



Georgia Technology Authority

PROGRAM MANAGEMENT OFFICE (PMO)

PROJECT BUDGET PREPARATION GUIDELINE

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None.

REVISION HISTORY

REVISION NUMBER	DATE	COMMENT
1.0	March 2, 2001	Original Scope ¹ and Initial Baseline
2.0	February 6, 2002	PMO Refinement
2.1	July 1, 2002	Wording change “policy to principle/procedure to guideline”

¹ This document is written and produced by the Georgia Technology Authority (GTA), Program Management Office (PMO) as part of the strategic Continuous Process Improvement initiative. Questions or recommendations for improvement to this document may be forwarded to any PMO member.

1.0 BUDGET PREPARATION PROCESS

1.1 KEY PROCESS AREA PURPOSE

A. This procedure applies to the following knowledge areas:

KNOWLEDGE AREA	APPLICABLE?
Integration Management	
Scope Management	
Time Management	
Cost Management	Y
Quality Management	
Human Resources Management	
Communications Management	
Risk Management	
Procurement Management	

B. The purpose of cost management is to ensure a project completes within its approved budget. It includes resource planning, cost estimating, cost budgeting, and cost control.

1.2 PROCEDURE PURPOSE

- A. The purpose of this procedure is to define the procedure for submitting a robust budget that defines the cost of the project
- B. The purpose of the budget preparation is to establish a written document that identifies the financial requirements for the activities and infrastructure of a project.
- C. The project budget involves developing and maintaining a clear understanding of the organization's financial responsibilities for the following:
1. Cost of the scope of work
 2. Cost of technical goals and objectives
 3. Cost of business goals and objectives
 4. Cost and schedule constraints and goals

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5. Cost of assumptions, risks and other constraints

1.3 DEFINITIONS

TERM	DEFINITION
Basis of Estimate (BOE)	(1) A statement of the assumptions underlying the costs, activity durations, or other forecast items used for planning. (2) A forecast budget that includes such statements. (3) Factual information and objective factors upon which the estimate was found.
Configuration Management (CM)	(1) The disciplines that create and maintain a controlled environment that protects intellectual assets by identifying the assets being protected, allowing re-creation of the assets in any version, tracking and controlling changes over time, informing affected groups and individuals of the status and content of the assets, and supporting planning for the activities within those disciplines. (2) The group responsible for implementing those disciplines.
Configuration Manager	The person with Configuration Management responsibility within a project or organization.
Earned Value	A method for measuring project performance. It compares the amount of work that was planned with what was actually accomplished to determine if cost and schedule performance is as planned.
Estimated Cost (EC)	The addition of total resource cost, other direct costs and performance incentives cost.
Georgia Technology Authority (GTA)	The State's Authority for coordinating a comprehensive statewide Information Technology (IT) vision. The GTA will provide agencies with technical assistance in strategic planning, program management, and human resources development.
Project Administrator (PA)	The member of the project team with responsibility for the technical aspects of project management, control, and reporting.
Project Asset Library (PAL)	The set of reference materials and historical project assets maintained by the GTA PMO as a knowledge repository for GTA project management.
Project Charter	A document that formally authorizes a project. It should include all the information necessary for senior management to make this decision including the business need, product description with business, technical and quality objectives, high level budget and

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TERM	DEFINITION
	time estimates along with known constraints, assumptions, dependencies and risks. The Project Charter contains the first agreed upon scope of the project.
Project Manager (PM)	(1) The individual who directs, controls, administers, and regulates a project. The project manager is the individual ultimately responsible to the customer. (2) The individual responsible for managing a project.
Program Management Office (PMO)	(1) An organizational entity responsible for management and oversight of the organization's projects. (2) As a specific reference in this document, the PMO for the Georgia Technology Authority. Alternatively, the acronym may stand for <i>Project Management Office</i> , with the same meaning as definition (1), above. An organization may use both forms, with the Program Management Office generally having responsibility for multiple Project Management Offices.
Work Breakdown Structure (WBS)	A deliverable oriented grouping of project elements, which organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of project components. Project components may be products or services.

1.4 PROCESS OWNER

- A. The Georgia Technology Authority Program Management Office (GTA PMO) is responsible for the maintenance of this process.

1.5 GENERAL LOGIC

- A. The purpose of the budget creation is to identify the cost of all work required to complete the project successfully. The following areas need to be identified and defined:
1. Cost of the scope of work
 2. Cost of technical goals and objectives
 3. Cost of business goals and objectives
 4. Cost and schedule constraints and goals
 5. Cost of assumptions, risks and other constraints

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1.6 REFERENCES

1.6.1 POLICIES

POLICY	PRODUCT CODE
Project Planning	GTA-PMO-PRI-001
Project Tracking and Oversight	GTA-PMO-PRI-002

1.6.2 PROCEDURES

PROCEDURE	PRODUCT CODE
Schedule Development	GTA-PMO-GLI-105
Project Management Plan Development	GTA-PMO-GLI-103
Budget Preparation	GTA-PMO-GLI-112

1.6.3 THIRD PARTY

Project Planning, Scheduling & Control, James P. Lewis, 1991

Mastering Project Management, James P. Lewis, 1998

Project Management, A Systems Approach to Planning Scheduling and Controlling, Harold Kerzner, 1998

Project Management Body of Knowledge, Project Management Institute (PMI®), 1996.

