

Job Cost Evaluation Scheduling

A schedule is a means of organizing, tracking and projecting the progress of a project. What can appear to be a simple chart of identified activities to be performed is in actuality a representation of interrelated mathematical algorithms, with direct impact on project profitability.

It is, without a doubt, a critical asset in helping to ensure your project progresses successfully. Schedules can be as simple as a hand written 8.5 x 11 chart illustrating the basic outline and intended execution of a project, or they can be comprised of huge software based models linking each task to another based upon numerous factors like sequence, timing, cost and/or construction trade.

How one builds a schedule will depend on the specific needs of the project team, the complexity of the project, and/or as required by contract specifications.

The major steps involved in the creation and maintenance of project schedules are as follows:

1. Establish a plan to perform/complete the project work;
2. Identify and organize tasks in a logical hierarchy (Work Breakdown Structure);
3. Identify predecessor and successor relationships;
4. Establish anticipated activities and durations; and
5. Map progress against the anticipated time line.

To the extent possible, a cost loaded schedule makes for the ultimate internal control and job cost evaluation tool. This tool can be put to use at any time during the life cycle of the project, not just alongside the periodic WIP calculation.

Making the upfront and ongoing investment in scheduling, whether using an in-house scheduler or an outside resource, will generally provide significant benefits which include, but may not be limited to the following:

- Speed of execution for the entire project through prioritization, collaboration and shared knowledge of the dates for specific activities.
- Knowledge of start/finish times for critical activities, sequencing, parallel work opportunities, slack and float times.
- Makes the dependency between tasks visible.
- Provides well documented back up for claims, as it has the potential to identify the causal effect(s) and the responsible party(ies) for delay, inefficiencies and disruption.
- A good schedule can optimize the execution of the project impacting the final quality and cost of a project by the sequencing of the various trades in each portion of the project.

Schedule development and maintenance can help a contractor identify when a project is deviating from its intended path. A good schedule will allow the project team to “see” issues as they unfold, potentially before the issue develops into a major problem.

Given the number of incidents that we can recall similar to the one discussed above, along with increasing contractual requirements for contractors to prepare and maintain qualitative project schedules (especially on public projects), critical attention must be paid to scheduling provision and the need to prepare and maintain a project schedule for all projects, regardless of type and size.

Additionally, we encountered numerous instances where contractors appear to have meritorious delay claims, but are ultimately unsuccessful in the prosecution of those claims because they were unable to adequately depict time impact(s) that were incurred throughout the life of a project which subsequently caused financial damage(s). This, in part, resulted from the claim preparers’ inability to

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compare and contrast performance differentials between baseline and updated schedule variations (which is generally required in order to identify delay responsibility/causal effects).

The proper development and utilization of construction project schedules is not the sole answer to the eventual successful prosecution of project work. However, from our experience, it is a critical component. Regardless of size and complexity, all projects require some extent of schedule design and implementation.

Courtesy: Travelers Construction Engineering Service Group. (2014). Construction project scheduling. [Article]

About Raffuel Surety Group

Based in Princeton, NJ, RSG has become a leader in the placement of surety for both construction and commercial clients throughout the country and globally. With clients ranging from small to large, across all trades, RSG has distinguished itself through the daily application of its signature motto;

Working Together for Your Success.