Maptitude Online Redistricting User Guide
Prepared by National Demographics Corp.

1. Select a Language

On the Maptitude Online Redistricting page, click your preferred language from the list at the bottom of the page.

You can use this web site in: English Español
Português Tiếng Việt 한국어 中文

2. Create a New User Account

On the login page, click the **New User** link.

Create a New User account with a login name and password. *NOTE: Your user name must be one word and your password must have at least 8 characters. Your user name will appear at the top of any maps you print or email.*

Enter your email address to receive an account activation link. Activate your account by clicking the link in the email you receive. After activating your account, login to Maptitude Online Redistricting.
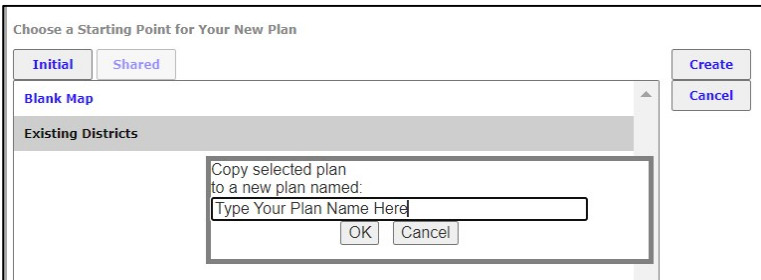
Access Your Online Redistricting Plans

Username

*

Password

*

Log In

New User | Forgot Password | Contact Us

3. Create a New Plan

In the Plan Manager window, click the **New Plan** button.

Plan Manager - kpdemo
My Plans
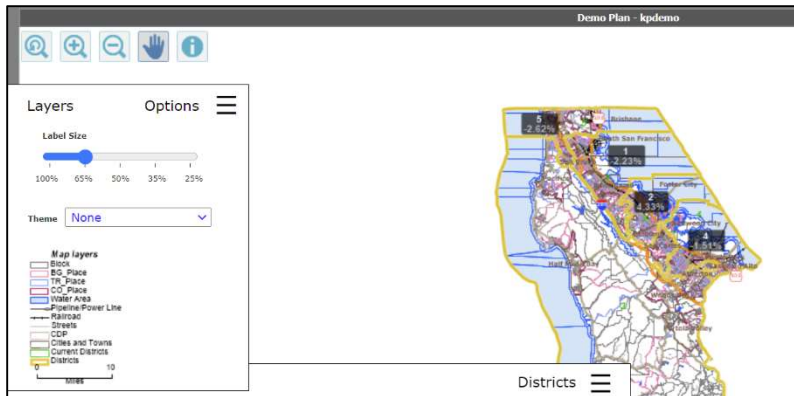
My Existing Districts

Open
Copy
Delete

New Plan

Next, choose a to start with a **Blank Map** or **Existing Districts.** Choose **Blank Map** if you want to draw new districts from scratch. Choose **Existing Districts** if you want to make modifications to the current districts.

Choose a Starting Point for Your New Plan

Initial   Shared

Blank Map

Existing Districts

Copy selected plan
to a new plan named:
Type Your Plan Name Here
OK   Cancel

Create
Cancel

4. Navigate the Map

Map Navigation

The navigation tools shown below are used to change the map scale and get information about the features in a map:

|	
	Click to show the initial map scale.
	Click on the map to zoom in or click and drag a rectangle to zoom to a specific area.
	Click on the map to zoom out or click and drag a rectangle to reduce the map scope to a specific area.
	Click and drag to pan the map in any direction without changing the scale.
	Click on the map to display information about the features at the location where you clicked in a separate Info window. Click the tabs to see information for different layers.

You can also use your mouse's scroll wheel to zoom in and out.
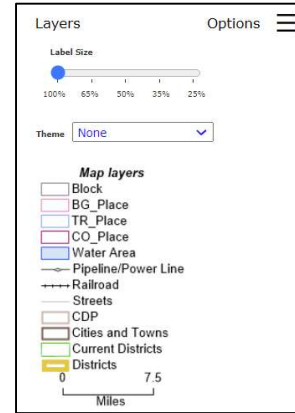
5. Explore the Toolboxes

Layers/Options

Click ☰ to show or hide the Layers/Options box.

The Layers/Options box is where you can choose what layers are visible in the map, select a theme to apply to the map, and see a legend for the map: Use the slider to change the size of labels and widths of lines.

Click **Layers** to see the layers on the map and at what scales they will display. Use the checkboxes to choose which background layers to display.

