STATE
COINCIDENT
INDEXES
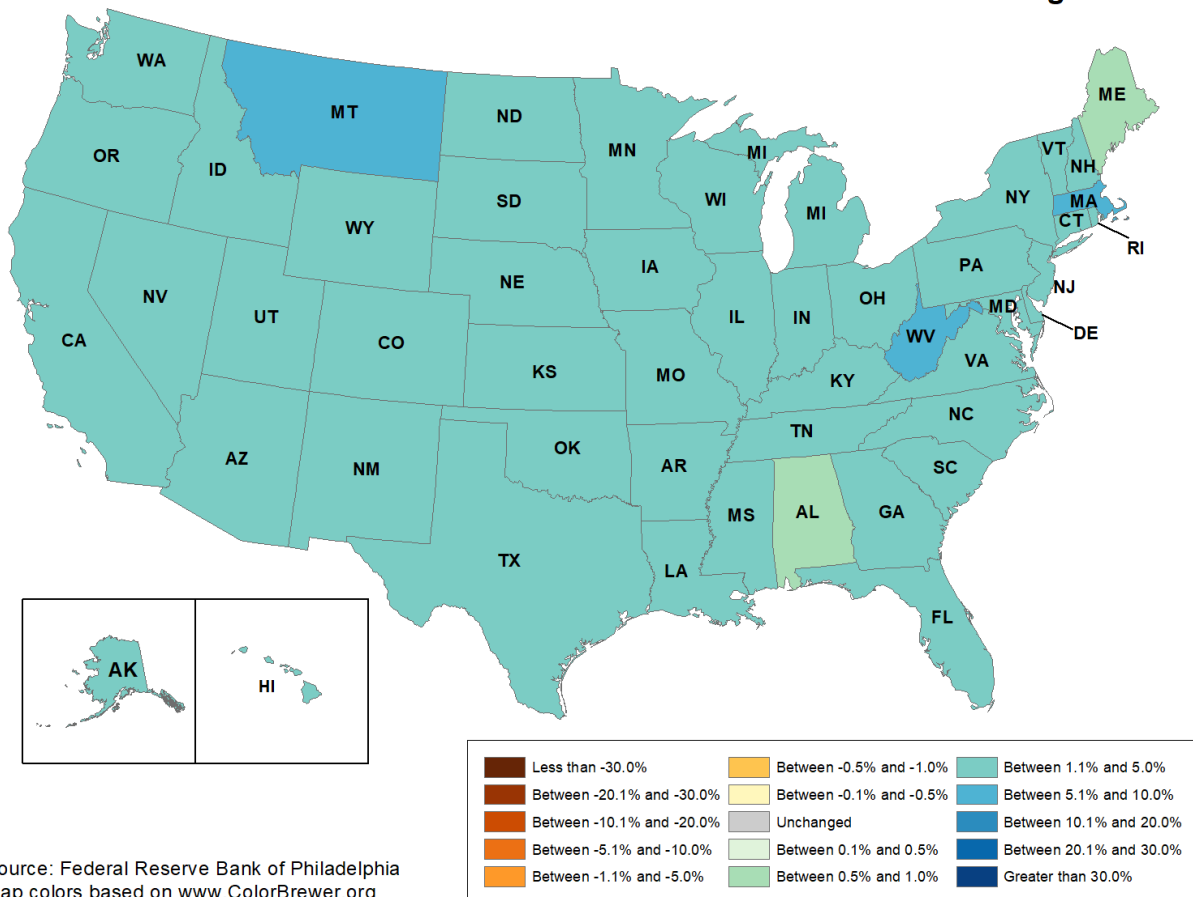
DECEMBER 2021

Release Date: January 28, 2022

The Federal Reserve Bank of Philadelphia has released the coincident indexes for the 50 states for December 2021. Over the past three months, the indexes increased in all 50 states, for a three-month diffusion index of 100. Additionally, in the past month, the indexes increased in all 50 states, for a one-month diffusion index of 100. For comparison purposes, the Philadelphia Fed has also developed a similar coincident index for the entire United States. The Philadelphia Fed's U.S. index increased 1.2 percent over the past three months and 0.4 percent in December.

** See the **Potential Impacts of the Coronavirus (COVID-19) Pandemic on the December 2021 State Unemployment Rates** and **South Carolina Employment and Wages Data** on the third page.
*** **Greater volatility of the Coincident Index has prompted an expanded map scale, and more discussion of this volatility will be forthcoming.**

The next release date of the state coincident indexes will be March 30, 2022.

