

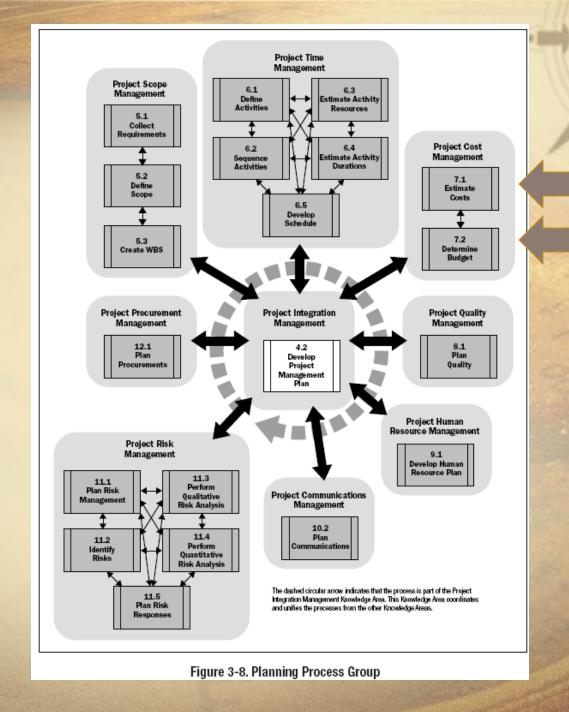
Dan Tuten, PMP, MCSE
IT Project Mgr
CDC

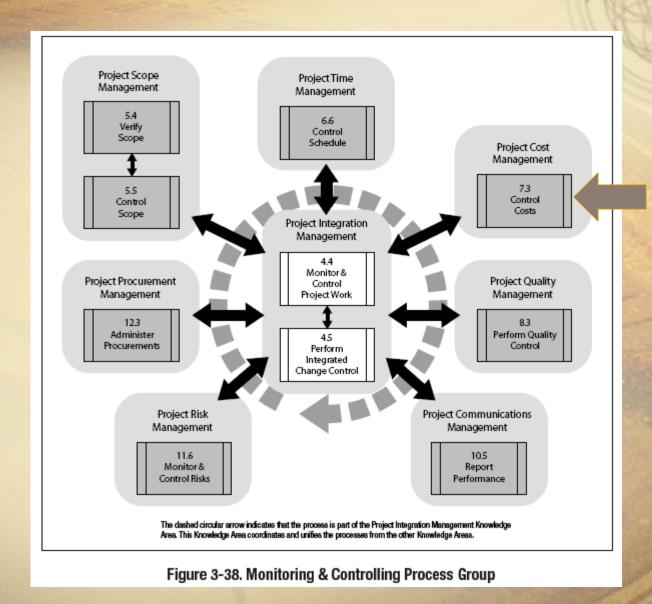
Cost Management and Estimating

Agenda

- PMBOK Relationships
- Real World Relationships
- Estimating Costs
- Determine Budget
- Control Costs
- Summary