Use the **Theme** dropdown menu to select a theme to apply to the map. The available themes are described below.

- **District ID** displays the current districts labeled by number and shaded by color
- **Renters** displays the percent of housing occupied by renters
- **CollegeGrads** displays the percent of the population age 25+ with a Bachelors degree or graduate degree
- **Income$75k+** displays the percent of the population earning an annual income of $75,000+
- **LatinoCVAP** displays the percent of Hispanic voting age (18+) citizens
- **AsnCVAP** displays the percent of Asian American voting age (18+) citizens
- **BlkCVAP** displays the percent of African American voting age (18+) citizens
- **TotMinCVAP** displays the percent of minority/non-white voting age (18+) citizens

Districts

Click ☰ to show or hide the District box.

The Districts box displays a table with demographic information about the districts. The title bar of the table tells you how many districts are in the plan and the ideal value for each district.

District	Est_Population	Deviation	% Deviation	CVAP_Total	CVAP_Latino	% CVAP_Latino	CVAP_Wh
1	150,280.45	-3,426.55	-2.2%	102,505.43	21,071.25	20.6%	43,598
2	160,356.9	6,649.9	4.3%	99,039.72	14,179.29	14.3%	51,623
3	156,829.9	3,122.9	2.0%	111,495.99	11,731.81	10.5%	80,370
4	151,385.5	-2,321.5	-1.5%	84,184.72	23,569.65	28.0%	41,017
5	149,682.74	-4,024.26	-2.6%	103,705.11	18,816.19	18.1%	19,765

Districts in Plan: 5; Target: 5; Ideal Population: 153,707

Redistricting Toolbox

Click ☰ to show or hide the Redistricting Toolbox box.

The Redistricting toolbox contains the tools for modifying districts in the plan. See "How to Modify the Districts" below for details on using the Redistricting toolbox.
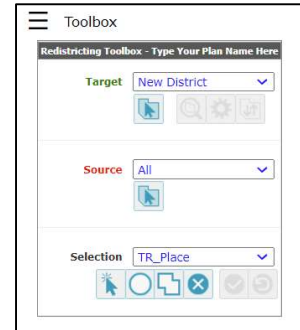
Changes

Click ☰ to show or hide the Changes box.

The Changes box displays a table with the pending changes to one or more districts based on modifications made with the Redistricting tools.

6. Modify the Districts

By looking at the population deviation percentages on the map or the Districts table, you can see which districts need adjusting. In the example below (from Phoenix, Arizona), you can see that you need to take population away from District 8 (over the ideal population by .96% or 6,800 people) and you need to add population to District 4 (under the ideal population by .96% or 6,799 people).

To do this, you will make District 4 the **TARGET DISTRICT** and District 8 the **SOURCE DISTRICT**. You do this in the Redistricting Toolbox.

From the **Target** drop-down list, choose the district to which you will add population.

From the **Source** drop-down list, choose the district from which you will remove population. Alternatively, you can choose the Pick Source District ![tool icon] tool and then click the source district on the map or choose **All** to choose features from any district.

From the **Selection** drop-down list, choose the level at which you will be making changes. You can choose to move individual blocks (this is the smallest unit), block groups, tracts, or even entire districts.

Click ![zoom icon] in the Redistricting Toolbox to zoom the map to the chosen district or click the Zoom In tool ![zoom in icon] on the map and then click and drag a rectangle on the part of the map you want to zoom to. Notice that as you zoom in, labels that indicate population in each individual feature will display to further help you identify populations to move.
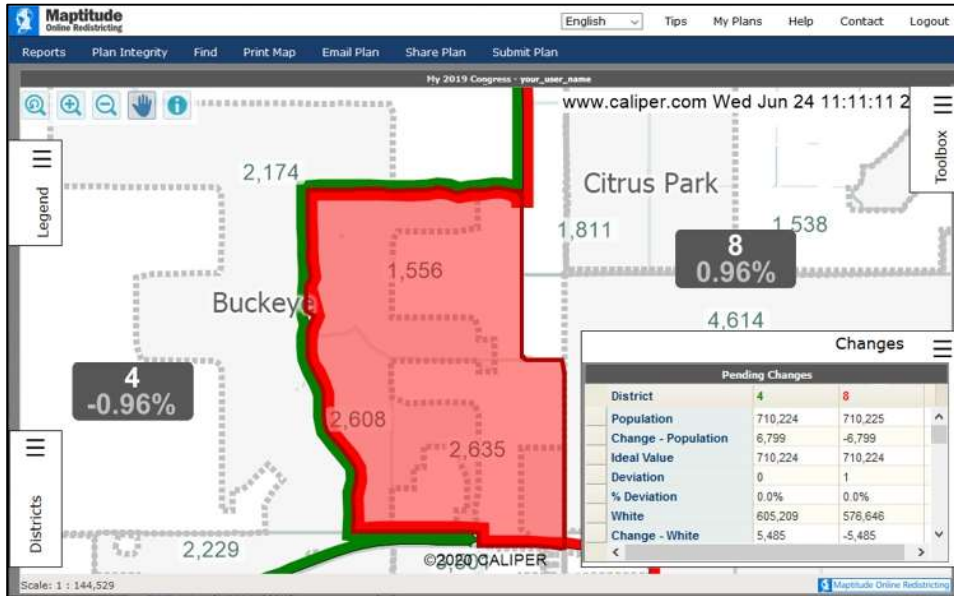
Use the Selection Tools to highlight the areas to move from the Source District to the Target District. You have three tools from which to choose:

