

Planned Value	=	PV	=	should have done according to plan and as percentage of BAC
Earned Value	=	EV	=	percentage of plan actually done times BAC expressed in \$
Actual Cost	=	AC	=	actual money spent
Budget at Completion	=	BAC	=	total planned work; project cost baseline

Equations:

Cost Variance	=	CV	=	EV - AC
Schedule Variance	=	SV	=	EV - PV
Cost Performance Index	=	CPI	=	EV / AC
Schedule Performance Index	=	SPI	=	EV / PV
Estimate at Completion	=	EAC	=	BAC / CPI OR AC + BAC - EV
Estimate To Completion	=	ETC	=	EAC - AC at either current actual OR plan rate
Value at Completion	=	VAC	=	BAC - EAC
To Complete Performance Index	=	TCPI	=	(BAC - EV) / (BAC - AC) efficiency needed to stay on plan

1. Late and Overspent Project

BAC	900
PV	135
EV	90
AC	100

	=	EV - AC			%	EV / AC	
CV	-10	90	100	CPI	0.90	90	100
	=	EV - PV			%	EV / PV	
SV	-45	90	135	SPI	0.67	90	135

Estimate at Completion	=	BAC / (EV / AC)		◆ If future work of project efficiency at CPI or AC as % of EV
EAC at current actual	1000	900	0.90	
		AC + BAC - EV		◆ If future work of project efficiency at Planned rate
EAC at plan rate	910	100 + 900 - 90		
Estimate To Completion	actual/plan	EAC - AC		◆ The expected cost to finish all remaining project work
ETC	935/845	1000 - 65 or 910 - 65		
Value at Completion	=	BAC - EAC		
VAC	-100	900	1000	
To Complete Performance	=	(BAC - EV) / (BAC - AC)		
TCPI	1.01	900 - 90	900 - 100	> 1 Harder to complete on plan

2. Early and Underspent Project

BAC	900
PV	75
EV	90
AC	65

	=	EV - AC			%	EV / AC	
CV	+25	90	65	CPI	1.38	90	65
	=	EV - PV			%	EV / PV	
SV	+15	90	75	SPI	1.20	90	75

Estimate at Completion	=	BAC / (EV / AC)		◆ If future work of project efficiency at CPI or AC as % of EV
EAC at current actual	652	900	1.38	
		AC + BAC - EV		◆ If future work of project efficiency at Planned rate
EAC at plan rate	875	65 + 900 - 90		
Estimate To Completion	actual/plan	EAC - AC		◆ The expected cost to finish all remaining project work
ETC	587/810	652 - 65 or 875 - 65		
Value at Completion	=	BAC - EAC		
VAC	+248	900	652	
To Complete Performance	=	(BAC - EV) / (BAC - AC)		
TCPI	0.97	900 - 90	900 - 65	< 1 Easier to complete on plan