ABSTRACT

THE OUT DOOR EFFECT OF MALL BUMI KEDATON AND THE U TURN OF THE CROSS RAIL ROAD BEFORE ON SULTAN AGUNG STREET
(Study cases of intersection Jl. Teuku Umar – Jl. ZA. Pagar Alam – Jl. Sultan Agung)

by

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The condition of intersection on Jl. Teuku Umar - Jl. ZA. Pagar Alam - Jl. Sultan Agung are crowded enough which can impact the traffic jam on the intersection. There is no different from the U-Turn on Jl. Sultan Agung which can impact long queues of vehicle. This is because the vehicle wants to do a U-turn / U-Turn wants go to the Mall Bumi Kedaton, And the location of openings U Turn is positioned before the cross railroad tracks. This condition especially happens at peak hour’s noon, afternoon, and evening.

This research used primary data and secondary data. The primary data is obtained from the direct survey result in the form of geometry data, environmental condition data, traffic flow, signal timing, and long queues. Secondary data consists of the population in Bandar Lampungat 2012 that is get from BPS Lampung Province. Data analysis is used the Indonesian Manual Highway Capacity in 1997 for Signalized Intersections.

Based on calculations, it can found that the intersection level of service at afternoon peak hour was F with a delay amount 61,50sec/pcu, level of service at evening peak hour was F with a delay amount 88, 20sec/pcu, and level of service at night peak hour was F with a delay amount 60, 29sec/pcu.

Similarly, with the U Turn result can obtained the intersection level of service at afternoon peak hour was B, level of service at evening peak hour was B, and level of service at night peak hour was A.It indicates that the performance of intersectionis not optimal. To increase the performance of the intersection, need make a changes in the pattern of setting time control become the pattern of not setting time control based on the peak condition by changing the cycle time, green time, and inter green time. And the recommendation needed for the handling of openings U Turn on Jl. Sultan Agung.

Keywords : signalized intersection, delay, performance, U Turn