

# Cost Study Manual

## Executive Summary

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This Cost Study Manual documents the procedures for preparing a Cost Study to compare the cost of a contractor's employee benefits to the industry average from a broad-based national benefit cost survey. The annual Employee Benefits Cost Study Comparison (Cost Study) assists with the analysis of contractors' employee benefits costs. The Contracting Officer (CO) may require corrective action when the average benefit per capita cost or the benefit cost as a percent of payroll exceeds the comparator group by more than five percent. For example, if per capita benefit costs for the comparator group are \$10,000 and the benefit costs as a percent of payroll for the comparator group are 20%, the threshold for the contractor's benefits as a percent of pay would be 20% plus 5%, or 25%, and the threshold for the contractor's per capita benefits cost would be \$10,000 plus 5% of \$10,000, or \$10,500.

In 2010, a Department of Energy (DOE) Cost Study template was developed by the Department and the Contractor Human Resources Council (CHRC) using tables published by the U.S. Department of Labor's Bureau of Labor Statistics (BLS). The template produces results that meet the contractual requirements to perform the annual Cost Study by using data from the DOE Workforce Information System (WFIS) and comparing benefits costs to a benchmark developed using BLS tables. Contractors may use alternatives to the DOE template to meet the contractual requirements with approval of the CO. Once a survey tool is selected, contractors must use the same tool in subsequent years unless a change in methodology is approved by the CO.

### ***Cost Study Data***

The template uses data for all active employees, including exempt, non-exempt non-bargaining, and bargaining, that is exported into a spreadsheet from WFIS under the Compensation & Benefits Profile Report. The data is then pasted as values in the template's WFIS Data tab. Total costs are converted to costs per FTE by dividing by the total active employee headcount. The BLS hourly costs are converted to costs per FTE by multiplying by 2,080 hours per year.

### ***Benchmark using BLS Tables***

The Contracting Officer needs to review and analyze the methods for selecting the comparator group to make a decision on whether or not to approve the use of the comparator group. The comparator group may be determined by independent benefits, actuarial, or management consultants; or it may be based on the BLS tables, as in the DOE template. The BLS publishes a broad based national survey of Employer Costs for Employee Compensation (ECEC).

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### **Calculations of Cost Ratios**

The benefits included in the Cost Study ratio are paid leave, health insurance, life and disability insurance, retirement and savings benefits, and post-retirement benefits (PRBs). Paid leave is included in the benefits and in the payroll. Legally required payments (Social Security, Medicare, Unemployment, and Workers' Compensation) are excluded. Pay-related benefit costs for paid leave, life and disability insurance, and retirement and savings benefits are shown as a percent of payroll. Benefit costs for health insurance and PRBs that are based on the number of covered employees and dependents are shown on a per capita basis per full time equivalent employee (FTE).

The pay-related benefits measured as a percent of payroll from the BLS tables are subtracted from the benefits measured as a percent of payroll for the contractor to determine if the five percent threshold is exceeded. For example, if the BLS Tables have pay-related benefits that cost 20% of payroll, and the contractor's percent is 24%, the excess is 4%, which is within the 5% threshold. If the BLS Tables have pay-related benefits that cost 20% of payroll, and the contractor's percent is 26%, the excess is 6%, which is over the 5% threshold. The spreadsheet also displays the results by adding the excess to a baseline of 100% to show if the benefits exceed 105%. For example, if the excess is 4%, the template will display 104%, which is within the 105% threshold.

The sum of the contractor's cost of the health insurance benefits and the value of the contractor's annual PRB accruals for active employees on a per capita basis is divided by the sum of the health insurance per capita cost from the BLS tables plus the average DOE PRB costs to determine if the five percent threshold is exceeded. For example, if the health insurance from the BLS Tables is \$7,500 and the average DOE PRB costs are \$2,500, the sum is \$10,000. If the contractor's per capita cost for health insurance and PRBs is \$10,400, the ratio is 104%, which is within the 105% threshold. If the contractor's per capita costs are \$10,600, the ratio is 106%, which is over the 5% threshold.

