

J.R. Huston Enterprises, Inc.

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[CT] Chapter 7

[CT] How to Calculate Labor Burden

Key terms

F.I.C.A. (Federal Insurance Contributions Act)

F.U.T.A. (Federal Unemployment Tax Act)

General Liability Insurance (GLI)

Holidays

Medical/Health Insurance

S.U.T.A. (State Unemployment Tax Act)

Sick days

Timely and accurate feedback (TAF)

Umbrella Insurance

Vacations

Well days

Workers' Compensation Insurance (WCI)

[OH] **PURPOSE:** To explain how to calculate labor burden

[OH] **INTRODUCTION**

Labor burden consists of those items (FICA, FUTA, SUTA, workers' compensation insurance WCI, general liability insurance GLI, etc.) that can be directly correlated to office and field payroll, and which vary in direct proportion to it. The labor burden added to field labor is a direct cost. The labor burden added to G&A overhead payroll is an indirect G&A cost. It's calculated as a percentage that's then applied to field and office (or G&A administrative) payroll.

When calculating the labor burden to be applied to prevailing wage or rated government jobs, you should review the bid documents and specifications to ensure that you're using the correct labor rates with the appropriate fringe benefits. In some cases, you may be duplicating items

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included in the fringe benefits when calculating your company labor burden amount in the bid. You may want to adjust your company labor burden accordingly. Check your bid documents and specifications, or contact your contract administrator to ensure that the figures that you're using are correct.

[A] SET PERCENTAGES

Most labor burden items (FICA, FUTA, SUTA, WCI, GLI) are assigned to you as a fixed percent that will vary little when calculated into your labor burden. For instance, FICA is currently 7.65 percent. This doesn't change, whether you're calculating labor burden for prevailing wage projects or non-rated ones.

[A] ACCUMULATED WORK TIME

Other labor burden items, such as sick pay, paid holidays, and/or vacation time, are based on accumulated paid non-work time (usually days or man-hours) and need to be calculated differently when bidding rated or non-rated jobs.

The usual range for labor burden in the United States is between 12-15 percent for office personnel and 20-35 percent for field personnel. Tree crews will usually have a much higher labor burden rate, primarily due to their high workers' compensation insurance rate.

The labor burden in Canada generally runs 10-20 percent (plus or minus 2-3 percent) for both office and field personnel. This is primarily due to the method by which Canada handles its health insurance, workers' compensation insurance, and FICA and FUTA equivalents.

[A] Reviewing Labor Burden "Budget-to-Actual"

Labor burden calculations should be reviewed every four to six months and adjusted whenever your insurance rates or experience modification change. You should also review and adjust your labor burden if you're bidding rated jobs and haven't done so in the recent past.

Some companies actually have accounting software that allows them to produce financial statements that display labor burden "budgeted" for actual field and office payroll, compared to "actual" accumulated expenses for labor burden items. For example, if labor burden is calculated to be 32 percent for field-labor payroll, the accounting software will make the calculations and then compare the result (in dollars and as a percent) to actual dollars spent for FICA, FUTA, WCI, GLI, holiday pay, vacation pay, etc. This is an excellent method for ensuring that your calculated labor burden percentages are correct.

Another method for accomplishing the same thing is to establish a labor burden checking account into which you deposit and accumulate labor burden funds. The amount is determined simply by multiplying your payroll (e.g., \$3,000) by your labor burden percent (e.g., 32 percent).

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That amount (\$960) is then deposited into the labor burden checking account. These funds are then accumulated, and all labor burden items (including holidays, vacations, etc.) are paid from that account.

If your labor burden percentages are correct, you should be able to pay all labor burden expenses from that account. If you can't cover labor burden expenses from it, your calculations are probably wrong.

[B] Use of Funds

Don't be too hasty to assume that the excess funds accumulated in this account can be withdrawn and spent for non-labor burden expense purposes.

