

What is a Rubber Baseline?

The rubber baseline as initially defined (1970's vintage) was any change to the performance measurement baseline (PMB) that was incorporated to:

1. Avoid schedule variance. The budgeted cost of work scheduled (BCWS) was moved with the current schedule instead of the estimate to complete (ETC) moving with the current schedule. Back in the 70's, this was referred to as "snowplowing".
2. Pull BCWS forward (robbing budget from future work effort) to temporarily hide a cost variance. This action used to be referred to as "surfing". There have been some classic examples of this over the decades, and the end result was never good. One of the more well known examples was the Navy's A-12 program which ended up being cancelled. Other contractors have lost their EVM system validations because a project used out-year budget to complete near term work effort.

These practices continue today in situations where project managers elect to hide schedule and cost variances instead of allowing their EVM Systems to properly function as early warning systems.

Since the term "rubber baseline" has outlived many of the early EVMS participants, authors, practitioners, and those who understood basic EVM concepts, the term, like many others used in the EVM vernacular, has become a five-headed dragon. Today the term can mean different things to different people – a standard definition for the term has been lost over time.

Some people now use the term to mean any contractor PMB change not clearly explained in the Contract Performance Report (CPR) Format 5 (reference the CPR Data Item Description (DID) DI-MGMT-81466A, paragraph 2.6.4.4). But, does that make sense? The CPR is a contractual requirement, the Format 5 instructions are clear, and more importantly, common sense should prevail. Keep the customer informed. Again, one of the fundamental purposes of using an EVMS is to provide early warnings so that the contractor can proactively respond to issues. The contractor and the customer need to have visibility into what is occurring on the project.

Others cite the term when the PMB has been changed within the freeze period (usually current period plus one depending on the EVM System Description or project directives) without customer approval or direction such as an engineering change proposal (ECP) or stop work order (SWO).

Still others use the term incorrectly when the contractor has properly (and consistent with its EVM System Description) implemented approved baseline changes to produce a more realistic baseline for the remaining work. Examples include using management reserve (MR), make/buy tradeoffs, and modifying or adding tasks to reflect a new direction, to satisfy the current contract statement of work within the existing approved contract budget base (CBB).

Another misinterpretation: Updating the rolling wave is not a rubber baseline, and many contractors' EVM System Descriptions do not require a baseline change request (BCR). Their position (and customer accepted) is that using the BCR process for a routine baseline maintenance function is an unnecessary administrative burden.

The need to implement a major rebaselining action should be a rare occurrence in the life of a project. Some level of internal replanning is to be expected to some degree, as the actual

execution of a project will always deviate from the initial plan. The initial PMB and the PMB for the remaining work needs to be realistic. Project stakeholders and most importantly, the control account managers (CAMs), must take ownership the PMB for effective performance measurement and control.

Rebaselining should not be done so frequently that the customer becomes doubtful of the purpose (attempting to temporarily hide a schedule or cost variance) and must always be fully explained in CPR Format 5. It is also strongly recommended to get prior customer understanding and concurrence. In short, do not surprise the customer – it diminishes credibility.