***The Contracting Officer may require corrective action when the average total benefit per capita cost or the total benefit cost as a percent of payroll exceeds the comparator group by more than five percentage points. Responsibilities of the Contracting Officer include documenting if the results are over or within the five percentage point threshold; documenting if corrective action is required or not; and documenting the corrective action or documenting why no corrective action was required, if applicable.***

### Development of Cost Study Template

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Most DOE contracts include a provision requiring contractors to conduct an employee benefit cost survey comparison annually. Prior to 2009, DOE contractors, for the most part, used the United States Chamber of Commerce (US COC) Annual Employee Benefits Survey to fulfill this contractual requirement. The US COC presented cost and frequency data on over 30 different benefits based on a voluntary survey that typically had responses from 400 to 1,000 employers each year. The survey detailed spending on legally required payments (Workers' Compensation, FICA, etc.) and a wide variety of benefit categories (including medically related benefits, payments for time not worked, and retirement and savings contributions). Costs for medically related benefits included costs for retiree medical insurance as reported by the survey participants and were shown as a percent of pay for active employees. Benefit costs to employers and employees were covered. In 2009, the US COC ceased publication of this survey.

In 2010, DOE and the Contractor Human Resources Council Cost Study Working Group collaborated to find an alternate to the US COC Survey by forming the CHRC Cost Study Subcommittee. Participants included Todd A. Beyers (Mission Support Alliance, Hanford), Denise DiMeglio (Brookhaven National Lab), John Greenquist (Savannah River Remediation), Ellen Leyba (DOE Headquarters), Martin McCaulay (DOE Headquarters), Cynthia McClintock (Savannah River Nuclear Solutions), Allen Roberson (Wackenhut Services, Savannah River), Rich Rons (Argonne National Lab), Melissa Rose (Wackenhut Services, Oak Ridge), Phil Sartell (Oak Ridge Institute for Science & Education), Mark O. Wagner (UT-Battelle, Oak Ridge National Lab), Cathy Wallin (Bechtel BSII), and Candace F. Wilkinson (CH2M-WG Idaho). The subcommittee developed a contractors' Cost Study template that contractors could elect to use to prepare spreadsheets for the annual Employee Benefits Cost Study Comparison. The template shows benefit costs on a per capita basis per FTE and as a percent of payroll and compares with costs reported by the U.S. DOL's Bureau of Labor Statistics (BLS).

#### **Cost Study Data**

The data source for contractor data is the WFIS data as of December 31st that is entered and approved by mid-March. The WFIS Defined Benefit (DB) plan contributions are overridden by the DB plan target normal cost on a not-at-risk basis which is found in the Pension Management Plan for the same plan year as the calendar year of data. The DB plan target normal cost measures the value of pension benefits earned by active employees for one year, and the DB plan contributions in WFIS could be greater than the normal cost if it includes an amortization payment an unfunded liability, or could be less than the normal cost if the plan is overfunded. The WFIS other post-retirement benefits (PRBs) including retiree medical dental, vision, prescription, and other benefits are overridden by the PRB plan service cost from the financial reporting for the fiscal year that ends in the calendar year of the WFIS data. The PRB service cost measures the value of benefits earned by active employees for one year, and the WFIS amount for PRBs is the pay-as-you-go cost for retirees and beneficiaries.

### BLS Tables

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The Bureau of Labor Statistics (BLS) is part of the U.S. Department of Labor (DOL). The BLS publishes the Employer Costs for Employee Compensation (ECEC), a product of the National Compensation Survey (NCS). The NCS is based on an unbiased set of sample employers and represents over 100 million private industry employees. The ECEC measures the average cost to employers for wages and salaries and benefits per employee hour worked. ECEC data on total compensation, wages and salaries, and benefits in private industry are produced annually for 15 metropolitan areas. The survey months are March, June, September, and December. Supplemental tables with occupational, establishment size and bargaining status series for detailed industries are available on the BLS website. The December tables are available by mid-March. The link to the Supplemental Tables can be found near the end of the BLS press release for the ECEC. For example, the December 2011 press release includes the text “Supplemental tables with occupational, establishment size, and bargaining status series for detailed industries” are available at



<http://www.bls.gov/news.release/pdf/ecec.pdf> and <http://www.bls.gov/ncs/ect/sp/ecsuptc21.pdf>.

