

Geographical Distribution of Accidents in Sri Lanka

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According to the Police Statistics, there were 54,911 road accidents in Sri Lanka in the year 2002. Of these, 2,038 accidents were fatal, while 3,286, 12,725 and 36,862 were reported as 'Grievous', 'Non-grievous' and 'Damage only' accidents, respectively. Finding out where accidents happen is an important first step, in understanding the possible patterns for accidents and the identification of some underlying causes.

Accident data for this study was obtained from the Traffic Police, Sri Lanka. Vehicle ownership, population, vehicle kilometers were computed from the TransPlan Database, University of Moratuwa. Different kinds of statistics were used for analysis. These include unadjusted factors such as the number of reported accidents and fatalities. Analysis was also done according to the vehicle kms & Population distribution for each province.

According to the statistics, the highest number of accidents is reported from the Western Province (WP). This is to be expected since the WP has the highest population as well as the largest number of vehicles. It has accounted for 60% of the country's accidents. The North Western (NWP) & Central Provinces (CP) have the second highest number of accidents in Sri Lanka. However, it is the 'damage only' accidents that are extremely high in the WP. This is 68%, which is much higher than the 39% for Grievous and Fatal accidents respectively. However, even with the slower travel speeds, 39% of all fatal accidents amounting to 796, occurred in the WP, still making it, the province with the highest number of fatal accidents. The NWP takes second place while the Southern Province (SP) lies in third place. The North Central Province (NCP) has the lowest number of fatal accidents when compared to the other provinces in Sri Lanka.

Although the WP has the highest number of road accident fatalities, when fatality rates were computed using passenger kms travelled and population, it was found that the NWP had the highest fatality rates and is ranked first, while the SP is ranked second and the Sabaragamuwa & WP are jointly ranked in third place. The reason for this can be understood by further analysis. The Severity Index is one such parameter that may give some insight as to which provinces have a higher proportion of fatalities when compared to all road accident casualties. The NWP shows the highest severity index of 12.86%. Even though WP has the highest number of fatalities in the country, when the severity index is calculated it is 9.06% and ranked 4th among all the provinces.

Probably, there are two different reasons why this has occurred. In the case of the Eastern Province, it could well be the inaccessibility to adequate medical facilities that indicates a higher fatality rate. In the NWP and the SP it is most likely, that it is due to the very high percentage of motor bicycles in those provinces.

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