Data Adventure: Maps & Census Data

If you have not already, please download this Word document to your computer!

The Data Adventure defined in this workbook help you learn to navigate the Census Data website and create maps of Census Data. This Data Adventure functions as a guide to finding relevant Census Data to facilitate data-informed discussions, decisions, and more! Additionally, the Data Adventure concludes with a short Reflection Guide to help you take the data a step further.

As this document can be saved locally, you are welcome to change formatting and other selections to best suit your planning and accessibility needs.

If you have any questions or comments regarding these practice tools, please contact Mari MacNeill (mmacnei@wested.org) for further assistance!

Link to Census Data website

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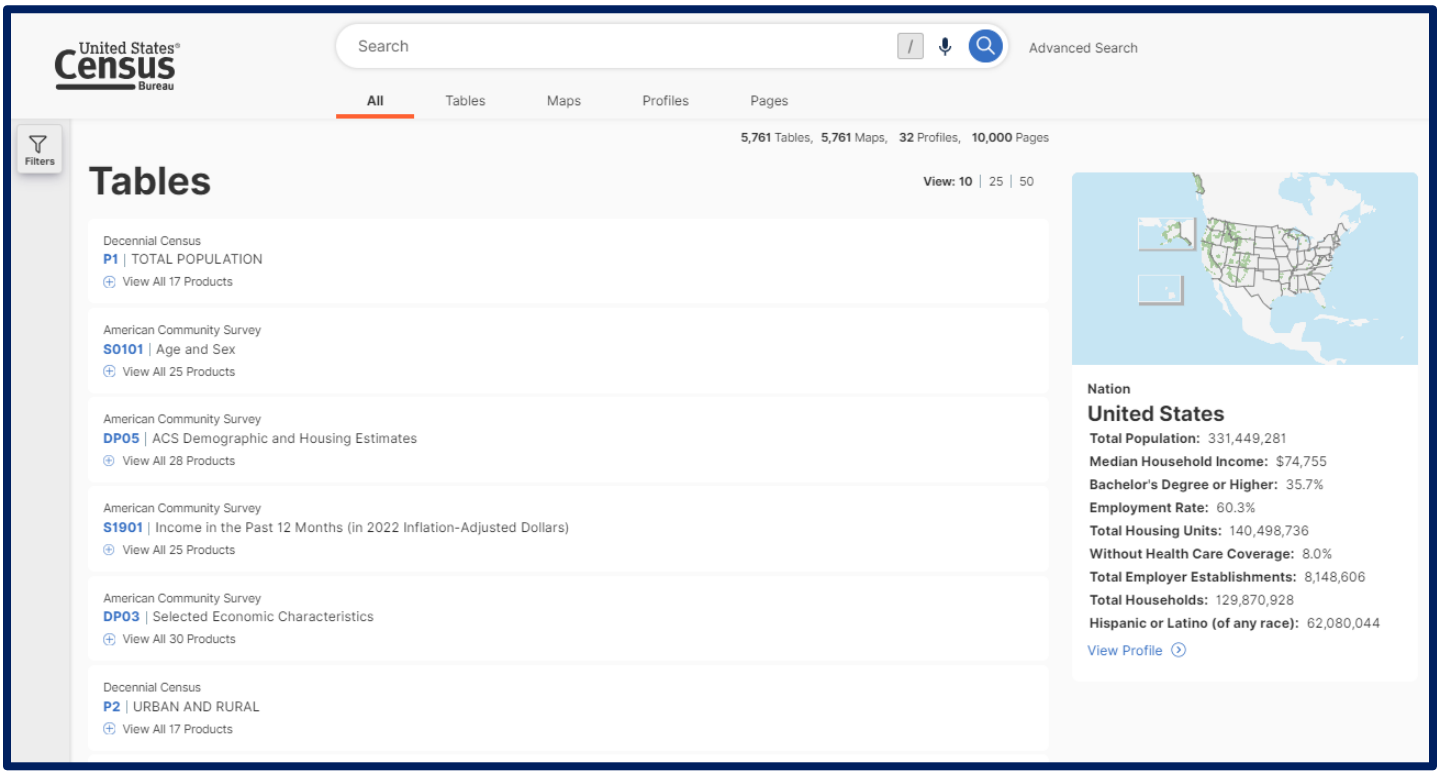
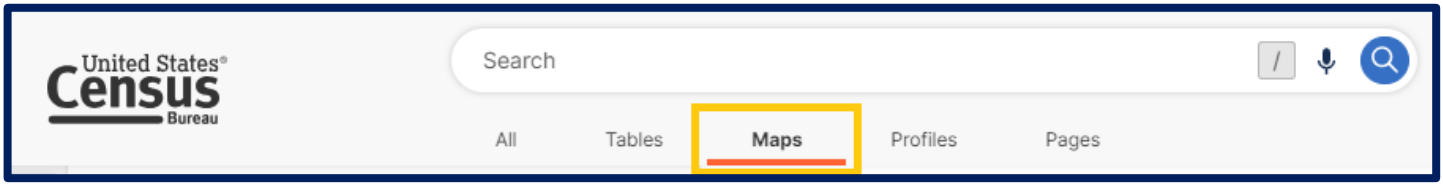
Navigating map data on the Census Data website

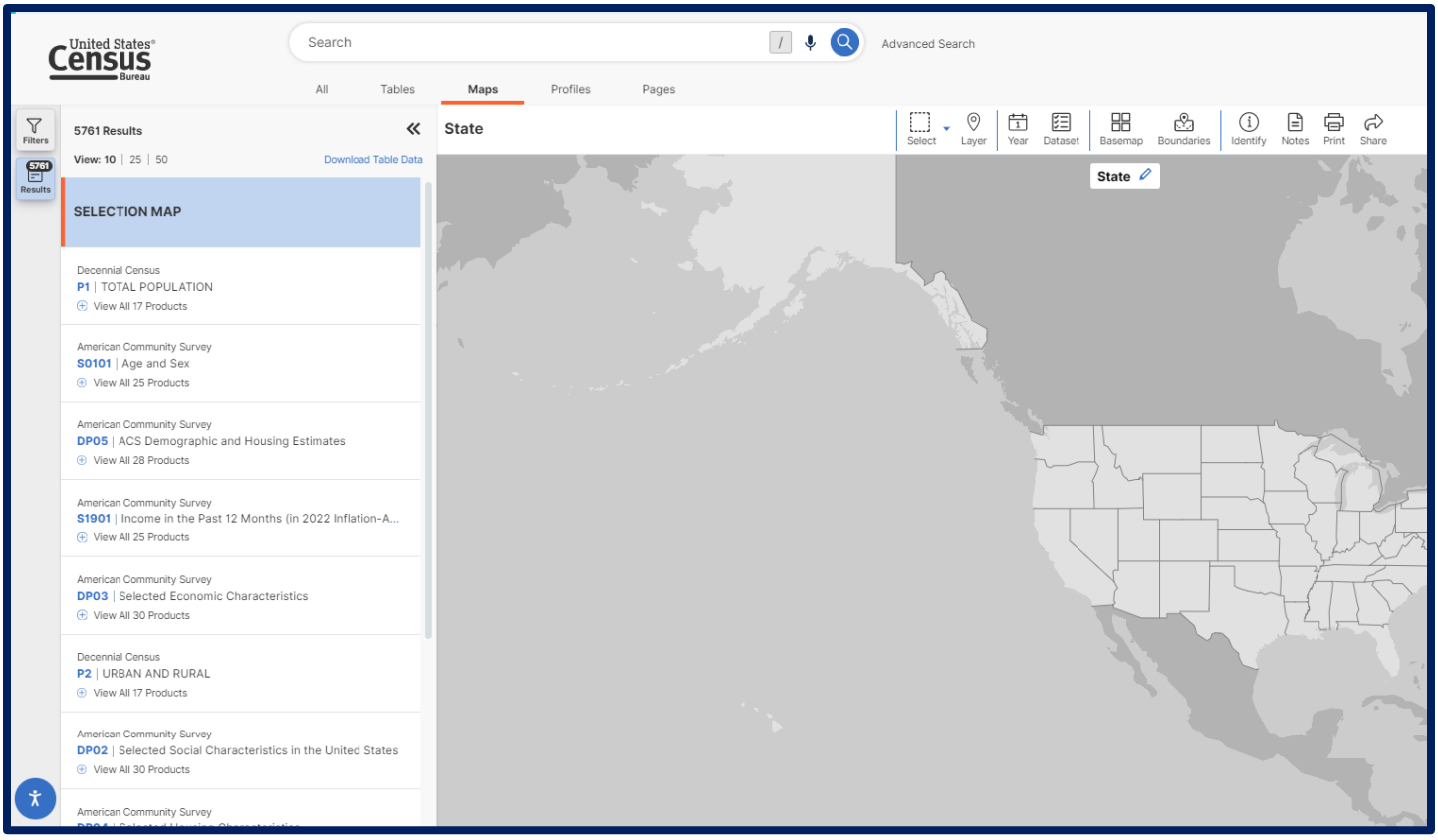
Before we look Use the link above to navigate to the main page of the Census Data site, where you will be taken to a page that has the following search bar:



