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Black Spot Determination of Traffic Accident Locations and Its Spatial Association Characteristic Analysis Based on GIS

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ABSTRACT

In general, the location of traffic accidents is described as an address with text, so they are difficult to display on the map. The paper discusses how to utilize the geocoding technology and VRS-GPS positioning technology to record the traffic accidents with Geo-spatial information. Based on the spatial relationship between traffic accidents and road network elements, two-way association relationship is defined by spatial relationship computation. Then the paper presents the method which takes the potential of reducing accidents as an index to extract the black spots. Finally, in the discussion, the association relationship between black spots and traffic attributes is used to analyze the factors that resulting in traffic accidents.

KEYWORDS

Black Spot; Traffic Accident; Spatial Analysis

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