

ABSTRAK

ANALISIS KINERJA RUAS JALAN TEUKU UMAR SEMARANG

(Studi Kasus: Titik Pertigaan Jalan Dr. Wahidin – Titik Pertigaan Jalan
Kesatrian)

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Jalan Teuku Umar Semarang merupakan jalan arteri sekunder yang letaknya cukup strategis di Kota Semarang. Pada Rencana Tata Ruang Wilayah Kota Semarang 2011-2031, Jalan Teuku Umar berada di dalam zonasi II yang merupakan wilayah Pendidikan, Kesehatan, Olahraga dan Rekreasi di Kota Semarang. Inilah yang menyebabkan dalam beberapa tahun terakhir jalan ini kerap kali mengalami kemacetan akibat tingginya arus lalu lintas yang memuncak terutama pada pagi dan sore hari.

Oleh karena itu, perlu dilakukan kajian terhadap kinerja ruas jalan tersebut yang berkaitan dengan kapasitas dasar (C), derajat kejenuhan (DS) dan tingkat pelayanan jalan (LOS). Adapun ketentuan serta analisis kinerja jalan ini berpedoman pada Manual Kapasitas Jalan Indonesia 1997. Rencana pelebaran dilakukan untuk mengantisipasi laju pertumbuhan kendaraan. Untuk itu, perkiraan terhadap kinerja ruas jalan setelah pelebaran perlu dilakukan pula agar efektivitas serta kemampuan jalan melayani mobilitas masyarakat dapat terjaga.

Hasil analisis terhadap kondisi jalan lama didapat bahwa derajat kejenuhan sangat tinggi yakni lebih besar dari 0,75 bahkan mencapai 1,2 dengan $C = 2736$ smp/jam. Adapun pelebaran jalan mampu meningkatkan kinerja ruas jalan namun tidak terlalu signifikan. Pada saat selesai pembangunan tahun 2018, diperkirakan $DS = 0,74$ dan pada tahun 2023, perkiraan $DS = 0,86$.

Kata Kunci : Arus Lalu Lintas, Volume, Kapasitas Ruas Jalan, Derajat Kejenuhan (DS), Kinerja Ruas Jalan, Tingkat Pelayanan Jalan (LOS)

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ABSTRACT

ROAD PERFORMANCE ANALYSIS OF JALAN TEUKU UMAR SEMARANG

(Case Study: Intersection Point of Jalan Dr. Wahidin – Jalan Kesatrian)

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Jalan Teuku Umar Semarang is a secondary arterial road which is located quite strategically in the city of Semarang. In the Spatial Plan 2011-2031 Semarang, Jalan Teuku Umar were in Zone II which is an area of education, health, sports and recreation in Semarang. That is why in recent years this road often experience congestion due to high traffic flow. The peak time happened especially in the morning and afternoon.

Therefore, it is necessary to study the performance of these roads which is related to the basic capacity (C), the degree of saturation (DS) and the level of service (LOS). As for the provision and analysis of the performance is guided by the Indonesian Highway Capacity Manual 1997. The widening plan is to anticipate the growth rate of the vehicle. Therefore, approximate the performance of the road after widening is also important so that the effectiveness and ability to serve the mobility of society can be maintained.

Analysis of the existing road conditions found a very high degree of saturation, it is greater than 0,75 even at 1,2 when $C = 2736$ smp / hour. As for the widening of the road is able to improve the performance of road but not too significant. When the widening project is completed in 2018, the estimation of DS is about 0,74 and in 2023 the degree of saturation will be 0,86.

Keywords: Traffic Flow, Volume, Road Capacity, Degree of Saturation (DS), Road Performance, Level Road Service (LOS)

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