

# Road Traffic Accident Hot Spots Situation and Potential Countermeasures Development in Tunisia

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## Abstract

In Tunisia, knowledge of how road traffic accidents vary geographically by different locations provides indices to understand their determinants. In addition, some locations on road network are characterized by a high concentration of accidents more than others. Focusing on how hot spot mapping can predict spatial patterns of accidents and how different mapping approaches compare will help to better inform their application in practice, our methodologies consist of two main steps. The first consist on the identification and ranking of accidents hot spots based on dangerousity index using a spatial autocorrelation approach (Local Moran index Vs Local Getis-Ord index) to investigate the high density of accident in the region of sousse, Tunisia and to compare our results with the public authority's results. Then once a hotspot is identified, the analysis of the problems and prospective treatments will be proposed. This will involve the development of planning rules of road environment, identify shortcomings in the regulation and make recommendations to identify solutions for the elimination of hotspot and better management of the road environment. We hope that the information and details mentioned in this paper could help the public decision-maker in terms of road safety.

## Keywords:

Road traffic accidents, Accident hotspots, Spatial autocorrelation approach, Local Moran index, Local Getis-Ord index, Prospective treatments.

## **Biographies**

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