# Early Benchmark Revisions of State Payroll Employment

RESEARCH DEPARTMENT

2022 Q3 Vintage

Release Date: March 16, 2023

## Early Benchmarks for All 50 States and the District of Columbia

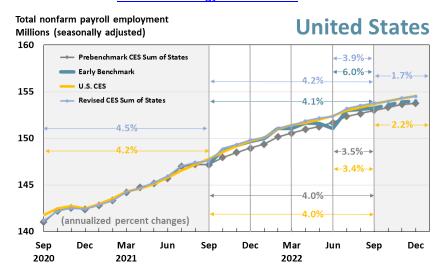
Estimates by the Federal Reserve Bank of Philadelphia indicate that the employment changes from June through September 2022 were significantly different in 34 states and the District of Columbia compared with prebenchmark state estimates from the Bureau of Labor Statistics' (BLS) Current Employment Statistics (CES). Early benchmark (EB) estimates indicated higher changes in 30 states and the District of Columbia, lower changes in four states, and lesser changes in the remaining 16 states. Learn more about interpreting our EB estimates.

The primary purpose of this analysis is to produce timely estimates of state payroll jobs that closely predict the annual benchmark revisions released by the BLS each March. To do so, we incorporate more comprehensive job estimates released by the BLS as part of its Quarterly Census of Employment and Wages (QCEW) program. All percentage change calculations are expressed as annualized rates. Read more about our methodology and caveats.

Over the full year ending with this 2022 Q3 vintage — which includes additional QCEW data changes affecting the prior three quarters — payroll jobs in the 50 states and the District of Columbia grew 4.1 percent.

- Based on the prebenchmark CES sum of states and the U.S. CES, payroll jobs grew 4.0 percent.
- The revised CES sum-of-states growth rate is 4.2 percent.

This EB estimate corresponds to 6,072,000 net new jobs added during the period rather than the 5,825,500 jobs estimated by the sum of states; the U.S. CES estimated net growth of 5,904,000 jobs for the period.



For 2022 Q3, payroll jobs in the 50 states and the District of Columbia rose 6.0 percent, after adjusting for QCEW data.

- Based on the prebenchmark CES sum of states and the U.S. CES, payroll jobs grew 3.4 percent and 3.5 percent, respectively.
- The revised CES sum-of-states growth rate is 3.9 percent.
- This EB estimate corresponds to 2,203,200 net new jobs added during the period rather than the 1,322,100 jobs estimated by the sum of states; the U.S. CES estimated net growth of 1,270,000 jobs for the period.

The chart on the next page compares state growth rates from our EB estimates with those obtained by using the prebenchmark CES data for 2022 Q3. The subsequent two charts compare our EB estimates for the full four quarters from September 2021 through September 2022 against the prebenchmark CES data and against the postbenchmark CES data (released on Monday). The latter provides an annual check on our EB process.

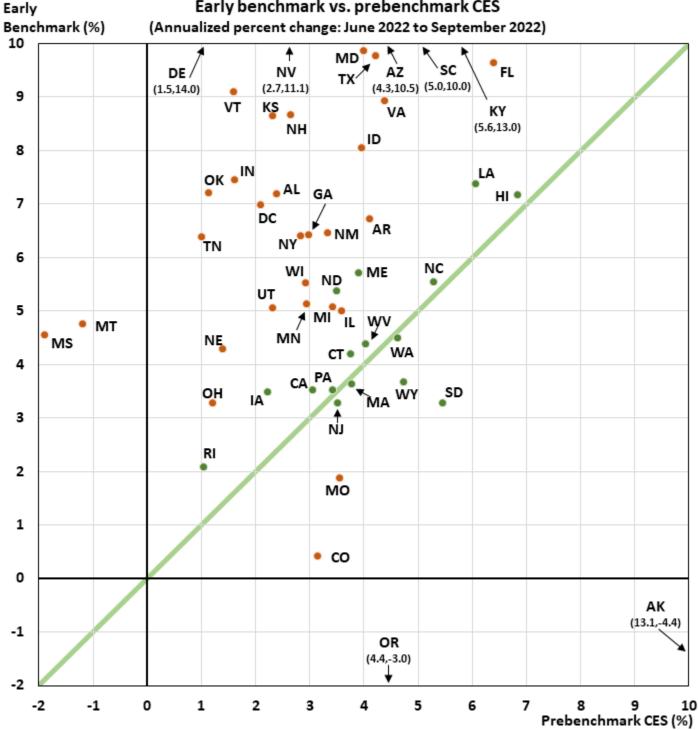
Note: The estimates obtained from the sum of our EB state estimates are not designed nor intended to be an accurate measure of national employment. Moreover, the BLS <u>warns</u> that, owing to statistical limitations, it "does not compile a 'sum-of-states' employment series and cautions users that such a series is subject to a relatively large and volatile error structure." This caveat also applies to our EB series.

