

Earned Value

Civil Engineering

Work done against spend and against plan.

Earned value measures work actually completed against both the money spent and the planned position.

$$CV = EV - AC \cdot SV = EV - PV \cdot CPI = EV/AC$$

PV 100, EV 80, AC 90

SV -20, CV -10.

Late and overspent

CPI = 0.9

Below 1 is bad.

Costing more than planned

SPI = 1.1

Above 1 is good.

Ahead of programme

THE COMMON MISTAKE

✗ **Reading spend as progress**

✓ **Measure the work completed**

Money spent says nothing about work done. Earned value is only meaningful when progress is measured against defined scope rather than guessed.

Educational reference. Earned value needs a baseline and honest measurement, both governed by the project's controls.