## 2017

## MIDDLE TENNESSEE <br> WAGE \& BENEFIT

 SURVEY

MIDDLE
TENNESSEE
STATE UNIVERSITY.

Dr. Murat Arik, Director
Jones College of Business
Business \& Economic Research Center


MT\{DA

Upper Cumberland
Development District

:if: TENNESSEE CENTRAL economic authority


HIGHLANDS
ECONOMIC PARTNERSHIP

Wage and Benefit Survey Project Team

This project is the product of the yearlong effort of the following individuals:

| Project Director | Murat Arik, Ph.D., Director of Business and Economic Research <br> Center (BERC) |
| :--- | :--- |
| Report Preparation <br> and Data Analysis | Allison Logan, BERC Research Associate |
| Survey Logistics and <br> Administration | Barbara Pieroni, BERC Associate |
| Regional Networking, <br> Field Work, Database <br> Creation, and Mapping | Kendrick Curtis, Ph.D., Assistant Executive Director, Middle <br> Tennessee Industrial Development Association |
| Editor | Sally Govan, BERC Senior Editor |

## Acknowledgment

I would like to thank the following individuals for their contributions to this project: Nathanael Asrat, BERC undergraduate research associate; Dr. Steven Livingston, BERC associate director; and the staff of MTIDA for their work and support of this project.

The Business and Economic Research Center (BERC) at Middle Tennessee State University conducted a wage and benefit survey of a 40-county region between June and October 2017. The wage and benefit survey was sponsored by Middle Tennessee Industrial Development Association (MTIDA) and USDA as well as regional partners--the Upper Cumberland Development District, the South Central Tennessee Development District, the Greater Nashville Regional Council, the Nashville Chamber of Commerce, The Highlands Economic Partnership, and Tennessee Central Economic Authority-and local chambers and economic development organizations. The purpose of the survey is to provide local economic development officials and human resource managers a clear understanding of the compensation structure of the key occupations in the region.

Across the region, 1,443 companies were invited to participate in this online wage and benefit survey. As of October 2017, BERC received 355 completed surveys with a response rate of 24.6 percent. These 355 companies employed 82,180 people, representing about 8 percent of all private jobs in the study market area. ${ }^{1}$ The wage and benefit survey data is organized by establishment size, and BERC provides a detailed profile from the survey results of 100 occupations.

## Key Highlights

## General

- The average number of weekly hours is estimated at 40.81 .
- Average annual sales of the covered establishments total $\$ 169.2$ million.
- On average, covered establishments offer over 8.5 paid holidays.
- On average, covered establishments offer 10.8 annual vacation days.


## Health Insurance and Benefits

- Ninety-two percent of the companies offer health insurance. Cost sharing is a common practice among the companies.
- Companies offer a range of retirement benefits including a traditional retirement plan and defined contributions. About 78 percent of the responding companies offer defined contribution plans.
- Approximately 47 percent offer career development opportunities, 44 percent offer tuition payment, and 69 percent offer other forms of incentives and bonuses.
- Overall, total employee benefits equal to 22.9 percent of wages and salaries in the study market area.


## Wages

- The median hourly wage across occupations in the study market area is $\$ 16.95$. The study provides details of wages and benefits for each occupational cluster.

[^0]
## Table of Contents

Executive Summary
I. Introduction
I.A. Study Region
I.B. Study Tasks and Research Questions
I.C. Private Sector in the 40-County Region
II. Conceptual Framework and Methodology
II.A. Definitions
II.B. Survey Design
II.C. Survey Process and Data
II.D. Data Analysis
III. Survey Results
III.A. Establishments by Employment Size and Average Revenue
III.B. Employee Benefits
III.C. Value of Benefits
III.D Selected Workplace Issues
III.E. Wages by Occupation
IV. Detailed Occupational Profiles

The Business and Economic Research Center (BERC), Middle Tennessee State University, conducted a wage and benefit survey for a 40-county region, hereafter referred to as the "all-county region," between June and October 2017. The wage and benefit survey was sponsored by Middle Tennessee Industrial Development Association (MTIDA) and USDA as well as regional partners--the Upper Cumberland Development District, the South Central Tennessee Development District, the Greater Nashville Regional Council, the Nashville Chamber of Commerce, The Highlands Economic Partnership, and Tennessee Central Economic Authority—and local chambers and economic development organizations. The purpose of the survey is to provide local economic development officials and human resource managers a clear understanding of the compensation structure of the key occupations in the area.

In designing the online wage and benefit survey, BERC consulted existing wage and benefits surveys as well as the U.S. Bureau of Labor and Statistics (BLS) methodology for the Quarterly Census of Employment and Wages (QCEW) and the BLS Occupational Outlook Handbook to make the regional survey results comparable to national and state level occupational characteristics. BERC retained the Standard Occupational Classification (SOC) codes for all occupations included in the survey.

To make the survey process manageable and less time-consuming, BERC , in consultation with the MTIDA, targeted 1,443 companies. The companies responding to this survey are presented in the appendix. Although this study gathered information for over 120 occupations, the survey response rate did not allow a detailed profile for a small portion of these occupations. A detailed occupational profile for 100 occupations allows local economic development officials and companies to see how a given occupation benchmarked against average jobs in the region.

The rest of the report is organized as follows. After a brief discussion about the study region, study tasks, and general characteristics of industries in the region, section two introduces the conceptual framework and study methodology. Section three analyzes survey results, while section four provides rich details for the selected occupations. Section five presents survey materials.

## I.A. Study Region

What is the study market area? The study market area includes 40 counties with a combined labor force of $1,349,755^{2}$ as of the fourth quarter of 2016. A map of the region can be seen below.


[^1]| Average Weekly Wage for Study Area Counties |  |  |  |
| :---: | :---: | :---: | :---: |
| County | tverage Weekly Wage | County | Average Weekly Wage |
| Bedford | \$731 | Marshall | \$786 |
| Cannon | \$590 | Maury | \$971 |
| Cheatham | \$872 | Montgomery | \$657 |
| Clay | \$611 | Moore | \$923 |
| Coffee | \$830 | Overton | \$733 |
| Cumberland | \$629 | Perry | \$555 |
| Davidson | \$1,157 | Pickett | \$589 |
| DeKalb | \$719 | Putnam | \$663 |
| Dickson | \$713 | Robertson | \$747 |
| Fentress | \$586 | Rutherford | \$910 |
| Franklin | \$662 | Smith | \$746 |
| Giles | \$721 | Stewart | \$730 |
| Hickman | \$685 | Sumner | \$806 |
| Houston | \$605 | Trousdale | \$586 |
| Humphreys | \$1,017 | Van Buren | \$702 |
| Jackson | \$618 | Warren | \$731 |
| Lawrence | \$621 | Wayne | \$638 |
| Lewis | \$564 | White | \$659 |
| Lincoln | \$682 | Williamson | \$1,335 |
| Macon | \$617 | Wilson | \$771 |

Source: BLS, Quarterly Census of Empoyment and Wages, 1 st Quarter 2017

## I.B. An Analysis of Sectoral Wages in All-County Region

> The following graphs present average wage data for six different sectors of the economy across the 40-county region. The charts show the 14 highest counties in the region in terms of average weekly wage. ${ }^{3}$

[^2]
## Goods-Producing Sectors: Average Wages (Q4 2016)



Manufacturing Sector: Average Wages (Q4 2016)


## Service-Providing Sectors: Average Wages (Q4 2016)



Trade, Transportation, and Utilities Sector:
Average Wages (Q4 2016)



Leisure and Hospitality Sector:
Average Wages (Q4 2016)


## I.C. Study Tasks and Research Questions

What is the purpose of this study? Which sectors are surveyed? What types of occupational data are collected? This section addresses these questions briefly, while the next section treats methodological issues. Primary research questions this survey addresses are:

- What is the compensation structure in the 40-county area?
- What are the characteristics of the key occupations?
- How do average wages for the key occupations compare with overall average wages in the study region and state?

The purpose of this study is to answer these questions in a way that helps (1) human resource managers in the study region make informed decisions about the prevailing compensation structure when making hiring decisions and (2) local economic development officials understand the compensation structure in their market when helping prospective businesses successfully transition to their region.

In terms of compensation structure and occupational characteristics, the wage and benefit survey captures wages and benefits for each occupation as well as occupational characteristics, such as educational and licensing requirements, difficulty of filling vacant positions, trainee and entry level wages, and union membership. On the benefit side, the survey covers annual paid and unpaid leave; sick leave; personal days off; medical, dental, and vision insurance; retirement benefits; and incentives. Although the wage and benefit survey includes rich details about occupations, many of the completed surveys do not provide enough information about some of the employee characteristics. Because of missing data on selected occupational characteristics for some occupations, BERC profiled less than one-third of the surveyed occupations.

## II. Conceptual Framework and Methodology

The wage and benefit survey of 40 counties was a hybrid mailed and online survey with multiple reminders to all companies surveyed in the study market area. In this section, we briefly review issues regarding the survey design and analysis and define certain concepts used throughout the data analysis section.

