

Detecting of Crime Hot Spots for Crime Mapping

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Abstract : The management of financial and human resources of police in metropolitans requires many information and exact plans to reduce a rate of crime and increase the safety of the society. Geographical Information Systems have an important role in providing crime maps and their analysis. By using them and identification of crime hot spots along with spatial presentation of the results, it is possible to allocate optimum resources while presenting effective methods for decision making and preventive solutions. In this paper, we try to explain and compare between some of the methods of hot spots analysis such as Mode, Fuzzy Mode and Nearest Neighbour Hierarchical spatial clustering (NNH). Then the spots with the highest crime rates of drug smuggling for one province in Iran with borderline with Afghanistan are obtained. We will show that among these three methods NNH leads to the best result.

Keywords : GIS, Hot spots, nearest neighbor hierarchical spatial clustering, NNH, spatial analysis of crime

Conference Title : ICGE 2017 : International Conference on Geomatics Engineering

Conference Location : Rome, Italy

Conference Dates : March 05-06, 2017