

Definition Of EVM Formulas

Earned Value Management is important for the PMP Exam. It measures the project by analyzing cost, and schedule data concurrently. It tells if the project is on cost and schedule and also helps in cost and schedule forecasting. Detail of earned value management is mentioned in the PMI's PMBOK guide. Understanding and remembering EVM Formulas by heart is essential for PMP certification exam prep.

To help you understand EVM formulae better, here is a EVM formulae table, with their description. You should ensure you memorize these formulae well before appearing in the PMP exam.

Metric	Abbrev	Description	Formula
Budget at Completion	BAC	Cost baseline for project.	
Actual Cost	AC	Total cost incurred.	
Earned Value	EV	Value of work completed so far, without c	
Planned Value	PV	Value of work planned that was schedule	
Cost Variance			
CV		Measurement of overrun in cost. It is variation between budget for work	
$CV = EV - AC$			
Cost Performance Index			
CPI		It is the project cost efficiency. CPI of 1 implies that cost is the same as budget for work comple	
$CPI = EV/AC$			
Schedule Variance			
SV		Measurement of slippage in schedule. It is variation of budget for the work completed and budg	
$SV = EV - PV$			
Schedule Performance Index			
SPI		It is project schedule efficiency. SPI of 1 implies that project is on schedule. SPI less than 1 me	
$SPI = EV/PV$			
Estimate to Completion			
ETC		It is anticipated additional costs required for project completion.	
$ETC = EAC - AC$			

Estimate at Completion

EAC

Anticipated project cost that is based on existing cost efficiency ratio.

"EAC = Budget at Completion/Cost Performance Index

= BAC/CPI"

Variance at Completion

VAC

Estimated cost overrun at the end of project.

"VAC = Budget at Completion–Estimate at Completion

= BAC–EAC"

Study of these EVM definitions is valuable for the PMP exam prep, and are also mentioned in the PMBOK guide.

Also Read:

[What is EVM and how EVM formulas are understood?](#)