Earned Value Formula = Percent Complete x Budgeted Amount

In our example, we have earned 12.8 (2.67% x 480) labor-hours, and $448.56 (2.67% x $16,800) in costs. Another way of saying this is that we should have spent 12.8 labor-hours, and $448.56 in costs to have completed this much work.

Now, let's compare our earned vs burned ratio. For labor-hours, we have earned 12.8 and burned 16. Expressed as a ratio that comes out to 12.8/16 = .8. For costs, we have earned $448.56 and burned 560. Expressed as a ratio this comes out to 448.56/560 = .8 as well. Generally speaking, these ratios are designed so that a value above one is good i.e., we're earning more that we're burning. Conversely, a value less than one means there are opportunities to improve. In our case, we're

opportunities for improvement.

What Business Value Is Provided?

A clever project manager may look at our .8 ratio and understand that we've still got 2,920 LF of fencing to install out of our total of 3,000. Maybe there was a one-time anomaly that occurred, like the materials weren't immediately available for installation, or perhaps there was a weather delay. Nonetheless, we still have plenty of work remaining in front

under budget.

At the end of day two, the team installed 125 feet of fencing. They "burned" the same amount of costs and hours, but "earned" substantially more than on day one. In this case, the metrics for day two are much better. Our earned analysis is computed the same way as it was for day one. Since we installed 125 LF, we completed 4.17% of the work (125 feet out of our total of 3,000). Also, 4.17% of our cost budget would be $700.56 and 4.17% of our labor-hours budget would be 20 hours.

Compared to our "burned" cost values, we come to a ratio of $700.56/$560 = 1.25. Compared to our "burned" labor-hours, we come to a ratio of 20/16 = 1.25.

Earned vs burned analyses can also help project teams identify trends early on in the execution of a project. As we have seen,

About the Author