

# **ANALISIS KAPASITAS DAN KEBUTUHAN PARKIR PADA BADAN JALAN DI KOTA PURWOKERTO**

**(Studi Kasus Jalan Moch. Safei, Jalan Jend. Suprapto, Jalan Brigjen  
Katamso, dan Jalan Prof. Dr. HR Boenyamin)**

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## **ABSTRAK**

Permasalahan lalulintas seringkali berkaitan dengan adanya aktivitas di samping jalan yang disebabkan akibat minimnya fasilitas parkir pada suatu kawasan. Adanya aktivitas pada suatu kawasan dan dengan pertambahan jumlah penduduk tiap tahun akan membawa konsekuensi penambahan kepemilikan kendaraan yang menyebabkan meningkatnya permintaan parkir. Kasus parkir pada badan jalan di Kota Purwokerto perlu dilakukan lebih mendalam karena belum banyak peneliti yang melakukan penelitian tentang *on street parking* selama beberapa tahun terakhir. Terdapat 4 ruas jalan yang diteliti yaitu ruas Jalan Moch. Safei, Jalan Jend. Suprapto, Jalan Brigjen Katamso, dan Jalan Prof. Dr. HR Boenyamin. Dilakukannya penelitian ini karena parkir pada badan jalan sering mengganggu lalu lintas sepanjang ruas jalan yang diakibatkan karena kendaraan tidak mendapat fasilitas parkir di dalam gedung ataupun penuhnya parkir *off street* yang sudah disediakan. Analisis statistik dan kuantitatif digunakan sebagai metode penelitian serta aplikasi *software ArcGIS* guna mengetahui kapasitas dan kebutuhan parkir.

Hasil analisis dari survey lapangan yang telah dilakukan didapat bahwa 4 ruas jalan tersebut memiliki pola parkir yang sama yakni konfigurasi (sudut) parkir yang digunakan adalah 180° untuk mobil dan 90° untuk motor. Panjang rerata 4 ruas jalan yakni 107,925 m, durasi parkir rerata seluruh kendaraan yakni 91,25 menit, akumulasi kendaraan parkir rerata yakni 44,619 kendaraan/hari, volume kendaraan parkir rerata yakni 60,857 kendaraan/hari, kapasitas parkir rerata yakni 51,5 kendaraan/jam, serta kebutuhan parkir rerata sebanyak 168,865%. Bangunan yang terdapat di 8 segmen jalan yaitu pendidikan, Kesehatan, komersial, dan kantor. *Forecasting* kebutuhan parkir 5 tahun mendatang terhitung sejak tahun 2021 didapat bahwa kebutuhan *on street parking* tidak mencukupi untuk menampung kebutuhan kendaraan *on street parking* pada tahun 2026.

Kata Kunci: *On Street Parking*, Karakteristik Parkir, Kebutuhan Parkir, Kendaraan

# **ANALYSIS OF PARKING CAPACITY AND NEEDS ON ROAD AGENCY IN PURWOKERTO CITY**

## **(Case Study on Moch. Safei Street, Jend. Suprapto Street, Brigjen Katamso Street, and Prof. Dr. HR Boenyamin Street)**

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## **ABSTRACT**

Traffic problems are often related to activities on the side of the road caused by the lack of parking facilities in an area. The existence of activity in an area and with an increase in population each year will have the consequence of increasing vehicle ownership which causes an increase in parking demand. The case of on-street parking in Purwokerto City needs to be done more deeply because not many researchers have conducted research on on-street parking for the last few years. There are 4 roads studied, namely Jalan Moch. Safei, Jalan Jend. Suprapto, Brigadier General Katamso Street, and Prof. Street. Dr. HR Boenyamin. This research was conducted because parking on the road often interferes with traffic along the road which is caused by vehicles not having parking facilities inside the building or full off street parking that has been provided. Statistical and quantitative analysis were used as research methods and ArcGIS software application was used to determine parking capacity and needs. The results of the analysis from the field survey that has been carried out show that the 4 roads have the same parking pattern, namely the parking configuration (angle) used is 180° for cars and 90° for motorbikes. The average length of 4 roads is 107.925 m, the average parking duration for all vehicles is 91.25 minutes, the average parking vehicle accumulation is 44,619 vehicles/day, the average parking vehicle volume is 60.857 vehicles/day, the average parking capacity is 51.5 vehicles/hour , and the average parking requirement is 168.865%. The buildings are located in 8 road segments, namely education, health, commercial, and office. Forecasting parking needs for the next 5 years starting from 2021 found that the need for on street parking is not sufficient to accommodate the needs for on street parking vehicles in 2026.

**Keywords:** On Street Parking, Parking Characteristics, Parking Needs, Vehicles

