

ABSTRAKS

ANALISIS ARUS LALU LINTAS PADA RUAS JALAN PERKOTAAN (Studi Kasus: Ruas Jalan Prambatan Kidul Jalan Kudus-Jepara Kabupaten Kudus)

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Ruas jalan Prambatan Kidul jalan Kudus-Jepara berpotensi terjadi kemacetan. Analisis arus lalu lintas dilakukan guna mengetahui bagaimana kinerja ruas jalan tersebut. Perhitungan dan analisis berdasar data hasil survei lalu lintas pada ruas jalan.

Ketentuan serta analisis kinerja jalan berpedoman pada Manual Kapasitas Jalan Indonesia 1997. Analisis data menggunakan metode kapasitas yang diselesaikan secara regresi linier berganda untuk mendapat nilai-nilai EMP lapangan.

Analisis data menghasilkan nilai EMP lapangan yang berbeda dari tetapan MKJI 1997. Dari dua nilai EMP yang berbeda didapat dua nilai derajat kejenuhan yang berbeda dan kinerja jalan yang berbeda

Hasil analisis Kinerja ruas jalan Prambatan Kidul dengan EMP dari lapangan sudah pada tahap tidak ideal dengan derajat kejenuhan 0,82. Sedangkan derajat kejenuhan dari EMP MKJI 1997 masih dalam kondisi ideal namun sudah mendekati nilai batas ideal yaitu 0,73 yang mana juga mengisaratkan kebutuhan solusi untuk peningkatan kinerja ruas jalan kedepannya.

Kata Kunci : Arus Lalu Lintas, Volume, Metode Kapasitas, Regresi Linear Berganda, Derajat Kejenuhan (DS), Kinerja Ruas Jalan, Ekuivalensi Mobil Penumpang (EMP).

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ABSTRACTION

TRAFFIC FLOW ANALYSIS ON ROAD SECTION (Case Study: Prambatan Kidul Road Section of Kudus-Jepara Road, Kudus District)

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Prambatan Kidul road section of Kudus-Jepara Road has potentially traffic congestion. Traffic flow analysis was conducted to determine how the performance of these roads. Calculation and analysis based on traffic survey data on the road.

Clause and analysis method based on the Indonesian Highway Capacity Manual 1997. Data were analyzed using method of capacity, which was resolved with multiple linear regression to obtain the values of Field's PCE (Passenger Car Equivalent).

Data analysis from field data result different values of PCE compare with from MKJI 1997 PCE's Contants. From the two different PCE values obtained two Degree of Saturaions and Performances between field and manual.

The results of the analysis of the Prambatan Kidul road section performance obtained their differences PCE values, between from field calculations (PCE MC = 0.29; PCE LV = 1; PCE HV = 1.96) compared with the constant MKJI 1997 (PCE MC = 0.25; PCE LV = 1 ; PCE HV = 1.2), this is due to differences in the composition of traffic on the field where the composition is outside the composition classification of MKJI 1997.

Keywords: Traffic Flow, Volume, Degree of Saturation (DS), Performance of Roads.

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