

Overhead and profit

Introduction

In the last chapter, jobsite general conditions was discussed in detail. Management of jobsite general conditions is the responsibility of the project manager (PM) with assistance from the superintendent and the jobsite cost accountant. This chapter turns the focus back to the home office and introduces home office general conditions. Even though the project team has little to no input on management of home office issues, it is important that PMs and superintendents understand how home office overhead (HOOH) impacts the project. In this case, HOOH is added to the desired profit to produce fee as reflected in the following equations. Fee is a jobsite focus, as fee is what is left over after all of the construction costs are subtracted from the contract value or revenue. Fee is necessary from each construction project in order to pay for HOOH. Each project must cover its proportional share of HOOH.

$$\begin{aligned}\text{Revenue} &= \text{Construction cost} + \text{Fee} \\ \text{Fee} &= \text{Home office overhead} + \text{Profit (OH\&P)}\end{aligned}$$

This chapter discusses the creation of the home office general conditions (GCs) or overhead estimate and management of that estimate which is a chief financial and executive officers' (CFO and CEO) responsibility. It is very unlikely that most project managers will ever see their corporate GCs estimate, unless they become an officer in the company. The construction company must produce enough revenue from its jobsites to pay for the home office GCs. If the total fee from the jobsite exactly equals the home office GCs costs, then the company has just broken even. It is the ultimate goal of each project team to provide sufficient fees, beyond the breakeven point, to return a net profit which can be returned to equity partners or invested back into the company. Producing enough fee to break even is important, but it is not enough.

Creation of the general conditions estimate

When are general conditions not general conditions? 'General conditions' is a generic term, which has different meanings to different parties in different situations, but it is still important that it be used properly. GCs are general, in that they do not have a specific focus. In the case of the home office, the GCs funds the financing of the operations of the company, which is outside of and not applicable to individual jobsite operations. Essentially if there were not any construction projects, the company would still have GCs activities and costs, but it then would not be in business for very long. Similar to the list presented in Chapter 5, some alternate terms or use of the phrase GCs include:

- American Institute of Architects (AIA) A201 is a general conditions contract attachment to most standard AIA contracts;
- Construction Specifications Institute (CSI) divisions 00 and 01 include general conditions but more often designated supplemental or special conditions to the contract;
- Overhead or overhead costs or general overhead;
- Indirect costs, in that they are not direct to the cost of construction;
- General requirements;
- General and administrative costs often are how general conditions or overhead is described by public entities;
- Distributable costs is another name for general conditions, as overhead is distributed over the costs of the entire company operations and not attributed to any particular project or construction activity;
- Administration or administrative or operational costs;
- Overhead and profit is known as fee for contractors. If the contractor anticipated 2% home office general conditions cost and desired a 3% profit, they would bid a project with a 5% fee; and
- Overhead for consulting companies includes the cost of the work plus profit. There is not any profit factored into overhead for contractors.

This chapter focuses on *home office general conditions* and not jobsite general conditions. It can be difficult for the built environment novice to navigate through all of these terms which in some cases are similar and others quite different. One easy way to keep them separate is to insert the terms jobsite and home office as a prefix, such that *jobsite administrative costs* and *home office GCs* are easy ways to keep them separate. Many participants in the built environment use the abbreviation GC for general conditions as well as for general contractor.

There are two ways to prepare a general conditions estimate. The first is very easy, and that is to simply apply a pre-determined percentage to the anticipated yearly volume produced by the construction operations. For example, assume the corporate officers anticipate on January 1, 2020 that the company will have a volume of \$100 million in 2020, based on their current backlog (projects under contract but not yet completely billed), and projects which are being pursued. If last year's home office GCs costs were \$2 million and this year was expected to be similar, this year's construction projects would need to generate a total fee of \$2 million to break even. This equates to 2% of \$100 million in total expected revenue. Each project would need to produce a 2% fee for the company to, at a minimum, just break even. This can all be shown by the following

equations. The problem with estimating with a rough percentage, such as this, is that it does not consider changes from one year to the next.

