

Pengaruh karakteristik parkir pada badan jalan terhadap arus lalu lintas (studi kasus: Jalan Jatinegara Barat) = The effect of on street parking characteristics on the traffic flow (case study : West Jatinegara Street)

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Abstrak

[ABSTRAK

Penelitian ini dilakukan untuk mengetahui pengaruh karakteristik parkir pada badan jalan terhadap arus lalu lintas di jalan Jatinegara Barat Jakarta (2 lajur 1 arah). Variabel karakteristik parkir yang digunakan adalah tingkat pergantian, indeks aktifitas, indeks parkir, volume kendaraan masuk dan keluar, sedangkan variabel karakteristik lalu lintas adalah penambahan waktu tempuh kendaraan. Pengumpulan data waktu tempuh untuk kondisi parkir diperoleh dari pengukuran lapangan, sedangkan untuk kondisi tidak ada parkir diperoleh dengan kalibrasi model Underwood ($R^2= 0,901$). Hasil analisa didapat untuk tiap kelompok volume kendaraan terdapat hubungan yang cukup kuat antara tingkat pergantian parkir dengan penambahan waktu tempuh. Bentuk hubungan tersebut yaitu untuk volume 400-1000 smp/jam: $y=2,802e1,381x$ ($R^2= 0,660$); volume 1000-1200 smp/jam: $y=1,497e2,476x$ ($R^2= 0,476$); volume 1200-1350 smp/jam: $y=3,646e2,519x$ ($R^2= 0,559$); volume 1350-1600 smp/jam: $y=1,760e3,680x$ ($R^2= 0,629$). Semakin tinggi tingkat pergantian parkir (x) dan semakin besar volume kendaraan maka semakin tinggi pula penambahan waktu tempuh kendaraan (y).

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ABSTRACT

The objective of study is to determine the effect of on-street parking characteristics on the traffic flow characteristics on West Jatinegara Street Jakarta (2 lanes 1 way). Parking variables that are used in the analysis are parking turnover, parking activity index, parking index, flow in and flow out, while the traffic flow variable is the additional link travel time. Collecting the travel time data for parking conditions derived from field measurements, whereas without parking conditions are obtained using calibration of Underwood model ($R^2=0,901$). The results show of there is a quit effect parking turnover with additional link travel time. Their relationship are as follows: for volume 400-1000 pcu/h: $y = 2,802e1,381x$ ($R^2= 0,660$); volume 1000-1200 pcu/h: $y=1,497e2,476x$ ($R^2= 0,476$); volume 1200-1350 pcu/h: $y=3,646e2,519x$ ($R^2= 0,559$); volume 1350-1600 pcu/h: $y= 1,760e3,680x$ ($R^2 = 0,629$). The higher parking turnover (x) and the greater volume of vehicles, the higher the additional link travel time(y).; The objective of study is to determine the effect of on-street parking characteristics on the traffic flow characteristics on West Jatinegara Street Jakarta (2 lanes 1 way). Parking variables that are used in the analysis are parking

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