Abstract

The very high cost of highway accidents paid by societies around the world makes the highway safety improvement an important objective of transportation engineering. The high speed cars are gaining popularity as one of the important means of transportation among the middle and higher income group of the society in India. At the same time the road accident statistics with regard to these high speed vehicles are also alarming. The present research aims at
correlation of accident of high speed cars with road geometry and traffic variables. Data collected from National Highway No. 6 of India, between Amravati and Nagpur were used for modeling accident. Generalized linear model was used to quantify the effect of various variables in the model. The variables used were lane width (LW), shoulder width deficiency (SWDEF), access density (AD), standard deviation of speed (STDSP) and percentage of heavy vehicles in the traffic (HVPER). Access density, shoulder width deficiency and standard deviation of speed were found to have significant influence on accident frequency of high speed cars.

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Index Terms

Computer Science

Information Sciences
Keywords
High Speed Cars  Shoulder Width Deficiency  Standard Deviation Of Speed  Access Density.