

Labor Cost Inputs Used in the Employee Benefits Security Administration, Office of Policy and Research's Regulatory Impact Analyses and Paperwork Reduction Act Burden Calculations

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Labor Cost Estimation

This document describes the data and methodology used for estimating labor costs for use in the Employee Benefits Security Administration (EBSA), Office of Policy and Research (OPR)'s regulatory impact analyses and Paperwork Reduction Act burden calculations. A brief general description of the data and the process will be presented, followed by a more detailed description of the data sources and the basic calculations of labor costs for specific occupations associated within the table, "EBSA OPR Labor Cost Inputs," located at the end of this document.

Total Hourly Compensation

Total compensation includes not only wages, but also nonwage benefits. Nonwage benefits include: paid leave (vacations, holidays, sick leave); supplementary pay (premium pay for overtime and work on holidays and weekends, shift differentials, and nonproduction bonuses); retirement (defined benefit and defined contribution plans); insurance (life insurance, health benefits, short-term disability, and long-term disability insurance); and legally required benefits (Social Security and Medicare, Federal and State unemployment insurance taxes, and workers' compensation). Mean hourly wages by occupation for 2015 are obtained from the Bureau of Labor Statistics (BLS) National Occupational Employment and Wage Estimates, which is a product of the Occupational Employment Statistics (OES) survey from May 2015 found at <http://www.bls.gov/news.release/pdf/ocwage.pdf>. The BLS National Compensation Survey's (NCS) Employee Cost for Employee Compensation (ECEC) program produces estimates of wages and salaries as a percentage of total compensation within major occupation groups in Table 2 of the June 2016 release found at http://www.bls.gov/news.release/archives/ecec_06092016.pdf. Total hourly compensation is then calculated by dividing the mean hourly wage rate from OES (Column 1 in the table below) by the wages and salaries to the total compensation percentage from the ECEC (Column 2 in the table below).

Overhead Costs

Overhead costs are costs incurred that are not related to direct labor or direct materials and that must be paid on an ongoing basis regardless of the output of a firm. These costs are included in how much a firm will charge for its products or services and should also be incorporated into labor cost estimates.

The U.S. Census Bureau provides detailed total cost estimates for several categories of costs annually in their 2014 Annual Survey of Manufacturers (ASM), from November 2015, and their 2014 Service Annual Survey (SAS), from January 2016. The ASM provides data for each 6-digit NAICS (North American Industry Classification System) within the manufacturing sector and can be found at <http://www.census.gov/manufacturing/asm/index.html>. The SAS does not provide as much detail as the ASM, but it provides detailed cost data for at least every 2-digit NAICS with the exception of NAICS 55, management of companies and enterprises, and also provides some less aggregated levels of NAICS industries, all of which can be found at <http://www.census.gov/services/index.html>. The SAS also does not provide data on any government industries.

Given the detailed cost breakdown from the ASM and the SAS, total overhead cost for each 2-digit NAICS industry can be estimated. While this provides an estimate for total overhead cost by industry, in order to calculate an estimate for total overhead cost by occupation, the industry overhead cost needs to be converted to occupation overhead cost. The BLS Office of Employment Projections (EP) produces a matrix that provides the employment and the employment percentage of each NAICS industry that comprises an occupation based on data from the OES program staffing patterns. The 2014 full matrix can be found at http://www.bls.gov/emp/ep_data_occupational_data.htm. For an occupation, the overhead cost corresponding to the 2-digit NAICS code is multiplied by the percent of that occupation within the NAICS industry code. The allocated shares of overhead cost for each NAICS code within an occupation is then summed to estimate the yearly total overhead cost for all employees within an occupation. The yearly total overhead cost for all employees within an occupation is divided by the number of employees in the occupation to get the yearly total overhead cost per employee. This number is divided by 2080, the approximate number of work hours in one year, to estimate the hourly overhead cost for each employee within an occupation.¹

