TRAFFIC ACCIDENT ANALYSIS AT SURABAYA-PORONG URBAN ROAD

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Abstract

The road network in Sidoarjo is very complex with high traffic growth rate each year increased the number of accidents in Sidoarjo arterial roads, especially on Surabaya - Porong urban road. Traffic accidents are a serious problem that requires treatment remember the high level of losses. Surabaya - Porong urban road is an arterial road with heavy traffic. In this study, the accident data obtained from the Sidoarjo police and the highway data obtained from DPU Bina Marga East Java.

The analysis begins by summarizing the accident report data and determine the accident-prone locations (black spot areas) based on the most vulnerable road. Then calculates its descriptive statistics further analyze the relationship between the number of accidents with the factors that cause accidents by time of incident, type of vehicle, and its perpetrators accident.

From the analysis of the accident data conclude the accident-prone areas at KM 12-13 and KM 14-15 pursuant to accident frequency for every road internode during four year. And from the ANOVA analysis found that there was no correlation between number of accidents by the time of the accident either to the month, day and hour of the accident, and there is a relationship between the number of accidents by type of vehicle that they were using. For motorcycle average number of accident not identical with another vehicle. There is a relation between the number of accidents and the perpetrators of the events there is the education level of high school and the private sector employees with the highly number of accidents on this road. And there is no relation to perpetrators of the incidents by age and gender.

Keywords: black spot, traffic accidents, Sidoarjo and Porong