#### ***BLS Tables used in Template***

The Cost Study template uses Supplementary Table 2 of the Employer Costs for Employee Compensation Supplementary Tables published by the BLS in December of each year.<sup>1</sup> Supplementary Table 2 has employer costs for workers in manufacturing industries. The title of the table is “Employer costs per hour worked for employee compensation and costs as a percent of total compensation: Private industry workers in manufacturing industries, by occupational group, establishment size and bargaining status, December 2011.” A 40% weight is given to the costs for the occupational group including management, professional, and related. A 60% weight is given to the costs for an establishment size of 500 workers or more. The weights were determined by the CHRC Cost Study Subcommittee as the weights that were the best fit for the typical DOE contractor. The manufacturing industry was selected because the North American Industry Classification System (NAICS) codes under manufacturing are the best match for the typical DOE contractor, as shown in the following table. The template updates the BLS tables annually.

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<sup>1</sup> Contractors may choose to replace Supplementary Table 2 with a table that is a better fit for their workforce and when submitting the Cost Study. Contractors using a different table should describe which table was used and explain why it is appropriate. Different tables and different weightings would need CO approval.

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## Manufacturing industries (NAICS Codes)

NAICS Code	Manufacturing Industry
332410	Nuclear reactors manufacturing
332420	Petroleum storage tanks, heavy gauge metal, manufacturing
332420	Nuclear waste casks, heavy gauge metal, manufacturing
325188	Nuclear fuels, inorganic, manufacturing
333414	Solar energy heating equipment manufacturing
335999	Linear accelerators manufacturing
335999	Atom smashers (i.e., particle accelerators) manufacturing
333611	Windmills, electric power, generation-type, manufacturing

### ***Minimum Standards for Alternatives to the Cost Study Template and BLS Tables***

The Cost Study template and the BLS tables should only be used by contractors who have concluded that both the template and BLS tables provide a reasonable approach to comparing benefit costs of comparable organizations in similar industries and size. Those contractors who conclude that the cost study template and BLS tables do not provide a reasonable comparison of organizations in similar industries and size should use an alternative comparator group or an alternative to the template, or both. In those circumstances where the contractor does not believe use of the cost study template or the BLS table is a viable option, the contractor should use another cost study approved by the contracting officer in fulfillment of its contractual requirement. A Cost Study report developed by a consultant must show the benefit costs for the major categories (i.e., paid leave, life and disability insurance, health insurance, retirement and savings, and post-retirement benefits), and must show each category as a percent of pay or on a per capita basis, or both, and show the Cost Study index as both a percent of pay and as a per capita cost.

Additionally, the consultant must identify cost elements included in each benefit category, compensation elements included in the payroll, number of the comparator group companies, a description of comparator companies (i.e., names of companies, category of industry, and company sizes), and a summary of the methodology used. The comparator group must consist of no more than 20 percent DOE contractors.

## **Benefits Included in the Cost Study**

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The Cost Study benefits are equal to the benefits in WFIS, excluding legally required payments, retiree life and health benefits, displaced worker insurance, defined benefit plan contributions, and other benefits such as cash awards; and adding the defined benefit plan normal cost. The costs are calculated for the employer-paid portion of benefits for active employees, shown as a total cost, and are not split for grandfathered and non-grandfathered employees, or incumbents and new hires.

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Both the Cost Study and the BLS tables include the following benefits for active employees: paid time off; insurance; and retirement. Benefits included in the BLS tables but excluded from the calculations used to produce the Cost Study results are supplemental pay and legally required benefits. Severance pay is included in both WFIS payroll and WFIS benefits, and excluded from both in the cost study.

