

Evaluasi Kinerja Simpang Tiga Tak Bersinyal *Performance Evaluation Of Unsignalized Tree Intersections*

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Abstrak

Setiap persimpangan memiliki panjang antrian normalnya masing-masing. Namun jika suatu persimpangan telah melebihi batas panjang antrian yang ditentukan. Penelitian ini memiliki tujuan untuk menghitung kembali kinerja simpang tak bersinyal dan menghitung pergerakan atau sirkulasi di simpang tak bersinyal Jl. Kismangunsarkoro – Jl. Aip Mugiman – Jl. Santawi, menganalisa kondisi lapangan di simpang tak bersinyal meliputi Kapasitas (C), Derajat Kejenuhan (DS), Peluang antrian (QP%) pada 5 (Lima) tahun kedepan dan memberikan peningkatan dalam hal manajemen transportasi supaya arus lalulintas lebih lancar dan Penelitian ini menggunakan metode MKJI 1997. Perhitungan kinerja simpang untuk kondisi simpang tak bersinyal pada keadaan eksisting, didapat waktu sibuk pada simpang tiga tak bersinyal pada jalan raya Jl. Aipman – Jl. Kismagunsarkoro – Jl. Santawi diambil pada hari dan jam puncak yaitu hari senin. Hasil perhitungan didapat jumlah arus total 2416.6 smp/jam, nilai kapasitas (C) = 2006,14 smp/jam dan derajat kejenuhan (DS) = 1.00 dan berdasarkan perhitungan kinerja simpang pada 5 (lima) tahun ke depan 2029, Hasil perhitungan di dapat nilai kapasitas (C) = 2027,04 smp/jam dan derajat kejenuhan DS = 0,93

Kata Kunci: *Kapasitas, Derajat Kejenuhan, Manual Kapasitas*

Abstract

Each intersection has its own normal queue length. However, if an intersection exceeds the specified queue length limit. This research aims to recalculate the performance of unsignalized intersections and calculate movement or circulation at unsignalized intersections on Jl. Kismangunsarkoro – Jl. Aip Mugiman – Jl. Santawi, analyzes field conditions at unsignalized intersections including Capacity (C), Degree of Saturation (DS), Queuing Opportunities (QP%) in the next 5 (Five) years and provides improvements in terms of transportation management so that traffic flows more smoothly and this research uses the 1997 MKJI 1997. Calculating the intersection performance for the existing condition of unsignaled intersections, it was found that busy times were found at unsignaled intersections on the Jl. Aipman – Jl. Kismagunsarkoro – Jl. Santawi is taken on the peak day and time, namely Monday. The calculation results show that the total flow is 2416.6 pcu/hour, capacity value (C) = 2006.14 pcu/hour and degree of saturation (DS) = 1.00 and based on calculations of intersection performance in the next 5 (five) years 2029, the calculation results can be paid capacity value (C) = 2027.04 pcu/hour and degree of saturation DS = 0.93.

Keywords: *Capacity, Degree Of Saturation, Capacity Manual*