Occupational Employment and Wages in Reading – May 2017

Workers in the Reading Metropolitan Statistical Area had an average (mean) hourly wage of $22.16 in May 2017, 9 percent below the nationwide average of $24.34, according to the U.S. Bureau of Labor Statistics. Sheila Watkins, the Bureau’s regional commissioner, noted that after testing for statistical significance, 13 of the 22 major occupational groups had average wages in the local area that were significantly lower than their respective national averages, including arts, design, entertainment, sports, and media; life, physical, and social science; and legal.

When compared to the nationwide distribution, local employment shares were significantly higher in 4 of the 22 occupational groups, including production and transportation and material moving. Conversely, 11 groups had employment shares significantly below their national representation; these groups included business and financial operations, management, and computer and mathematical. (See table A and box note at end of release.)

Table A. Occupational employment and wages by major occupational group, United States and the Reading Metropolitan Statistical Area, and measures of statistical significance, May 2017

<table>
<thead>
<tr>
<th>Major occupational group</th>
<th>Percent of total employment</th>
<th>Mean hourly wage</th>
<th>Percent difference (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United States</td>
<td>Reading</td>
<td>United States</td>
</tr>
<tr>
<td>Total, all occupations ........................................</td>
<td>100</td>
<td>100</td>
<td>$24.34</td>
</tr>
<tr>
<td>Management ..........................................................</td>
<td>5.1</td>
<td>3.8</td>
<td>* 57.65</td>
</tr>
<tr>
<td>Business and financial operations ................................</td>
<td>5.2</td>
<td>3.7</td>
<td>* 36.70</td>
</tr>
<tr>
<td>Computer and mathematical .........................................</td>
<td>3.0</td>
<td>1.7</td>
<td>* 43.18</td>
</tr>
<tr>
<td>Architecture and engineering ......................................</td>
<td>1.8</td>
<td>2.0</td>
<td>* 41.44</td>
</tr>
<tr>
<td>Life, physical, and social science ..............................</td>
<td>0.8</td>
<td>0.4</td>
<td>* 35.76</td>
</tr>
<tr>
<td>Community and social service ....................................</td>
<td>1.5</td>
<td>1.6</td>
<td>23.10</td>
</tr>
<tr>
<td>Legal ....................................................................</td>
<td>0.8</td>
<td>0.4</td>
<td>* 51.62</td>
</tr>
<tr>
<td>Education, training, and library ..................................</td>
<td>6.1</td>
<td>5.9</td>
<td>26.67</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports, and media..................</td>
<td>1.4</td>
<td>0.7</td>
<td>* 28.34</td>
</tr>
<tr>
<td>Healthcare practitioners and technical .........................</td>
<td>6.0</td>
<td>6.3</td>
<td>38.83</td>
</tr>
<tr>
<td>Healthcare support ..................................................</td>
<td>2.9</td>
<td>2.9</td>
<td>15.05</td>
</tr>
<tr>
<td>Protective service ..................................................</td>
<td>2.4</td>
<td>1.6</td>
<td>* 22.69</td>
</tr>
<tr>
<td>Food preparation and serving related ............................</td>
<td>9.3</td>
<td>8.1</td>
<td>* 11.88</td>
</tr>
<tr>
<td>Building and grounds cleaning and maintenance .................</td>
<td>3.1</td>
<td>3.0</td>
<td>13.91</td>
</tr>
<tr>
<td>Personal care and service .........................................</td>
<td>3.6</td>
<td>3.7</td>
<td>13.11</td>
</tr>
<tr>
<td>Sales and related ....................................................</td>
<td>10.2</td>
<td>9.6</td>
<td>* 19.56</td>
</tr>
<tr>
<td>Office and administrative support ..................................</td>
<td>15.4</td>
<td>14.7</td>
<td>18.24</td>
</tr>
<tr>
<td>Farming, fishing, and forestry ....................................</td>
<td>0.3</td>
<td>0.1</td>
<td>* 13.87</td>
</tr>
<tr>
<td>Construction and extraction .......................................</td>
<td>4.0</td>
<td>3.3</td>
<td>* 24.01</td>
</tr>
</tbody>
</table>

Note: See footnotes at end of table.
Table A. Occupational employment and wages by major occupational group, United States and the Reading Metropolitan Statistical Area, and measures of statistical significance, May 2017 - Continued

