

## New Measures of Labor Underutilization to supplement the Official Unemployment Rate

Each month New Hampshire Employment Security's Economic and Labor Market Information Bureau releases the official statewide unemployment rate. This is prepared in cooperation with the U.S. Bureau of Labor Statistics.

In 2008 New Hampshire's official annual unemployment rate averaged 3.8%. This measure of unemployment requires very specific conditions to be met. For example, to be in the *labor force*, a person needs to be employed or unemployed.

*Employed* means one of the following:

- a. worked for pay
- b. was self-employed
- c. worked 15 hours or more as unpaid workers in a family-owned business
- d. was temporarily absent from a job due to vacation, holiday, illness, etc.

*Unemployed* means all of the following:

- a. not employed
- b. able and available for work
- c. made specific efforts to find a job during the last four weeks

The civilian labor force is the sum of people who are either employed or unemployed. The official unemployment rate is the unemployed as a share of the state's civilian labor force. People who are neither employed nor unemployed, as defined above, are *not in the labor force*.

The value of this calculation, and its components, is that people being included have a strong attachment to work – either by being employed, or actively seeking a job.

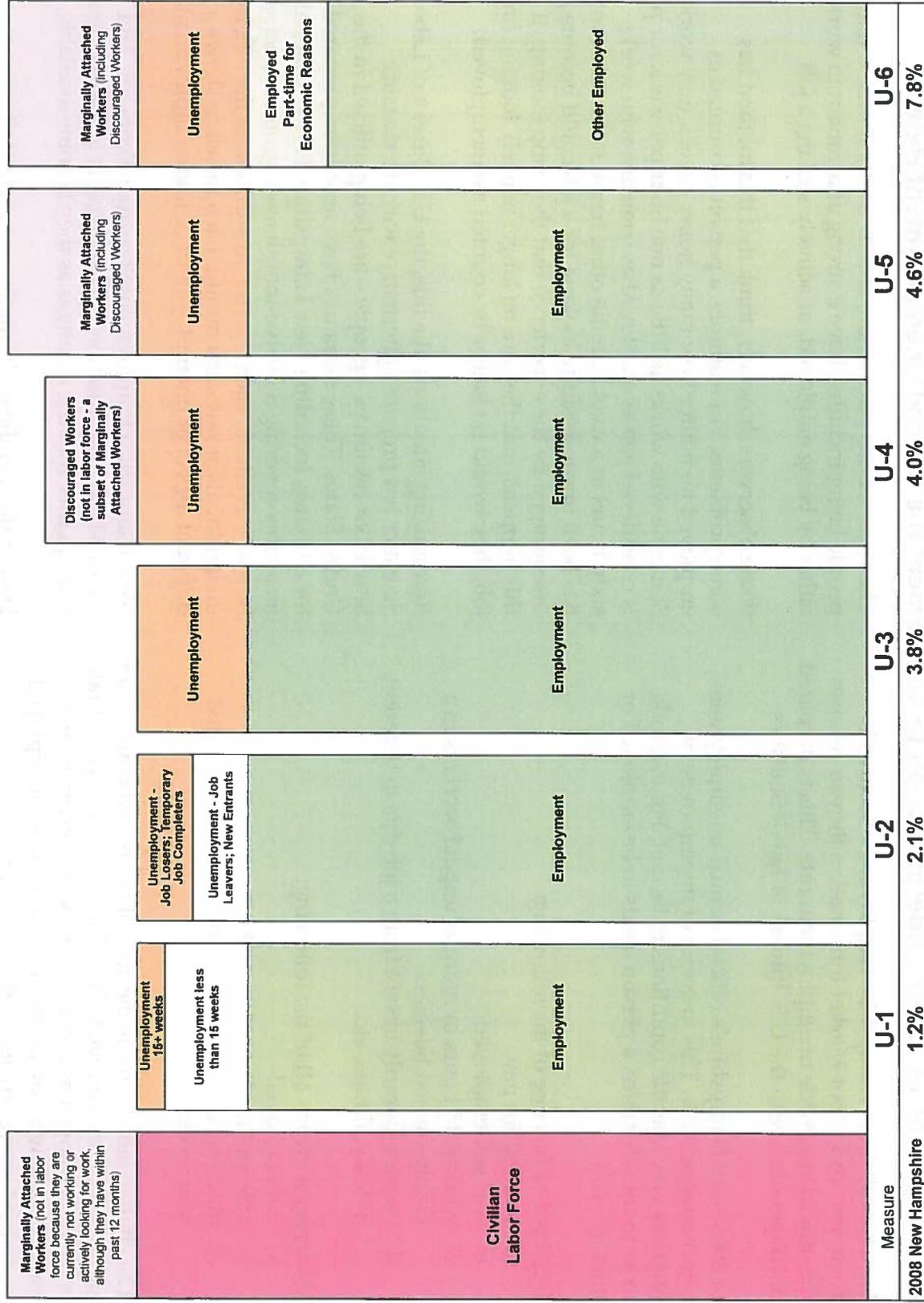
Some observers, however, think that this method has some problems. For example, a person is counted as employed no matter how many hours a week they work. Someone who works as little as one hour per week for pay is considered just as employed as someone who works sixty hours in a week. On the other hand, someone who has been unsuccessfully looking for a job could become so discouraged by the experience that they stop looking. If this happens, and they are no longer actively looking for a job, they would no longer be counted as unemployed.