For this activity, we want to create a map of Race and Ethnicity data. To get started, click on ‘Maps’ in the top bar.

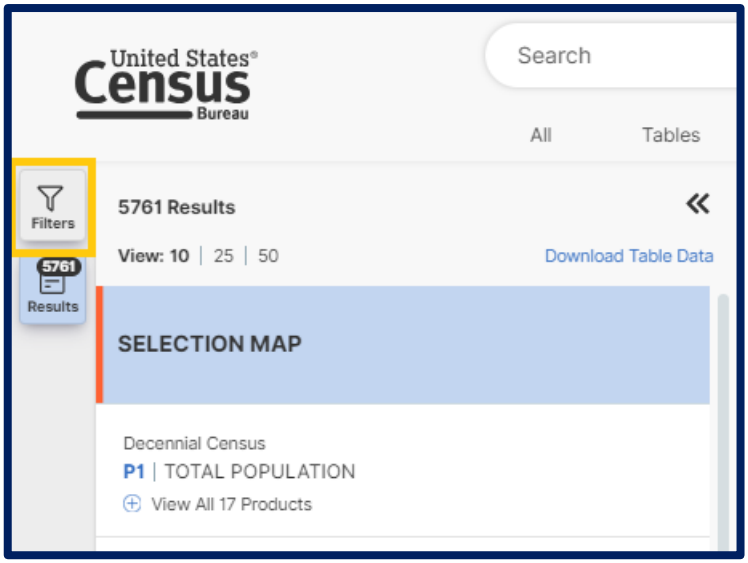


You will land on a page that looks like this:

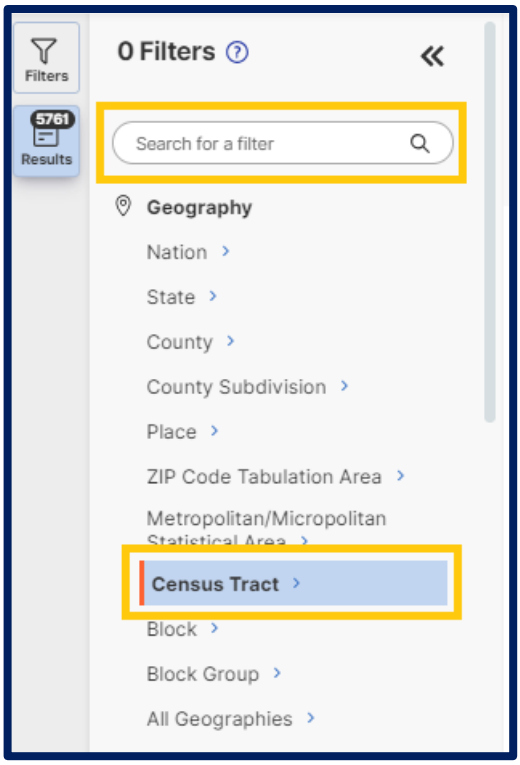


Let's start by **filtering the map view to a particular county within the state of California**. You can change selections in these steps in order to look at other locales!

First, start by clicking on the square box that says 'Filters' in the top left corner of the page.

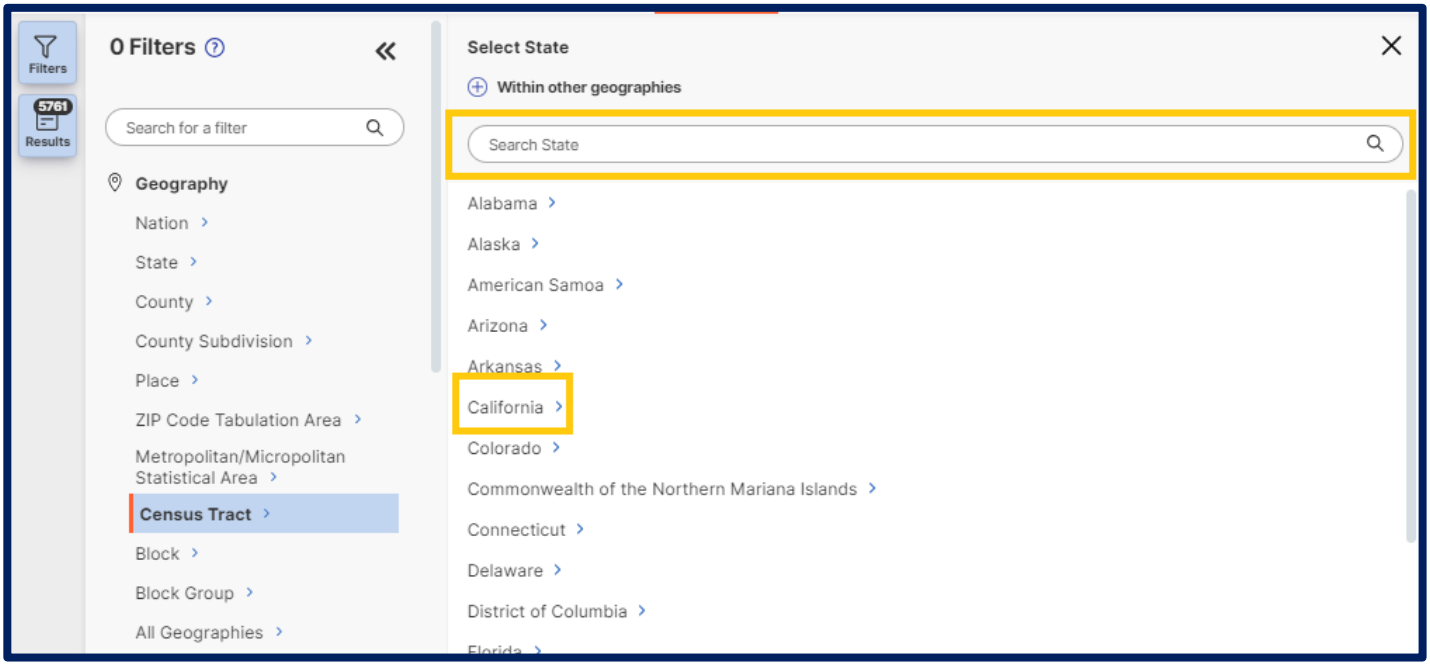


This will open a menu of filters for the data. For this activity, we're going to look at **Census Tracts**. Census tracts are areas of land defined by **population density**, with 2,500 to 8,000 residents per census tract (U.S. Census Bureau).

