ABSTRAK

Pembangunan rumah susun mahasiswa (rusun) di kawasan kampus berpotensi menimbulkan perubahan signifikan terhadap kinerja lalu lintas di sekitarnya akibat bangkitan dan tarikan perjalanan baru. Penelitian ini bertujuan menganalisis dampak lalu lintas (ANDALALIN) pembangunan rumah susun mahasiswa di Kawasan Kampus Tiga Universitas Tribhuwana Tunggadewi, khususnya pada ruas Jalan Jaten–Jedong dan simpang tak bersinyal terdekat. Metode penelitian menggunakan survei lalu lintas lapangan dan analisis kinerja ruas jalan serta simpang berdasarkan Pedoman Kapasitas Jalan Indonesia (PKJI) 2023. Parameter yang dianalisis meliputi volume lalu lintas, kapasitas, derajat kejenuhan (DS), tingkat pelayanan (LOS), serta bangkitan perjalanan pada masa konstruksi dan operasional. Hasil analisis menunjukkan bahwa keberadaan rumah susun meningkatkan volume lalu lintas dan berdampak pada penurunan kinerja ruas dan simpang pada jam puncak. Prediksi lima tahun mendatang tanpa rekayasa menunjukkan kecenderungan peningkatan DS hingga mendekati kondisi jenuh. Oleh karena itu, diperlukan penerapan alternatif rekayasa lalu lintas berupa pengaturan akses, manajemen parkir, dan penambahan rambu lalu lintas untuk menjaga tingkat pelayanan jaringan jalan. Penelitian ini diharapkan menjadi acuan dalam perencanaan hunian mahasiswa yang berkelanjutan di kawasan pendidikan.

Kata kunci: ANDALALIN, rumah susun mahasiswa, bangkitan perjalanan, kinerja lalu lintas, PKJI 2023

ABSTRAC

The construction of student apartments (dormitories) in campus areas has the potential to cause significant changes in surrounding traffic performance due to newly generated and attracted trips. This study aims to analyze the traffic impact (Traffic Impact Analysis) of student apartment development in the Campus Three area of Universitas Tribhuwana Tunggadewi, particularly on Jalan Jaten–Jedong and the nearest unsignalized intersection. The research method employed field traffic surveys and performance analysis of road segments and intersections based on the Indonesian Highway Capacity Manual (PKJI) 2023. The analyzed parameters include traffic volume, road capacity, degree of saturation (DS), level of service (LOS), and trip generation during both construction and operational

phases. The results indicate that the presence of the student apartment increases traffic volume and contributes to a decline in road and intersection performance during peak hours. Five-year traffic performance predictions without traffic engineering measures show a tendency toward increasing saturation levels approaching congested conditions. Therefore, the implementation of traffic management and engineering measures, such as access control, parking management, and the installation of traffic signs, is necessary to maintain acceptable levels of service on the surrounding road network. This study is expected to serve as a reference for sustainable student housing planning in educational areas.

Keywords: *traffic impact analysis, student apartment, trip generation, traffic performance,* PKJI 2023