



## Chapter 7: Planning the Budget and Estimating Costs

### Key Learning Points

- Budgets include direct costs (labor, materials) and indirect costs (overhead, administration).
- Project managers must track current spend vs. budget and forecast final costs.
- Reports to the PMO often include variances, burn rate, and funding requests.
- Regular budget reviews help detect overspending early and prevent financial surprises.

A well-planned budget is one of the most powerful tools a project manager has for ensuring project success. In for-profit businesses, accurate budgeting not only controls costs but also protects profit margins and resource efficiency. Budgeting in project management involves estimating how much the project will cost, how funds will be allocated, and how those costs will be tracked throughout the project lifecycle.

### Understanding the Budgeting Process

The budgeting process begins after the scope and schedule have been defined. Using estimates for labor, materials, tools, services, and overhead, the project manager builds a line-item budget that reflects all known expenses. This document becomes part of the overall project plan and serves as the **cost baseline**—a point of reference for measuring cost performance during execution.

The budget is typically reviewed and approved by a **finance team, executive leadership**, or a **Project Management Office (PMO)**, depending on the organization's size and structure. Budget reviews are important checkpoints to ensure alignment with company strategy, available funds, and risk tolerance. Once the budget is approved, it must be monitored, reported on, and adjusted through formal change control processes.

# Direct vs. Indirect Costs

Projects incur two major types of costs:

- **Direct Costs** are expenses tied specifically to the project’s activities. *Examples:* Salaries for project-dedicated employees, contractor invoices, third-party licenses purchased just for the project.
- **Indirect Costs** are shared across multiple projects and not directly attributed to one specific effort. *Examples:* Office rent, HR support, general software subscriptions (like Microsoft Office), utilities.

Understanding the difference is important because direct costs are typically included in the project budget, while indirect costs may be allocated based on organizational policy or managed separately by finance.

## Example: Small Business Website Redesign Project Budget

Cost Item	Type	Estimated Cost
Web Developer (80 hours)	Direct (Labor)	\$4,800
Graphic Designer (30 hours)	Direct (Labor)	\$1,500
Domain & Hosting (1 year)	Direct	\$200
Website Theme & Plugins	Direct	\$300
Project Manager (20 hours)	Direct (Labor)	\$1,200
QA Testing Services	Direct	\$600
Office Wi-Fi & Utilities	Indirect	\$150 (allocated)
PM Software (shared license)	Indirect	\$75 (allocated)

**Total Budget: \$8,825**

# Financial Performance Tracking and Reporting

Once a project is in motion, the project manager must track spending, forecast final costs, and report variances. These financial controls are essential for making informed decisions and communicating with the PMO and stakeholders.

## Current Spend vs. Budget (Earned Value)

This is the comparison of how much work has been completed (earned value) against how much has been spent (actual cost). It helps determine whether the project is on track financially and in terms of progress.

- **Earned Value (EV):** The value of work actually completed, based on the planned budget.
- **Actual Cost (AC):** The real amount of money spent to date.
- **Planned Value (PV):** The value of work that should have been completed by now.

*Example:* If 50% of the project is complete, the earned value should be 50% of the total budget. If more has been spent than earned, the project is over budget.

## Forecasted Final Cost (Estimate at Completion – EAC)

This is the projection of what the total project cost will be, based on current trends. It helps identify early if the project is trending over or under budget.

*Formula Example:*

$EAC = \text{Actual Cost (AC)} + \text{Remaining Work Estimate}$

*Example:* If the current cost is \$5,000 and remaining work is estimated to cost \$4,000, then the EAC is \$9,000.

## Cost Variances and Their Causes

A cost variance (CV) is the difference between the earned value and the actual cost:

$$CV = EV - AC$$

A positive CV means the project is under budget; a negative CV means it's over. Variances can arise from:

- Unplanned labor hours
- Higher-than-expected material costs
- Delays causing overtime
- Scope creep introducing new work

Project managers must investigate variances and explain them to the PMO or leadership, along with corrective actions.

## Requests for Additional Funding

When costs exceed estimates and contingency buffers are used up, a request for additional funding may be necessary. These are typically submitted as:

- Change Requests or
- Funding Justifications

Such requests must clearly document the reason for the overrun, the impact on the project if funding isn't approved, and how the extra funds will be used.

## Change Orders or Re-Allocations

A change order is a formal adjustment to the project budget due to scope changes or resource shifts. It is reviewed and approved by the PMO or governance body.

*Example:* If a marketing campaign expands to include video production not in the original scope, a change order would add the cost to the budget and may shift funds from another area.

## Burn Rate

The burn rate is how quickly the project is spending money. It's usually calculated as:

$$\text{Burn Rate} = \text{Actual Cost} / \text{Time Period}$$

*Example:* If the project spends \$2,000 per week, the burn rate is \$2,000/week.

Monitoring the burn rate helps ensure spending aligns with the schedule. A high burn rate early in the project may indicate poor planning or front-loaded tasks.

## Factors that Influence Project Budgets

A project budget is not just a static number—it's a living financial plan that evolves throughout the project lifecycle. While the initial estimate provides a baseline for cost expectations, budgets are almost always subject to change as work progresses. Understanding the potential factors that influence budget adjustments is critical for maintaining control over project finances and avoiding unwelcome surprises. Several factors can cause budget variances:

### 1. Scope Changes or Additions

Any expansion of the project's deliverables—whether due to client requests, regulatory requirements, or overlooked needs—can significantly increase costs.

- *Example:* A software development project originally planned for five modules but adds two more after the client redefines requirements. This adds design, coding, and testing costs that were not in the original plan.

Proactive scope management and a formal change request process help ensure that any scope growth is evaluated for budget impact before approval.

### 2. Vendor Pricing Fluctuations

Costs for materials, equipment, or subcontracted services may change unexpectedly.

- *Example:* A construction project relying on imported steel faces a 15% price increase due to market shortages, raising total material costs substantially. Building vendor contracts with fixed pricing or escalation clauses can help reduce risk.

### 3. **Delays in Schedules (Which May Increase Labor)**

Extended timelines often mean additional labor hours, overtime, and sometimes extended equipment rentals.

- *Example:* A marketing campaign launch delayed by four weeks may require the design team to remain on the project longer, adding payroll expenses. Tracking schedule performance alongside cost performance helps anticipate these impacts early.

### 4. **Currency Exchange Shifts (for International Projects)**

Exchange rate volatility can change the real cost of goods or services purchased abroad.

- *Example:* An event management company planning a European conference sees venue costs rise by 8% when the exchange rate shifts before payment. Hedging or early payments can help mitigate this type of risk.

### 5. **Policy Changes within the Organization**

Internal decisions—such as new travel restrictions, hiring freezes, or procurement rules—can affect the budget.

- *Example:* A policy limiting business-class travel forces rebooking flights, which may save on airfare but require additional hotel nights due to less convenient flight times. Maintaining communication with internal departments helps identify policy changes before they affect the budget.

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