

NEWS RELEASE

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STATE EMPLOYMENT AND UNEMPLOYMENT — MARCH 2020

Unemployment rates were higher in March in 29 states and the District of Columbia, lower in 3 states, and stable in 18 states, the U.S. Bureau of Labor Statistics reported today. Twenty-three states had jobless rate increases from a year earlier, 3 states had decreases, and 24 states and the District had little or no change. The national unemployment rate rose by 0.9 percentage point over the month to 4.4 percent and was 0.6 point higher than in March 2019.

Nonfarm payroll employment decreased in 31 states in March 2020 and was essentially unchanged in 19 states and the District of Columbia. Over the year, nonfarm payroll employment increased in 13 states, decreased in 2, and was essentially unchanged in 35 states and the District.

This news release presents statistics from two monthly programs. The civilian labor force and unemployment data are modeled based largely on a survey of households. These data pertain to individuals by where they reside. The employment data are from an establishment survey that measures nonfarm employment, hours, and earnings by industry. These data pertain to jobs on payrolls defined by where the establishments are located. For more information about the concepts and statistical methodologies used by these two programs, see the Technical Note.

Unemployment

North Dakota had the lowest unemployment rate in March, 2.2 percent, while Louisiana had the highest rate, 6.9 percent. The rates in Alaska (5.6 percent) and Idaho (2.6 percent) set new series lows. (All state series begin in 1976.) In total, 25 states had unemployment rates lower than the U.S. figure of 4.4 percent, 13 states and the District of Columbia had higher rates, and 12 states had rates that were not appreciably different from that of the nation. (See tables A and 1 and map 1.)

In March, the largest unemployment rate increases occurred in Nevada (+2.7 percentage points) and Colorado (+2.0 points). Rates rose over the month by at least a full percentage point in 19 additional states. Alaska had the largest jobless rate decrease from February (-0.2 percentage point). Eighteen states had rates that were not notably different from those of a month earlier, though some had changes that were at least as large numerically as the significant changes. (See table B.)

The largest unemployment rate increases from March 2019 occurred in Louisiana (+2.4 percentage points), Nevada (+2.2 points), and Pennsylvania (+1.9 points), with another 12 states experiencing increases of a full point or more. The largest unemployment rate decreases over the year were in Oregon and South Carolina (-0.8 percentage point each). (See table C.)

Nonfarm Payroll Employment

Nonfarm payroll employment decreased in 31 states in March 2020. The largest job declines occurred in California (-99,500), Texas (-50,900), and New York (-41,700). The largest percentage declines occurred in Louisiana and Rhode Island (-1.1 percent each), followed by Missouri and Vermont (-0.9 percent each). (See tables D and 3.)

Thirteen states had over-the-year increases in nonfarm payroll employment in March, 2 had decreases, and 35 states and the District of Columbia were unchanged. The largest job gains occurred in Texas (+250,900), California (+150,400), and Florida (+126,000). The largest percentage gains occurred in Utah (+2.6 percent), Idaho (+2.4 percent), and Arizona (+2.2 percent). Employment decreased in Vermont (-7,700, or -2.4 percent) and West Virginia (-12,600, or -1.7 percent). (See table E and map 2.)

The Metropolitan Area Employment and Unemployment news release for March is scheduled to be released on Wednesday, April 29, 2020, at 10:00 a.m. (EDT). The State Employment and Unemployment news release for April is scheduled to be released on Friday, May 22, 2020, at 10:00 a.m. (EDT).

Coronavirus (COVID-19) Impact on March 2020 Establishment and Household Survey Data

March data from the establishment and household surveys broadly reflect some of the early effects of the coronavirus (COVID-19) pandemic on the labor market. We cannot precisely quantify the effects of the pandemic on state and local job markets in March. However, it is clear that the decreases in employment and hours and the increases in unemployment can be ascribed to effects of the illness and efforts to contain the virus. It is important to keep in mind that the March survey reference periods for both surveys predated many coronavirus-related business and school closures in the second half of the month. More information on the impacts of the coronavirus on the surveys is available in the “Frequently asked questions” document at www.bls.gov/cps/employment-situation-covid19-faq-march-2020.pdf.