Total anticipated revenue: \$100,000,000
 Total anticipated home office overhead: \$2,000,000
 General overhead percentage: $\$2,000,000 / \$100,000,000 = 2\%$
 Minimum fee each project must generate to break even: 2%

The more accurate way to prepare a home office general conditions estimate is to prepare a detailed line-item estimate, exactly as was done for the jobsite GCs in the last chapter. There are home office administrative labor and personnel categories, materials and supplies, and office equipment. This is all very similar to the jobsite estimate. Each line item likely has a quantity or duration, such as 12 months, or 52 weeks, which are multiplied times labor rates and material unit prices. An abbreviated home office GCs budget is included as Figure 6.1.

The complete estimate may be 100 to 200 line items long, depending upon the size of the company and the proportion of management which is performed at the home office compared to the jobsite. The general overhead budget should be detailed enough to track, but not so detailed that it is unmanageable, similar to the 80-20 rule that is used throughout this discussion of cost accounting and financial management. Different categories of office labor should be kept separate and not combined as they all have different rates. The process for estimating the home office general conditions would be similar to estimating direct construction costs. Historical costs are available, trends are analyzed, and new conditions of the coming year must be considered. At the completion of this year, the actual costs should be fed back into the GCs database to better prepare future estimates.

There are many potential home office 'staff' personnel who may or may not be billable to the project. In the case of a lump sum project, it doesn't matter as it is closed-book and the client does not really care how costs are accounted, unless they show up on change order proposals. In a

Evergreen Construction Company						Date: 01/01/2020		
Annual Home Office General Conditions Budget, Abbreviated						Estimator: Robert Benson, OIC		
						Estimate #: 1		
Home Office General Conditions								
Line Item	Description	Qty	Unit	Wage Rate	Labor Cost	Unit M Cost	Material Cost	Total Cost
5	Receptionist	12	mos	\$3,000	\$36,000			\$36,000
14	VP of Operations	12	mos	\$10,000	\$120,000			\$120,000
56	Cleaning Service	52	wks			\$800	\$41,600	\$41,600
72	Office Supplies	1	LS			\$25,000	\$25,000	\$25,000
99	Copy Machine Rental	12	mos			\$700	\$8,400	\$8,400
141	Warehouse and Storage	12	mos			\$3,000	\$36,000	\$36,000
	Continued...							
Totals:					<u>\$1,150,000</u>		<u>\$850,000</u>	<u>\$2,000,000</u>

Figure 6.1 Home office general conditions budget

negotiated project, some home office personnel and costs may be attributable to a project, but that depends upon the contract terms. The AIA A102, cost plus fee with a guaranteed maximum price (GMP), is the contract that Evergreen Construction Company (ECC) executed on the Olympic Hotel and Resort project. Contract Article 7 in that agreement spells out the cost-reimbursable items and Article 8 lists those which are non-reimbursable. Generally any cost incurred at the site is considered a reimbursable cost and any function carried out at the home office is considered non-reimbursable. Any additional home office general conditions item or person can be inserted into Article 7 as a reimbursable cost, but it must be mutually agreeable and done so before the contract is executed. Some of the home office GCs costs which can be inserted into the contract include:

- Scheduler,
- Estimator,
- Safety officer or inspector,
- Quality control officer or inspector,
- Data processing costs, including accounting and audits,
- Cost engineer or accountant,
- Senior project manager,
- Preconstruction services fee or costs,
- Specialty superintendents, such as a hoisting superintendent, concrete finisher superintendent, earthwork superintendent, ironworker or structural steel superintendent, and others.

It is very common to see the project manager inserted as a reimbursable cost in Article 7; this was the situation on the hotel case study project. The jobsite cost accountant was also inserted as cost-reimbursable and her wages were included in the jobsite administration estimate. An example of an expanded annual home office general conditions estimate for Evergreen Construction Company can be found on the eResource.