For more regional economic analysis, see www.philadelphiafed.org/regional-economy.

The next release of our EB estimates will be on Thursday, June 15, 2023.

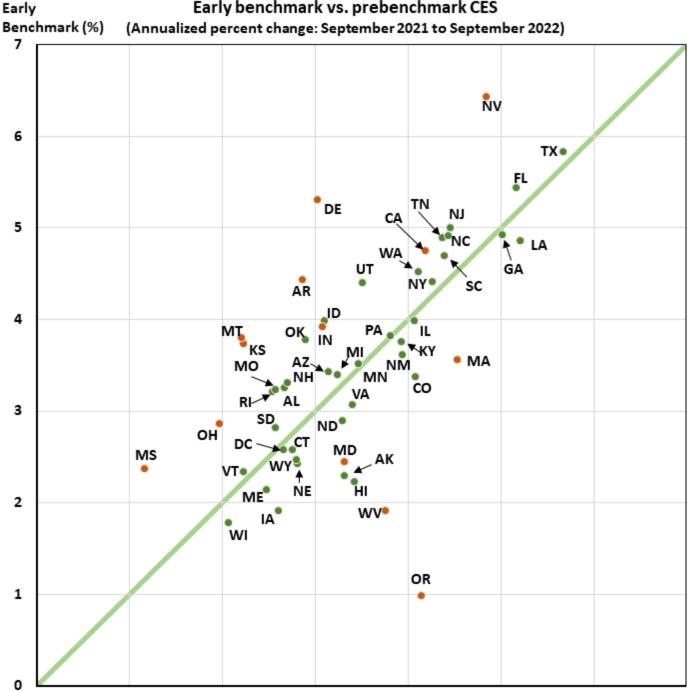


## Total nonfarm payroll employment Early benchmark vs. prebenchmark CES



Each state's percentage change in total nonfarm payroll employment from June through September 2022 is expressed on an annualized basis in the scatterplot above. Prebenchmark CES estimates are represented on the horizontal axis; our EB estimates are represented on the vertical axis. A green dot indicates that the difference between our EB estimate and the prebenchmark CES estimate are within the standard error (+/-) for that state. An orange dot indicates a significant difference that suggests future revisions (positive or negative) will likely be larger for that state.

## Total nonfarm payroll employment Early benchmark vs. prebenchmark CES



Each state's percentage change in total nonfarm payroll employment from September 2021 through September 2022 is expressed on an annualized basis in the scatterplot above. Prebenchmark CES estimates are represented on the horizontal axis; our EB estimates are represented on the vertical axis. A green dot indicates that the difference between our EB estimate and the prebenchmark CES estimate are within the standard error (+/-) for that state. An orange dot indicates a significant difference that suggests future revisions (positive or negative) will likely be larger for that state.

