

Types of Costs

- Typical costs found in a project
 - Direct costs
 - Labor, materials, equipment, other
 - Clearly chargeable to a specific work package
 - Real cash outflows, must be paid as project progresses
 - Direct project overhead costs
 - Pinpoint resources being used in the project. Tied to deliverables or work packages
 - EX: salaries, rent
 - General and administrative (G&A) costs
 - Not linked to project, carried for duration of project
 - EX: advertising, accounting
 - Percentage of total direct cost

Direct costs	\$80,000
Direct overhead	<u>\$20,000</u>
Total direct costs	\$100,000
G&A overhead (20%)	<u>\$20,000</u>
Total costs	\$120,000
Profit (20%)	<u>\$24,000</u>
Total bid	\$144,000

Refining Estimates

- Reasons to refine estimates:
 - Interaction costs are hidden
 - According to guidelines, tasks are to be completed independently. Work on one task is dependent on prior tasks and hand offs require time/attention
 - Normal condition do not apply
 - Resource shortages (people, equipment, materials) can extend original estimates
 - Things go wrong
 - Design flaws, extreme weather conditions, accidents, etc.
 - Changes in project scope/plan
 - As project progresses, manager obtains a clearer picture of what needs to be done to accomplish project
 - May lead to major changes in project plans/costs
 - Overly optimistic
 - Tendency in people to overestimate how quickly things get done and underestimate how long it will take to complete
 - Strategic misrepresentation
 - Project promoters often underestimate costs and overestimate benefits to win approval

Creating a Database for Estimating

- Collection of actual vs. estimated times/costs of work packages over numerous projects. Used for estimating new project tasks and expected possible errors

Mega Projects (special case)