

# **Analisa Volume Kendaraan Pada Simpang Pertigaan Karangrejo**

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## **Abstrak**

Sarana transportasi yang memadai sangat berpengaruh bagi perekonomian. Salah satu persimpangan di Kabupaten Tulungagung dikendalikan dengan alat pemberi isyarat lalu lintas (APILL). Seiring dengan peningkatan volume lalu lintas saat ini, perlu dikaji setting traffic light pada simpang tersebut. Geometri Pada lokasi analisa pada kaki persimpangan utara, selatan, dan barat tipe lingkungan jalannya COM. Volume Lalu Lintas Harian (LHR) adalah 608,302 smp/jam. Berdasarkan hasil kontrol dan evaluasi kinerja dapat disimpulkan bahwa pada hasil perhitungan simpang bersinyal kondisi eksisting kontrol berdasarkan MKJI 1997. Secara idealisasi program setting traffic light kondisi lapangan terbukti sudah sesuai (layak), yaitu siklus optimum puncak pagi  $C_0 = 60$  detik, dan puncak sore  $C_0 = 75$  detik masih berada di range  $C_0 = 80 - 130$  detik untuk tipe kontrol 4 fase berdasarkan MKJI 1997. Nilai tundaan rata-rata simpang puncak pagi = 38,27 detik/smp dengan LOS D. Puncak sore tundaan rata-rata simpang = 38,32 detik/smp dengan LOS D.

Kata Kunci : Transportasi, Geometri, MKJI 1997, Volume Kendaraan

## **Abstract**

*Adequate transportation facilities are very influential in the economy. One of the intersections in the city of Tulungagung is controlled by means of a traffic signal (APILL). In line with the current increase in traffic volume, it is necessary to study the traffic light settings at these intersections. The geometry at the analysis site is at the intersection of north, south, east, west COM type road environment. Daily Traffic Volume (LHR) is 608,302 pcs / hour. Based on the results of the analysis and performance evaluation, it can be concluded that the results of the intersection calculation indicate the existing conditions of analysis based on MKJI 1997. An idealization of the traffic light setting program, the field conditions are proven to be appropriate (feasible), namely the optimum cycle of morning peak  $C_o = 60$  seconds, and afternoon peak  $C_o = 75$  seconds is still in the range  $C_o = 80 - 130$  seconds for the 4-phase control type based on MKJI 1997. The average delay value of morning peak intersection = 38.27 seconds /pcu with LOS D. Evening peak, the average delay of intersection = 38.32 seconds / junior high school with LOS D.*

Keywords : Transportation, Geometry, MKJI 1997, Vehicle Volum