

ARC 226 Construction Scheduling

Chapter 19

Introduction to Computerized CPM Scheduling

Introduction

- ▶ CPM basics were developed in the '50s
 - Was initially a cumbersome process, especially for updates
 - Information was not available on a timely basis
- ▶ For CPM to be fully utilized, real-time data is important
- ▶ CPM became much more useful with the advent of PCs
 - The PMs still needed to have computer skills, which was (and in some cases still is) uncommon
- ▶ The most common programs are Primavera Project Planner (P3), SureTrak, and MS Project
- ▶ Project managers must still become proficient with CPM basics and the computer software

Tips for Learning PM Software

- ▶ Once one brand is learned, learning other is easier
- ▶ It is essential to know the basics of CPM first
- ▶ Most companies provide introductory training with the software
 - Typically two to three days
- ▶ Post-secondary institutions may offer training
- ▶ Training should be followed immediately by application at your office
- ▶ Start by inputting a basic schedule and generating reports
 - Learn new features as you need them
- ▶ Often beneficial to have several employees trained at the same time

Comparison of Popular Software

- ▶ Each company should analyze the capabilities of different software and decide which meets the needs of their company
- ▶ Learning the CPM basics is the critical first step
- ▶ P3, SureTrak, MS Project have the largest user base

Primavera Project Planner

- ▶ Commonly referred to as P3
- ▶ Allows more than one PM to be in the same schedule files at the same time
- ▶ Takes a little more time to learn (most likely)
- ▶ Primary choice for large commercial and industrial contractors
- ▶ Can handle almost any type of project and generate many different types of reports
- ▶ Allows for multiple baseline schedules for comparison
- ▶ Both S-curves shown (banana curve)

SureTrak

- ▶ Junior version of P3
- ▶ More Windows based than P3
- ▶ Single user
- ▶ Less expensive than P3
- ▶ Only one baseline schedule
- ▶ Can show only one S-curve
- ▶ Can import into P3

MS Project

- ▶ Familiar Windows user interface
- ▶ Imports/exports easily to other MS programs (Excel)
- ▶ Most commonly used with residential
- ▶ Less expensive
- ▶ Can not do multiple S-curves

General Suggestions for Reports

- ▶ Keep in mind the intent of the report is to communicate the schedule with the interested party
- ▶ Keep the reports simple and clear
 - A tabular report may be the best
- ▶ Save the fancy graphics for the appropriate time
 - Possibly for a contract negotiation
- ▶ In general, keep the reports simple and without information overload

Conclusion

- ▶ Computer advances have greatly increased the usability of CPM techniques
 - The PC probably is the only reason CPM is now viable
- ▶ All companies can benefit from the methods
- ▶ Take the time to learn the CPM techniques, then the software
- ▶ Take a course on the particular software
 - Then learn by using
 - Start simple, add features as you need them