
 <p>The cornerstone of confidence™</p>		<p>May 2003</p>
<p>The following is a series of articles addressing the cost of construction projects.</p>		<p>Article 1 of 4</p>
<p>PinnacleOne Institute Custom, In-house Training and National Seminar Series</p> <p>Program & Project Management</p> <p>Dispute Avoidance & Resolution</p> <p>Real Property Advisory Services</p> <p>Headquartered in Phoenix, PinnacleOne regional operations are located in Irvine, Los Angeles, Sacramento, and Hartford, CT.</p> <p>To view a specific back-issue of this newsletter, please <Click Here></p>	<div style="border: 1px solid black; padding: 5px;"> <p>WHAT WILL MY PROJECT COST?</p> </div> <p>Most ideas in life come with a price tag attached. "Can we pay the bill?" is a significant question. Cost overruns are common in construction since numerous factors affect the final cost of any complex building project. This series of articles addresses some practical remedies to avoid the pitfalls of ... <u>IT COST TOO MUCH!</u></p> <hr/> <p style="text-align: center;">C O N T R O L L I N G C O S T S</p> <p>We all learn at an early age the embarrassment of not having enough money to pay the bill. At a restaurant, retail store, or a corner convenience store, when time to pay, we have all searched our pockets for the last coin needed to pay the bill. When the concept for a new project first emerges in an organization, it is not nearly as clear what the ultimate price will be or if it is affordable. On many projects, the answer to the cost puzzle is never finally known until the last bill is paid. Those that must pay the bill may still have a nervous feeling in their stomach when the check arrives. The quote I find most applicable to this situation is from the famous science fiction writer, Robert Heinlein, in his book entitled <u>The Moon is a Harsh Mistress</u>,</p> <p style="text-align: center;">"There ain't no such thing as a free lunch."</p> <p>1) PRELIMINARY BUDGET – Just as a growing family which has expanded beyond its current home, organizations need new and better spaces. In the world of construction, this need is translated to new office space, facility space, hospital space, factories, plants, highways, bridges, etc. For large projects, preliminary estimates are generally made early in the process. The viability of these projects may very well depend on the accuracy of this estimate as the project develops from concept to reality.</p>	 <p>Peter J. Scavello, P.E., Senior Project Manager with PinnacleOne, is an expert in construction. He is often called upon by public and private owners to determine the project status and recommend solutions to delivery. Scavello has testified as an expert on such matters in numerous venues including the US Federal Court of Claims and has advised both public and private owners on solutions to these problems.</p>

Preliminary estimates are derived from the concept of what the project is to be. Rule of thumb, yardsticks generally are used. These include costs such as "per mile" of highway or "square footage" for a particular building type. This information can be handy in establishing starting points for budget amounts. A variety of sources are available with historical data which can be used as predictors of what the costs will be. Factors such as locale, business climate, and demand, as well as any reputation for difficult administration of previous factors, can all affect the ultimate price and should be factored into the preliminary prediction of cost.

The best predictor of cost is the contractor who built an identical item in an identical locale. Contractors keep records of what it costs to pour a cubic yard of concrete in downtown San Francisco in 2001. Therefore,, they have the best possible chance of predicting what the same yard of concrete will cost to pour in downtown San Francisco in 2005. Successful construction contractors keep meticulous records of this data and guard it from competition.

As a project progresses, an issue I call "quality creep" occurs. Everyone wants a nicer house, a finer place to work, a better and safer highway, etc. As the project evolves, and more people become aware of its pending reality, they all want to influence the process. Upgrades become the vogue and can drastically influence the price. Often times, the design team is encouraged to refine, upgrade, and generally make the project nicer. They want to please, not throw water on the process.

The price of a project can increase dramatically when too many people are influencing the designers. Think of the project like a car. It can be cut-rate like a Kia or Yugo, standard like a Chevrolet or Ford, or expensive like a Lexus or Mercedes. All are vehicles that will get you where you want to go. The more expensive, the nicer it should be. Control is the issue for the decision maker – if you had budgeted for a Chevy and upgraded to a Mercedes, then don't be shocked at the Final Construction Cost Estimate. Construction is an old industry. Costs are well defined and bargains are a rarity.

2) FINAL CONSTRUCTION ESTIMATE – Finally, the design is done! Along with the completed plans and specifications, comes the cost estimate. If you have been managing the process, there should have been constant interaction between you and the design team as to how and why the bottom line number was changing. If the process was being managed carefully, there should be no shock as to what quality and quantity of project

you should be getting for the money. You can't get a Mercedes for the price of a Ford, nor should you be getting a Ford with a Mercedes price tag.

Another factor which influences the price, and which a construction contractor must charge for is Risk. How difficult to construct, how time consuming, and how resource intensive the project will be affect the bid. Cash out of pocket, return on investment, and duration of the project all affect the contractor's willingness to invest his money in producing your job. These are some of the business factors which a contractor must include in its bid price.

3) ACTUAL CONSTRUCTION COST – The day arrives. Bid opening. There is much excitement. A proud owner to be, and a number of disappointed bidders. Hopefully, your bid comes near the estimate and the project can proceed. I have seen projects come in 20% or 30% overbid and be scrapped because the funding source for the additional cost simply was not available. Many Architect/Engineer contracts require a redesign if bids exceed a defined percentage in the project estimate. A good idea if cost control is important.

The bid, however, represents only one element of the construction cost. The contingency factor needed will vary with a number of elements, including the quality of the construction documents. How was the risk divided between the owner and contractor? Design/Build? Low Bid? Selected Bidder? All of these methods have their own degree of risk, and a varying price for bid and prudent contingency allowance.

The technical sophistication of the owner, as well as how the contract is to be administered, will also influence the final construction cost. Additionally, there is always inherent risk in all projects and the manner in which problems are resolved, if technical problems occur. Then, to add insult to injury, sometimes there are claims at the end of the project. The money that it costs to assert or defend against claims are added project costs that do nothing to enhance or improve the quality or scope of the project. Overseeing the process or having someone do it for you, and understanding that costs can be controlled but bargains are a rarity, is a key to the financial success of your job.

After reading all these words of caution and risk, you may decide that living in a mud hut on some isolated South Pacific atoll is the only alternative. Just keep in mind that most projects precede on time and within budget, providing just what was needed.

Always, always be mindful of the fact that a construction estimate is nothing more than a guess by knowledgeable persons - and it's a guess about what it will ultimately cost the other guy!

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