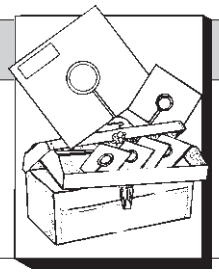

Estimating Wrap-up

by Morris D. Carey, Jr.

This month we'll complete our journey through the wilds of estimating, talk a bit about job cost accounting, and then answer a question for an anxious reader.

In the September issue of JLC we studied the price book section of an estimating program. In October we took a close look at the bidding section. This month we'll study three other important areas: the report section, the utilities section, and the user/computer interface.

The report section sends data stored in the estimating program to a printer, and, in some cases, to the screen or a disk file. Study the report section carefully before making that final program selection. Although all programs will print out the database and estimate information, not all of them will display all reports on the screen, and only a few will store the data in a disk file.

Listing information to the screen can save time and printer paper in reviewing an estimate. And listing to a disk file has an infinite number of uses you may not have considered. For example, with the ability to access the report from a disk file, you can use a word processor to add a note or specification, or change the title or other job-related information.

You'll also want to think about your printer before selecting an estimating program. In order to list a report to a printer, the estimating software must be able to "talk" that particular printer's language. Since hundreds of models of printers are currently available, this could prove to be a problem.

To avoid this communication problem, most estimating systems require that you use a certain brand or type of printer—an expensive proposition if you already own a different one. the more sophisticated estimating programs can be modified locally so they can be used with your existing printer, regardless of brand.

One of the most important functions performed by the report section is to create a printed copy of the estimate for presentation purposes. When it comes to reports, you are usually at the mercy of the program creators and of what they think the estimate should look like. If the reports a system generates do not fulfill your requirements, keep looking—no two programs offer the same report formats. Fancier programs allow you to create custom reports to fit special needs.

What could those needs be? During my stint as the computer columnist for the now-defunct Remodeling Contractor magazine, I had occasion to survey several hundred home-improvement contractors about how they liked to present an estimate to their customers. It was pretty evenly split: one-third wanted to present detailed estimates with the price at the bottom line only. Slightly more than one-third preferred their customers see prices for major categories only. And a little fewer than one-third wanted their clients to see pricing line-item by line-item.

Within the three presentation types, half the contractors wanted overhead and profit shown separately, and the other half wanted overhead and profit to be included within the prices. As you can see—report versatility can be important.

The more powerful estimating programs give you the ability to list reports to spreadsheet programs and/or to accounting programs. They can also be used to create bills of materials, cost-type reports, man-hour requirement reports, and more.

If you don't need those special reports, and if bottom-line total pricing interests you most, then practically any estimating program will do the job.

Another important question you'll want to ask before buying relates to user choices. What utilities (special little bells and whistles) are provided within the program? For example: When you present an estimate would you like to show dollar signs or not? How about the date? Would you like to use month/date/year or date/month/year? Do you want your quantities shown to one, two, or three decimal places? Would you like the program presented to the screen in color? How about combining two estimates into one?

Setting aside all the technical considerations, there is only one true test as to whether you should buy or not: Does the program fit you and your business? This is where I leave the objective criteria, and wander into the human dimension.

More important than anything is finding a program that you can "relate to" on screen. If it seems simple to you, regardless of power or lack of it—buy it. If you purchase a system you feel comfortable with, you are more likely to use it. In using any program successfully, you will learn to trust the computer, experience its power, and, ultimately—if you wish—investigate more powerful alternatives.

In the end, you, the user, are the most important part of any estimating program.

The Job-Cost Connection

Once you have purchased your estimating system, loaded your database (or personalized the one that comes with it), and then sold a job that you have estimated, you must then "job cost." Without job costing, your estimates, whether manual or computerized, can prove to be useless. Job costing is a relatively simple function:

Estimated Cost — Actual Cost = Profit or Loss. See the chart below as an example.

Most contractors include labor, material, subcontract work, and equipment in their bids. If you own your own equipment or regularly rent it from the same place, reasonable price consistency can be achieved. The same holds true with materials and subcontractors.