## II.A. Definitions

The following concepts will be used throughout the rest of the report:
Annual Wage: Annual wage is annualized salary and wages, calculated as follows:

```
Annual Wage = 52 X Weekly Wage (1 Year = 52 Weeks)
    = 52 X (40 X Hourly Wage) (1 Week = 40 Hours)
    = 52 X (5 X 8 X Hourly Wage) (Work Week = 5 Days; and 1 Day = 8 Hours)
```

Mean (Average) Wage: Average wage is the sum of the wages divided by the number of reporting establishments.

| Average Wage | (sum of the wages) / (number of establishments reporting <br> that occupation) |
| ---: | :--- |
| Weighted Average Wage $=$ | $=($ sum of the total wages for an occupation) / (number of |
|  | jobs in that occupation) |

Median (Middle Position) Wage: Median wage represents the wage level that 50 percent of wages fall above and 50 percent of the wages fall below.

Difficulty of Filling: Difficulty of filling a vacant position, with 1 being extremely easy and 10 being extremely difficult.

## II.B. Survey Design

BERC designed the survey in consultation with local economic development officials. A list of local companies was prepared, and each company was assigned a unique ID and password to access the online survey, which was hosted on the BERC website. The wage and benefit survey included a section about each company's total employment, annual revenues, and percent of part-time workers. The second section of the survey included a list of benefits a typical business offers to its employees.

The occupational employment section was carefully prepared. Using the BLS (www.bls.gov) staffing pattern for the manufacturing sector, BERC in consultation with local economic development officials prepared a list of occupations to be surveyed. BERC retained the original SOC code and title for occupations for the purpose of comparing the local compensation structure with the regional, state, or national compensation structure for the same occupation.

The survey also included several characteristics of each occupation for a detailed analysis. These characteristics include number of jobs, part-time status, trainee-level wage, entry-level wage, current wage, number of vacancies, licensing requirement, degree requirement, and difficulty of filling a vacant position. For further details about the survey, see the appendix.

## II.C. Survey Process and Data

BERC conducted a hybrid online and mailed wage and benefit survey between June and September 2017. All surveyed companies in the study market area received a cover letter and printed copy of the survey as well as instructions for online completion. Initially, 1,443 companies received the survey. To increase the sample size, BERC sent several reminders by email after the initial letter was mailed. The final tally is shown in Table 2. BERC received 355 completed surveys with a response rate of 24.60 percent.

## Table 1: Wage and Benefit Survey Procedure and Response Rate

| Number of Companies Surveyed |  |
| :--- | :--- |
| Number of Completed Surveys |  |
| Response Rate | Online and Mailed Survey |
| Mode: | Cover Letter with Survey |
| Initial Letter: | Package, Company ID and |
|  | Password |
|  | By email |
| Reminders: | September 2017 |
| Survey Closing Date: |  |
| Response Rate by Initial Contact Type |  |
| E-mail Contacts | 860 |
| Responses Generated | 290 |
| Response Rate |  |
| Regular Mail Contacts |  |
| Responses Generated |  |
| Response Rate |  |

## II.D. Data Analysis

BERC checked all survey data for accuracy and consistency. The cleaned survey database contains a unique company code and survey responses to each of the survey categories. The companies did not respond to every occupation initially included in the survey; overall, the companies supplied information for 100 occupations. In the following section, BERC presents the survey results.

## III. Survey Results

This section provides a comprehensive analysis of the wage and benefit survey. First, BERC regroups the companies by employment size using the following three categories:

- Less Than 100
- 100-350
- More than 350

All major categories of data except wage by occupation are presented using these three categories. Where data is available, BERC presents survey findings using both unweighted (by establishment) and weighted (by number of jobs) mean and median. Occupational wages include both hourly and annualized wages, which assume a 40 -hour workweek and 52 annual workweeks.

## III.A. Establishment Size, Employment, and Revenue

Of the establishments surveyed, 51 percent identified themselves as having fewer than 100 employees. Around 33 percent recorded having between 100 and 350 employees. Overall, these 350 companies account for a total of 82,180 employees, an average of 235 per company. Of these employees, 9 percent were part-time.

Table 2: Wage and Benefit Survey: Employment by Establishment Size and

| Part-Time Status |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Number of Employees |  |  |  |
|  | Number of |  |  |  | Part-Time |
| Employment Size | Companies | Total | Median | Average | Workers (\%) |
| Less Than 100 | 179 | 7,007 | 36 | 39 | $10.09 \%$ |
| $100-350$ | 117 | 20,946 | 158 | 179 | $6.32 \%$ |
| Over 350 | 54 | 54,227 | 653 | 1004 | $12.15 \%$ |
| Grand Total | 350 | 82,180 | 98 | 234.8 | $9.08 \%$ |

Average weekly hours. The table below presents average weekly hours in the study market area:

Table 3: Wage and Benefit Survey: Average Weekly Hours

|  | Average Weekly <br> Hours | Average Weekly <br> Hours Per Employee | Median Weekly Hours |
| :--- | ---: | ---: | ---: | ---: |$\quad$| Median Weekly Hours |
| ---: |
| Per Employee |

In general, median weekly work hours are 40.0 in the study market area. Average weekly hours are around 40.81. The table above shows the discrepancy among companies of different employment size: average weekly work hours for employees working at companies in the over350 employment range are 40.79 . At the other end of the spectrum are companies with employment ranging from 100 to 350 , whose average weekly work hours total 41.39.

Union Membership. A couple of companies in the study market area have a unionized workforce. Because these companies represent about 8 percent of total responses, BERC excluded them from a detailed analysis.

Annual Revenues. Over half of responding companies reported their annual revenue. Overall, the average annual sales total $\$ 169.2$ million with a median of $\$ 15$ million. A more detailed table of revenues by company size can be seen in the table below.

Table 4: Wage and Benefit Survey: Average Annual Sales

|  | Number of <br> Companies |  |  |
| :--- | ---: | ---: | ---: |
| Employment Size | Reporting | Average Sales | Median Sales |
| Less than 100 | 112 | $\$ 13,102,037$ | $\$ 4,250,000$ |
| $100-350$ | 62 | $\$ 314,264,879$ | $\$ 50,000,000$ |
| Over 350 | 21 | $\$ 573,265,476$ | $\$ 200,000,000$ |
| Grand Total | 195 | $\$ 169,181,670$ | $\$ 15,000,000$ |

## III.B. Employee Benefits

BERC asked four sets of questions regarding employee benefits: time off, medical insurance, retirement, and education and other benefits. This section first provides a brief overview of employers' responses for each category and then analyzes each specific benefit in further detail.

Time off. ${ }^{4}$ In this category of benefits, BERC included paid and unpaid holidays, paid vacation days, paid sick leave, paid jury duty, personal paid time off, and time off to vote. These benefit categories are in line with other wage and benefit studies as well as official methodologies such as those of BLS (www.bls.gov). Four major benefits top the chart: paid holidays, unpaid holidays, paid vacation days, and paid jury duty. Other common benefits include personal paid time off (41 percent), time off to vote (40 percent), and paid sick leave (36 percent)

| Wage and Benefit Survey: Benefits (Time off) |  |  |
| :--- | ---: | ---: |
|  |  | Percent of <br> Type of Benefit |
| Number of Responses | 349 | $98.3 \%$ |
| Paid Holidays | 282 | $84.8 \%$ |
| Unpaid Holidays | 313 | $98.1 \%$ |
| Paid Vacation Days | 309 | $35.9 \%$ |
| Paid Sick Leare | 329 | $87.2 \%$ |
| Personal Paid Time off | 326 | $40.5 \%$ |
| Time-off to Vote | 326 | $39.6 \%$ |

[^3]How do paid holidays, annual vacations, and annual sick leave vary by employment size? Chart 1 below presents median and average paid holidays by employment size. On average, the study market area companies offer 8.5 paid holidays annually. Chart 2 provides a frequency distribution of paid holidays by number of companies.

Chart 1: Wage and Benefit Survey: Average Paid Holidays by Employment Size


Chart 2: Wage and Benefit Survey: Number of Paid Holidays


Chart 3 presents median and average annual vacations by company size. Overall, average vacation time in the study market area is 10.8 days. In interpreting vacation days, BERC cautions the reader that many companies have graduated vacation days that change with employees' tenure at a given company. Vacation days presented in Charts 3 and 4 suggest that if you become an employee of an area company, on average you can expect to receive around 11 vacation days. Many employees offer 0 to 28 days of vacation as seen in Chart 4.

## Chart 3: Wage and Benefit Survey: Vacation Days by Employment Size



Chart 4: Wage and Benefit Survey: Number of Vacation Days


Finally, 36 percent of employers in the study market area offer sick leave. By employment size, midsize companies with between 100 and 350 employees offered the most sick leave with an average of three days. However, average sick leave for all companies is just two days. Many companies do not offer sick leave and instead give employees a set amount of time off for illness, vacation, and so forth.

