ROAD SECTION PERFORMANCE ANALYSIS USING PKJI 2023 METHOD

(CASE STUDY: SIAK II ROAD, PAYUNG SEKAKI SUB-DISTRICT, PEKANBARU CITY)

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ABSTRACT

Road Siak II Payung Sekaki Subdistrict is a national road across Sumatra in the city of Pekanbaru. This road section often occurs congestion caused by the interference of large tonnage vehicles and parking on the road. This study aims to find road capacity, degree of saturation, and level of road service based on the Indonesian road capacity guidelines (PKJI) 2023 method.

The results of data analysis obtained a road capacity value of 4601 smp / hour and the highest degree of saturation of (0.93) for DJ 5 years with level of service (E) and for DJ 10 years to come that is (1.20) with level of service (F), it can be concluded that the level of service of Siak II road in 10 years condition is not safe so it is necessary to make improvements or changes to the geometric.

After making changes to the road type (geometric) on Siak II road, for the next 5 years the degree of saturation is (0.25-0.37) with a smooth traffic flow level of service (A). And for the next 10 years the degree of saturation value (0.31-0.48) traffic flow is smooth and stable with level of service (A). It is concluded that in the next 10 years after making changes to the road type (geometric) Siak II road the traffic flow is smooth and stable.

Keywords: Degree of saturation Road section performance, Road capacity, , Level of service of the road.