

HELP! HOW CAN I MAKE MY BUDGET WORK?

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As they say, every day is a new day. This is especially true when we see the extent of cost escalations all projects are feeling today. This effect has had terrible impacts on budgets that were often established many years ago. For any owner, we often hear the word “Help!” as they do not know which way to turn. The worst choice is to do nothing.

Trying to ignore the new realities in today’s construction market will not make the current or even future cost impacts go away. While we have all seen the impact of China buying up scrap steel, along with rising energy costs, we have yet to see the true impact of a multi-billion dollar Gulf Coast rebuilding from the Katrina Hurricane destruction.

“You ain’t seen nothing yet.”

While the 1970s song of the same name by Bachman Turner Overdrive dealt with a different topic, the meaning is still the same: “Here’s something that you’re never gonna forget, baby.”

While you could not have foreseen what we are experiencing today, we can predict that in the near future rapid cost escalation will not slow down. **So what are project owners to do when faced with costs that exceed budgets or are anticipating a new project?**

The first key is to understand that you are not alone. Many owners are feeling the impact of the last two years of cost escalations and ultimately this also affects the design and construction firms that depend upon new projects to stay in business.

This was exactly the situation that faced a new, large high school construction project that bid over budget in June of 2005. The bids came in a shocking 25 percent over the bond budget established level, even though there was a CM@Risk contractor providing pre-construction services. Many of the following steps are based upon the lessons learned in a very intensive effort lead by the PinnacleOne team on behalf of the city and its building committee to keep the project moving forward. It also includes 27 years of my personal experience in representing owners in the design and construction management on many types of publicly and privately funded projects through numerous cycles of both cost increases and decreases.

1. ADJUST THE PROJECT SCOPE

While this is among the last options any owner wishes to consider, sometimes hard decisions have to be made. Can the project be phased by delaying future built-in capacity? Do you really need that large lobby area that is infrequently used? Can you build out a portion as a shell and delay the interior build-out to a future phase and funding? Can a function such as that served by an auditorium be met by other existing facilities? Preferably, these are the questions that should be examined in the programming phase of a project at its earliest inceptions. The later in the design process they are addressed, the harder it is to reverse direction.

2. RELOCATE THE PROJECT TO A DIFFERENT SITE

The easiest solution is not always the best. Unfortunately, this in reality is not a true option for many owners. Demographics, required land area, accessibility, and visibility – especially for retail projects – will often dictate that this is the location...period. However, many sites have hidden costs, especially those that initially appear to be the least costly.

Proper due diligence in complete land surveys, environmental and geotechnical soils studies, traffic studies, archeological studies,

and wetlands determination will always pay off in allowing owners to make an informed decision. In my experience, the old saying “penny wise and pound foolish” is very true...spend the money up front!

3. REVISE THE PROJECT DELIVERY METHOD

There are many choices today in how to design and construct a project. Each has its own advantages and disadvantages and each has had entire books written about them to discuss their virtues. However, there are a few points that are worth noting here.

Firstly, there is the need to look at the type of project and its potential difficulties, such as renovation versus new construction, whether the facilities will have continued occupancy during construction, and whether it is a congested, urban type of site. For difficult projects, it is always best to pursue a delivery method that allows for a quality-based selection process where references and past successes take precedence over a low bid. This qualification-based selection would include the CM@Risk and Design/Build delivery methods.

On the other hand, with cost being so important, an owner must look closely at the use of Design/Bid/Build, where the low bid comes in and gets the job as long as they meet established pre-qualification standards. However, these standards do not include providing good references. Typically, in the public sector, just being able to provide a Bid, Performance and Payment Bond qualifies a contractor. This delivery option works best for simple, new project types.

Combining a qualification and low-cost proposal selection process is creating the growing use of Design/Build. The selection process in this method can be tailored to address both the cost and quality needs of an owner. It also provides two other advantages to an owner: 1) the ability to compress the time of the project to reduce the impact of the on-going cost escalation (also known as inflation), and 2) elimination of exposure to architect errors and omissions caused by change orders. This is possible because the architect is hired and accountable to the Design/Build firm. The only drawback to this delivery method is that the architect is no longer a representative of the owner, as they are under contract to the Design/Build firm. Under this circumstance, there is a critical need for an independent owner’s representative to protect the owner’s interests. While the services of a program/project manager as the owner’s representative will add value in any project delivery method, they are extremely valuable in Design/Build.

4. CANCEL THE PROJECT

Ultimately, if all of the above – and other potential options to balance out the cost and the budget fail – then the choice for an owner is to stop or not start the project. The key to this decision will be to ask, “How much has already been invested and would be wasted or lost?” If the project is too far along, and too much money has been spent it becomes very difficult to justify the waste of the investment if it is cancelled. The sooner this decision is made, the better. Projects that are ready to be bid and to start construction require a quick assessment of the impacts each option would create and decisions made. While moving ahead could cost money, time delays in moving forward will also create even more added cost due to the escalation factor of time.

5. INCREASE FUNDING

Very often the options, and the compromises they require, are not

acceptable to an owner. In my experience, the gap between the budget and cost becomes too great at some point and no amount of change will close the gap. At this point the decision must be made to pursue additional funding.

