

THE COST ANALYSES CHECKLIST INTRODUCTION

The Cost Analysis Process

Cost analyses should become increasingly detailed and accurate as the development process moves forward. In the early phases (Concept and Predevelopment) estimates based on square foot costs, modified by costs associated with special site conditions, will be sufficient.

However, as the design becomes more detailed (during the Development phase), so will the cost estimates, moving away from square foot methods to more accurate analyses based on the costs of individual materials and products. Instead of a rough estimate based on the overall size and complexity of the project, the developer will have a far more accurate estimate based on the amount of brick, the number and type of windows, the total linear feet of countertop, etc. to be included in the project.

These later estimates are based on “take offs,” in which accurate quantities of individual materials or products are extracted from (i.e. “taken off”) the design drawings.

Cost Analysis Tools

A number of tools are available to help developers conduct these cost analyses. For square foot estimates, data collected by three national companies—R.S. Means, Craftsman and Marshall & Swift—can be used. Craftsman Book Company has a resource available on line at no cost at www.building-cost.net. R.S. Means also provides some information gratis at their website www.rsmeans.com. Marshall & Swift’s site is www.marshallswift.com.

For analyses based on material and quantity “take-offs,” software tools are available from these companies and from the Enterprise Foundation. Craftsman can be reached at 1-800-829-8123 or www.craftsman-book.com. R.S. Means is at 800-448-8182 or www.rsmeans.com. Marshall & Swift is at 800-451-2367 or www.marshallswift.com. The Enterprise Foundation is at 410 964 1230 or www.enterprisefoundation.org.

At all stages, cost estimators, contractors and/or architects with knowledge of local cost conditions can provide invaluable advice and input. They should be an integral part of any cost estimating team.

Using The Cost Analyses Checklist

The Design Advisor recommends that cost analyses be conducted a minimum of seven times over the course of a development project. The Cost Analyses Checklist is a simple method for ensuring that these analyses are conducted and completed. It provides a

timeline indicating when each analysis should be undertaken, together with brief descriptions of what type and level of analysis should be conducted at each point during the timeline. Completing all the analyses called for on the Checklist will go a long way toward ensuring that the design goals for a project are realistic and achievable.

THE COST ANALYSES CHECKLIST

Analysis #1 **Date Completed** _____

When: Upon Completion of the Site Evaluation

What: A square foot-based analysis, using the estimated gross square footage of the building.

Plus a “best judgement” estimate of costs for site development, including parking and treatment of any special site conditions (special soils, potential problems with construction access, need for retaining walls, utility access, environmental remediation, etc.).

Plus a contingency of 15-20% to account for possible inaccuracies, inflation, change orders, unknowns, etc.

Analysis #2 **Date Completed** _____

When: Upon Completion of Early Schematic Design

What: A square foot-based analysis, using the actual gross square footage of the building.

Plus a “best judgement” estimate of costs for site development, including parking and treatment of any special site conditions (special soils, potential problems with construction access, need for retaining walls, utility access, environmental remediation, etc.).

Plus a “best judgement” estimate of additional costs to account for special design considerations (e.g. artwork, special types of construction, balconies, etc.).

Plus a contingency of 15-20%.

Analysis #3 **Date Completed** _____

When: Upon Completion of Late Schematic Design

What: A quantities-based analysis, using preliminary take-offs of the primary systems and materials in the project.

Plus a detailed estimate of costs for site development, including parking and treatment of any special site conditions (special soils, potential problems with construction access, need for retaining walls, utility access, environmental remediation, etc.).

Plus a series of “allowances”—bulk costs for standard components (e.g. kitchens, bathrooms, heating systems, etc.) based on experience and local knowledge.

Plus a contingency of 12-20%.

Analysis #4 (if required) **Date Completed** _____

When: Upon Completion of Late Schematic Redesign
(if required during the funding application process)

What: A quantities-based analysis, using preliminary take-offs of the primary systems and materials in the project.

Plus a detailed estimate of costs for site development, including parking and treatment of any special site conditions (special soils, potential problems with construction access, need for retaining walls, utility access, environmental remediation, etc.).

Plus a series of “allowances”—bulk costs for standard components (e.g. kitchens, bathrooms, heating systems, etc.) based on experience and local knowledge.

Plus a contingency of 12-18%.

Analysis #5 **Date Completed** _____

When: Upon Completion of Design Development Drawings

What: A quantities-based analysis, using more detailed take-offs of both primary and secondary systems and materials in the project.

Plus a detailed estimate of costs for site development, including parking and treatment of any special site conditions (special soils, potential problems with construction access, need for retaining walls, utility access, environmental remediation, etc.).

Plus a series of more detailed “allowances,” if required.

Plus a contingency of 10-15%.

Analysis #6 **Date Completed** _____

When: Upon Completion of the Contract Documents

What: A quantities-based analysis, using detailed take-offs of all systems and materials in the project.

Plus a contingency of 10-15%.

Analysis #7 **Date Completed** _____

When: During the bidding/negotiating process.

What: As bids are negotiated and accepted, maintain a 5-10% budget reserve above the negotiated bid to cover potential change orders over the course of construction.