



Time & Money: Schedule & Cost

<https://www.pmlead.net>
info@pmlead.net

CONTENTS

- 01 | Foundations
- 02 | Activity Planning
- 03 | Estimation Methods
- 04 | Reserves & Scheduling
- 05 | Cost Management
- 06 | Closure

The Clock and the Coin

The WBS showed us **what** to build. Now, the heavy questions: **When** will we finish, and **how much** will it cost?



Time

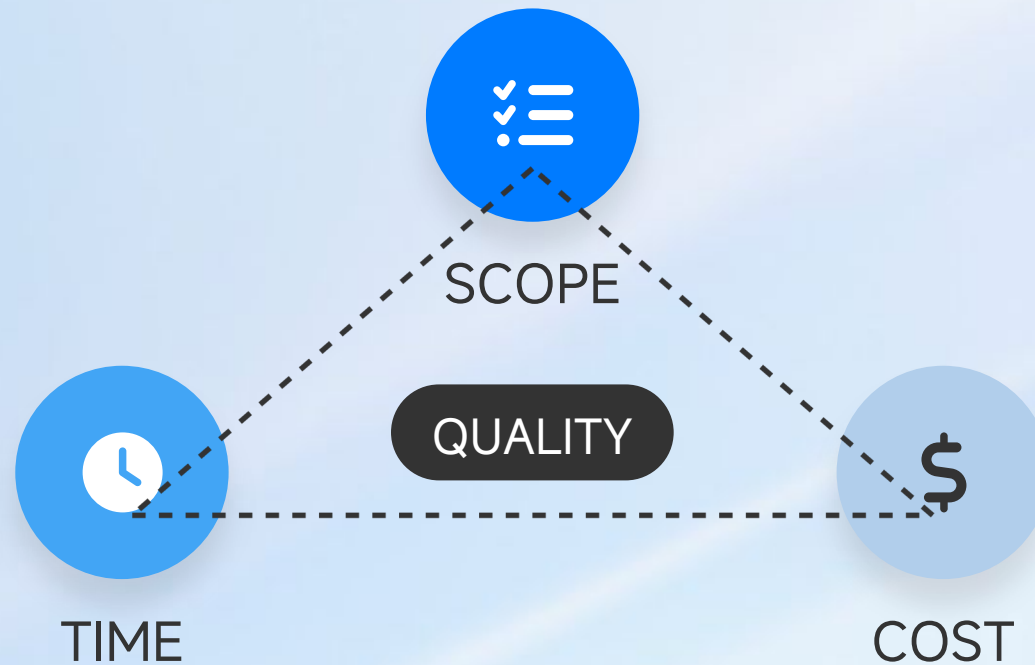


Cost

They aren't just numbers; they are the two immovable walls of our project. Today, we turn those **Work Packages** into a Schedule and a Budget.

The Interlocking Triangle

Every project manager lives under the pressure of the triple constraint.



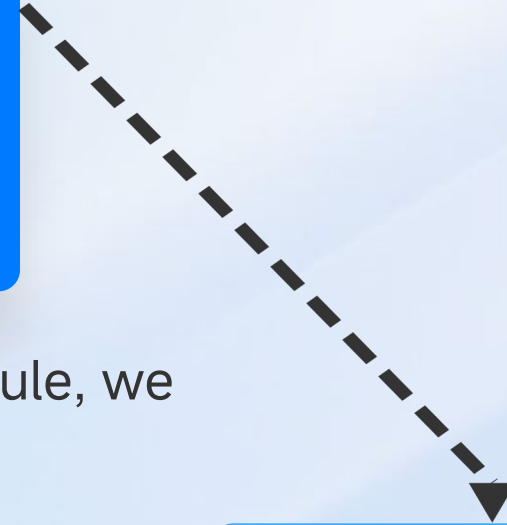
Change one, and the other two **must** adjust. It's a delicate, non-negotiable balance.

Phase 1: Activity Definition

Bridging the Gap from Nouns to Verbs.