PMBOK RELATIONSHIPS





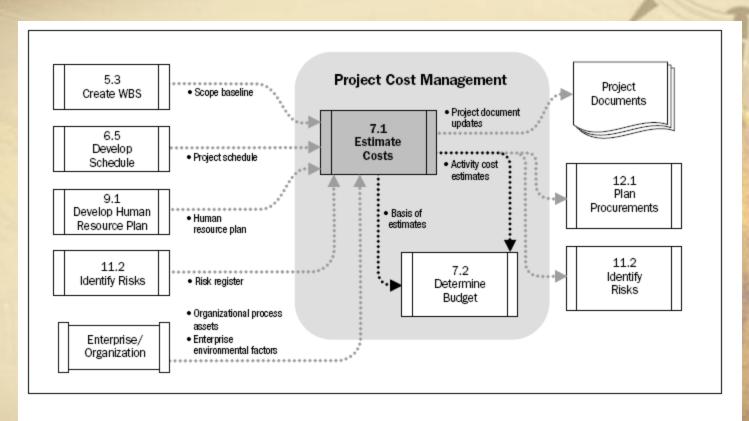


Figure 7-3. Estimate Costs Data Flow Diagram

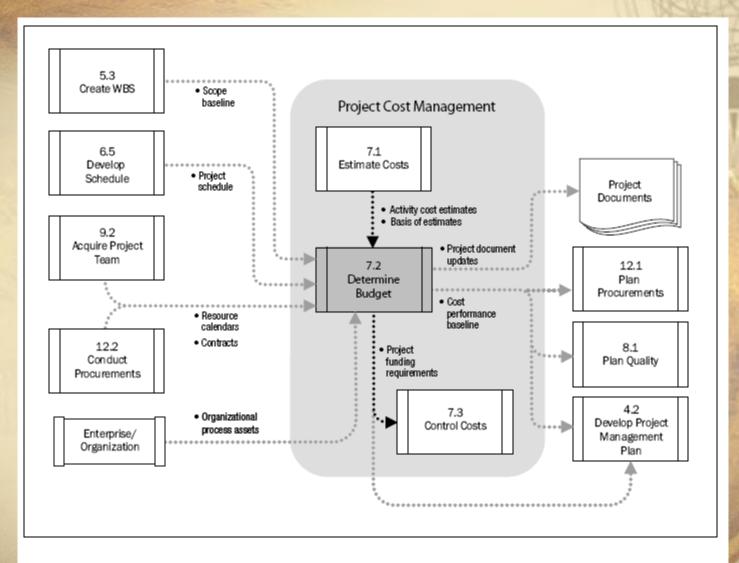


Figure 7-5. Determine Budget Data Flow Diagram

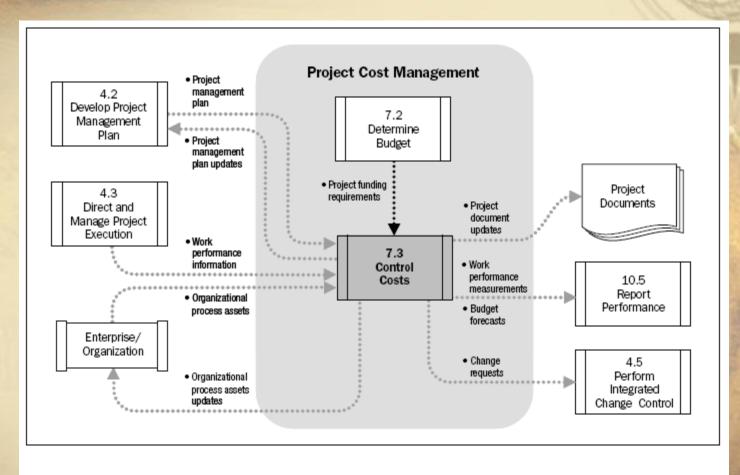


Figure 7-8. Control Costs Data Flow Diagram

REAL WORLD RELATIONSHIPS

PM Nirvana

I need you deliver PROJECT A. Could you please tell me what it's BUDGET, the DATE you can deliver it and what FEATURES will be included?



I need you to manage a project to deliver
 PROJECT A and you only have X BUDGET...



 I need you to manage a project to deliver PROJECT A and it MUST be delivered by Y DATE...

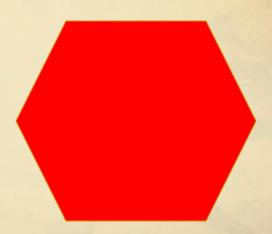


I need you to manage a project to deliver PROJECT A and you only have X BUDGET, and I absolutely need it in by this DATE...





 I need you to manage a project to deliver PROJECT A and you only have X BUDGET, and I absolutely need it in by this DATE with these FEATURES included...



ESTIMATE COSTS 15

When does estimating occur?