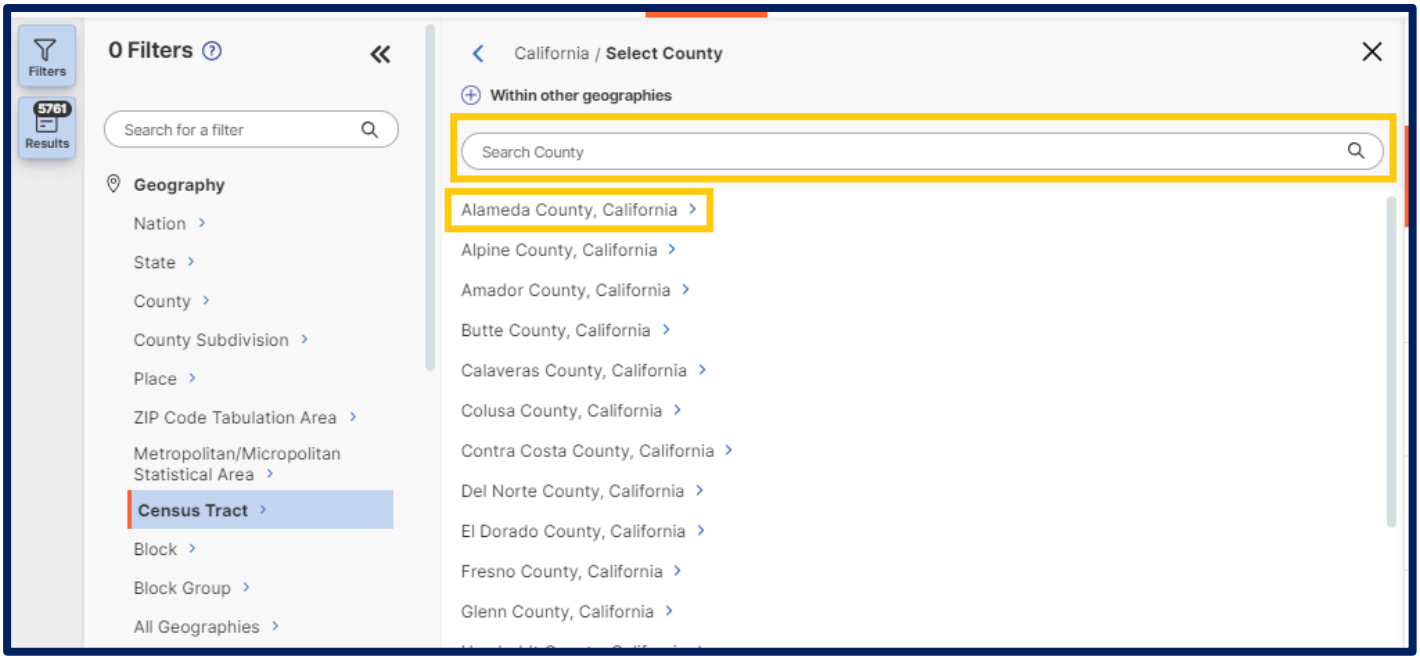


To view data via census tract, select ‘Census Tract’ under Geography. You can also use the search bar at the top of the menu to search for Census Tract.

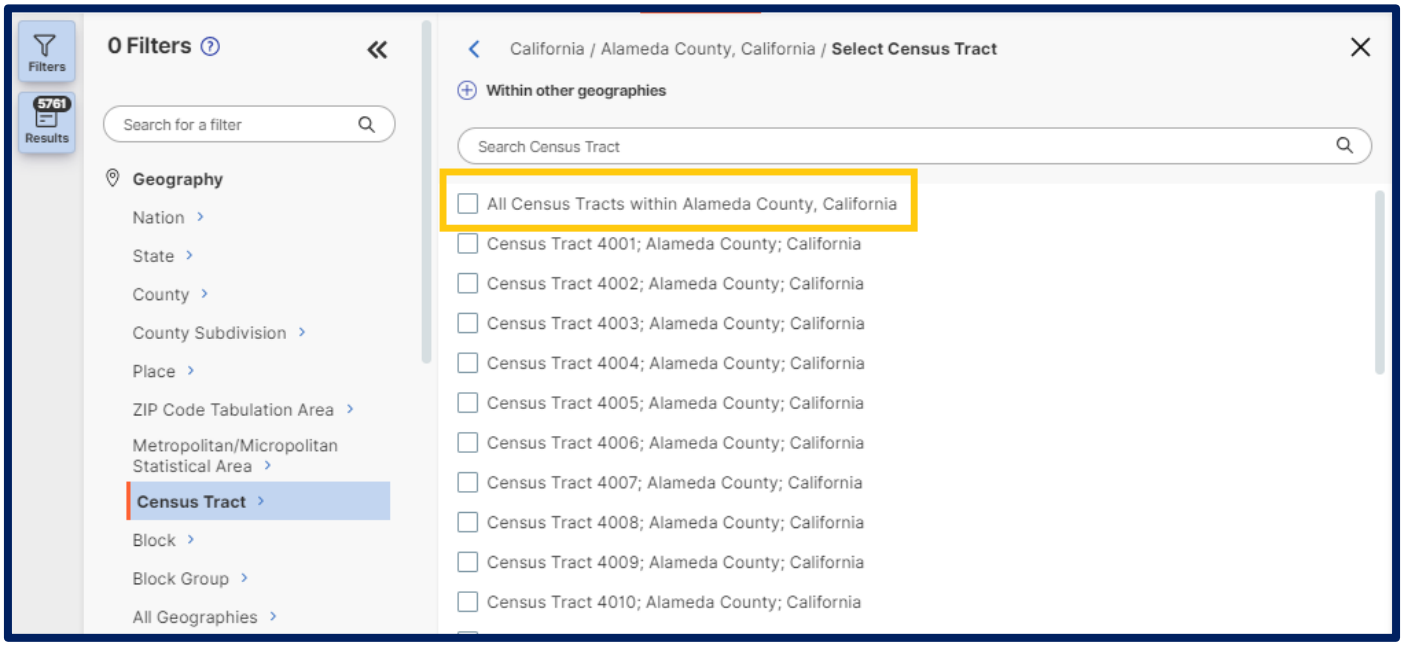
A second menu will pop up with a list of states. To view a locale within California, select ‘California’ in this menu. You can also use the search bar at the top of the menu to search for California.



