

FACT SHEET

CALCULATING THE UNEMPLOYMENT RATE

The federal Bureau of Labor Statistics (BLS) and the California Employment Development Department (EDD) publish estimates of employment and unemployment each month. These data are produced for the nation and the state, and for selected local areas. At the beginning of each month, the BLS provides figures for the United States. Subsequently, the EDD releases data for California and sub-state areas.

The basic definitions used in estimating the number of people employed and unemployed are as follows:

- **Civilian Population:** all individuals who are at least 16 years of age, who are not institutionalized (in, for example, correctional, residential nursing, or mental healthcare facilities) nor on active duty in the Armed Forces.
- **Employed:** members of the civilian population, defined above, who worked during the week including the 12th of the month.
- **Unemployed:** members of the civilian population, defined above, who did not work during the week including the 12th of the month but who looked for work and were able and available for work.
- **Labor Force:** the sum of employment and unemployment.
- **Unemployment Rate:** the number of unemployed divided by the labor force, expressed as a percentage.
- **Not in the Labor Force:** members of the civilian population, defined above, who were neither employed nor unemployed during the week including the 12th of the month.

The BLS establishes the procedures for producing the employment and unemployment statistics. The methods used to make these estimates vary from the national data to state data to local area data. Below we briefly describe the methods used at each level.

National Data

As it is impractical to actually count every person in the nation each month, the BLS contracts with the U.S. Census Bureau to conduct the Current Population Survey (CPS), a monthly sampling of about 60,000 households used to estimate the extent of employment and unemployment in the country. The survey asks about the work status of each individual in the household during the week including the 12th of the month.

The survey is designed so that each person age 16 years old and over who is neither in an institution (for example, correctional, residential nursing, and mental health care facilities) nor on active duty in the Armed Forces is classified and counted as employed, unemployed, or not in the labor force.

The unemployed are classified into one of four groups: job losers; job leavers (those who quit voluntarily); new entrants (those seeking work for the first time); or re-entrants (those who have previously worked but have been out of the labor force for some time). Job losers usually represent about half of the total unemployed. Re-entrants account for about one quarter of the total. The balance is divided between new entrants and job leavers. This distribution changes with the business cycle. For instance, during a recession, job losers generally reach levels higher than 50 percent.

California Data

At the state level, labor force statistics are produced using economic models. These models combine current and historical data from the CPS, monthly estimates of the number of nonfarm jobs from the Current Employment Statistics (CES) Program, and State Unemployment Insurance (UI) claims data. In California, these models are used to produce employment and unemployment estimates at two geographic levels: Los Angeles County and the rest of the State of California. The results from the two areas are added together to calculate the statewide labor force estimates.

California's and other states' employment and unemployment model estimates are controlled each month so that they sum to the national labor force estimates. In addition, a statistical smoothing technique is applied to minimize volatility introduced by the models.

Each month, the prior month's estimates are revised to reflect more up-to-date and complete model inputs. At the end of each calendar year, new Census Bureau population estimates are introduced and the monthly data are re-estimated in a process called "benchmarking." These benchmarked numbers may be subject to future adjustments as additional information becomes available.

County and Metropolitan Area Data

Estimates for counties and metropolitan areas are produced by the Local Area Unemployment Statistics (LAUS) Program through a building-block approach known as the “Handbook Method.” This procedure uses data from several sources, including the CES nonfarm jobs data, UI claims data, and estimates of new entrants and re-entrants into the labor force. Estimates are derived for the counties and then aligned to the model findings for California and Los Angeles County. These data are available for:

- Metropolitan Statistical Areas
- Metropolitan Divisions
- Micropolitan Statistical Areas
- Counties

The LAUS method has been used for many years throughout the nation and provides a long series of comparable data. A number of studies at the national and state level have validated this method.

Sub-County Data

Monthly estimates of employment and unemployment for cities and Census Designated Places (CDP) are calculated by using the share of county-level employment and unemployment in the area at the time of the most current five-year American Community Survey (ACS) estimates. This method assumes that the rates of change in employment and unemployment are exactly the same in each city and CDP as at the county level. For example, if a city comprised 10 percent of the employment in its assigned county at the point the ACS was conducted, the current month’s employment for the city would assume to be 10 percent of the county’s current month employment total. The same process is used for unemployment. The city’s employment and unemployment estimates are then added to determine the total labor force and unemployment rate. The sub-county estimates assume that employment and unemployment in the jurisdiction grows at the same rate as the county after the ACS time period. The ACS population data is released annually to reflect these growth changes.

Seasonal Adjustment

Total employment and unemployment rise and fall with predictable patterns throughout the year. The seasonal fluctuations in the number of employed and unemployed persons reflect not only the normal seasonal weather patterns that tend to be repeated year after year, but also the hiring (and layoff) patterns that accompany regular events such as the winter holiday season and the summer vacation season. For example, unemployment is higher and employment lower in January and February, when it is cold in many parts of the country and work in agriculture, construction, and other weather-affected industries is curtailed. Also, both employment and unemployment rise every June, when students enter the labor force in search of summer jobs. These regular patterns make it more difficult to understand whether the monthly changes are due to normal seasonal patterns or to changing economic

conditions. To help users isolate the economic elements of growth or decline, labor force data for the U.S., California, and Los Angeles are seasonally adjusted. In this process, normal seasonal patterns of employment and unemployment can be removed or minimized making the underlying economic trends easier to identify.

Seasonal adjustment is a statistical technique that uses the past history of the data series to identify the seasonal movements and to calculate the size and direction of these movements. A seasonal adjustment factor is then developed and applied to the estimates to eliminate the effects of regular seasonal fluctuations on the data.

When a statistical series has been seasonally adjusted, the normal seasonal fluctuations are smoothed out and data for any month can be more meaningfully compared with data from any other month or with an annual average. Many statistical time series that are based on monthly data are seasonally adjusted.

Uses of Unemployment Rates

The unemployment rate is an important indicator that reflects and coincides with current economic conditions. Unemployment rates can be compared on a month-to-month and year-to-year basis to assess economic conditions or to compare geographic areas (especially when adjustments are made to eliminate seasonal influences). Seasonally adjusted data should only be compared with other seasonally adjusted data.

Unemployment rates are also determined for certain demographic subgroups. For example, rates are estimated nationally and in large states by gender, age, and ethnicity/race groups.

Another indicator of the employment and unemployment trends is the duration of unemployment. The pool of unemployed workers is constantly changing. New people are entering the labor market for the first time and other people are retiring and leaving the labor market. Some people are leaving the labor market temporarily—to return to school, take care of family responsibilities, etc.—while others are returning to the labor market, having completed school or taken care of other responsibilities. The duration of unemployment represents the length of time persons classified as unemployed have been continuously looking for work. Estimates of unemployment duration are calculated for the nation and for California.

If you have any questions on employment or unemployment estimates, or would like to obtain labor market information, please write or call:

Employment Development Department
Labor Market Information Division
800 Capitol Mall, MIC 57
Sacramento, CA 95814
Phone: 916-262-2162
Fax: 916-651-5771
Ask EDD: <https://askedd.edd.ca.gov/>
(Select: “Labor Market Information”)

For additional information on other EDD programs and services, please visit the EDD’s website at www.edd.ca.gov.

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