1.6.4 FORMS

FORM	NUMBER
BUDGET PREPARATION QUESTIONNAIRE	GTA-PMO-QUE-035

1.7 PROCEDURAL OVERVIEW

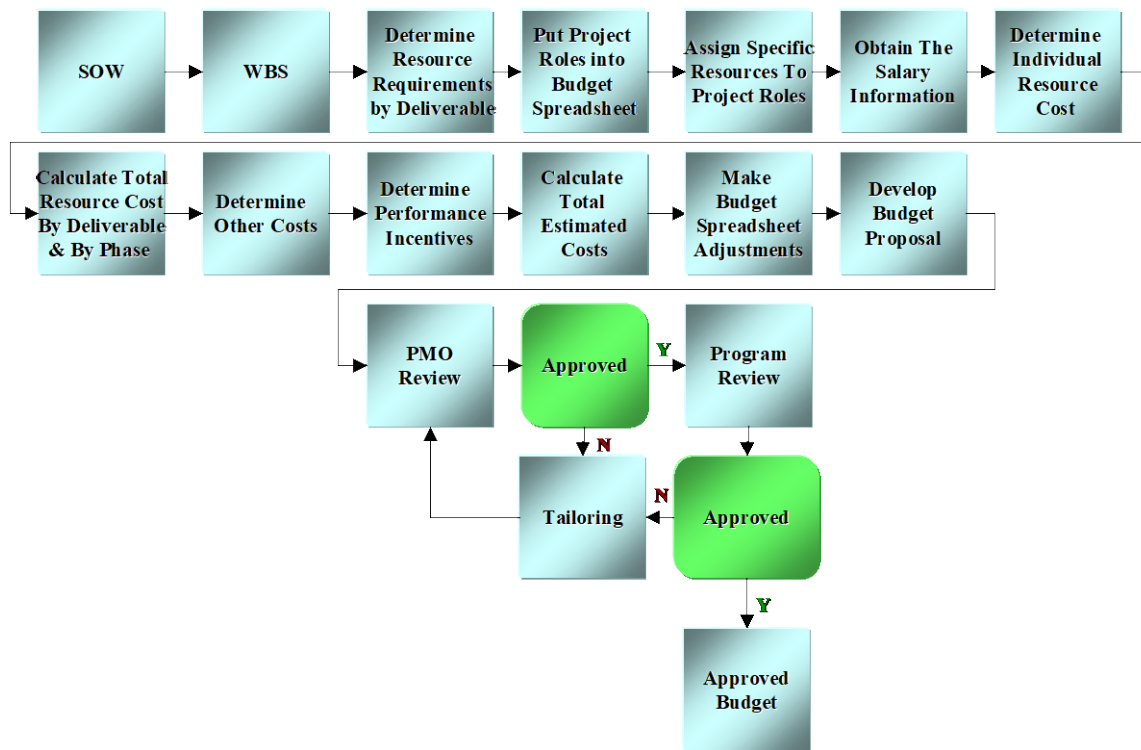


Figure 1: Budget Preparations

1.7.1 PROJECT CHARTER OR STATEMENT OF WORK (SOW)

A. The Project Charter or Statement of Work provides information concerning scope.

1.7.2 WORK BREAKDOWN STRUCTURE

A. The approved WBS identifies what activities and tasks need to be done for each project phase.

1.7.3 DETERMINE RESOURCE REQUIREMENTS BY DELIVERABLE

A. Working with the functional manager and based on the approved Work Breakdown Structure (WBS), determine what resource roles are needed to complete the project deliverables.

1.7.4 PUT PROJECT ROLES INTO BUDGET SPREADSHEET

A. Once the roles have been determined, place them into a Budget Spreadsheet.

B. Be sure to record all assumptions on which specific calculations are made. This will assist in both budget validation, and when making adjustment to the budget.

1.7.5 ASSIGN SPECIFIC RESOURCES TO PROJECT ROLES

- A. With the project roles established in a Budget Spreadsheet, now assign specific resources to those roles.

1.7.6 OBTAIN THE SALARY INFORMATION

- A. Develop a salary table that give the resource's low, mid, and high range salary.