- Initiation = +/- 25%
- Planning = +/- 12%
- Requirements = +/- 5%

Estimate Cost

- All I need is the WBS, my hourly rate and a calculator, right?
- Depends on how accurate you wish to be...

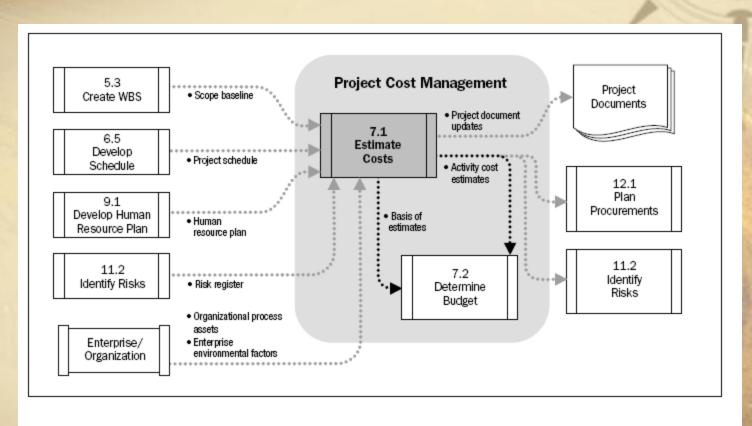


Figure 7-3. Estimate Costs Data Flow Diagram

Project Cost Management Overview

7.1 Estimate Costs

- .1 Inputs
 - .1 Scope baseline
 - .2 Project schedule
 - .3 Human resource plan
 - .4 Risk register
 - .5 Enterprise environmental factors
 - .6 Organizational process assets
- Tools & Techniques
 - .1 Expert judgment
 - .2 Analogous estimating
 - .3 Parametric estimating
 - .4 Bottom-up estimating
 - .5 Three-point estimates
 - .6 Reserve analysis
 - .7 Cost of quality
 - .8 Project management estimating software
 - .9 Vendor bid analysis
- .3 Outputs
 - .1 Activity cost estimates
 - .2 Basis of estimates
 - .3 Project document updates

7.2 Determine Budget

- .1 Inputs
 - .1 Activity cost estimates
 - .2 Basis of estimates
 - .3 Scope baseline
 - .4 Project schedule
 - .5 Resource calendars
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 - .7 Organizational process assets
- .2 Tools & Techniques
 - .1 Cost aggregation
 - .2 Reserve analysis
 - .3 Expert judgment
 - .4 Historical relationships
 - .5 Funding limit reconciliation
- .3 Outputs
 - .1 Cost performance baseline
 - .2 Project funding requirements
 - .3 Project document updates

7.3 Control Costs

- .1 Inputs
 - .1 Project management plan
 - .2 Project funding requirements
 - .3 Work performance information
 - .4 Organizational process assets
- .2 Tools & Techniques
 - .1 Earned value management
 - .2 Forecasting
 - .3 To-complete performance index (TCPI)
 - .4 Performance reviews
 - .5 Variance analysis
 - .6 Project management software
- .3 Outputs
 - .1 Work performance measurements
 - .2 Budget forecasts
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 - .4 Change requests
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Figure 7-1. Project Cost Management Overview

Estimate Costs

Inputs

- .1 Scope baseline
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- .6 Organizational process assets

Tools & Techniques

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- .7 Cost of quality
- 8 Project management estimating software
- .9 Vendor bid analysis

Outputs

- .1 Activity cost estimates
- .2 Basis of estimates
- .3 Project document updates

Figure 7-2. Estimate Costs: Inputs, Tools & Techniques, and Outputs

WHY THESE INPUTS?

Estimating Cost

What additional tools/techniques do YOU use?