December 2021 State Coincident Indexes: Three-Month Change

Legend		
Less than -30.0%	Between -0.5% and -1.0%	Between 1.1% and 5.0%
Between -20.1% and -30.0%	Between -0.1% and -0.5%	Between 5.1% and 10.0%
Between -10.1% and -20.0%	Unchanged	Between 10.1% and 20.0%
Between -5.1% and -10.0%	Between 0.1% and 0.5%	Between 20.1% and 30.0%
Between -1.1% and -5.0%	Between 0.5% and 1.0%	Greater than 30.0%

Source: Federal Reserve Bank of Philadelphia
Map colors based on www.ColorBrewer.org

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THIRD DISTRICT COINCIDENT INDEXES: DECEMBER 2021

Pennsylvania

In the three months to December, the coincident index for Pennsylvania rose 2.7 percent. The level of payroll employment rose over the past three months but remained lower than that of February 2020. The unemployment rate fell significantly during the three-month period but generally remained higher than its pre-pandemic level. In addition, average hours worked in manufacturing increased. Overall, Pennsylvania's economic activity as measured by the coincident index has risen 7.3 percent over the past 12 months.

New Jersey

In the three months to December, the coincident index for New Jersey rose 2.6 percent. The level of payroll employment rose over the past three months but remained lower than that of February 2020. The unemployment rate fell significantly during the three-month period but generally remained higher than its pre-pandemic level. However, average hours worked in manufacturing decreased. Overall, New Jersey's economic activity as measured by the coincident index has risen 6.6 percent over the past 12 months.

Delaware

In the three months to December, the coincident index for Delaware rose 1.9 percent. The level of payroll employment increased over the past three months but remained lower than that of February 2020. The unemployment rate decreased during the three-month period but generally remained higher than its pre-pandemic level. In addition, average hours worked in manufacturing increased. Overall, Delaware's economic activity as measured by the coincident index has risen 5.1 percent over the past 12 months.

December 2021 DATA: Third District Coincident Indexes

Area	December 2021*	1-Month Change	3-Month Change	12-Month Change
Pennsylvania	122.0	1.0%	2.7%	7.3%
New Jersey	128.1	1.1%	2.6%	6.6%
Delaware	130.8	0.7%	1.9%	5.1%
US	131.8	0.4%	1.2%	6.0%

* Indexed to 2007 annual average. Values are subject to monthly revision.

Historical data for the state coincident indexes and diffusion indexes are available in Excel format. Click here to download the files. Visit our website for data, maps, and more information on the state coincident indexes.

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** Potential Impacts of the COVID-19 Pandemic on the December 2021 State Unemployment Rates and the Philadelphia Fed's State Coincident Indexes

In December 2021, unemployment rates were lower in 42 states (in which the monthly change was considered statistically significant); the monthly changes in the remaining eight states were considered stable. For nonfarm payroll jobs, statistically significant changes were positive in 17 states.

However, the Bureau of Labor Statistics (BLS) noted the following for the U.S. as a whole:

- Despite the over-the-month increase, nonfarm employment in December 2021 was 3.6 million (or 2.3 percent) below its February 2020 level.

- Although unemployment decreased in December 2021, the unemployment rate and the number of unemployed people are up 0.4 percentage point and 0.6 million, respectively, since February 2020.

Our map and our three-month diffusion index currently depict changes from September 2021 through December 2021, which continued the broadly positive results from the November 2021 report. The monthly unemployment rate is typically the most influential factor underlying a state's coincident index for most states, and the unemployment rate declined in most states on a three-month basis.

Of note, the BLS reported on changes to and aspects of its standard methodology for state estimates that bear particular relevance to movements in the Philadelphia Fed's coincident indexes.

- **Handling misclassifications:** The BLS noted again that in December 2021 an atypically large number of workers were classified as employed, but not at work for "other reasons," and suggested that some of these workers should have been classified as "unemployed on temporary layoff." The BLS noted that the national unemployment rate might have been as high as 3.8 percent (not seasonally adjusted) compared with 3.7 percent. Thus, state unemployment rates also may have been higher than estimated, which would imply that the coincident indexes may have increased less than our model indicates. [See FAQ: The Impact of the Coronavirus (COVID-19) Pandemic on the Employment Situation for December 2021.]

Finally, the BLS reported two other aspects of its methodology of relevance for the coincident indexes:

- **Greater uncertainty:** The December 2021 unemployment rate estimates met the Census Bureau's standards for accuracy and reliability, even though the response rate for the household survey was about 10 percentage points less than in the 12 months preceding February 2020. [See FAQ: The Impact of the Coronavirus (COVID-19) Pandemic on the Employment Situation for December 2021.]

- **Handling outliers:** The BLS routinely examines each state's Current Population Survey inputs for outliers. If an outlier is sufficiently large — passes certain statistical tests — the information is retained or preserved as a level shift. If not, the information is discounted. Generally, the need to implement level shifts does not occur during normal month-to-month processing. For December 2021, level shifts were implemented for most, if not all, states. [See State Employment and Unemployment — December 2021.]

** South Carolina Employment and Wages Data

According to the Bureau of Labor Statistics (BLS), it is still working with its South Carolina partners to finalize QCEW data for the first quarter of 2019 and BED data for the fourth quarter of 2018 and the first quarter of 2019. South Carolina data had shown unusual movements beginning in early 2018, potentially as a result of changes that coincided with a modernization of the South Carolina unemployment insurance system. Data from both QCEW and BED for the aforementioned months are still considered to be preliminary. Read the report.