Abstract

Urban areas are prone to natural or man-made disasters and in the event of a disaster, population in these areas will be in danger and need to be evacuated from the threatened place to a safer place in order to protect their lives. This paper discusses a GIS system for evacuation planning; the system combines geometric information with non-geometric information in order to fulfill evacuation planning process's requirements like: selecting safe areas to which evacuees should be transferred, determine evacuation routes from the incident place to the safe areas, and minimize the overall time required for the evacuation process to complete. A case study on Mansoura city in Egypt is implemented using ArcInfo software.

References

- Huang, B. and Pan, X. 2006. GIS coupled with traffic simulation and optimization for incident response. In ELSEIVIER.

**Index Terms**

Computer Science  
Information Systems

**Keywords**

Geographical Information Systems (GIS)  
Evacuation Planning