4

5

Prebenchmark CES (%)

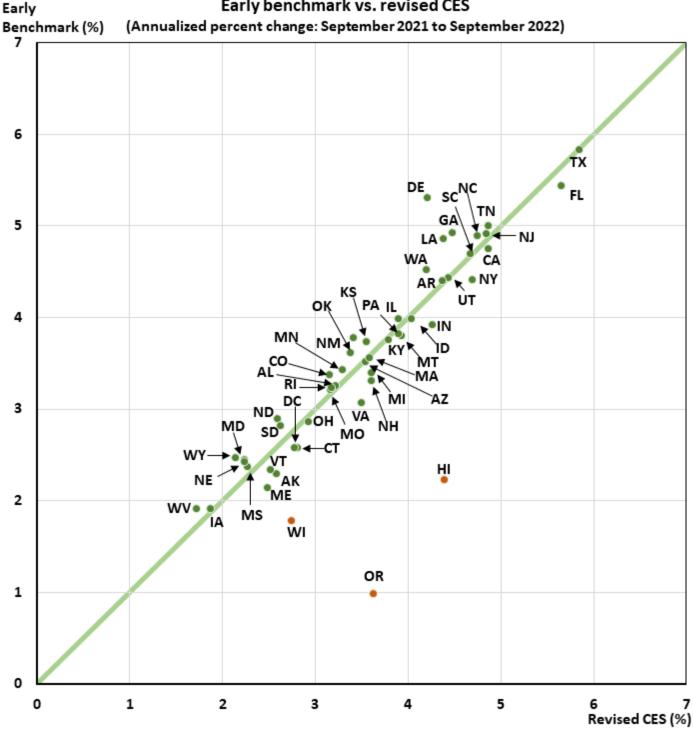
3

0

1

2

## Total nonfarm payroll employment Early benchmark vs. revised CES



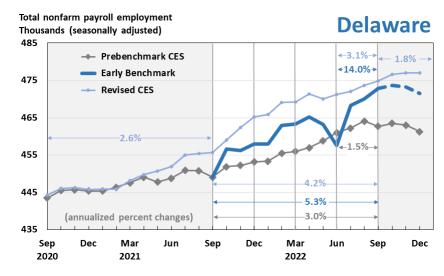
Each state's percentage change in total nonfarm payroll employment from September 2021 through September 2022 is expressed on an annualized basis in the scatterplot above. Current (revised) CES estimates are represented on the horizontal axis; our EB estimates are represented on the vertical axis. A green dot indicates that the difference between our EB estimate and the current CES estimate are within the standard error (+/-) for that state. An orange dot indicates a significant difference that suggests future revisions (positive or negative) will likely be larger for that state.

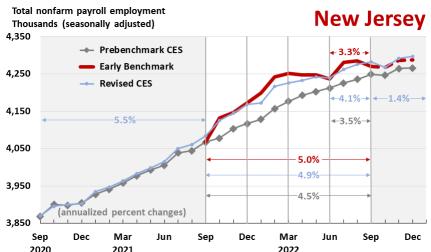
#### **Early Benchmarks for Third District States**

Our EB analysis indicates that total payroll job growth from June through September 2022 was substantially faster in Delaware than prebenchmark revision CES monthly estimates indicated, slightly slower in New Jersey, and slightly faster in Pennsylvania.

#### Faster Growth in Delaware

EB job growth in Delaware was 5.3 percent over the 12-month period through September 2022, after adjusting for QCEW data. The prebenchmark CES estimate was 3.0 percent; the postbenchmark CES estimate was 4.2 percent. Payroll jobs rose 14.0 percent from June through September 2022, after adjusting for QCEW data — significantly different than the 1.5 percent growth based on prebenchmark CES estimates.





### Little Change in New Jersey

EB job growth in New Jersey was 5.0 percent over the 12-month period through September 2022, after adjusting for QCEW data. The prebenchmark CES estimate was 4.5 percent; the postbenchmark CES estimate was 4.9 percent. Payroll jobs rose 3.3 percent from June through September 2022, after adjusting for QCEW data — slightly less than the 3.5 percent growth based on prebenchmark CES estimates.

#### Little Change in Pennsylvania

EB job growth in Pennsylvania was 3.8 percent over the 12-month period through September 2022, after adjusting for QCEW data. The prebenchmark CES estimate was 3.8 percent; the postbenchmark CES estimate was 3.9 percent. Payroll jobs rose 3.5 percent from June through September 2022, after adjusting for QCEW data — slightly more than the 3.4 percent growth based on prebenchmark CES estimates.

