

Cost Model *for* Library

Introduction - What Is a Cost Model ? (*vs. a Cost Estimate*)

Components - What Goes into a Cost Model?

Cost Model – Review Recommended Draft Total Project Cost Model

Cost Model for Library

Introduction

- Total Project Cost Modeling helps to *establish a range of costs* for a building project. This goes beyond just the hard costs of construction but all the costs that must be accounted for in a project.
- *A Cost Model...*
studies potential costs & *provides budgetary numbers* without a completed design
- *A Cost Estimate...*
is done when there is a solidified design that *can be quantified and estimated*
- When using a Cost Model as a budgetary tool allows the City to adjust quantity, quality, or other project assumptions in order *to establish the target budget*
- The cost per square foot information in the model is based on *aggregated benchmark data of comparable projects*

Cost Model for Library

Components

- **Hard Costs**

The direct costs to construct a building & site ("brick & mortar" costs).

- Building
- Site

- **Soft Costs**

Expenses, other than hard costs, incurred in developing a project

- Design and Professional Engineering Costs
 - Basic Services (architecture, landscape, civil, structural, mechanical, plumbing, electrical, specifications)
 - Specialty Services (acoustical, AV, cost consultant, library specialist, environmental, traffic, hazardous materials, etc.)
 - Reimbursable Expenses
- City of Salinas Fees
 - Planning
 - Engineering
 - Building
 - TAMC
 - Other
- Owner's Consultants
 - Project Management – Internal or External
 - Soils Engineer
 - Survey
 - Other
- Testing and Inspections
 - Foundation
 - Steel/Welding

Cost Model for Library

Components

- **Contingencies**

Allowances for unknowns at the time of cost model development

- **Bid Contingency**

- Allowance for volatility in the bid climate at the time of bidding

- **Construction Contingency**

- Allowance for unforeseeable conditions during construction

- **Project Contingency**

- Allowance /owner budget for unanticipated expenses, often dependent on type of project
 - Owner discretionary fund

- **Escalation**

Changes in the price of goods or services in a given economy over a period.

- Similar to the concepts of inflation and deflation except that escalation is specific to an item or class of items (not as general in nature)
 - It is often not primarily driven by changes in the money supply, it tends to be less sustained
 - Unpredictable

Cost Model for Library

Components

- What is Included?

- Demolition Costs
- Site Work Costs
- Building Costs
- Allowance for Furniture, Furnishings and Equipment
- Allowance for a Construction Contingency
- Allowance for a Bid Contingency
- Allowance for Soft Costs
- Allowance for Escalation
- Allowance for Project Contingency

- What is **NOT** Included?

- Land Acquisition
- Feasibility Studies
- Financing Costs
- Existing Conditions Reports
- Hazardous Material Investigations and Abatement
- Utility Company Back Charges
- Owner Supplied and Installed Items
- Deep Foundation System
- Temporary Facilities

Cost Model for Library

Components

- Items that may affect this Cost Model
 - Modifications to the scope of work subsequent to this cost model
 - Unforeseen Conditions
 - Special requirements for site access, off-hour work, or phasing activities
 - Restrictive technical specifications, excessive contract or non-competitive bid conditions
 - Sole source specifications for materials or products
 - Bid approvals delayed beyond the anticipated project schedule
 - Off hours and overtime

Cost Model for Library

Components

- Assumptions:
 - Cost model information is conceptual (no plans, designs, feasibility studies, or detailed site land use studies have been completed)
 - Construction cost ranges account for local prevailing labor rates, wages
 - Assumes design to a LEED Silver Level of Sustainability (no certification)
 - Subcontractors markups are included in each line item unit price
 - Assumes a site area of approximately 47,000 square feet
 - Assumes surface parking only (no underground or structured parking)
 - Assumes a two story library with a first floor footprint of ~10,000 sf

Cost Model for Library

Components

- Assumptions continued:
 - Escalation has been added to this model to reflect the anticipated increases in labor and materials up until the mid point of construction.
 - Escalation assumes a construction start of June 2018 with a duration of 14 months for construction at an average 5.0% per year from the start of construction to the midpoint of construction

Cost Model Benchmarks

Looking Specifically at Similar Projects

Cost Model Benchmarks

Comparable Projects

Year	Library	Construction Cost	Gross Sq Ft	Cost/SF	Geographic Adjustment	Escalation Adjustment	Adjusted Cost/SF
2016	San Jose Branch	\$9,060,000	16,000	\$566 /SF	0.00%	1.00%	\$572 /SF
2015	Palo Alto Branch	\$27,000,000	56,000	\$482 /SF	0.00%	6.95%	\$516 /SF
2014	Pico Rivera (southeast LA)	\$8,840,891	16,199	\$546 /SF	7.00%	5.70%	\$615 /SF
2013	Lemon Grove	\$5,303,701	13,210	\$401 /SF	10.00%	7.50%	\$472 /SF
2011	Fallbrook (San Diego area)	\$9,703,814	19,151	\$507 /SF	10.00%	12.30%	\$620 /SF
2011	Oakland	\$9,854,713	21,000	\$469 /SF	-2.00%	12.30%	\$518 /SF
2011	Ramona (San Deigo area)	\$11,700,000	21,500	\$544 /SF	10.00%	12.30%	\$666 /SF
2011	Sacramento	\$8,812,377	15,387	\$573 /SF	6.00%	12.30%	\$678 /SF
2011	San Jose Branch	\$7,647,935	18,000	\$425 /SF	0.00%	12.30%	\$477 /SF
2010	Los Angeles	\$12,600,000	13,760	\$916 /SF	7.00%	16.20%	\$1,128 /SF
2010	Sacramento	\$10,867,475	20,500	\$530 /SF	6.00%	16.20%	\$648 /SF
2010	Sacramento	\$7,794,305	22,400	\$348 /SF	6.00%	16.20%	\$425 /SF
2010	San Jose Branch	\$9,399,486	22,000	\$427 /SF	0.00%	16.20%	\$496 /SF
2008	Encinitas	\$14,700,000	26,798	\$549 /SF	10.00%	22.50%	\$727 /SF
2008	San Diego	\$7,900,000	16,020	\$493 /SF	10.00%	22.50%	\$653 /SF
2008	San Jose Branch	\$7,799,314	22,222	\$351 /SF	0.00%	22.50%	\$430 /SF
2008	San Jose Branch	\$7,307,397	14,500	\$504 /SF	0.00%	22.50%	\$617 /SF
2008	San Jose Branch	\$6,212,483	13,885	\$447 /SF	0.00%	22.50%	\$548 /SF
2008	San Jose Branch	\$7,091,919	13,380	\$530 /SF	0.00%	22.50%	\$649 /SF
						Average \$/SF:	\$603 /SF