

# How to Easily Compare Maps

September 14, 2023 | Redistricting Data Hub (RDH)

# Agenda

1. Comparing maps in Redistricting & You
2. Comparing maps in Dave's Redistricting App (DRA)
3. Where can I find maps?
4. Questions?



# Redistricting & You

- ◆ The [Center for Urban Research](#) (CUR) at [The Graduate Center](#) of the [City University of New York](#) (CUNY) created the Redistricting & You online map to help members of the public, journalists, elected officials, and other redistricting stakeholders to understand the local implications of redrawing legislative district lines across the country
- ◆ Built to enable comparison of post-2010 and post-2020 districts
- ◆ Two versions: United States (50 states), and State Specific (9 states)

# Redistricting & You (US version)

- ◆ Go to <https://www.redistrictingandyou.org>
  - a. Select a state and district
  - b. Or, enter an address
  - c. Or, click anywhere on the map
- ◆ Select level (Congress / State Lower House / State Upper House)
  - a. Only includes official maps

# REDISTRICTING & YOU: United States

Comparing Post-2010 Districts with Post-2020 Districts

ABOUT

RESOURCES

SHARE

PRINT

Enter an address

## POST-2010 DISTRICTS: Congressional

State selection  
Georgia

District selection  
Congress 5

DATA LEGEND

The location you've selected is in the  
**Congress 5 in Georgia**, enacted after the 2010  
Census.

### District population (2020)

(Where appropriate & where data is available, totals  
below reflect prisoner-adjusted population.  
Otherwise, population reflects 2020 Census data  
from the P.L. 94-171 redistricting data file.)

Total population	788,126
Voting age pop.	635,913
Average district pop. in GA	765,136
District <b>above avg.</b> by...	<b>22,990 people</b>
% difference from avg.	<b>3.0%</b>

**i** Hover over charts for population %s:  
Race reflects people reporting a single race, not of  
Hispanic origin, on the 2020 Census questionnaire.  
Hispanic can be of any race.

Total Population

Voting Age (VAP)

☒ CONGRESS ☐ STATE LOWER HOUSE  
☐ STATE UPPER HOUSE



Congress (old)



Congress (new)

CLEAR SELECTION

ZOOM TO SELECTION

## DISTRICTS APPROVED POST- 2020 CENSUS: Congressional

State selection  
Georgia

District selection  
Congress 5 (in litigation)

The location you've selected is in  
Georgia's **new Congressional  
district 5**.

**NOTE:** District plan under litigation (per  
*All About Redistricting's* [national  
overview](#))

The Congressional district number  
for this location (5) is the same.  
But **the district lines have  
changed**. Use the slider to  
compare:

- move the slider to the **← left** for  
the old lines;
- move it to the **right →** for the  
new ones.



Congress (old)



Congress (new)

# Redistricting & You (US version)

- ◆ Provides summary statistics of individual districts [DATA]:
  - a. Total population and voting age population, by race/ethnicity
  - b. Voting patterns in the 2020 presidential election
  - c. Metrics on compactness and splits of political subdivisions
  - d. District size, incarcerated population, and deviation from ideal

# REDISTRICTING & YOU: United States

Comparing Post-2010 Districts with Post-2020 Districts

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Georgia

District selection

Congress 5

DATA

LEGEND

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below reflect prisoner-adjusted population.  
Otherwise, population reflects 2020 Census data  
from the P.L. 94-171 redistricting data file.)

Total population 788,126

Voting age pop. 635,913

Average district pop. in  
GA 765,136

District **above avg.** by... **22,990**  
**people**

% difference from avg. **3.0%**

*Hover over charts for population %s:*

Race reflects people reporting a single race, not of  
Hispanic origin, on the 2020 Census questionnaire.  
Hispanic can be of any race.

Total Population

Voting Age (VAP)

☒ CONGRESS ☐ STATE LOWER HOUSE  
☐ STATE UPPER HOUSE



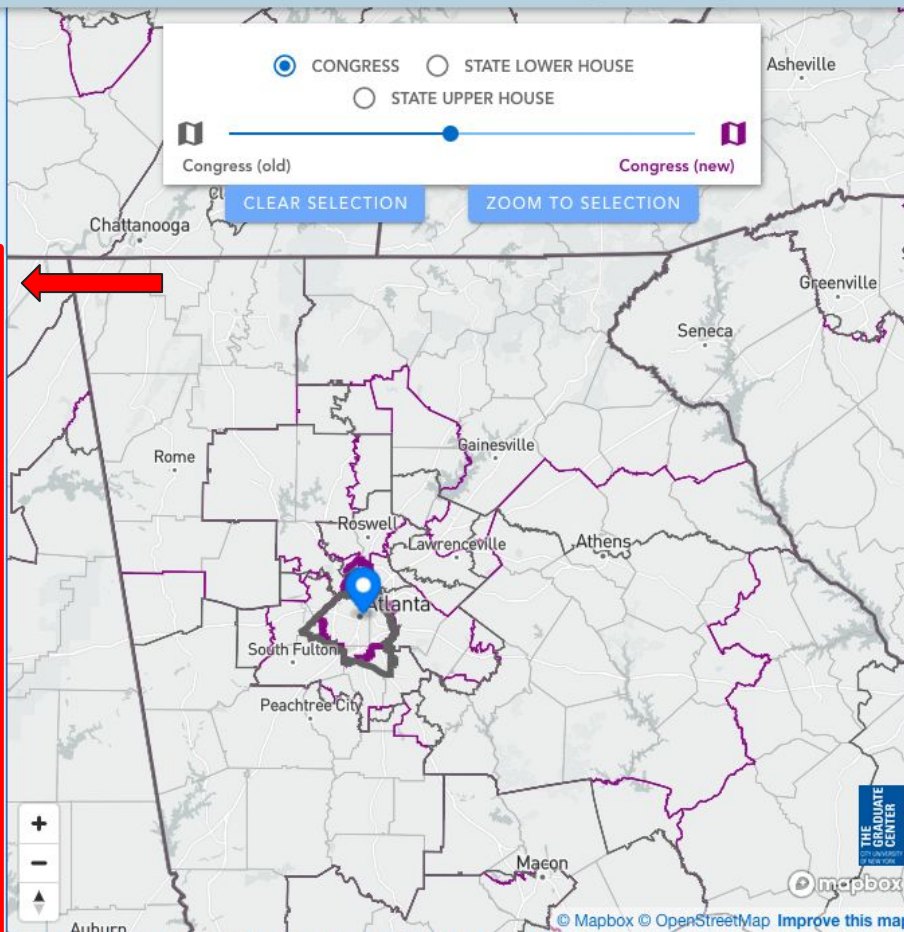
Congress (old)



