

STATE

COINCIDENT

INDEXES



DECEMBER 2020

Release Date: January 29, 2021

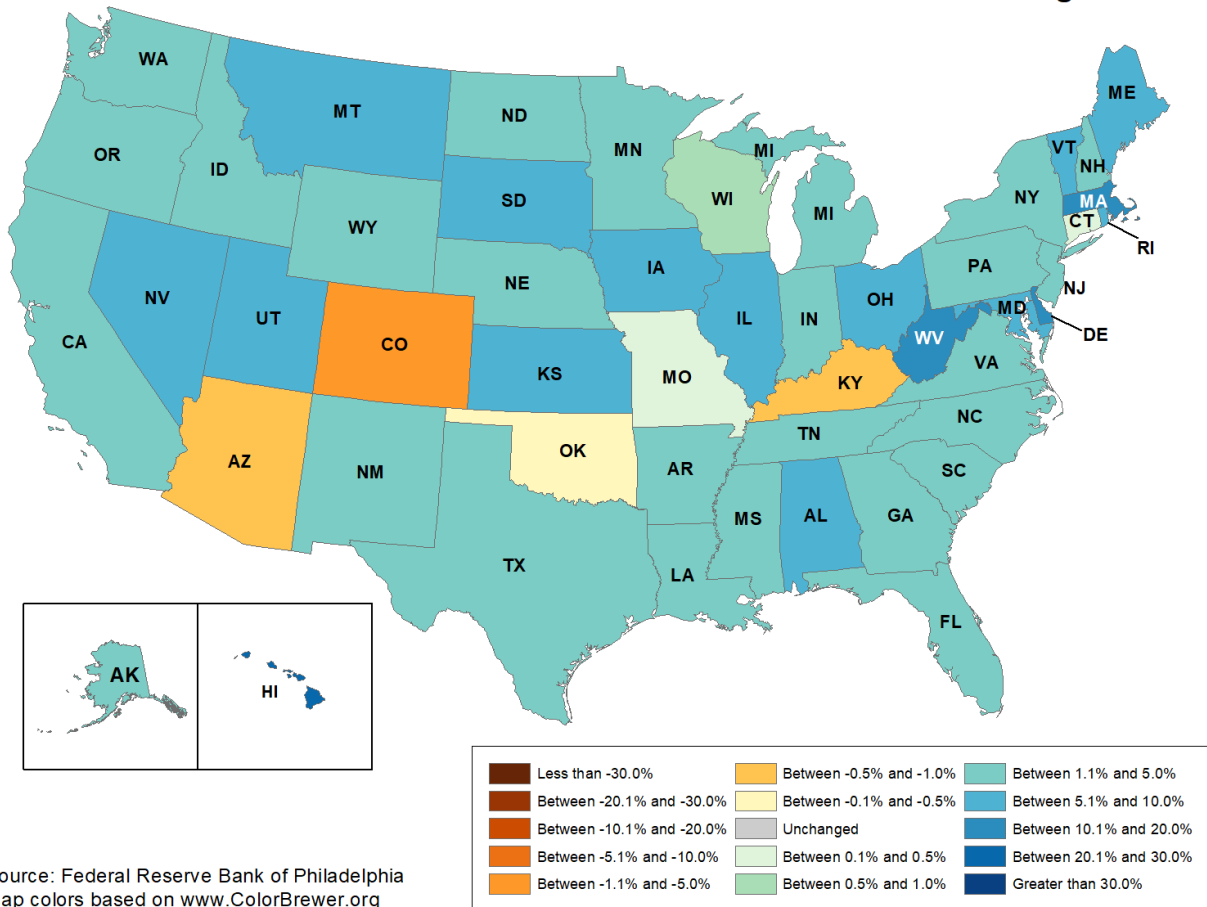
The Federal Reserve Bank of Philadelphia has released the coincident indexes for the 50 states for December 2020. Over the past three months, the indexes increased in 46 states and decreased in four states, for a three-month diffusion index of 84. Additionally, in the past month, the indexes increased in 36 states, decreased in 12 states, and remained stable in two, for a one-month diffusion index of 48. 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 0.1 percent in December.

** See the **Potential Impacts of the Coronavirus (COVID-19) Pandemic on the December 2020 State Unemployment Rates and the State Coincident Indexes** 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 April 2, 2021.

