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

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 conditions 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)