The BLS tables exclude costs for PRBs because the BLS Tables measure costs for active employees and PRBs are typically funded on a pay-as-you-go basis for retirees. The Cost Study includes costs for PRBs using the service cost which is a measure of the cost of benefits accrued in one year for active employees. In the absence of PRB costs from a broad based national benefit cost survey, this cost study compares the contractor PRB service cost of a DOE contractor to a benchmark using the weighted average of all DOE contractors, with the annual per capita average equal to the total PRB service cost for all DOE contractors divided by the total active employee headcount for all DOE contractors.

### ***Paid Time Off***

Paid time off or paid leave includes vacation, holidays, sick leave, personal leave, parental leave; and other paid leave. Paid time off is measured as a percent of pay.

### ***Health Insurance***

Health insurance includes the employer cost for insured or self-insured medical, dental, prescription, vision, and miscellaneous medical costs. Health insurance is measured on a per capita basis.

### ***Life and Disability Insurance***

Life and disability insurance includes the employer cost for life insurance and death benefits, short-term disability, and long-term disability. Life and disability insurance benefits are measured as a percent of pay.

### ***Retirement and Savings***

Retirement and savings benefits include employer contributions to defined benefit plans and defined contribution plans. The cost for the defined benefit plan is the target normal cost for the year, not the cash flow for funding that is entered in WFIS. Exclusions are benefits for retirees such as retiree medical and retiree life insurance; displaced worker benefits, and retirement plan disbursements and expenses. Retirement and savings benefits are measured as a percent of pay.

### ***Post-Retirement Benefits (PRBs)***

PRBs include insured and self-funded retiree medical, dental, vision, prescription drugs, and other retiree health benefits. The cost for the PRB plan is the service cost from the financial statements for the fiscal year ending in the calendar year of the cost study data. The service

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cost is used instead of the cash flow for funding PRBs that is entered in WFIS. PRBs are measured on a per capita basis.

### ***Submitting Cost Studies***

All cost studies along with supporting documentation (i.e., the WFIS report, BLS Data Tables, and an explanation of the methodology if it differs from the standard) are to be sent electronically from the contractors to the contracting officers. For cost studies using the template, it is not necessary for the contractor to have their actuary or benefits consultant certify the results. If the Cost Study uses the template with an alternative BLS table for the comparator group, actuarial or benefits consultant certification is not necessary, but the documentation should include an explanation of why the alternative BLS table is a better fit for the contractor's workforce. For cost studies that are not based on the template or that do not use BLS tables, the submission should include a communication from the actuary or benefits consultant certifying the validity of the results. If the study indicates the contractor has exceeded the DOE benchmark for one or both measures, the contractor should submit an analysis of the factors contributing to the above market costs and, if desired, a request for a Corrective Action Plan Waiver with supporting justification.

### ***Field Office Review and Corrective Action Plan***

When the cost of the contractor's total employee benefits, as a percent of payroll or on a per capita basis, exceeds the DOE standard of a Cost Study index of no more than 105.0 percent, the CO may, no later than 14 calendar days after receipt of the Cost Study, notify the contractor to submit a corrective action plan (CAP). The notification letter shall require the contractor to develop and submit an acceptable CAP for the CO's review and approval no later than 60 calendar days after the date of the CO notification letter. The corrective action needs to be implemented within 2 years.

If the contractor fails to submit an acceptable CAP during the 60-day submission period and the CO determines that there is a legitimate reason for the contractor's delay, the CO may allow a 30 calendar day extension for the contractor to submit an acceptable CAP. The CAP extension letter shall include the following language: "DOE reserves its right to implement a corrective action by withholding DOE reimbursement of the appropriate portion of the total employee benefits cost, if (the contractor) fails to submit an acceptable CAP by the conclusion of the extension period."

Should the contractor fail to submit an acceptable CAP by the end of the extension period, the CO shall issue a final notification letter to advise the contractor of DOE's intent to withhold the reimbursement of the portion of employee benefits cost attributed to the Cost Study score net over the DOE standard index 30 calendar days from the date of the final notification letter. This net Cost Study score represents the level of benefits above the 105 threshold.