1.7.7 DETERMINE INDIVIDUAL RESOURCE COST

- A. Determine which salary level will be used for each resource from the salary table.
- B. In some cases it might be necessary to use a blended rate, especially for internal team members to protect salary information.
- C. Make sure to add a burden rate to account for benefits and taxes.
- D. It may also be necessary to calculate compensation increases if the project is slated to extend over time periods in which such increases take place.
- E. Consider that everyone is not 100% efficient. Allow for off-project time: Breaks, communication, meetings, etc.-75% may be a rule of thumb.

1.7.8 CALCULATE TOTAL RESOURCE COST BY DELIVERABLE AND BY PHASE

- A. The resources costs should directly relate to specific work products or deliverables. This is essential in the establishment of Earned Value.
- B. This calculation should be repeated for deliverables that will be updated by phase, such as the Project Management Plan.
- C. Add all the individual resource costs together to get the total resource cost.

1.7.9 DETERMINE OTHER COSTS

- A. Working with the functional manager, determine the other costs that are associated with and necessary to complete the project (e.g., rent, utilities, office furniture, hardware, software, office supplies).
- B. The other costs should be analyzed to see their impact on specific work products or deliverables. Some costs, such as rent, may be indirect and represented as a percentage and allocated across the resource costs.
- C. Other costs, such as software or a piece of equipment, may be direct costs that are required to produce a specific deliverable, and should therefore be allocated to the cost of that work product.
- D. Additional cost, where appropriate, may need to be considered, such as training and maintenance, etc.

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1.7.10 DETERMINE PERFORMANCE INCENTIVES

- A. If applicable, determine the compensation necessary to retain key employees for the duration of the project.
- B. This should be factored into the resource costs for those specific individuals, or as part of a blended rate to ensure accurate accounting of the costs to produce a deliverable.

1.7.11 CALCULATE TOTAL ESTIMATED COSTS

- A. Add the total resource cost, other direct costs and performance incentives cost together to form total estimated cost for the project.

1.7.12 MAKE BUDGET SPREADSHEET ADJUSTMENTS

- A. Update the Budget Spreadsheet with all the necessary changes.

1.7.13 DEVELOP BUDGET PROPOSAL

- A. Once all the costs have been calculated develop a budget proposal for the project.

1.7.14 REVIEW

- A. The evaluating authority will review the proposal. If the proposal is approved, they will send it to the Program Managers for their review.

1.7.15 APPROVED BUDGET

- A. Once the budget is approved, it is assigned to the project.

1.7.16 BUDGET PREPARATION ACTIVITIES

- A. To successfully develop an extensive and complete budget, the following activities need to occur:

1.7.16.1 DEVELOP BUDGET PROPOSAL

RESOURCES	ACTIVITY	DELIVERABLE
Project Team Resource Manager	Obtain the salary table that provides the resource salary ranges (low end, mid range, high end)	Salary Table
Program Manager Project Administrator Project Manager PROJECT TEAM	A complete draft budget is created which covers the following topics: <ul style="list-style-type: none"> • Resource Costs • Other Costs 	Complete Budget Proposal

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RESOURCES	ACTIVITY	DELIVERABLE
	<ul style="list-style-type: none"> Performance Incentive Cost 	

1.7.16.1.1 DETERMINE PROJECT RESOURCE COST

RESOURCES	ACTIVITY	DELIVERABLE
Project Manager Project Team	From the Project Charter and WBS, determine the resource requirements for the project. Submit a resource request to the Resource Manager.	Resource Request
RESOURCE MANAGER PROJECT MANAGER Project Administrator	Based on the resource requests, place available resources in the required roles.	Completed Resource Request & Updated Budget Spreadsheet
Project Manager Project Administrator Finance	From the resource assignments and the salary table, calculate the total resource cost by deliverable by phase.	Deliverable Cost Calculation
Project Manager Project Administrator Finance	From the deliverable resource cost allocation, calculate the total resource cost by deliverable by phase.	Total Resource Cost Calculation

1.7.17.1.2 DETERMINE PROJECT OTHER COSTS

RESOURCES	ACTIVITY	DELIVERABLE
Program Manager Project Administrator Financial	<p>From the Project Charter, determine the additional direct costs associated with the project. Examples include the following:</p> <ul style="list-style-type: none"> Rent Utilities Office furniture Hardware 	Other Costs Calculation

RESOURCES	ACTIVITY	DELIVERABLE
	<ul style="list-style-type: none"> • Software • Office supplies <p>MAKE SURE THAT OTHER PROJECT COSTS ARE ACCURATELY ALLOCATED TO PROJECT DELIVERABLES, EITHER AS A DIRECT COST ASSOCIATED WITH A SPECIFIC WORK PRODUCT, OR AS AN INDIRECT COST ALLOCATION ACROSS MULTIPLE DELIVERABLES.</p>	

