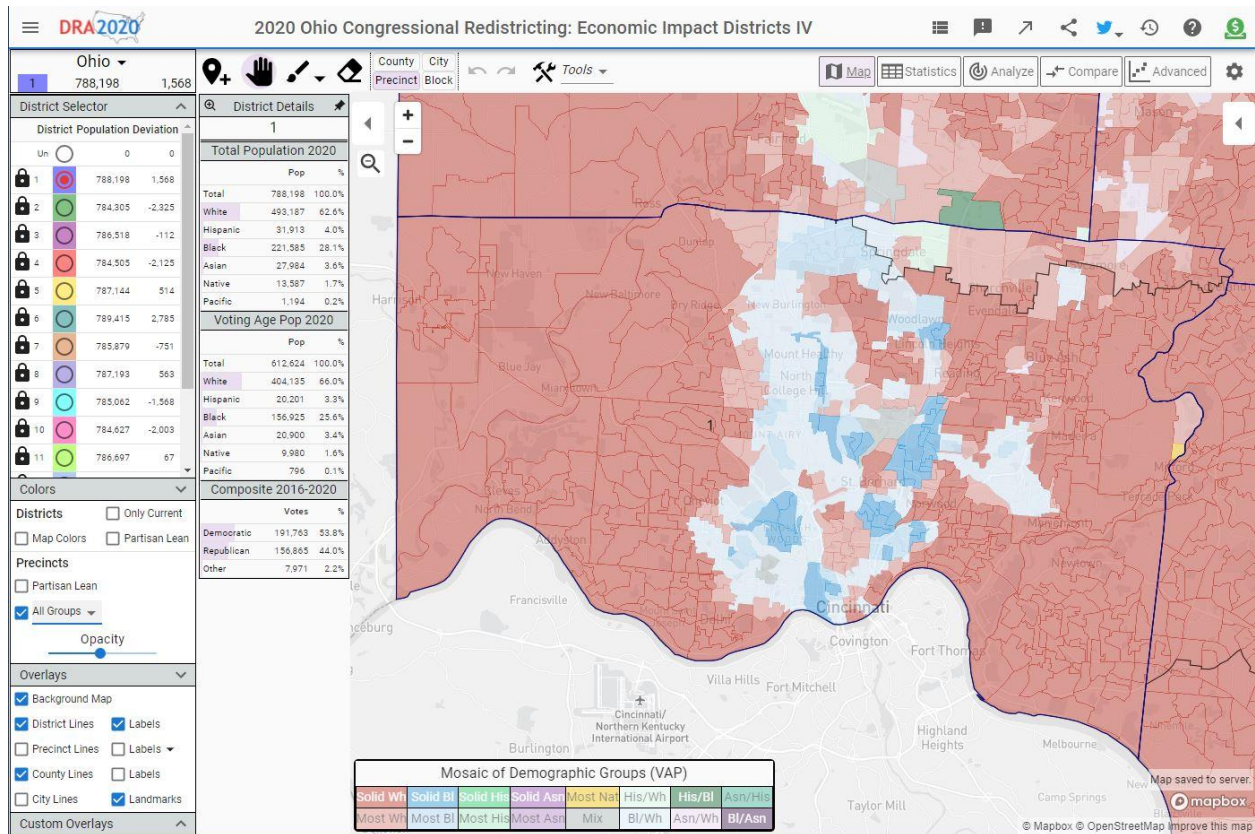
## District 1 Cincinnati, Hamilton County