For the March 2020 estimates of household employment and unemployment from the Local Area Unemployment Statistics (LAUS) program, BLS determined that no modifications to the model-based methodology were necessary. Rather, the LAUS program implemented level-shift outliers in employment and/or unemployment in many modeled areas based on statistical evaluation of movements in each area's Current Population Survey inputs. These level shifts preserved movements in published estimates that the models otherwise would have discounted, without requiring changes to how the models create estimates at other points in the time series. Outlier detection and implementation of level shifts are usual aspects of the LAUS modeling procedures. However, until March 2020 these activities generally had been limited to annual processing, following the completion of estimation for the full calendar year.

Due to the effects of the illness and efforts to contain the virus, Puerto Rico was not able to conduct normal data collection for its household survey in March 2020; therefore, its data were not published. Household data for Puerto Rico are not modeled, but rather are derived from a monthly household survey similar to the Current Population Survey.

In anticipation of issues due to the pandemic, BLS carefully reviewed all estimation and methodological procedures for the establishment survey, which included the review of data, estimation processes, the application of the birth/death model, and seasonal adjustment. No changes were made; the estimation process for the production of the March 2020 establishment survey estimates followed standard protocol. Outlier detection is a usual part of the seasonal adjustment process. Outliers for seasonal adjustment are identified in the establishment survey seasonal adjustment documentation, which is available at www.bls.gov/sae/seasonal-adjustment/home.htm.

Table A. States with unemployment rates significantly different from that of the U.S., March 2020, seasonally adjusted

| State | Rate ^P |
|----------------------------------|-------------------|
| United States ¹ | 4.4 |
| Alabama | 3.5 |
| Alaska | 5.6 |
| Arizona | 5.5 |
| California | 5.3 |
| Connecticut | 3.7 |
| Delaware | 5.1 |
| District of Columbia | 6.0 |
| Hawaii | 2.6 |
| Idaho | 2.6 |
| Indiana | 3.2 |
| Iowa | 3.7 |
| Kansas | 3.1 |
| Kentucky | 5.8 |
| Louisiana | 6.9 |
| Maine | 3.2 |
| Maryland | 3.3 |
| Massachusetts | 2.9 |
| Minnesota | 3.1 |
| Mississippi | 5.3 |
| Montana | 3.5 |
| Nevada | 6.3 |
| New Hampshire | 2.6 |
| New Jersey | 3.8 |
| New Mexico | 5.9 |
| North Dakota | 2.2 |
| Ohio | 5.5 |
| Oklahoma | 3.1 |
| Oregon | 3.3 |
| Pennsylvania | 6.0 |
| South Carolina | 2.6 |
| South Dakota | 3.3 |
| Tennessee | 3.5 |
| Utah | 3.6 |
| Vermont | 3.2 |
| Virginia | 3.3 |
| Washington | 5.1 |
| West Virginia | 6.1 |
| Wisconsin | 3.4 |
| Wyoming | 3.7 |

¹ Data are not preliminary.

^P = preliminary.

Table B. States with statistically significant unemployment rate changes from February 2020 to March 2020, seasonally adjusted

