

How Do We Measure the Labor Force Statistics?

- Nationally, labor force statistics are derived directly from the Current Population Survey (CPS), which is conducted by the Census Bureau for the Bureau of Labor Statistics (BLS). The survey is based on a selected sample of households and includes the population 16 years of age and over. The national CPS sample includes approximately 60,000 households.
- On the first Friday of each month, BLS releases the national labor force statistics for the preceding month. These figures reflect an estimated count of the employed and unemployed persons for the nation, who together, comprise the labor force. BLS also publishes a monthly seasonally adjusted (the official estimate) and a not seasonally adjusted unemployment rate. The unemployment rate represents the percentage of the labor force that is unemployed.
- In Rhode Island, the CPS includes about 1,200 sample households. However, unlike the nation, the RI sample is not comprehensive enough to reflect the State's true labor force estimates. Therefore, BLS developed a methodology for those states that could not use the CPS sample data directly.
- In the old days (prior to 1989), Rhode Island's labor force figures were computed manually using a BLS-approved methodology called the "Handbook Method." This multi-step process was similar to a building block approach and relied heavily on data from two sources - Current Employment Statistics (CES, another BLS program), and administrative data records. Even though BLS developed this methodology, the state analyst was still very involved in the estimating process.
- However, it was determined that the Handbook Methodology was not an ideal way to produce estimates. The estimates were not actually comparable state-to-state because this method did not fully account for differences in state Unemployment Insurance (UI) laws and state economies.
- In 1989, BLS introduced a new "Regression" Methodology for developing labor force estimates for the 39 smaller states (including Rhode Island) and the District of Columbia. At that time, the eleven larger states used data directly from the CPS. BLS used more than ten years of data from the CPS, the CES, and the UI system – sources which covered employed and unemployed persons in all sectors of the economy – to develop regression equation models.
- Advantages for using model-based estimation includes a reduction in the number of state-supplied inputs, consistency in the estimates from state-to-state, and an automated approach using a PC to access the individual state models. A disadvantage to the model-based approach is the analyst became less involved in the actual production of the estimates.
- Effective with the estimates for January 2005, all states began using a web-based model system developed by BLS. **Web STARS** (State Time Series Analysis and Review System) represents the third generation of regression models.

- One of the major differences between the new **Web STARS** and the prior STARS version is that states are now grouped into one of nine Census Divisions. State estimates are benchmarked (a benchmark is a reliable total to which less reliable estimates are controlled) to the national CPS estimates of employment and unemployment each month via the Census Division models.
- The process of adjusting the monthly state estimates to the national total via the Census Division is referred to as “real-time benchmarking.” This simply means that the process occurs as part of the normal monthly estimation (in real-time). Prior to the implementation of **Web STARS**, the adjustment process occurred only once a year.
- The new **Web STARS** requires a state analyst to enter nonfarm payroll employment and UI claims information into the web application each month. Once the inputs are entered, BLS takes over the estimation process. Final estimates cannot be produced for a state until all states in the relevant Census Division have entered their inputs.
- In addition to the “real-time benchmarking,” a modified annual historical benchmarking still occurs at the end of the year. It involves updating model inputs (revisions to employment and claims data, which the state analyst enters directly into **Web STARS**). It also involves updating the population controls, smoothing the model estimates and controlling the state estimates to the revised monthly historical benchmarked estimates at the Division level (BLS performs these activities), which, in turn, sum to the monthly national CPS estimates.
- The models provide monthly state estimates of the civilian labor force, the resident employed, the number unemployed, and the unemployment rate for both the seasonally adjusted and not seasonally adjusted data series. During the annual benchmarking process, state estimates are revised historically. Typically, the seasonally adjusted series is revised back five years and the not seasonally adjusted series is revised back three years.

Note: The methodology to produce the state labor force statistics (resident labor force, resident employed, unemployed and the unemployment rate) was developed by the Bureau of Labor Statistics (BLS). Currently, all states adhere to this methodology. Although the analyst enters data into the STARS web-based application, BLS is ultimately responsible for generating the final estimates and for seasonally adjusting the data.