**Figure III-1 District 1 Map: Cincinnati in Hamilton County**

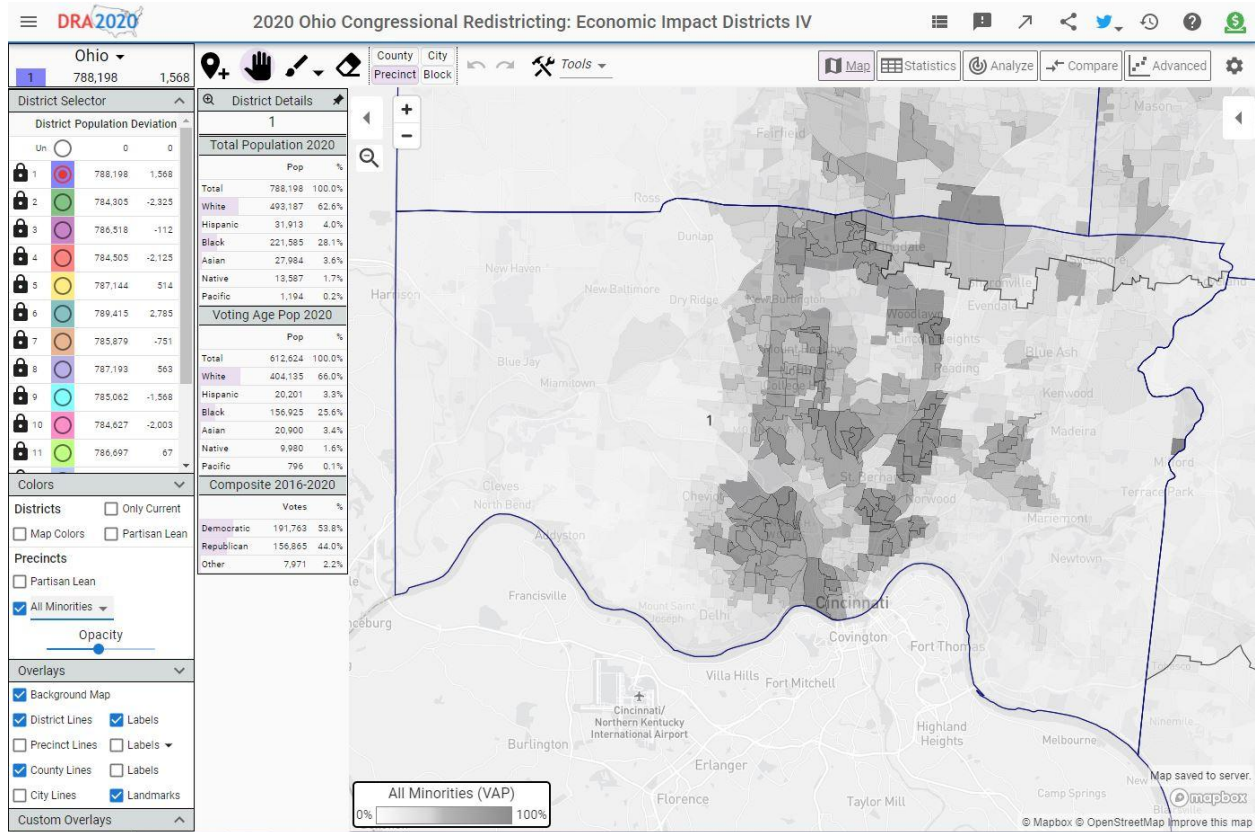
District 1 consists of most of Hamilton County. All of Cincinnati is contained in District 1.