Labor Costs

Total hourly labor cost, as estimated through this method, is equal to the sum of the hourly total compensation and the hourly overhead cost for an occupation in 2015. Since there is a lag in data from BLS and Census Bureau, the 2015 total hourly labor costs are the most recent labor costs available. In order to estimate labor costs for 2016, the 2015 labor costs are adjusted for inflation using the BLS Employment Cost Index (ECI) program estimate of 2.3 percent increase in total labor cost for private industries from 2015 to 2016 in the July 2016 release found at <http://www.bls.gov/news.release/pdf/eci.pdf>. A 2.3 percent increase in the 2015 labor cost is applied to estimate the 2016 value. In most circumstances, these 2016 values will serve as EBSA OPR's labor cost inputs for regulatory impact analyses and Paperwork Reduction Act burden calculations for this year.

¹ 2080 hours assumes that an employee works 40 hours per week for 52 weeks per year. As this may overstate average employee hours, actual overhead costs may be greater than our estimate.

EBSA OPR Labor Cost Inputs

| Occupation | Standard Occupational Classification Code | Mean Hourly Wage (\$) | W&S as % of Total Compensation | Total Compensation (\$) = (1) / (2) | Overhead (\$) | Total Labor Cost (\$) | |
|--|---|-----------------------|--------------------------------|-------------------------------------|---------------|-----------------------|--------|
| | | | | | | (3) + (4) | 2016 |
| | | (1) | (2) | (3) | (4) | (5) | (6) |
| Management, business, and financial | | | | | | | |
| Financial Managers | 11-3031 | 64.58 | 66.8 | 96.68 | 66.95 | 163.63 | 167.39 |
| | | | | | | | |
| Professional and related | | | | | | | |
| <i>Professional</i> | | | | | | | |
| Family and General Practitioners | 29-1062 | 92.36 | 69.0 | 133.86 | 20.4 | 154.26 | 157.80 |
| Computer Programmers | 15-1131 | 40.56 | 69.0 | 58.78 | 45.39 | 104.17 | 106.57 |
| Computer Systems Analysts | 15-1121 | 43.36 | 69.0 | 62.84 | 54.38 | 117.22 | 119.92 |
| Lawyers | 23-1011 | 65.51 | 69.0 | 94.94 | 35.56 | 130.50 | 133.50 |
| Compensation and Benefits Manager | 11-3111 | 58.48 | 69.0 | 84.75 | 22.49 | 107.24 | 109.71 |
| Compensation, benefits, and job analysis specialists | 13-1141 | 31.30 | 69.0 | 45.36 | 45.36 | 90.72 | 92.81 |
| Accountants and Auditors | 13-2011 | 36.19 | 69.0 | 52.45 | 43.18 | 95.63 | 97.83 |
| Actuaries | 15-2011 | 53.15 | 69.0 | 77.03 | 98.92 | 175.95 | 179.67 |
| Personal Financial Advisors | 13-2052 | 56.76 | 69.0 | 82.26 | 115.66 | 197.92 | 202.47 |
| | | | | | | | |

| | | | | | | | |
|---|---------|-------|------|-------|-------|-------|-------|
| <i>Paraprofessional</i> | | | | | | | |
| Paralegals and Legal Assistants | 23-2011 | 25.19 | 69.0 | 36.51 | 34.36 | 70.87 | 72.50 |
| | | | | | | | |
| Registered nurses | | | | | | | |
| Licensed Practical and Licensed Vocational Nurses | 29-2061 | 21.17 | 67.2 | 31.50 | 14.46 | 45.96 | 47.02 |
| | | | | | | | |
| Office and administrative support | | | | | | | |
| Secretaries, Except Legal, Medical, and Executive | 43-6014 | 16.92 | 67.7 | 24.99 | 28.52 | 53.51 | 54.74 |
| Receptionists and Information Clerks | 43-4171 | 13.67 | 67.7 | 20.19 | 23.68 | 43.87 | 44.88 |
| Mail Clerks and Mail Machine Operators, Except Postal Service | 43-9051 | 14.39 | 67.7 | 21.26 | 41.5 | 62.76 | 64.20 |
| Medical Secretaries | 43-6013 | 16.50 | 67.7 | 24.37 | 16.76 | 41.13 | 42.08 |