Where things really start to get difficult is in bidding labor. But, actually, no estimate needs to be difficult to create or job cost if you follow one simple rule: Convert all cost types—labor, material, subcontractor prices, and equipment—to quantitative values that can be extracted directly from your plans. Here's an example:

Jack and Jill are partners in a company called Hillside Construction. Jack estimated that it will take two hours to run up the hill and return with a pail of water. Jill figures six hours. Jack enters two hours into the company's estimate. In fact, the water took three hours to get so they lost money on the job. As it turned out, Jack's bid was so low and Jill's bid was so high they might not have gotten the job. Fortunately, Hillside Construction only lost one hour of labor at $15, so it didn't have to file Chapter 11.

Anyway, Jill finally said to Jack, "Why don't we convert our pricing to something more consistent than estimating labor hours? The last pail of water we went for took three hours, and the hill was a 3,000-yard round trip. From now on, let's agree that we'll charge $15 plus overhead and profit for each 1,000 yards of travel."

What J&J have agreed on is bidding consistency. If the plan includes a 6,000-yard round trip, Hillside Construction bids the job at 6 x $15 + overhead and profit. If the hill they are asked to retrieve a pail of water from is 10,000-yards, then they bid 10 x $15 + overhead and profit.

The plan unit of measure, be it linear yards, linear feet, square feet, or "each" must be the unit of measure used to create the estimate. It's simple: Calculate the hours it takes to do a task for your average job, and divide the cost of those hours into the unit of measure. That way, when you estimate 10 feet of wall framing labor it is one foot more expensive than 9 feet of wall framing labor.

To determine your costs, average the cost of each category of work that you do over at least five jobs. Raise or lower your price in conjunction with your findings, and your price will never be too high or too low. You'll do work, and you won't go broke doing it. Remember: Without estimating consistency, job cost accounting is useless. You can't correct a mistake at the job-cost level unless you make the mistake consistently at the estimating level.

Job Name: XYZ Residence

Work	Estimated	Actual	Profit/(Loss)
Excavation	$2,000	$1,500	$ 500
Demolition	4,000	3,000	1,000
Foundation	6,000	3,000	3,000
Carpentry	8,000	9,000	(1,000)
Total	20,000	16,500	3,500

Job costing is necessary to see if your estimates match reality, and to know how they affect your bottom line.

Advanced Estimator Wanted

Donald Yeoman of Laurelforge Contractors, Coatesville, Pa., writes:

I was pleased to see your column back in print after the demise of remodeling Contractor and I am looking forward to up-to-the-minute information on computers and the assorted "stuff" necessary to make them tick.

At onetime you highly recommended the Remodeling Estimator program by National Computer Estimating, Ona, W. Va., which I purchased. I have since upgraded the program to the NCE 2000, but have never really been satisfied with it.

The ability to "customize" the database helped some, but it still is not flexible. And the accounting program that is now available for it is disappointing.

So, what are you recommending these days as an estimating program with the ability to add accounting at a later date? By the way, cost is a prime consideration. Maybe the ideal program for remodeling has yet to be written.

I have a 286 clone, 640K, and 20-meg hard disk, hi-res monitor and enhanced keyboard. I also do a lot of CADD work using Generic Cadd.

Morris Carey Responds:

Don, you should be in ads for Construction Management Systems (CMS) of San Diego, Calif., because it's Espri program is everything you are looking for.

I still feel that NCE's program is a great place to start, but it sounds as if you are more advanced than the average user.

Your computer is perfectly suited for Power Takeoff by Master Builder (Omware, Inc., Sebastopol, Calif.), or California Contractor (Van Stolk Computer Service, Inc., Watsonville, Calif.), both of which offer excellent accounting systems, but CMS is the only one that interfaces with Generic Cadd. Espri program sells for $1,995. Watch out through. Espri interfaces with many top-notch accounting systems, but they're all pretty expensive. Good luck!

Next month I'll review a couple of scheduling programs, talk about where you can shop for training devices, and answer more letters. ■

Morris D. Carey is a partner with Carey Bros. Construction, a successful remodeling firm based in Pittsburg, Calif. In addition, he is an author and lecturer and has reviewed hundreds of construction-related computer products. If you have a question about computing in construction, address it to State-of-the-Art Contractor, c/o JLC, *RR#2, Box 146, Richmond, VT 05477.*