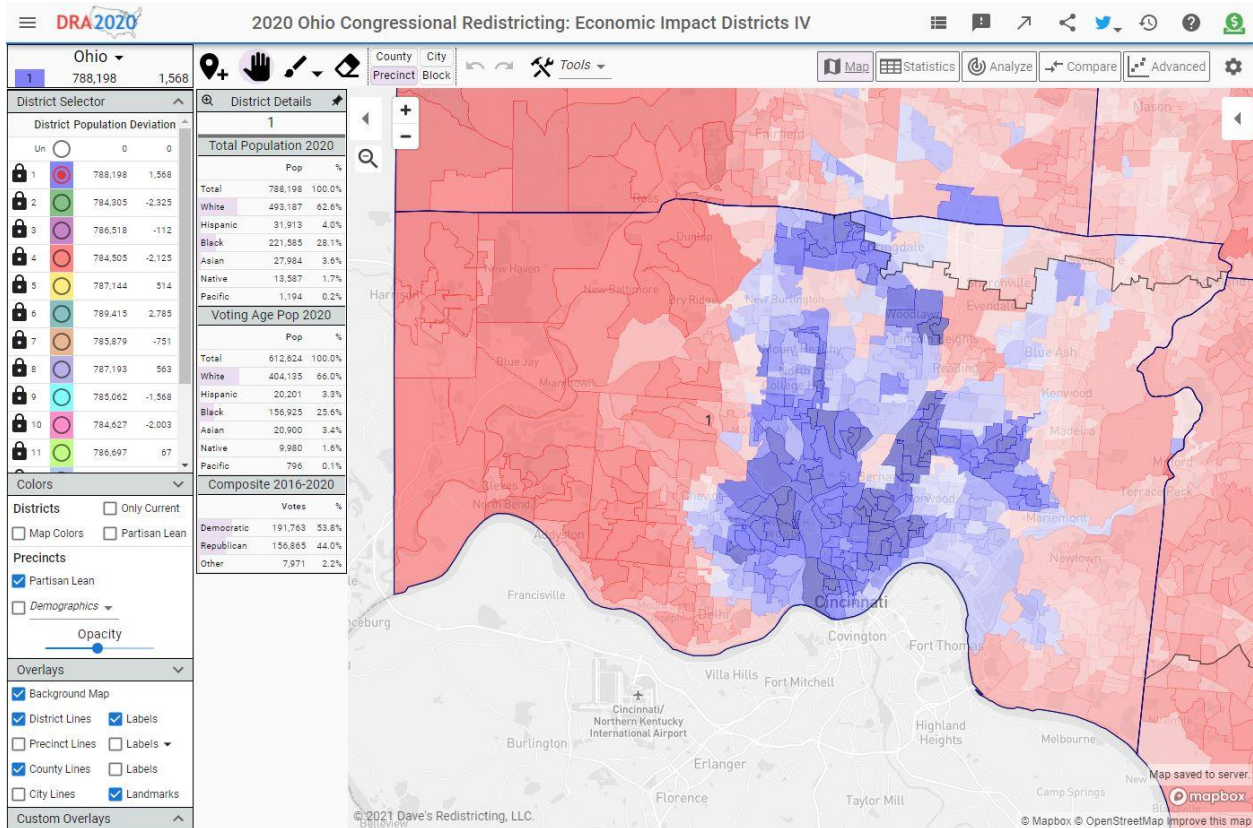
**Figure III-2 District 1 Cincinnati: Distribution of Demographic Groups**

This figure III-2 maps the relative concentration of all demographic groups as a portion of the Voting Age Population (VAP). The data for the entire district is on the District Details pinned to the left of the map.



**Figure III-3 District 1 Cincinnati: All minorities as a percentage of Voting Age Population**

The minority grouping of Voting Age Population is useful in monitoring adherence to the Voting Rights Act restrictions on redistribution of districts.



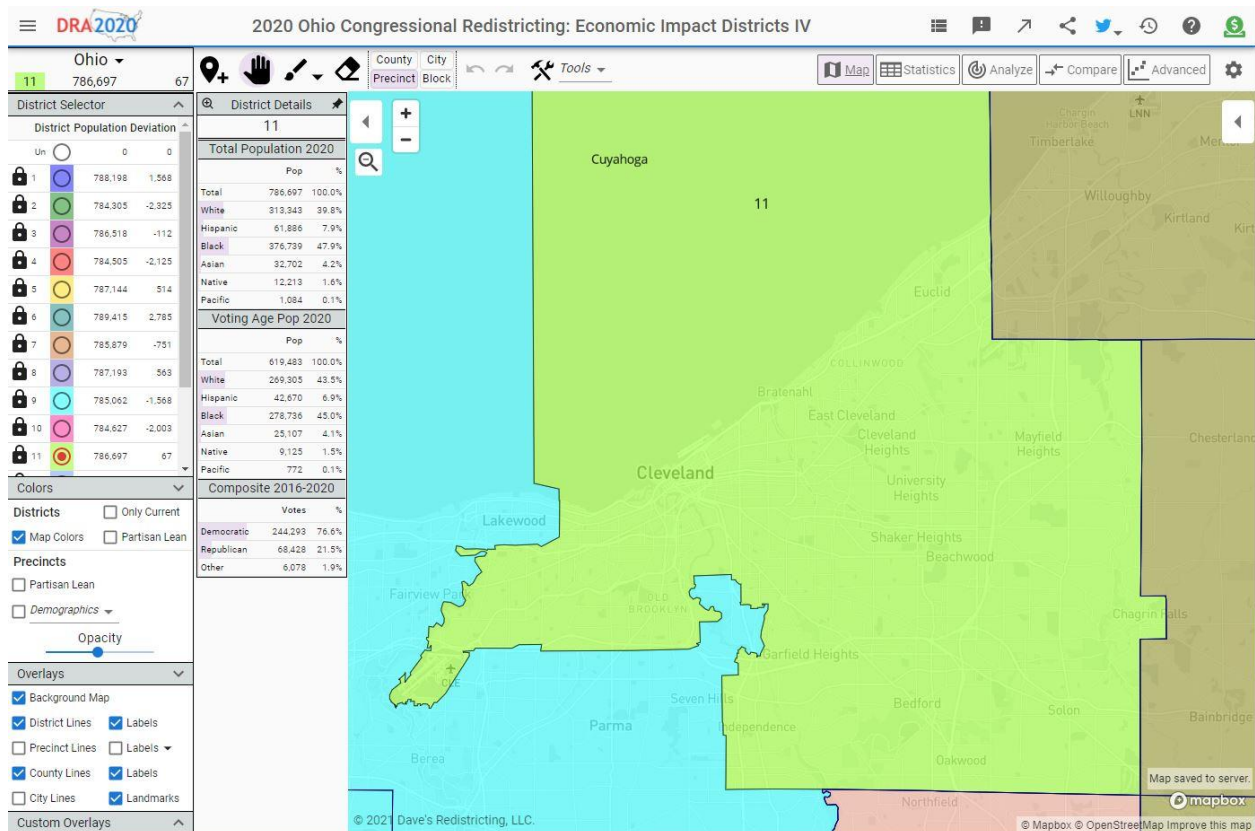
**Figure III-4 District 1 Cincinnati: Partisan Lean by Precinct**