Chart 5: Wage and Benefit Survey:
Sick Days by Employment Size


Chart 6: Wage and Benefit Survey:
Number of Paid Sick Days


Insurance. What kinds of medical insurance do area companies offer their employees? Who pays what portion of the insurance premiums? The table below provides the percent of area companies offering health, dental, vision, disability, and life insurance to their employees.

Table 6: Wage and Benefit Survey: Insurance

| Type of Insurance | Insurance to Employees |  | Who Pays? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Responses | Percent of Companies | Employee | Percent of Companies | Employer | Percent of Companies | Cost <br> Shared | Percent of Companies |
| Health | 311 | 91.2\% | 26 | 8.4\% | 30 | 9.6\% | 204 | 65.6\% |
| Dental | 284 | 84.3\% | 110 | 38.7\% | 26 | 9.2\% | 88 | 31.0\% |
| Vision | 260 | 77.6\% | 142 | 54.6\% | 17 | 6.5\% | 43 | 16.5\% |
| Life | 337 | 84.0\% | 29 | 8.6\% | 126 | 37.4\% | 14 | 4.2\% |
| Disability | 258 | 78.7\% | 52 | 20.2\% | 85 | 32.9\% | 14 | 5.4\% |

Only a fraction of companies reported cost data.

The highlights from the previous table are that 91 percent of the companies offer health and 84 percent offer dental insurance. Sixty-six percent of companies indicated the cost of health insurance is shared between employer and employee. However, vision insurance is primarily offered on an employee-paid basis (55 percent of companies). Life insurance is offered by 84 percent of the companies, usually paid for by the employer ( 37 percent). It is a common practice for the employer to pay for a certain package with employees having the option to add more insurance at their own expense. Disability insurance is offered by 79 percent of the companies, with employers usually paying for this coverage.

When companies offer insurance benefits to dependents, who pays?
Table 7 presents findings from the wage and benefit survey. As shown in Table 7, companies primarily offer health insurance for dependents on a shared-cost basis, with 77 percent of companies offering this insurance. The employee normally pays the cost of dependents' dental insurance, with 53 percent of companies offering dependents' dental insurance. Vision insurance for dependents is also commonly offered, and it is paid for by the employee at 70 percent of the offering companies.

Table 7: Wage and Benefit Survey: Insurance for Dependents

| Type of Insurance | Who Pays? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employee | Percent of Companies | Employer | Percent of Companies | Cost <br> Shared | Percent of Companies |
| Health | 46 | 18.6\% | 10 | 4.0\% | 191 | 77.3\% |
| Dental | 119 | 52.7\% | 11 | 4.9\% | 96 | 42.5\% |
| Vision | 142 | 70.0\% | 9 | 4.4\% | 52 | 25.6\% |

What is the average cost of providing medical insurance?
Overall, employees are expected to pay on average of \$1,113 for health insurance, $\$ 167$ for dental, and $\$ 60$ for vision. Employers' share for each employee is significantly higher for health $(\$ 3,940)$ and dental insurance ( $\$ 271$ ) while relatively lower for vision insurance ( $\$ 28$ ). These costs are for insuring an employee. When dependents become part of the benefit plan, individual cost for health insurance increases to $\$ 4,757$, dental to $\$ 580$, and vision to $\$ 171$. Similarly, the cost to employers of insuring dependents increases significantly for health (\$8,293), dental (\$421), and vision insurance (\$60). Of course, the cost of insurance to both employees and employers varies by establishment size. Table 8 provides detailed cost figures by establishment size.

Table 8: Wage and Benefit Survey: Average Cost of Insurance

| Employment Size | Insurance for Employees |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Health Insurance |  | Dental Insurance |  | Vision Insurance |  |
|  | Employee | Employer | Employee | Employer | Employee | Employer |
|  | Cost | Cost | Cost | Cost | Cost | Cost |
| Less Than 100 | \$1,234 | \$3,742 | \$205 | \$335 | \$67 | \$15 |
| 100-350 | \$1,104 | \$4,348 | \$142 | \$188 | \$53 | \$41 |
| Over 350 | \$787 | \$3,643 | \$119 | \$286 | \$58 | \$33 |
| Grand Total | \$1,113 | \$3,940 | \$167 | \$271 | \$60 | \$28 |
| Employment <br> Size | Insurance for Dependents |  |  |  |  |  |
|  | Health Insurance |  | Dental Insurance |  | Vision Insurance |  |
|  | Employee | Employer | Employee | Employer | Employee | Employer |
|  | Cost | Cost | Cost | Cost | Cost | Cost |
| Less Than 100 | \$5,369 | \$6,831 | \$636 | \$233 | \$182 | \$26 |
| 100-350 | \$4,711 | \$9,955 | \$564 | \$514 | \$166 | \$94 |
| Over 350 | \$3,336 | \$8,876 | \$465 | \$705 | \$156 | \$71 |
| Grand Total | \$4,757 | \$8,293 | \$580 | \$421 | \$171 | \$60 |

Only a fraction of companies reported cost data.

Retirement and Other Benefits. Over 78 percent of companies in the study market area offer defined contribution plans to their employees (Table 9). Profit sharing is offered by about 22 percent of the companies. Traditional pension plans are offered by 11 percent and employee stock ownership plans by 9 percent of the companies.

Table 9: Wage and Benefit Survey: Types of Retirement Plans

| Type of Plan | 357 | Percent of Companies |
| :--- | ---: | ---: |
| Traditional Pension Plan | 71 | $10.86 \%$ |
| Defined Contribution (401K, 403K, IRA, etc.) | $78.12 \%$ |  |
| Profit Sharing | 27 | $22.40 \%$ |
| Employee Stock Ownership Plan | $8.68 \%$ |  |

Some other benefits the surveyed companies offer their employees include career development, tuition payment, and other benefits and incentives. Table 10 provides the number and percent of companies offering these benefits. Overall, almost 69 percent offer incentives and bonuses, 47 percent career development, and 44 percent tuition payment.

Table 10: Wage and Benefit Survey: Types of Incentives and Bonuses

| Type of Bonus and Incentive | Number of Companies | Percent of Companies |
| :--- | ---: | ---: |
| Career Development | 154 | $46.95 \%$ |
| Tuition Payment | 146 | $44.24 \%$ |
| Incentives and Bonuses* |  |  |

*These incentives and bonuses include safety, production, and sales performance bonuses, discretionary bonuses, attendance bonuses, holiday bonuses, and other.

Educational Reimbursement Benefits. Table 11 provides data on the number of employees taking advantage of educational reimbursement. Corporations with fewer than 100 employees have the highest percentage of employees taking advantage of educational benefits, 2.70 percent. Companies with more than 350 employees have the highest percentage of employees completing educational programs ( 78.5 percent) and the highest retention rate ( 96.6 percent). Companies with fewer than 100 employees had a comparable completion rate of 78.4 percent and a retention rate of 83.1 percent.

| Company Size | Average Number of Employees Taking <br> Advantage of Educational <br> Reimbursement | Average Percent of Company Employees Taking Advantage of Educational Reimbursement | Average Percent of Employees Completing the Program | Average Percent of Employee Retention After Program Completion |
| :---: | :---: | :---: | :---: | :---: |
| Less Than 100 | 1.167 | 2.70\% | 78.41\% | 83.11\% |
| 100-350 | 2.912 | 2.00\% | 67.25\% | 82.53\% |
| More than 350 | 12.973 | 2.08\% | 78.48\% | 96.59\% |
| Grand Total | 4.09 | 2.20\% | 72.56\% | 85.69\% |

Do Companies Offer Educational Reimbursement Benefits? Of 287 companies responding to this question, 123 indicated they offer educational-reimbursement programs. For many companies, a full-time employee must work several months before receiving benefits. Nearly 33 percent of companies require fewer than three months, 57 percent require six to 12 months, and about 2 percent require more than two years. Only 10 companies indicated part-time employees are eligible for educational reimbursement. The majority of these companies give part-time workers immediate educational reimbursement benefits.

How much educational benefit do the companies offer? Of 355 companies, 116 reported dollar amounts of educational reimbursement:

- 7 percent offer less than $\$ 1,500$;
- 8 percent offer \$1,500-\$3,500;
- 27 percent offer more than $\$ 3,500$;
- 23 percent offer full tuition;
- 21 percent offer half, scaled, or grade-based reimbursement;
- 15 percent offer reimbursement based on company discretion.

Is there a limit to what employees can study to qualify for reimbursement? Only about
6 percent of companies indicated they do not require or limit what employees can study to receive reimbursement. Of the companies that limit what an employee can study, the requirement is that the field must be either directly related to the job, related to a future position within the company, or useful to the company in some form. About 89 percent of companies usually reimburse their employees' educational expenses after the class. Only 11 percent pay before or during enrollment.

What are the reimbursement criteria? Many companies indicated reimbursement is based on the grade employees earn. Nearly 23 percent require a grade of $A / B$ or "pass" for full reimbursement. About 43 percent pay for C , while 13 percent suggest other scaled versions. Four percent of companies have no grade requirements.