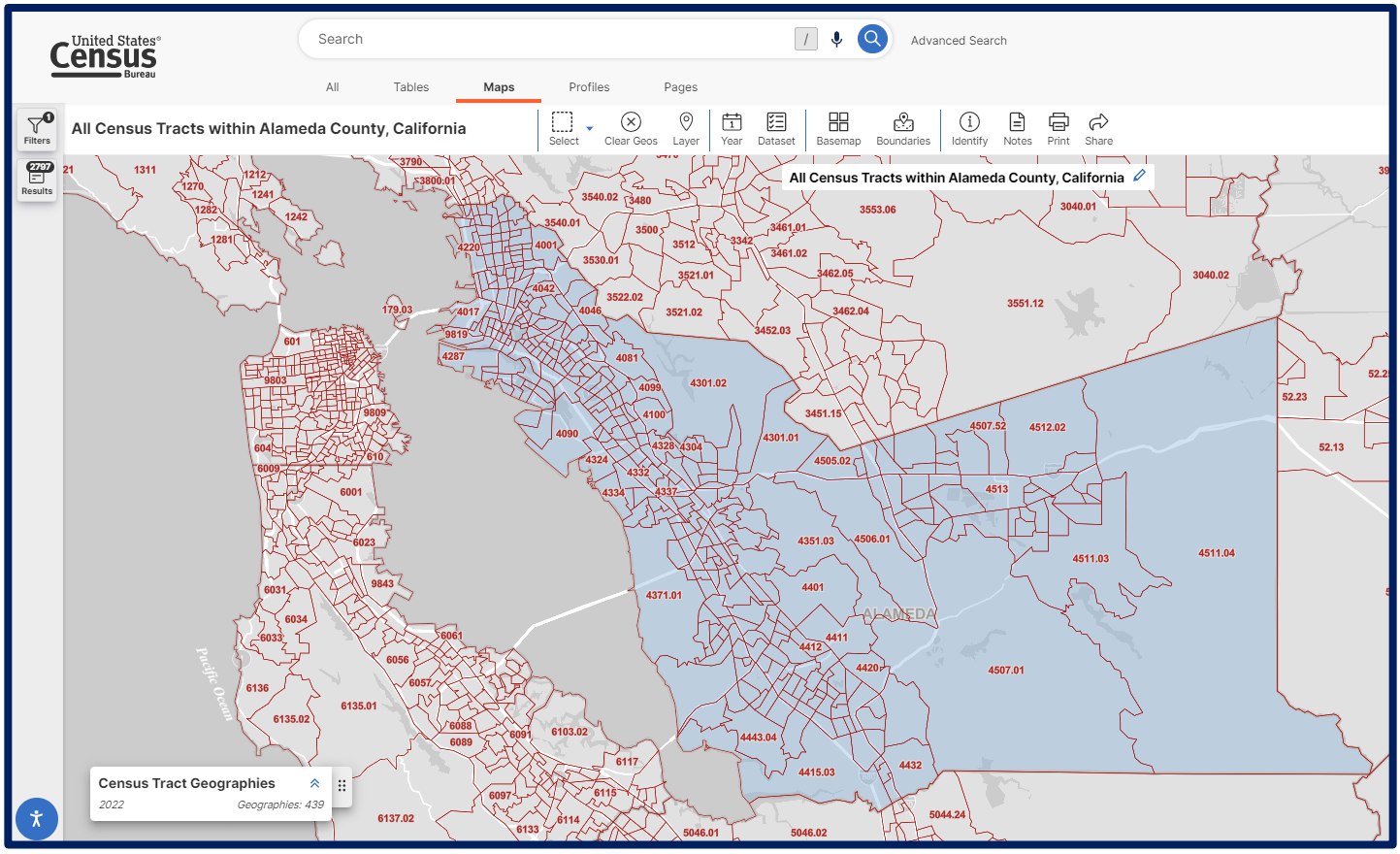
The second menu will refresh with a list of counties within the state of California. For the purpose of this example, census data for Alameda will be used. To view data for Alameda, select ‘Alameda County, California’ in this menu. You can also use the search bar at the top of the menu to search for Alameda.



Finally, you'll want to select the Census Tracts to look at in the map. For the purposes of this activity, let's look at all census tracts within Alameda County. To do so, select 'All Census Tracts within Alameda County, California' at the top of the list.

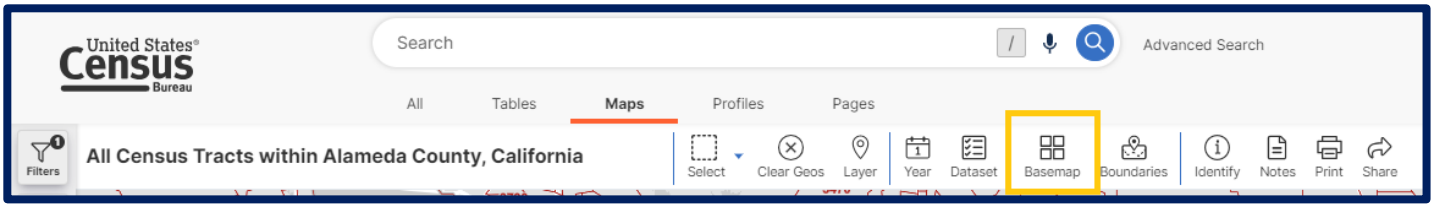


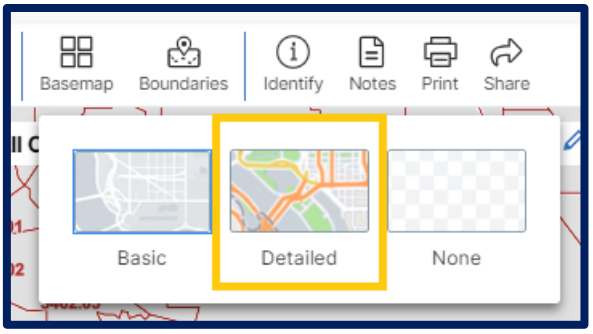
The site will then take you back to the map view. Specifically, the map will zoom in on your selected locale (in this case, Alameda County) with Census Tract lines drawn over the map. The numbers on the map are the numbers designated for each Census Tract.



