



## **Unemployment and Labor Underutilization in Pine Bluff**

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The unemployment rate is a commonly cited measure of labor market conditions, representing the percentage of the workforce that is unemployed. By this simple statistic, labor market conditions in Pine Bluff are clearly weaker than the state or national averages. Currently-reported statistics show that the average unemployment rate in Pine Bluff was 8.8% in 2015, compared to rates of 5.2% for Arkansas and 5.3% for the U.S. as a whole.

But the conventionally defined unemployment rate is far from perfect as a complete summary measure. The standard unemployment rate (known as U-3) is defined as the number of unemployed divided by the civilian labor force—with the labor force, in turn, defined as the number of employed plus the number of unemployed. The key definition in this configuration is how unemployed workers are counted. If a survey respondent says he/she does not have a job and had not searched for work over the prior 4 weeks, then he/she is not considered part of the labor force at all. When labor market conditions are weak, job seekers commonly become discouraged and are dropped from this official labor force measure. Hence, it is possible that the unemployment rate can decline simply because the unemployed have given up on finding a job. This is an example of how changes in the unemployment rate can provide misleading signals.

As a way of better measuring labor underutilization, the Bureau of Labor Statistics also compiles data on “discouraged” workers, other “marginally attached” workers, and those who are employed part-time for economic reasons (sometimes known as involuntary part-time workers). These statistics are then used to calculate a range of other labor utilization ratios (U-4, U5, and U-6). These alternative measures of unemployment/underemployment are reported for the nation, and for individual states on a four-quarter moving-average basis. However, no comparable statistics exist for smaller geographic areas. This report uses existing data to calculate rough estimates of alternative unemployment/underemployment estimates for the City of Pine Bluff.

### ***Definitions:***

(quoted from <http://www.bls.gov/lau/stalt.htm>)

- U-3, total unemployed, as a percent of the civilian labor force (this is the definition used for the official unemployment rate);
- U-4, total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers;

- 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; and
- 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.

Definitions for the economic characteristics underlying the three broader measures of labor underutilization are worth mentioning here. Discouraged workers (U-4, U-5, and U-6 measures) are persons who are not in the labor force, want and are available for work, and had looked for a job sometime in the prior 12 months. They are not counted as unemployed because they had not searched for work in the prior 4 weeks, for the specific reason that they believed no jobs were available for them. The marginally attached (U-5 and U-6 measures) are a group that includes discouraged workers. The criteria for the marginally attached are the same as for discouraged workers, with the exception that any reason could have been cited for the lack of job search in the prior 4 weeks. Persons employed part time for economic reasons (U-6 measure) are those working less than 35 hours per week who want to work full time, are available to do so, and gave an economic reason (their hours had been cut back or they were unable to find a full-time job) for working part time. These individuals are sometimes referred to as involuntary part-time workers.

**Methodology:**

Data on U-3 through U-6 for the 50 states plus the District of Columbia were compiled for 2015, and used to calculate average relationships among the various U-measures. Simple linear regression techniques were used to estimate U-4, U-5 and U-6 as functions of a constant, the conventional U-3 measure, and a measure of the employment-population ratio for 2014 (in order to capture the degree of existing labor market slack in general). With these estimated relationships in hand, data on U-3 and the employment-population ratio for Pine Bluff were used to calculate rough measures of U-4 through U-6. From these ratios, underlying estimates were calculated for the number of discouraged workers, other marginally attached workers, and those who worked part-time for economic reasons.

**Results:**

Extrapolating from the regression results, measures of U-4, U-5 and U-6 for the City of Pine Bluff are summarized in Table 1:

**Table 1:  
Alternative measures of labor underutilization, 2015 annual averages (percent)**

	<b>U-3</b>	<b>U-4</b>	<b>U-5</b>	<b>U-6</b>
<b>United States</b>	<b>5.3</b>	<b>5.7</b>	<b>6.4</b>	<b>10.4</b>
<b>Arkansas</b>	<b>5.2</b>	<b>5.6</b>	<b>6.4</b>	<b>9.5</b>
<b>Pine Bluff (City)</b>	<b>8.8</b>	<b>9.4</b>	<b>10.6</b>	<b>15.8</b>

In terms of raw numbers, the unemployment-underemployment ratios imply the following totals:

**Table 2:  
Labor Force, Employment, Unemployment and  
Underemployment, City of Pine Bluff, 2015**

<b>Labor Force</b>	<b>17,048</b>
<b>Employed</b>	<b>15,554</b>
<b>Unemployed</b>	<b>1,495</b>
<b>Discouraged (est.)</b>	<b>127</b>
<b>Other Marginally Attached (est.)</b>	<b>218</b>
<b>Part-time for Economic Reasons (est.)</b>	<b>917</b>

It should be noted that these numbers are merely estimates. Even the “official” figures on number of employed and unemployed are derived from survey samples and compiled using economic models and assumptions. Nevertheless, they provide some indication of the relative magnitudes of unemployment and underemployment in Pine Bluff.