December 2020 State Coincident Indexes: Three-Month Change



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

THIRD DISTRICT COINCIDENT INDEXES: DECEMBER 2020

Pennsylvania

In the three months to December, the coincident index for Pennsylvania rose 3.5 percent. The level of payroll employment was essentially unchanged over the past three months and remained lower than that of February. The unemployment rate fell sharply during the three-month period but generally remained higher than the pre-pandemic level. In addition, average hours worked in manufacturing increased significantly. Overall, Pennsylvania's economic activity as measured by the coincident index has fallen 6.5 percent over the past 12 months.

New Jersey

In the three months to December, the coincident index for New Jersey rose 1.3 percent. The level of payroll employment was essentially unchanged over the past three months and remained lower than that of February. The unemployment rate increased during the three-month period and generally remained at an elevated level. In addition, average hours worked in manufacturing decreased sharply. Overall, New Jersey's economic activity as measured by the coincident index has fallen 3.8 percent over the past 12 months.

Delaware

In the three months to December, the coincident index for Delaware rose 11.1 percent. The level of payroll employment increased over the past three months but remained lower than that of February. The unemployment rate declined during the three-month period but generally remained higher than the pre-pandemic level. In addition, average hours worked in manufacturing decreased slightly. Overall, Delaware's economic activity as measured by the coincident index has increased 0.6 percent over the past 12 months.

December 2020 DATA: Third District Coincident Indexes

Area	December 2020*	1-Month Change	3-Month Change	12-Month Change
Pennsylvania	114.5	0.3%	3.5%	-6.5%
New Jersey	122.0	4.1%	1.3%	-3.8%
Delaware	128.9	0.5%	11.1%	0.6%
US	124.4	0.1%	1.2%	-4.4%

* 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.

Please contact [Joey Lee](#) for media inquiries.
Phone: 215-574-3840

**** Potential Impacts of the COVID-19 Pandemic on the December 2020 State Unemployment Rates and the Philadelphia Fed's State Coincident Indexes**

In December 2020, unemployment rates were lower in 19 states and higher in 12 states (in which the monthly change was considered statistically significant); the monthly changes in the remaining 19 states were considered stable. For nonfarm payroll jobs, statistically significant changes were positive in 15 states and negative in 11.

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 was 9.8 million (or 6.5 percent) below its February level.
- Although unemployment fell in December, the unemployment rate and the number of unemployed people are up 3.2 percentage points and 5.0 million, respectively, since February.

Our map and our three-month diffusion index currently depict changes from September through December, which continued the broadly positive results from the November 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 reports of zero employment:** The BLS noted that the relationship between firm births and deaths is no longer stable. This prompted a change to its methodology to include some portion of firms that reported zero employment for the period (they are typically excluded). This change resulted in lower payroll job totals for December preliminary estimates, as well as for November final estimates. The latter change contributed to downward revisions of the November coincident indexes for some states. However, for some firms reported employment turned positive in December from zero in November. [See [State Employment and Unemployment — December 2020](#).]
- **Handling misclassifications:** The BLS noted again that in December 2020 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 7.1 percent (not seasonally adjusted) compared with 6.5 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 2020](#).]

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

- **Greater uncertainty:** The December 2020 unemployment rate estimates met the Census Bureau's standards for accuracy and reliability, even though the response rate for the household survey was about 6 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 2020](#).]
- **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 2020, level shifts were implemented for most, if not all, states.

Beginning with the May report and continuing with the June through December reports, the BLS also modified its seasonal adjustment process for state estimates to reduce the impact these large outliers have on the seasonal factors. [See [State Employment and Unemployment — December 2020](#).]

**** South Carolina Employment and Wages Data**

According to the Bureau of Labor Statistics (BLS), “QCEW and BED data for 2018 and the first quarter of 2019 for South Carolina are showing unusual movements, potentially as a result of a change in reporting. These unusual movements coincide with a modernization of the South Carolina unemployment insurance system. Both QCEW and BED data are subject to changes in the administrative data produced by state unemployment insurance systems. The BLS is working with its South Carolina partners to identify any impact this system change may have. Data from both QCEW and BED are considered preliminary until the release of their final revision.” [Read the report](#).