| State | Rate | | Over-the-month change ^P |
|----------------------------|---------------|-------------------------|---------------------------------------|
| | February 2020 | March 2020 ^P | |
| Alabama | 2.7 | 3.5 | 0.8 |
| Alaska | 5.8 | 5.6 | -.2 |
| Arizona | 4.5 | 5.5 | 1.0 |
| Arkansas | 3.5 | 4.8 | 1.3 |
| California | 3.9 | 5.3 | 1.4 |
| Colorado | 2.5 | 4.5 | 2.0 |
| Delaware | 3.9 | 5.1 | 1.2 |
| District of Columbia | 5.1 | 6.0 | .9 |
| Florida | 2.8 | 4.3 | 1.5 |
| Georgia | 3.1 | 4.2 | 1.1 |
| Idaho | 2.7 | 2.6 | -.1 |
| Illinois | 3.4 | 4.6 | 1.2 |
| Iowa | 2.8 | 3.7 | .9 |
| Kentucky | 4.2 | 5.8 | 1.6 |
| Louisiana | 5.2 | 6.9 | 1.7 |
| Michigan | 3.6 | 4.1 | .5 |
| Missouri | 3.5 | 4.5 | 1.0 |
| Nebraska | 2.9 | 4.2 | 1.3 |
| Nevada | 3.6 | 6.3 | 2.7 |
| New Mexico | 4.8 | 5.9 | 1.1 |
| New York | 3.7 | 4.5 | .8 |
| North Carolina | 3.6 | 4.4 | .8 |
| Ohio | 4.1 | 5.5 | 1.4 |
| Oklahoma | 3.2 | 3.1 | -.1 |
| Pennsylvania | 4.7 | 6.0 | 1.3 |
| Rhode Island | 3.4 | 4.6 | 1.2 |
| South Carolina | 2.5 | 2.6 | .1 |
| Texas | 3.5 | 4.7 | 1.2 |
| Utah | 2.5 | 3.6 | 1.1 |
| Vermont | 2.4 | 3.2 | .8 |
| Virginia | 2.6 | 3.3 | .7 |
| Washington | 3.8 | 5.1 | 1.3 |
| West Virginia | 4.9 | 6.1 | 1.2 |

^P = preliminary.

Table C. States with statistically significant unemployment rate changes from March 2019 to March 2020, seasonally adjusted

| State | Rate | | Over-the-year change ^P |
|----------------------|------------|-------------------------|--------------------------------------|
| | March 2019 | March 2020 ^P | |
| Arizona | 4.8 | 5.5 | 0.7 |
| Arkansas | 3.5 | 4.8 | 1.3 |
| California | 4.2 | 5.3 | 1.1 |
| Colorado | 3.0 | 4.5 | 1.5 |
| Delaware | 3.6 | 5.1 | 1.5 |
| Florida | 3.4 | 4.3 | .9 |
| Georgia | 3.7 | 4.2 | .5 |
| Idaho | 2.9 | 2.6 | -.3 |
| Iowa | 2.7 | 3.7 | 1.0 |
| Kentucky | 4.2 | 5.8 | 1.6 |
| Louisiana | 4.5 | 6.9 | 2.4 |
| Missouri | 3.2 | 4.5 | 1.3 |
| Nebraska | 3.1 | 4.2 | 1.1 |
| Nevada | 4.1 | 6.3 | 2.2 |
| New Mexico | 5.0 | 5.9 | .9 |
| New York | 4.0 | 4.5 | .5 |
| Ohio | 4.1 | 5.5 | 1.4 |
| Oregon | 4.1 | 3.3 | -.8 |
| Pennsylvania | 4.1 | 6.0 | 1.9 |
| Rhode Island | 3.6 | 4.6 | 1.0 |
| South Carolina | 3.4 | 2.6 | -.8 |
| Texas | 3.5 | 4.7 | 1.2 |
| Utah | 2.8 | 3.6 | .8 |
| Vermont | 2.3 | 3.2 | .9 |
| Washington | 4.5 | 5.1 | .6 |
| West Virginia | 4.8 | 6.1 | 1.3 |

^P = preliminary.

Table D. States with statistically significant employment changes from February 2020 to March 2020, seasonally adjusted

