EVALUASI KINERJA SIMPANG DAN PENGATURAN LAMPU LALU LINTAS PADA SIMPANG TIGA POLSEK DANUREJAN

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ABSTRAK

Lengan Selatan Simpang Polsek Danurejan terdapat *flyover* Lempuyangan yang sangat dekat dengan simpang, saat jam sibuk kendaraan belok kiri langsung terhalang oleh kendaraan lurus sehingga terjadi penumpukan jumlah kendaraan. Sedangkan lengan Selatan simpang Universitas Kristen Duta Wacana (UKDW) memiliki dua fase sinyal dimana pergerakan kendaraan lurus bebarengan dengan lengan Utara dan kendaraan belok kanan bergerak setelah fase kendaraan lurus selesai.Metode penelitian ini dilakukan dengan melalukan survei Lalu Lintas Harian (LHR) pada simpang Polsek Danurejan dan simpang UKDW selanjutnya dianalisis dengan Manual Kapasitas Jalan Indonesia 1997 yang bertujuan mengetahui kinerja simpang dan alternatif pemecahan masalah.Berdasarkan hasil analisis, kinerja simpang kondisi eksisting untuk derajat kejenuhan (DS) simpang Polsek Danurejan untuk lengan Selatan dan Barat adalah 1,028 dan 0,494. Simpang UKDW untuk lengan Utara, Selatan, dan Barat masing-masing adalah sebesar 1,014 , 0,883 dan 1,190. Tingkat Pelayanan simpang (LoS) adalah 0,87 (E).

Kata Kunci: Simpang, LHR, Derajat Kejenuhan, LoS, MKJI 1997

PERFORMANCE EVALUATION AND SETTING OF TRAFFIC LIGHTS AT DANUREJAN POLICE INTERSECTIONS

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Abstract

The south arm of Danurejan Police Crossing has a Lempuyangan flyover which is very close to the intersection. During rush hour vehicles which turn left immediately are blocked by vehicles which are going straight and stop in a queue for the traffic lights. It causes an accumulation of the number of vehicles. Meanwhile, the South arm of Duta Wacana Christian University (UKDW) intersection has two signal phases where the movement of the vehicle goes straight together with the North arm and the right-turning vehicle moves after the straight vehicle phase is allowed to move. This research method was carried out by carrying out a Daily Traffic Survey (LHR) at the Danurejan Polsek intersection and the UKDW intersection. Data were then analyzed with the 1997 Indonesia Road Capacity Manual which aimed to determine the intersection performance and problem-solving alternatives. Based on the results of the analysis, the intersection performance of the existing conditions for the degree of saturation (DS) of the Danurejan Police intersection for the South and West arms was 1.028 and 0.494. The UKDW intersections for the North, South, and West arms were 1.014, 0.883 and 1.190, respectively. The intersection service level (LoS) was 0.87 (E).

Keywords: *Intersection, LHR, Degree of Saturation, LoS, MKJI 1997*

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