ABSTRAK

Judul: ANALISIS EFEKTIVITAS PERBAIKAN MANAJEMEN LALU LINTAS (Studi Kasus: Simpang Tiga Rawa Hingkik, Kabupaten Bogor), Nama: Ahmad Fadli Hasan, NIM: 41119210004, Dosen Pembimbing: Dr. Andri Irfan Rifai S.T., M.T., Tahun : 2023.

Simpang Tiga Rawa Hingkik, Kabupaten Bogor, merupakan salah satu simpang tiga lengan tak bersinyal. Pada tahun 2021 telah dilakukan proyek perbaikan manajemen lalu lintas di simpang tiga Rawa Hingkik. Adanya proyek perbaikan manajemen lalu lintas tersebut guna mengatasi kemacetan di persimpangan.

Metode yang digunakan dalam penelitian ini adalah metode Manual Kapasitas Jalan Indonesia 1997 (MKJI 1997) yang meliputi analisa terhadap kapasitas persimpangan, panjang antrian, serta tundaan. Data didapat dengan melakukan survey khususnya pada Simpang Tiga Rawa Hingkik. Kemudian data tersebut dapat diolah dan dievaluasi.

Dari hasil analisis yang telah dilakukan, didapatkan hasil kinerja eksisting simpang tak bersinyal pada arus maksimum berupa nilai Derajat Kejenuhan (DS) 1,73, Tundaan Lalu Lintas Simpang (DT_I) 11,82, Tundaan Lalu Lintas Jalan Utama (DT_{MA}) 14,7, Tundaan Lalu Lintas Jalan Minor (DT_{MI}) 5,59, Tundaan Geometrik Simpang (DG) 4, Tundaan Simpang (D) 9,59, Tingkat Pelayanan atau *Level of Service* (LOS) B. Diketahui data peneliti terdahulu pada nilai derajat kejenuhan (DS) 1,17, Tundaan Lalu Lintas Simpang (DT_I) 30,1, Tundaan Lalu Lintas Jalan Utama (DT_{MA}) 18,35, Tundaan Lalu Lintas Jalan Minor (DT_{MI}) 52,96, Tundaan Geometrik Simpang (DG) 4, Tundaan Simpang (D) 34,1, Tingkat Pelayanan atau *Level of Service* (LOS) F. Maka dapat disimpulkan bahwa perbaikan manajemen lalu lintas pada simpang tiga rawa hingkik berhasil mengurangi kemacetan.

ABSTRACT

Title: Efficiency Analysis of Traffic Management in Simpang Tiga Rawa Hingkik, Bogor, Name: Ahmad Fadli Hasan, NIM: 41119210004, Lecture Advisor: Dr.   Andri Irfan Rifai S.T., M.T., Year: 2023.

Intersection Rawa Hingkik, Bogor Regency, is an unsignalized three-arm intersection. In 2021 a traffic management improvement project was carried out at the Rawa Hingkik intersection. There is a traffic management improvement project to overcome congestion at intersections. The method used in this research is the 1997 Indonesian Highway Capacity Manual (MKJI 1997) which includes an analysis of intersection capacity, queue length, and delays. The data was obtained by conducting a survey, especially at the Rawa Hingkik Intersection. Then the data can be processed and evaluated.

From the results of the analysis that has been carried out, the results of the existing performance of the unsignalized intersection at maximum current are the degree of saturation (DS) 1,73, Delay Traffic Intersection (DT$_I$) 11,82, Delay Traffic Major (DT$_{MA}$) 14,7, Delay Traffic Minor (DT$_{MI}$) 5,59, Delay Geometric (DG) 4, Delay Intersection (D) 9,59, Level of Service (LOS) B. It is known that previous research data on the degree of saturation (DS) is 1.17, Delay Traffic Intersection (DT$_I$) 30,1, Delay Traffic Major (DT$_{MA}$) 18,35, Delay Traffic Minor (DT$_{MI}$) 52,96, Delay Geometric (DG) 4, Delay Intersection (D) 34,1, and the Level of Service (LOS) F.

So it can be concluded that improving traffic management at the Rawa Hingkik intersection has reduced congestion.