

## **ABSTRACT**

Public toilet construction project in Cianjur town square is one of the projects being handled by PT Indah Karya. At this time the project is still in the planning stage. One of the problems faced by PT Indah Karya is an inappropriate scheduling method. For project scheduling, PT Indah Karya using Bar chart. Although this method can still be used, but in its application is limited to scheduling large-scale projects, because this method cannot describe the interdependence of activity.

The problem can be solved using Program Evaluation and Review Technique (PERT) and Critical Path Method (CPM). PERT is a method that can be used to estimate the duration of activity and can calculate the probability of project time completion, while CPM is a scheduling method used to find the path of critical path and can describe the relationship between activities.

Scheduling results using CPM found that the minimum duration to complete the project was 135 days with 20 activities on the critical path with 50% project probability. Further analysis using PERT found that for a greater probability of the project completion was 68% for 139.78 days duration, 95% for 144.56 days, and 99.7% for 149.34 days

**Keyword: Project Schedule, Bar Chart, PERT, CPM, Probability**