OPTIONAL

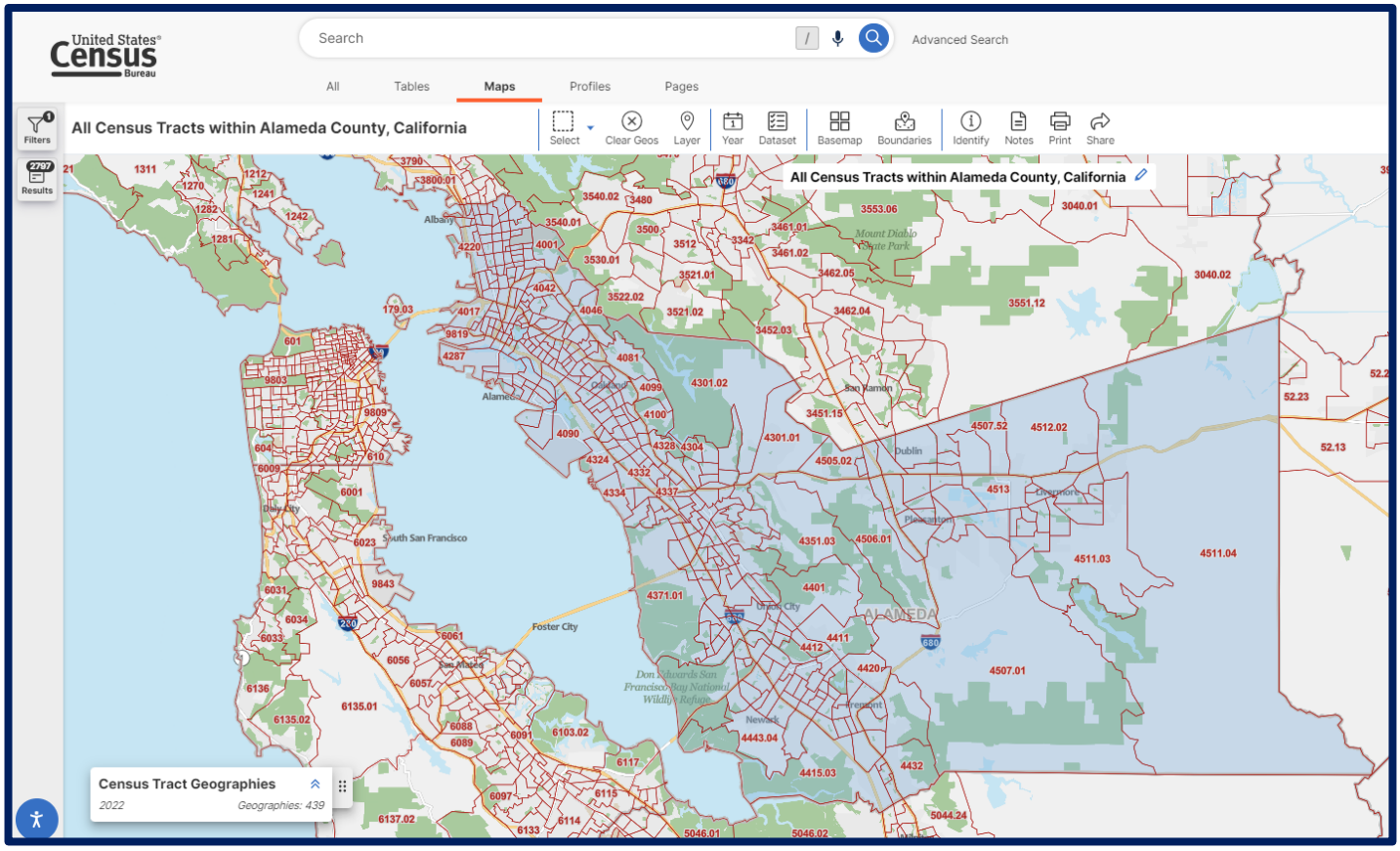
To further contextualize the map and the data you will be looking at, let's make the map look a little more familiar. To do so, select 'Basemap' at the top bar of the page.





A small menu will pop up. Select 'Detailed' from this menu.

Viewing the 'Detailed' map displays commonly known landmarks, such as freeways & highways. This can help you to further contextualize the data you are seeing.

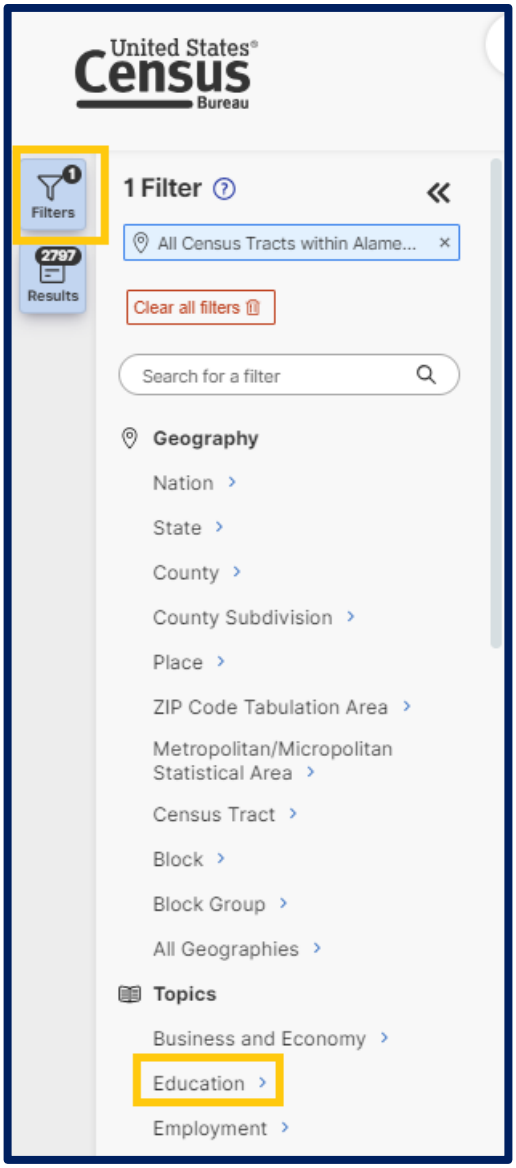


Now that we've set up our map, let's look at Census Data!

Data Adventure #1: Looking at Educational Attainment across a Geographic Area

As Adult Education practitioners, let's look at Educational Attainment data. Specifically, let's look at the percentage of the adult population who has yet to obtain a high school diploma.

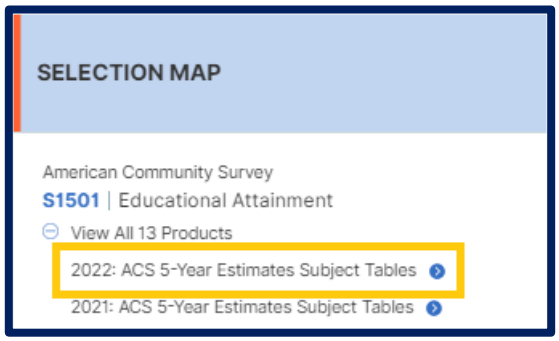
First, select 'Filters' from the top left corner of the page again. Then scroll down the menu to select 'Education' under Topics.



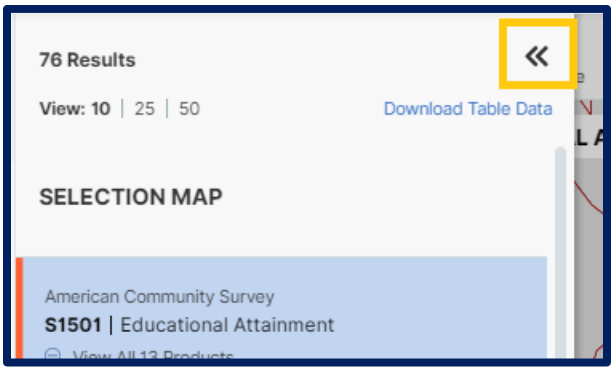
In the second menu that pops up, select 'Educational Attainment.'

From the third menu that pops up, find S1501 | Educational Attainment and select ‘View All Products’ underneath it.