DETERMINE BUDGET 22

Project Cost Management Overview

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Figure 7-1. Project Cost Management Overview

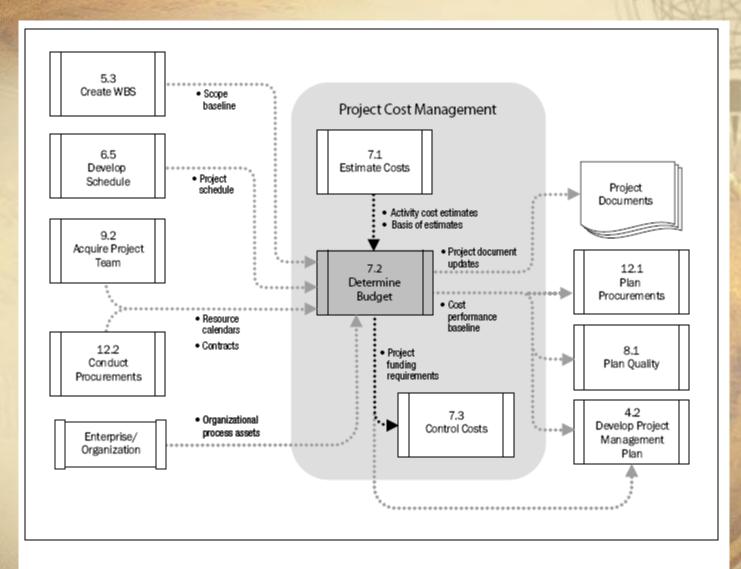


Figure 7-5. Determine Budget Data Flow Diagram

Determine Budget

Inputs

- .1 Activity cost estimates
- .2 Basis of estimates
- .3 Scope baseline
- .4 Project schedule
- .5 Resource calendars
- .6 Contracts
- .7 Organizational process assets

Tools & Techniques

- .1 Cost aggregation
- .2 Reserve analysis
- .3 Expert judgment
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Outputs

- .1 Cost performance baseline
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Figure 7-4. Determine Budget: Inputs, Tools & Techniques, and Outputs

Real World NOTE

Inputs

- .1 Scope baseline
- .2 Project schedule
- .3 Human resource plan
- .4 Risk register
- .5 Enterprise environmental factors
- .6 Organizational process assets

Tools & Techniques

- .1 Expert judgment
- .2 Analogous estimating
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Outputs

- .1 Activity cost estimates
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Figure 7-2. Estimate Costs: Inputs, Tools & Techniques, and Outputs

Inputs

- .1 Activity cost estimates
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Tools & Techniques

- .1 Cost aggregation
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Outputs

- .1 Cost performance baseline
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Figure 7-4. Determine Budget: Inputs, Tools & Techniques, and Outputs

DONE TOGETHER!!!!

