EVALUATION OF ROAD SEGMENT PERFORMANCE USING THE INDONESIAN ROAD CAPACITY GUIDELINES METHOD (PKJI 2023)

(*Case Study*: Pekanbaru-Bangkinang Highway)

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ABSTRACT

With a population of 1,016,366 people in 2023, Pekanbaru City is included in 16 cities with above average economic growth in Indonesia. This can cause an increase in vehicle traffic volume. can be evaluated using (PKJI) in 2023. The Pekanbaru-Bangkinang highway, which connects the capital of Riau Province and Kampar Regency and is a route to West Sumatra, often experiences an increase in vehicle volume during holidays and has very busy activity. The aim of this research is to obtain the existing performance of the section using PKJI 2023.¬ and to carry out simulation results using Vissim Student Version on the Pekanbaru–Bangkinang Highway section. The analysis results from section calculations using (PKJI 2023) obtained a road capacity value of 3,672 cur/hour. and the degree of saturation (DJ) value for existing conditions is 0.56, conditions at the beginning of the year are 0.84, for conditions in the next 5 years it is 0.66 and for conditions in the next 10 years it is 0.84. So it can be concluded that the road section does not experience congestion. After reducing the value of the degree of saturation by means of improvements, either widening or other improvements. After repairs were carried out with a widening limit of 4 meters and the degree of saturation value on Thursday was 0.56.

Keywords*: PKJI 2023, Degree of Saturation, and Capacity*