![cursor icon] Click on each area to be moved individually. Every area you click is highlighted on the map.

![circle icon] Click on the map and drag a circle. All areas within or touching the circle are highlighted on the map.

![shape icon] Click a shape on the map and double-click to close it. All areas within or touching the shape are highlighted on the map.

Notice that as you highlight areas to be moved, the Pending Changes table shows the effect on the Target and Source districts. You can continue to click on additional areas to get the population deviation as close to zero as you can. For example, by choosing to move the red highlighted areas below from District 8 to District 4, the two districts will have populations within 1 of the ideal population:

If the Pending Changes table indicates that you have put too many people into a district, you may want to remove some areas from the highlight. Press and hold the **Ctrl** key on your keyboard while using any of the Selection Tools to remove areas from your pending changes.

Click ✅ in the Redistricting Toolbox to save the changes to the district. The map will then automatically update the district boundary and the population values in the table.
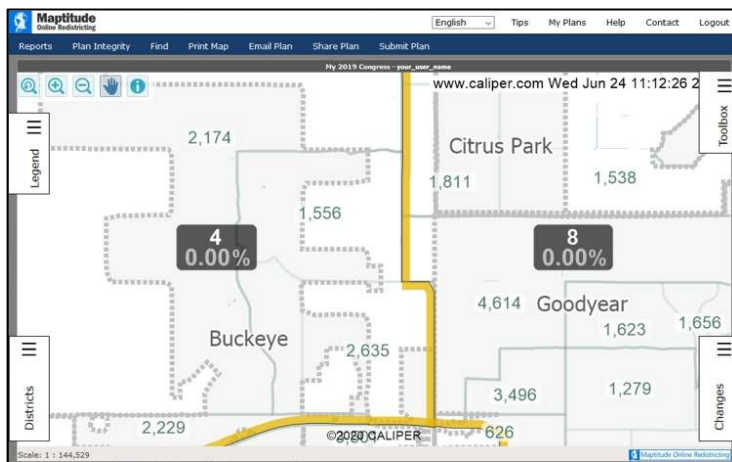
You can undo the change to the districts by clicking 🔄 in the Redistricting Toolbox.

7. Verifying and Submitting Your Plan

When you have finalized your plan you need to check if for errors. If your plan is free from errors you can submit it.

From the Plan Integrity menu, choose **Find Unassigned Areas**. If any unassigned areas are found they will be listed in the Unassigned Areas toolbox. Double-click any unassigned area in the list to zoom to its location (or highlight the area in the list and click in the Unassigned Areas toolbox). Choose a target district into which to move the unassigned area, select the area with one of the Selection Tools, and save the change. Click in the Unassigned Areas toolbox to refresh the list and verify your changes.

From the Plan Integrity menu, choose **Find Non-Contiguous Districts**. If any non-contiguous areas are found they will be listed in the Non-Contiguous Areas toolbox. Double-click any non-contiguous area in the list to zoom to its location (or highlight the area in the list and click in the Non-Contiguous Areas toolbox). Choose a target district into which to move the non-contiguous area, select the area with one of the Selection Tools, and save the change. Click in the Non-Contiguous Areas toolbox to refresh the list and verify your changes.

Click **Submit Plan**. Provide a description of your plan, provide contact information, and click OK.