Dave's redistricting App uses a Composite of Elections from 2016-2020 to determine how each precinct votes. ([see Reference 1b](#)) Democratic majorities are shades of blue. Republican majorities are shades of red. The overall data is at the bottom of the pinned District Details panel at the left of the map.



# Appendix IV

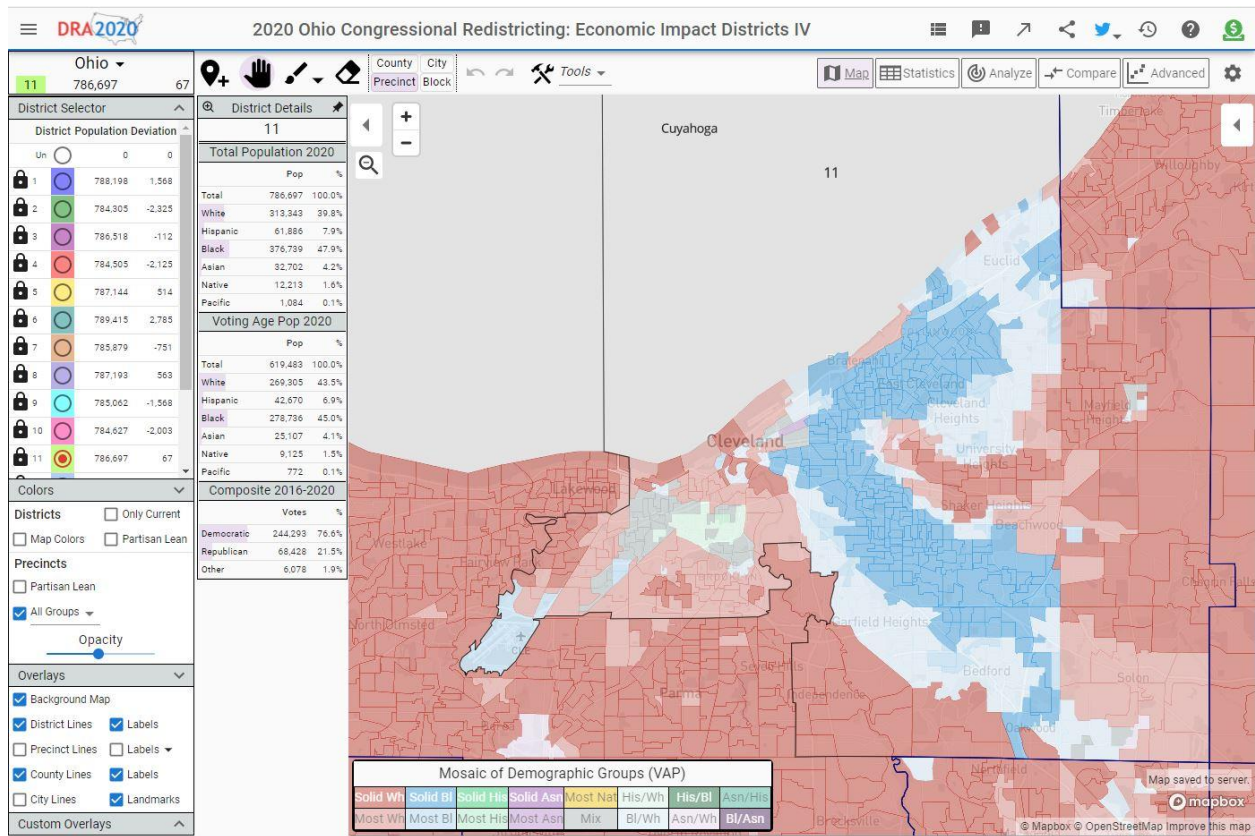
## District 11 Cleveland, Cuyahoga County



