



CHABOT

LAS POSITAS

**C O M M U N I T Y
C O L L E G E
D I S T R I C T**

Impact of Rising Construction Costs on the Measure B Bond Program

Agenda

CLPCCD Measure B Bond Program

Program Cost Overview/Status Update

- Program Cost Estimate Baseline/Schedule
- Program Cost Estimate Baseline/Schedule vs. Actual Market Conditions/Impacts
- Updated Cost Projection per College
 - Estimating Basis/Assumptions and Approach
 - Chabot College
 - Las Positas College

CLPCCD Measure B Bond Program

- § Purchasing power has been significantly diminished due to market conditions

- § As a result, the District needs to reassess program scope and budget allocations

Re-Estimating Basis/Assumptions and Approach

- § The original Bond budget (September 2003) was analyzed to compare the original assumptions on escalation and assumed mid- point of construction with the current data on escalation and projected mid-points of construction (based on the development of a master schedule).
- § The building costs of elements in each building were reviewed and updated for current market conditions.

Re-Estimating Basis/Assumptions and Approach

- § The various markups for Overhead and Profit and bid and project contingencies, were revisited as appropriate.
- § Where hard data was available on projects already committed and bid, these figures were incorporated into a matrix.
- § The assumed escalation rates are based on a reasonable assessment of projected market conditions.

Re-Estimating Basis/Assumptions and Approach

Objective: To update the projected Construction/Project costs to reflect the current market conditions and anticipated escalation moving forward.

Escalation: Actual Escalation

§ Actual escalation to November 29, 2005 was built into the current construction costs and escalation rates for future time periods to mid points of construction were isolated by project to arrive at a total projected construction cost

Future Projected Escalation

- § Escalation to the mid-point of construction has been included with each building or sitework package.
- § December 2005-06 California increases in construction 7%
- § Future years – California increases in construction 5% per annum

Program Manager's Estimate

- November 2005
- Based upon a nine year Program
- Used Escalation Factor 7% First Year, 5% Thereafter from December 2005

	Value
Chabot College Projects	\$427,500,000
Las Positas College Projects	\$299,000,000
District Wide Projects	\$48,900,000
Total	\$775,400,000
Measure B Funds	<\$498,000,000>
Loss of Purchasing Power	\$277,400,000

Cost Escalation Resulting from Market Conditions

- § Expansion of construction activity (Public and Private) in Bay Area and Northern California
- § Competition from other Bond Programs and Public Works Projects
 - § College of San Mateo
 - § Contra Costa College
 - § Diablo Valley College
 - § Los Medanos College
 - § San Ramon Valley Center
 - § San Joaquin Delta College
 - § Evergreen Valley College
 - § Foothill-De Anza CCD
 - § West Valley-Mission CCD
 - § Dublin Unified School District
- § Demand for construction materials for:
 - § Rebuilding for Hurricanes
 - § Iraq War and Rebuilding Efforts
 - § Afghanistan Rebuilding Efforts
 - § Global expansion in China, Asia, India and Eastern Europe

Cost Escalation Resulting from Market Conditions

Materials

- § Steel and steel component products
- § Aluminum and aluminum component products
- § All wood products: Timber/Boards/Composites/By-products
- § Concrete
- § Gypsum Products
- § Petroleum Based Products: Asphalt/Paints/Sealants
- § PVC Pipe and Conduit

Labor Costs

- § Workforce availability
- § Hurricane reconstruction
- § Local and national infrastructure replacements
- § Engineering and construction workforce retirements

Unit Rate Comparison ('99 – '03)

Unit rates are installed costs including subcontractors overhead and profit

Item	1999	Mid '03	Difference	%	Average Annual Increase
Concrete in place	120/CY	\$135/cy	\$15/cy	13%	3%
Rebar	.60/lb	0.65/lb	\$0.05/lb	8%	2%
Steel Deck	2.00/sf	\$2.00/sf	\$1.5/sf	0%	0%
Steel Stair	7,000/ft	\$8,000/ft	\$1,000/ft	14%	4%
Ext Door	1,000/ea	\$1,200/ea	\$200/ea	20%	5%
Drywall	5.40/sf	\$9.50/sF	\$4.1/sf	76%	19%
Suspended Drywall	6.00/sf	\$8.00/sf	\$2.00/sf	33%	8%
Steel Ductwork	5.70/lb	\$6.15/lb	\$0.45/lb	8%	2%
Ceramic wall tile	10.00/sf	\$11.0/sf	\$1.0/sf	10%	3%
Paint to walls	0.60/sf	\$0.75/sf	0.15/sf	25%	6%
Watercloset	900/ea	\$950/ea	50/ea	6%	1%
Overhead and Profit	10%	12%	5%	20%	5%