Recognizing situations like this, the U.S. Bureau of Labor Statistics has prepared alternative ways to measure how labor resources – people – are being utilized in the United States. These measures have now been prepared for all states, including New Hampshire. Five additional measures covering a twelve-month average are expected to be made available each quarter, in addition to the official unemployment rate each month. Each measure shows a different aspect of unemployment or underemployment.

New Hampshire Employment Security's Economic and Labor Market Information Bureau expects to release these four-quarter moving averages as they become available.

Descriptions of these alternative measures follow.

## How the Different Measures of Labor Underutilization Relate to Each Other



**U-1:** Persons unemployed 15 weeks or longer, as a percent of the civilian labor force

**Comments:** Because it counts only the long-term unemployed and calculates their share of the civilian labor force, this measure will be lower than the calculation for the official unemployment rate. (U-3)

**U-2:** Job losers and persons who completed temporary jobs, as a percent of the civilian labor force

**Comments:** Measures only those persons who lost their jobs through layoff or other dismissal, and those who had been working a temporary job that ended, all as a share of the civilian labor force. This measure will be lower than the official unemployment rate (U-3) since it does not include persons who left jobs voluntarily but are still looking for a new job, nor does it include new entrants into the workforce.

**U-3:** Total unemployed (willing and able to work, and actively looking for a job), as a percent of the civilian labor force

**Comments:** This is the traditional (official) unemployment rate measure. It measures total unemployment (those not working but willing and able to work, and actively seeking employment over the prior four weeks) as a percentage of the total civilian labor force. The labor force is the total of unemployment (as defined above) plus employment.

**U-4:** Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers.

**Comments:** This measure will be at least equal to (and likely greater than) the official unemployment rate, since it includes discouraged workers in the total number of underutilized workers. Discouraged workers belong to a subset of marginally attached workers, and have given a job-market related reason for not looking currently for a job. Measure U-4 adds discouraged workers to the civilian labor force to create a larger workforce base.

**U-5:** Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers.

**Comments:** Marginally attached workers are persons who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past. Measure U-4 includes discouraged workers, while measure U-5 also includes other marginally attached workers, so U-5 will typically be greater than U-4.

**U-6:** Total unemployed, plus all marginally attached workers, plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers.

**Comments:** This measure uses the same workforce base as U-5, but adds the number of persons employed part-time for economic reasons to the number of persons either unemployed or underutilized. Persons employed part-time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule.

**In 2008, by any measure of labor unemployment or underutilization, New Hampshire fared better than the United States**

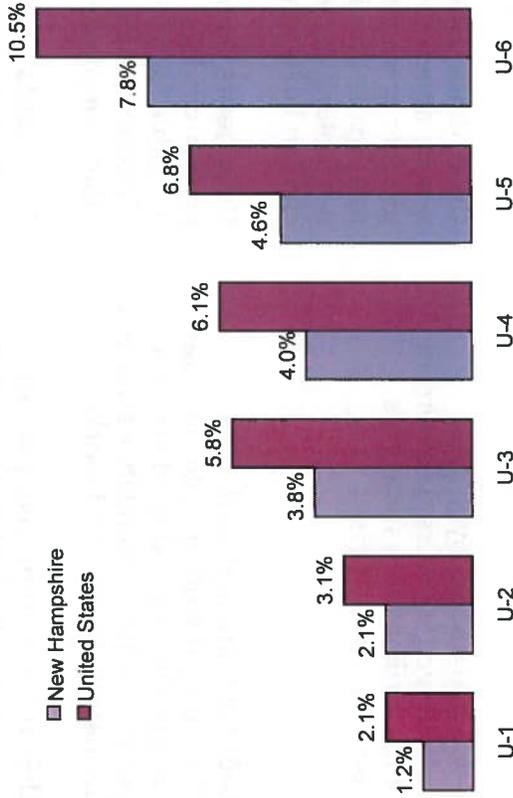
The following statement was prepared by the U.S. Bureau of Labor Statistics:

**Frequency and Availability of Alternative Measures of Labor Underutilization for States**

The Current Population Survey (CPS) is the monthly household survey, conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS), that is the direct source of the national unemployment rate, but not state unemployment rates. The sample is scientifically developed to represent the entire civilian noninstitutional population, with about 60,000 households nationwide eligible for interview each month. State sample sizes range from about 600 to 4,000 households. Due to the small sample sizes, the sampling errors and confidence intervals on the State-level CPS data are considerably larger than their national counterparts.

For all States and the District of Columbia, the official monthly labor force and unemployment estimates are developed using a statistical modeling approach, based on historical and current relationships found within each State's economy. Modeling results in estimates that are more reliable than the direct survey estimates.