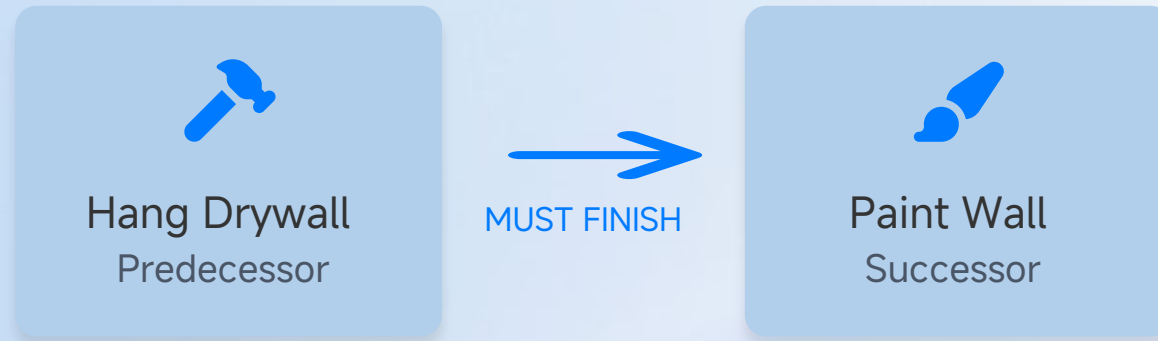
The WBS gave us Work Packages (Nouns). To build the schedule, we need **Activities** (Verbs).

This is where the team's input is golden.



Sequence: Finding the Flow

Activities rarely happen in a vacuum. You can't paint the wall before the drywall is hung.



Sequencing is the process of identifying the **Dependencies** between activities.



The Estimating Challenge

Estimating is less a science and more a human prediction, colored by optimism and fear.

Our goal is to get closer to the bullseye. We need to be **honest and realistic**, resisting the urge to satisfy the sponsor with an impossible number.



Method 1:

Expert Judgment

(The Old Hand)

The simplest method: Ask someone who has done this before.

"How long did it take you to install that server last time?"

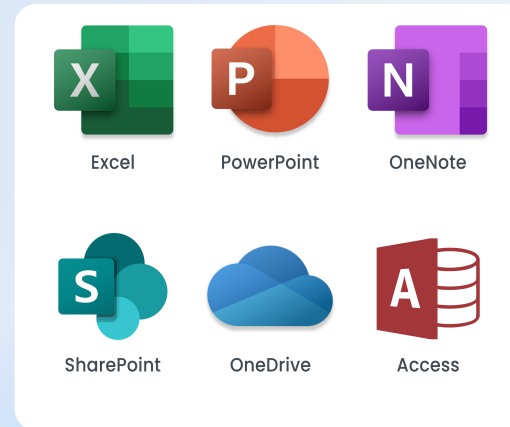
This is fast, but it only works if the expert is objective, not biased by their own speed or memory.

Method 2: Analogous Estimation

(The Quick Glance)



Past Project
6 Months



Current Project
Estimate: ~6 Months

We use historical data from a similar, past project to estimate the current project. It's **fast and cheap**, but less accurate because projects are unique.

Method 3: Parametric Estimation

(The Math)

Parametric Estimating relies on statistical relationships.

You take a quantity and multiply it by a unit rate.

$$\text{Cost} = \text{Quantity} \times \text{Rate}$$

Example: 1,000 meters \times \$10/meter

This is more accurate if the unit rate is reliable.



Method 4: Three-Point Estimates

(The Safety Net)



Optimistic

Everything goes perfectly.



Most Likely

The realistic scenario.



Pessimistic

Everything goes wrong.

Use a formula to get a statistically weighted average. This **forces realism** and provides a safety net.

The Reserve: The Safety Buffer

No estimate is perfect. We must include a Reserve to deal with the unexpected.



Contingency Reserve

For known risks (from the Risk Register).

Part of the Cost Baseline.



Management Reserve

For unknown unknowns (true surprises).

Requires management approval.

