ABSTRACT

OPTIMIZATION TRANSPORT CAPACITY AND SCHEDULING OF BABARANJANG RAIL PT. BUKIT ASAM

by

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Bandar Lampung as a city that crossed by Babaranjang PT . Bukit Asam, Persero Tbk . getting the benefit local revenue which is paid by PT . BA . However, the impact caused the length of carriages and almost all the railroads that passed were prone to traffic accidents, especially during peak hours. Based on these problems necessary to study the optimization and scheduling trains Babaranjang .

Analysis and optimization of transport capacity and scheduling using secondary data of annual reports PT . BA periods 2010-2013, the data SOP 2013 coal transportation. This analysis is done by optimizing the transport capacity, checking the railway line capacity, determining the maximum headway, calculating tracking train travel , and scheduling plan and chart a train trip.

Babaranjang railway transport capacity is affected by two variables, they are the number of train carriages and frequency requirements. The most optimal transport capacity is using 60 of railway carriages, 3000 tons of loading capacity, and 21 trips/day of frequency needs. Based on train scheduling, average train trip duration is 14.9 hours, average waiting time is 64 minutes, and the longest waiting time train is 107 minutes.

Keywords : optimization, transport capacity, scheduling, train