****How it works - start****

A contractor in the Southwest who thought he had extra money to spend in the last month of his fiscal year, which was also the last month of the calendar year. He then proceeded to spend it (not all of it wisely, I might add) on non-essentials. A few months later, he received two bills, for a combined total of over \$40,000, for workers' compensation insurance and general liability insurance premiums that were due for the previous year.

Although he had charged the correct amount for labor burden on his jobs, he didn't collect and accumulate it throughout the year. Once his insurance company did its annual audit, it determined that his business had almost doubled in the previous 12 months, as had his payroll. Because his insurance premiums were based on a much lower projected payroll amount for the year, he only paid half of what he should have paid. Although he included the correct amount of labor burden in his bids and collected the correct amount of dollars from his customers to cover it, he spent the money on non-labor burden items, thinking the extra money was additional net profit.

****How it works – end****

****Box text - Don't just charge the correct amount for labor burden, but save and accumulate this amount in order to ensure that it's used to pay labor burden expenses.****

Don't just charge the correct amount for labor burden, but save and accumulate this amount in order to ensure that it's used to pay labor burden expenses.

[A] View Labor Burden as an Incentive

Labor burden items (such as vacation pay, holiday pay, medical and/or dental insurance, sick pay, etc.) *must be earned*. I've had contractors ask me if they should provide various types of benefits, and whether these benefits would serve as an incentive to productivity. Let me use some examples to explain my answer.

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****How it works – start****

One contractor provided virtually everyone in his field crew with a minimum of two weeks vacation, six paid holidays and three sick days per year. Medical and dental benefits were also provided. Labor burden ran at well over 40 percent for the company. This company was very profitable, yet competitive with its pricing.

The key was that this company's field crew *earned* all these benefits. All had been with the company for at least eight years. They were budget- and production-oriented and they produced. An extremely high quality standard had been established and achieved throughout the company. Things were done right the first time, and mistakes were not tolerated. This company is still going strong today, and the owner still rewards his people for their results.

Another company provided similar benefits, but the field was never run properly. Project budgets and standards weren't clearly identified in the bidding process, nor were they (nor could they be) communicated clearly to the field. The owner thought he could increase productivity if he provided increased benefits (that is, labor burden). In reality, he actually rewarded his crew for poor results.

This company self-destructed and is no longer in existence. Ultimately, it was the owner's fault, because he failed to run his company effectively.

****How it works – end****

My point is this: vacation pay, holiday pay, health insurance plans, etc., don't significantly increase productivity, in and of themselves. They should be viewed as a reward for work well done. You can't just "throw" money and benefits at people and expect increased productivity.

If you want to *increase productivity* (any productivity), provide your people with:

- Well-defined, reasonable *goals* and *budgets*
- Timely and accurate *feedback*
- Fair-market *wages*
- Results-oriented *incentives*

You won't necessarily increase productivity by increasing your labor burden items.

[A] **Calculating Labor Burden**

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Figure 7.1 displays the labor burden calculations for a company with multiple divisions. Office labor calculations are also included in the diagram.

****(FIGURE 7.1 LABOR BURDEN CALCULATION SAMPLE)****

Perhaps your entire company consists of only construction, or only maintenance, or only irrigation, or only tree service; or perhaps you might choose to lump your entire labor force as one labor division. This is fine, but once a division accounts for more than 20 percent of your gross annual sales, I'd encourage you to separate it in your financial statements and calculate its own labor burden.

Notice that office labor burden has no labor burden percentage figure for general liability insurance, vacation pay, holiday pay, sick pay, or medical and health insurance. These items, except for general liability insurance, are included in general and administrative (G&A) overhead totals for these people.

In the event an individual's payroll amount (whether on salary or paid on an hourly basis) is partly in G&A overhead and partly in field payroll, split the burden amounts accordingly.

For instance, if 50 percent of an owner's time is spent working in the field and the other 50 percent on administrative tasks, you should put half of the vacation time, holiday pay, sick pay, and medical insurance premiums in G&A overhead and the other half in the respective field division labor burden category.

