

**ABSTRACT**

*Title : Analysis of Performance Signalized Intersection and Roads with MKJI Methods in Kalibata Intersection (Pasar Minggu Raya Street) Jakarta City, Name : Muhammad Azmi Baihaqi, NIM : 41117310020, Lecturer : Muhammad Isradi ST, M.T, 2018.*

*According to Head of Transportation Office of Jakarta City, Andri Yansyah, where the number of vehicles in South Jakarta City is more than half of population in Jakarta City which is currently reaches 3 million people. Among them as much as 40 percent of cars and 60 percent of motorcycles. The vehicle is moving in the city of Jakarta everyday. In urban areas, especially in Jakarta city which is basically a city that is quite crowded and busy, there are many intersections that become the source of congestion that caused a very long queue. One of them is the intersection of Jl. Raya Pasar Minggu or Kalibata intersection. This study aims to determine the performance signalized intersections and roads in Pasar Minggu Raya Street. Data requirements for process of performance analysis signalized intersections and roads are the primary data such as data traffic conditions, road geometric and environmental conditions. As well as secondary data such as a map location and the amount of population. And procedures the Analysis of performance urban roads and signalized intersections which refers to (MKJI 1997).*

*From the results of the field survey and calculation that has been done, it can result in the performance of road Pasar Minggu Raya street obtained peak volume on Tuesday afternoon with the degree of saturation (DS) of 0.711, including the service level C. As for the West, traffic volume on Tuesday afternoon period with the degree of saturation of 0.718 including the service level C. The highest volume of traffic at the intersection Kalibata on Tuesday at 17:30 to 18:30 pm. The results of the analysis of existing data, obtained Level of Service (LOS) F means of the delay is high, indicating a long cycle and the ratio of high vehicle shown on long time cycle is 130 seconds with a 4-phase traffic with the degree of saturation (DS) the reach 1.11 which already exceeds the numbers implied by MKJI 1997 that is less than 0,85. There are three alternative solutions were used in this case are there solutions to reduce the side barriers, a combination of side friction reduction and changes in cycle time of traffic lights, and a phase change. Indicators in the performance of signalized intersections can be seen from the intersection delay. In conclusion from the three alternative can change the level of service more better than before.*

**Keyword : Signalized Intersections, Roads, Degree of saturation, MKJI 1997**