In calculating the non-reimbursable portion of the employee benefits costs attributed to the net Cost Study score, the CO should request alternative Cost Study scenarios that would align the

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contractor's benefits most closely to a 105 index. The request for alternative Cost Study scenarios should be included in the final notification letter. Alternative scenarios should be prepared by an independent benefits professional with an opinion on the impact on cost reduction. If scenarios are not provided, by the end of the 30 day notification period, the CO may consider unallowable costs based upon the results of the Cost Study report.

DOE policy recognizes there are circumstances when DOE approval of a CAP exemption/waiver may be warranted. CO approval of CAP exemption/waiver requests may be made only when there is clear and convincing evidence that the DOE's interest is protected from the reimbursement of unreasonable costs. The CO shall obtain approval of a CAP waiver/exemption from the Head of Contracting Activity (HCA), with concurrence from the Senior Procurement Executive, except under the following circumstances:

Deviation is statistically insignificant. When the contractor's Cost Study index exceeds the DOE standard by less than one percentage point, the CO may consider the difference to be "statistically insignificant" and approve the contractor's request for a CAP waiver. It is important to remember that a Cost Study index of 105 does not represent average cost of benefits. The average is 100. A Cost Study index of 105 means that the contractor's cost of benefits is 5 percent greater than the average value of the total benefits of the comparator group.

Costs are deemed allowable under FAR. Pursuant to FAR 31.3, Contracts with Educational Institutions, the allowability of cost to government contracts with educational institutions are subject to the cost principles of the Office of Management Budget (OMB) Circular A-21. Pursuant to Circular A-21, the cost of the university's corporate employee benefit programs is reasonable and allowable if DOE's costs conform to the established policies of the institutions consistently applied. In lieu of a CAP on a corporate benefits program, the CO shall ensure that periodic audit of indirect cost including the cost of employee benefits be conducted to ensure that the contractor's methodology for developing and allocating the corporate employee benefits cost to the DOE contract is consistent with costs charged to non-DOE components.

BenVal is within 105 percent. When the contractor submitted benefit value report (BenVal) reveals that benefits provided to contractor employees do not exceed the DOE Standard of 105 percent.

The exceptions above only apply if the HCA permits them. As a minimum, a CAP should document cost savings projections that have been verified by the contractor's benefit provider or an actuary.

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### Sample Tables

#### Reconciliation of WFIS Benefits and Cost Study Benefits<sup>2</sup>

	Dollar Amount
WFIS Total Benefits	51,078,358
Legally Required Payments	-8,558,798
Displaced Worker	-17,670
Post-Retirement Benefit (PRB) Service Cost	3,778,600
Post-Retirement Benefit (PRB) Contributions	-3,566,490
Defined Benefit Plan Normal Cost	6,860,000
Defined Benefit Plan Contributions	-7,334,760
Retirement Disbursements	-0
Retirement Expenses	-401,540
Severance Pay	-95,190
Performance Incentive Compensation	-955,890
Cash Award	-230,280
Non Performance-Based Bonuses	-434,340
Facility Closing Retention Bonus	-14,820
Voluntary Separation Bonus	-0
Other Benefits	-227,430
Cost Study Benefits	39,879,750

<sup>2</sup> Color coded numbers on the above chart correspond to the color coded numbers on the following chart.