From Activity Estimate to Schedule



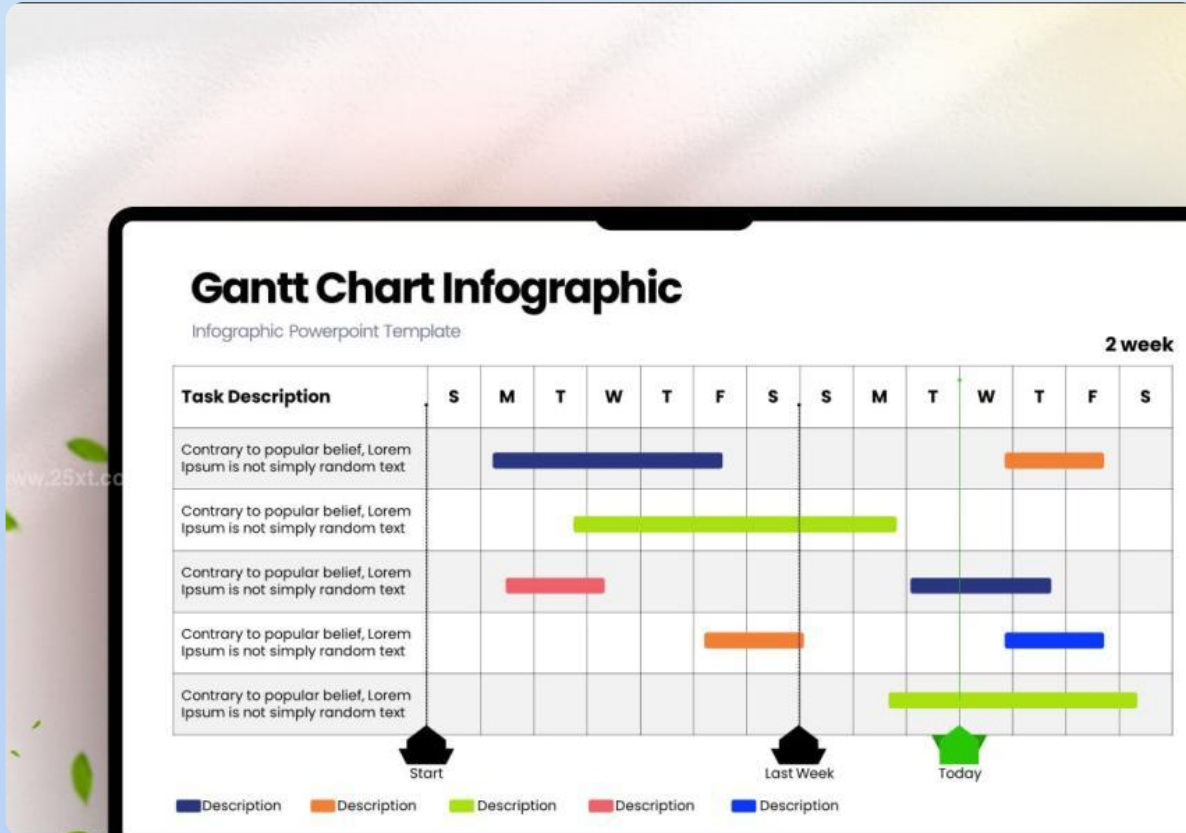
Critical Path

The longest sequence of activities that dictates the project's shortest possible completion time.

If any activity on this path is late, the project is late.

The Schedule Baseline

The output of all this planning is the **Schedule Baseline**—the approved version of the project schedule.



- Once approved, it's locked down.
- Every time we execute, we measure against this baseline.
- No changes without **Integrated Change Control**.

Cost Management: The Mirror Image

The good news? Estimating cost uses the exact same Work Packages and the same four methods.

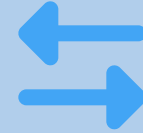




Direct Costs

- Labor
- Materials
- Equipment

Directly attributable to the work.



Indirect Costs

- Office Rent
- Utilities
- Administrative Staff

Needed to keep the lights on.

Don't forget the hidden overhead!

Cost Aggregation: Building the Budget

Work Package Costs

+

Contingency Reserve



Cost Baseline

The maximum amount you're authorized to spend.

