

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 detailed material and the basic calculations of labor costs for specific occupations associated with 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 2014 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 2014 (<http://www.bls.gov/oes/tables.htm>). 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 2015 release found at http://www.bls.gov/news.release/archives/ecec_09092015.htm. 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 data does not provide as much detail

as the ASM, but 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 aggregate levels of NAICS industries, all of which can be found at <http://www.census.gov/services/index.html>. The SAS data 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 2014. Since there is a lag in data from BLS and Census Bureau, the 2014 total hourly labor costs are the most recent labor costs available. In order to estimate labor costs for 2015 and 2016, the 2014 labor costs are adjusted for inflation using the BLS Employment Cost Index (ECI) program estimate of 2.0 percent increase in total labor cost for private industries from 2014 to 2015 in the September 2015 release found at http://www.bls.gov/news.release/archives/eci_10302015.pdf. A 2.0 percent increase in the 2014 labor cost is applied to estimate the 2015 value and a 2.0 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	62.61	66.7	93.87	66.95	160.82	167.32
Professional and related							
Professional							
Family and General Practitioners	29-1062	89.58	69.1	129.64	20.40	150.04	156.10
Computer Programmers	15-1131	39.75	69.1	57.53	45.39	102.92	107.07
Computer Systems Analysts	15-1121	41.98	69.1	60.75	54.38	115.13	119.78
Lawyers	23-1011	64.17	69.1	92.87	35.56	128.43	133.61
Compensation and Benefits Manager	11-3111	57.05	69.1	82.56	22.49	105.05	109.30
Compensation, benefits, and job analysis specialists	13-1141	30.95	69.1	44.79	45.36	90.15	93.79
Accountants and Auditors	13-2011	35.42	69.1	51.26	43.18	94.44	98.25
Actuaries	15-2011	52.93	69.1	76.60	98.92	175.52	182.61
Personal Financial Advisors	13-2052	51.97	69.1	75.21	115.66	190.87	198.58
Paraprofessional							
Paralegals and Legal Assistants	23-2011	24.92	69.1	36.06	34.36	70.42	73.27
Registered nurses							
Licensed Practical and Licensed Vocational Nurses	29-2061	20.87	68.6	30.42	14.46	44.88	46.70
Office and administrative support							

Secretaries, Except Legal, Medical, and Executive	43-6014	16.59	67.6	24.54	28.52	53.06	55.21
Receptionists and Information Clerks	43-4171	13.38	67.6	19.79	23.68	43.47	45.23
Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051	14.02	67.6	20.74	41.5	62.24	64.75