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### Sample WFIS Data <sup>3</sup>

	Number of Employees
<b>Exempt:</b>	<b>1,000</b>
<b>Bargaining Unit:</b>	<b>200</b>
<b>Nonexempt Nonbargaining Unit:</b>	<b>200</b>
<b>Retiree:</b>	<b>1,000</b>

Types of Expenditure	WFIS Benefits	Cost Study Benefits
<b>Paid-Time off:</b>	<b>13,951,320</b>	<b>13,951,320</b>
<b>Severance Pay:</b>	<b>95,190</b>	N/A
<b>Performance Incentive Compensation:</b>	<b>955,890</b>	N/A
<b>Cash Award:</b>	<b>230,280</b>	N/A
<b>Non Performance-Based Bonuses:</b>	<b>434,340</b>	N/A
<b>Facility Closing Retention Bonus:</b>	<b>14,820</b>	N/A
<b>Voluntary Separation Bonus:</b>	<b>0</b>	N/A
<b>Legally Required Insurance:</b>	<b>8,558,798</b>	N/A
<b>Life/Death Benefits:</b>	<b>336,300</b>	<b>336,300</b>
<b>Medical/Medically Related:</b>		
<b>Insured Active Medical:</b>	<b>3,652,560</b>	<b>3,652,560</b>
<b>Self-Insured Active Medical:</b>	<b>5,186,580</b>	<b>5,186,580</b>
<b>Dental Active:</b>	<b>784,890</b>	<b>784,890</b>
<b>Vision/Prescription-Active:</b>	<b>858,990</b>	<b>858,990</b>
<b>Misc. Medical-Active:</b>	<b>33,630</b>	<b>33,630</b>
<b>PRB Service Cost</b>		<b>3,778,600</b>
<b>Insured Retiree Medical:</b>	<b>1,057,350</b>	N/A
<b>Self-Insured Retiree Medical:</b>	<b>1,695,750</b>	N/A
<b>Dental-Retiree:</b>	<b>231,420</b>	N/A
<b>Vision/Prescription-Retiree:</b>	<b>490,770</b>	N/A
<b>Misc. Medical-Retiree:</b>	<b>91,200</b>	N/A
<b>Short-Term Disability:</b>	<b>220,590</b>	<b>220,590</b>
<b>Long-Term Disability:</b>	<b>246,810</b>	<b>246,810</b>
<b>Displaced Worker:</b>	<b>17,670</b>	N/A
<b>Retirement:</b>		
<b>Defined Contribution:</b>	<b>3,969,480</b>	<b>3,969,480</b>
<b>Defined Benefits:</b>	<b>7,334,760</b>	<b>6,860,000</b>
<b>Disbursements:</b>	<b>0</b>	N/A
<b>Expenses:</b>	<b>401,540</b>	N/A
<b>Other:</b>	<b>227,430</b>	N/A
<b>TOTAL BENEFITS</b>	<b>51,078,358</b>	<b>39,879,750</b>

<sup>3</sup> Color coded numbers on the above chart correspond to the color coded numbers on the previous chart.

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### Reconciliation of WFIS Payroll and Cost Study Payroll <sup>4</sup>

	Dollar Amount
WFIS Gross Payroll	102,236,910
Severance Pay	-95,190
Relocation – Direct and Other	-428,640
Education Allowance	-103,740
Cost Study Payroll	101,609,340

Types of Expenditure	WFIS Payroll	Cost Study Payroll
Annual Base Pay	94,956,870	94,956,870
Overtime Pay:	4,124,520	4,124,520
Severance Pay:	95,190	N/A
Other Pay:		
Shift Differential:	234,840	234,840
Lump Sum Payment:	0	0
Performance Incentive Compensation:	955,890	955,890
Cash Award:	230,280	230,280
Non Performance-Based Bonuses:	434,340	434,340
Facility Closing Retention Bonus:	14,820	14,820
Voluntary Separation Bonus:	0	0
Relocation/Housing Allowance-Direct:	265,620	N/A
Relocation/Housing Allowance-Other:	163,020	N/A
Remote/Isolation Pay:	92,340	92,340
Hazard Duty Pay:	4,560	4,560
Expatriate Allowance:	72,390	72,390
Education Allowance-Pay:	103,740	N/A
Other Overtime Payment:	0	0
Geographic Differential Pay:	0	0
Dependent Care:	0	0
Misc. Compensation:	488,490	488,490
<b>TOTAL PAYROLL</b>	<b>102,236,910</b>	<b>101,609,340</b>

<sup>4</sup> Color coded numbers on the top chart correspond to the color coded numbers on the bottom chart.