Please note that labor burden includes only the portion that's paid by the company for that item. The portion for FICA, FUTA, and SUTA that's taken out of an individual's gross payroll amount is not included in our labor burden calculations.

Let's explain labor burden step-by-step.

In our calculations, we'll display decimals as percentages. For example: .27 is 27 percent and .008 is .8 percent. Some labor burden items will have "caps." This means the rate only applies for a certain amount of payroll on each individual. For instance, a state's SUTA rate may be capped at \$15,000 for any given year. This means the SUTA amount is only paid on the first \$15,000 of payroll per individual per year. Accumulated payroll amounts above the \$15,000 cap for a specific individual are exempt from the rate.

We won't apply these caps in our examples, as they're generally insignificant and very difficult to calculate accurately. However, when I prepare a budget using our budget software, it takes these caps into consideration. Use either Exhibit 4 for the United States or 5 for Canada to calculate your labor burden.

[B] **FICA (Federal Insurance Contributions Act)**

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The present FICA rate is .0765 (or 7.65 percent). Enter .0765 into the respective columns.

[B] FUTA (Federal Unemployment Tax Act)

The present FUTA rate is .008 (or .8 percent). Enter .008 into the respective columns.

[B] SUTA (State Unemployment Tax Act)

Enter the appropriate SUTA rate for your respective state and/or county, if applicable.

If there's a ceiling (or cap) on what you have to pay for an individual (e.g., SUTA is paid only on the first \$7,000 of an individual's gross annual payroll), you could use the method below to calculate the correct percentage that will be entered into labor burden. Please note that I include this example for instructional purposes only.

You have eight people on payroll. The SUTA rate is 3.5 percent. The SUTA ceiling is \$7,000. Therefore, you pay 3.5 percent on the first \$7,000 of payroll for a specific individual. Once payroll for the year exceeds \$7,000 for that individual, you're exempt from further SUTA taxes (in this example only).

Three employees earn more than \$7,000 per year, for a total of \$45,000. The remaining five people earn under \$7,000, for a total of \$25,000. You calculate your labor burden SUTA rate as follows:

A. For the three employees earning more than the cap:

(1). $3 \text{ (# of people)} \times \$7,000 \text{ (the cap)} = \$21,000$

(2). $\text{Multiply the } \$21,000 \times .035 = \735

B. For the remaining five employees earning less than the cap:

(1). $\$25,000 \text{ (combined payroll)} \times .035 = \$875.$

(2). $\text{Total projected SUTA payment: } \$735 + \$875 = \$1,610$

C. Divide the total projected SUTA payment by the total projected payroll for the company (or the respective division).

$$\$1,610 \div (\$45,000 + \$25,000) = \$1,610 \div \$70,000 = .023 = 2.3\%$$

You'd use 2.3 percent (not 3.5 percent) for your SUTA labor burden percentage.

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[B] Workers' Compensation Insurance

Enter the respective **Workers' Compensation Insurance (WCI)** percentage in the appropriate division column.

Factor in your experience modification, if applicable. A WCI rate of 7 percent would be adjusted to 6.3 percent if your experience modification rate was .9, or 90 percent.

[B] General Liability Insurance and Umbrella Insurance Policies

These labor burden items are calculated for field company or division payroll only, and are indicated as such on your policy.

General liability insurance (GLI) and **umbrella policy** rates are sometimes difficult to translate into labor burden percentages. However, with a little effort, or a phone call to your insurance agent, you should be able to obtain the needed information for your policy.

We'll combine these two types of insurance into one labor burden percent category:

(a). GLI

Your policy will usually display GLI insurance rates in one of two ways:

(1). Rate per thousand. This method indicates your rate as a dollar amount of premium for each \$1,000 of field payroll.

For instance, a rate of \$29 per thousand will translate into a GLI rate of .029, or 2.9 percent. You divide \$29 by \$1,000 to obtain the rate.

If you have no umbrella premium, you'd use 2.9 percent as your GLI labor burden percent.

(2). Premium per total payroll. This method simply states that your premium is based on a certain amount of payroll.