Management of the home office general conditions budget

Management of the home office general conditions budget is the responsibility of the CFO and CEO and is not project-based. The contractor's goal is to reduce its home office overhead costs with respect to overall volume. Recall that fee equals overhead and profit. If the fee is fixed and home office costs are reduced, then profit is increased as reflected in the following equations. The jobsite team focuses on producing fee, and the home office team uses that fee to first pay its operational costs. Anything remaining is considered profit.

$$\begin{aligned} \text{Fee} &= \text{Overhead} + \text{Profit} \\ \downarrow \text{Overhead} &= \uparrow \text{Profit} \end{aligned}$$

The lack of proper understanding, recognition, management, and allocation of home office overhead to construction projects is a common source of smaller-sized contractor failures; an example is exhibited in the following. The goal of HOOH management is first to make sure the

company spends within its budget, just as they would do with jobsite indirect and direct costs. One way to do this is not to add additional overhead expenditures, such as a second marketing director or new office equipment, beyond that which was anticipated on the first of the year and accounted for in the annual budget. The second goal is to reduce overhead costs, and that can be accomplished in a couple of fashions:

- Reduce overhead costs by eliminating personnel. It is unlikely that wage rates can be reduced, but if one accountant or one receptionist or one vice president leaves during the middle of the year, and is not replaced, costs will be reduced. This applies to materials and office equipment as well.
- Attribute as much of the home office overhead to construction projects as is possible. Examples include wages of the project manager and jobsite cost accountant as discussed earlier.
- If construction equipment is owned by the construction company, and not a separate equipment company, it needs to be out on jobsites and charged to projects and not in the warehouse or the company storage yard. Equipment maintenance also needs to be job-costed wherever possible as will be expanded on in Chapter 12, 'Equipment use and depreciation.'
- Labor burden is a combination of labor taxes and labor benefits. All labor burden, including burden on direct and indirect project labor, should be attributable to the project and job-costed and not costed to the home office. Labor burden is included with Chapter 18, 'Taxes and audits.'
- Overhead is a combination of fixed and variable costs as discussed with breakeven analysis later. If a company's volume is increased, the variable overhead costs increase proportionately, but the fixed overhead costs are not necessarily increased. If revenue is increased just to the point, but not over, where a jump in fixed overhead costs would be necessary, such as the addition of an administrative clerk or a second payroll clerk, then the total overhead percentage as compared to total revenue is reduced.

Example One: This small but successful custom and spec home builder was organized as a sole-proprietor and utilized the cash accounting method of recognizing revenue and expenditures. The owner was also the project manager, superintendent, lead carpenter, and on weekends estimated new projects. His wife was the bookkeeper, interior decorator, assisted with marketing, and often was seen picking up materials in her husband's pickup truck. He invoiced his clients his time at \$2 per hour above union scale, his crew's actual wages straight through, and marked up materials and subcontractors by 10%. He did not factor his home office or equipment utilized in his home office into his billings. Neither did he invoice for his wife's wages, his pickup truck, or his shop/warehouse. He made a decent and fair income, due to an outstanding relationship in the community for quality work and fairness, but when it came time to replace his pickup truck and radial-arm saw, he had to dig into his personal savings.

Any reduction in home office overhead, assuming a fixed fee, increases profit. But a reduction in the overall overhead percentage as related to revenue also allows the contractor to reduce its required fee and become more competitive with their bids and proposals. In the previous example,

HOOH was set at 2% and profit at 3% with a desired fee of 5%. If HOOH were reduced to 1.5% through any of the means discussed earlier, and the contractor retains their goal of a 3% profit, then the fee (which could either be used for bids or open-book proposals) could be reduced to 4.5%. The lower fee should then increase revenue which results in additional opportunities to make additional fee with more projects.