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### Sample BLS Table

The following sample BLS table with DOE PRB costs shows that the comparator group's Cost Study pay-related benefits are 19.1% of payroll, including 11.1% for paid leave, 0.7% for life and disability insurance, and 7.3% for retirement and savings. The per capita cost for benefits is \$11,538, including \$8,840 for health insurance and \$2,698 for PRBs. The thresholds are based on the BLS table percent plus five percentage points and the per capita cost times 105%. A contractor's pay-related benefits would be within the 5% threshold if the benefits did not exceed 24.1% of payroll. A contractor's per capita benefits would be within the threshold if they did not exceed 105% of \$11,538, or \$12,115. The BLS data is entered on the BLS tab of the spreadsheet template, and the results from the BLS tab are linked to the results tab.

<b>US Bureau of Labor Statistics Employer Costs for Employee Compensation December 2011 Supplementary Table 2, weighted average: Management, professional, and related (40%) &amp; 500 workers or more (60%) Including DOE PRB Costs</b>		
	<b>Percent of Payroll</b>	<b>Annual Cost per FTE</b>
<b>A. PAYROLL</b>	100.0%	\$81,994
<b>B. PAID LEAVE</b>	11.1%	
<b>C. LIFE AND DISABILITY INSURANCE</b>	0.7%	
<b>D. HEALTH INSURANCE</b>		\$8,840
<b>E. RETIREMENT AND SAVINGS</b>	7.3%	
<b>F. POST-RETIREMENT BENEFITS (PRBs)</b>		\$2,698
<b>G. COST STUDY BENEFITS</b>	19.1%	\$11,538

### Sample Cost Study Results

The following table shows the percent-of-pay Cost Study results for a contractor with average pay of \$72,758 compared to the BLS average pay of \$81,994, pay-related benefits of 25.1% of pay compared to a BLS percent of 19.1%, and a per capita benefit cost of \$10,221 compared to the BLS plus PRB per capita cost of \$11,538. The contractor's benefits as a percent of pay are 6% higher (25.1% minus 19.1%) than the BLS percent of pay, resulting in a contractor benefit index of 106%. The contractor's benefits on a per capita basis are \$1,327 less than the BLS plus PRB per capita cost, resulting in a contractor benefit index of 88.5% (\$10,221/\$11,538). The sample contractor is over the 5% threshold as a percent of pay and within the 5% threshold on a per capita basis.

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### Percentage of Payroll Comparison

		Dollar Amount	Contractor's Percent	BLS + PRB Percent	Pct. Above Average
<b>A.</b>	<b>PAYROLL</b>	\$101,609,340	100.0%	100.0%	
<b>B.</b>	<b>PAID LEAVE</b>				
	Vacation	\$5,582,580	5.5%	5.6%	-0.1%
	Holidays	\$3,789,930	3.7%	3.2%	0.5%
	Sick and Personal	\$4,578,810	4.5%	2.3%	2.2%
	<b>TOTAL B</b>	<b>\$13,951,320</b>	<b>13.7%</b>	<b>11.1%</b>	<b>2.6%</b>
<b>C.</b>	<b>INSURANCE</b>				
	Life	\$336,300	0.3%	0.2%	0.1%
	Health	\$10,516,650			
	Short-Term Disability	\$220,590	0.2%	0.2%	0.0%
	Long-Term Disability	\$246,810	0.2%	0.3%	-0.1%
	<b>TOTAL C</b>	<b>\$11,320,350</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.0%</b>
<b>D.</b>	<b>RETIREMENT AND SAVINGS</b>				
	Defined Benefit Normal Costs	\$6,860,000	6.8%	4.2%	2.6%
	Defined Contribution	\$3,969,480	3.9%	3.1%	0.8%
	<b>TOTAL D</b>	<b>\$10,829,480</b>	<b>10.7%</b>	<b>7.3%</b>	<b>3.4%</b>
<b>E.</b>	<b>POST-RETIREMENT BENEFITS (PRBs)</b>	<b>\$3,778,600</b>			
<b>F.</b>	<b>COST STUDY RESULTS</b>	<b>\$39,879,750</b>	<b>25.1%</b>	<b>19.1%</b>	<b>6.0%</b>
	Contractor's Benefits Index				<b>106.0%</b>
	Baseline plus 5%				<b>105.0%</b>
	Excess of Benefit Index Over 105%				<b>1.0%</b>

