A STUDY ON ROAD SAFETY INDEX ON A SELECTED ROAD STRETCH OF A NATIONAL HIGHWAY

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Abstract

This research is to investigate the Road geometrics and predict Accidents in selected stretch and correlate the data collected to improvise the present traffic scenario in urban areas. Accidents have been a major social problem in urban areas, the first part of identification is to investigate a selected stretch and collection of accident data, It is strongly felt that most of the accidents are being a multi factor event but not merely due to drivers fault or account of driver's negligence and ignorance of traffic rules and regulations. Second part of identification is to study block spot locations by using multiple linear regressions. Third part of investigation covers collection of the traffic volume and Vehicle Speed data to analyze and determine Road Safety Risk index (RSRI), The Road safety audit (RSA) procedures adopted for study area to urbanize the geometrics of the pavement. Finally fourth part of the investigation is to collect geometric data and develop the relation between accidents and different traffic, road geometrical related parameters. The Road Safety Audit is conducted to identify the safety deficiencies on the selected stretches. The traffic volume and speed data taken developed the Road Safety Risk Index (RSRI) of selected stretches of the city, the risk index values are ranked accordingly. Road safety characteristics are improvised based on observations in selected stretch and implementing Remedial measures. Accident studies have to be carried out before and after conducting the Road Safety Audit, Economic analysis can be done for improvements suggested after conducting the Road Safety Audit.

Keywords: Road Accident details, Traffic Characteristics, Road Geometrics, inventory data.