Congress (new)

CLEAR SELECTION

ZOOM TO SELECTION



## DISTRICTS APPROVED POST- 2020 CENSUS: Congressional

State selection

Georgia

District selection

Congress 5

(in litigation)

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[overview](#))

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But the **district lines have**  
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compare:

- move the slider to the **← left** for  
the old lines;
- move it to the **right →** for the  
new ones.



Congress (old)

Congress (new)

Mapbox © OpenStreetMap Improve this map

# Redistricting & You (US version)

- ◆ Allows you to visually toggle [LEGEND]
  - a. Aerial imagery (street map view)
  - b. Counties
  - c. Voting age population by race/ethnicity by block group
  - d. 2020 presidential vote share by precinct



# REDISTRICTING & YOU: United States

Comparing Post-2010 Districts with Post-2020 Districts

ABOUT

RESOURCES

SHARE

PRINT

Enter an address

## POST-2010 DISTRICTS: Congressional

State selection

Georgia

District selection

Congress 5

DATA

LEGEND

FULTON COUNTY Counties

Aerial imagery from Mapbox

Voting Age Race/Hispanic origin  
(2020, by census tract)

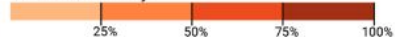
Hispanic VAP Plurality



Non-Hispanic White VAP Plurality



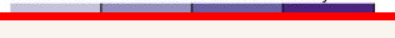
Black VAP Plurality



Asian VAP Plurality



American Indian/Alaska Native VAP Plurality



CONGRESS



STATE LOWER HOUSE



STATE UPPER HOUSE



Congress (old)



Congress (new)

CLEAR SELECTION

ZOOM TO SELECTION

## DISTRICTS APPROVED POST- 2020 CENSUS: Congressional

State selection

Georgia

District selection

Congress 5

(in litigation)

The location you've selected is in Georgia's **new Congressional district 5**.

**NOTE:** District plan under litigation (per *All About Redistricting's* [national overview](#))

The Congressional district number for this location (5) is the same. But **the district lines have changed**. Use the slider to compare:

- move the slider to the ← left for the old lines;
- move it to the right → for the new ones.



Congress (old)

Congress (new)

## District population (2020)

(Where appropriate & where data is available, totals below reflect prisoner-adjusted population. Otherwise

# Redistricting & You (9 States)

- ◆ State specific website for FL, GA, LA, MA, MO, MS, NC, NJ, and NY enable you to compare post-2010 with official *and alternative* post-2020 maps
- ◆ Also enables more visual comparisons [LEGEND], including
  - a. Relevant political subdivisions (such as towns or precincts)
  - b. Communities of interest (GA and NC only)
- ◆ Go to <https://www.STATE.redistrictingandyou.org>

# REDISTRICTING & YOU: Florida

Comparing District lines through 2022 Districts with New Post-2020 Proposed Plans

ABOUT

RESOURCES

SHARE

PRINT

Enter an address

## DISTRICTS (2012-2022): State Senate

District selection  
Senate 29

DATA

LEGEND

The location you've selected is in **Senate 29**, in effect [from 2012-2022](#).

### District population (2020)

Total population	528,123
Voting age pop.	423,605
Adults in correctional facilities	2,324
Average district pop. in FL	538,455
District <b>below avg.</b> by...	<b>10,332 people</b>
% difference from avg.	<b>-1.9%</b>

