

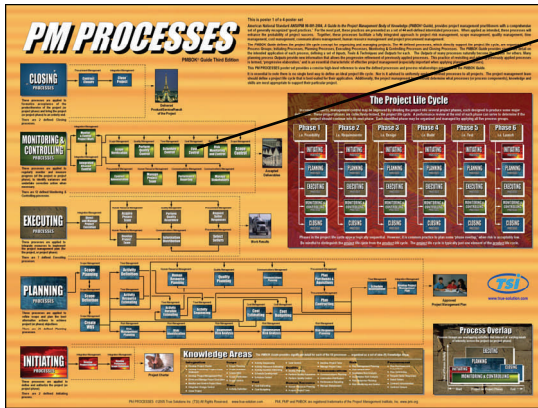


Applying the Cost Control Process

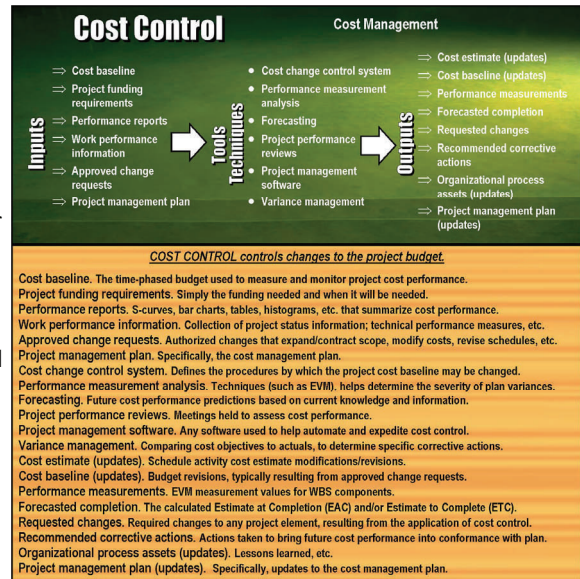
Cost Control is the process of effectively managing changes to the project budget, then integrating those changes across the entire project through the Integrated Change Control process. It is important to understand that it is the project manager's responsibility to discourage unnecessary budget changes. It is also important to understand that when changes are warranted, that they be made in strict accordance with the project's cost change control process, and that the established cost baseline remains intact. Re-baselining the budget is appropriate only in extreme situations.

In Cost Control, the application of *earned value analysis* (EVA) is a key tool used to measure project performance. Earned value analysis integrates cost, scope and schedule to derive measurement values that accurately assess project progress to date, as well as forecasted future performance.

Consider that schedule, scope or cost values alone can create false impressions. For example, a project can be well under budget at any given time. This may appear favorable. However, if the under-budget performance is the result of being well behind schedule, then the project may not be in a favorable status. Earned value analysis corrects these type issues.



You will likely encounter five or six questions on your PMP Exam designed to challenge your applied understanding of earned value analysis. Accordingly, this discussion includes an earned value primer.



Cost Control Must Know Concepts

1. "Cost Control is the process of effectively managing changes to the project budget, then integrating those changes across the entire project through the Integrated Change Control process."
2. "It is the project manager's responsibility to discourage unnecessary cost changes."
3. "When legitimate budget changes are warranted, they should be made in accordance with the project's cost change control system."
4. "Earned value analysis (EVA) is a key tool used to measure project performance. Earned value analysis integrates cost, scope and schedule to derive measurement values that accurately assess project progress to date, as well as forecasted future performance."
5. "Planned Value PV (also termed Budgeted Cost of Work Scheduled BCWS) is the established baseline that indicates *the amount of money planned for spending to date, at any particular point in time* (regardless of what actual work has been performed)."
6. "Earned Value EV (also termed Budgeted Cost of Work Performed BCWP) is the established baseline that indicates *the amount of money planned for spending on the actual work performed to date, at any particular point in time* (regardless of other planned objectives)."
7. "Actual Cost AC (also termed Actual Cost of Work Performed ACWP) is the *amount of money spent on the actual work performed to date, at any particular point in time* (regardless of other planned objectives)."
8. "Budget at Completion BAC is simply *the amount of money planned for spending on the entire project*."
9. "Schedule Variance SV $SV = EV - PV$ $SV > 0$ = ahead of schedule. $SV < 0$ = behind schedule."
10. "Cost Variance CV $CV = EV - AC$ $CV > 0$ = under budget. $CV < 0$ = over budget."
11. "Variance at Completion VAC $VAC = BAC - EAC$ $VAC > 0$ = under budget. $VAC < 0$ = over budget."
12. "Schedule Performance Index SPI $SPI = EV/PV$ $SPI > 1$ = ahead of schedule. $SPI < 1$ = behind schedule."
13. "Cost Performance Index CPI $CPI = EV/AC$ $CPI > 1$ = under budget. $CPI < 1$ = over budget."
14. "Estimate to Complete ETC $ETC = EAC - AC$ ETC forecasts remaining project costs."
15. "Cost Estimate at Completion EAC $EAC = BAC/CPI$ EAC forecasts final project cost total."

