

CALCULATING

Labor Costs

by Shawn McCadden

If you're not charging
customers for all
employee expenses,
you're losing money

Labor is one of the most difficult costs to predict in an estimate. Basically, it's determined by calculating the hours required to complete a task or project, and then charging what it costs your business to compensate its field employees. But trying to predict the time required to complete a task or a project, especially if someone other than you will do the work, requires judgment and experience.

You can get unit costs for labor from a cost estimate book, but you have to be careful. The numbers in the book are unlikely to accurately reflect your own hard costs, even if you apply the regional adjustment factors provided. Your labor charges must reflect your company's actual expenses.

Consider that, if you pay each of your employees for 2,000 hours each year, and you fail to account for a couple of dollars per employee per hour, your loss could quickly become significant. Because no other company is exactly like yours, it's important to know precisely how much it costs your company to do business.

Burden and Benefits

The hard cost of labor includes not only the hourly wage of the employee, but also all employer-paid taxes, Social Security, insurance, vehicle expenses, and any employee benefits (see the example given for a lead carpenter in Figure 1, next page). Workers' Compensation, liability insurance, auto insurance, paid holidays, vacations, medical benefits, education, employee meetings, cell phones, pagers, and every other labor-related expense must be factored into your hourly rates.

Overhead vs. direct costs. There are different schools of thought within the remodeling industry as to what should be considered overhead expenses versus hard labor expenses. Adding to the confusion, those items may be reinterpreted by your

Calculating Labor Burden for a Lead Carpenter

Expense	Rate	Cost	
Basic hourly wage	\$22.00	\$22.00	
Fica & Medicare	7.65%	\$1.68	
State unemployment tax	1.50%	\$0.33	(only on first \$10,800)
Federal unemployment tax	0.80%	\$0.18	(only on first \$7,000)
Workers' Compensation	9.39%	\$2.07	
Total		\$26.25	

Note: The figure \$26.25 has been automatically rounded by Excel.

Figure 1. The first step in estimating labor is to charge a rate that accurately accounts for your state and federal tax obligations and insurance requirements.

accountant, who likely views your business from the specific perspective of standard accounting practices.

When evaluating labor costs, my rule of thumb is, "If you didn't have the project or the employee, would you still have the expense?" If the answer is yes, then that expense should be assigned to your fixed overhead. But if your lead carpenter uses a cell phone specifically for work purposes, the phone bill should be considered a cost of labor for that employee. After all, if you let the employee go, assuming he or she is not replaced, would you keep the cell phone service? On the other hand, if you let that employee go, would you still have a fax line at your office? Most likely you would, so that expense would be assigned to your overhead.

When I pull an estimate together, I make sure that the hard cost of labor covers every cost I would incur in support of my field employees on that project. The total estimated cost is then marked up by a predetermined factor so that the selling price covers my overhead and profit.

Nonproductive Costs

An important consideration when determining the hard cost of labor is the difference between the hourly pay

you give an employee and the hours that he or she actually works, producing income (Figure 2). When you add up all of the hours for paid vacations (2 weeks: 80 hours), holidays (5 days: 40 hours), paid time while attending training programs or trade events (12 hours total), as well as attending company meetings (2 hours every other week, or 50 hours annually), where will that money come from if you're not charging for it? Many remodelers I've worked with never realize that they're making this mistake. With 52 weeks in a year and a 40-hour work week, your company pays each full-time employee for 2,080 hours. The time paid for nonproductive hours, as listed above, totals 182 hours, or almost 5 weeks. Therefore, your company must collect enough money from 1,898 hours of production to pay that employee for 2,080 hours.

Don't forget sick days. If you pay, but don't collect for, sick days, you'll be losing vital revenue during a sick employee's absence. Even if you don't pay for sick days, you're spared paying the labor burden only on the basic hourly wage during the employee's absence. The cost of benefits and other annual expenses remains constant. To cover for these items, add an assumption for sick days, similar to that for paid vacation days, to your labor costs.

