

**Construction-Project Cost Estimating Guideline**

Below is a building new construction/renovation cost estimating guideline developed to assist grant and development authorities as well as all other University departments in the preparation of project estimates for funding applications and/or proposed construction. The procedure and line item guidelines are only approximate, and any final project budgeting would need to be developed by the Facilities Management Design and Construction Services staff.

<b><u>Budget Breakdown</u></b>	<b><u>New</u></b>	<b><u>Renovation</u></b>
1. Construction – labor and material (includes demolition, utility connections, landscaping, parking lots, telecom systems, fixed equipment, building costs, etc., and would go up if any contingency funds below were spent on construction or other material items. - Approx. 65% Total Project Cost)		
a. Administration/offices	\$115/GSF	\$85/GSF
b. Classrooms	\$115/GSF	\$100/GSF
c. Wet Laboratories	\$180/GSF	\$180-\$225/GSF
2. Contingency – held at 10% through project design and bidding. Typically allowed to go down to no less than 5% at award of construction to cover unforeseen construction problems.	10% Construction	
3. Fees – consultant fees on overall design, utilities, furnishings and equipment, building systems, site work, roadways and lots, any contingency expenditures, site representative, reimbursable expenses, etc. (Varies with the construction complexity and cost.)	6.75% Construction	9% Construction
4. Moveable Equipment and Furniture – building Construction non-fixed furnishings, etc. - does not include telecom support electronics, decorating, computers, etc.	5% Construction	4.5%
5. Computers –occupant computer equip. (optional) Construction	1% Construction	0.5%
6. Remote Utilities – replacement costs for utility Construction capacity utilized in the building, etc.	4% Construction	2.5%
7. University Project Administration – Facilities	1.25% All Invoices	

Management construction administration fees.  
 (% of invoices of items 1, 2, 3, and 4 above)

8.	Other Costs – non-energy utilities (water, sewer Construction systems, etc.), trash, special systems (A/V, security, telephone, TV, etc.), advertising, construction surveying, testing, soil borings, custodial equipment, telecom support electronics, etc.	1% Construction	.75%
9.	Moving Costs – moving occupants or related shifting Construction of personnel.	1% Construction	1.5%
10.	Project Escalation – 3% per year from date of estimate on construction, furniture, and other costs.	3% Per Year Total Project Cost	
11.	<b>Total Project Cost = (1 - 10)</b>	<b>All above costs added together.</b>	
12.	Capital Renewal Endowment – facility replacement funding	25% Construction	
13.	Financing Costs (5% for 20 years)	5% Total Project Cost	
14.	<b>Total Bond Amount</b>	<b>All above costs (11 – 13) added together.</b>	
15.	Annual Debt Service (5% for 20 years)	\$80,000 per Million \$ Debt	

**Sample Project Total Budgets**

A. Construction of a new 35,778 GSF laboratory building to be bid in 4 years.

1.	Construction (wet laboratories - \$180/GSF)	\$6,440,040
2.	Contingency (10% Construction)	644,004
3.	Fees (6.75% Construction)	434,703
4.	Moveable Equipment and Furniture (5% Construction)	322,002
5.	Computers (1% Construction)	64,400
6.	Remote Utilities (4% Construction)	257,602
7.	University Project Administration (1.25% items 1, 2, 3, and 4 above)	98,009
8.	Other Costs (1% Construction)	64,400
9.	Moving Costs (1% Construction)	64,400
10.	Project Escalation	
	<u>[{(total items 1 thru 9 above)/(1 - .03x4 yrs)} - (total items 1 thru 9 above)]</u>	<u>1,144,031</u>
11.	<b>Total Project Cost (All above costs added together.)</b>	<b>\$9,533,591</b>
12.	Capital Renewal Endowment (25% Construction)	1,610,010
13.	Financing Costs (5% Total Projects Cost)	476,680

14. <b>Total Bond Amount</b> (items 11 thru 13 added together)	\$11,620,281
15. Annual Debt Service (\$80,000 per Million \$ Debt)	\$929,600

B. Renovation of 6440 GSF of classroom spaces in a building to be started in 1 year.

1. Construction (classrooms - \$100/GSF)	\$644,000
2. Contingency (10% Construction)	64,400
3. Fees (9% Construction)	57,960
4. Moveable Equipment and Furniture (4.5% Construction)	28,980
5. Computers (0.5% Construction)	3,220
6. Remote Utilities (2.5% Construction)	16,100
7. University Project Administration (1.25% items 1, 2, 3, and 4 above)	9,942
8. Other Costs (0.75% Construction)	4,830
9. Moving Costs (1.5% Construction)	9,660
10. Project Escalation	
<u>[{(total items 1 thru 9 above)/(1 - .03x1 yr)} - (total items 1 thru 9 above)]</u>	<u>25,951</u>
11. <b>Total Project Cost</b> (All above costs added together.)	<b>\$865,043</b>
12. Capital Renewal Endowment (25% Construction)	161,000
13. Financing Costs (5% Total Projects Cost)	43,252
14. <b>Total Bond Amount</b> (items 11 thru 13 added together)	<b>\$1,069,295</b>
15. Annual Debt Service (\$80,000 per Million \$ Debt)	\$85,544

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