**Figure IV-1 District 11 Map: Cleveland in Cuyahoga County**

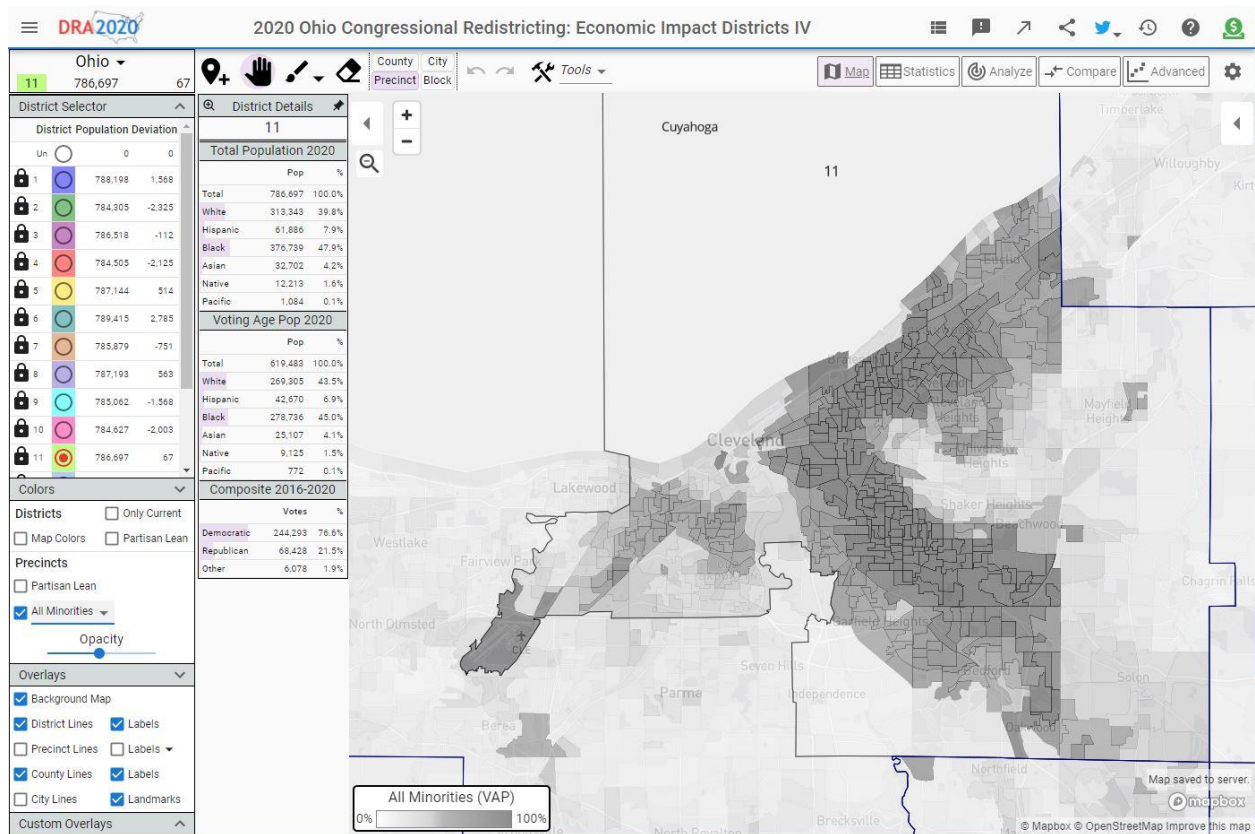
All of Cleveland is contained in District 11. The district extends to the Eastern boundary of Cuyahoga County. It is wholly contained within Cuyahoga County.





