



Managing the Golden Triangle of Project Goals

Projects often must make trade-offs in scope as it relates to:

- Quality of what is being built
- Desired timetable for the project
- Desired cost of the project

The first breakout group discussed better ways to manage these trade-offs over the life of the project.





Managing the Golden Triangle of Project Goals



Establish the Guiding Principles

Define the rank order between cost, schedule & quality as it relates to scope of the project

Need alignment of all project participants on the Guiding Principles and rank order of prior – will assist in good decision-making



Develop Trust and Communicate Effectively

Seek transparency

Constructors' perspective: Ask the right questions to gain insight from Owner and Designers

Owner's perspective: Get the right people involved at the beginning to set the Guiding Principles and related priorities.



Cost Contingency: Best Practices



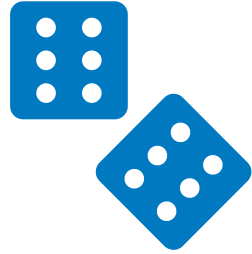
Contingency in an estimate is one of the largest line items.

The second breakout group discussed best practices in:

- Establishing the cost contingency amount
- Managing contingency over the life of the project



Cost Contingency: Best Practices



Consider Risk in Establishing Contingency

Consider use of a cost risk analysis (and simulation) to establish contingency

More risk = more contingency; Less risk = less contingency

If risk is eliminated, consider reducing contingency amount

Understand risk tolerance of Owner when developing contingency amount



Define How Contingency Is Used

Agree up front what contingency should be used for

Usually needed for cost of expected “unknowns”

Often used to offset cost of normal changes

Have effective cost control (due diligence) to ensure contingency is used for its intended purposes.

Consider use of a “rundown” scheme for the contingency amount as the project ensues. This scheme is based on timing of when the risks could occur on the project.



What Does It Take to Get a Reliable Cost Estimate?

Adjust Base Approach for Peculiarities of Project

- » Adapt for Project Site/Nature: Greenfield v. Brownfield v. Renovation (or Revamp)
- » Consider Effect of Market Conditions: Will It Be Normal, Active or Hyper-Active Market for Construction
- » Consider Project Risks
- » Consider Effect of Construction Execution Strategies – use of pre-fabrication, for instance



What Does It Take to Get a Reliable Cost Estimate?

Set Up Estimator for Success

- » Ensure Estimator Has Adequate Information to Compile the Estimate
- » Provide Sufficient Time to Compile Estimate
- » Confirm Reliability of Information from Subcontractors, Suppliers, etc.
- » Ensure Estimator Has “Right Tools” Coupled With Experience to Prepare a Quality Estimate

Declare Underlying Assumptions & Clarifications

- » Review to Confirm Reasonableness

Reliable Estimate: Consider Table Analogy

Consider this analogy to develop reliable estimates:

- » Need stable definition of project scope
- » Need to define the execution plan for project and related schedule (as many project costs are time-dependent)
- » Need reliable tools and data to compile the estimate

Use of estimate basis document is key to communicate underlying assumptions and basis for the costs.