**Alternative Measures of Labor Underutilization – NH vs. US, 2007 and 2008**



Monthly statewide estimates from the CPS are used as inputs in the statistical models. The monthly CPS estimates on their own are far too variable to provide an accurate picture of the labor market. Other than modeling, the way in which the CPS estimates are made more reliable is by aggregating the survey estimates over time. As a result, BLS generally produces CPS statewide estimates of demographic and economic characteristics on an annual average basis only. Due to the interest in the alternative measures of labor underutilization and the rapidly changing economy, 4-quarter moving averages are being developed as well.

		U-1	U-2	U-3	U-4	U-5	U-6
2008	New Hampshire	1.2%	2.1%	3.8%	4.0%	4.6%	7.8%
	United States	2.1%	3.1%	5.8%	6.1%	6.8%	10.5%
2007	New Hampshire	0.9%	1.8%	3.6%	3.7%	4.2%	6.5%
	United States	1.5%	2.3%	4.6%	4.9%	5.5%	8.3%

Alternative Measures of Labor Underutilization through 2nd Quarter 2017

**Alternative Measures of Labor Underutilization -- New Hampshire vs United States**

Alternative Measure	Previous Calendar Year Annual Average		Latest 4-quarter moving average	
	2016 New Hampshire	2016 United States	Third quarter of 2016 through second quarter of 2017 New Hampshire	Third quarter of 2016 through second quarter of 2017 United States
U-1, persons unemployed 15 weeks or longer, as a percent of the civilian labor force	1.0%	2.0%	0.9%	1.8%
U-2, job losers and persons who completed temporary jobs, as a percent of the civilian labor force	1.5%	2.3%	1.5%	2.3%
U-3, total unemployed, as a percent of the civilian labor force (this is the definition used for the official unemployment rate) *	2.8%	4.9%	2.9%	4.7%
U-4, total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers	3.0%	5.2%	3.1%	5.0%
U-5, total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers	3.6%	5.9%	3.7%	5.7%
U-6, total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers	6.4%	9.6%	6.1%	9.2%

\* Due to small state sample sizes, monthly state Current Population Survey (CPS) data do not meet Bureau of Labor Statistics (BLS) publication standards, and moving average estimates of alternative measures for states had not been tabulated until recently. These data were developed by BLS from quarterly tabulations in which the components of each measure are rounded to the nearest hundred. As a result, the newly tabulated estimates contain slightly more rounding error than that found in typical CPS annual average tabulations (in which rates are based on unrounded data). Note that the unemployment rates (U-3) that are shown in the table are derived directly from the CPS. As a result, these U-3 measures may differ from the official state unemployment rates for the latest 4-quarter average period. The latter are monthly estimates developed from models used by the Local Area Unemployment Statistics (LAUS) program that incorporate CPS estimates, as well as input data from other sources.

For further explanation of these Alternative Measures of Labor Underutilization, please see Alternative Measures of Labor Underutilization May 2009, on the NHES ELM I website at [www.nhes.nh.gov/elmi/statistics/documents/underutilization.pdf](http://www.nhes.nh.gov/elmi/statistics/documents/underutilization.pdf)

For historical New Hampshire Alternative Measures of Unemployment, please see next page

Alternative Measures of Labor Underutilization through 2nd Quarter 2017

**Alternative Measures of Labor Underutilization - New Hampshire - Annual Averages**

Measure	2011	2012	2013	2014	2015	2016
U-1, persons unemployed 15 weeks or longer, as a percent of the civilian labor force	2.6%	2.9%	2.5%	1.9%	1.3%	1.0%
U-2, job losers and persons who completed temporary jobs, as a percent of the civilian labor force	3.2%	3.3%	3.0%	2.4%	1.9%	1.5%
U-3, total unemployed, as a percent of the civilian labor force (this is the definition used for the official unemployment rate) *	5.4%	5.6%	5.2%	4.2%	3.4%	2.8%
U-4, total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers	5.8%	6.0%	5.4%	4.5%	3.7%	3.0%
U-5, total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers	6.5%	6.7%	6.2%	5.2%	4.2%	3.6%
U-6, total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers	11.3%	11.2%	10.9%	9.7%	8.0%	6.4%

\* Due to small state sample sizes, monthly state Current Population Survey (CPS) data do not meet Bureau of Labor Statistics (BLS) publication standards, and moving average estimates of alternative measures for states had not been tabulated until recently. These data were developed by BLS from quarterly tabulations in which the components of each measure are rounded to the nearest hundred. As a result, the newly tabulated estimates contain slightly more rounding error than that found in typical CPS annual average tabulations (in which rates are based on unrounded data). Note that the unemployment rates (U-3) that are shown in the table are derived directly from the CPS. As a result, these U-3 measures may differ from the official state unemployment rates for the latest 4-quarter average period. The latter are monthly estimates developed from models used by the Local Area Unemployment Statistics (LAUS) program that incorporate CPS estimates, as well as input data from other sources.

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