

Identify Possible Reasons For Accident Occurred In Southern Expressway

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Southern Expressway, the first ever access controlled expressway in Sri Lanka was started to function in year 2011. Total road length from Kottawa to Pinnaduwa is 126 km and there are eleven interchanges within that length. Government of Sri Lanka is expecting lots of benefits through this expressway. Safety consideration is essential in any of the road project. Even though there is several safety precautions are provided, about 1100 number of accidents have been reported up to now. Since “expressways” is a new topic for Sri Lanka , perception about it will be bad due to this and discourage the road users. Therefore identifying possible reasons for the accidents and accident prone locations is essential to provide immediate safety improvements.

Main objectives of this research are identifying accident prone locations, identifying possible reasons for the accidents and calculate the accident rate based on the vehicle travel kilometre.

It could be identified the nine number of most critical accident prone locations and by detail analysis of those prone locations found out the possible reasons for the accidents. In addition to that since the traffic data is reported daily it could be find out the accident rate based on the accident travel kilometre which is more accurate than other methods to calculate accident rate. Road user and the road environment are the two key factors contributed for the accidents based on the accident data of the Southern Expressway collected from the Road Development Authority and Sri Lanka Police. Since it is very difficult to carryout accurate analysis for the contribution of road user with the recoded accident data, this study was mainly targeted on the second important factor, road Environment to the accidents.

According to the analysis it could be concluded as there is a higher possibility to occur accidents during rainy weather under the slippery road condition. In addition, driver fatigue was identified as a contributory factor for accidents of long distance travellers (travelling distance is more than 40 km).

Key words: Road Accident, Accident Analysis, Southern Expressway

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