

# Project Cost Management

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# Project Cost Management

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- Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget.

# Processes of project cost management

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- Plan Cost Management

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- Estimate Costs

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- Determine Budget

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- Control Costs

# 1. Plan Cost Management

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- Process of defining how the project costs will be estimated, budgeted, managed, monitored, and controlled
- **Key benefit:** provides guidance and direction on how the project costs will be managed throughout the project

# Plan Cost Management- Overview

## Plan Cost Management

### Inputs

- .1 Project charter
- .2 Project management plan
  - Schedule management plan
  - Risk management plan
- .3 Enterprise environmental factors
- .4 Organizational process assets

### Tools & Techniques

- .1 Expert judgment
- .2 Data analysis
- .3 Meetings

### Outputs

- .1 Cost management plan

# Output – Cost Management Plan

A component of the project management plan and describes how the project costs will be planned, structured, and controlled

The cost management plan can establish the following,

- i. Units of measure
- ii. Level of precision
- iii. Level of accuracy
- iv. Organizational procedures links (That is the connection with the work breakdown structure)
- v. Control thresholds
- vi. Rules of performance measurement - For example, the cost management plan may:
  - a. Define the points in the WBS at which measurement of control accounts will be performed
  - b. Establish techniques (e.g., weighted milestones, fixed-formula, percent complete, etc.)
- vii. Reporting formats

## 2. Estimate Costs

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- Process of developing an approximation of the cost of resources needed to complete project work.
- **Key benefit:** it determines the monetary resources required for the project.

# 3. Determining budget

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- Process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline.
- **Key benefit:** it determines the cost baseline against which project performance can be monitored and controlled.



# Output – Cost baseline

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- Approved version of the time-phased project budget, excluding any management reserves, which can only be changed through formal change control procedures.
- Used as a basis for comparison to actual results.
- Cost baseline is developed as a summation of the approved budgets for the different schedule activities.

	Task Name	Baseline Dur.	Baseline Start	Baseline Finish	Baseline Work	Baseline Cost
0	<b>Commercial Construction</b>	<b>198.38 days</b>	<b>Mon 22-8-16</b>	<b>Wed 31-5-17</b>	<b>1,885.62 hrs</b>	<b>\$76,310.20</b>
1	<b>General Conditions</b>	<b>24.75 days</b>	<b>Mon 22-8-16</b>	<b>Fri 23-9-16</b>	<b>176 hrs</b>	<b>\$8,100.00</b>
2	Receive notice to proceed and sign contract	3 days	Mon 22-8-16	Wed 24-8-16	24 hrs	\$1,440.00
3	Submit bond and insurance documents	2 days	Thu 25-8-16	Fri 26-8-16	20 hrs	\$1,040.00
4	Prepare, review and submit project schedule	2 days	Mon 29-8-16	Tue 30-8-16	20 hrs	\$760.00
5	Obtain building permits	4 days	Wed 31-8-16	Mon 5-9-16	32 hrs	\$1,360.00
6	Submit preliminary shop drawings	2 wks	Tue 6-9-16	Mon 19-9-16	80 hrs	\$3,400.00
7	Submit monthly requests for payment	6 hrs	Fri 23-9-16	Fri 23-9-16	0 hrs	\$100.00
8	Final General Condition	0 days	Fri 23-9-16	Fri 23-9-16	0 hrs	\$0.00
9	<b>Long Lead Procurement</b>	<b>26.25 days</b>	<b>Fri 9-9-16</b>	<b>Mon 17-10-16</b>	<b>320 hrs</b>	<b>\$15,200.00</b>
10	Submit shop drawings and order long lead items -	2 wks	Fri 9-9-16	Fri 23-9-16	80 hrs	\$4,000.00
11	Submit shop drawings and order long lead items -	2 wks	Tue 20-9-16	Mon 3-10-16	80 hrs	\$4,000.00
12	Detail, fabricate and deliver steel	4 wks	Tue 20-9-16	Mon 17-10-16	160 hrs	\$7,200.00
13	Long Lead Procurement check all items	0 days	Mon 17-10-16	Mon 17-10-16	0 hrs	\$0.00
14	<b>Mobilize on Site</b>	<b>10.25 days</b>	<b>Fri 23-9-16</b>	<b>Fri 7-10-16</b>	<b>64 hrs</b>	<b>\$2,280.00</b>
15	Install temporary power	2.5 days	Fri 23-9-16	Wed 28-9-16	20 hrs	\$800.00
16	Set up site office	3 days	Wed 28-9-16	Mon 3-10-16	26.4 hrs	\$792.00
17	Prepare site - lay down yard and temporary fencing	2 days	Thu 6-10-16	Fri 7-10-16	17.6 hrs	\$688.00
18	Finish temporary utilities	0 days	Fri 7-10-16	Fri 7-10-16	0 hrs	\$0.00
19	<b>Site Grading and Utilities</b>	<b>28 days</b>	<b>Mon 10-10-16</b>	<b>Wed 16-11-16</b>	<b>224 hrs</b>	<b>\$8,960.00</b>
20	Clear and grub site	3 days	Mon 10-10-16	Wed 12-10-16	24 hrs	\$960.00
21	Rough grade site (cut and fill)	1 wk	Thu 13-10-16	Wed 19-10-16	40 hrs	\$1,600.00
22	Install exterior fire line and building fire riser	2 wks	Thu 20-10-16	Wed 2-11-16	80 hrs	\$3,200.00
23	Perform final site grading	2 wks	Thu 3-11-16	Wed 16-11-16	80 hrs	\$3,200.00
24	Install Utilities check	0 days	Wed 16-11-16	Wed 16-11-16	0 hrs	\$0.00
25	<b>Team meeting and discussion with partners</b>	<b>20.25 days</b>	<b>Wed 4-1-17</b>	<b>Wed 1-2-17</b>	<b>0 hrs</b>	<b>\$0.00</b>
26	Team meeting and discussion with partners 1	2 hrs	Wed 4-1-17	Wed 4-1-17	0 hrs	\$0.00
27	Team meeting and discussion with partners 2	2 hrs	Wed 18-1-17	Wed 18-1-17	0 hrs	\$0.00
28	Team meeting and discussion with partners 3	2 hrs	Wed 1-2-17	Wed 1-2-17	0 hrs	\$0.00
29	<b>Foundations</b>	<b>21.5 days</b>	<b>Thu 17-11-16</b>	<b>Fri 16-12-16</b>	<b>283.2 hrs</b>	<b>\$10,136.00</b>
30	Excavate foundations	2 wks	Thu 17-11-16	Wed 30-11-16	120 hrs	\$4,000.00
31	Rough-in electric and plumbing in elevator	4 days	Thu 17-11-16	Tue 22-11-16	64 hrs	\$2,560.00
32	Pour column piers and foundations	5 days	Wed 23-11-16	Tue 29-11-16	60 hrs	\$1,800.00

# 4. Controlling costs

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- Process of monitoring the status of the project to update the project costs and managing changes to the cost baseline.
- **Key benefit:** the cost baseline is maintained throughout the project.