The key to increasing the budget – especially for public sector owners – is the need to justify and sell the increase to political bodies and, very often, the voters. This should be the next-to-last resort, just prior to cancelling a portion of or the entire project itself.

6. INCREASE REVENUE PROJECTIONS

For public sector projects, increasing revenue projects will not usually be an option as the projects do not help to produce revenue through sales or leases. However, for the private commercial, industrial, or other similar capital projects, the income side must also be looked at closely.

Usually, as the costs go up for construction, the cost for other items also increases. Products can be sold for more, generating a bigger return on investment, allowing more to be spent to help generate that new revenue. Lease agreements are often tied to inflation factors, again allowing for greater revenue. These all need to be explored to create the new budget baseline to work against.

7. REVISE THE DESIGN TO CHANGE PROJECT MATERIALS

This is the process that is often called “value engineering.” While the search for substitute materials or products of equal quality at a reduced cost is always valuable, this exercise usually defaults into a “cutting” process. One of the keys for any owner is to not lose sight of the “pay now or pay later” aspect of the decisions. Life cycle cost analysis must be part of any material change decision.

There have been numerous studies that have found construction costs are a very small part of the cost to own and maintain a facility over the course of its estimate lifespan of 40 to 50 years. According to the Facilities Maintenance & Operations Committee of the National Institute of Building Sciences, more than 95 percent of a facility’s total life cycle cost goes toward supporting the occupants during the life of the facility. That means that the initial construction budget has only a 5 percent impact on the total facility cost to own. The need to more frequently replace finishes, mechanical, and other systems in a building has tremendous cost implications for any owner. Think of your own house and the impact that can occur when lesser quality materials and products are used to not only replace existing items, but to repair, clean, and maintain them.

8. INCREASE THE ESCALATION ALLOWANCE AND/OR PROJECT CONTINGENCY

While projects that have been underway have had major challenges thrust upon them to address established budgets, a whole different set of problems arise for new projects being considered and budgeted. This problem centers around what value should be used to forecast the escalation factor for the cost of construction two to three years into the future. We are currently experiencing escalation of approximately 1 percent per month.

This puts tremendous pressure on projects to get bid-out as soon as possible. This concern will grow even more in the following years as the rebuilding of New Orleans gets into gear.

The only way for up-coming new projects to avoid a repeat of the cost versus budget crunch is to be realistic. An owner needs to ensure that today’s conceptual cost estimates are escalated by 15 percent per year to the mid-point of construction. Also, an owner must ensure that a proper level of owner contingency of 10 to 15 percent on the total budget value is allowed for. Simple new projects would be at the lower end of this range, while complex renovation projects should fall at the upper end of this range.

9. REDUCE THE DESIGN AND/OR CONSTRUCTION TIME PERIOD

With the high level of construction cost escalation, owners can gain real value by accelerating construction. This is where the use of the Design/Build delivery method can work to the owner’s best advantage. While you can “fast track” a project using multiple prime contractors, this puts more risk on the owner. However, the concept of “fast tracking” can be used in a partial way to accelerate the project, especially to begin it. Preparing the site with demolition, environmental remediation, grading, and new utilities creates a long lead time to start any vertical work. The documents for this site work are almost always ready well ahead of the building construction documents. Why not take the site-related documents out to bid early and allow this work to proceed while the rest of the documents are being finalized? Also, key materials such as structural steel, pre-cast, major mechanical, and electrical equipment historically involve a long lead time to procure. You can always bid and order these materials in advance and assign the contact to the prime contractor. This creates a limited chance for delays and accelerates the commencement of work.

One other area that will need to be explored further is the use of manufactured building systems. By using factory-produced, entire building systems – or major components such as walls and roofs – you are less dependent on the local labor availability and have a higher level of quality control.

CONCLUSION

As you can see, there are many options. It is the owner who must ultimately decide what is most important to control cost. However, this is not only a concern for owners. This is a concern for anyone dependent upon construction for a living. At some point, as costs increase, any owner can be forced to scale back, delay, or cancel a project. As enough owners do so, then resources and demand will find balance; or worse, we will see more resources than demand. Although it is hard to remember today, back in the early 1990s we went through a period of deflation, when construction costs went backwards.

While from an owner’s perspective, the reduction in costs with deflation like that of the early 1990s was a great help to budgets for those projects built then, we cannot count on that happening in the near future. No one can clearly predict when something like that may happen again. I feel there is too much demand for construction resources around the world – both for materials and labor – to not have continued cost escalation in the foreseeable future.

So, we are back to the main point; costs will continue to increase and everyone will need to plan for them realistically. Hopefully, I have provided you with some options to consider as you move forward.

ABOUT THE AUTHOR-

Bill Trail has over 25 years of experience in the construction industry. He has served as both project executive and project manager for numerous large-scale municipal projects throughout the United States. His strengths include overall project management, master schedule development, project budget establishment and facilitation, construction document preparation, oversight and construction administration. Mr. Trail is the Vice President of Program Project Management for PinnacleOne’s Northeast operations.