

UNIVERSITAS INTERNASIONAL BATAM

*Undergraduate Thesis
Bachelor of Civil Engineering Program
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ANALYSIS OF U-TURN GAJAH MADA STREET PURA ROAD TO REDUCE STREET JET

(Case Study : U-Turn of Pura Amerta Bhuana)

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Abstract

The growth in the number of two-wheeled and four-wheeled vehicles in Batam City has been increasing every year, but this is not accompanied by the capacity of the existing road, causing congestion on the road, especially during peak hours. One of the traffic jams that is often felt by motorists in the city of Batam is on the Jalan Gajah Mada section in the U-Trun segment in front of the Amerta Bhuana Temple towards the UIB Campus.

It is necessary to analyze the traffic performance and evaluate the u-turn segment, the analysis is done by taking daily traffic volume data (VLHR) then the analysis refers to the 1997 Indonesian Road Performance Module (MKJI), and the evaluation of the back loop form refers to U-Turn Planning No: 06 / BM / 2005 and Road Median Planning Pd-T-17-2004-B.

In the analysis of traffic service levels in the turn-round segment (\neg u-turn) it is known that the service level is at value C on Sunday with a peak vehicle volume of 3254 pcu / hour, then on Monday peak hours occur at 17.00 - 18.00 with vehicle volume peak of 6402 pcu / hour, so that the level of service that occurs in the roundback segment (\neg u-turn) is at value D. At peak hours Monday the vehicle's waiting time is 122 seconds and the turnaround time is 156 seconds with a queue length vehicles that occur along 124 meters. The re-design of the turning segment was redesigned by adding a special lane toward the 120 meter long sack and the direction of the Batam Center 130 meters by changing the shape of the median opening by adding a 30 meter long kanstin barrier.

Keyword: *Level of Sevice, U-turn, Traffic Volume.*