*Hover over charts for population %s:*

#### Total Population

Hover over legend to highlight chart



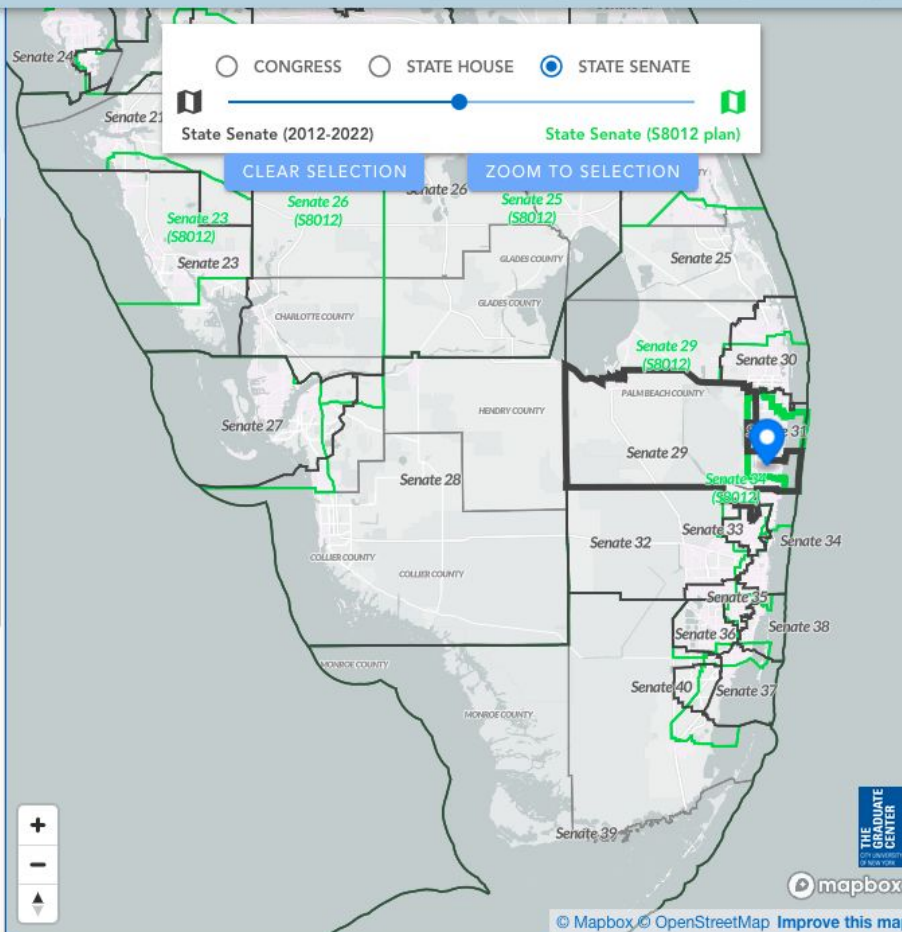
White non-Hispanic

#### Voting Age (VAP)

Hover over legend to highlight chart



Amer. Indian  
Nat. Hawaiian



## PROPOSED/NEW DISTRICTS: State Senate

Select a plan from the list:

State Senate (S8012 plan)

District selection  
Senate 31 (S8012)

The location you've selected is in **State Senate district 31** from a district plan submitted by [Florida Senate Committee on Reapportionment](#) on Nov. 10, 2021 that was **not approved**.

### District population (2020)

Total population	539,824
Voting age pop.	452,490
Adults in correctional facilities	0
Average district pop. in FL	538,455
District <b>above avg.</b> by...	<b>1,369 people</b>
% difference from avg.	<b>0.3%</b>

*Hover over charts for population %s:*

#### Total Population

Hover over legend to highlight chart

#### Voting Age (VAP)

Hover over legend to highlight chart

# Redistricting & You

- ◆ Highlights

- a. No account required
- b. Easy to use, no specialized skills/knowledge required
- c. Provides key data points for both maps
- d. Great for visualization

# DRA

- ◆ The mission of [Dave's Redistricting App](#) (DRA) is to empower civic organizations and citizen activists to advocate for fair congressional and legislative districts and increased transparency in the redistricting process.
- ◆ It enables drawing of communities of interest, local, state legislative, and congressional maps.
- ◆ It also includes numerous metrics for analyzing maps, and allows you to import and export maps in several formats.

# DRA

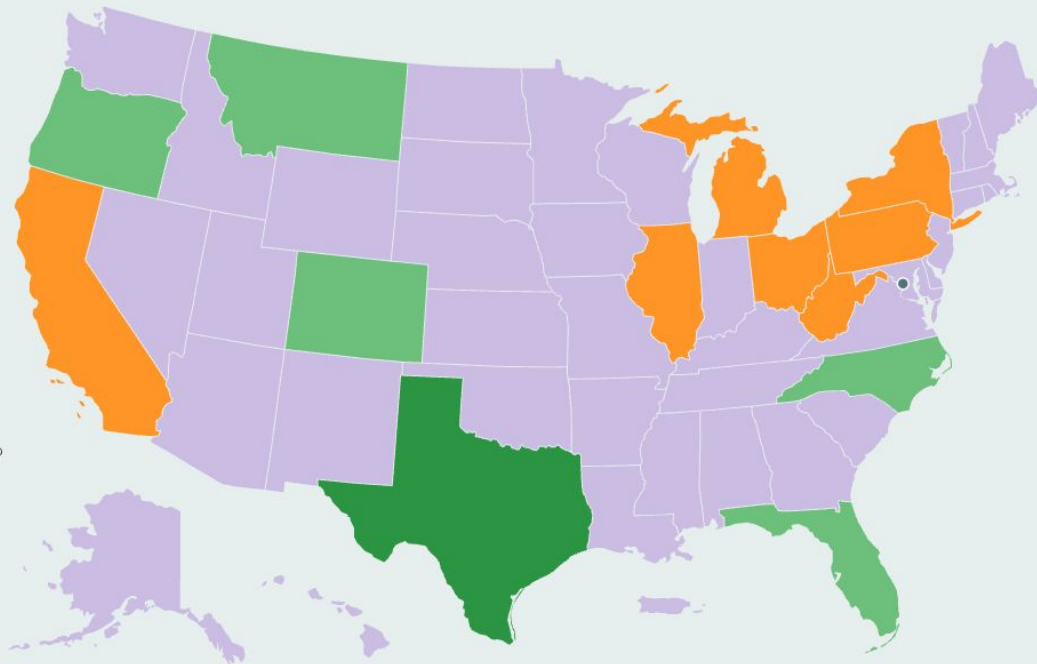
- ◆ Go to <https://davesredistricting.org> and select login or signup





**Gain 2 Seats**

Click a state to go to its page.



# DRA

- ◆ Import or select map
  - a. Go to Maps and select from your existing list
  - b. Or, go to Maps and select import button, then upload
  - c. Or, go to Home and select state, then currently enacted or notable map