| State | February 2020 | March 2020 ^p | Over-the-month change ^p | |
|----------------------|------------------|----------------------------|------------------------------------|---------|
| | | | Level | Percent |
| Alabama | 2,085,000 | 2,078,000 | -7,000 | -0.3 |
| Alaska | 329,800 | 327,900 | -1,900 | -.6 |
| Arkansas | 1,281,600 | 1,273,900 | -7,700 | -.6 |
| California | 17,604,500 | 17,505,000 | -99,500 | -.6 |
| Connecticut | 1,699,500 | 1,691,900 | -7,600 | -.4 |
| Delaware | 472,400 | 469,500 | -2,900 | -.6 |
| Florida | 9,071,600 | 9,035,000 | -36,600 | -.4 |
| Illinois | 6,121,800 | 6,087,700 | -34,100 | -.6 |
| Indiana | 3,179,600 | 3,162,000 | -17,600 | -.6 |
| Kansas | 1,434,300 | 1,428,400 | -5,900 | -.4 |
| Kentucky | 1,947,000 | 1,939,900 | -7,100 | -.4 |
| Louisiana | 1,995,000 | 1,974,000 | -21,000 | -1.1 |
| Maine | 637,300 | 634,200 | -3,100 | -.5 |
| Maryland | 2,797,100 | 2,776,200 | -20,900 | -.7 |
| Massachusetts | 3,712,600 | 3,694,600 | -18,000 | -.5 |
| Michigan | 4,461,500 | 4,437,200 | -24,300 | -.5 |
| Minnesota | 2,977,600 | 2,963,200 | -14,400 | -.5 |
| Mississippi | 1,163,200 | 1,155,800 | -7,400 | -.6 |
| Missouri | 2,912,600 | 2,887,000 | -25,600 | -.9 |
| New Hampshire | 690,300 | 685,700 | -4,600 | -.7 |
| New Jersey | 4,241,900 | 4,210,100 | -31,800 | -.7 |
| New York | 9,847,300 | 9,805,600 | -41,700 | -.4 |
| North Carolina | 4,612,000 | 4,589,400 | -22,600 | -.5 |
| Ohio | 5,599,100 | 5,559,400 | -39,700 | -.7 |
| Pennsylvania | 6,109,600 | 6,069,200 | -40,400 | -.7 |
| Rhode Island | 508,400 | 502,800 | -5,600 | -1.1 |
| South Carolina | 2,217,100 | 2,203,700 | -13,400 | -.6 |
| Texas | 13,016,800 | 12,965,900 | -50,900 | -.4 |
| Vermont | 314,000 | 311,100 | -2,900 | -.9 |
| Virginia | 4,099,900 | 4,071,300 | -28,600 | -.7 |
| Washington | 3,520,800 | 3,509,700 | -11,100 | -.3 |

^p = preliminary.

Table E. States with statistically significant employment changes from March 2019 to March 2020, seasonally adjusted

| State | March 2019 | March 2020 ^p | Over-the-year change ^p | |
|----------------------|---------------|----------------------------|-----------------------------------|---------|
| | | | Level | Percent |
| Arizona | 2,914,200 | 2,979,200 | 65,000 | 2.2 |
| California | 17,354,600 | 17,505,000 | 150,400 | .9 |
| Colorado | 2,765,600 | 2,809,500 | 43,900 | 1.6 |
| Florida | 8,909,000 | 9,035,000 | 126,000 | 1.4 |
| Georgia | 4,602,300 | 4,645,100 | 42,800 | .9 |
| Idaho | 752,700 | 770,800 | 18,100 | 2.4 |
| Montana | 480,600 | 489,500 | 8,900 | 1.9 |
| New Mexico | 854,300 | 868,400 | 14,100 | 1.7 |
| South Carolina | 2,174,800 | 2,203,700 | 28,900 | 1.3 |
| Tennessee | 3,108,100 | 3,160,400 | 52,300 | 1.7 |
| | | | | |
| Texas | 12,715,000 | 12,965,900 | 250,900 | 2.0 |
| Utah | 1,546,100 | 1,586,400 | 40,300 | 2.6 |
| Vermont | 318,800 | 311,100 | -7,700 | -2.4 |
| Washington | 3,445,500 | 3,509,700 | 64,200 | 1.9 |
| West Virginia | 722,600 | 710,000 | -12,600 | -1.7 |

^p = preliminary.

Technical Note

This news release presents civilian labor force and unemployment data for states and selected substate areas from the Local Area Unemployment Statistics (LAUS) program (tables 1 and 2). Also presented are nonfarm payroll employment estimates by state and industry supersector from the Current Employment Statistics (CES) program (tables 3 and 4). The LAUS and CES programs are both federal-state cooperative endeavors.

