

Name	Formula	What it Says	Why You Use It
Budget at Completion (BAC)	No formula; it's the project budget	How much money you'll spend on the project	To tell the sponsor the total amount of value they're getting for the project
Planned Value (PV)	PV = Sum of the authorized budget for the work to be completed by a point in time.	The value of what your schedule says you should have completed by today	To figure out what value your plan says you should have delivered so far
Earned Value (EV)	EV = Sum of the planned value of work that is completed to a point in time.	As of today, what is the value of the work actually accomplished?	EV lets you translate how much work the team has finished into a dollar value.
Actual Cost (AC)	No formula; it's what you have actually spent on the project	How much you've actually spent so far	What you spend doesn't always match the value you get!
Schedule Performance Index (SPI)	$SPI = \frac{EV}{PV}$	We are progressing at ____ % of the rate originally planned	To figure out whether you've delivered the value your schedule said you would
Schedule Variance (SV)	$SV = EV - PV$	The budgeted amount of work that we are ahead of behind on	Puts a dollar amount on exactly how far ahead or behind schedule you are.
Cost Performance Index (CPI)	$CPI = \frac{EV}{AC}$	We are getting \$_____ worth of work for every \$1 spent	To figure out whether you're spending faster or slower than planned.
Cumulative Cost Performance Index (CPI <sup>c</sup> )	$CPI^c = \frac{EV^c}{AC^c}$	The same as CPI, only for the project to-date	Same as CPI.
Cost Variance (CV)	$CV = EV - AC$	How much over or under budget	Your sponsor is always most interested in the bottom-line!
Estimate at Completion (EAC)	$EAC = AC + \text{Bottom-up ETC}$ <i>(fundamentally flawed)</i> $EAC = \frac{BAC}{CPI^c}$ <i>(var typical)</i> $EAC = AC + BAC - EV$ <i>(var atypical)</i> $EAC = AC + (BAC - EV) / (CPI^c \times SPI^c)$	As of now, how much do we expect the total project to cost?	To understand if we need to seek more funding or make other changes to get costs back in line.
Estimate to Complete (ETC)	$ETC = EAC - AC$	How much more will the project cost?	You need to make sure there is adequate funding
Variance at Completion (VAC)	$VAC = BAC - EAC$	As of now, how much over or under do we expect the total project cost to be?	Your sponsor is always most interested in the bottom-line!
To-Complete Performance Index (TCPI)	$TCPI = (BAC - EV) / (BAC - AC)$ $TCPI = (BAC - EV) / (EAC - AC)$ , when EAC is approved	What cost performance is required to meet our budget?	Provides a sanity check for how viable your BAC really is. If not viable, the PM develops a forecasted EAC for approval.

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Earned Value (EV)	As of today, what is the value of the work actually accomplished?	EV lets you translate how much work the team has finished into a dollar value
Actual Cost (AC)	How much you've actually spent so far	What you spend doesn't always match the value you get!
Schedule Performance Index (SPI)	We are progressing at ____ % of the rate originally planned	To figure out whether you've delivered the value your schedule said you would
Cumulative Schedule Performance Index (SPI <sup>c</sup> )	Represents the cumulative SPI of the project at the point the measurement is taken	Where SPI can be at one point in time (e.g. for a specific month), SPI <sup>c</sup> is for the project to-date.
Schedule Variance (SV)	The budgeted amount of work that we are ahead of behind on	Puts a dollar amount on exactly how far ahead or behind schedule you are.
Cost Performance Index (CPI)	We are getting \$_____ worth of work for every \$1 spent.	To figure out whether you're spending faster or slower than planned.
Cumulative Cost Performance Index (CPI <sup>c</sup> )	The cumulative CPI of the project at the point the measurement is taken	Where CPI can be at one point in time (e.g. for a specific month), CPI <sup>c</sup> is for the project to-date.
Cost Variance (CV)	How much over or under budget	Your sponsor is always most interested in the bottom-line!
Estimate at Completion (EAC)	As of now, how much do we expect the total project to cost?	To understand if we need to seek more funding or make other changes to get costs back in line.
Estimate to Complete (ETC)	How much more will the project cost?	You need to make sure there is adequate funding
Variance at Completion (VAC)	As of now, how much over or under do we expect the total project cost to be?	Your sponsor is always most interested in the bottom-line!
To-Complete Performance Index (TCPI)	What cost performance is required to meet our budget?	Provides a sanity check for how viable your BAC really is. If not viable, the PM develops a forecasted EAC for approval.