Calculating Unbillable Paid Hours for a Lead Carpenter

Benefits & Meetings	# of Days	Total Hours	Cost per Year
Paid holidays	5	40	\$1,050.00
Paid vacation days	10	80	\$2,100.00
Office meeting hours/year		50	\$1,312.50
Hours to attend education		12	\$315.00
Total unbillable paid hours		182	\$4,777.50
Hours paid in a year (52 wks x 40 hrs/wk)		2080	
Less unbillable hours		182	
Total billable hours		1898	

Other Annual Lead Carpenter Expenses

Medical benefits & insurance	\$10,567.00
Education fees	\$650.00
Truck payments & depreciation	\$6,541.00
Truck insurance	\$987.00
Gas and oil	\$467.00
Cell phone	\$1,134.00
Vehicle maintenance	\$1,234.00
Total	\$21,580.00

Individual Factors

To calculate the hard labor cost you should use when estimating or job costing, you'll need to collect the expenses specific to each employee (Figure 3, next page). One may have a company vehicle; another may get a vehicle allowance. That may create different costs for each, even if the two are paid the same hourly rate. After you've assembled all of the expenses to support each employee for a full year and added them to the employee's yearly wage, divide the total cost by the actual hours worked. By doing that, you'll know what to charge per hour in your

estimates to cover your true costs. If you're not sure which employee you'll assign to the project, use the highest-paid employee's cost, and estimate the work based on his or her abilities and performance.

Dollars vs. Hours

Another trap to watch out for is how you job-cost labor and compare it to your estimate. When you compare your job cost information for actual labor against the estimated labor, be careful what you compare. You should be comparing the total dollar budget, not the number of hours. If you have

Figure 2. Paid vacations and other employee benefits put an additional burden on your billable hours. Subtract the annual total of these unbillable hours from the total hours paid in a year to find your total billable hours.

Calculating the Total Lead Carpenter Rate

Lost time from benefits & meetings	\$4,777.50
Truck & other annual expenses	\$21,580.00
Total lead carpenter expenses	\$26,357.50
Divide by billable hours (1898)	\$13.89 per hour
Add to basic wage rate (\$26.25)	\$40.13 per hour

Figure 3. To cover all of the costs associated with each employee, divide the total expenses by the actual hours worked. Add the result to each employee's basic wage to find the hourly rates you should be using in your estimates.

different employees earning different wages, with different hard costs of labor, an hourly comparison will be inaccurate and will skew the value of your records.

Evaluate assumptions. If you job-cost a project using an incorrect labor rate from your estimate, you may be led to believe you're doing better than you are. If you've used the wrong assumption for the hard cost of labor, you'll either make more money than anticipated, or less. How many of us make more money than we budget for?

Here's a list of guidelines I use to determine hard labor costs:

- Create a computerized template that can be used for each employee.
- Use a worksheet to determine the costs for each employee, including office workers.
- Be sure that the figures you're using are accurate based on the current year's expenses.
- Be sure you're collecting enough money for the hours an employee actually works to cover what you will pay him or her for holidays, vacations, and other nonproductive benefits.
- Keep track of how you determined your labor costs. Verify your cost assumptions against changes during

the year, and for next year, so you can update your labor costs accordingly.

- Check Workers' Compensation and employer-paid tax rates for any changes.
- Anticipate and add in employee raises during the coming year, in advance of selling the work to be completed after the raise.
- Assume an accurate cost per gallon for gasoline.
- Get accurate quotes for auto insurance from your provider.
- Consider creating a reserve account for vehicle replacement.
- Be clear on how you separate overhead expenses from the hard cost of labor expenses. You need to decide whether you'll recover overhead expenses through a charge to labor or a markup on your net costs.
- To help you verify or question how you determine your costs, ask your colleagues to share their costs and explain how they determine them. 

Shawn McCadden, CR, is the president of Custom Contracting Inc., in Arlington, Mass., a regular speaker at JLC Live, and a cofounder of the Residential Design/Build Institute, LLP. Send requests for the MS Excel version of Shawn's employee worksheet to shawnm@designbuildinstitute.com.