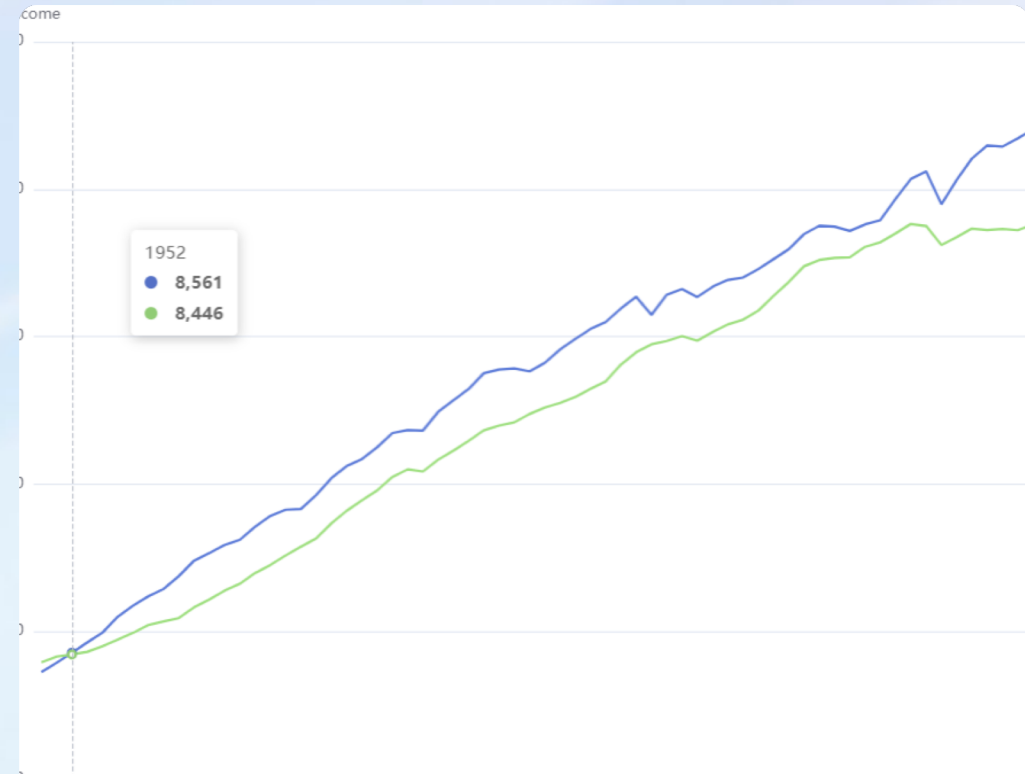
We build the budget from the bottom up.

Baseline vs. Funding Requirements

The Cost Baseline is the planned spending curve (S-Curve).

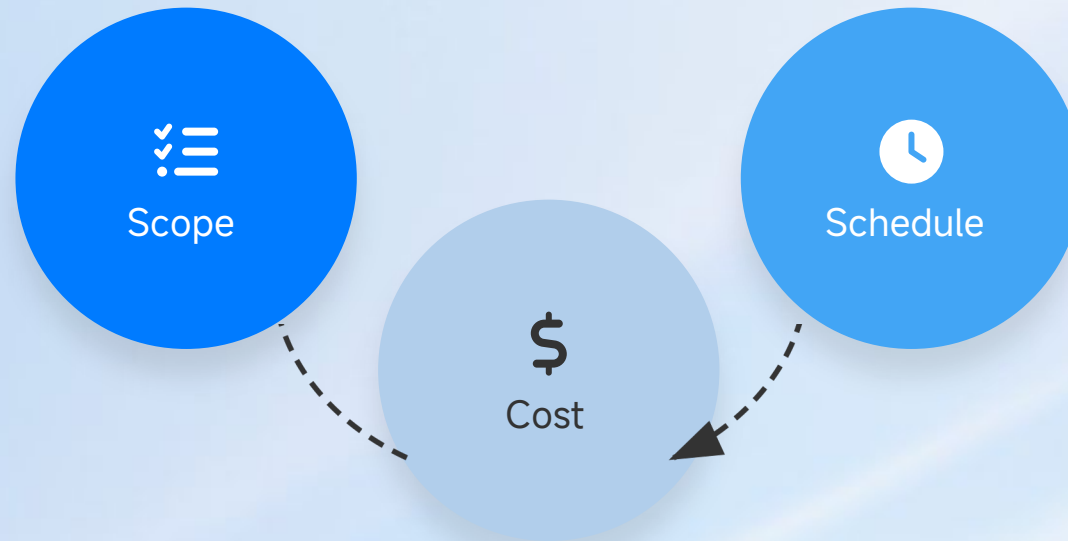
We use it to determine the Funding Requirements—when we need money and how much.