How do companies advertise educational-reimbursement benefits? In many cases, employers advertise these benefits through their hiring and orientation process ( 40 percent). Other venues include company handbook ( 33 percent) and company postings ( $32 \%$ ), through such formats as bulletin boards, emails, or flyers. Some companies (6 percent) do not advertise this benefit at all.

Looking back over the past two to five years, how many employees took advantage of this opportunity? In the past year, 440 employees in 81 companies have taken advantage of this opportunity. In the past five years, 921 employees have taken advantage of educationalreimbursement opportunities.

Where do these employees study? Employees study at a multitude of places including public and private four-year universities, online schools, local community colleges, Tennessee College of Applied Technology (TCAT) centers, other technical programs, and conferences and workshops.

Program completion and retention. Of the employees that started the program, an average of 73 percent completed it. On average, a little over 2 percent of company employees took advantage of educational reimbursement. The companies reported that 86 percent of all employees
completing the program are still employed at the company. About 71 percent of companies reported that completing educational programs helped employees.

## III.C. Value of Benefits

Total compensation for an employee consists of wages and benefits. BERC asked employers to report average value of employee benefits as a percent of wages and salaries. A total of 189 companies ( 53 percent of the sample size) reported their employee benefits as a percentage of wages and salaries. Average benefits equal 22.9 percent of employee wages and salaries. BERC will use this average figure to estimate total employee compensation throughout the rest of this analysis. The following formula for each occupation will be used:

$$
\text { Total Compensation }=\text { Average Wage }+ \text { (Average Wage X 0.229) }
$$

III.D. Selected Workplace Issues

BERC asked covered employers questions about a few selected workplace issues: employee turnover and absenteeism.

Employee Turnover. What percent of companies cite employee turnover as an issue? Out of 281 responses, 53 percent of employers say this is an issue. A majority of companies answering "Yes" are either small or mid-size.

What is the average percent of employee turnover? On average, the annual employee turnover rate is nearly 14 percent. When asked about the reason for turnover, the most frequent answers are as follows:

- Absenteeism
- Job Dissatisfaction
- Job-Hopping
- Pay and Benefits

Is Employee Turnover an Issue?


- Lack of Advancement

Absenteeism. Is employee absenteeism a problem? Forty-three percent of respondents say it is. This issue affects all company sizes.

What is the average annual employee absenteeism rate? Surveyed companies average 8 percent absenteeism each year. When asked the most important factors for absenteeism,

Is Absenteeism an Issue?

companies replied as follows:

- Illness
- Disengagement and Burnout
- Children and Elder Care
- Transportation


## III.E. Wages by Occupation

This section provides wage data for manufacturing companies and selected occupations surveyed in the study market area. The wage data will be presented in two general formats: (1) average wage by establishment size and cumulative wage distribution and (2) average wage by selected occupation. In presenting wage data, BERC will use both weighted (by jobs) and unweighted (by establishment) data. However, in the next section, in which we profile 100 occupations, BERC will use establishment-level (unweighted) wage data.

As previously stated, BERC, in consultation with local economic development officials, originally identified occupations for the wage and benefit survey. The 355 companies responding to the survey provided data for 100 occupations listed. BERC excluded occupations from the list if they had fewer than three responses.

Wages by Establishment Size. Throughout this section, BERC uses establishment size and company size interchangeably. How do wages vary by establishment size? Table 11 presents aggregate wage data by both hourly and annualized wage. Unweighted wage data is the establishment data, whereas weighted wage data is employment adjusted. Overall, companies pay an average hourly wage of $\$ 24.78$ in the study market area. The median establishment wage is
\$22.01. Annualized average and median establishment wages are $\$ 51,542$ and $\$ 45,781$, respectively. Table 11 illustrates slight variations in wage by employment size.

Table 11: Wage and Benefit Survey: Average Wages by Employment Size

|  |  | Unweighted Hourly Wages | Weighted Hourly Wages |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Number of |
| Employment Size | Average (Mean) | Median | Average (Mean) | Median | Jobs |
| Less than 100 | $\$ 28.85$ | $\$ 26.64$ | $\$ 23.54$ | $\$ 20.95$ | 10,270 |
| $100-350$ | $\$ 26.87$ | $\$ 23.41$ | $\$ 21.78$ | $\$ 18.81$ | 10,214 |
| Over 350 | $\$ 22.03$ | $\$ 19.52$ | $\$ 18.84$ | $\$ 16.45$ | 4,947 |
| Total | $\$ 24.78$ | $\$ 22.01$ | $\$ 20.66$ | $\$ 18.00$ | 25,626 |


|  | Unweighted Annual Wages | Weighted Annual Wages |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Number of <br> Employment Size |
| Average (Mean) | Median | Average (Mean) | Median | Jobs |  |
| Less than 100 | $\$ 60,005$ | $\$ 55,418$ | $\$ 48,957$ | $\$ 43,572$ | 10,270 |
| $100-350$ | $\$ 55,891$ | $\$ 48,698$ | $\$ 45,302$ | $\$ 39,123$ | 10,214 |
| Over 350 | $\$ 45,822$ | $\$ 40,604$ | $\$ 39,190$ | $\$ 34,225$ | 4,947 |
| Total | $\$ 51,534$ | $\$ 45,790$ | $\$ 42,968$ | $\$ 37,446$ | 25,626 |

Chart 7 presents average compensation (wages + benefits) by establishment size. Although average compensation varies by establishment size, overall compensation in the study market area is $\$ 63,315(\$ 51,534+\$ 11,781)$. The total compensation figures in Chart 7 represent unweighted establishment wages and benefits.


Finally, Chart 8 below plots wage distribution in the study market area. Overall distribution suggests wage distribution is highly skewed at the ninth and tenth deciles. The median wage in the distribution is marked on the chart, and this chart will be used in the occupational templates.


Wage by Occupations. Where data is available, this section presents occupational information by trainee-level wage, entry wage, average wage, number of jobs, educational requirement, difficulty of filling vacant positions, and licensing requirement. Table 10 tabulates the covered
occupations by employment, educational and licensing requirements, difficulty of filling vacant positions, and current openings. Tables 11 and 12 present occupational-level wage data.

| Table 10: Wage and Benefit Survey: Characteristics of the Covered Occupations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOC Code and Title | Number of Companies | Number of Jobs | Current Job <br> Openings | Educational Requirement | Licensing | $\begin{array}{r} \text { Difficulty of } \\ \text { Filling ( } 1=\text { Easy; } \\ 10=\text { Difficult }) \end{array}$ |
| 11-1011 Chief Executive Officer | 7 | 11 | 0 | Bachelor | No | 9 |
| 11-1021 General and Operations Managers | 169 | 503 | 13 | Bachelor | No | 6 |
| 11-2021 Marketing Manager | 43 | 50 | 0 | Bachelor | No | 6 |
| 11-2022 Sales Manager | 72 | 107 | 3 | Bachelor | No | 7 |
| 11-3000 Production Planning Manager | 54 | 59 | 2 | Bachelor | No | 7 |
| 11-3011 Administrative Services Managers | 31 | 34 | 0 | High School | No | 6 |
| 11-3011 Manager of Facilities | 49 | 36 | 1 | High School | No | 6 |
| 11-3021 Computer and Information Systems Managers | 78 | 75 | 1 | Bachelor | No | 6 |
| 11-3031 Controller (comptroller) | 96 | 86 | 1 | Bachelor | No | 6 |
| 11-3051, 19-4099 Quality Control Engineer | 60 | 184 | 4 | Bachelor | No | 6 |
| 11-3051 Plant Manager | 96 | 78 | 2 | Bachelor | No | 7 |
| 11-3061 Purchasing Manager | 81 | 64 | 2 | Bachelor | No | 5 |
| 11-3071 Shipping Supervisors | 108 | 138 | 13 | High School | No | 5 |
| 11-3121 Human Resources Managers | 132 | 121 | 6 | Bachelor | No | 6 |
| 11-9041 Engineering Manager | 84 | 122 | 5 | Bachelor | No | 7 |
| 11-9041 Quality Assurance Manager | 87 | 80 | 1 | Bachelor | No | 6 |
| 11-9199 Misc. Managers | 11 | 60 | 3 | Bachelor | No | 6 |
| 13-1022 Buyer | 65 | 151 | 2 | High School | No | 4. |
| 13-1023 Purchasing Agents, Except Wholesale, Retail, and Farm Products | 48 | 50 | 0 | High School | No | 5 |
| 13-1031 Claims Adjusters, Examiners, and Investigator | 3 | 1 | 0 | N/A | N/A | N/A |
| 13-1071 Human Resources Specialist | 91 | 145 | 1 | High School | No | 5 |
| 13-1081 Logistician | 6 | 7 | 0 | High School | No | 7 |
| 13-1111 Management Analyst | 5 | 7 | N/A | Bachelor | N/A | 6 |
| 13-1151 Training Specialists | 34 | 46 | 6 | Bachelor | No | 5 |
| 13-1161 Market Research Analyst | 10 | 14 | 0 | Associate's | No | 5 |
| 13-1199 Business Operations Specialist | 35 | 58 | 4 | Bachelor | No | 5 |
| 13-2011 Account Manager | 76 | 161 | 6 | Bachelor | No | 5 |
| 13-2011 Accountant, Auditor | 90 | 154 | 1 | Bachelor | No | 5 |
| 13-2051 Financial Analyst | 23 | 30 | 1 | Bachelor | No | 5 |
| 15-1121 Computer Systems Analyst | 21 | 52 | 1 | Bachelor | No | 7 |
| 15-1131 Computer Programmers | 48 | 22 | 1 | Bachelor | No | 6 |
| 15-1132 Software Developer, Applications | 10 | 16 | 0 | Bachelor | No | 8 |
| 15-1133 Software Developer, Systems Software | 9 | 8 | 4 | Varies | Yes | 8 |
| 15-1134 Web Developer | 13 | 13 | 4 | Bachelor | Yes | 6 |
| 15-1141 Database Manager | 6 | 9 | 0 | Bachelor/Associate | No | 8 |
| 15-1142 Network and Computer Systems Administrators | 16 | 14 | 2 | ........... Bachelor | No | 6 |
| 15-1151 Computer User Support Specialist | 30 | 44 | 3 | Bachelor | No | 5 |
| 15-1152 Computer Network Support Specialists | 46 | 104 | 1 | Bachelor | No | 5 |
| 15-1199 Computer Occupations, all other | 34 | 108 | 6 | Bachelor | No | 6 |
| 15-2031 Operations Research Analyst | 6 | 6 | 0 | High School | No | 4 |
| 17-2070 Electrical and Electronics Engineers | 5 | 18 | 1 | Bachelor | No | 9 |
| 17-2110 Quality Assurance Specialist | 49 | 59 | 1 | High School | No | 5 |
| 17-2112 Industrial Engineer | 54 | 133 | 18 | Bachelor | Yes | 6 |
| 17-2141 Mechanical Engineer | 55 | 274 | 8 | Bachelor | No | 7 |
| 17-2199 Misc Engineers | 18 | 282 | 5 | Bachelor | Yes/No | 7 |
| 17-3013 Mechanical Drafters | 8 | 16 | 1 | Vocational | No | 5 |
| 17-3020 Engineering Technician | 12 | 64 | 1 | High School | No | 6 |
| 19-4099 Quality Control Analysts | 3 | 15 | 0 | High School | No | 3. |


