

ABSTRACT

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Simpang Kemang Selatan VIII South Jakarta is one of the intersections passed by vehicles where there is congestion at the intersection. Traffic flow is calculated in (junior high school / hour) where the coefficient value (emp) depends on the type of vehicle and the type of approach. There are 2 types of data taken to do the final project, namely primary data and secondary data, where primary data is obtained directly at the intersection location and secondary data is obtained from BPS South Jakarta on the internet. Primary data obtained that the intersection location has a commercial environment type (COM). The purpose of the study is to identify the performance of signaling intersections at the intersection of Jalan Kemang Raya - Jalan Kemang Selatan VIII, and plan performance improvements at the intersection of Jalan Kemang Raya - Jalan Kemang Selatan VIII. The results of the study will produce capacity values, saturation degrees, delays and queue opportunities obtained in existing conditions for a capacity of 704 smp / hour, with 0.92 degrees of saturation, a delay of 219.94 seconds / smp, and 148 meters of queue length. The value of the degree of saturation in existing conditions has exceeded the limit of provisions set in MKJI 1997, which is 0.85. This figure has shown that traffic performance at intersections is quite low, which has exceeded the DS value greater than required by MKJI 1997, namely $DS < 0.85$. The results suggest that the intersection needs to be improved. Planning is carried out to improve the performance of this intersection is to change the phase of the intersection signal.

Keywords: Increased Interchange, Saturation Degree (DS), Capacity (C), Signaling Interchange, Delay (D).

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