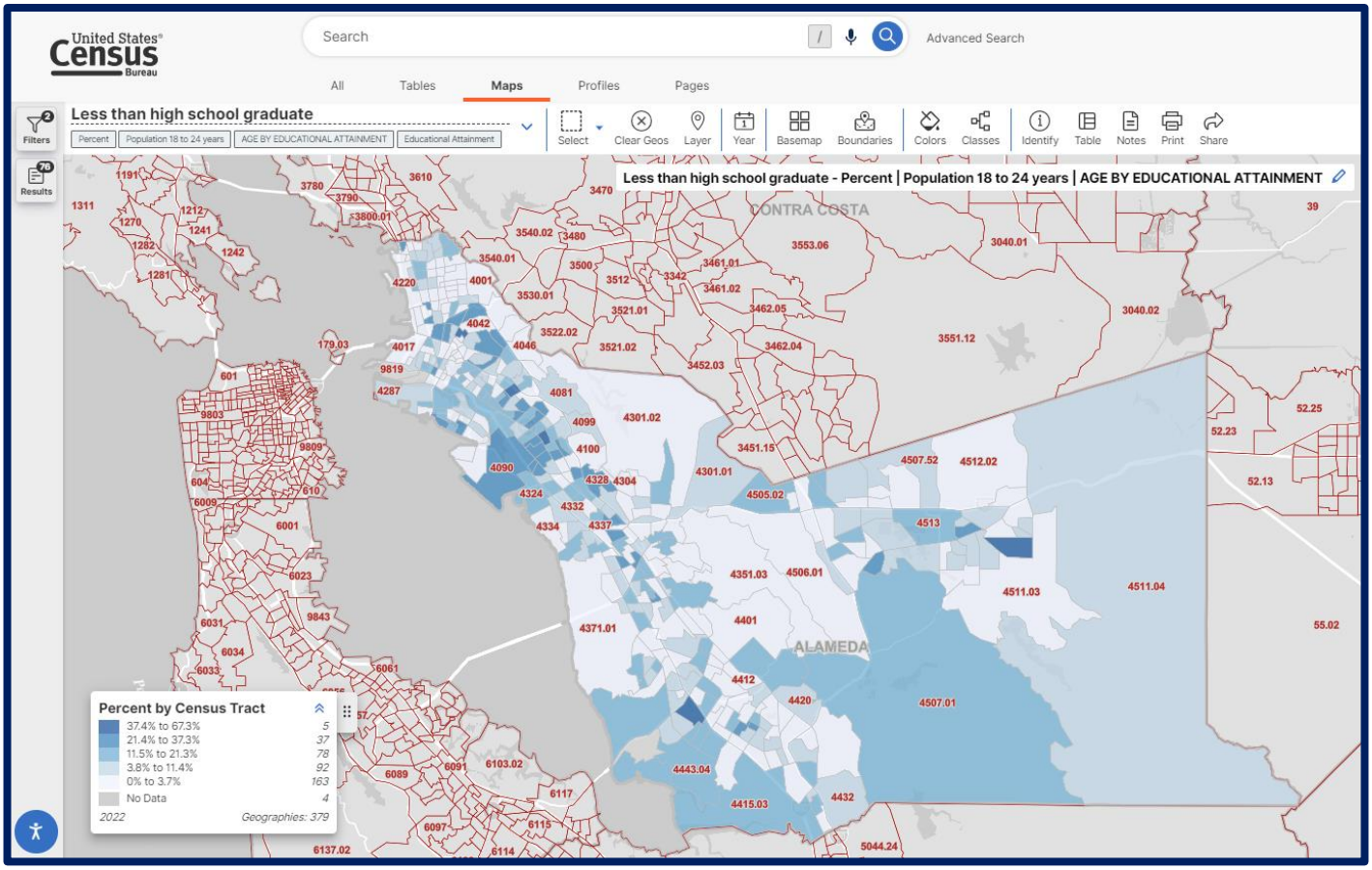
From the drop-down menu, select the most recent year of data, labelled ‘2022: ACS 5-Year Estimates Subject Tables’.



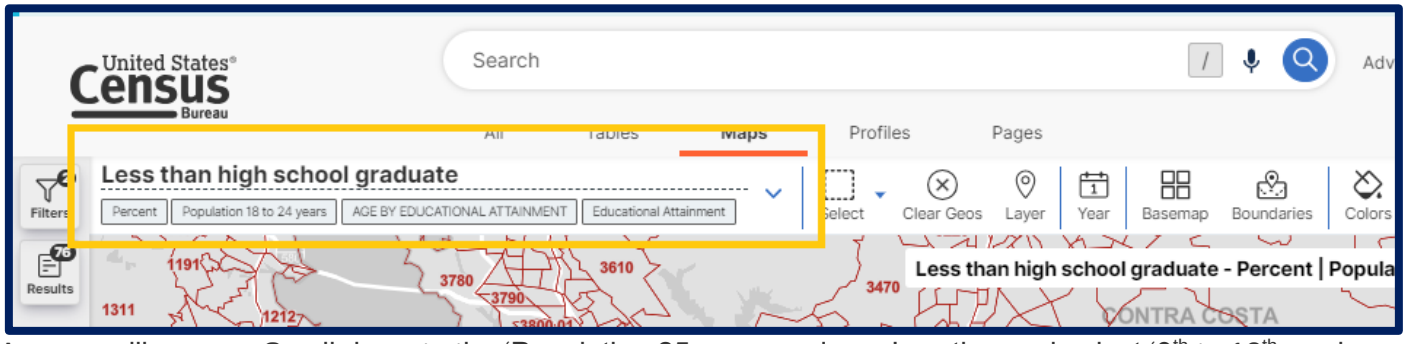
To close the menus and view your map, click on the double arrows in the top right corner of the Filters menu.



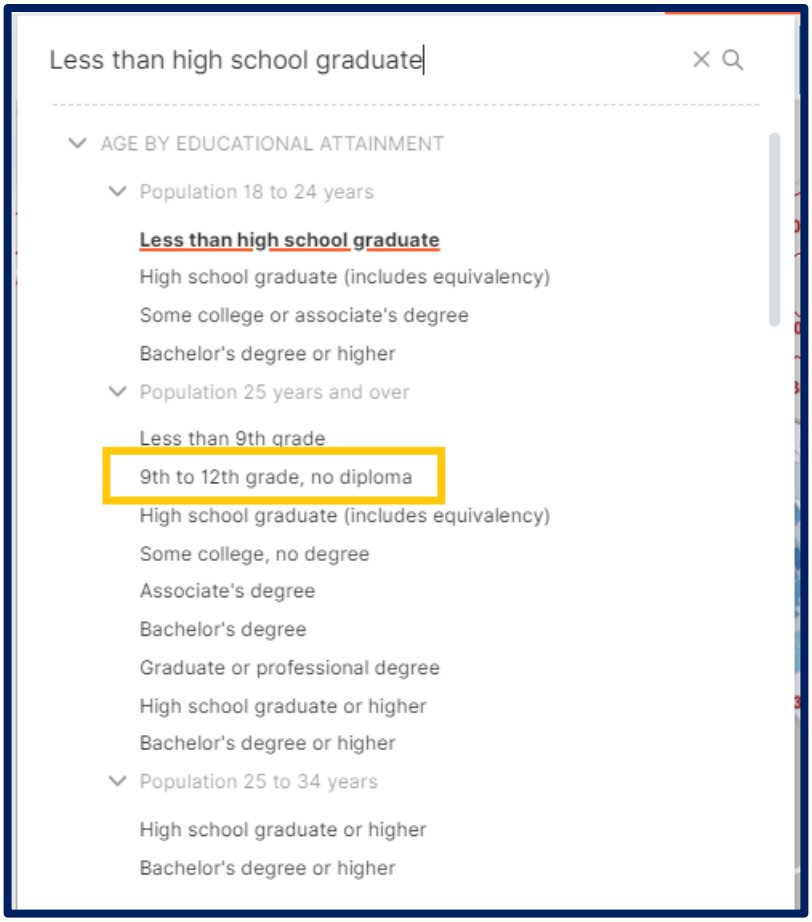
Your map should look something like this.