| SOC Code and Title | Number of Companies | Number of Jobs | Current Job Openings | Educational <br> Requirement | Licensing | Difficulty of Filling ( $1=$ Easy; $10=$ Difficult) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27-1010 Artists and Related Workers | 3 | 10 | 0 | High School | No | 5 |
| 29-1069 Physician and Surgeon, all other | 3 | 84 | 2 | Phd or Professional | Yes | 6 |
| 29-1141 Registered Nurse | 8 | 92 | 2 | Bachelor | No | 4 |
| 29-1171 Nurse Practitioners | 4 | 108 | 11 | Master | Yes | 6 |
| 29-2012 Medical and Clinical Laboratory Technician | 3 | 3 | N/A | Associate's | N/A | 3 |
| 29-2061 Licensed Practical and Licensed Vocational Nurse | 4 | 134 | 11 | Vocational | Yes | 5 |
| 29-9011 Health and Safety Manager | 6 | 9 | 0 | Bachelor | No | 6 |
| 37-2011 Janitors and Cleaners | 63 | 110 | 3 | High School | No | 4. |
| 41-3090 Field Service Representative | 18 | 77 | 6 | High School | Yes | 6 |
| 41-4011 Sales Representative | 54 | 232 | 12 | Bachelor | Yes | 6 |
| 41-9011 Product Manager | 34 | 58 | 1 | Bachelor | No | 6 |
| 41-9099 Sales and related all other | 9 | 125 | 2 | Bachelor | No | 6 |
| 43-1000 Customer Service Manager | 56 | 52 | 1 | Bachelor | No | 5 |
| 43-1010 Department Supervisor | 101 | 402 | 7 | High School | No | 6 |
| 43-1011 First Line Supervisor of Office and Administrative Support Workı | 3 | 3 | 0 | High School | No | 5 |
| 43-2011 Switchboard Operators | 24 | 19 | 1 | High School | No | 4 |
| 43-3011 Bill and Account Collector | 34 | 30 | 0 | Associate's | No | 6 |
| 43-3031 Bookkeeping, Accounting, and Auditing Clerk | 137 | 219 | 1 | High School | No | 4 |
| 43-3051 Payroll and Timekeeping Clerk | 76 | 69 | 0 | High School | No | 4 |
| 43-4051 Customer Service Representative | 91 | 558 | 26 | High School | Yes | 4. |
| 43-4151 Office Clerks, General - Number of Workers | 6 | 40 | 0 | High School | No | 2 |
| 43-4161 Human Resources Assistants | 81 | 121 | 7 | High School | No | 5 |
| 43-5061 Production Planner | 59 | 90 | 1 | High School | No | 5 |
| 43-5071 Shipping, Receiving, and Traffic Clerks | 144 | 405 | 4 | High School | No | 4. |
| 43-5081 Stock Clerks and Order Fillers | 7 | 140 | 10 | High School | Yes | 5 |
| 43-6011 Executive Secretaries and Executive Administrative Assistants | 74 | 67 | 2 | High School | No | 4. |
| 43-6014 Secretaries and Administrative Assistants | 108 | 167 | 3 | High School | No | 4 |
| 43-9061 Office Clerks, General | 92 | 193 | 8 | High School | No | 5 |
| 47-2111 Electrician | 52 | 228 | 10 | Vocational | No | 7 |
| 49-1000 Supervisor of Machine Maintenance | 45 | 73 | 1 | High School | No | 6 |
| 49-3031 Bus and Truck Mechanics and Diesel Engine Specialists | 5 | 76 | 10 | High School | Yes | 7 |
| 49-9041 Industrial and Refractory Machinery Mechanics | 7 | 58 | 3 | High School | Yes | 7 |
| 49-9070 Building Maintenance Worker | 107 | 365 | 15 | High School | No | 6 |
| 49-9071 Maintenance Mechanic | 111 | 903 | 24 | High School | No | 7. |
| 51-1011 First-Line Supervisor of Production Workers | 130 | 833 | 24 | High School | No | 6 |
| 51-2011 Assembler | 103 | 2,483 | 182 | High School | Yes | 5 |
| 51-2092 Leadperson | 75 | 405 | 16 | High School | Yes | 6 |
| 51-4031 Cutting, Punching, and Press Machine Operators | 64 | 657 | 31 | High School | Yes | 6 |
| 51-4041 Machinist | 10 | 119 | 5 | High School | Yes | 8 |
| 51-4072 Molding, Coremaking, and Casting Machine Setters and Opera | 18 | 246 | 2 | High School | No | 5 |
| 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal a | 47 | 425 | 32 | High School | Yes | 6 |
| 51-4111 Tool and Die Makers | 43 | 289 | 24 | Vocational | Yes | 8 |
| 51-4121 Welder | 52 | 743 | 47 | High School | Yes | 6 |
| 51-6091 Extruding, Forming, Pressing | 14 | 400 | 10 | High School | Yes | 6 |
| 51-9023 Mixing and Blending Machine Operator | 16 | 114 | 3 | High School | Yes/No | 5 |
| 51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers | 80 | 472 | 23 | High School | Yes | 6 |
| 51-9199 General Production Labor | 138 | 3,464 | 238 | High School | Yes | 5 |
| 53-3032 Heavy and Tractor-Trailer Truck Drivers | 40 | 271 | 13 | High School | Yes | 6 |
| 53-7051 Industrial Truck and Tractor Operators | 101 | 1,097 | 87 | High School | Yes | 5 |
| 53-7062 Material Handling Workers | 77 | 775 | 27 | High School | Yes | 5 |
| 53-7064 Packers and Packagers | 77 | 541 | 46 | High School | Yes | 5 |
| 53-7199 Material Moving Workers | 89 | 859 | 34 | High School | Yes | 4. |