<table>
<thead>
<tr>
<th>Major occupational group</th>
<th>Percent of total employment</th>
<th>Mean hourly wage</th>
<th>(\text{Percent difference}^{(1)})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United States</td>
<td>Reading</td>
<td>United States</td>
</tr>
<tr>
<td>Installation, maintenance, and repair</td>
<td>3.9</td>
<td>4.5</td>
<td>*</td>
</tr>
<tr>
<td>Production</td>
<td>6.3</td>
<td>11.9</td>
<td>*</td>
</tr>
<tr>
<td>Transportation and material moving</td>
<td>7.0</td>
<td>10.0</td>
<td>*</td>
</tr>
</tbody>
</table>

Footnotes:
(1) A positive percent difference measures how much the mean wage in the Reading Metropolitan Statistical Area is above the national mean wage, while a negative difference reflects a lower wage.
* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

One occupational group—production—was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Reading had 20,600 jobs in production occupations, accounting for 11.9 percent of local area employment, nearly twice the 6.3-percent share nationally. The average hourly wage for this occupational group locally was $19.57, measurably higher than the national wage of $18.30.

With employment of 1,750, production worker helpers was the largest occupation within the production group, followed by first-line supervisors of production and operating workers (1,680). Among the higher-paying jobs in this group were first-line supervisors of production and operating workers and metal-refining furnace operators and tenders, with mean hourly wages of $27.62 and $22.14, respectively. At the lower end of the wage scale were bakers ($12.68) and sewing machine operators ($11.57). (Detailed occupational data for production are presented in table 1; for a complete listing of detailed occupations available go to www.bls.gov/oes/current/oes_39740.htm.)

Location quotients allow us to explore the occupational make-up of a metropolitan area by comparing the composition of jobs in an area relative to the national average. (See table 1.) For example, a location quotient of 2.0 indicates that an occupation accounts for twice the share of employment in the area as it does nationally. In the Reading area, above-average concentrations of employment were found in many of the occupations within the production group. For instance, welders, cutters, solderers, and brazers were employed at 2.4 times the national rate in Reading, and metal-refining furnace operators and tenders at 14.1 times the U.S. average. On the other hand, inspectors, testers, sorters, samplers, and weighers had a location quotient of 1.2 in Reading, indicating that this particular occupation’s local and national employment shares were similar.

These statistics are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies, in this case, the Pennsylvania Department of Labor and Industry.
Note on Occupational Employment Statistics Data

With the release of the May 2017 estimates, the OES program has replaced 21 detailed occupations found in the 2010 Standard Occupational Classification (SOC) with 10 new aggregations of those occupations. In addition, selected 4- and 5-digit North American Industry Classification System (NAICS) industries previously published by OES will no longer be published separately. Some of the 4-digit NAICS industries that are no longer being published separately will instead be published as OES-specific industry aggregations. More information about the new occupational and industry aggregations is available at www.bls.gov/oes/changes_2017.htm.

A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Technical Note

The Occupational Employment Statistics (OES) survey is a semiannual survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. The OES data available from BLS include cross-industry occupational employment and wage estimates for the nation; over 650 areas, including states and the District of Columbia, metropolitan statistical areas (MSAs), metropolitan divisions, nonmetropolitan areas, and territories; national industry-specific estimates at the NAICS sector, 3-, 4-, and selected 5- and 6-digit industry levels, and national estimates by ownership across all industries and for schools and hospitals. OES data are available at www.bls.gov/oes/tables.htm.

OES estimates are constructed from a sample of about 1.2 million establishments. Each year, two semiannual panels of approximately 200,000 sampled establishments are contacted, one panel in May and the other in November. Responses are obtained by mail, Internet or other electronic means, email, telephone, or personal visit. The May 2017 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2017, November 2016, May 2016, November 2015, May 2015, and November 2014. The overall national response rate for the six panels, based on the 50 states and the District of Columbia, is 72 percent based on establishments and 68 percent based on weighted sampled employment. The unweighted sample employment of 82 million across all six semiannual panels represents approximately 58 percent of total national employment. The sample in the Reading Metropolitan Statistical Area included 1,941 establishments with a response rate of 74 percent. For more information about OES concepts and methodology, go to www.bls.gov/oes/current/oes_tec.htm.


Metropolitan area definitions

The substate area data published in this release reflect the standards and definitions established by the U.S. Office of Management and Budget.
The Reading, PA Metropolitan Statistical Area includes Berks County in Pennsylvania.

