

Abstraksi—This paper illustrates a simple model concerning the interaction between the obstacles of traffic flow to the surrounding traffic flow. The traffic flow is assumed to be described by a macroscopic model. The modeling of obstacle traffic flow is based on two conditions which are the obstacle and free obstacle traffic flow conditions. The observation data here is consist of characteristic traffic flow such as density and average speed of the vehicle are obtained from real observation in Jalan Merdeka, Bandung, West Java, Indonesia. There is 8 velocity function are obtained by using a polynomial function approximation. Here, the linear velocity function are obtained as  $v_1(\rho) = -50.72\rho + 45.08$  is the free obstacle velocity function and  $v_1(\rho) = -15.73\rho + 21.09$  is the obstacle velocity function. In fact, to observe congestion occurs in obstacle traffic flow it can be concluded from the two condition velocity function. Moreover, there is a shock wave phenomenon in the obstacle traffic flow simulation.