Sources of data:

Analysis of bids/estimates received from contractors

Reconciliation of estimates with contractors

Quotes received from suppliers/vendors

Unit Rate Comparison ('03 – '05)

Unit rates are installed costs including subcontractors overhead and profit

Item	Mid '03	Nov '05	Difference	%	Average Annual Increase
Concrete in place	\$135/CY	\$200/cy	\$65/cy	48%	24%
Rebar	0.65/lb	0.90/lb	\$0.25/lb	38%	19%
Steel Deck	\$2.00/sf	\$3.50/sf	\$1.50/sf	75%	38%
Steel Stair	\$8,000/ft	\$15,000/ft	\$7,000/ft	88%	44%
Ext Door	\$1,200/ea	\$1,500/ea	\$300/ea	25%	13%
Drywall	\$9.50/sf	\$12.0/sf	\$2.50/sf	26%	13%
Suspended Drywall	\$8.00/sf	\$13.00/sf	\$5.00/sf	63%	31%
Steel Ductwork	\$6.15/lb	\$8.50/lb	\$2.35/lb	38%	19%
Ceramic wall tile	\$11.0/sf	\$13/sf	\$2.00/sf	18%	9%
Paint to walls	\$0.75/sf	\$.85/sf	\$0.10/sf	13%	7%
Watercloset	\$950/ea	\$1300/ea	350/ea	37%	18%
Overhead and Profit	12%	17%	5%	42%	21%

Sources of data:

- Analysis of bids/estimates received from contractors
- Reconciliation of estimates with contractors
- Quotes received from suppliers/vendors

Escalation Impacts

- § State Chancellor's Office proposes to Department of Finance (DOF) a +30% adjustment in the building guidelines effective with 2006/2007 FPPs.

- § Division of the State Architect Advised 11/18/05:
 - § Project size $x < \$5,000,000$ (smaller/less complex) Review time: 3-5 months
 - § Project size $x > \$10,000,000$ (larger projects) Review time: 6+ months

- § Award of Bid No. 05-05 Construction of the Multi-Disciplinary Education Building, Las Positas College:
 - § "Considering the unfavorable bid climate and building price increases in the construction industry, the bids were very competitive...many other Districts are receiving bids that exceed their costs estimates by 25% - 30%".

Problem Statement

“As a result of an unprecedented increase in construction costs, the voter approved \$497M program is now estimated to cost \$775M”.

Strategies

- § Develop more detailed Program definition
- § Confirm scope and facility requirements based upon the College Educational Master Plans
- § Accelerate the construction of new facilities to a five year timeline and schedule
- § Define Project Re-Prioritization
- § Project Delivery: Combine Projects into Procurement Packages/”Economies of Scale”
- § Procure Bulk Purchases of Equipment and Materials
- § Reassess level of LEED Certification

Strategies

- § Conduct Continuous Program Reassessment to Match Local Market Conditions
- § Include Bid Alternate Opportunities
- § Manage realistic expectations of facilities/projects that can be implemented
- § Develop Project Scope and Budgeting based on State Chancellor's Office and Title V Community College Space and Capacity Standards

Conclusions

By implementing the proposed strategies, the District can:

- § Maximize number of projects with available funding
- § Minimize future loss of purchasing power
- § Manage Stakeholder expectations
- § Complete projects faster
- § Reduce Program Management level costs

Articles

- § “Construction Costs Skyrocket, Forcing Districts to Cutback on Prop. 39 Campus Projects”, The News, Summer 2005, Community College League of California
- § Fact Finding Report – Executive Summary, Swinerton Management & Consulting , January 9, 2006
- § “Resolution of lawsuit allows community college upgrades”, San Jose Mercury News, December 13, 2005
- § CLPCCD Award of Bid No. 05-05 Construction of the Multi-Disciplinary Education Building, Las Positas college, June 21, 2005
- § “Construction at Colleges Corralled by Costs.” Los Angeles Times, August 23, 2005
- § CLPCCD Facilities Planning & Management Monthly Report – Measure B Projects – November 2005
- § “Focus on Escalating Costs and Market Conditions” “Is there anything we can do?” Construction Management Association of America (CMAA) News; Winter 2005; Southern California Chapter
- § “Worrying about Labor Shortages” ENR Sourcebook – November 14, 2005
- § The Colleges of Contra Costa County, Board Report, October 26, 2005