Additional information


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.
### Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Reading Metropolitan Statistical Area, May 2017

<table>
<thead>
<tr>
<th>Occupation (1)</th>
<th>Employment (2)</th>
<th>Location quotient (3)</th>
<th>Hourly Mean wage (4)</th>
<th>Annual Mean wage (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production occupations ........................................</td>
<td>20,600</td>
<td>1.9</td>
<td>$19.57</td>
<td>$40,700</td>
</tr>
<tr>
<td>First-line supervisors of production and operating workers ........................................</td>
<td>1,680</td>
<td>2.3</td>
<td>27.62</td>
<td>57,460</td>
</tr>
<tr>
<td>Structural metal fabricators and fitters ........................................</td>
<td>100</td>
<td>1.1</td>
<td>19.67</td>
<td>40,920</td>
</tr>
<tr>
<td>Assemblers and fabricators, all other ........................................</td>
<td>1,610</td>
<td>1.0</td>
<td>15.77</td>
<td>32,790</td>
</tr>
<tr>
<td>Bakers ........................................</td>
<td>370</td>
<td>1.7</td>
<td>12.68</td>
<td>26,380</td>
</tr>
<tr>
<td>Butchers and meat cutters ........................................</td>
<td>50</td>
<td>0.3</td>
<td>13.51</td>
<td>28,100</td>
</tr>
<tr>
<td>Meat, poultry, and fish cutters and trimmers ........................................</td>
<td>(5)</td>
<td>(5)</td>
<td>(5)</td>
<td>(5)</td>
</tr>
<tr>
<td>Slaughterers and meat packers ........................................</td>
<td>80</td>
<td>0.8</td>
<td>17.34</td>
<td>36,080</td>
</tr>
<tr>
<td>Food batchmakers ........................................</td>
<td>300</td>
<td>1.6</td>
<td>16.73</td>
<td>34,790</td>
</tr>
<tr>
<td>Computer-controlled machine tool operators, metal and plastic ........................................</td>
<td>400</td>
<td>2.3</td>
<td>20.15</td>
<td>41,920</td>
</tr>
<tr>
<td>Extruding and drawing machine setters, operators, and tenders, metal and plastic ........................................</td>
<td>220</td>
<td>2.5</td>
<td>20.79</td>
<td>43,240</td>
</tr>
<tr>
<td>Cutting, punching, and press machine setters, operators, and tenders, metal and plastic ........................................</td>
<td>260</td>
<td>1.1</td>
<td>21.17</td>
<td>44,040</td>
</tr>
<tr>
<td>Lathe and turning machine tool setters, operators, and tenders, metal and plastic ........................................</td>
<td>40</td>
<td>1.2</td>
<td>(5)</td>
<td>(5)</td>
</tr>
<tr>
<td>Milling and planing machine setters, operators, and tenders, metal and plastic ........................................</td>
<td>(5)</td>
<td>(5)</td>
<td>18.30</td>
<td>38,070</td>
</tr>
<tr>
<td>Machinists ........................................</td>
<td>850</td>
<td>1.9</td>
<td>19.10</td>
<td>39,730</td>
</tr>
<tr>
<td>Metal-refining furnace operators and tenders ........................................</td>
<td>300</td>
<td>14.1</td>
<td>22.14</td>
<td>46,050</td>
</tr>
<tr>
<td>Foundry mold and coremakers ........................................</td>
<td>60</td>
<td>3.3</td>
<td>16.34</td>
<td>33,980</td>
</tr>
<tr>
<td>Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic ........................................</td>
<td>330</td>
<td>1.7</td>
<td>14.98</td>
<td>31,160</td>
</tr>
<tr>
<td>Multiple machine tool setters, operators, and tenders, metal and plastic ........................................</td>
<td>300</td>
<td>2.0</td>
<td>20.72</td>
<td>43,100</td>
</tr>
<tr>
<td>Tool and die makers ........................................</td>
<td>70</td>
<td>0.8</td>
<td>24.99</td>
<td>51,980</td>
</tr>
<tr>
<td>Welders, cutters, solderers, and brazers ........................................</td>
<td>1,110</td>
<td>2.4</td>
<td>19.02</td>
<td>39,570</td>
</tr>
<tr>
<td>Plating and coating machine setters, operators, and tenders, metal and plastic ........................................</td>
<td>60</td>
<td>1.4</td>
<td>23.61</td>
<td>49,110</td>
</tr>
<tr>
<td>Metal workers and plastic workers, all other ........................................</td>
<td>60</td>
<td>2.3</td>
<td>(5)</td>
<td>(5)</td>
</tr>
<tr>
<td>Prepress technicians and workers ........................................</td>
<td>30</td>
<td>0.9</td>
<td>21.83</td>
<td>45,400</td>
</tr>
<tr>
<td>Printing press operators ........................................</td>
<td>(5)</td>
<td>(5)</td>
<td>26.28</td>
<td>54,670</td>
</tr>
<tr>
<td>Print binding and finishing workers ........................................</td>
<td>60</td>
<td>1.0</td>
<td>16.80</td>
<td>34,940</td>
</tr>
<tr>
<td>Laundry and dry-cleaning workers ........................................</td>
<td>190</td>
<td>0.7</td>
<td>13.00</td>
<td>27,030</td>
</tr>
<tr>
<td>Pressers, textile, garment, and related materials ........................................</td>
<td>40</td>
<td>0.8</td>
<td>11.63</td>
<td>24,180</td>
</tr>
<tr>
<td>Sewing machine operators ........................................</td>
<td>380</td>
<td>2.3</td>
<td>11.57</td>
<td>24,070</td>
</tr>
<tr>
<td>Textile cutting machine setters, operators, and tenders ........................................</td>
<td>(5)</td>
<td>(5)</td>
<td>13.88</td>
<td>28,870</td>
</tr>
<tr>
<td>Textile knitting and weaving machine setters, operators, and tenders ........................................</td>
<td>130</td>
<td>5.2</td>
<td>16.42</td>
<td>34,150</td>
</tr>
<tr>
<td>Cabinetmakers and bench carpenters ........................................</td>
<td>310</td>
<td>2.6</td>
<td>19.12</td>
<td>39,770</td>
</tr>
<tr>
<td>Woodworking machine setters, operators, and tenders, except sawing ........................................</td>
<td>110</td>
<td>1.1</td>
<td>16.72</td>
<td>34,770</td>
</tr>
<tr>
<td>Stationary engineers and boiler operators ........................................</td>
<td>50</td>
<td>1.2</td>
<td>22.34</td>
<td>46,470</td>
</tr>
<tr>
<td>Water and wastewater treatment plant and system operators ........................................</td>
<td>190</td>
<td>1.4</td>
<td>21.86</td>
<td>45,470</td>
</tr>
<tr>
<td>Chemical equipment operators and tenders ........................................</td>
<td>370</td>
<td>3.9</td>
<td>16.37</td>
<td>34,040</td>
</tr>
<tr>
<td>Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders ........................................</td>
<td>50</td>
<td>0.8</td>
<td>18.96</td>
<td>39,440</td>
</tr>
<tr>
<td>Grinding and polishing workers, hand ........................................</td>
<td>80</td>
<td>2.2</td>
<td>15.07</td>
<td>31,340</td>
</tr>
<tr>
<td>Mixing and blending machine setters, operators, and tenders ........................................</td>
<td>120</td>
<td>0.8</td>
<td>17.97</td>
<td>37,380</td>
</tr>
<tr>
<td>Cutting and slicing machine setters, operators, and tenders ........................................</td>
<td>270</td>
<td>3.7</td>
<td>13.64</td>
<td>28,370</td>
</tr>
<tr>
<td>Inspectors, testers, sorters, samplers, and weighers ........................................</td>
<td>770</td>
<td>1.2</td>
<td>20.83</td>
<td>43,320</td>
</tr>
<tr>
<td>Dental laboratory technicians ........................................</td>
<td>(5)</td>
<td>(5)</td>
<td>19.32</td>
<td>40,180</td>
</tr>
</tbody>
</table>