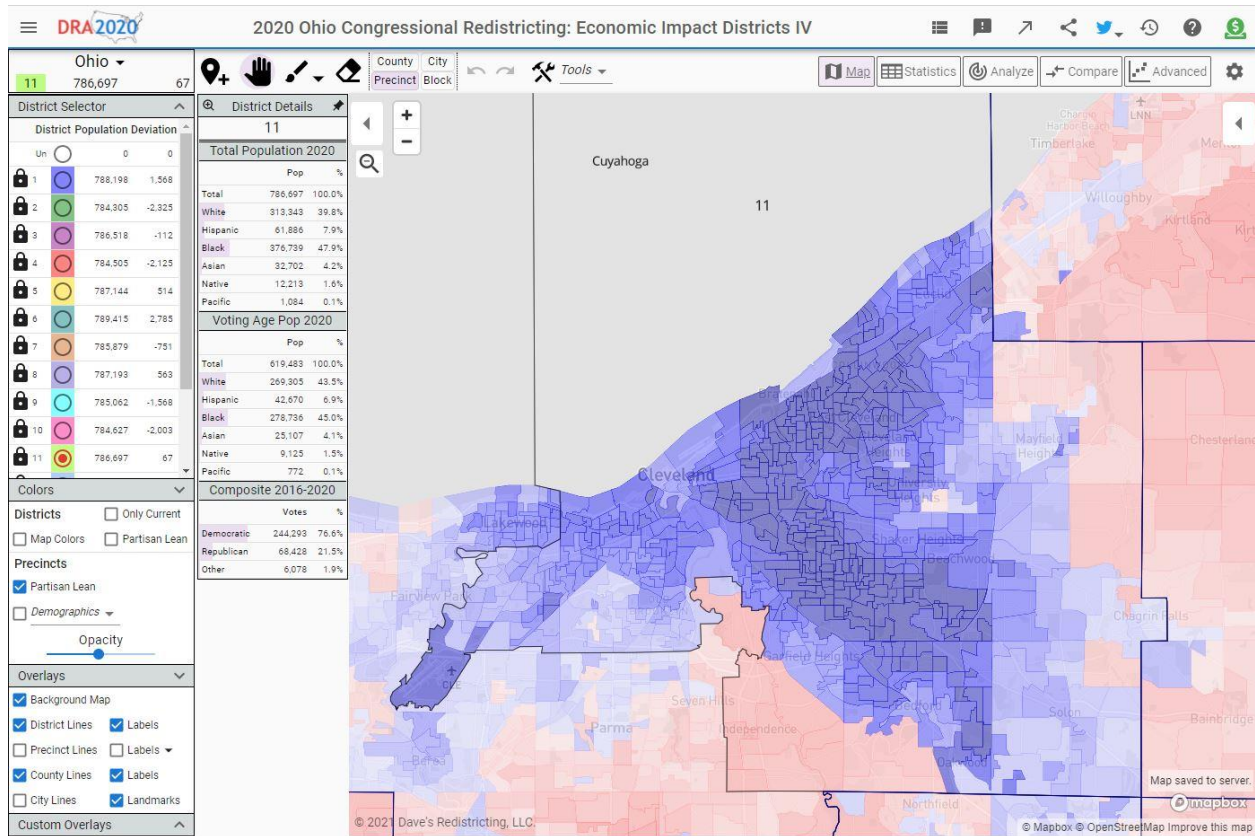
**Figure IV-2 District 11 Cleveland: Distribution of Demographic Groups**

This figure IV-2 maps the relative concentration of all demographic groups as a portion of the Voting Age Population (VAP). The data for the entire district is on the District Details pinned to the left of the map.



**Figure IV-3 District 11 Cleveland: All minorities as a percentage of Voting Age Population**

The minority grouping of Voting Age Population is useful in monitoring adherence to the Voting Rights Act restrictions on redistribution of districts. District 11 maintains a minority-majority status. (See Figure 2 Statistics)



**Figure IV-4 District 11 Cleveland: Partisan Lean by Precinct**

Dave's redistricting App uses a Composite of Elections from 2016-2020 to determine how each precinct votes. ([see Reference 1b](#)) Democratic majorities are shades of blue. Republican majorities are shades of red. The overall data is at the bottom of the pinned District Details panel at the left of the map.