Abstract

The *Lighthill-Whitham-Richard model*, sometimes known as the LWR model, is used to simulate various traffic circumstances in this study. In the case of exit flow, the Lighthill-Whitham-Richard model is utilized to simulate various traffic circumstances. The study's data is based on two variables: vehicle speed and traffic flow density. This study is applied to the branch (exit flow) on Jalan Braga in Bandung, West Java, by collecting data twice, during leisure hours and during work hours. To determine the vehicle speed function, a hypothesis testing analysis was performed using the regression tree approach. T = 2 seconds, T = 8 seconds, T = 14 seconds, and T = 25 seconds are the times examined in this simulation. At the conclusion of T = 2 seconds, the vehicle's position in the starting simulation condition is x = 4.8 meters. The simulation continues until the vehicle's position reaches x = 11.2 meters at T = 25 seconds.

Keywords: *traffic, model LWR, exit flow*.