

How to Use DistrictBuilder.org to Redistrict Local Governments

IndianaLocalRedistricting.com

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Ideally, redistricting would involve simply switching a few precincts without splitting any of them to create compact and contiguous districts that have a population deviation below 10%. Because census data is readily available at the precinct level, it is easy to calculate population changes when all that is involved is swapping whole precincts. Indeed, state statute prohibits splitting precincts unless it is necessary to equalize population. However, the fewer the precincts the harder that is to do; some local governments have only a handful of precincts within them making equalization of population without splitting precincts impossible.

Thus, in most cases you will need to create maps for local redistricting that overlay census blocks so you can keep a running total of the number of residents in each proposed council or board district. If your county reprecincted after the 2020 census, and the changes in boundaries affected your local government, you will definitely need to use maps showing census block data. The instructions below will help you do that at no cost using the website DistrictBuilder.org.


Note: There are other websites, such as Districtr and Redistricting Data Hub, that also allow you to create maps free of charge. Since we use DistrictBuilder, that is the one we describe below.

1. Gather necessary materials
 - a. Obtain a map of your local government's boundaries and the precincts **as they existed at the time of the 2020 census**.
 - b. Obtain **2020 census data** for precincts within your local government area so that you can verify the populations of each precinct as they appear on DistrictBuilder.
2. Calculate the ideal population size for each of your city/county/school board districts or wards **based on the 2020 census**
 - a. To find the ideal size, divide the total population of your county or city council or school board **as it was in 2020** by the number of required districts

3. Create a free account on DistrictBuilder.org
 - a. Sign up using your name and email
 - b. Create a password

4. Create a new map in DistrictBuilder
 - a. Log into DistrictBuilder.org
 - b. Click on “Create a map”
 - c. Give your map a name (e.g., “LakeStationCityCouncilMap1”)
 - d. Select your state (e.g., Indiana)
 - e. In response to the prompt “How many districts do you want to map,” choose the “Custom” option
 - f. Specify the number of “districts,” which should be slightly more than the number of precincts.
 - i. For example, if your county or city has 11 precincts, put down “13” under “number of districts”)
 - ii. Don’t worry; these aren’t the number of board or council districts you will end up with
 - g. Ignore “Population deviation tolerance” for the moment
 - h. Click “Create Map”

5. Locate your area
 - a. Zoom into the map to find your specific location (e.g., Lake Station in Lake County, Indiana)


6. Enable advanced editing
 - a. Above your map will be three editing options: “Counties,” “Blockgroups,” and “Blocks” 
 - b. Click on “Blocks” to enable advanced editing
 - i. This will allow you to subdivide small local governments and to get accurate population numbers for any new council or board districts you want to propose


- ii. “Blocks” refers to “census blocks” (Census blocks are the smallest geographic units used by the Census Bureau to determine population. Precincts and government district lines are not allowed to cross census blocks, thereby allowing you to accurately calculate total population for any new council or board districts you want to propose.)
- c. A box will pop up to warn you that “Block” editing is harder; ignore the warning and click “Start Block Editing”
 - i. DistrictBuilder was designed to be used primarily for state legislative and Congressional redistricting, which usually doesn’t require getting down to the census block level

7. Draw precincts:

- a. You want to start by drawing your precincts **as they existed in 2020**
- b. To the left of your map on DistrictBuilder, you will see headers and columns that look like this:

Districts ↕	
Number	Population
∅	6,785,528 ↕
1	0
2	0
3	0

- c. The chart will have as many lines and colors as the number of districts you listed in step 4(f)
 - i. Ignore the first line for now; it gives you the population of the entire state
 - ii. Note that each numbered “district” has a separate color. When you start, each color will represent a different precinct, which you will eventually combine into proposed wards or council/board districts
- d. At the top left of your map, you will find three ways of selecting census blocks: 
 - i. The first is “point and click selection”
 - ii. The second is “rectangular selection”
 - iii. The third is “paint brush selection”

- e. Select your first precinct, for example Lake Station 1 (LS01), and use the rectangular selection tool to draw the main part of the precinct based on the map that you obtained in Step 1(a) above
 - f. Then use the paintbrush or point-and-click tools for more detailed adjustments
 - g. Once you have all of the census blocks that belong in Precinct 1 (LS01), then click on 
 - h. If you realize after you hit “Accept” that you need to delete a block from that precinct, click on the top line in the “District” table (the one with the Indiana state population—see Step 7c(i) above), then click on the census block and click “Accept”
 - i. If you look at the table to the left of the map, you will see that “District” 1 (the one with the green dot beside it) now gives you the total population for Precinct 1
 - j. You should now verify that that population figure is the same as the population for Precinct 1 on your 2020 census data. (Don’t worry if it is off by a few people, but if it is off by more than that, you need to check to be sure you have all the right census blocks in Precinct 1.)
 - k. Do the same for all the other precincts
 - l. Once all your precincts are in place, make a duplicate of your map so that you can try different combinations based on your precincts as they were in 2020
 - i. To make a duplicate map, click on the puzzle piece icon in the top left corner (above the word “Districts”); that will take you back to the map creation screen.
 - ii. To the right of every map listed you will see three dots; click on these and then click on “Duplicate Map”
 - iii. Rename the copy (e.g., “LakeStationDraftMap1”); then click on it to start editing it
8. Combine precincts into proposed council or board districts
- a. Here comes the creative part of redistricting!
 - b. You can try various combinations of precincts to form your city/county/ school board districts or wards that
 - i. come as close to your ideal population as possible (see step 2a above)
 - ii. are contiguous and reasonably compact

- c. Now you need to calculate the “population deviation” for your proposed map. You do this by subtracting the smallest district’s population from the largest district’s population and then dividing by the average population for the *entire* town/city/council/school corporation

$$\text{Population Deviation} = \frac{\text{largest district population} - \text{smallest district population}}{\text{average district population}}$$

- i. For Indiana counties, cities and towns, the population deviation must be below 10%.
- ii. For school boards, it must be below 15%.
- d. If you are unable to get your population deviation below the required minimum, then you will need to split some of your precincts.
- i. Indiana law allows you to do this *to equalize your population* as long as the resulting wards/districts are contiguous and reasonably compact
- e. Note: Some local governments (especially cities or towns like Indiana’s Lake Station) have non-contiguous pieces within their incorporated areas, in which case obviously one or more of the resulting city wards will have those non-contiguous pieces

9. Finalize and compare maps:

- a. Review the final map, checking visual and numerical data
- b. Make multiple maps if necessary and compare them to find the best configuration

10. Save your maps!

These steps should guide you through using DistrictBuilder.org to redistrict local governments effectively.