# Welcome to Dave's Redistricting

Empowering Citizens  
to Advocate for  
Fair and Transparent Redistricting

Create, Analyze and Share  
District Maps  
with  
DRA 2020

PICK A STATE

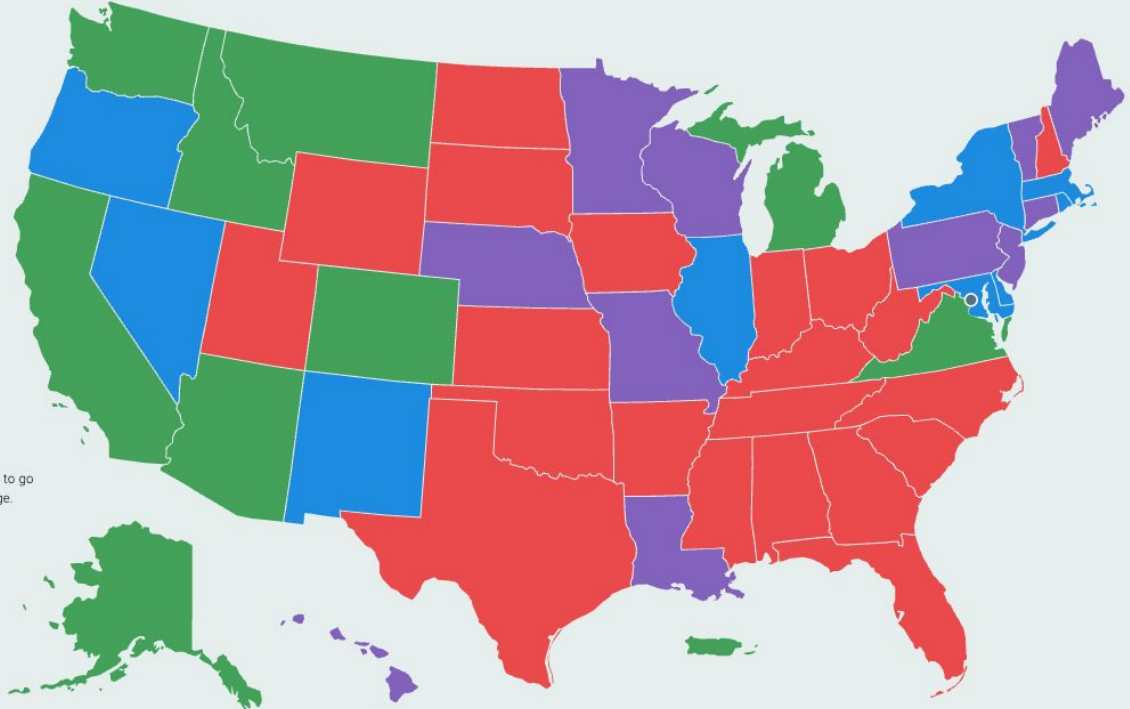
LEARN MORE

SUPPORTERS

By using this website, you agree to the  
[Terms of Service and Privacy Policy](#)

Partisan Redistricting Control  
Independent Commission Republican Control  
Split Control Democratic Control  
[Source: Wikipedia](#)

Click a state to go  
to its page.














My Maps ▾ (35 maps)

[+ New Map](#)

[+ New Community](#)

[↶ Import](#)

<input type="checkbox"/>	Preview	Name	Labels	Modified ↓		Plan	State
<input type="checkbox"/>		Copy of NY 2022 State Senate (Court Ordered Technical Corrections)		3:36 PM	100	2020/Upper	NY
<input type="checkbox"/>		Littleton, CO city council		Aug 1		2020/Other	CO
<input type="checkbox"/>		Copy of FL 2022 Congressional		Jun 12	46	2020/Congress	FL
<input type="checkbox"/>		NC 2022 precincts		Jun 7	0	2020/Congress	NC
<input type="checkbox"/>		Final Shape_9_6_22		Oct 12, 2022	100	2020/Other	NY
<input type="checkbox"/>		michigan		Aug 25, 2022	0	2020/Congress	MI
<input type="checkbox"/>		[No Name]		Jun 10, 2022		2020/Other	TX
<input type="checkbox"/>		NYC		Apr 19, 2022	0	2020/Other	NY
<input type="checkbox"/>		Ft. Pierce		Mar 29, 2022	100	2020/Other	FL
<input type="checkbox"/>		Illinois		Jan 26, 2022	87	2020/Lower	IL
<input type="checkbox"/>		[No Name]		Jan 4, 2022	64	2020/Congress	TX
<input type="checkbox"/>		dra_districts_wi_csv		Nov 29, 2021	19	2020/Congress	WI

# DRA

- ◆ Select compare button
- ◆ Select up to 5 maps to compare
  - a. Default option is Notables
  - b. But can select any published map, from you or others
  - c. Or any of your unpublished maps

New York ▾

1 325,503 4,966

District Selector

District Population Deviation

District Details ▾

Colors

Districts ☐ Only Current☒ Map Colors ☐ Partisan Lean☐ Demographics ▾

Precincts

☐ Partisan Lean ☐ Swing ▾☐ Demographics ▾

Opacity

Change Palettes

Overlays

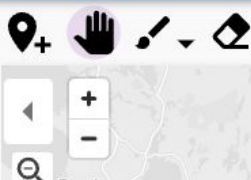
☒ Map ☐ Racial Dot ▾☒ District Lines ☒ Labels☐ Precinct Lines ☐ Labels ▾☒ County Lines ☐ Labels☐ City Lines ☐ Labels☐ Landmarks

Custom Overlays

Overlays



2020 Neighborhood Ta &gt;

County  
PrecinctCity  
Block

Tools ▾

Map

Statistics

Analyze

Compare

Advanced



Precinct Details

Total Pop (Adj) 2020

	Pop	%
Total	0	(-)
White	0	(-)
Hispanic	0	(-)
Black	0	(-)
Asian	0	(-)
Native	0	(-)
Pacific	0	(-)

Voting Age Pop 2020

	Pop	%
Total	0	(-)
White	0	(-)
Hispanic	0	(-)
Black	0	(-)
Asian	0	(-)
Native	0	(-)
Pacific	0	(-)

[Ratings](#) [Ratings to Selected Maps](#) [Similar Maps](#)

Map

Statistics

Analyze

Compare

Advanced

i

## Ratings: Copy of NY 2022 State Senate (Court Ordered Technical Corrections)



Bigger is better, for the ratings above.

PICK MAP(S)

☒ Compare Notables

These maps are compared with ratings that use the default Census, Voting Age and Election datasets, which are noted below, to ensure 'apples to apples' comparisons.

