

# SF Fed Data Explorer

## Starter Guide

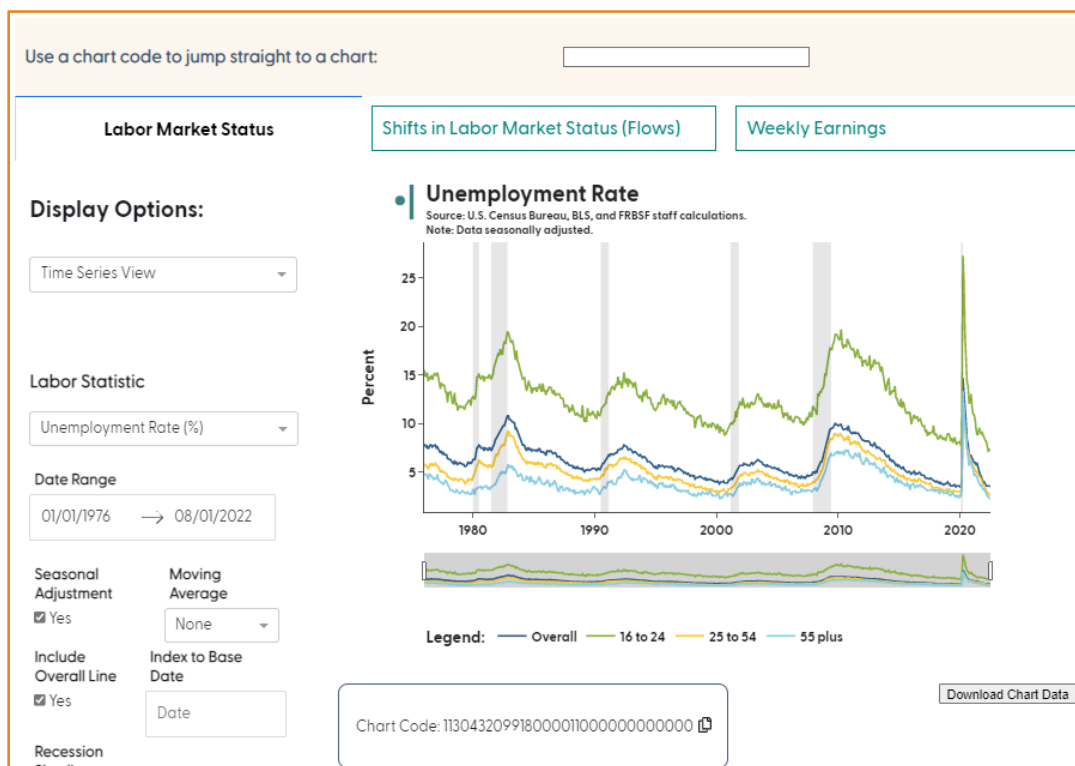
This starter guide introduces some of the functionality of the SF Fed Data Explorer by illustrating how to chart a key indicator of labor market health, the unemployment rate.

Labor market data measure all the different ways people engage with work. People are counted as being in the labor force if they are employed or if they fit the Bureau of Labor Statistics definition of “unemployed,” meaning they are out of a job and actively looking for work.

The population tends to grow over time, so measuring a group relative to a larger relevant population is more meaningful for comparisons than the number of people. This is why we often look at the *percent share* of people in the labor force who are unemployed—commonly called the unemployment rate—to gauge the current health of the labor market.

The steps below walk through how to build a chart showing the evolution of unemployment rates over time for a demographic group, in this case for women.

First select the **Labor Market Status** tab and the **Time Series View** display option. Then, under the **Labor Statistic** dropdown, select “Unemployment rate (%)” This is what you should see:



This displays the unemployment rate in each month from 1976 to the most recent data available for the overall working-age population (dark blue line) and three broad age categories.

To narrow the focus, further down the control panel on the left you will see **Select View Mode**. Select the “By Demographic Groups” radio button. This allows you to open the **Demographic Options** dropdown and select “Sex”.

