

## Finding & Getting Data - Google Public Data Explorer

Another great tool that will help you find data on the web is the Public Data Explorer by Google. This is a tool that lets you explore, find and visualize data all in one place, from trusted data sources from around the world like the World Bank, the World Trade Organization, Eurostat, the U.S. Bureau of Labor Statistics and so on.

Here on, on the web page of the Public Data Explorer you go by [google.com/publicdata](https://google.com/publicdata) and then you'll find here on the left, data sets which are groups of data sets published by a single data source. And then we have also metrics which are mostly topics inside those datasets like unemployment, childbirth and things like that. And here we can also filter by data providers. So, if we go here to the U.S. Census Bureau we see that there are five datasets here that we can access, and then we can go to population in the U.S., for example. And then we can see here all of the metrics that we can track on this particular dataset, all of the data sets that are inside here. We can see net migration, population, death rate, birth rate.

Let's take a look at population, so let's take a look at this dataset. To do that you just click on population here, and then you will see the aggregated population on the United States. See how the United States here is selected at the top. So that's why it's showing all the aggregated data throughout the years since actually the beginning of the 20th century for the whole of the United States. But we can break this data down and do comparisons amongst different states. For example, if we select maybe California here, and then we can also select New York, you will see that the Public Data Explorer automatically adds California and New York here.

But see that this scale is a little different for the United States is too big, because the United States shows the aggregated data so we unselect United States and then the Public Data Explorer automatically conforms the visualizations so that you see both variables that you're clicking here, California, New York in a nice way. And we can see here that the population change throughout the years, and we can select different types of visualization as well.

We, here we have the line chart but we also have here if we click on this bar, we can also have the bar chart or we can also do a visualization on a map, even scattered too. So let's take a look at the bar chart because the bar chart also has a play button here at the bottom. And the play, what the play button does is that it goes back to the beginning of the timeline of the data set. In this case the beginning of the 20th century, and then it shows you in an animation how the population changed. And you can visualize it in a nice way following the countries, actually the states, that you are comparing on the data sets. See how New York here and California, they change over time and then they become two of the most populated states in the country for a while, but then they are taken over by, New York specially is taken over by Texas and then by Florida throughout the years.

The same thing for the visualization on the map because you see, like the circles, the circles they are smaller if the population is smaller and then they go big throughout over time. Take a look at that. So you hit play, and then you see the population growing in different parts of the country as the animation plays along, and then you can see that. Then you have the final one and you have the states that you were following in different colors too.

The same for the scatter, you can also do see how population shifts terms of the amount of people that were in the United States and you see how the different states they are compared to each other in a nice visualization. You can, on the Public Data Explorer for all of the data sets that are available, you can also look, you can search. So if you search for "education" you will find education data and you can see who published the data, which data source is associated with this and then you can also actually upload your own data sets.

I'm not going to, I'm I'm not going to get into how you upload your data sets because there is a tutorial about this on the website. It uses a custom format, you have to attach an XML file to an existing data set that you have. But the cool thing about uploading your own data set to the Public Data Explorer is that you can use these visualization tools to learn more about the data and get different insights about this data set. And if you want to learn more about the Public Data Explorer there are lessons in our training center. Just go to [g.co/newstraining](https://data.gov/newstraining) to see what's there.