



Influences of the transport infrastructure facilities to road accidents in the Colombo area (By using Geographical Information System)

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Abstract

This paper concerns the most populous issue within Sri Lanka in recent times called vehicle traffic and accidents. However, Colombo as the major commercial city in Sri Lanka became the major victim city with the issue of vehicle traffic accidents. Kuruduwatta and Pettah police divisions are the main urban areas that spread vehicle accidents in the Colombo area. Vehicle traffic, human traffic, and poor infrastructure facilities are the major reasons for accidents. The main objective of this study is the interrelationship between vehicle accidents and the travel infrastructure facilities. And how those infrastructure facilities, directly and indirectly, influence to the accidents. As the specific objective touch upon the improvement and the development of the traveling infrastructure as well as the variations of the traffic jam. The secondary data collection method is applicable for this study and GIS & SPSS use for data analysis. According to the Hotspot Analysis Western part of the Kuruduwatta identify as the highest about the accident and middle parts of the Maradana and Pettah became the highest amount of accidents. With that identify the nature of the vehicle accident. Traffic lights and the liability of the junctions are the major factors for such kinds of accidents further the road system, signal light system and platform also can be considered as a major reason and all of these reasons are proved during the project field visit in Kuruduwatta police division. Based on this study can identify the interrelationship between heavy traffic and the time duration of the vehicle available on the roads according to the study area, and as the recommendations can identify providing public transportation in a useful manner by using subways and friendly manner for people and try to mitigate the busiest schedule.

Keywords: infrastructure, transport, road accident, Colombo

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