|  | Trainee Level (Hourly) |  | Entry Level (Hourly) |  | Current Wages (Hourly) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOC Code and Title | Average (Mean) | Median | Average (Mean) | Median | Average (Mean) | Median |
| 11-1011 Chief Executive Officer | N/A |  | N/A |  | \$71.68 | \$55.00 |
| 11-1021 General and Operations Managers | \$26.49 | \$25.00 | \$34.17 | \$31.97 | \$48.55 | \$43.27 |
| 11-2021 Marketing Manager | \$19.33 | \$20.50 | \$32.96 | \$32.00 | \$41.14 | \$40.00 |
| 11-2022 Sales Manager | \$21.82 | \$19.23 | \$29.00 | \$31.25 | \$42.64 | \$40.87 |
| 11-3000 Production Planning Manager | \$22.93 | \$22.84 | \$30.02 | \$28.85 | \$35.76 | \$33.50 |
| 11-3011 Administrative Services Managers | \$13.68 | \$12.00 | \$14.68 | \$14.00 | \$22.87 | \$20.43 |
| 11-3011 Manager of Facilities | \$24.14 | \$24.04 | \$31.91 | \$32.69 | \$37.48 | \$37.48 |
| 11-3021 Computer and Information Systems Managers | \$20.67 | \$19.23 | \$32.35 | \$31.25 | \$37.88 | \$37.74 |
| 11-3031 Controller (comptroller) | \$25.75 | \$28.00 | \$33.50 | \$33.99 | \$47.40 | \$47.60 |
| 11-3051, 19-4099 Quality Control Engineer | \$22.65 | \$20.00 | \$27.08 | \$27.67 | \$34.29 | \$35.40 |
| 11-3051 Plant Manager | \$31.67 | \$30.83 | \$40.56 | \$40.87 | \$49.00 | \$49.41 |
| 11-3061 Purchasing Manager | \$18.66 | \$18.00 | \$28.44 | \$29.09 | \$35.39 | \$36.06 |
| 11-3071 Shipping Supervisors | \$16.27 | \$15.00 | \$20.85 | \$20.02 | \$24.86 | \$24.19 |
| 11-3121 Human Resources Managers | \$25.00 | \$20.91 | \$30.11 | \$30.00 | \$37.00 | \$38.00 |
| 11-9041 Engineering Manager | \$30.59 | \$31.18 | \$35.38 | \$37.16 | \$48.59 | \$48.64 |
| 11-9041 Quality Assurance Manager | \$28.30 | \$28.85 | \$39.69 | \$31.57 | \$40.07 | \$39.00 |
| 11-9199 Misc. Managers | \$33.56 | \$33.56 | \$27.20 | \$26.89 | \$36.46 | \$36.31 |
| 13-1022 Buyer | \$17.91 | \$16.00 | \$19.44 | \$17.92 | \$24.45 | \$23.42 |
| 13-1023 Purchasing Agents, Except Wholesale, Retail, and Farm Products | \$16.48 | \$14.00 | \$18.88 | \$15.50 | \$23.61 | \$21.30 |
| 13-1031 Claims Adjusters, Examiners, and Investigator | \$14.42 | \$14.42 | \$21.45 | \$21.45 | \$24.38 | \$24.38 |
| 13-1071 Human Resources Specialist | \$16.52 | \$15.63 | \$19.88 | \$19.23 | \$25.46 | \$24.04 |
| 13-1081 Logistician | \$16.55 | \$16.55 | \$22.60 | \$22.42 | \$27.44 | \$27.64 |
| 13-1111 Management Analyst | N/A | N/A | \$23.81 | \$23.79 | \$38.97 | \$38.94 |
| 13-1151 Training Specialists | \$18.77 | \$20.58 | \$19.55 | \$20.00 | \$24.73 | \$22.83 |
| 13-1161 Market Research Analyst | \$12.00 | \$12.00 | \$19.00 | \$19.00 | \$31.27 | \$27.64 |
| 13-1199 Business Operations Specialist | \$17.16 | \$14.42 | \$21.19 | \$22.83 | \$32.16 | \$30.63 |
| 13-2011 Account Manager | \$17.96 | \$18.00 | \$21.78 | \$20.28 | \$30.57 | \$30.00 |
| 13-2011 Accountant, Auditor | \$17.50 | \$17.86 | \$21.62 | \$21.32 | \$28.79 | \$27.69 |
| 13-2051 Financial Analyst | \$19.23 | \$19.23 | \$26.59 | \$25.94 | \$37.79 | \$36.11 |
| 15-1121 Computer Systems Analyst | \$22.00 | \$22.00 | \$25.30 | \$25.00 | \$38.00 | \$36.63 |
| 15-1131 Computer Programmers | \$18.00 | \$18.00 | \$28.01 | \$28.85 | \$39.11 | \$37.50 |
| 15-1132 Software Developer, Applications | N/A | N/A | \$31.20 | \$30.00 | \$39.86 | \$36.06 |
| 15-1133 Software Developer, Systems Software | N/A | N/A | \$30.98 | \$31.97 | \$38.19 | \$35.08 |
| 15-1134 Web Developer | \$13.71 | \$13.71 | \$17.95 | \$16.80 | \$25.38 | \$26.93 |
| 15-1141 Database Manager | \$6.50 | \$6.50 | \$27.58 | \$26.50 | \$35.85 | \$42.63 |
| 15-1142 Network and Computer Systems Administrators | \$28.95 | \$28.95 | \$27.89 | \$27.76 | \$33.12 | \$31.92 |
| 15-1151 Computer User Support Specialist | \$18.67 | \$19.25 | \$19.01 | \$17.50 | \$25.43 | \$23.29 |
| 15-1152 Computer Network Support Specialists | \$18.15 | \$19.23 | \$21.57 | \$20.82 | \$26.23 | \$25.24 |
| 15-1199 Computer Occupations, all other | \$14.00 | \$15.00 | \$17.71 | \$16.25 | \$25.54 | \$22.84 |
| 15-2031 Operations Research Analyst | \$15.00 | \$15.00 | \$25.49 | \$20.00 | \$30.55 | \$32.03 |
| 17-2070 Electrical and Electronics Engineers | \$27.81 | \$27.81 | \$27.70 | \$26.44 | \$39.19 | \$40.81 |
| 17-2110 Quality Assurance Specialist | \$16.60 | \$15.00 | \$17.95 | \$16.59 | \$22.99 | \$19.04 |
| 17-2112 Industrial Engineer | \$28.71 | \$29.93 | \$29.94 | \$29.81 | \$34.96 | \$36.06 |
| 17-2141 Mechanical Engineer | \$23.94 | \$25.00 | \$29.04 | \$28.85 | \$36.84 | \$36.06 |
| 17-2199 Misc Engineers | \$24.00 | \$24.00 | \$27.43 | \$27.91 | \$37.69 | \$37.79 |
| 17-3013 Mechanical Drafters | \$12.21 | \$12.21 | \$14.47 | \$14.42 | \$22.41 | \$20.07 |
| 17-3020 Engineering Technician | \$16.85 | \$16.85 | \$23.47 | \$20.00 | \$26.31 | \$25.90 |
| 19-4099 Quality Control Analysts | \$18.20 | \$18.20 | \$18.20 | \$18.20 | \$20.51 | \$21.55 |

Table 11 (Continued) : Wage and Benefit Survey: Average Hourly Wages (Unweighted) for the Covered Occupations