Note: See footnotes at end of table.
### Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Reading Metropolitan Statistical Area, May 2017 - Continued

<table>
<thead>
<tr>
<th>Occupation (1)</th>
<th>Employment (2)</th>
<th>Mean wage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>Location quotient (3)</td>
</tr>
<tr>
<td>Packaging and filling machine operators and tenders</td>
<td>1,070</td>
<td>2.2</td>
</tr>
<tr>
<td>Coating, painting, and spraying machine setters, operators, and tenders</td>
<td>300</td>
<td>2.8</td>
</tr>
<tr>
<td>Painters, transportation equipment</td>
<td>(5)</td>
<td>(5)</td>
</tr>
<tr>
<td>Photographic process workers and processing machine operators</td>
<td>40</td>
<td>1.5</td>
</tr>
<tr>
<td>Cooling and freezing equipment operators and tenders</td>
<td>30</td>
<td>3.0</td>
</tr>
<tr>
<td>Molders, shapers, and casters, expect metal and plastic</td>
<td>(5)</td>
<td>(5)</td>
</tr>
<tr>
<td>Paper goods machine setters, operators, and tenders</td>
<td>250</td>
<td>2.2</td>
</tr>
<tr>
<td>Helpers--production workers</td>
<td>1,750</td>
<td>3.6</td>
</tr>
<tr>
<td>Production workers, all other</td>
<td>100</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Footnotes:
(1) For a complete listing of all detailed occupations in the Reading Metropolitan Statistical Area, see www.bls.gov/oes/current/oes_39740.htm.
(2) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.
(3) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.
(4) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.
(5) Estimate not released.