If your company/division payroll is \$50,000 per year and your premium is \$1,450 per year, divide the annual premium by the projected payroll amount (i.e., $\$1,450 \div \$50,000 = .029$, or 2.9 percent).

If you have no umbrella policy, you'd again use 2.9 percent as your GLI labor burden percent.

(b). Umbrella Policy

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If your policy includes an umbrella feature, simply divide the premium amount by the projected payroll amount on the policy.

For an annual premium of \$600, it would be \$600 divided by \$50,000, or .012 (which is 1.2 percent). Add the .012 to your GLI portion amount (which we determined to be .029) in your GLI labor burden percent. In this case, it would equal .041, or 4.1 percent.

If your policy doesn't provide a projected annual payroll amount, or if you can't find the information you need to calculate your general liability insurance labor burden percent, contact your insurance agent.

(c). Average National Rates

Rates for the GLI portion of the labor burden factor usually range from 1.5 to 3.5 percent nationally.

If your GLI labor burden percent is 3.5 percent or higher, it's time to shop around for insurance coverage. Contact several insurance agents three to four months before your present policy expires. Be sure to provide exactly the same information to each agent for quote purposes. Otherwise, when you compare the quotes, you won't be comparing apples to apples.

Inform your current agent of what you're doing (if you'd like, mention that I told you to do so). You may be surprised at how creative and competitive your current carrier can become when faced with some competition.

[B] Vacations

To obtain the labor burden **vacation** percent, determine the total weeks of paid vacation for the field labor force, for the company as a whole, or for a particular division. Divide that number by the total number of actual weeks worked by the company (or respective division). Don't include downtime (see chapter 8 for a detailed explanation), equipment repair time, paid holidays, paid vacations, paid sick days, etc., in the actual weeks worked.

****How it works-start****

To illustrate, ABC Landscape and Irrigation Company has three field laborers who each work 40 weeks a year. The average work week per man is 45 man-hours (five days a week x nine man-hours per day). Everyone receives four paid holidays. One individual receives two weeks paid vacation during the season, another receives one week and the third individual doesn't qualify for a paid vacation.

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From reviewing past payroll records (time cards and memory), the owner determines that he'll budget 40 man-hours per season per field-crew member for downtime. Equipment repairs will total 20 man-hours per field-crew member per season.

Actual work weeks are computed as follows:

A. Dividing weeks by weeks

Total paid vacation weeks	3
Approximate total man-hours paid per year:	
45 (hrs/wk) x 40 (wks/yr) x 3 (men)	5,400
Minus paid holiday man-hours: 3 (men) x 4 (days) x 8 (hrs/day)	-96
Minus paid vacation man-hours: 3 (wks) x 40 (hrs/wk)	-120
Minus projected downtime: 3 (men) x 40 (hrs/yr)	-120
Minus equip. repair time: 3 (men) x 20 (hrs/yr)	<u>-60</u>
Actual field worked	5,004
Convert to actual weeks worked:	
5,004 man-hours ÷ 45 average man-hours/week	111
Convert to vacation labor burden decimal:	
Divide vacation weeks by actual weeks worked	.027

$$3 \text{ paid vacation weeks} \div 111 \text{ work weeks} = .027 \text{ or } 2.7 \text{ percent}$$

B. Dividing man-hours by man-hours (a more accurate method)

Total vacation man-hours: 3 paid vacation weeks x 40 hrs/wk	120
Total actual man-hours worked	5,004

$$\text{Vacation labor burden percent: } 120 \text{ man-hours} \div 5,004 \text{ man-hours worked} = .024 \text{ or } 2.4 \text{ percent}$$

****How it works-end****

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[C] Comparison

Notice that if we hadn't deducted downtime man-hours, holidays, etc., from our actual weeks worked, our vacation labor burden decimal would have been higher in both cases:

Method "A"

5,400 man-hours \div 45 man-hours/week = 120 actual weeks worked.

3 paid vacation weeks \div 120 = .025 or 2.5 percent.