The chart will now plot the rate of unemployment for men and women since 1976, as shown below:

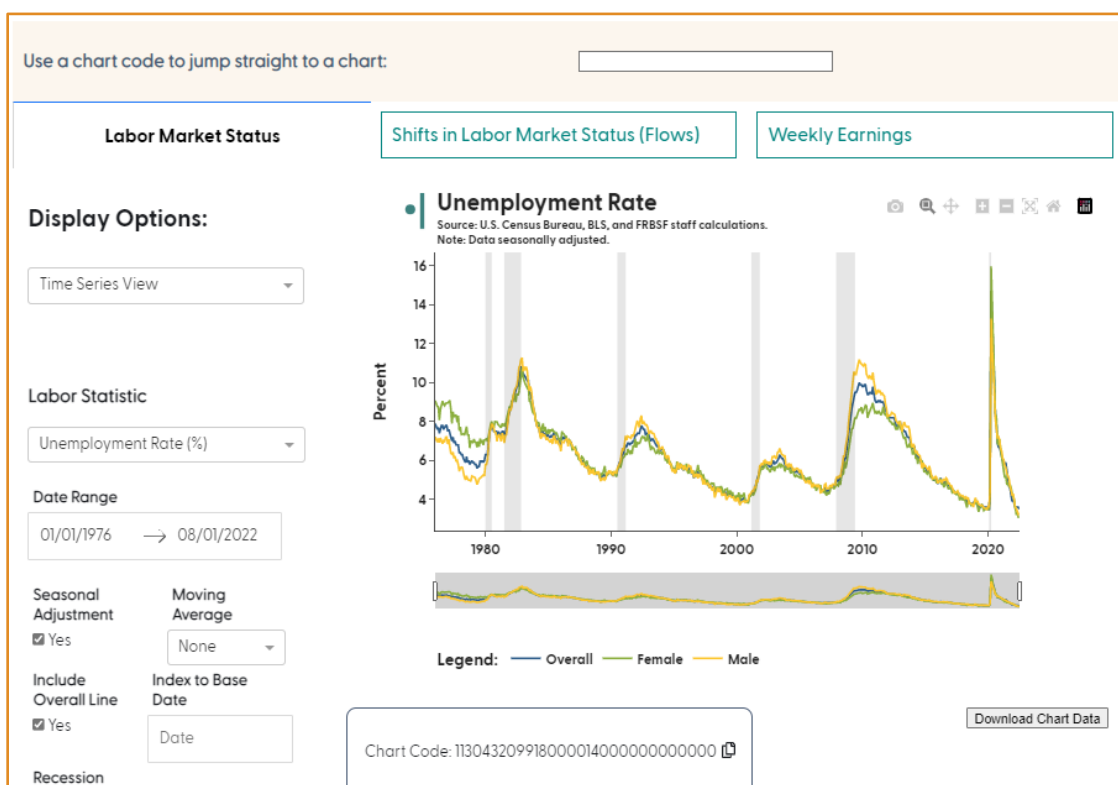
**Select View Mode:**

By Demographic Groups

Build Your Own Chart

**Demographic Options**

Sex x ▼



## Using Chart Codes to Share Your Work

As you make changes to your chart, note that the **Chart Code** box under the chart updates to reflect the data in your display.

If you want to share your work, you may copy the code – in this case, **113043209918000014000000000000** – and send it to someone, along with a link to the [SF Fed Data Explorer](#). The recipient can recreate your chart by simply pasting the code in the box at the top of the page:

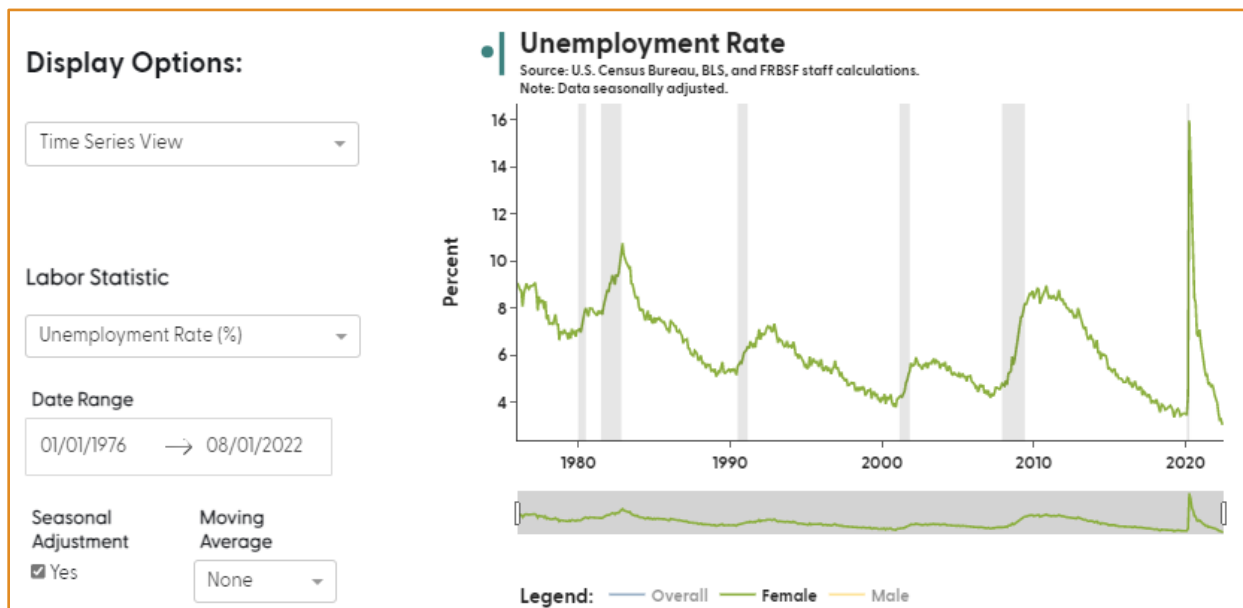
Use a chart code to jump straight to a chart:

## Charting Changes for a Single Group over Time

To create a chart that focuses on a single group's rate of unemployment, you have two options.

### *Alternative 1: Change View Using Legend*

The first uses the interactive nature of the chart area. By hovering over the **Legend** and clicking on a category, you can remove it from the chart. The chart will now look like this:



Clicking on the gray element in the Legend will bring that line back into the chart.

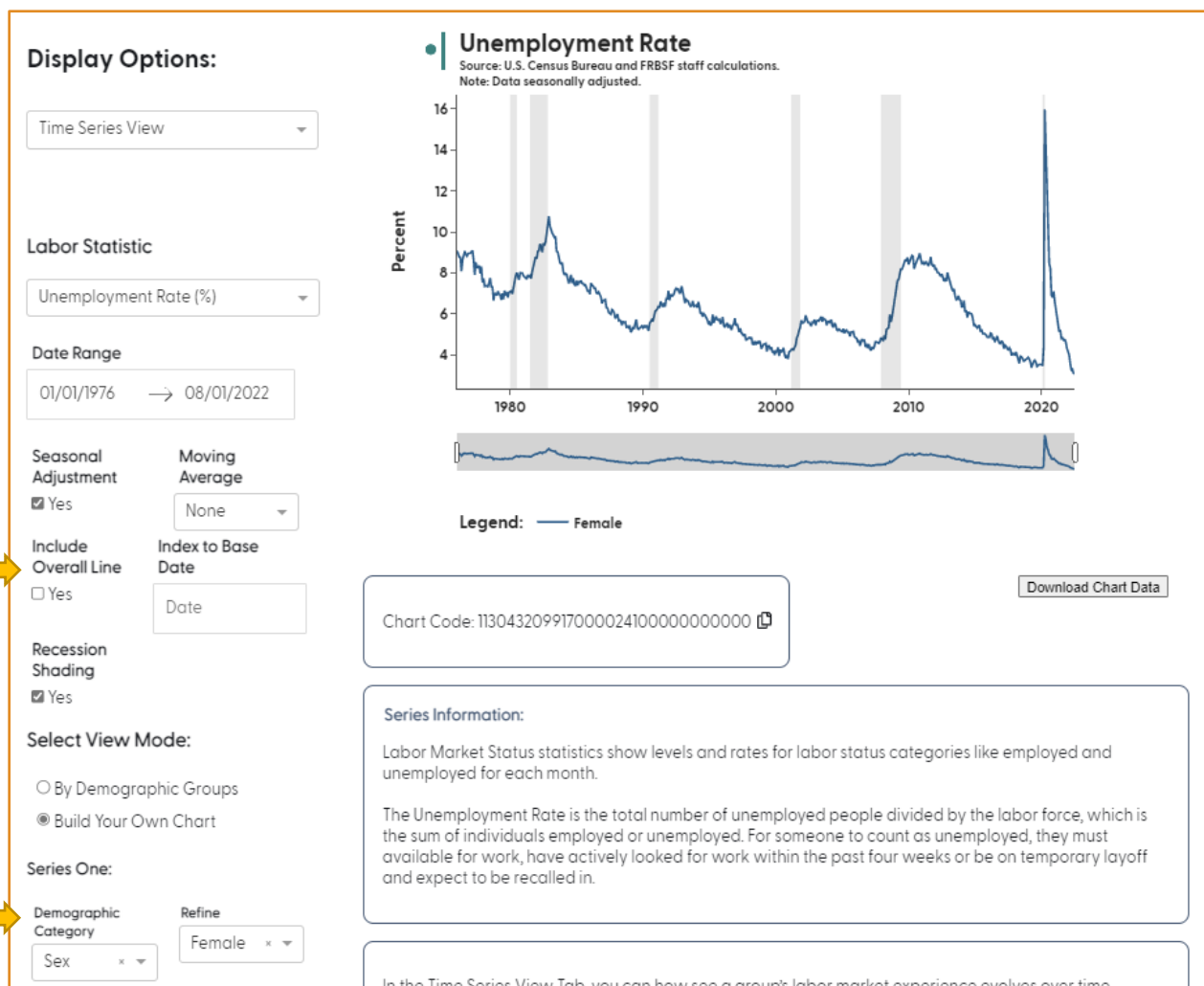
### *Alternative 2: Build Your Own Chart and Add a Series*