Some smaller contractors will attribute more of their expenses to the home office than do others, simply because it is easy. These include many percentage markups such as liability insurance and labor burden, even for craftsmen. In this case, personnel who work on many projects, such as a project manager running five jobs, a structural steel specialty superintendent who helps all the projects with steel, or a quality control inspector who visits ten jobs a week for a half a day each, are all cost-coded to the home office. In the contractor's view, 'cost is cost.' But ideally each project should carry its own share, such that the firm can easily disseminate which projects are more successful. There are several advantages to job-costing versus home office costing on negotiated projects as well as is discussed throughout this book.

There are a couple of different ways home office overhead may be allocated to projects. The most common is for it to be distributed proportionately across all of the projects in the company. If one project accounts for 50% of this year's corporate volume, than that job needs to generate enough fee to cover 50% of the HOOH expenses. In this way every project carries its own weight. Other methods include allocating more of the general conditions to projects which have a higher fee opportunity; allocate them based on project durations – those that last longer are charged more; or attempt to subjectively allocate them based on project support needs. Conversely if a company has only one construction project, that project must pay for 100% of the home office costs just to break even. Another option is to reorganize the company and/or office as exhibited in Example Two. The application of overhead costs to divisions, projects, and direct construction activities is the basis behind activity-based costing (ABC) which will be discussed in detail in Chapter 10.

Example Two: This commercial general contractor had followed a repeat negotiated client to a new city and opened a branch office with expectations of additional work. The additional work did not materialize, for a variety of reasons, and the contractor had only one competitive bid project in backlog for the next year. They shut down their nicely appointed rental office, laid-off most of the office personnel, and the branch manager and his receptionist moved to the jobsite trailer and assumed the roles of project manager and administrative assistant/cost engineer. The PM which had previously been assigned to that job stepped down into the project engineering (PE) role. They survived that year, expanded into a permanent office the following year, and are now the largest general contractor in that city.

Breakeven analysis

Construction projects are required to bring in a sufficient fee to cover home office operations costs. If the home office general conditions budget is \$4 million then \$4 million in fee is a minimum the company needs just to pay its bills. This fee is the breakeven point, with zero profit, which is below

Table 6.1 Breakeven analysis

Ideal Revenue	Breakeven Revenue Without Profit	Construction Cost	Stepped Fixed OH	Variable OH %	Variable HOOH	Total HOOH	Total HOOH % of Cost	Ideal Profit as % of Cost	Fee, or OH&P	Ideal Net (Before Tax) Profit
\$50,000	\$50,000	\$0	\$50,000	2.0%	\$0	\$50,000	NA	4.0%	NA	\$0
\$156,000	\$152,000	\$100,000	\$50,000	2.0%	\$2,000	\$52,000	52.0%	4.0%	56.0%	\$4,000
\$630,000	\$610,000	\$500,000	\$100,000	2.0%	\$10,000	\$110,000	22.0%	4.0%	26.0%	\$20,000
\$1,160,000	\$1,120,000	\$1,000,000	\$100,000	2.0%	\$20,000	\$120,000	12.0%	4.0%	16.0%	\$40,000
\$2,220,000	\$2,140,000	\$2,000,000	\$100,000	2.0%	\$40,000	\$140,000	7.0%	4.0%	11.0%	\$80,000
\$10,850,000	\$10,450,000	\$10,000,000	\$250,000	2.0%	\$200,000	\$450,000	4.5%	4.0%	8.5%	\$400,000
\$53,650,000	\$51,650,000	\$50,000,000	\$650,000	2.0%	\$1,000,000	\$1,650,000	3.3%	4.0%	7.3%	\$2,000,000
\$107,000,000	\$103,000,000	\$100,000,000	\$1,000,000	2.0%	\$2,000,000	\$3,000,000	3.0%	4.0%	7.0%	\$4,000,000
\$532,000,000	\$512,000,000	\$500,000,000	\$2,000,000	2.0%	\$10,000,000	\$12,000,000	2.4%	4.0%	6.4%	\$20,000,000
\$1,063,000,000	\$1,023,000,000	\$1,000,000,000	\$3,000,000	2.0%	\$20,000,000	\$23,000,000	2.3%	4.0%	6.3%	\$40,000,000

Volume = Revenue = Contracted Construction Cost (Direct + Indirect) + OH&P (Home Office Overhead (Fixed + Variable) + Profit)

where the corporate equity owners desire it to be. They are expecting an above average return on their investment because of the high risk investment they made in a construction company.

