SAFETY MANAGEMENT OF ROAD USERS WITH SPECIAL REFERENCE TO PEDESTRIANS

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Degree of Master of Science in Occupational Safety and Health Management

Department of Building Economics

University of Moratuwa

Sri Lanka

June 2019

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Dissertation submitted in partial fulfilment of the requirement for the Degree Master of Science in Occupational Safety and Health Management

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DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Further, I acknowledge the intellectual contribution of my research supervisor Chartered Quantity Surveyor Professor (Mrs.) B.A.K.S. Perera for the successful completion of this research dissertation. I affirm that I will not make any publication from this research without the name of my research supervisor as contributing author unless otherwise I have obtained written consent from my supervisor.

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…….. ……...
Ch. QS Prof. (Mrs.) B.A.K.S. Perera Date
Dissertation Supervisor

DEDICATION

I dedicate this dissertation
to my beloved ***Amma*** *and* ***Thaththa,***
for their unwavering love
and endless sacrifices

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ABSTRACT

SAFETY MANAGEMENT OF ROAD USERS WITH SPECIAL REFERENCE TO PEDESTRIANS

Approximately 600 - 900 pedestrian deaths occur annually during the past 15 years in Sri Lanka. Very less attention has been given to control these deaths. Thus, safety of pedestrian has become one of the important issues in Sri Lanka. This research aimed at identifying strategies to manage better safety conditions of pedestrians to reduce the damage caused by accidents. Identification of current rules and regulations for road users, main causes of pedestrian deaths and injuries, analysis of recorded data, identification of existing road safety conditions in Sri Lanka, UK and Singapore and proposing appropriate road safety measures to Sri Lanka were among the objectives. A mixed research approach was used for this research consisting of a comprehensive literature survey, desk study, collection of statistical data via interviews, local and foreign field observations.

Data analysis revealed that motorcycles accounted for the highest number of fatal accidents. Indicating the highest major and minor injury accidents for last 15 years, motorcycles were the most affected vehicle. Pedestrians accounted for the maximum number of deaths during the last twelve years. Speed driving and overtaking were the major causes of death in road accidents. Accidents by turning and intoxication of drivers were also affected. Weekends have encountered for highest deaths. Vehicle drivers in the age of 26 – 35 have contributed the highest. From 18:00 – 20:00 hrs. at night, accidents occurred heavily. Traffic calming devices and speed limits can be introduced to residential areas and around schools. More provisions for sidewalks in road widening and rehabilitation are required. Raised sidewalks provide better safety conditions for pedestrians. Designing an exclusive pedestrian phase for crossings at highly populated junctions, increasing road signs and constructing appropriate crossings, overpasses or underpasses in towns are proposed. Traffic rules and road safety measures must be included in school syllabi. Enforcement of laws for misconducting traffic rules and strict supervision of vehicle drivers by automated systems is also proposed.

Key words: pedestrian, road traffic, accidents, safety management.

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UK	-	United Kingdom
RDA	-	Road Development Authority
Km	-	Kilo meters
USDOT		United States Department of Traffic