The second alternative will let you dive even deeper into the data.

Starting from the **Select View Mode** in the control panel, choose the **Build Your Own Chart** radio button.

Under the **Series One** option that appears, select "Sex" from the **Demographic Category** dropdown. This will display the unemployment rate for men and women. The Refine dropdown to the right allows you to select one of these categories.

Finally, uncheck the **Include Overall Line** box in the middle of the control panel column. This will remove the overall line from both the chart and the legend.



## Changing Time Period

On occasion you may want to focus on a specific time period. For example, you may want to focus on developments from the year 2000 to right before the COVID-19 pandemic.

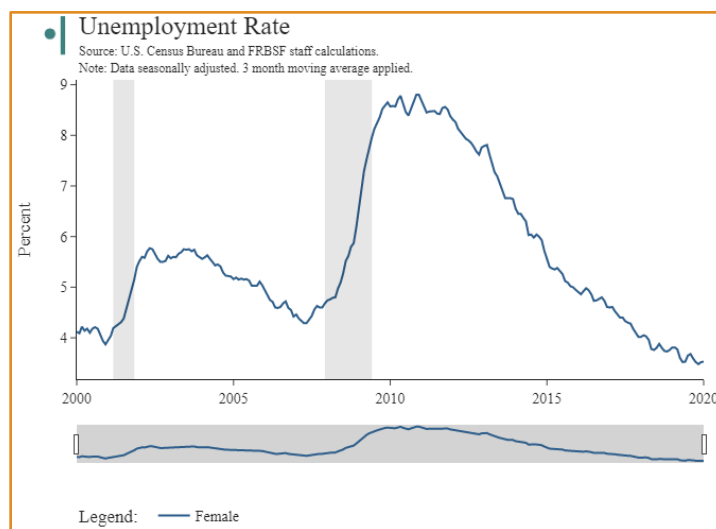
Begin by adjusting the **Date Range** in the control panel, starting your data on 01/01/2000 and ending on 01/01/2020; you can do this by either typing in those dates or using the calendar feature. This will make the small changes in the unemployment rate from month to month more apparent. Such month-to-month movements often reflect the fact that the data are from a survey of households and there is some error in measurement.

You can smooth out some of this volatility with the **Moving Average** option. Selecting “3 months” from the dropdown menu will chart an average of the variable over the previous three months.

## Download Your Data and Chart Image

You can download the data for the chart you created using the **Download Chart Data** button just below the chart area. This will download a csv file, which you can import to other applications to create charts or use for your own statistical calculations.

You can also download your work as an image file for a report, as shown below, by hovering over the top right area of the chart and clicking on the camera icon that appears.



## Additional Tools and Guides

- Occasionally you may be interested in comparing the evolution of a measure relative to a point in time. You can enter the date of interest in the **Index to Base Date** box in the control panel. Your data will be scaled to equal 100 at this reference date.
- Under each chart is a feature called **Series Information**. This provides helpful details about the series used to create your chart, based on your Labor Statistic selection.
- Also listed under each chart is a helpful guide to other elements of your chart, including descriptions of your Display Option, a glossary of some economic terms, and guidelines to help you understand the options available for your exploration.
- If you use your chart in a report or for publication, please use the **Suggested Citation** listed at the bottom of the page.

## Learn More

More information about the SF Fed Data Explorer can be found on our [How-to page](https://www.frbsf.org/economic-research/sf-fed-data-explorer/how-to/) ([www.frbsf.org/economic-research/sf-fed-data-explorer/how-to/](https://www.frbsf.org/economic-research/sf-fed-data-explorer/how-to/)). There you can find short Tutorial videos on interesting data trends and Frequently Asked Questions (FAQs).

Follow us on Facebook and LinkedIn at Federal Reserve Bank of San Francisco and on Twitter and Instagram @sffed to receive regular updates on the SF Fed Data Explorer and learn new insights each month.