# ABSTRAK

Ketidakseimbangan antara pertumbuhan volume kendaraan dan kapasitas prasarana sering kali memicu kemacetan pada persimpangan jalan. Studi ini difokuskan pada analisis karakteristik, evaluasi kinerja, serta penyusunan strategi perbaikan di Simpang Tiga Jalan Raya Kepuh – Jalan Klayatan, Kota Malang, yang dikenal padat akan aktivitas residensial dan pendidikan namun belum dilengkapi APILL. Menggunakan metode kuantitatif deskriptif dan mengacu pada PKJI 2023, data primer dikumpulkan melalui survei lapangan selama satu minggu. Temuan menunjukkan kondisi eksisting pada jam puncak memiliki derajat kejenuhan (DJ) sebesar 0,87 dengan volume 3081,80 smp/jam, sehingga masuk dalam kategori tingkat pelayanan E. Guna mengatasi masalah tersebut, diusulkan rekayasa lalu lintas berupa pemasangan median 0,5 m dan larangan belok kanan. Skenario ini diproyeksikan mampu memperbaiki kinerja simpang secara signifikan dengan menurunkan nilai DJ menjadi 0,68 (Tingkat Pelayanan C).

Kata kunci: Kinerja Simpang, PKJI 2023, Kapasitas, Derajat Kejenuhan, Kota Malang.

## ABSTRACT

The imbalance between vehicle volume growth and infrastructure capacity often triggers congestion at road intersections. This study focuses on analyzing characteristics, evaluating performance, and developing improvement strategies at Simpang Tiga Jalan Raya Kepuh - Jalan Klayatan, Malang City, which is known to be dense with residential and educational activities but is not yet equipped with APILL. Using descriptive quantitative methods and referring to PKJI 2023, primary data was collected through a field survey for one week. The findings show that the existing condition at peak hours has a degree of saturation (DJ) of 0.87 with a volume of 3081.80 pcu/hour, so it is included in the service level category E. In order to overcome this problem, traffic engineering is proposed in the form of installing a median of 0.5 m and prohibiting right turns. This scenario is projected to be able to significantly improve intersection performance by reducing the DJ value to 0.68 (Service Level C).



Keywords: Intersection Performance, PKJI 2023, Capacity, Degree of Saturation, Malang City.