|  | Trainee Level (Hourly) |  | Entry Level (Hourly) |  | Current Wages (Hourly) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOC Code and Title | Average (Mean) | Median | Average (Mean) | Median | Average (Mean) | Median |
| 27-1010 Artists and Related Workers | N/A | N/A | N/A | N/A | \$23.00 | \$23.00 |
| 29-1069 Physician and Surgeon, all other | N/A | N/A | \$72.12 | \$72.12 | \$120.62 | \$120.62 |
| 29-1141 Registered Nurse | N/A | N/A | \$27.40 | \$25.88 | \$34.08 | \$33.82 |
| 29-1171 Nurse Practitioners | N/A | N/A | \$36.06 | \$36.06 | \$39.75 | \$43.99 |
| 29-2012 Medical and Clinical Laboratory Technician | N/A | N/A | \$18.25 | \$18.25 | \$20.17 | \$18.50 |
| 29-2061 Licensed Practical and Licensed Vocational Nurse | \$15.00 | \$15.00 | \$16.17 | \$17.00 | \$18.99 | \$19.50 |
| 29-9011 Health and Safety Manager | \$37.11 | \$37.11 | \$37.11 | \$37.11 | \$38.13 | \$40.00 |
| 37-2011 Janitors and Cleaners | N/A | N/A | \$11.48 | \$11.25 | \$13.11 | \$12.85 |
| 41-3090 Field Service Representative | N/A | N/A | \$20.85 | \$21.00 | \$27.01 | \$24.00 |
| 41-4011 Sales Representative | N/A | N/A | \$22.96 | \$22.42 | \$29.15 | \$26.89 |
| 41-9011 Product Manager | N/A | N/A | \$23.72 | \$15.91 | \$27.19 | \$24.04 |
| 41-9099 Sales and related all other | N/A | N/A | \$19.69 | \$19.78 | \$24.79 | \$28.61 |
| 43-1000 Customer Service Manager | N/A | N/A | \$24.41 | \$24.04 | \$29.29 | \$27.00 |
| 43-1010 Department Supervisor | N/A | N/A | \$21.60 | \$22.45 | \$28.08 | \$27.81 |
| 43-1011 First Line Supervisor of Office and Administrative Support Workers | N/A | N/A | \$18.44 | \$18.44 | \$19.24 | \$19.24 |
| 43-2011 Switchboard Operators | N/A | N/A | \$13.15 | \$13.00 | \$15.14 | \$15.00 |
| 43-3011 Bill and Account Collector | N/A | N/A | \$14.19 | \$14.17 | \$17.21 | \$17.00 |
| 43-3031 Bookkeeping, Accounting, and Auditing Clerk | \$12.00 | \$12.00 | \$14.99 | \$14.86 | \$18.63 | \$18.00 |
| 43-3051 Payroll and Timekeeping Clerk | N/A | N/A | \$15.94 | \$15.00 | \$21.23 | \$19.92 |
| 43-4051 Customer Service Representative | \$14.00 | \$14.00 | \$14.36 | \$14.00 | \$16.95 | \$16.87 |
| 43-4151 Office Clerks, General - Number of Workers | N/A | N/A | \$11.00 | \$11.00 | \$13.01 | \$11.50 |
| 43-4161 Human Resources Assistants | N/A | N/A | \$16.46 | \$16.18 | \$19.47 | \$18.00 |
| 43-5061 Production Planner | N/A | N/A | \$21.47 | \$20.00 | \$28.07 | \$26.56 |
| 43-5071 Shipping, Receiving, and Traffic Clerks | \$20.00 | \$20.00 | \$13.83 | \$13.00 | \$16.49 | \$15.75 |
| 43-5081 Stock Clerks and Order Fillers | \$14.00 | \$14.00 | \$15.43 | \$15.00 | \$19.33 | \$17.64 |
| 43-6011 Executive Secretaries and Executive Administrative Assistants | N/A | N/A | \$16.62 | \$15.00 | \$22.26 | \$20.64 |
| 43-6014 Secretaries and Administrative Assistants | N/A | N/A | \$14.53 | \$13.94 | \$17.31 | \$16.03 |
| 43-9061 Office Clerks, General | N/A | N/A | \$13.38 | \$13.50 | \$15.66 | \$14.95 |
| 47-2111 Electrician | \$15.00 | \$15.00 | \$19.95 | \$18.60 | \$23.49 | \$24.00 |
| 49-1000 Supervisor of Machine Maintenance | N/A | N/A | \$27.89 | \$27.14 | \$31.28 | \$32.81 |
| 49-3031 Bus and Truck Mechanics and Diesel Engine Specialists | N/A | N/A | \$12.75 | \$11.00 | \$19.10 | \$17.50 |
| 49-9041 Industrial and Refractory Machinery Mechanics | N/A | N/A | \$18.81 | \$17.50 | \$22.55 | \$24.00 |
| 49-9070 Building Maintenance Worker | N/A | N/A | \$16.11 | \$16.00 | \$19.67 | \$19.96 |
| 49-9071 Maintenance Mechanic | \$12.00 | \$12.00 | \$17.80 | \$17.75 | \$22.05 | \$22.00 |
| 51-1011 First-Line Supervisor of Production Workers | \$20.00 | \$20.00 | \$19.99 | \$19.38 | \$23.55 | \$23.18 |
| 51-2011 Assembler | N/A | N/A | \$12.01 | \$12.00 | \$14.21 | \$13.46 |
| 51-2092 Leadperson | N/A | N/A | \$14.43 | \$14.09 | \$17.11 | \$16.23 |
| 51-4031 Cutting, Punching, and Press Machine Operators | N/A | N/A | \$13.46 | \$13.00 | \$15.88 | \$15.00 |
| 51-4041 Machinist | N/A | N/A | \$16.71 | \$15.00 | \$22.11 | \$22.86 |
| 51-4072 Molding, Coremaking, and Casting Machine Setters and Operators | N/A | N/A | \$12.10 | \$12.00 | \$14.41 | \$13.57 |
| 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Pld | N/A | N/A | \$13.47 | \$12.00 | \$16.55 | \$16.30 |
| 51-4111 Tool and Die Makers | N/A | N/A | \$19.44 | \$19.94 | \$24.68 | \$25.00 |
| 51-4121 Welder | N/A | N/A | \$14.53 | \$14.70 | \$18.25 | \$17.00 |
| 51-6091 Extruding, Forming, Pressing | N/A | N/A | \$14.22 | \$14.08 | \$18.69 | \$17.00 |
| 51-9023 Mixing and Blending Machine Operator | N/A | N/A | \$15.16 | \$15.00 | \$18.21 | \$17.14 |
| 51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers | N/A | N/A | \$13.48 | \$13.00 | \$16.34 | \$15.00 |
| 51-9199 General Production Labor | \$11.50 | \$11.50 | \$12.21 | \$12.00 | \$14.35 | \$13.80 |
| 53-3032 Heavy and Tractor-Trailer Truck Drivers | N/A | N/A | \$15.13 | \$15.00 | \$17.59 | \$16.92 |
| 53-7051 Industrial Truck and Tractor Operators | N/A | N/A | \$13.05 | \$12.71 | \$15.83 | \$15.00 |
| 53-7062 Material Handling Workers | \$11.63 | \$11.63 | \$12.18 | \$12.00 | \$14.43 | \$14.03 |
| 53-7064 Packers and Packagers | \$11.25 | \$11.12 | \$11.68 | \$11.75 | \$13.72 | \$13.13 |
| 53-7199 Material Moving Workers | N/A | N/A | \$12.95 | \$12.25 | \$14.79 | \$14.03 |

Table 12: Wage and Benefit Survey: Average Annualized Wages for the Covered Occupations

|  | Weighted (by Job) |  | Unweighted (by <br> Establishment) |  |
| :---: | :---: | :---: | :---: | :---: |
| SOC Code and Title | Average <br> (Mean) | Median | Average <br> (Mean) | Median |
| 11-1011 Chief Executive Officer | \$156,023 | \$114,400 | \$149,094 | \$114,400 |
| 11-1021 General and Operations Managers | \$94,421 | \$92,622 | \$100,990. | \$90,002 |
| 11-2021 Marketing Manager | \$96,368 | \$149,635 | \$85,574 | \$83,200 |
| 11-2022 Sales Manager | \$89,272, | \$72,800 | \$88,692 | \$95,826 |
| 11-3000 Production Planning Manager | \$81,223. | \$84,198 | \$74,376 | \$69,680 |
| 11-3011 Administrative Services Managers | \$63,402. | \$63,960 | \$47,578 | \$42,494 |
| 11-3011 Manager of Facilities | \$79,537 | \$74,485 | \$77,949 | \$77,949 |
| 11-3021 Computer and Information Systems Managers | \$82,794 | \$82,202 | \$78,792. | \$78,489 |
| 11-3031 Controller (comptroller) | \$101,156 | \$99,060 | \$98,588 | \$99,008 |
| 11-3051, 19-4099 Quality Control Engineer | \$78,728, | \$75,774 | \$71,319 | \$73,632 |
| 11-3051 Plant Manager | \$96,312. | \$84,635 | \$101,920 | \$102,773 |
| 11-3061 Purchasing Manager | \$74,974 | \$75,629 | \$73,003. | \$75,005 |
| 11-3071 Shipping Supervisors | \$51,834 | \$49,462 | \$51,712 | \$50,315 |
| 11-3121 Human Resources Managers | \$76,232. | \$76,502 | \$76,952. | \$79,040 |
| 11-9041 Engineering Manager | \$102,963 | \$101,171 | \$101,066 | \$101,171 |
| 11-9041 Quality Assurance Manager | \$85,683, | \$88,629 | \$83,346. | \$81,120 |
| 11-9199 Misc. Managers | \$65,940 | \$65,000 | \$75,841 | \$75,525 |
| 13-1022 Buyer | \$60,420, | \$66,248 | \$50,865 | \$48,714 |
| 13-1023 Purchasing Agents, Except Wholesale, Retail, and Farm Products | \$49,984 | \$45,760 | \$49,110 | \$44,304 |
| 13-1031 Claims Adjusters, Examiners, and Investigator | N/A | N/A | \$50,700 | \$50,700 |
| 13-1071 Human Resources Specialist | \$56,405 | \$30,160 | \$52,963 | \$50,003 |
| 13-1081 Logistician | \$58,880 | \$57,491 | \$57,084 | \$57,491 |
| 13-1111 Management Analyst | \$98,874 | \$109,460 | \$81,053 | \$80,995 |
| 13-1151 Training Specialists | \$51,866, | \$45,032 | \$51,435 | \$47,476 |
| 13-1161 Market Research Analyst | \$90,448 | \$67,860 | \$58,456 | \$49,920 |
| 13-1199 Business Operations Specialist | \$73,286, | \$70,512 | \$66,894 | \$63,700 |
| 13-2011 Account Manager | \$66,112. | \$62,400 | \$63,577 | \$62,400 |
| 13-2011 Accountant, Auditor | \$54,185 | \$57,325 | \$59,887 | \$57,595 |
| 13-2051 Financial Analyst | \$84,750, | \$76,211 | \$78,604 | \$75,109 |
| 15-1121 Computer Systems Analyst | \$76,871 | \$73,882 | \$79,034 | \$76,190 |
| 15-1131 Computer Programmers | \$82,831 | \$78,260 | \$81,352 | \$78,000 |
| 15-1132 Software Developer, Applications | \$76,482 | \$75,005 | \$82,900, | \$75,005 |
| 15-1133 Software Developer, Systems Software | \$70,044 | \$66,997 | \$79,425 | \$72,956 |
| 15-1134 Web Developer | \$60,575, | \$65,000 | \$52,785 | \$56,004 |
| 15-1141 Database Manager | \$61,497. | \$39,728 | \$74,558 | \$88,660 |
| 15-1142 Network and Computer Systems Administrators | \$65,258, | \$61,443 | \$68,880 | \$66,394 |
| 15-1151 Computer User Support Specialist | \$52,615. | \$48,360 | \$52,893 | \$48,433 |
| 15-1152 Computer Network Support Specialists | \$50,662 | \$44,928 | \$54,549 | \$52,499 |
| 15-1199 Computer Occupations, all other | \$44,892 | \$42,016 | \$53,125 | \$47,507 |
| 15-2031 Operations Research Analyst | \$62,761 | \$42,640 | \$63,551 | \$66,622. |
| 17-2070 Electrical and Electronics Engineers | \$82,980 | \$81,120 | \$81,510 | \$84,890 |
| 17-2110 Quality Assurance Specialist | \$45,892 | \$45,344 | \$47,829 | \$39,603 |
| 17-2112 Industrial Engineer | \$76,577 | \$77,875 | \$72,718 | \$75,005 |
| 17-2141 Mechanical Engineer | \$83,061 | \$67,434 | \$76,628. | \$75,005 |
| 17-2199 Misc Engineers | \$82,352. | \$86,112 | \$78,398 | \$78,603 |
| 17-3013 Mechanical Drafters | \$51,537 | \$41,870 | \$46,621 | \$41,735 |
| 17-3020 Engineering Technician | \$61,677. | \$69,867 | \$54,734 | \$53,872 |
| 19-4099 Quality Control Analysts | \$43,296 | \$48,859 | \$42,654 | \$44,824 |