## All maps are rated using these datasets

- Precinct Shapes: Census 2020
- Total Population: Census Adjusted 2020

Q Search map list

1 out of max 5 choices selected

PICK DISMISS

☒ Compare Notables

These maps are compared with ratings that use the default Census, Voting Age and Election datasets, which are noted below, to ensure 'apples to apples' comparisons.

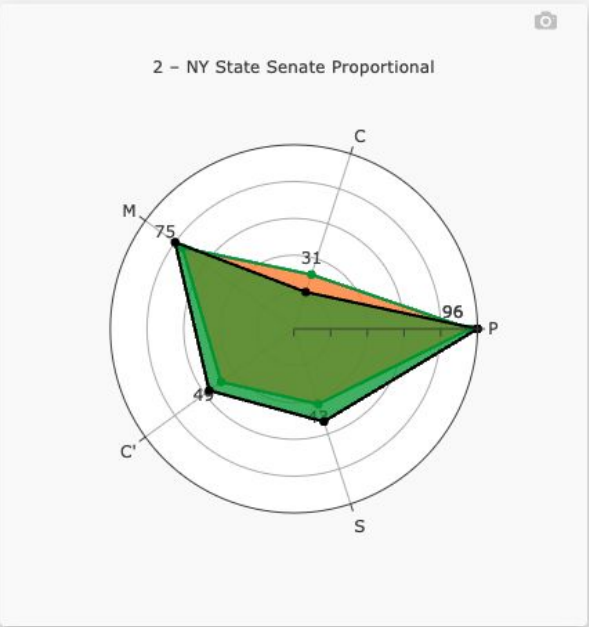
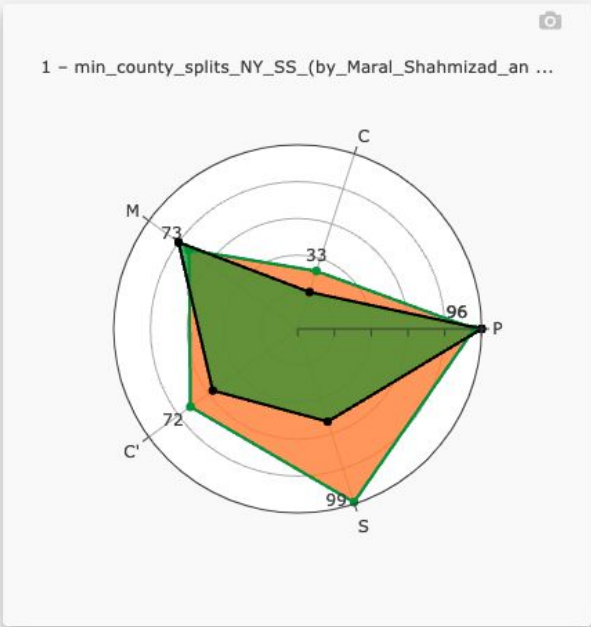
# DRA

- ◆ Compares:
  - a. Competitiveness (C)
  - b. Minority representation (M)
  - c. Compactness (C')
  - d. Splitting (S)
  - e. Proportionality (P)
- ◆ All scaled 0 to 100, with 100 be the best possible score
- ◆ Learn more about [these analytics](#)

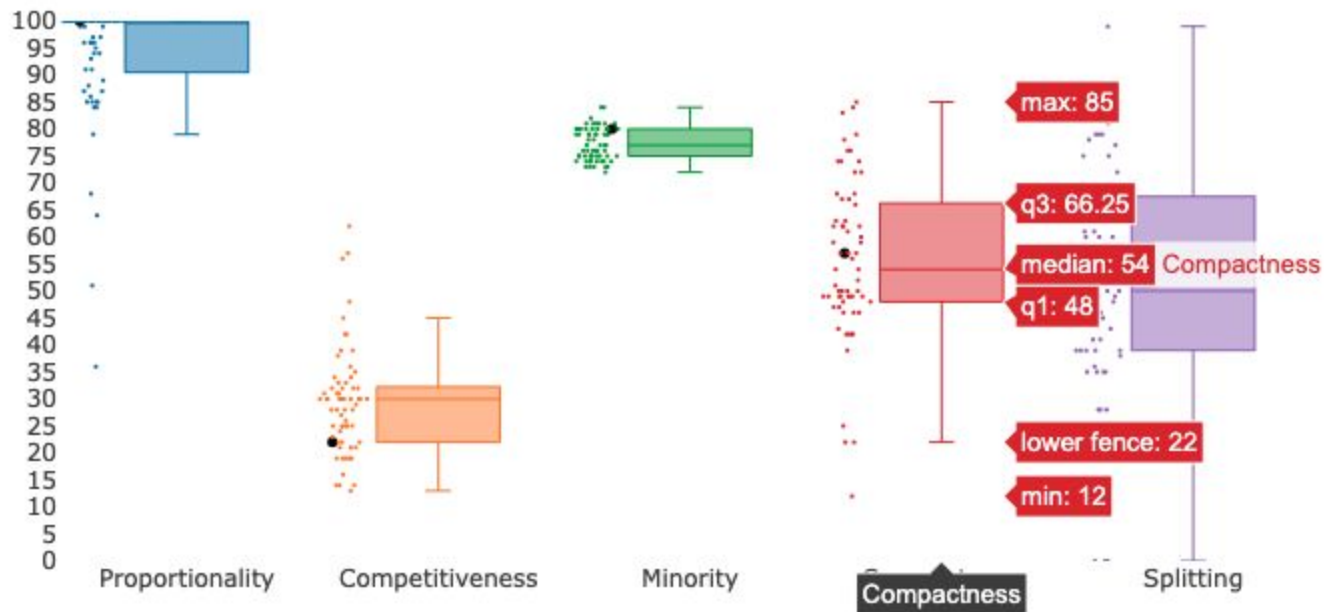


# Ratings to Selected Maps

These are the comparative ratings for the selected maps in pairs.







