Project Comparison Estimate:

- The comparison estimates is based upon information from other similar project that have been completed.
- Adjustments need to be made for the economy of scale.

Record Keeping for Project Comparison:

- When and where the project was built.
- Project specific including:
  - Size.
  - Type of structure.
  - Level of finishes.
  - Utilization of the space.
- The cost of the project, preferably by line item.
- Any unusual condition that would skew the cost higher or lower.

Simple Versus Complex Projects:

- Simple projects include residents and office space because their design tend to be quite uniform.
- Complex projects include factories, laboratories, hospitals, and plants because there are significant variations between the projects.

Economy of Scale:

- As the area built increases, the unit cost decreases.
Economy of Scale:

- Calculation of Size Factor (SF):
  - SF = Proposed Size/Comparison Size
  - The ratio can be in square feet, cubic feet, number of parking stalls, number of hospital beds, etc.
  - For projects about the same size—plus or minus 10 percent—a cost multiplier of 1 can be used.

Adjusting for Economy of Scale:

- Calculation of Total Cost Multiplier:
  - The exponential for the total project cost is 0.9 for simple projects and 0.6 for complex projects.
  - TCM = SF^0.9 For simple projects
  - TCM = SF^0.6 For complex projects

Other Adjustments:

- Increase in labor or materials cost over time.
- Differences in location.
- Union versus non-union labor.

- Unique conditions influencing construction. For example, local ordinances, availability of materials, locations for stockpiles, soil conditions.
- Other features of the building, such as a higher level of finish, changes in use of space, etc.
Writing a Proposal Letter

- Identify it as a preliminary estimate (price), subject to change once plans have been completed.
- Clearly spell out the specifications of the building used as a comparison.
- Clearly spell out exclusions.