Home office and jobsite general conditions costs both can be thought of as a mix of fixed and variable costs. Fixed overhead costs are those which are more time-dependent than volume- or revenue-dependent. The office rental for the company costs \$400,000 per year. If the company accomplishes either \$1 million in volume or \$500 million in volume the office rent is the same, it is fixed. These fixed costs may increase though when volume has increased so substantially that an addition is necessary. This may be the case with added office space or an additional company officer or accountant. It is difficult for a contractor to reduce its fixed overhead in an effort to increase its profit margin.

Variable overhead costs are those that are volume-dependent. Items that would show up at the bottom of a contractor's estimate summary page, those that are below-the-line and are percentage add-ons, are variable costs. These include items such as liability insurance, excise tax, and small tools, or in the case of home office overhead, office supplies. If the contractor has a year with very little business, then although they still may need a copy machine (fixed cost), they do not need to run as much paper through it (variable cost).

Evergreen Construction Company is anticipating a volume of \$100 million in 2020. The *fixed home office general conditions* estimate is a series of line items which is mostly time-dependent and is anticipated to cost \$1.5 million this year. The *variable general conditions* costs are volume related and they are budgeted at 0.5% for the coming year. \$100 million multiplied by 0.5% is an additional \$500,000 in general conditions, for a total of \$2 million. Table 6.1 is a sample breakeven analysis worksheet which combines revenue with fixed and variable overhead costs, construction costs, and fees.

Profits

Contractors set many goals including building quality projects, meeting schedules, keeping everyone safe, and developing a good reputation with clients and subcontractors. But contractors are also in the business of making a profit. Construction is risky and is not a 'not-for-profit' industry. Project managers will be reminded of their fee goals throughout the course of construction on their projects by the home office. One of the unique aspects of construction is that true fee will not be known until the project is complete. In the home office, corporate executives will not know what the total yearly profit will be until the year is complete and all job costs and revenues have been factored, along with the actual home office general conditions expenditures. This section analyzes methods to determine estimated profit, sources of profit, and methods to improve profit.

Methods to determine estimated profit

Profits are not what contractors add to the bottom of construction estimates, they add a proposed fee, but for some participants in the built environment, they see the fee as all profit. The fee is also known as the 'margin' or generically the 'markup.' But as we have discussed earlier, the fee first needs to cover home office overhead, and any money remaining after overhead is accounted for may be considered gross profit. The following accounting equations will help explain how

net profit is derived from the original contract value. It is the net profit that provides a return on equity (ROE) for the company owners. Net profit is also known as after-tax profit or net income or 'the bottom line.' Revenue would be the top line in an income statement as reflected in the next chapter's discussion of financial statements. Then after a series of expenditure deductions, and subtotals, a summary of which is reflected in the following equations, the net profit is reflected on the bottom line.

$$\begin{aligned} \text{Revenue, or Contract value or Volume} &= \text{Total cost} + \text{Gross profit} \\ \text{Total cost} &= \text{Construction cost} + \text{Home office overhead cost} \\ \text{Revenue} &= \text{Construction cost} + \text{Fee} \\ \text{Construction cost} &= \text{Direct construction cost} + \text{Jobsite administration cost} \\ \text{Direct costs} &= \text{Direct labor} + \text{Material} + \text{Equipment} + \text{Subcontractors} \\ \text{Fee} &= \text{Home office overhead} + \text{Gross profit, or OH\&P} \\ \text{Net profit} &= \text{Gross profit} - \text{Income taxes} \end{aligned}$$