- ◆ If you select only one map to compare, you will also see a table comparing the population across the two maps, district by district

[Back to top](#)

# DRA

- ◆ Visual comparison of maps is done through custom overlays
- ◆ Select the gear icon next to custom overlays
  - a. Select or import **layers**: any static image in geojson or shapefiles, such as a community of interest, locations of prison facilities, or a full district map
  - b. Select **maps**: any published map or any of your unpublished maps on DRA, which will update when the original map is updated

New York ▾

1 325,503 4,966

District Selector

District Population Deviation

District Details ▾

Colors

Districts ☐ Only Current☒ Map Colors ☐ Partisan Lean☐ Demographics ▾

Precincts

☐ Partisan Lean ☐ Swing ▾☐ Demographics ▾

Opacity

Change Palettes

Overlays

☒ Map ☐ Racial Dot ▾☒ District Lines ☒ Labels☐ Precinct Lines ☐ Labels ▾☒ County Lines ☐ Labels☐ City Lines ☐ Labels☐ Landmarks

Custom Overlays

Overlays ⚙

2020 Neighborhood Ta &gt;

County  
PrecinctCity  
Block

Tools ▾

Map

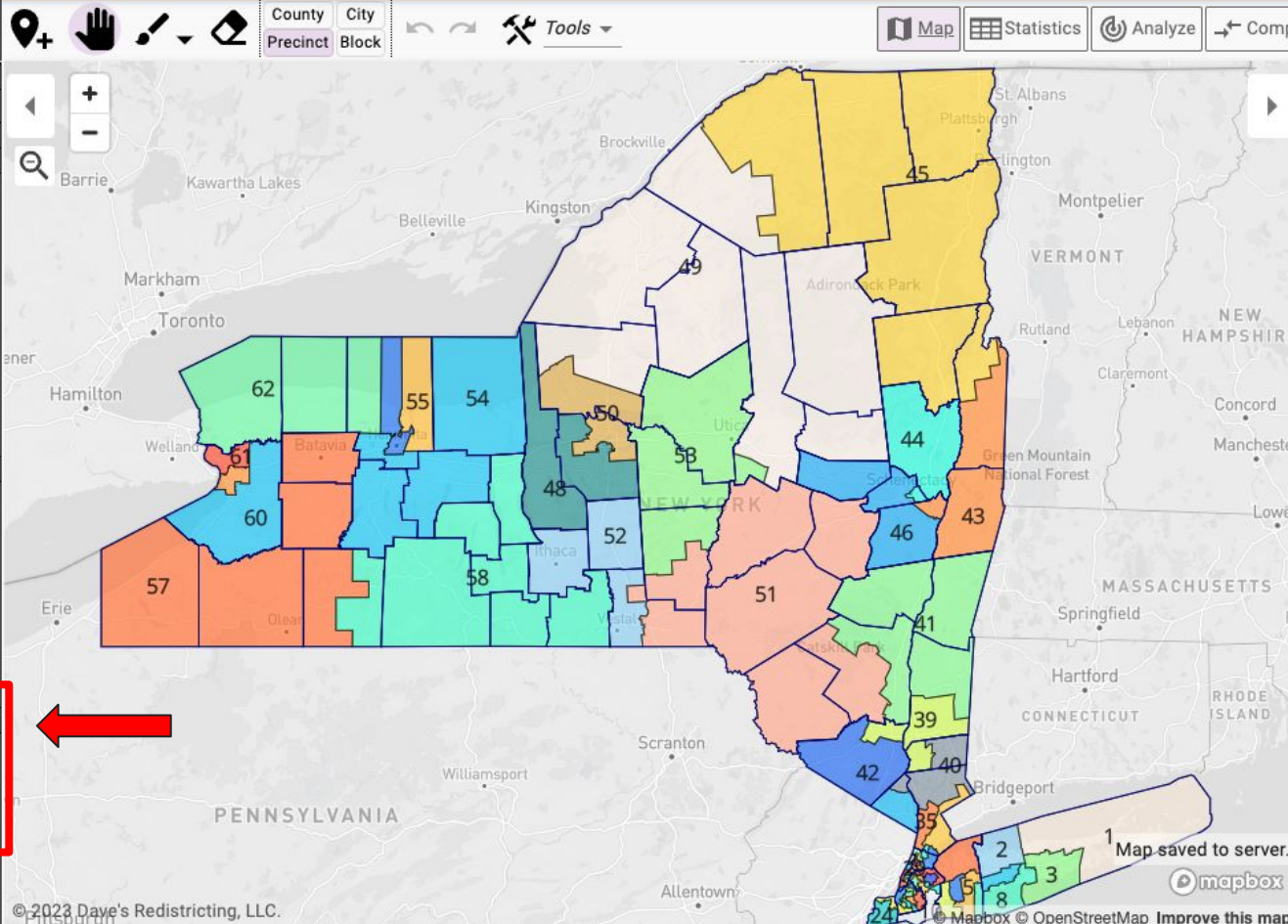
Statistics

Analyze

Compare

Advanced

⚙



## Precinct Details

## Total Pop (Adj) 2020

	Pop	%
Total	0	(-)
White	0	(-)
Hispanic	0	(-)
Black	0	(-)
Asian	0	(-)
Native	0	(-)
Pacific	0	(-)

## Voting Age Pop 2020

	Pop	%
Total	0	(-)
White	0	(-)
Hispanic	0	(-)
Black	0	(-)
Asian	0	(-)
Native	0	(-)
Pacific	0	(-)

Map saved to server.

mapbox

DRAB2020

Copy of NY 2022 State Senate (Court Ordered Technical Corrections)

Map Statistics Analyze Compare Advanced

New York  
1 325,503 4,966

District Selector

District	Population	Deviation
Un	0	0
1	325,503	4,966
2	320,585	48
3	325,503	4,966
4	325,503	4,966
5	325,504	4,967
6	325,503	4,966
7	325,503	4,966
8	325,504	4,967

District Details

Colors

Overlays

☒ Map

☐ Racial Dot

☒ District Lines

☒ Labels

☐ Precinct Lines

☐ Labels

☐ County Lines

☐ Labels

☐ City Lines

☐ Labels

☐ Landmarks

Custom Overlays

Overlays

No overlays added

County Precinct City Block

Tools

Select Layers and Maps

Select and manage the layers, communities and maps displayed over this map.

