BUDGET DEVELOPMENT

Developing and tracking the project budget is one of the project manager's key responsibilities. The project manager develops the budget in the Feasibility phase and refines it through succeeding phases. It is imperative that all elements of the budget are clearly defined, captured, and developed throughout each phase.

DPM uses custom software (Projecto) to create, develop, and monitor budgets. This program is linked to Stanford's accounting systems to track actual project commitments and expenditures. Project managers create budgets according to the categories below.

1. Construction

- a) Basic Construction (prime contractor's scope, including building, equipment in contract, site work, and construction escalation)
- b) Other Construction (hazardous materials, utilities, work orders, etc.)
- 2. Design Services
 - a) Architectural Services
 - b) Other Professional Services
- 3. Stanford Costs
 - a) Stanford Costs (Stanford staff re-charge costs)
 - b) Fixture, Furniture & Equipment (not in construction contract)
 - c) Surge Costs
 - d) Agency and External Fees (including permits, Below Market Rate Housing Tax [BMR], and Palo Alto Unified School District Impact Fee [PAUSD])
 - e) Activation (moving, signage, telephone/data, etc.)
 - f) Stanford Infrastructure Program
 - g) General Use Permit Entitlement Fee
 - h) Financing Costs
- 4. Project Contingency
- 5. Escalation Risk

Each of the process phases include budgets as a key deliverable and control point. The rough order-of-magnitude budget generated in the Scoping phase is based on a benchmark cost. Stanford maintains a database of completed projects, which is used in the Capital Plan to provide an early cost forecast. During the Feasibility phase, the project manager develops this benchmark budget based on specific project information. In the Programming phase, the benchmark budget is further developed to reflect more detailed project information.

At the end of Schematic Design, the project team is required to make value choices based on parameters including design, program, sustainability, and cost information in order to finalize the scope and budget. The Schematic Design BoT approval is the most important control point. Each of the user groups and vendors must understand and agree that the project scope is frozen at this point in the process.

At the end of Design Development, the project team must reconcile the Design Development estimate to the BoT approved Schematic Design budget. The arrows in the budget-control portion of the Heartbeat loop from the budget back into design, representing the time and effort that may be required to realign the DD scope of work with the approved budget. This realignment facilitates informed decision making among team members.

At the end of the Construction Documents phase and prior to a GMP, the project team must verify that the scope of work is aligned with the approved budget. Once the project receives Construction Approval, the GMP contract can be executed.

SPECIAL COST CONSIDERATIONS

Contingencies in the project budget represent the degree of risk within the estimate. Each budget carries a project contingency that represents risks in the completeness of the design, the degree of unknown conditions at the site, and other unknown areas such as professional fees, telecommunications, and hazardous materials. Contingencies may not be used to pay for scope additions or program changes requested by the project team, or university stakeholders. Project contingency funds must be authorized by the project manager prior to their commitment.

Field Allowance included in the contractor's GMP is for unforeseen conditions, jurisdictional requirements, and construction clarifications. The project manager must approve the use of field allowance.

Allowances are similar to contingencies in that they are intended to reserve funds for an event that is not clearly defined; they are thus more prevalent in the earlier Design phases, when project uncertainties are greatest. Unlike contingencies, however, allowances typically are identifiable single items or issues that are carried in budgets as line items. Allowances can also be carried by the general contractor (with the project manager's approval) within its budgets and estimates to cover identifiable items. Allowances within the general contractor's budgets should be minimal and not exceed 1 to 2% of the total contract. The project manager carries allowances in the project budget for construction and non-construction items as necessary.

Escalation Risk may be carried in the project budget during volatile construction markets in order to mitigate the risk of extraordinary material and labor escalation.

Stanford Infrastructure Program (SIP) provides funding for auxiliary projects that further develop the university's academic community and improve the university's physical plant. The infrastructure will be developed as necessary to improve public safety and service, and to promote conservation in land use and resources. A SIP assessment of 4.6% on all project costs applies to all capital projects (including new buildings, renovations, deferred maintenance projects, and the Capital Utilities Program) regardless of size, funding, and management. No assessments will be taken on projects funded through SIP or GUP Entitlement Fees. The SIP tax percentage may be reevaluated periodically.

General Use Permit Entitlement Fee (GUP) provides funding for the mitigation projects and programs required by Santa Clara County (Conditions of Approval) as a result of the December 2000 Community Plan and GUP approval. The required projects and programs include infrastructure and environmental resources studies, a comprehensive water conservation program, transportation demand management, habitat conservation, and consultant monitoring of mitigation compliance.

Additionally, the GUP Entitlement Fee will pay for the cost of roadway expansions, new parking, and expanded child care facilities to support a projected increase of students, faculty, and staff; the fee will be assessed on increases in school/department gross square footage. Housing units are required as a component of the GUP and are thus excluded from the GUP Entitlement Fee.

Below Market Rate Housing Fee (BMR) and **Palo Alto Unified School District Fee (PAUSD)** are assessed based on additional square footage, and paid to the Santa Clara County Office of Affordable Housing and Palo Alto Unified School District, respectively. These fees escalate yearly.

Financing Costs are a project responsibility for projects with debt funding or backstopping of gifts and/or department funds. The project is responsible for the cost of financing until the Temporary Certificate of Occupancy (TCO) or Substantial Completion; the school or department is responsible for the debt service once the TCO is received.