Allocating Overhead to Labor Makes Financial Sense

by Irv Chasen

If I were to ask ten contractors how they calculate and apply overhead (indirect expense) to their estimates or time-and-material work, I would get ten different answers. If I were to press further as to how they arrived at their numbers, most of their methods would turn out to be arbitrary or have some element of guessing.

For nearly 40 years, I have been working with contracting businesses to help them improve their cost-accounting systems, and most of those I have worked with had no scientific method as to how to calculate and allocate company overhead. This is not to say all were doomed to failure. On the contrary, many were extremely successful. As one successful mechanical contractor told me, "I have a good business and make a lot of money, but I'm not sure why. That bothers me, because if I make a lot of money and don't know why, I could lose a lot of money and not know why."

Understanding and properly allocating company overhead is the answer. When overhead recovery becomes a science instead of a haphazard guess, profit or loss become predictable and can be continually monitored. Many contractors rely on their accountant or CPA to provide a profit-and-loss statement quarterly, semi-annually, or annually. While this information can be useful, it is in most cases after-the-fact information. The ability to nail down profit or loss on an hourly, daily, or job basis is a better approach by far. When the contractor has made overhead recovery a science, the professionally prepared P&L statement will simply confirm what he or she already knows.

Know the Net

Many contractors view gross profit as their degree of financial success. But a contractor could have substantial gross profit on every job he completes and still go broke. We survive or prosper on net profit, not gross profit. Therefore, when the contractor has a scientific method of subtracting overhead from gross profit, the bottom line will reveal the real net results, profit or loss.

Builders often allocate overhead by adding a percentage to labor and material combined. This may work well for some companies, particularly when the labor-to-material mix remains about the same on most of their jobs. However, more often than not, this will not hold true. Typically, relating overhead to labor and material combined can produce mixed results, while recovering overhead as a percentage of labor alone is far more accurate.

Charlie's Story

The following example will illustrate this point. (Remember as you read this that we are discussing only overhead recovery, and that *all* costs — labor, materials, and overhead — should also be marked up for profit.)

Charlie is the owner of a contracting business. He has taken the time to budget his next year's operating expense, something very few contractors do. Next year's expense budget is as follows:

Budgeted field labor	$500,000
Budgeted material cost	$250,000
Budgeted overhead	$525,000

At this point, Charlie's overhead is 105% of labor cost ($525,000 divided by $500,000 = 105%). As a percentage of labor and material combined, overhead is 70% ($525,000 divided by $750,000 = 70%).

Let's say Charlie decides to allocate 70% overhead to labor and materials combined. Using this approach, let's look at four sample jobs to see the amount of overhead each would produce (see table below). Note that all four jobs have the same $1,000 labor figure, but material costs vary.

If Charlie had chosen a labor-only method for recovering his company's overhead instead of a labor-and-materials-combined method, the overhead recovery for each of the jobs, A through D, would have been $1,050: 105% of $1,000 = $1,050. When allocating overhead on labor and materials combined, Job A would recover only $840 of overhead, $210 short of the labor-only method. Job B would recover $980 of overhead, still $70 short of the labor-only procedure. Job C would

Overhead as a Percentage of Labor and Materials Combined

	Job A	Job B	Job C	Job D
Labor	$1,000	$1,000	$1,000	$1,000
Material	$ 200	$ 400	$ 600	$ 500
	$1,200	**$1,400**	**$1,600**	**$1,500**
	x.70	x.70	x.70	x.70
Overhead	**$ 840**	**$ 980**	**$1,120**	**$1,050**

contribute $1,120 of overhead, $70 more than the $1,050 if overhead was on labor only. Job D would produce $1,050 of overhead, which is the same as if the overhead was on labor only.

So why did Job D, using the labor-and-materials-combined method, produce the same amount that would have been produced in a labor-only method? Because in Job D, the labor-to-materials mix (2 to 1) is exactly the same as the annual budget ($500,000 labor to $250,000 material). But here's the big question: Just how many jobs will Charlie's company produce next year that have the exact budgeted mix of labor and material (2 to 1)? There may not be any!

Allocating overhead to labor and materials combined sometimes produces too few overhead dollars and sometimes produces too many, as with more material-intensive jobs like Job C. Too much in overhead could make Charlie's company less competitive on a materials-intensive job.

What If You Sub Everything?

What if Charlie runs a home building business that employs no field labor but produces the work by subbing out all labor and most materials? It is generally true that builders who primarily use subcontractors will have considerably less overhead expense. So in this case, Charlie will achieve a much higher volume of business with less overhead. And instead of overhead being a percentage of field labor, the overhead will need to be a percentage of subcontractor dollars.

Suppose Charlie plans to build ten homes next year, each home in a price range that will require about $175,000 in subcontractor costs. The total annual sub dollars would be budgeted at $1,750,000, before overhead or profit.

Next, let's say Charlie budgets his overhead expense for the coming year at $215,000. Dividing the $215,000 of overhead by the $1,750,000 subcontractor volume yields 12.28%, or, rounded off, 12.5% of overhead on every one dollar of sub cost. So the subcontractor cost per home including company overhead would be $175,000 plus $21,875 (12.5% of $175,000), or $196,875 (see chart below).

For illustration purposes, assume that Charlie is shooting for 15% profit. Thus, the $196,875 cost would represent 85% of the sale. Therefore, dividing $196,875 by .85, the selling price is $231,618, with profit at $34,743. (For simplicity's sake, I've left the cost of the lot out of this example.)

Suppose Charlie is unable to achieve the budgeted ten-house goal. Naturally, the annual sub cost would be reduced, but his company overhead would more than likely remain the same. Assume that Charlie builds only eight houses. His total sub cost would be $1,400,000 instead of $1,750,000, and his overhead percentage would be approximately 15.5% of the sub dollars instead of 12.5% ($215,000 overhead divided by 1,400,000 equals about 15.5%). If the planned selling price remained at $231,618, the original anticipated $34,743 profit per unit would shrink to $29,493, while the overhead per home increases to $27,125.

Conversely, if home sales increased beyond the budgeted ten, profit would increase, provided overhead stayed as budgeted.

Subs and Crew

One other scenario we can explore is that of the contractor who has a sizable field crew and also subs out a high volume of work. That type of contractor has two options when considering the best way to allocate and recover overhead.

After the annual overhead budget is established, it can become a percentage of the company's own budgeted field labor force and a percentage of the budgeted subcontractor expense, thus creating two barometers to monitor. The amount of overhead to be allocated and recovered through subcontractor expense might be, to some extent, a judgment figure like 10, 15, or 20% — whatever the contractor senses the traffic will bear before profit is added. Whereas this figure may be somewhat arbitrary, it is at least a good start, because whatever overhead is left must become a percentage of the company's own budgeted field labor force, and there is nothing arbitrary about this last allocation procedure.

A second, simpler way would be to allocate all overhead to company field labor before profit and just mark up all subcontractor costs for profit. We can explore this in a future article

---

Irv Chasen *is the retired CEO of his family's 89-year-old contracting business and founder of Proof Management.*

How Profit Fluctuates With Volume

	10 Houses	8 Houses
Subcontractor amount per house	(175,000)	(175,000)
Overhead allocation per house	+ (21,875)	+ (27,125)
Total Fixed Expense	**(196,875)**	**(202,125)**
Selling Price	+ 231,618	+ 231,618
Net Profit	**34,743**	**29,493**
	x 10 units	x 8 units
Annual Profit	**347,430**	**235,944**