<input checked="" type="checkbox"/>	Layer ↑	Owner	Type
<input checked="" type="checkbox"/>	ny_sldu_2012_to_2021	kate	layer

ADD LAYERS ADD MAPS

APPLY DISMISS

Precinct Details

Total Pop (Adj) 2020

	Pop	%
Total	0	( )
White	0	( )
Hispanic	0	( )
Black	0	( )
Asian	0	( )
Native	0	( )
Pacific	0	( )

Voting Age Pop 2020

	Pop	%
Total	0	( )
White	0	( )
Hispanic	0	( )
Black	0	( )
Asian	0	( )
Native	0	( )
Pacific	0	( )

Map saved to server.

mapbox

© Mapbox © OpenStreetMap Improve this map

# DRA

- ◆ Customize the outline, fill, labels, and landmarks



New York  
1 325,503 4,966

District Selector			
District	Population	Deviation	
Un	0	0	
1	325,503	4,966	
2	320,585	48	
3	325,503	4,966	
4	325,503	4,966	
5	325,504	4,967	
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District Details

Colors

Overlays

☒ Map ☐ Racial Dot

☒ District Lines ☒ Labels

☐ Precinct Lines ☐ Labels

☐ County Lines ☐ Labels

☐ City Lines ☐ Labels

☐ Landmarks

Custom Overlays

Overlays

ny\_sldu\_2012\_to\_2021

Line Width 1

Line Color

Line Opacity 0.25

Fill Color

Fill Opacity 0.25

Apply to All Overlays

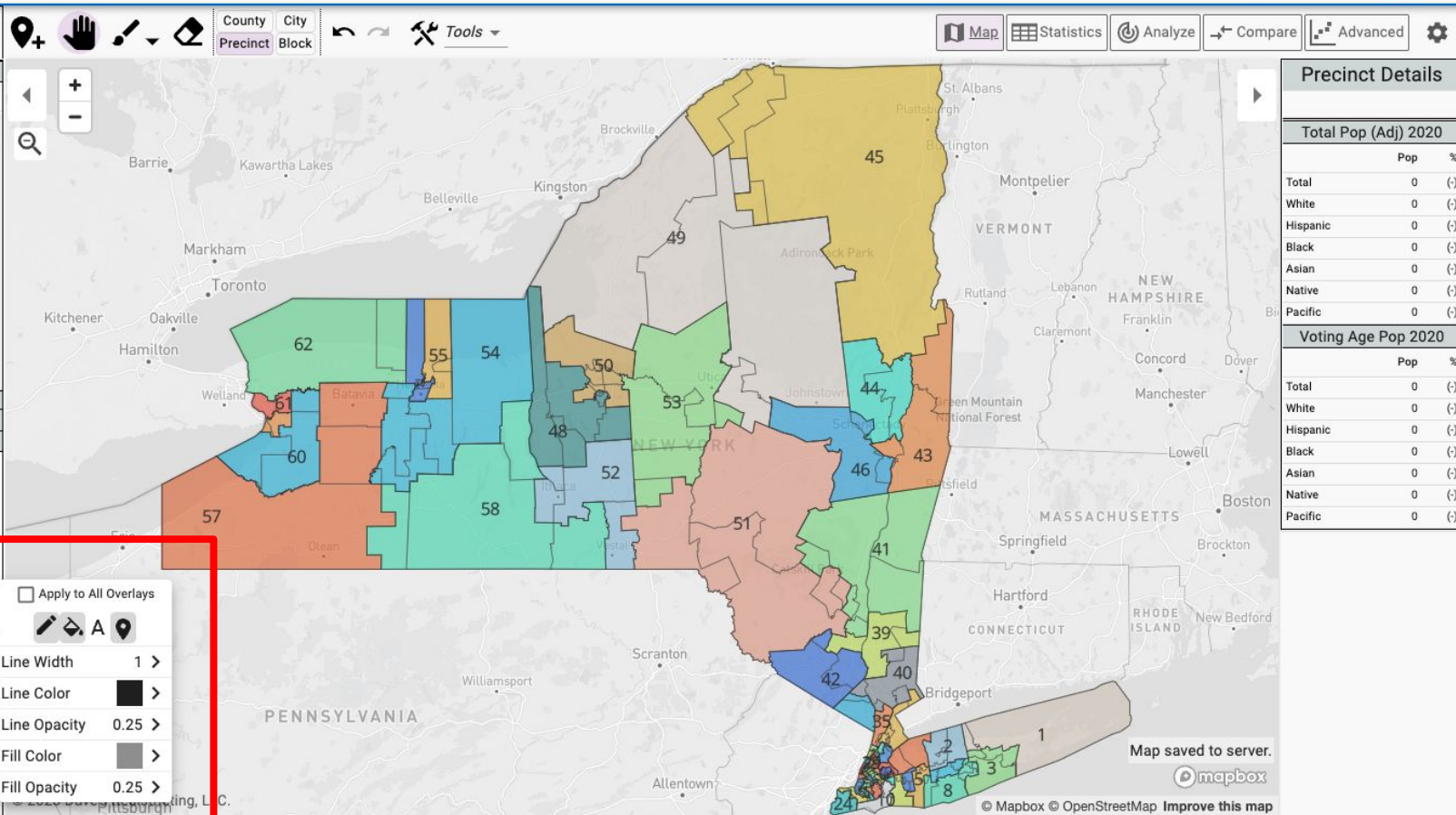
Line Width 1

Line Color

Line Opacity 0.25

Fill Color

Fill Opacity 0.25



Precinct Details

Total Pop (Adj) 2020

Pop %

Total 0 (-)

White 0 (-)

