
Effects of Road Rehabilitation on Road Safety; Analysis of Accident Trends

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Abstract

The purpose of rehabilitating the existing roads is to increase the level of service for the users. In that case increasing the level of safety of the road is a main concern. However, with the improvements, the resulting high-speed flow of vehicles and the safety issues in road designs cause changes in accident trends in newly rehabilitated roads. Analysing the accident trends helps to identify the contributory factors which cause the changes in accident trends and to eliminate those causes from future designs. Under this study, an analysis of road traffic crashes on selected rehabilitated roads in terms of descriptive statistics was carried out using 'Sri Lanka Police Accident Database' to find the road safety conditions of newly rehabilitated roads. Further with the purpose of an in-depth review of the causes of accidents a stepwise binary logistic regression was carried out on Padeniya - Puttalam road which has been newly rehabilitated in 2007-2009 as a case study.

Keywords: Rehabilitation, Level of safety, Accident trends, Descriptive statistics, Step wise binary logistic regression

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