

عنوان مقاله:

Investigation of Traffic Accident Hotspots in Yazd City using GIS

محل انتشار:

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خلاصه مقاله:

INTRODUCTION: The importance of safety and prevention of traffic accidents have highlighted the necessity of research and investigation in this field. The present study aimed to identify and eliminate the risk factors underlying the occurrence of inner-city traffic accidents. In so doing, scientific and effective solutions can be provided at the lowest cost to implement the slogan of "prevention is better than cure". **METHODS:** In this study, the accident rate-severity index method was used to identify traffic accident hotspots. The spatial units in which this index (I) was more than twice the average of the total spatial units were identified as Hot Zones **FINDINGS:** In the present study, the study area (۶,۶۰۰ meters) was divided into ۶۶ ۱۰۰-meter spatial units. Using the accident rate-severity method, ۶ (۶۰۰ m) and ۱۹ (۱۹۰۰ m) spatial units were identified as Hot Zone (۹.۱%) and Yellow Zone (۲۸.۸%), respectively. Finally, ۴۱ Cold Zone spatial units (۶۲.۱%) were identified (۴,۱۰۰ m). **CONCLUSION:** As evidenced by the obtained results, the following measures can be effective in the reduction of road accidents: retrospection of traffic signs in terms of number, size, location, height, installation of speed bumps in the Hot Zone and Yellow Zone spatial units, timely pruning of trees along the road-construction of underpasses and overpasses in some important points of the route (accident hotspots and Yellow Zone). Furthermore, the development of a comprehensive and long-term educational program to improve traffic safety culture in kindergartens and schools can be effective in reducing road accidents.

کلمات کلیدی:

Rate-Severity Index, Hot Zones, Spatial Unit, Rate-Severity Index, Hot Zones, Spatial Unit

