Updating the Schedule

ARC 226 CHAPTER 14

INTRODUCTION

- During the course of the project it is important to keep the schedule updated
  - List actual start and finish dates
  - % complete can be listed
    - May also be number of days remaining
  - Actual number of resources used
    - Money spent, work hours, equipment hours utilized, etc.
- The computer is essential for updates
  - Each change requires a new forward and backward pass

TARGET OR BASELINE SCHEDULE

- The PM must create a target or baseline schedule
  - Serves as the comparison for subsequent schedules
- When performance is measured, performance improves
  - With the target schedule the manager has a tool to measure the performance of he crews, subs, vendors

HISTORICAL INFORMATION

- Before updating, rename the new schedule
  - Save the old schedule for records and historical info
  - Use numeric characters at the end of the name to allow easy tracking of updates
- Previous schedules need to saved and backed-up on a separate storage device
  - Potential legal matters
  - Possibly back up to a network server
    - Consider a separate off-site storage

MONTHLY UPDATES

- May be required by the project specifications
- Daily logs give information about progress
  - This is critical information and needs to be updated in a timely manner
- The progress information must be collected in a usable format
  - You must be able to read the reports
- If the schedule is updated only monthly it is not being utilized as effectively as it should be

ACTIVITY TURNAROUND REPORT

- To simplify the monthly update consider an activity turnaround report
- Consists of a monthly report with the activities for the month along with the prospective start and finish dates
  - Leave blank columns for the field manager to fill in the actual start and finish dates
    - Also include a column for percent complete
  - Much easier than relying on the daily log for start and finish information

WEEKLY UPDATES

- Take less time than monthly updates
  - More likely to get done and serve as a useful management tool for the project
- The management team will never be more than a week away from knowing about a potential schedule problem
- Still take considerable time, increasing the likelihood of being abandoned

DAILY UPDATES

- Consist of:
  - Opening the job file on your computer
  - Input “old activities that finished today”
  - Input “new activities that started today”
  - Have the computer calculate the remainder of the schedule
    - Check that the project completion date is still on track
- May take only a few minutes to complete
- More accurate
  - Give the most timely information available
    - % complete and days remaining can be reserved for the monthly update
  - May also post the schedule to the web for sub info

USING A PDA TO UPDATE THE SCHEDULE

- A PDA can be used to update the project
  - Field manager can input the start and finish dates
    - Synchronized with the desktop computer
- Helps eliminate extra paperwork
- Available with most software

REMOTE CAMERAS

- Allows for gathering information without traveling to the jobsite
- Remote cameras broadcast to your computer
- Can give a general idea about the progress for a particular area
  - Owners often like the remote camera

% COMPLETE VS. DAYS REMAINING

- Should progress be determined by days remaining or % complete?
  - Often a company preference
- % complete usually gives a better indication of the actual progress
  - The activity may have 3 out of 10 days remaining, but only be 50% complete
    - Is the activity behind schedule?
      - Learning curve
      - Final units may take longer to install

DETERMINING PERCENT COMPLETE

- Should % complete be base on
  - Units in place
  - Budget expended
  - Time expended
  - Labor hours or other key resources
- If 50% of the units are installed, is the activity 50% complete?
- The method used may depend on the company, the activity, and the circumstances of the project

PERCENT OF QUANTITIES IN PLACE

- Probably the most commonly used method
- % complete =
  - quantity installed/quantity planned * 100
- Example
  - 3000 ft^2 completed / 12,000^2 planned * 100 = 25% complete

PERCENT OF ACTIVITY BUDGET EXPENDED

- Actual costs at the time vs. total planned costs
- Percent complete = Actual cost / Planned cost * 100
- Example
  - $2000 to date / $6000 planned * 100 = 33% complete

PERCENT OF ACTIVITY TIME EXPENDED

- Actual time used on the activity to date vs the amount of time planned for the activity
- % complete = actual duration / planned duration * 100
- Example
  - 3 days / 10 days total duration * 100 = 30% complete

PERCENT OF LABOR HOURS USED

- Actual labor hours consumed vs planned labor hours
- % complete = actual hours/planned hours * 100
- Example
  - 50 hours used / 150 planned * 100 = 30% complete

WHICH METHOD TO USE?

- Each method gives a percentage complete but this may not always indicate whether the activity (or project) is ahead or behind
- The PM must analyze the percentages and specifics of the project to determine if it is ahead or behind
- It is often a good idea to use several methods to determine % complete and compare
  - Budget, time, units, etc.

DETERMINING QUANTITIES IN PLACE

- How is data collected to determine % complete?
- The PM is not always able to visit the site to determine % complete
  - Also has implications regarding pay draws
- Methods for collecting information
  - Superintendent daily logs
  - Turnaround reports
    - Field managers fill in data about the status of activities
- The field manager needs to be trained in the appropriate method for collecting the data

EVALUATING THE PROJECT

- Is the project on schedule with respect to time?
- Is the project on track with respect to budget?
- Is quality ok?
- Safety?
- Does the original plan for the project need to be changed or revised?
  - Do new activities need to be planned?
- These questions should be considered on a regular basis
  - It is extremely important to have timely information

CONCLUSION

- Updating the schedule is key to evaluating the project
  - Do any adjustments need to be made?
- How is the project progressing compared to what was planned?
- If the project is in trouble the management teams needs to adjust before the project nears completion