1.7.17.1.3 DETERMINE PERFORMANCE INCENTIVE COSTS

RESOURCES	ACTIVITY	DELIVERABLE
Program Manager Project Manager	Determine what incentives if any will be rewarded to the project team members for completion of project tasks.	Performance Incentive Costs Calculation

1.7.17.1.4 DETERMINE TOTAL ESTIMATED COST

RESOURCES	ACTIVITY	DELIVERABLE
Project Manager Project Administrator Financial	Add the Resource Costs, Other Costs, and Performance Costs together to form the Total Estimated Cost.	Total Estimated Cost Calculation

1.7.17.1.5 PREPARE BUDGET PROPOSAL

RESOURCES	ACTIVITY	DELIVERABLE
Project Manager Project Administrator Financial	Based on all the cost calculations, develop a budget proposal document that lays out a detailed description for all the estimated costs for the project.	Budget Proposal & Updated Budget Spreadsheet

1.7.17.2 BUDGET PROPOSAL REVIEWS

RESOURCES	ACTIVITY	DELIVERABLE
PROJECT MANAGER	Forward the budget proposal to the Program Manager for review. If it is not approved, the Project Manager will tailor the proposal and then re-submit it to the Program Manager.	Approved Budget Proposal
Project Manager	Upon approval, the proposed budget becomes the budget for the project.	Approved Project Budget

1.8 PROCEDURE GOALS

- A. Provide a mechanism for clearly defining a project's cost
- B. Provide a mechanism for identifying the organization's financial responsibilities on a project
- C. Provide a foundation to support Earned Value Analysis

1.9 STANDARDS

- A. The Budget Preparation Procedure maintains standards in the following areas:
 - 1. Resource Costs
 - 2. Direct Costs
 - 3. Performance Incentives

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1.10 RESPONSIBILITIES

1.10.1 PROGRAM MANAGER

- A. Ensures that an approved Project Charter exists for the project
- B. Assists Project Managers in determining the specific resources needed to fulfill the roles on the project
- C. Ensures that adequate funding and resources are provided for the budget preparation
- D. Reviews the budget proposals before it is approved

1.10.2 PROJECT MANAGER

- A. Reviews the Project Charter
- B. Participates on the budget proposal team
- C. Reviews all proposed commitments
- D. Identifies the project staffing needs
- E. Estimates project cost based on staffing, training, maintenance, development resources (including personnel, facilities, non-critical resources, critical computing resources), creating software deliverables, and tasks
- F. Ensures metrics are in place to monitor the budgetary progress against the documented budget
- G. Performs tasks of Project Administrator if one is not assigned
- H. Assures tasks of Quality Assurance functions are performed

1.10.3 PROJECT ADMINISTRATOR

- A. Documents and maintains the Project Budget
- B. Compiles financial documentation, estimates, and Basis of Estimates (BOEs) for historical repository
- C. Ensures costs are accurately allocated to specific project deliverables
- D. Participates in the Budget Reviews
- E. Reviews budget estimates

1.10.4 PROGRAM MANAGEMENT CONSULTANT

- A. Ensures all elements of the budget proposal are considered in the final document
- B. Mentors and helps establish understanding of need and the processes required for successful budget generation
- C. Serves as a liaison between the PMO and the performing organization

1.10.5 QUALITY ASSURANCE (QA)

- A. Reviews the Project Charter
- B. Reviews and makes budget commitments
- C. Prepares the QA materials of the budget
- D. Participates in the Budget Review

1.10.6 CONFIGURATION MANAGEMENT (CM)

- A. Reviews the Project Charter
- B. Participates in the Budget Review
- C. Estimates and documents the cost of critical computing resources needed for the project activities.

1.10.7 FINANCIAL

- A. Reviews the Project Charter
- B. Participates on the budget proposal team
- C. Reviews all proposed commitments
- D. Reviews the project staffing needs
- E. Reviews the estimated project cost based on staffing considerations, development resources (including personnel, facilities, non-critical resources, critical computing resources), creating software deliverables, and tasks

1.10.8 RESOURCE MANAGER

- A. Reviews the resource request
- B. Assigns resources to the requested roles

1.11 PROGRESS TRACKING/MEASUREMENT

Metrics will be reported through the change control system as to the number of change requests issued against the budget. These metrics will be used to create measurement of “control” in the budget’s robustness.

1.12 VERIFICATION

- A. The PMC or QA function validates the process has been followed.
- B. The process will be reviewed by the GTA PMO on a regular basis.
- C. The PMC or QA will examine the process and the product by use of the following QA checklists and questionnaires against the listed procedures, forms and deliverables:

PROCEDURE, DELIVERABLE OR FORM	DOCUMENT NUMBER
PMP Development Procedure	GTA-PMO-GLI-103
Project Management Plan Template	GTA-PMO-TEM-030
Budget Preparation Procedure	GTA-PMO-GLI-112