When a contractor is preparing to bid a project, or submit a proposal on a negotiated project, they have to determine what fee to include. Some of the fee considerations the contractor's CEO will make include:

- The fee must at least cover the home office breakeven overhead costs, which are approximately 2–3% of revenue for a mid-sized commercial general contractor.
- Direct labor is the biggest estimating risk for any contractor. The fee should cover approximately 50% of estimated direct labor cost for a commercial general contractor. This is saying that if the estimator missed the labor estimate by half, they will still come out even.
- There is an opportunity cost for both the project manager and superintendent working on any particular project. The PM and superintendent are soft assets with earning power. They are expected to earn a fee for their company. If they cannot realize a fee of \$20,000 per month each on project 'A' then the contractor should pass on it and pursue project 'B'. An experienced project engineer or cost engineer can be added to this equation as well.
- Does the contractor have a large backlog, in which case the fee would increase, or does the contractor need additional backlog, in which case the fee would drop?
- Market conditions may indicate that work is being bid today with a fee of 4–6%, therefore the fee needs to be within that range.
- Availability of personnel, especially the PM and superintendent.
- The contract type can significantly influence the fee decision. Lump sum projects have increased risk for the contractor and deserve more fee than a cost-plus project. A project with a guaranteed maximum price is somewhere in between.
- There are many contract issues and contract clauses which can raise or lower the fee, such as liquidated damages (LDs) and definition of reimbursable costs in the AIA A102 contract, Articles 7 and 8. If there are additional opportunities for home office costs to be considered job cost and therefore reimbursable, this allows money to be moved from the home office general conditions to jobsite GCs and allows a lower fee, all the while retaining the same profit goal.

Other potential risks or opportunities such as the client and subcontractors and design team can have an influence on increased or reduced fees as well. The greater the risk, the higher is the fee. If the risks are too great, there might not be any fee that would make the job attractive. Risks are also resolved by the contractor purchasing insurance, bonding subcontractors, increasing estimating contingencies, or taking on a joint venture partner for a specific project.

Sources of profits

There are many ways a contractor can make money and realize a profit, just as there are many ways they can lose money. The following are some examples.

- Operate each division within the company and each separate construction project as independent profit centers. This is one focus of activity-based costing.
- Minimize home office overhead as discussed earlier. This is difficult to do and is not a financial management responsibility of the project manager.
- Perform more work with direct craft labor. If direct-hire carpenters and ironworkers beat their estimate, then the general contractor makes additional fee. But as will be discussed in Chapter 8, 'Cost control,' this also increases risk.
- Alternatively, reduce direct labor and increase the mix of subcontractors. This will not necessarily improve profit potential, but it reduces risk and therefore improves the potential to make the estimated fee.
- Individual construction crews or teams, including foremen, and superintendents are potential profit centers as some may consistently beat the budget.
- Build the project quicker: saving times saves jobsite general conditions expenses.
- Build with good quality and minimize rework, which is a goal of lean construction.
- Construction accidents cost everyone in a variety of fashions. Safer projects have proven to be more cost efficient.
- The project management team does not have as immediate an effect on profits as does the construction crew, but they need to be held accountable to return the estimated fee if not improved upon. They can do this if they are given the authority to act and make independent decisions in the field and are not totally reliant on home office oversight.
- Reduce construction costs by:
 - Beating labor productivity estimates,
 - Efficient material purchases and deliveries with less waste,
 - Shorter construction schedules, and
 - Reduced jobsite GCs costs.
- Efficient bid procedures and later successful buyout of subcontractors and suppliers and execution of tight contracts.
- Types of projects: some companies will make more money on retail and others on hotels.
- Clients or project owners can make a project run smoothly and improve a contractor's efficiency which should prove it more cost effective. The reverse is true as well. Client satisfaction is the responsibility of the PM and superintendent, not only on this project, but for future references. Some projects have potential incentive fees calculated from scorecards to be completed

by the client which provide the general contractor with a bonus based on several categories of performance, including schedule, quality, safety, and communications.