|  | Weighted (by Job) |  | Unweighted (by <br> Establishment) |  |
| :---: | :---: | :---: | :---: | :---: |
| SOC Code and Title | Average (Mean) | Median | Average (Mean) | Median |
| 27-1010 Artists and Related Workers | \$46,139 | \$45,656 | \$47,830 | \$47,830 |
| 29-1069 Physician and Surgeon, all other | N/A | N/A | \$250,879 | \$250,879 |
| 29-1141 Registered Nurse | \$62,564 | \$62,400 | \$70,885 | \$70,346 |
| 29-1171 Nurse Practitioners | \$104,582 | \$114,400 | \$82,670 | \$91,499 |
| 29-2012 Medical and Clinical Laboratory Technician | \$38,480 | \$38,480 | \$41,947 | \$38,480 |
| 29-2061 Licensed Practical and Licensed Vocational Nurse | \$38,153 | \$41,600 | \$39,494 | \$40,560 |
| 29-9011 Health and Safety Manager | \$82,142 | \$84,989 | \$79,319 | \$83,200 |
| 37-2011 Janitors and Cleaners | \$29,392 | \$28,288 | \$27,271 | \$26,728 |
| 41-3090 Field Service Representative | \$60,231 | \$60,008 | \$56,179 | \$49,920 |
| 41-4011 Sales Representative | \$58,956 | \$52,000 | \$60,625 | \$55,931 |
| 41-9011 Product Manager | \$47,175 | \$41,642 | \$56,565 | \$50,003 |
| 41-9099 Sales and related all other | \$59,133 | \$61,173 | \$51,572 | \$59,509 |
| 43-1000 Customer Service Manager | \$53,026 | \$49,421 | \$60,926 | \$56,160 |
| 43-1010 Department Supervisor | \$65,010, | \$60,320. | \$58,403 | \$57,845 |
| 43-1011 First Line Supervisor of Office and Administrative Support Workers | \$40,009 | \$40,009 | \$40,009 | \$40,009 |
| 43-2011 Switchboard Operators | \$31,496 | \$30,680 | \$31,489 | \$31,200 |
| 43-3011 Bill and Account Collector | \$34,322 | \$32,864 | \$35,792 | \$35,360 |
| 43-3031 Bookkeeping, Accounting, and Auditing Clerk | \$38,240 | \$38,002 | \$38,746 | \$37,440, |
| 43-3051 Payroll and Timekeeping Clerk | \$41,272 | \$37,440 | \$44,155 | \$41,423 |
| 43-4051 Customer Service Representative | \$32,961 | \$32,240, | \$35,262 | \$35,079 |
| 43-4151 Office Clerks, General - Number of Workers | \$24,569 | \$24,960 | \$27,069 | \$23,920 |
| 43-4161 Human Resources Assistants | \$48,145 | \$50,003 | \$40,492 | \$37,440 |
| 43-5061 Production Planner | \$68,089 | \$61,194 | \$58,386 | \$55,245 |
| 43-5071 Shipping, Receiving, and Traffic Clerks | \$34,755 | \$30,160, | \$34,292 | \$32,760 |
| 43-5081 Stock Clerks and Order Fillers | \$38,507 | \$37,440 | \$40,196 | \$36,681 |
| 43-6011 Executive Secretaries and Executive Administrative Assistants | \$43,326 | \$37,003 | \$46,301 | \$42,931 |
| 43-6014 Secretaries and Administrative Assistants | \$38,309 | \$35,194 | \$36,000 | \$33,342 |
| 43-9061 Office Clerks, General | \$30,958 | \$29,120, | \$32,580 | \$31,096. |
| 47-2111 Electrician | \$58,256 | \$63,565 | \$48,853 | \$49,920 |
| 49-1000 Supervisor of Machine Maintenance | \$71,295 | \$72,363 | \$65,061 | \$68,245 |
| 49-3031 Bus and Truck Mechanics and Diesel Engine Specialists | \$36,633 | \$36,400 | \$39,728 | \$36,400 |
| 49-9041 Industrial and Refractory Machinery Mechanics | \$42,625 | \$36,795 | \$46,904 | \$49,920 |
| 49-9070 Building Maintenance Worker | \$47,979 | \$52,998 | \$40,916 | \$41,517 |
| 49-9071 Maintenance Mechanic | \$53,086 | \$52,603 | \$45,857 | \$45,760 |
| 51-1011 First-Line Supervisor of Production Workers | \$54,605 | \$54,080 | \$48,987 | \$48,214 |
| 51-2011 Assembler | \$29,144 | \$25,626 | \$29,561 | \$27,997 |
| 51-2092 Leadperson | \$39,858 | \$36,858 | \$35,597 | \$33,758 |
| 51-4031 Cutting, Punching, and Press Machine Operators | \$33,828 | \$32,219 | \$33,030 | \$31,200 |
| 51-4041 Machinist | \$52,903 | \$58,240 | \$45,997 | \$47,549 |
| 51-4072 Molding, Coremaking, and Casting Machine Setters and Operators | \$27,705 | \$27,435 | \$29,980 | \$28,226 |
| 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Pla | \$35,531 | \$35,214 | \$34,418 | \$33,904 |
| 51-4111 Tool and Die Makers | \$55,448 | \$55,598 | \$51,339 | \$52,000 |
| 51-4121 Welder | \$37,171 | \$34,528 | \$37,962 | \$35,360 |
| 51-6091 Extruding, Forming, Pressing | \$40,355 | \$37,294 | \$38,867 | \$35,360 |
| 51-9023 Mixing and Blending Machine Operator | \$35,615 | \$34,008 | \$37,876 | \$35,651 |
| 51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers | \$34,263, | \$31,200 | \$33,989 | \$31,200, |
| 51-9199 General Production Labor | \$31,800 | \$29,994 | \$29,843 | \$28,704 |
| 53-3032 Heavy and Tractor-Trailer Truck Drivers | \$45,911 | \$41,600. | \$36,580 | \$35,194 |
| 53-7051 Industrial Truck and Tractor Operators | \$34,721 | \$29,640 | \$32,929 | \$31,200 |
| 53-7062 Material Handling Workers | \$32,064 | \$32,240 | \$30,018 | \$29,182. |
| 53-7064 Packers and Packagers | \$29,615 | \$26,520 | \$28,544 | \$27,310 |
| 53-7199 Material Moving Workers | \$36,771 | \$35,360, | \$30,758 | \$29,182. |

## Detailed Occupational Profiles

This section includes templates for 100 occupations. Data reported in each of these templates have already been reported in previous sections. What is new in these templates is that company characteristics provided are for companies reporting that job. These templates are labeled as Templates 1-100. Each template may be used as a standalone document for informational purposes.


[^0]:    ${ }^{1}$ Quarterly Census of Employment and Wages (BLS)

[^1]:    ${ }^{2}$ Bureau of Labor Statistics

[^2]:    ${ }^{3}$ Source: Quarterly Census of Employment and Wages (BLS)

[^3]:    ${ }^{4}$ BERC would like to caution readers that a number of respondents grouped all variations of "time off" and did not distinguish between sick leave, vacation, etc. Estimates given are conservative in nature and take this into account.