Civilian labor force and unemployment—from the LAUS program

Definitions. The civilian labor force and unemployment data are based on the same concepts and definitions as those used for the official national estimates obtained from the Current Population Survey (CPS), a sample survey of households that is conducted for the Bureau of Labor Statistics (BLS) by the U.S. Census Bureau. The LAUS program measures employed people and unemployed people on a place-of-residence basis. The universe for each is the civilian noninstitutional population 16 years of age and older. Employed people are those who did any work at all for pay or profit in the reference week (typically the week including the 12th of the month) or worked 15 hours or more without pay in a family business or farm, plus those not working who had a job from which they were temporarily absent, whether or not paid, for such reasons as bad weather, labor-management dispute, illness, or vacation.

Unemployed people are those who were not employed during the reference week (based on the definition above), had actively looked for a job sometime in the 4-week period ending with the reference week, and were currently available for work; people on layoff expecting recall need not be looking for work to be counted as unemployed. The civilian labor force is the sum of employed and unemployed people. The unemployment rate is the number of unemployed as a percent of the civilian labor force.

Method of estimation. Estimates for 48 states, the District of Columbia, the Los Angeles-Long Beach-Glendale metropolitan division, New York City, and the balances of California and New York State are produced using time-series models. This method, which underwent substantial enhancement at the beginning of 2015, utilizes data from several sources, including the CPS, the CES, and state unemployment insurance (UI) programs. Estimates for the state of California are derived by summing the estimates for the Los Angeles-Long Beach-Glendale metropolitan division and the balance of California. Similarly, estimates for New York State are derived by summing the estimates for New York City and the balance of New York State. Estimates for the five additional substate areas contained in this release (the Cleveland-Elyria and Detroit-Warren-Dearborn metropolitan areas and the Chicago-Naperville-Arlington Heights, Miami-Miami Beach-Kendall, and Seattle-Bellevue-Everett metropolitan divisions) and their respective balances of state are produced using a similar model-based approach.

Each month, estimates for the nine census divisions first are modeled using inputs from the CPS only and controlled to the

national totals. State estimates then are controlled to their respective census division totals. Substate and balance-of-state estimates for the five areas noted above also are controlled to their respective state totals. This tiered process of controlling model-based estimates to the U.S. totals is called real-time benchmarking. Estimates for Puerto Rico are derived from a monthly household survey similar to the CPS. A more detailed description of the estimation procedures is available from BLS upon request.

Annual revisions. Civilian labor force and unemployment data for prior years reflect adjustments made after the end of each year. The adjusted estimates reflect updated population data from the U.S. Census Bureau, any revisions in the other data sources, and model re-estimation. In most years, historical data for the most recent five years are revised near the beginning of each calendar year, prior to the release of January estimates. With the introduction of a new generation of times-series models in early 2015, historical data were re-estimated back to the series beginnings in 1976, 1990, or 1994.

Seasonal adjustment. The LAUS models decompose the estimates of employed and unemployed people into trend, seasonal, and irregular components. The benchmarked signals of employed and unemployed people first are adjusted using an X-11 type of seasonal adjustment filter. The adjusted data then are smoothed using a Reproducing Kernel Hilbert Space (RKHS) filter. The smoothed-seasonally adjusted estimates of employed and unemployed people are summed to derive the civilian labor force, and the unemployment rate then is calculated as the unemployed percent of the civilian labor force. The resulting smoothed-seasonally adjusted unemployment rate estimates are analyzed in this news release and published on the BLS website.

During estimation for the current year, the smoothed-seasonally adjusted estimates for a given month are created using an asymmetric filter that incorporates information from previous observations only. For annual revisions, historical data are smoothed using a two-sided filter.

Area definitions. The substate area data published in this release reflect the delineations that were issued by the U.S. Office of Management and Budget on April 10, 2018. A detailed list of the geographic definitions is available online at www.bls.gov/lau/lausmsa.htm.

Employment—from the CES program

Definitions. Employment data refer to persons on establishment payrolls who receive pay for any part of the pay period that includes the 12th of the month. Persons are counted at their place of work rather than at their place of residence; those appearing on more than one payroll are counted on each payroll. Industries are classified on the basis of their principal activity in accordance with the 2017 version of the North American Industry Classification System.

