The data visualization for the Census Bureau's Index of Economic Activity (IDEA) provides data users with the ability to customize views of the IDEA data, other economic data, or both. This User Guide highlights some of the features available in the data visualization. If you have any questions as you navigate the visualization, please email us at <u>eid.economic.index@census.gov</u>.

For the best user experience with the IDEA data visualization, we recommend using Microsoft Edge or Google Chrome as your browser.

DEFAULT VIEW: IDEA DATA ONLY

When navigating to the Census Bureau's Briefing Room, the default view for the data visualization is a plot of the latest IDEA time series.



The plot area (6) displays the IDEA time series. The plot area has several shades of blue bands to help with the interpretation of the IDEA values. Using these blue bands are explained in the Info button (1) on the top of the data visualization. The y-axis on the left (5) displays the index values. This axis is dynamic and will change to reflect the maximum and minimum index values when you change the time period view.

The plot area (6) also highlight the two economic recessions (the Great Recession and the COVID-19 Recession) that have occurred since 2004.

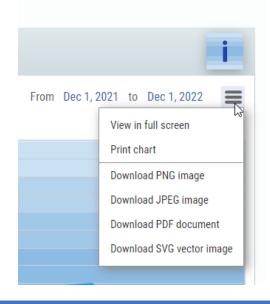
You can zoom in on the visual three different ways:

- Using the time period buttons (2), you can select views of the most recent 3 months, the most recent 6 months, the current year-to-date, one year back from the current month, or all.
- Using the calendar feature (3), you can customize the beginning and end dates for your view of the visualization.

• The scroll bar at the bottom (7) also allows you to customize the beginning and end dates for your view of the visualization by moving the boxes (see red arrows in figure below) left and right until you have selected the appropriate time span.



The hamburger button (4) provides options to view the visualization as a full screen, print the data visualization, or capture a screen shot in PNG, JPEG, PDF, SVG vector format. See image below.



VIEWING OTHER DATA SERIES

One exciting feature of the new IDEA data visualization is that it allows other economic data series to be plotted in the graph.

Click on the "View additional data series" button



Uncheck the box for the Economic Index and then select one or more of the other data series listed. Click on the "View additional data series" button again to return to the data visualization

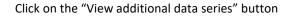
| | 1 |
|-----------------------------------|--|
| | All Data Series |
| Imports of Goods and Services | New Single-Family Houses Sold |
| Manufacturing Inventories | Retail Trade Inventories |
| Manufacturing Value of New Orders | Retail Trade and Food Services Sales |
| New Orders for Durable Goods | Total Construction Spending |
| New Single-Family Houses for Sale | Wholesale Trade Inventories |
| | Manufacturing Inventories Manufacturing Value of New Orders New Orders for Durable Goods |

The data visualization will now display your selected series only. All features in the visualization remain the same but the y-axis for the other, non-index series is now on the right side of the graph (8) and reflects a month-to-month percent change.



VIEWING THE INDEX DATA WITH OTHER DATA SERIES

Plotting the Index data with other data series can be a useful tool in understanding the movements of the index.





Check the box for the Economic Index and then select one or more of the other data series listed. Click on the "View additional data series" button again to return to the data visualization

| Last updated 11:30 a.m. February 7, 2023 | | |
|---|-----------------------------------|---|
| View additional data series | | |
| Economic Index | | All Data Series |
| Business Applications | Imports of Goods and Services | New Single-Family Houses Sold |
| Exports of Goods and Services | Manufacturing Inventories | Retail Trade Inventories |
| Housing Units Authorized in Permit- Issuing Places | Manufacturing Value of New Orders | Retail Trade and Food Services Sales |
| Housing Units Completed | New Orders for Durable Goods | Total Construction Spending |
| Housing Units Started | New Single-Family Houses for Sale | Wholesale Trade Inventories |
| | | |

The data visualization will now include a plot of the index along with any other series that you selected. The left yaxis (9) is for the Index data and the right x-axis (10) is the month-to-month percent change for the individual data series.



There is a tool-tip (11) available in all views of the data visualization when you hover over the data point that provides information on that data point for all displayed series. The colors of the series names in the tool-tip match the colors of the plot for each series.

DOWNLOADING AND USING INPUT DATA CSVS



Datasets are available for download on the "Downloads" tab (12) in the upper right of the visualization.

Because of the amount of daily data available, you can download data by day. Select a day (13) and available downloads will populate on the right side of the screen (14). Click on each link to download the CSV. CSVs can be opened in a variety of software, including Excel and Notepad. Short descriptions for the available downloads are included (15). Read below for more detail on how to use the CSVs.

Files available for download each day:

- Indicator_Input_Values_YYYYMMDD.csv This file captures the values of the time series of each input data series on the specified day. Most indicators consistently revise prior month and prior year data, but occasionally will revise additional months as well. (This most commonly happens with Annual Revisions. See each input data series' methodology pages for more information on revisions). Comparing the inputs across days can help capture reasons for changes to the Index values.
- Index_Values_YYYY.csv This file exists for the full calendar year, and a column is added for each business day the index is published. Compare daily columns to see how the monthly Index values change over time.
- Weights.csv This file provides the weights for each input data series used in the computation of the index. This can be helpful to understand why a series' publication may have more or less impact on the Index value changing.
 - The weights can change. Since the weights are calculated using the input data series' values from August 2004 to February 2020, when a data series revises back data during their historical annual revision, the weight distribution in the Index can also change.
 - We track those changes by adding a column each time new weights are introduced. The column header of "PCA_Weight_02092023" shows the weight values starting February 9, 2023. The next column header of "PCA_Weight_03242023" shows the weights had no change From February 9 through March 23, but did change on March 24th.

File available for download at the end of the data processing month:

Nowcast_Index_Values_YYYYMM.csv – This file is available for download at the end of the data
processing month, generally around 36-37 days after the data month end. It contains the forecasted and
actual values of the current data month that are used in the daily computation of the index. There is a row
for each day in the data processing month and a column for each input data series. If a number has
decimal places, it was a forecasted value. Once the number is a whole number, that signals the day the
series replaced a forecasted value with an actual published value. Some series may change in an
additional day/row. This occurs for series that have an "advance" and "preliminary" value, as we replace
those values as updated data is published.

Source: U.S. Census Bureau Last updated March 24, 2023