

## PROCESS ACTIVITY - REVIEW BASE ESTIMATE

<b>Activity</b>	<b>Review Base Estimate</b>
<b>Description</b>	<p><b>Estimate reviews</b> are necessary to ensure that the base cost estimate is an accurate reflection of the project's scope of work that items are not missing, that historical data reasonably reflects project scope and site conditions, that assumptions and basis are appropriate for the project.</p>
<b>Inputs</b>	<p>Completed base cost estimate (including backup calculations)  Completed estimate basis and assumptions</p>
<b>Technique and Tools</b>	<p>Internal Reviews</p> <ul style="list-style-type: none"> <li>• In-house/Peer</li> <li>• Formal Committee</li> <li>• Round Table</li> </ul> <p>External Reviews</p> <ul style="list-style-type: none"> <li>• Independent or expert team</li> </ul> <p>Project Cost Estimate File Template</p>
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Determine the Level of Review  Estimate reviews are generally a function of project size and complexity and resources available to perform these reviews. In this step, the project manager or project engineer must determine who should review the estimate and at what level these reviews should occur. Knowledge of who will perform the review and how long will the review will take to perform is a consideration.</li> <li>2. Review Estimate Basis and Assumptions  The first component of the review should focus on understanding how an estimate is developed and then on what the major factors that are used to determine the estimated cost of a project. These factors are ones that typically influence a majority of the cost elements that comprise the estimate.</li> <li>3. Verify Completeness and Use of Estimating Information and Data  This step focuses on ensuring that the estimate reflects the scope of the project as described when the estimate is prepared. Further, the review should assess whether quantities, unit prices, and percentages reflect the scope of work, site conditions, and market conditions.</li> <li>4. Reconcile the Current Estimate  Traceability between the initial estimate and future estimate updates is critical for explaining why there are changes in project costs. This traceability with the baseline cost estimate is imperative if changes from the baseline require that the programmed cost be adjusted to reflect current estimated cost of the project.</li> <li>5. Prepare Estimate Package  This step focuses on compiling all estimate documents and organizing</li> </ol>

	<p>them into a single package to include cost summaries, detailed estimates, estimate basis and assumptions, and quantity calculations.</p>
<b>Products</b>	<p>Estimate Package File (e.g., complete notebook of all estimate related information)</p> <ul style="list-style-type: none"> <li>• Base Cost Estimate</li> <li>• Estimate Basis and Assumptions</li> </ul>
<b>Guidance</b>	<ul style="list-style-type: none"> <li>• Project complexity is perhaps the most important driver of the level of estimate review. The estimate for most small projects, such as Pavers, can be reviewed internally by peers and supervisors. Larger and more complex projects, such as those in the mobility area, may require an increased level of internal estimate review. Reviews for these projects would require specialty group participation and an increase level of management review time. In addition to internal reviews, very large and complex projects may also require outside expertise to properly review the cost estimate.</li> <li>• The experience of the estimator might influence the review process.</li> <li>• The review process should be structured. General estimate bases and assumptions should be reviewed first. This information sets the context in which the estimated costs were prepared. Next, the estimate scope should be verified so that every item of work to complete the project is captured in the estimate. Finally, quantities, unit prices and percentages should be evaluated focusing on the major contributors to the project cost (Puerto Principle that 80% of the cost is covered by 20% of the items).</li> <li>• Sometimes comparing a completed base project cost estimate with a similar project's cost, that was recently completed, can be helpful in verifying an estimate. If this technique is used in the review process, then major differences between the two cost estimates need to be understood when there are differences.</li> <li>• Differences between current cost estimates and previous estimates should be explained. This is particularly critical when cost increases have occurred. Doing this will address the "Why has project cost increased?" question from supervisors and management. The Change Management activity of the Project Management Process should also help in tracking changes to cost estimates.</li> </ul>