- Efficient use of construction equipment, including:
 - Economical rental periods, such as one week and not four days,
 - Good business decisions either to rent from external firms, or require subcontractors to provide all the equipment, or rent from in-house equipment companies, and
 - Open-book contract issues affecting equipment maintenance repair costs and rental rates.
- Some geographical locations, including cities and states may be better for one contractor versus another due primarily to relations with subcontractors.
- Some architects and engineers are easier to work with than others which can have a positive impact on cost performance.
- Guaranteed maximum price contract savings splits.
- Back charging subcontractors for work which was either performed by the general contractor or another subcontractor or for work which the general contractor had to repair.
- Sliding scale fees allow a contractor to make more money on direct work than on subcontracted work and more money on change orders than on the base contract.
- Some below-the-line markups have the potential for hidden fees, in that the markup charged either on change order work or on the original open-book contract was higher than it needed to be. Some of these can be discovered during a financial close-out audit, but others are very complicated. This includes markups such as labor burden, liability insurance, data processing, and others.
- And for some contractors, but unfortunately for owners and architects, claims are a source of potential profit.

Methods to improve profits

The contractor's goal is first to achieve the fee that was estimated, and then improve upon that. Assuming the home office overhead costs are set, an improvement in the fee directly results in an increase in profit. But without systems in place to first estimate accurately and then track costs, as shown in the following example, profits cannot be attained, let alone increased. There are many ways that *profits can be improved*, including:

- Raise bid prices, but this may also reduce volume;
- Increase volume without increasing fixed overhead;
- Reduce fixed overhead expenditures, with a constant volume;
- Specialize in one type of construction, for example medical facilities;
- Be selective with client choices, types of work, designers, subcontractors, employees;
- Improve preconstruction planning;
- Reduce construction cost; and/or
- Learn better methods. See Chapter 11 'Lean construction techniques.'

Example Three: This small speculative home builder did not have any means of construction cost control and did not even track the cost of any individual home. He often had three houses under construction at any point in time, one at the site-clearing stage, one in rough framing, and the third in trimming-out interior finishes. The economy was slow, but he was still able to sell a couple of houses each year and pay his bills. There were two things he did not understand: first, he was using the revenue from the current house sale to pay for the bills on the last house, and second, he was selling them below cost. When the economy slowed even further, and he was stuck with two completed but unsold houses, he went through bankruptcy and lost the houses to the bank.

Contractors may choose to *raise their estimated or bid fee* on one particular project for a variety of reasons, including:

- Provide a practice bid, although this is expensive to do and potentially dangerous if the contractor accidentally becomes the low bidder;
- Market conditions allow a higher fee;
- The type of work is not the contractor's specialty;
- The client may be a high risk client which is prone to slow payments or lawsuits;
- The construction documents are not complete, although some contractors would see this as a change order opportunity;
- Tight schedule mandated by the client, possibly with liquidated damages;
- Other risky contract clauses, such as slow payment terms or high retention withheld;
- Provide a courtesy bid to a client they do not want to offend if they have a sufficient backlog; and/or
- If the project is difficult or complicated it may require a higher fee due to higher associated risks.

Other markups and add-ons to the estimate

The fee is only one markup that is placed *below-the-line* in the estimate summary; there are several others. All of the estimated costs 'above-the-line' are considered direct costs. Similar to fee, other items below-the-line are percentage add-ons to the estimate and are volume-dependent and therefore are variable costs. Labor burden is applied to direct and indirect labor only, not to the entire direct cost subtotal. Labor burden is not applied to material costs and subcontractors are expected to have covered their own labor burden in their bid prices. Different burden rates should be applied to direct and indirect labor. Typical percentage add-ons that will show up below-the-line on a construction summary estimate include: labor burden, liability insurance, excise tax, sales tax, contingency, and fee.