

Trends in Heavy Vehicle Crashes in Sri Lanka

Kaushan W. Devasurendra¹, Loshaka Perera², Saman Bandara³

Around 2,250 number of people die annually in Sri Lanka from road accidents. In 2013, the heavy vehicle percentage of the country is 8% but its involvement in fatal crashes is 21%. Therefore it is evident that heavy vehicles are playing a major role in fatal crashes. Finding the causes for these accidents and finding proper engineering and other solutions to minimize them have become of great importance. In order to find out the critical conditions and contributory factors for the severity of heavy vehicle crashes, a logistic regression analysis was carried out using accident details of heavy vehicles for the year 2013 extracted from Sri Lankan Police Accident Database. In the analysis, accident severity was considered as the dependent variable and crash factor for severity, vehicle ownership, validity of license, weather condition, road surface condition, location type, time of accident, urban\rural condition, light condition, road surface condition were considered as independent variables. Accidents occurrence at 'Y' junctions, SLTB bus involvement, drivers with probationary driving license, hitting a fixed object were found to be as having a significant effect on the severity of heavy vehicle crashes.

Key words: Heavy vehicle crashes, Logistic regression

Authors Details:

1. Research Student, Department of Civil Engineering, University of Moratuwa, Katubedda, Sri Lanka. kaushanwd@gmail.com, 0718081706
2. Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Katubedda, Sri Lanka. perera.loshaka@gmail.com, 0777291920
3. Professor, Department of Civil Engineering, University of Moratuwa, Katubedda, Sri Lanka. bandara@uom.lk, 0112 650 567 (ext. 2129)