

City of San José, California

COUNCIL POLICY

TITLE	ESTIMATING CONSTRUCTION COSTS AND DEVELOPMENT OF PROJECT BUDGET	PAGE	1 of 3	POLICY NUMBER	8-12
EFFECTIVE DATE	August 22, 2000	REVISED DATE			
APPROVED BY COUNCIL ACTION				August 22, 2000, Item 11a.	

PURPOSE

To improve the quality and effectiveness of the City Public Capital Budget Process and accuracy of subsequent capital project construction by assuring that:

1. Capital projects have realistic budgets.
2. The City Council has enough information and data to establish the budget once a project is approved.
3. The Public is clearly informed about project "budgets".

BACKGROUND

Approval of a Council Policy for the Redevelopment Agency and City that will improve the Capital planning and budgeting process by setting definitions of project estimation relative to the degree of project design definition and level of completion. The policy will establish a consistent and uniform approach for estimating and reporting construction project costs and establishing realistic construction project budgets.

As a general guideline, the City and Agency should use no less than a "budget" estimate associated with the Schematic Design Phase when establishing final project budgets. Relying on "program" and/or "preliminary" level estimates for setting a final project construction budget is far too early in the project's planning, its definition or design. Until the time where a budget estimate can be made, the project is too conceptual in terms of scope and program size to accurately predict final costs. After the Schematic Design Phase, the project's scope of work is more defined and schematic design has been completed to the extent that a realistic budget estimate can be made to impose effective discipline and direction on the project. At this stage the budget becomes the control for project scope and construction.

POLICY

"Program" and "Preliminary" level estimates are useful tools in a long-term capital budget planning process. However, an estimate must have a level of certainty provided by a "Budget" level estimate to realistically establish a final project.

From project initiation as a concept through the award of a construction contract, there are six essential milestones or steps in the development of a project. These steps are shown below.

At various points within these steps, there are four different kinds of estimates that are prepared as the project progresses from start to finish. As more detail, specificity and definition are developed through the stages of design, these estimates become more certain and realistic as noted below.

The six milestones or steps in a project and the point at which these estimates are prepared, are defined in Attachment "A" and are as follows:

TITLE	ESTIMATING CONSTRUCTION COSTS AND DEVELOPMENT OF PROJECT BUDGET	PAGE	POLICY NUMBER
		2 of 3	8-12

Project Milestone/Phase	Type of Estimate
1. Project Initiation	Program Estimate
2. Planning/Programming	Preliminary Estimate
3. Design	
Conceptual Design	
Schematic Design	Budget Estimate
4. Construction Documents/Bidding/Contract Award	Engineers Estimate
5. Construction	
6. Occupancy/Opening	

The four estimates are defined by this policy as follows:

- The "Program Estimate" is created in the Project Initiation Phase for the long-term, multi-year planning and for initial feasibility studies. It is based on a general description of the project as a concept and does not include any design, architectural work or detailed scope. It may typically include components for land acquisition, design, construction and construction management.

Level of Certainty: \pm 35%

- The "Preliminary Estimate" is prepared during the Planning/Programming Phase and is based on an initial program containing building and site square footages and general site work. It is typically not based on any formal engineering or architectural work, which usually has not yet occurred. The Preliminary Estimate is most commonly used to develop the next year's budget or to add a project a current year budget to allow for further design development. For smaller projects of shorter duration and minimal complexity, the Program Estimate step may be eliminated in favor of the Preliminary Estimate.

Level of Certainty: \pm 20%

- The "Budget Estimate" is prepared during the Schematic Design Phase and is based on a defined scope and schematic design work. It is prepared using estimated material quantities and unit prices taken from the plans and applying a general unit cost to each item. This estimate includes all changes in definition and scope that have been identified and incorporated into the project design since the Preliminary Estimate. Items associated with the commencement of construction such as bonds, insurance, mobilization and overhead costs are also included. This estimate is used for evaluating project alternatives, value engineering, and evaluation of the project budget established by the Preliminary Estimate in the Planning/Programming Phase. For projects of a multi-year duration, the Budget Estimate should include an inflationary factor that escalates the cost to the dollar value at the mid-point of the construction schedule.

Level of Certainty: \pm 10%

- The "Engineers Estimate" is a detailed estimate prepared using the final construction documents prior to bidding and contract award. It is prepared using unit prices for exact quantities of materials and labor taken from the plans. The Engineer's estimate is used to establish the final funding within the budget and to evaluate bids received.

TITLE	ESTIMATING CONSTRUCTION COSTS AND DEVELOPMENT OF PROJECT BUDGET	PAGE 3 of 3	POLICY NUMBER 8-12
--------------	--	-----------------------	------------------------------

Level of Certainty: \pm 5%

Smaller projects of shorter duration may not require all four levels of estimates. In most cases, however, a larger project would require as a minimum a "Preliminary", "Budget" and "Engineer's" Estimate.

To support the establishment and implementation of this policy, a set of detailed administrative procedures to be followed for project managers and staff engaged in capital construction projects will be developed. These procedures are to provide specific and detailed instructions and guidelines on how and when estimates are prepared, reviewed and approved in accordance with this Council Policy.