International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 6 No. VI (November, 2012), pp. 405-420

URBAN ROAD ACCIDENT ANALYSIS AND MODELLING

MD. ABDULLAH SHARIFF[1] AND MIR IQBAL FAHEEM[2]

[1]Professor of Civil Engineering,
Muffakham Jah College of Engineering and Technology,
Banjara Hills, Hyderabad - 500 034, India
[2]Professor of Civil Engineering,
Deccan College of Engineering and Technology,
Dar-us-Salam, Hyderabad - 500 001, India

Abstract

Road accidents in developing countries are increasing over the last ten years. This may possibly because of increasing vehicle occupancy over time/particular type of accident which is more common now prior to a decade ago. A matter of concern to study the behavior of the traffic and identification of accident prone locations is the need of the hour. In this research attempt is being made to identify the variables that mainly determine the number of fatal and non-fatal accidents and illustrate the impact of accidents based on vehicle, driver, pedestrian and climatic factors. The study is conducted on selected accident prone areas having highest vehicle population in the jurisdiction of the city of Hyderabad. For identification of accident prone areas and factors affecting accidents, forecasting model based on multiple linear regression technique is developed. The factors influencing the accident rate and measures for prevention/ reducing the accidents is suggested. The validation of data is made through statistical package for social sciences (SPSS) software.

Key Words : *Road accidents, Vehicle population, Multiple linear regression model, SPSS.*

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