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ANALISIS KEMACETAN LALU LINTAS TERHADAP TINGKAT PELAYANAN JALAN BERDASARKAN PERHITUNGAN MKJI 1997 DAN PERANGKAT LUNAK *VISSIM* PADA SIMPANG BERSINYAL

(Studi Kasus: Simpang Cijago, Jl.Raya Bogor, Depok, Jawa Barat)

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ABSTRACT

Mella Rianti Dewi. Analysis Level of Service Based of Calculating MKJI 1997 and Software Vissim of A Signalized Intersection. Thesis. Jakarta: Civil Engineering, Faculty of Engineering, State University of Jakarta, January 2017.

The aim of this research is to determine the level of service in Cijago intersection, which is obtained from degree of saturation and delay of vehicle that is used as a determinant interval value level of service on Cijago intersection.

This study uses the approach of MKJI (Indonesia Highway Capacity Manual) and Vissim with obtain data by observation results. Surveys in this study to obtain primary data on Cijago intersection. From the results of the survey can be obtained through the data, the geometrical data, the volume of motor vehicle traffic, the speed of vehicle and the side frictions.

The analysis results showed that the level of service on Cijago intersection based of MKJI 1997 is F for all road of signalized intersection with the degree of saturation is > 0,75. And the level of service based of Vissim is F. This shows that the degree of saturation and level of service Cijago intersection is bad with the degree of saturation is $\geq 0,75$ and the delay ≥ 80 based of standar Indonesian Highway Capacity Manual (MKJI).

Keywords: Level of Service, Signalized Intersection, MKJI, Vissim