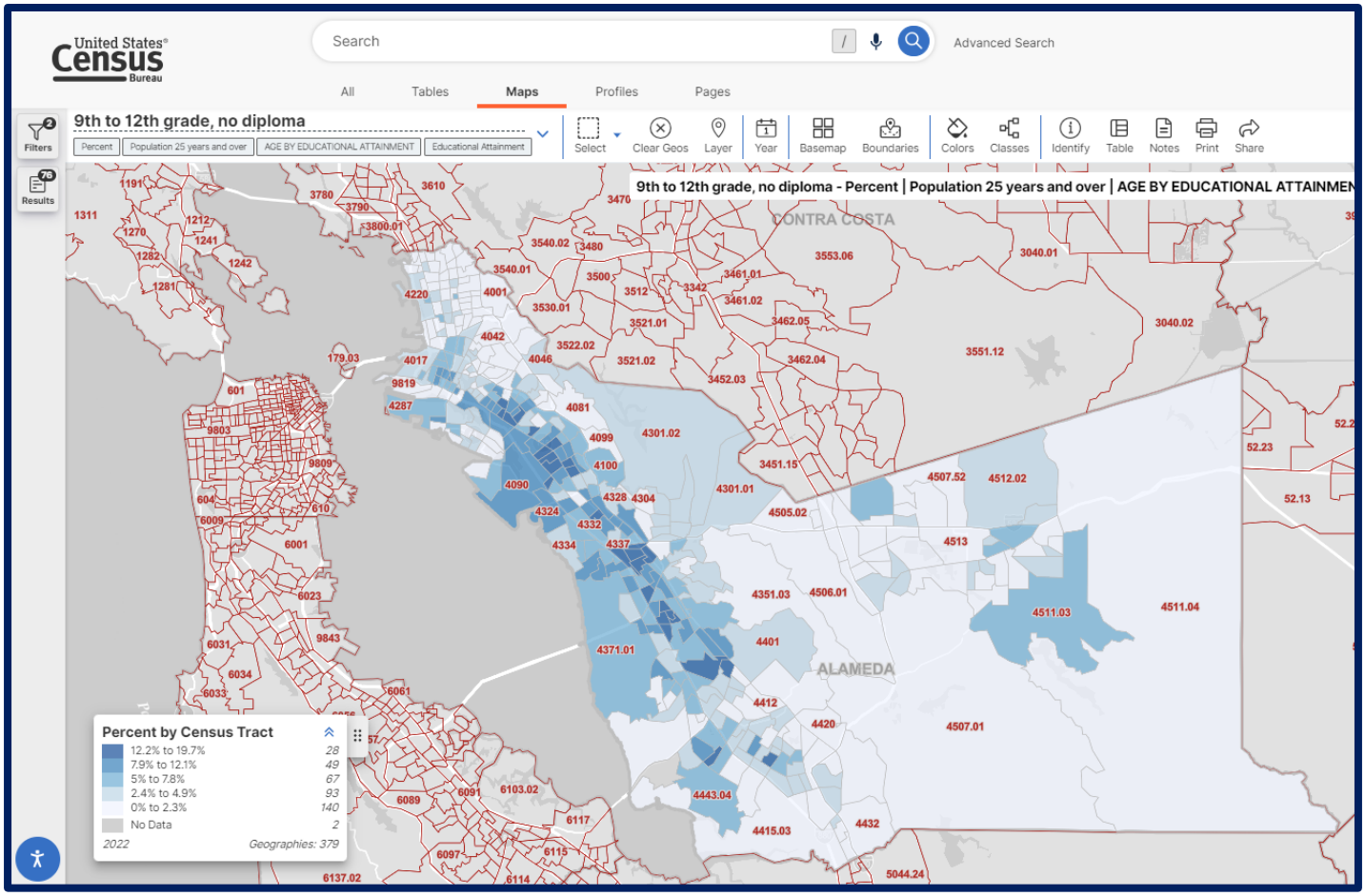
Let’s change the data so we’re looking at adults who have not obtained a high school diploma. To do so, click on ‘Less than high school graduate’ in the top bar.



A menu will pop up. Scroll down to the ‘Population 25 years and over’ section and select ‘9th to 12th grade, no diploma.’



The map will update to reflect this data.

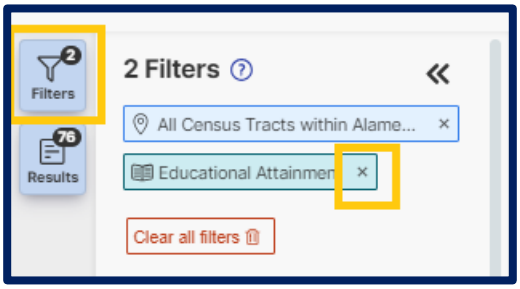


Reflection Guide:

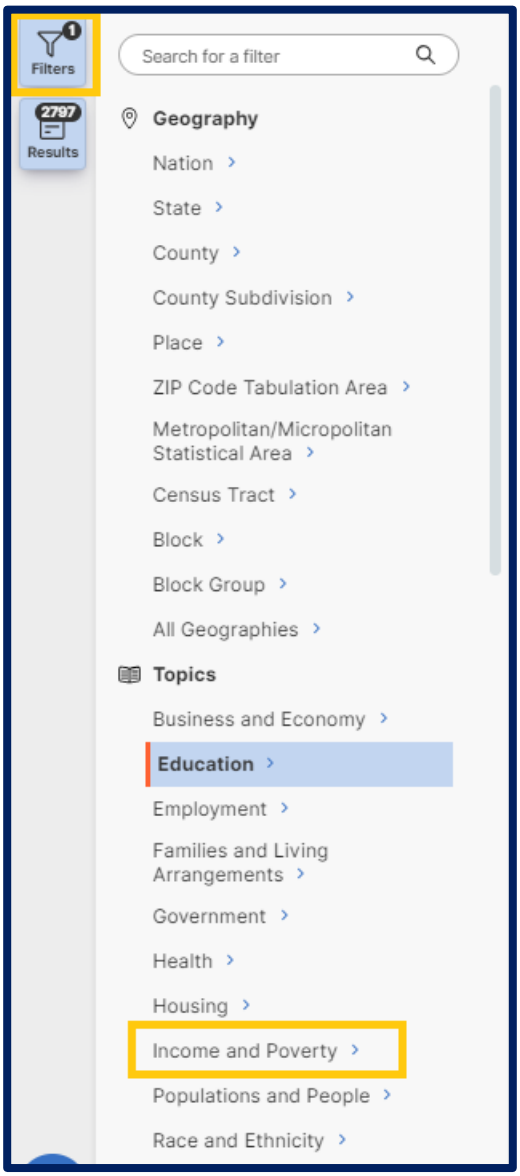
1. What areas have higher percentages of Adults with No High School Diploma? What areas have lower percentages of Adults with No High School Diploma?
2. What other age ranges would be interesting to view through this map?
3. What areas are served by Adult Education institutions?
4. What are some contexts to the data that may be valuable to understanding this data? For example, what areas are considered more metropolitan or more rural?