Method of estimation. CES State and Area employment data are produced using several estimation procedures. Where

possible these data are produced using a "weighted link relative" estimation technique in which a ratio of current month weighted employment to that of the previous-month weighted employment is computed from a sample of establishments reporting for both months. The estimates of employment for the current month are then obtained by multiplying these ratios by the previous month's employment estimates. The weighted link relative technique is utilized for data series where the sample size meets certain statistical criteria.

For some employment series, the sample of establishments is very small or highly variable. In these cases, a model-based approach is used in estimation. These models use the direct sample estimates (described above), combined with forecasts of historical (benchmarked) data to decrease volatility in estimation. Two different models (Fay-Herriot Model and Small Domain Model) are used depending on the industry level being estimated. For more detailed information about each model, refer to the BLS Handbook of Methods.

Annual revisions. Employment estimates are adjusted annually to a complete count of jobs, called benchmarks, derived principally from tax reports that are submitted by employers who are covered under state unemployment insurance (UI) laws. The benchmark information is used to adjust the monthly estimates between the new benchmark and the preceding one and also to establish the level of employment for the new benchmark month. Thus, the benchmarking process establishes the level of employment, and the sample is used to measure the month-to-month changes in the level for the subsequent months. Information on recent benchmark revisions is available online at www.bls.gov/web/lau/benchmark.pdf.

Seasonal adjustment. Payroll employment data are seasonally adjusted at the statewide expanded supersector level. In some cases, the seasonally adjusted payroll employment total is computed by aggregating the independently adjusted supersector series. In other cases, the seasonally adjusted payroll employment total is independently adjusted. Revisions to historical data for the most recent five years are made once a year, coincident with annual benchmark adjustments.

Payroll employment data are seasonally adjusted concurrently, using all available estimates including those for the current month, to develop sample-based seasonal factors. Concurrent sample-based factors are created every month for the current month's preliminary estimate as well as the previous month's final estimate in order to incorporate real-time estimates.

Caution on aggregating state data. State estimation procedures are designed to produce accurate data for each individual state. BLS independently develops a national employment series; state estimates are not forced to sum to

national totals. Because each state series is subject to larger sampling and nonsampling errors than the national series, summing them cumulates individual state-level errors and can cause significant distortions at an aggregate level. Due to these statistical limitations, BLS 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.

Reliability of the estimates

The estimates presented in this release are based on sample surveys, administrative data, and modeling and, thus, are subject to sampling and other types of errors. Sampling error is a measure of sampling variability—that is, variation that occurs by chance because a sample rather than the entire population is surveyed. Survey data also are subject to nonsampling errors, such as those which can be introduced into the data collection and processing operations. Estimates not directly derived from sample surveys are subject to additional errors resulting from the specific estimation processes used.

