

Appendix D. Estimate Types / Uncertainty Tables for M&S, Labor, Conventional Facilities

Code	Type of Estimate	Contingency %	Description
M&S Guidelines			
M1	Existing Purchase Order	0%	Items that have been completed or obligated. (Note: Contact Change Orders are considered a Risk and should not be included as estimate uncertainty contingency)
M2	Procurements for LOE / Oversight work	0%-20%	M&S items such as travel, software purchases and upgrades, computers, etc. estimated to support LOE efforts and other work activities.
M3	Advanced	10%-20%	Items for which there is a catalog price or recent vendor quote based on a completed or nearly completed design or an existing design with little or no modifications and for which the costs are documented.
M4	Preliminary	20%-40%	Items that can be readily estimated from a reasonably detailed but not completed design; items adapted from existing designs but with moderate modifications, which have documented costs from past projects. A recent vendor survey (e.g., budgetary quote, vendor RFI response) based on a preliminary design belongs here.
M5	Conceptual	40%-60%	Items with a documented conceptual level of design; items adapted from existing designs but with extensive modifications, which have documented costs from past projects
M6	Pre-Conceptual - Common work	60%-80%	Items that do not have a documented conceptual design, but do have documented costs from past projects. Use of this estimate type indicates little confidence in the estimate. Its use should be minimized when completing the final estimate.
M7	Pre-Conceptual - Uncommon work	80%-100%	Items that do not have a documented conceptual design, and have no documented costs from past projects. Its use should be minimized when completing the final estimate.
M8	Beyond state of the art	>100%	Items that do not have a documented conceptual design, and have no documented costs from past projects. Technical requirements are beyond the state of the art.

Code	Type of Estimate	Contingency %	Description
LABOR Guidelines			
L1	Actual	0%	Actual costs incurred on activities completed to date.
L2	Level of Effort Tasks	0%-20%	Support type activities that must be done to support other work activities or the entire project effort, where estimated effort is based on the duration of the activities it is supporting.
L3	Advanced	10%-25%	Based on experience with documented identical or nearly identical work. Development of activities, resource requirements, and schedule constraints are highly mature. Technical requirements are very straightforward to achieve.
L4	Preliminary	25%-40%	Based on direct experience with similar work. Development of activities, resource requirements, and schedule constraints are defined at a preliminary (beyond conceptual) design level. Technical requirements are achievable and with some precedent.
L5	Conceptual	40%-60%	Based on expert judgment using some experience as a reference. Development of activities, resource requirements, and schedule constraints are defined at a conceptual level. Technical requirements are moderately challenging.
L6	Pre-conceptual	60%-80%	Based only on expert judgment without similar experience. Development of activities, resource requirements, and schedule constraints are defined at a pre-conceptual level. Technical requirements are moderately challenging.
L7	Rough Estimate	80%-100%	Based only on expert judgment without similar experience. Development of activities, resource requirements, and schedule constraints is largely incomplete. Technical requirements are challenging.
L8	Beyond state of the art	>100%	No experience available for reference. Activities, resource requirements, and schedule constraints are completely undeveloped. Technical requirements are beyond the state of the art.

Appendix D Continued

Code	Type of Estimate (Desing Maturity)	Contingency %	Description	Contributing Factors
Conventional Facilities				
C1	Contract Award	0-5%	Contract Award	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Contract Type</div> </div> <p>Fixed Price ←————→ Time and Materials</p>
C2	Final Design	5-20%	Bid Docs Complete	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Project Complexity</div> </div> <p>Straightforward Contributing Factors ←————→ Complex Contributing Factors</p> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Project Unique Factor</div> </div> <p>Independent Reviews ←————→ Peer Review No Review</p>
C3	Preliminary	10-30%	30% design complete	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Technical Requirements</div> </div> <p>Traditional Building Type / Requirements ←————→ Distinct Building Type /Requirements</p>
C4	Conceptual	20-40%	10-15% design complete	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Unit Cost Source</div> </div> <p>Detailed Documents ←————→ Immature Design</p> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Quantity Take Off basis</div> </div> <p>Bottoms Up ←————→ Parametric Scaling</p>
C5	Project Definition	40-100%	Scope Developed	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Estimate Type</div> </div> <p>Quote ←————→ Guess</p> <p style="text-align: center;">Estimating Guide</p>