



UNIT COST AND PRODUCTION REPORTING

Reap the Benefits Using Construction-Specific
Accounting Software

BY MIKE ODE

UNIT COST AND PRODUCTION REPORTING

Reap the Benefits Using Construction-Specific Accounting Software

Some things are difficult, if not impossible, to measure—client satisfaction, employee loyalty, a company’s reputation—but in the world of construction, productivity should not one of them. As hard as it may seem, many contractors do successfully track and measure the outputs that define their production rates, and the reasons are clear. Only detailed production reporting provides the kind of accurate and up-to-date job-cost data that can make the difference between a winning project and budget-breaking cost overruns. To automate the process, and make it worthwhile, contractors are turning to construction-specific accounting software.

Production reports go beyond basic job-cost reporting to help owners and project managers understand the output of a measurable task, such as how many quantities have been completed per labor hour (e.g., 10 SF/hour) or how much each unit of measure costs (e.g., \$2/SF). Why is this information important? The benefits of production reporting are threefold: (1) it allows contractors to see how they are progressing from a production standpoint as a job unfolds, (2) it allows contractors to project their costs on a daily or weekly basis, and (3) it provides precise historical data for more accurate estimating on future jobs with similar conditions.



KNOW PRODUCTIVITY AS JOB PROGRESSES

Whether by instinct or based on real data, contractors generally use some type of number to calculate costs when estimating and bidding. Once the job has been won, however, a greater challenge exists: how can those numbers be measured on a regular basis to know how much work is being completed vs. how much was estimated to be completed each labor hour or each day? Production reporting is the answer.

Consider what a drywall contractor could learn from a production report that contains data on quantities completed and hours from payroll. Using previous production data, the contractor estimated that they will complete 8.3 LF per labor hour. However, a current quantity/labor hour report shows that they are only averaging 7.2 LF. This immediately raises a red flag as to why productivity is behind. It may have to do with the crew, the equipment or the timing of material deliveries. In any case, the contractor is aware that they are behind, and he has time to get the job back on track.

Tracking quantities also gives contractors more detailed information for calculating percent-complete. Most contractors look only at costs, not productivity, to determine how a job is progressing, but those numbers don't always tell the whole story. A contractor, for instance, may have pre-paid for all materials (say, 30% of total costs) before the job has even started (actually, 0% complete). Using a more specific example, let's say our drywall contractor has spent \$60,000 to date on a job that has a total budget of \$100,000. Based on those numbers, the job is 60% complete. However, a production report shows that 16,660 LF of wall has been completed to date, whereas the finished job calls for 33,320 LF. Therefore, no matter what the costs say, the job is only 50% complete.

KNOW PROJECTED COSTS BASED ON QUANTITIES COMPLETE

Another valuable benefit of tracking production has to do with forecasting or projecting costs. By knowing the quantities completed and costs to date as well as quantities to be completed, contractors can project with great accuracy what their total costs will be. With this critical data, they can also choose to change the course of a bad job or even maintain productivity on over-performing jobs.

Of course, in order to compare estimated vs. actual costs, contractors must begin with a job budget. However, without tracking production, it's often extremely difficult to predict what the remaining job costs will be. It's not enough for a contractor to say, "We projected to spend \$100,000, and we have spent \$50,000 to date; therefore, we have \$50,000 left to spend." The math is easy—but not necessarily true. The contractor needs to know not just what was estimated but the actual *unit cost* to date. Only with this up-to-the-minute accurate data and remaining quantities can precise projected costs be calculated. Rather than subtracting current costs from estimated costs, a contractor who takes his current unit cost and multiplies it by the remaining quantities will come up with a much more precise remaining cost.

PRODUCE BETTER BIDDING WITH PAST PRODUCTION DATA

Perhaps the greatest advantage of production reporting is how it can impact the profitability of future jobs. Successful contractors understand that construction—even niche subcontracting—is too complex for them to know intuitively the unit costs and production rates for all cost codes, phases or activities of their work. Using historical data from previous jobs allows contractors to estimate their costs more precisely and, oftentimes, more aggressively for greater profit potential. Contractors who use production reporting over a period of time clearly have a competitive advantage when it comes to estimating jobs. When bidding on work for a new office building, for example, a concrete contractor simply pulls reports from historical jobs that were similar in size and scope. After looking through the reports, the estimator comes up with an average production rate for each phase of the job. In addition, patterns and truths about productivity are often revealed that can impact more than just production rates. For instance, perhaps this contractor discovers that certain tasks are more cost-effective than others.

USE JOB-COST ACCOUNTING SOFTWARE TO SIMPLIFY PRODUCTION REPORTING

Contractors may agree on the value of production reporting but suspect it's not worth the great effort required to calculate and maintain these reports. To do so using spreadsheets would require someone to gather all of the disparate information (quantities completed from the field, labor costs from payroll, material costs from accounts payable, etc.) and then perform numerous calculations. Updating this data on a daily or weekly basis would probably cost a company more in time and resources than it would save with accurate production data.

Fortunately, however, job-cost accounting systems give contractors quick and easy access to production reporting. The best systems are those that integrate fully with the company's estimating software so that all estimated costs flow directly to job costing. The time-consuming work of gathering ongoing job costs is eliminated, since integrated job-cost accounting systems already provide ready access to all job-related costs. The only step for which contractors need to assume responsibility is entering quantities. How often quantities are entered (daily, weekly, etc.) will determine how often these reports can be run. Generally, quantities can be updated by using one of several methods, including timecard entry, importing from other systems and, of course, manual entry.

Once quantity information is in the system, production reporting is automatic. Construction-specific accounting packages also provide users with flexible reporting advantages. In addition to standard

production reports, such as quantity/labor hour, labor hours/quantity and unit cost reports, most systems contain report writers and other features that allow contractors to dig deep into production details and create production reports the way they want to see them. For example, an extremely useful reporting field available on some construction-specific systems is the catch-up calculation. When production rates fall below a contractor's estimated rate, the catch-up rate will provide the new rate that must be met in order to finish the job on time and on budget.

In today's competitive construction environment, contractors know very well just how important productivity is to their company's bottom line. With access to production reports, contractors learn how their jobs are progressing, what their projected job costs will be, and what their historical production rates have been. With construction-specific accounting software, these are available with greater ease and convenience than ever before, transforming the entire reporting process from time-consuming and impractical to simply indispensable.



MIKE ODE

President

Foundation Software, Inc. of Strongsville, Ohio

Mike Ode is the president of Foundation Software, author and developer of FOUNDATION for Windows construction accounting software. For more information on FOUNDATION, visit www.foundationsoft.com. Mike Ode can be reached directly by phone at 800.246.0800, or email mode@foundationsoft.com.

A version of this article first appeared in
Construction Executive



Foundation Software is the developer of FOUNDATION® – America's #1 Construction Accounting Software. Since 1985, we've been dedicated to giving contractors the back office tools they need to manage their job cost accounting, project management, and scheduling.

WWW.FOUNDATIONSOFT.COM