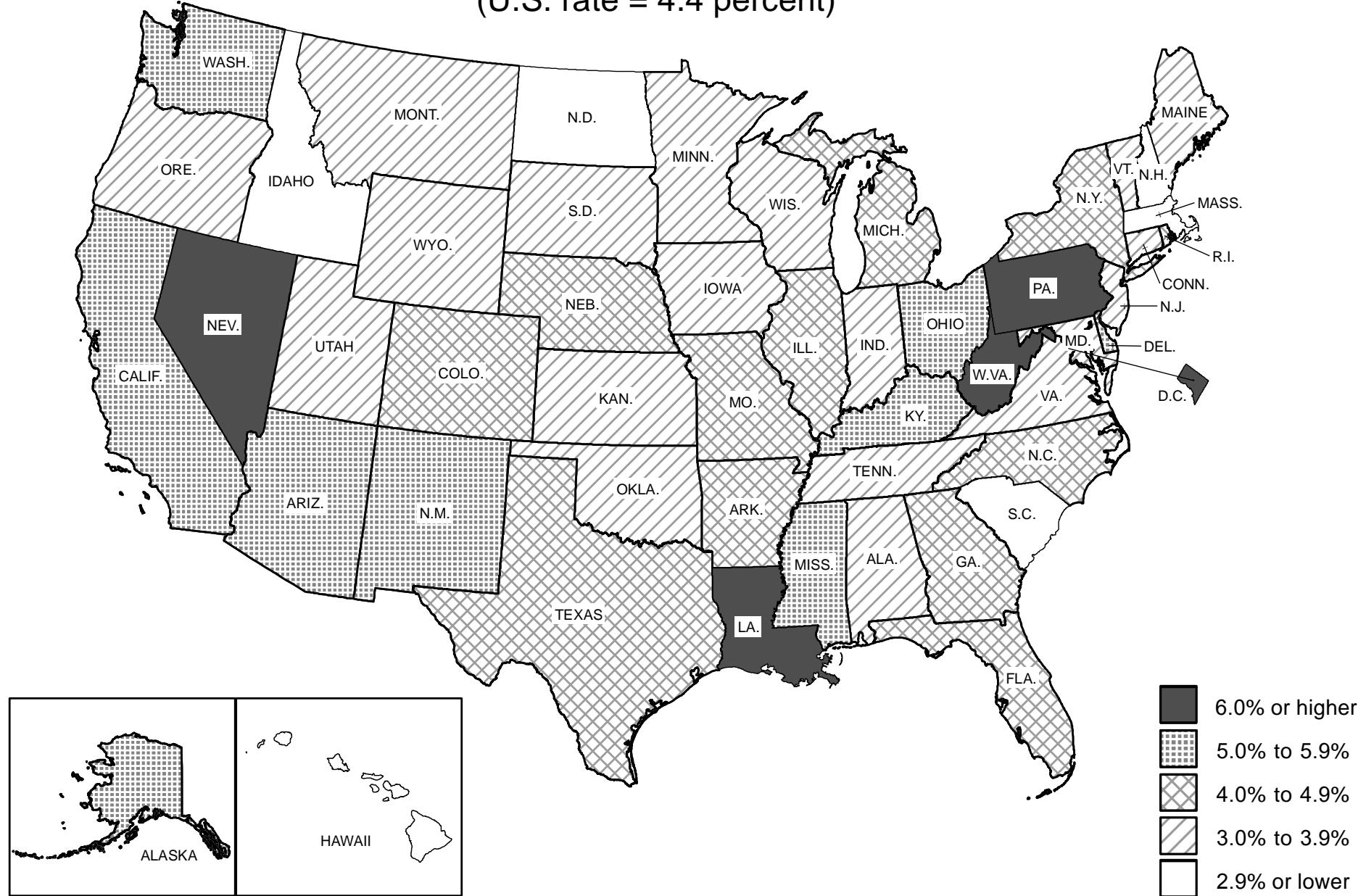
Use of error measures. Changes in state unemployment rates and state nonfarm payroll employment are cited in the analysis of this release only if they have been determined to be statistically significant at the 90-percent confidence level. Furthermore, state unemployment rates for the current month generally are cited only if they have been determined to be significantly different from the U.S. rate at the 90-percent confidence level. The underlying model-based standard error measures for unemployment rates and over-the-month and over-the-year changes in rates are available at www.bls.gov/lau/lastderr.htm. The underlying standard error measures for over-the-month and over-the-year changes in state payroll employment data at the total nonfarm and supersector levels are available at www.bls.gov/web/laus/790stderr.htm. Measures of nonsampling error are not available.

Additional information

Estimates of civilian labor force and unemployment from the LAUS program, as well as nonfarm payroll employment from the CES program, for metropolitan areas and metropolitan divisions are available in the news release Metropolitan Area Employment and Unemployment. Estimates of civilian labor force, employed people, unemployed people, and unemployment rates for approximately 7,500 subnational areas are available online at www.bls.gov/lau/. Employment data from the CES program for states and metropolitan areas are available online at www.bls.gov/sae/. Information in this release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service: (800) 877-8339.

Map 1. Unemployment rates by state, seasonally adjusted, March 2020

(U.S. rate = 4.4 percent)



Map 2. Percentage change in nonfarm employment by state,
seasonally adjusted, March 2019 - March 2020

