

ABSTRACT

The construction of new roads specifically for PT. Indonesia Pasific Energy has an impact on the increase in the number of vehicles and the growth of increasingly complex road infrastructure. One effort to overcome this problem is by building new road sections. This study aims to analyze the impact of the construction of new road sections on the performance of existing roads with the presence of heavy vehicles for coal transportation at PT. Indonesia Pasific Energy that cross the road in each segment. In analyzing traffic volume, capacity, side obstacles, degree of saturation (DJ), and geometric conditions of the road. The analysis was carried out by comparing road performance before and after the construction of new roads, which include the level of road service (Level of Service/LOS) and the degree of traffic saturation referring to the Indonesian Road Capacity Guidelines Method (PKJI 2014). The results of the analysis show that the construction of new road sections has a significant impact on improving the performance of the road network as a whole. Several existing road sections experienced a decrease in traffic volume, an increase in LOS and a decrease in the degree of saturation. This shows that traffic distribution is more even and efficient. Thus, the construction of new roads specifically for PT. Indonesia Pasific Energy can be one of the effective solutions to reduce congestion and improve traffic flow in coal transportation work of PT. Indonesia Pasific Energy, as long as the planning is carried out based on proper analysis using the method (PKJI 2014).

Keywords: New road, PKJI, Road Performance, Service Level, Saturation Degree, Traffic Analysis.