

The Power of Parallel Estimating

“Not only is Parallel Estimating good business practice that helps minimize risk, it also provides the necessary checks and balances through independent verification that is so often lacking on many projects today.”

“To mitigate the risk for both the owner and the contractor it is becoming more advisable and prudent to engage the services of an independent cost estimator.”

With the continued pressure on the availability of funding for major capital programs, owners now place much more emphasis on the pre-construction phase of a project and in particular on the budgeting and estimating process. Recent trends show that owners have started to put in place more sophisticated processes to analyze, monitor and control this phase of the work. The primary means by which owners are exerting more control in this area is through the process of Parallel Estimating. Not only is Parallel Estimating good business practice that helps minimize risk, it also provides the necessary checks and balances through independent verification that is so often lacking on many projects today. As buildings become more and more complex, owners, architects and contractors are all more exposed to the vulnerabilities and complexities inherent in the planning, design and construction of modern facilities.

Projects now require more aggressive scheduling and coordination resulting in non-traditional project delivery systems such as Construction Management “At Risk”, Design Build, and Integrated Project Delivery being implemented instead of the more traditional Design-Bid-Build (where procurement rules permit). Paramount within all forms of non-traditional project delivery is the early involvement of the contractor during the Pre-Construction Phase of the project where deliverables of budgeting, scheduling, constructability analysis, manpower projections, and material procurement are emphasized.

This early involvement of the contractor is essential in assisting the owner in establishing construction costs of sufficient accuracy and reducing the owner’s risk of proceeding with the project and incurring unforeseen costs prior to the completion of design. To mitigate the risk for both the owner and the contractor it is becoming more advisable and prudent to engage the services of an independent cost estimator to confirm and validate the budget as design evolves from early schematic design through construction document phases. The benefits of engaging an independent cost estimator also protects the architect from unnecessary redesigns which, apart from added cost to the architect, typically have created project schedule delays, threatened team chemistry, and endangered the viability of a project.



“The benefits of parallel cost estimating far outweigh the additional cost to the project for these services.”

The process of Parallel Estimating starts with the engagement of an independent third party cost estimating firm contracted directly to the owner or the architect. To maximize the benefits of the Parallel Estimating concept, the contractor and the estimating firm are required to organize their estimates in a mutually agreed Work Breakdown Structure which assists with the reconciliation of cost. Typically, each trade or CSI division (or Unifomat breakdown typically used during the early concept and schematic design phases) is compared and all major scope, quality assumptions, and unit cost deviations are identified. Through a process of an in-depth line item review and subsequent discussions with the design team, contractor, subcontractors and suppliers and the independent cost estimator, adjustments are agreed upon for all line items including allowances, contingencies and amendments made to all estimates as required. This comparative process reflects the known design realities, market conditions and owner directives related to unknown or incomplete designs. The availability of recently developed powerful estimating technology such as digital take-off from both 2D documents and BIM collaboration using 3D models allows for a much greater degree of accuracy and ability to effectively review project documentation in detail to easily identify, share and reconcile assumptions with regard to scope.

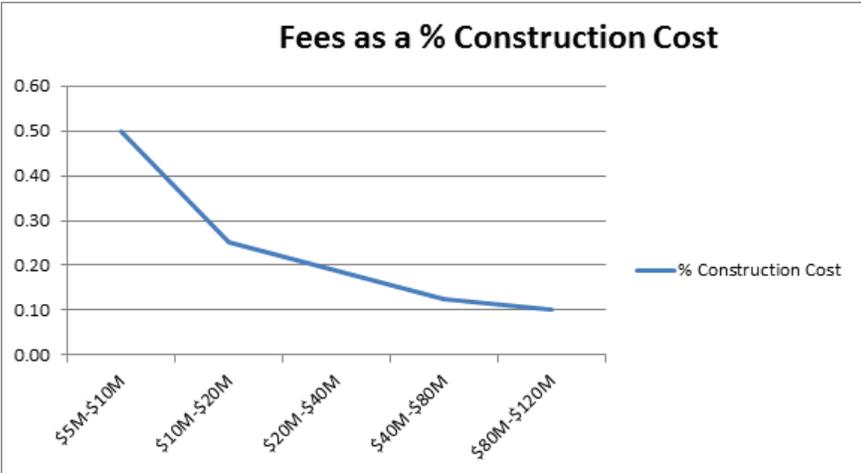
The benefits of Parallel Estimating include:

- Enhancement of scope interpretation.
- Elimination of scope duplication.
- Identification of pricing assumptions.
- Agreement of allowances for scope yet to be designed.
- Establishment of contingency amounts which more accurately reflect the level of risk currently in the project.
- Reduction of risk of cost overruns.
- Reduction of risk of cost associated with redesign.
- Reduction of risk of schedule overruns.
- Increases confidence of all parties, owner, architect and contractor, that the project construction costs are realistic.

Most importantly, we have evidence that suggests that through a combination of the above we typically see a reduction in the proposed contractor budget or GMP of between 5-10%.

The benefits of parallel cost estimating far outweigh the additional cost to the project for these services. Consider that on projects with estimated construction cost in the ranges as referenced below, the estimating fees for conceptual, schematic, design development and construction documents cost estimates, including the reconciliation process at each design stage, will typically cost, as follows:





To summarize, the process of Parallel Estimating is a worthwhile investment for any owner to consider. Not only does the process identify and mitigate risk, it does so in a format that has benefit for all those involved including the owner, architect and contractor and ultimately results in a better project for everyone.

