ANALYSIS OF VEHICLE QUEUE DUE TO TRAFFIC JAM IN BLEGIA MARKET OF BANGKALAN

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Abstract

Roads built to connect one region to other region automatically change the value of land along the lanes as a result of an increased access. Blega market is a traditional market that leads to changes in the value of land along the lane. The roads supposed to be traffic lanes are used for parking or unloading passengers. Planning of adequate parking lots, provision of market area in accordance with the capacity, and sufficient location of loading and unloading are expected to reduce the frequently occurring congestion. The purpose of the present study was to analyze the queue conditions due to market instability.

Several methods were used to analyze queues due to spillover market of Blega. Assuming the traffic intensity $\rho$, arrival rate $\lambda$ and service level $\mu$, so applied for this formula $\rho = \frac{\lambda}{\mu}$, the value of which would be compared to that of the calculation of field condition by the queue survey. Parking buildup was addressed by a parking study conducted by the use of the survey technique of Road Side Patrol.

That problem can be analyzed with calculating the degree of saturation (DS). So during the existing condition got the $DS = 0.94$ and the number of DS after the presence of alternative roads 1 is 0.65 and the alternative roads 2 is 0.30 so can be choosed for the alternative that appropriate with Blega market conditions. The alternative plans were to construct stops for loading and unloading passengers or goods, to empty street...
vendors out of parking lots in order to restore the function of the parking lots to the maximum and to construct a bypass in case of traffic jam. Parking was resolved by the angle analyzer.

Keywords: Queue, degree of saturation, parking