Hispanic 0 (-)

Black 0 (-)

Asian 0 (-)

Native 0 (-)

Pacific 0 (-)

Voting Age Pop 2020

Pop %

Total 0 (-)

White 0 (-)

Hispanic 0 (-)

Black 0 (-)

Asian 0 (-)

Native 0 (-)

Pacific 0 (-)

Map saved to server.

mapbox

© Mapbox © OpenStreetMap Improve this map

New York  
1 325,503 4,966

County Precinct City Block

District Selector			
District	Population	Deviation	
Un	0	0	
1	325,503	4,966	
2	320,585	48	
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5	325,504	4,967	
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District Details

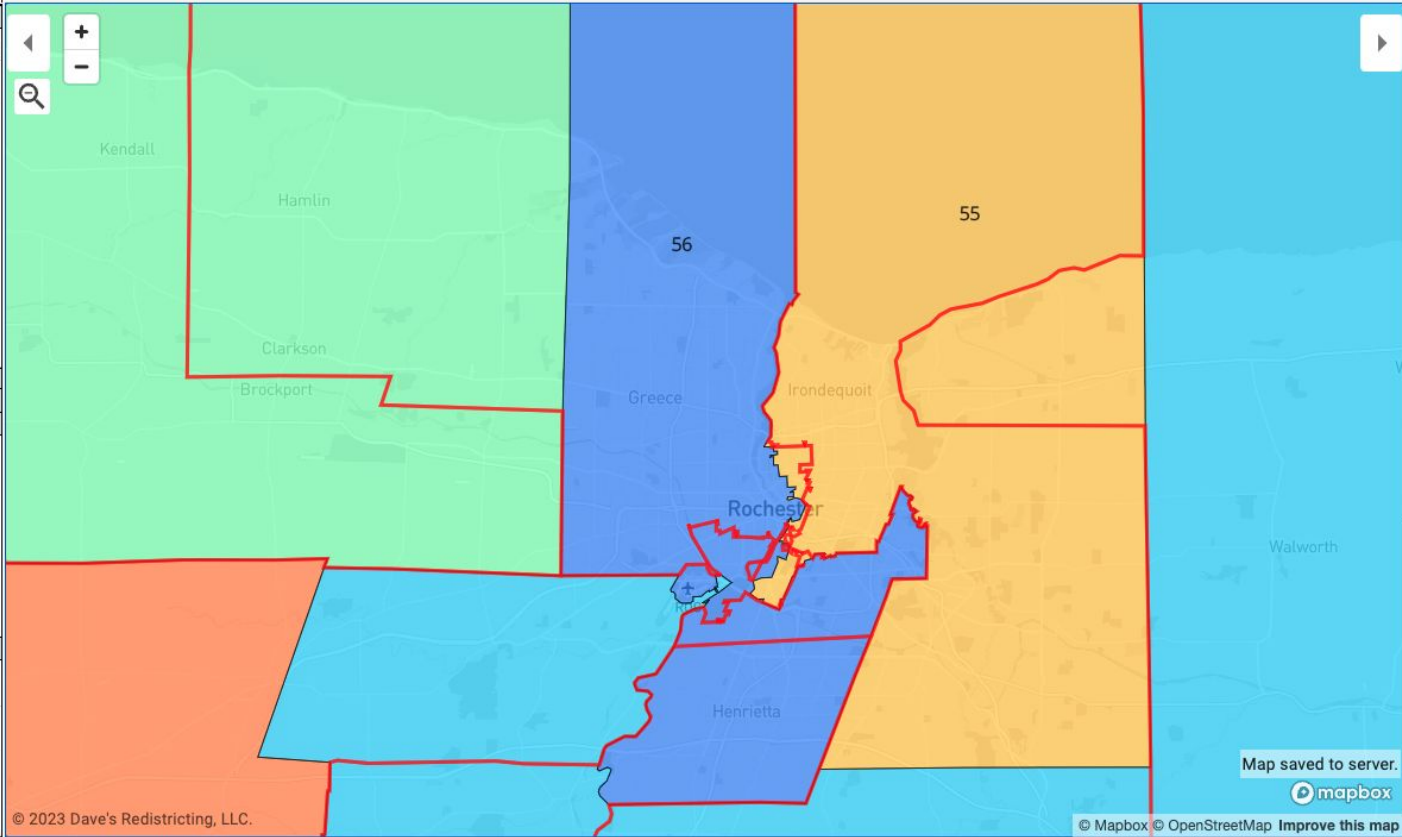
Colors

Overlays

- ☒ Map ☐ Racial Dot
- ☒ District Lines ☒ Labels
- ☐ Precinct Lines ☐ Labels
- ☐ County Lines ☐ Labels
- ☐ City Lines ☐ Labels
- ☐ Landmarks

Custom Overlays

Overlays  
ny\_sldu\_2012\_to\_2021



Precinct Details

Total Pop (Adj) 2020		
	Pop	%
Total	0	(-)
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Native	0	(-)
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Voting Age Pop 2020		
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White	0	(-)
Hispanic	0	(-)
Black	0	(-)
Asian	0	(-)
Native	0	(-)
Pacific	0	(-)



# DRA

## ◆ Highlights

- a. Enables comparison of any map
- b. Enables comparison of multiple (up to 6 total) maps
- c. Provides detailed analytics on maps
- d. Visual comparisons of maps possible with Custom Overlays feature

# Where can I find maps?

- ◆ Redistricting & You has all post-2010 and post-2020 maps, and will continue to add new maps as they are enacted
- ◆ To download:
  - a. RDH and DRA have all post-2010 and post-2020 maps, and will continue to add new maps as they are enacted
  - b. [PlanScore](#) has numerous maps
  - c. Many states still have their redistricting websites live and store proposed and alternative maps ([Ohio](#), for example)
  - d. Contact the RDH for help tracking down a map at [help@redistrictingdatahub.org](mailto:help@redistrictingdatahub.org)

Questions?

