SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE
SCHOOL OF BUSINESS

2009 Project Management Symposium - Breakout Session D

Project Prioritization and Resourcing – *One Size Does Not Fit All*

Walkthrough of Earned Value Calculation

Example of EV Calculation, assume a project that has exactly one task. The task was baselined at 8 hours, but 12 hours have been spent. The task was to have been completed already. Assume an Hourly Rate of $50 per hour. Using this information:

Hourly Rate = $50
PV or BCWS = Hourly Rate * Total Hours Planned or Scheduled
PV = $400 ($50 * 8 hours)
AC or ACWP = Hourly Rate * Total Hours Spent
AC = $600 ($50 * 12 hours)
EV or BCWP = Baseline Cost * % Complete Actual
EV = $80 (baseline of $400 * 20% complete)
(NOTE Using Physical % Complete)*
SV = Earned Value (EV) - Planned Value (PV)
SV = -$320 ($80 EV - $400 PV)
SPI = Earned Value (EV) /Planned Value (PV)
SPI = 0.20 ($80 EV / $400 PV)
CV = Earned Value (EV) - Actual Cost (AC)
CV = -$520 ($80 EV - $600 AC) indicating a cost overrun
CPI = Earned Value (EV) /Actual Cost (AC)
CPI = 0.13 ($80 EV / $600 AC) indicating over budget

Additional Formulas for EVM (Earned Value Management)

EAC = AC + (Baseline Cost – BCWP) / CPI
EAC = $3000 (600 + ((400 – 80) / .13))
VAC = BAC - EAC
VAC = -$2600 ($400 - $3000)