Method "B"

Paid vacation man-hours = 120 \div 5,400 (approximate total man-hours paid) = .0222 or 2.2 percent.

It's not a lot of difference, but the higher decimals (.024 and .027) are more accurate calculations.

[B] Holidays

Because we've already done most of work determining the vacation labor burden decimal, calculating **holiday** labor burden will be much easier. Let's continue using the above example:

A. Dividing days by days

Total paid holidays: 3 (men) x 4 (paid holidays) = 12 total paid holidays

Total man-days worked per year:

5,004 actual man-hours worked per year \div 9 man-hours per day per man =

5,004 \div 9 = 556 man-days per year

Holiday labor burden decimal: = 12 \div 556 = .0216 or 2.16 percent.

B. Dividing man-hours by man-hours

Total paid holiday man-hours:

(12 days x 8 man-hours/day) = 96

Total man-hours worked per year = 5,004

Holiday labor burden decimal: = 96 \div 5,004 = .0192 or 1.92 percent.

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Of the two methods, “B” is the more accurate, although a little more complex; however, either is accurate enough for our purposes.

[B] Sick Days (sometimes referred to as “well” days)

If you provide paid time off to your field employees when they’re sick, compute **sick days** or **well days** into the appropriate company/division labor burden decimal, just as you did for the holiday labor burden calculations.

Use this method for any other similar type of benefit provided by the company.

[B] Medical/Health Insurance

Divide total annual **medical/health insurance** premiums paid by the company, which are not reimbursed by the employees, by the company/division projected total annual field payroll.

Total premiums paid by company \$3,300 ÷ total projected field payroll \$75,000 =
 $\$3,300 \div \$75,000 = .044$ or 4.4 percent.

When I compile a budget for a company, I actually deduct holiday, vacation and sick pay, as well as pay for downtime and equipment repairs, from the total projected field payroll. However, I use a personal computer and a somewhat sophisticated spreadsheet program to do so, but the above method will suffice for our purposes.

Remember: Consider only the field labor holidays, vacation time, etc., when calculating the GLI, vacation, holiday, sick days and medical/health insurance portions of labor burden. Put a portion (e.g., 50 percent) of a person’s paid vacations, premiums, etc., in the labor burden totals if that person is actually in the field working a portion of his/her total work time.

In the United States, your labor burden percent for field divisions will normally fall between 20 and 35 percent. In Canada (and elsewhere outside the U.S.), it normally runs from the high teens to the mid-20s.

Companies outside the U.S. can use the same methods we’ve used in our examples, making the appropriate category adjustments.

[A] **SUMMARY**

Labor burden is primarily comprised of payroll taxes, unemployment taxes and various forms of insurance. Field labor burden also includes general liability insurance; paid holidays, sick days, vacations and medical insurance benefits. Other items such as employer 401K and retirement contributions could also be included.

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Both field labor burden and office labor burden are calculated as percentages and added to payroll costs in our budget. The field labor burden is also directly used in the estimating process.

Field labor burden is a direct cost while office labor burden is an indirect G&A cost.

Labor burden items should be viewed as incentives that have to be earned by everyone as a result of productivity in the office and the field.

Future labor burden costs are often overlooked. They should be monitored and accumulated in a savings account. Otherwise, they may be forgotten and the funds spent.

[AP] ACTION POINT

Using Exhibit 4 in the back of the book, determine your company/division labor burden percentages.

This article was adapted from James Huston's new book and audio book, *How to Price Landscape & Irrigation Projects*, released in July 2003 and his previous book, *Estimating for Landscape & Irrigation Contractors*. The author is president of J.R. Huston Enterprises, Inc., which specializes in construction and services management consulting to the Green Industry. Mr. Huston is a member of the American Society of Professional Estimators and he is one of only two Certified Professional Landscape Estimators in the world. For further information on the products and services offered by J.R. Huston Enterprises, call 1-800-451-5588, e-mail JRHEI at jrhei@jrhuston.biz or visit the J.R. Huston Enterprise web site at <http://www.jrhuston.biz>.