Determine Budget Output

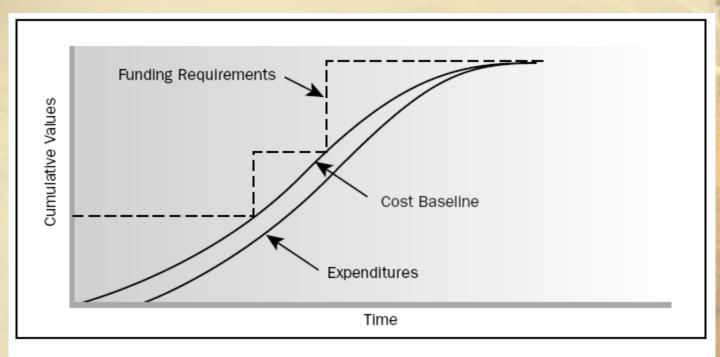


Figure 7-6. Cost Baseline, Expenditures, and Funding Requirements

Funding MUST be available

CONTROL COSTS 28

Project Cost Management Overview

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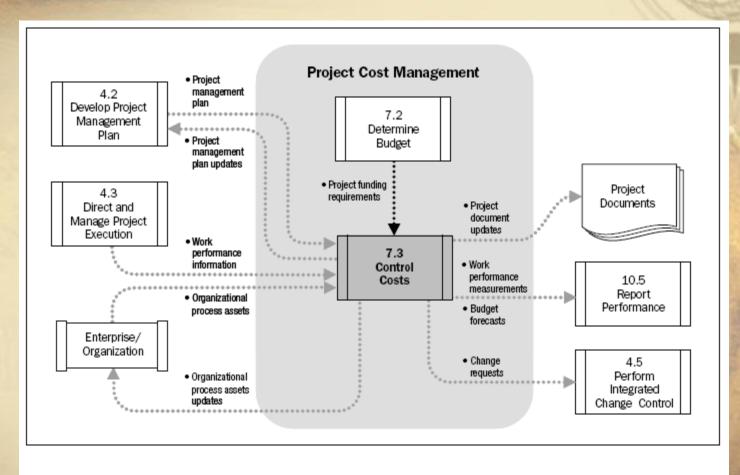


Figure 7-8. Control Costs Data Flow Diagram

Control Costs

Inputs

- .1 Project management plan
- .2 Project funding requirements
- .3 Work performance information
- 4 Organizational process assets

Tools & Techniques

- .1 Earned value management
- .2 Forecasting
- .3 To-complete performance index
- .4 Performance reviews
- .5 Variance analysis
- .6 Project management software

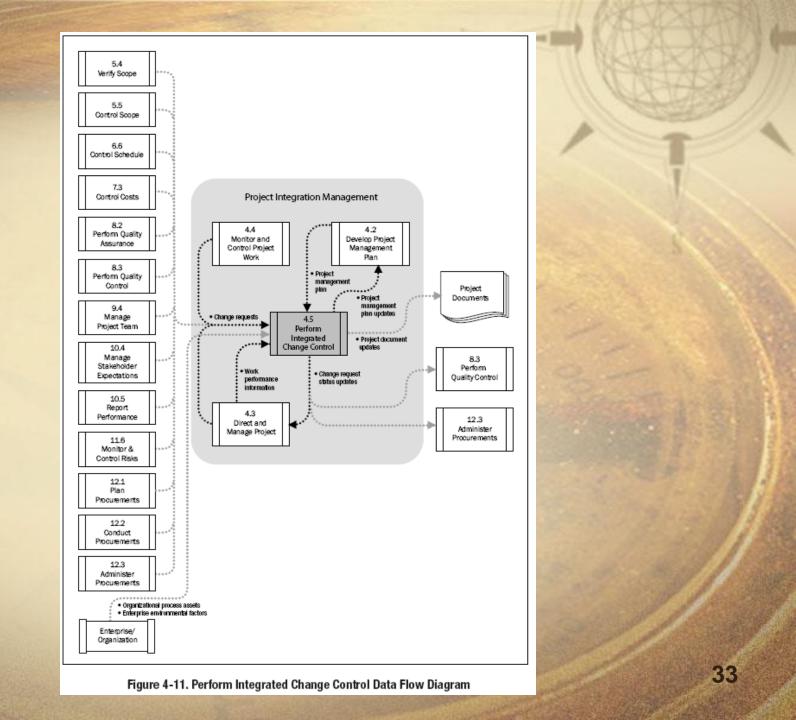
Outputs

- .1 Work performance measurements
- .2 Budget forecasts
- .3 Organizational process assets updates
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- .5 Project management plan updates
- .6 Project document updates

Figure 7-7. Control Costs: Inputs, Tools & Techniques, and Outputs

Control COST

How do YOU control costs?



Control Costs

- Document all assumptions
- Actively manage stakeholder expectations
- Rigorously defend from Scope Creep
- Actively discourage "Gold Plating"
- Assign HIGHLY qualified resources

Resist Borrowing from your project or Vice Versa

Cost Management Summary

 Effective Cost Management can only be achieved when Estimating is based on quality inputs and produces a Budget that can be Monitored and Controlled throughout the life of the project.

Questions

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- **404-663-0558**