### Per Capital Cost Comparison (1,400 FTEs)

		Dollar Amount	Contractor's Per Capita	BLS + PRB Per Capita	Per Capita Cost Diff.
<b>A.</b>	<b>PAYROLL</b>	\$101,609,340	\$72,578	\$81,994	
<b>B.</b>	<b>PAID LEAVE</b>				
	Vacation	\$5,582,580			
	Holidays	\$3,789,930			
	Sick and Personal	\$4,578,810			
	<b>TOTAL B</b>	<b>\$13,951,320</b>			
<b>C.</b>	<b>INSURANCE</b>				
	Life	\$336,300			
	Health	\$10,516,650	\$7,512	\$8,840	-\$1,328
	Short-Term Disability	\$220,590			
	Long-Term Disability	\$246,810			
	<b>TOTAL C</b>	<b>\$11,320,350</b>	<b>\$7,512</b>	<b>\$8,840</b>	<b>-\$1,328</b>
<b>D.</b>	<b>RETIREMENT AND SAVINGS</b>				
	Defined Benefit Normal Costs	\$6,860,000			
	Defined Contribution	\$3,969,480			
	<b>TOTAL D</b>	<b>\$10,829,480</b>			
<b>E.</b>	<b>POST-RETIREMENT BENEFITS (PRBs)</b>	<b>\$3,778,600</b>	<b>\$2,699</b>	<b>\$2,698</b>	<b>\$1</b>
<b>F.</b>	<b>COST STUDY RESULTS</b>	<b>\$39,879,750</b>	<b>\$10,221</b>	<b>\$11,538</b>	<b>-\$1,327</b>
	Contractor's Benefits Index				<b>88.5%</b>
	Baseline plus 5%				<b>105.0%</b>
	Excess of Benefit Index Over 105%				<b>-16.5%</b>

## Cost Study Manual

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### Formulas

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*Payroll = Gross Payroll – Severance Pay – Relocation or Housing Allowance  
– Education Allowance*

*Paid Leave = Vacation + Holidays + Sick and Personal*

*Life and Disability Insurance = Life + Short Term Disability + Long Term Disability*

*Retirement and Savings = Defined Benefit + Defined Contribution*

*Cost Study Benefits Measured as a Percent of Pay  
= Paid Leave + Life and Disability Insurance + Retirement and Savings*

*Cost Study Results as a Percent of Pay =  $\frac{\text{Cost Study Benefits Measured as a Percent of Pay}}{\text{Payroll}}$*

*Percentage Points Above Average =  
Contractor's Cost Study Results as a Percent of Payroll –  
BLS Cost Study Results as a Percent of Payroll*

#### Percentage Point Method

*If (Percentage Points Above Average) ≤ 5% then Contractor's Cost within 5% of Comparator*

*If (Percentage Points Above Average) > 5% then Contractor's Cost over 5% of Comparator*

#### Benefit Index Method

*Contractor's Benefits Index = 100% + Percent Above Average*

*Baseline plus 5% = 105%*

*If (Contractor's Benefit Index – (Baseline plus 5%))  
≤ 0% then Contractor's Cost within 105% of Comparator*

*If (Contractor's Benefit Index – Baseline plus 5%)  
> 0% then Contractor's Cost over 105% of Comparator*

*Cost Study Benefits Measured on a Per Capita Basis = Health Insurance + PRBs*

*Cost Study Results on a Per Capita Basis =  $\frac{\text{Cost Study Benefits on a Per Capita Basis}}{\text{BLS plus DOE Benefits on a Per Capita Basis}}$*