Our funding should always be slightly above the baseline to cover the management reserve.



The Planning Cycle is Iterative

You rarely get it right the first time.

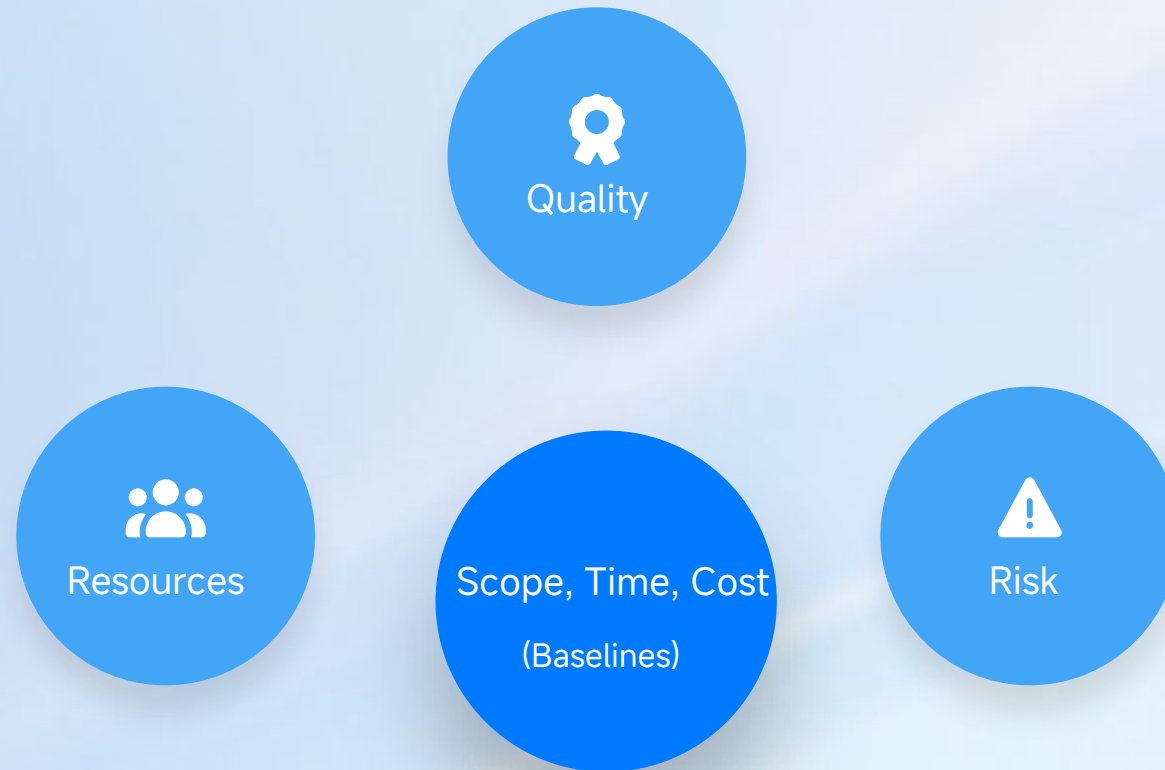


Expect to cycle through these steps several times until your constraints align.

Planning is iterative.

Next Steps: Quality, Resources, and Risk

We have defined the What, the When, and the How Much. Our baselines are locked down.



Next time, we'll solidify the rest of the plan.



Thank You

Content & Course Design by:

Amr Miqdadi, PMP

Follow my profile for daily professional insights, articles, and discussions:

<https://www.linkedin.com/in/amrmiqdadi>

Subscribe for practical, weekly project management video lessons:

https://www.youtube.com/@pm_in_5

PMLEAD.NET: Your ultimate project management & leadership hub

<https://www.pmlead.net>

PMLEAD.INFO: Leadership. & Growth

Download leadership and self-development eBooks and resources

<https://www.pmlead.info>

"Don't just manage projects—lead change. See you on the field."