Data Adventure #2: Contextualizing Educational Attainment using Poverty data

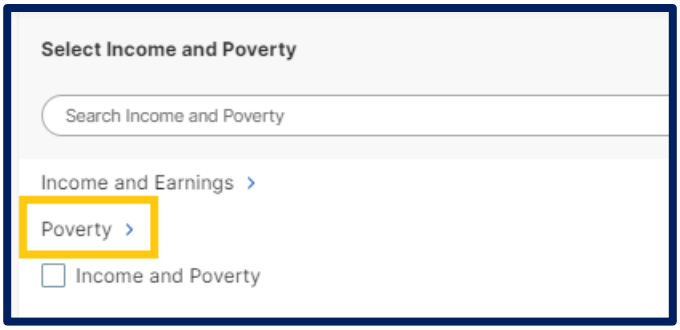
Next, let's look at Poverty data. To start, select 'Filters' in the top left corner again. Find 'Educational Attainment, or whatever filter you were using before, and delete it from your filters by selecting the X next to the filter.



Next, scroll down the menu to select 'Income and Poverty' under Topics.

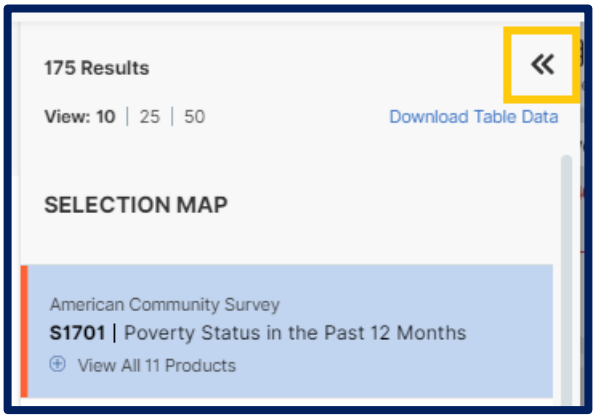


In the second menu that pops up, select 'Poverty.'

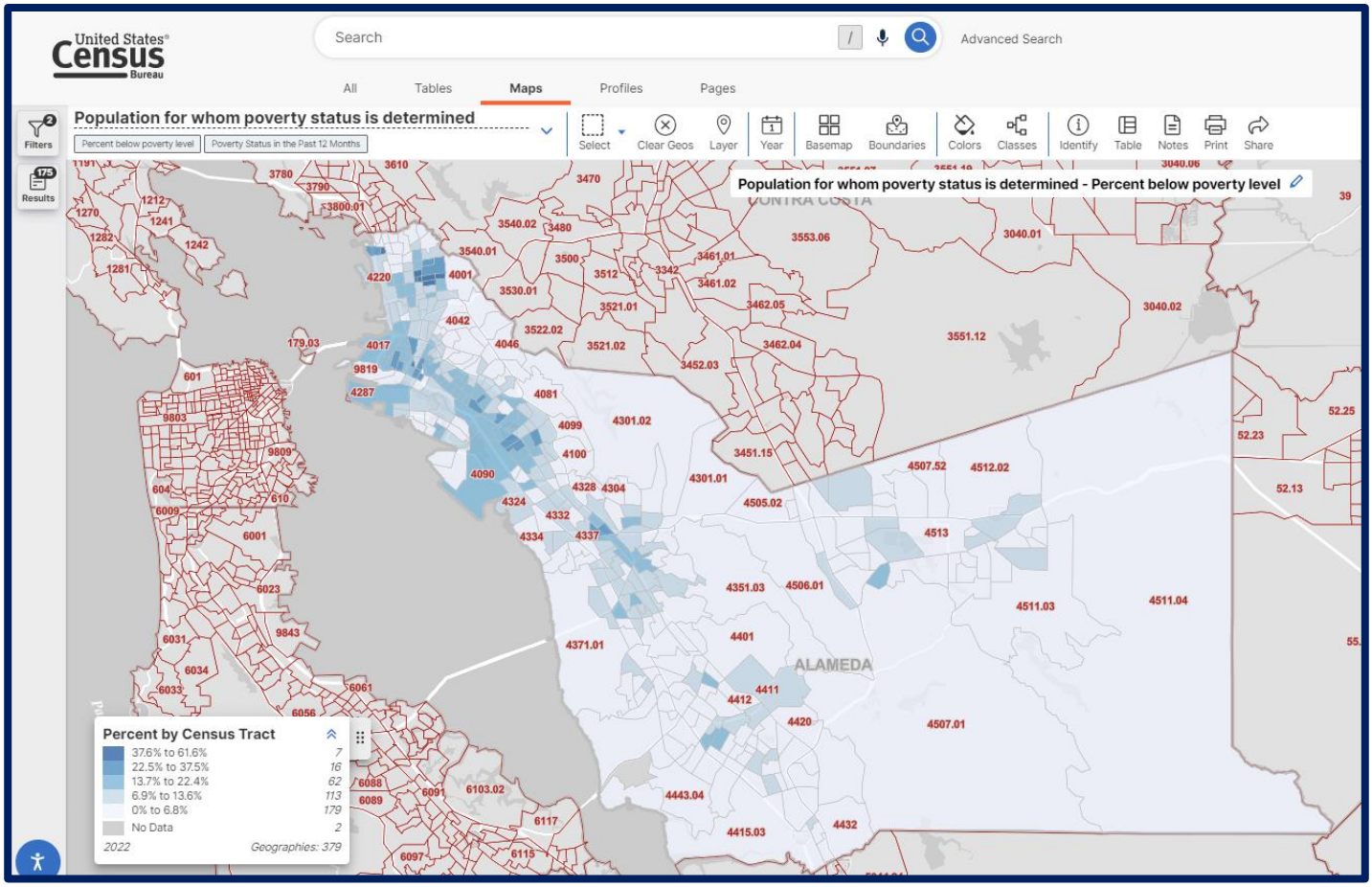


When the menu refreshes, select ‘Poverty’ again.

In the third menu, make sure that S1701 | Poverty Status in the Past 12 Months is highlighted. To close the menus and view your map, click on the double arrows in the top right corner of the Filters menu.



The map should update to reflect your new filtered data.


United States Census Bureau
Search
Advanced Search
All
Tables
Maps
Profiles
Pages
Population for whom poverty status is determined
Percent below poverty level
Poverty Status in the Past 12 Months
Filters
Results
Select
Clear Geos
Layer
Year
Basemap
Boundaries
Colors
Classes
Identify
Table
Notes
Print
Share
Population for whom poverty status is determined - Percent below poverty level
CONTRA COSTA
ALAMEDA
Percent by Census Tract
37.6% to 61.6% 7
22.5% to 37.5% 16
13.7% to 22.4% 62
6.9% to 13.6% 113
0% to 6.8% 179
No Data 2
2022
Geographies: 379

Reflection Guide:

1. What areas have higher percentages of the population with Poverty status? What areas have lower percentages of the population with Poverty status?

2. Are there connections with this data and the Educational Attainment map data?

3. What areas are served by Adult Education institutions?

4. What are some contexts to the data that may be valuable to understanding this data? For example, what areas are considered more metropolitan or more rural?