Scheduling Templates for SCDOT Preconstruction Activities

The objective of the research described in the above named SCDOT research report was to develop a comprehensive and versatile computer-based system for scheduling preconstruction activities. Preconstruction activities are tasks related to preliminary design, final design, field surveys, environmental studies and permits, public hearings, utility coordination, and right-of-way acquisition. The system developed by Clemson University utilizes four category-specific templates: Urban Widening, Rural Widening and Interchange Improvement, Bridge Replacement, and New Location Projects. Logic diagrams were developed through a series of extensive meetings with SCDOT personnel and loaded into the commercially available software package Primavera Project Planner. A companion spreadsheet software package was developed to provide activity durations and activity manpower resource requirements as a function of project length and other factors. Typical reports that are generated by the system include resource summaries, schedule reports with usage, earned value analysis, turnaround reports, and resource profiles. Primavera reports can be generated in three levels of detail. The system has greatly facilitated manpower resource allocation for preconstruction project management within SCDOT in that the templates can be loaded and easily modified to enter scheduling activities and data that are unique to a given project.

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