Spatial multi-criteria decision analysis for safe school site selection

ABSTRACT

Schools which are located in a strategic and safe area play an important role in improving students’ performance and excellence. To ensure both success and long-term sustainability of the school planning, the finding of suitable sites for school is important and challenging. This study delves into a site selection process to establish a systematic public school. It was carried out by geographic information system (GIS) and multi-criteria evaluation model. A set of criteria was used to design a number of potential sites using a spatial analysis model. Mukim Batu which is located in Federal Territory of Kuala Lumpur (WPKL) has been selected as the study area. The final safety model outputs were compared with the field verification data and found to be reliable.

Keywords: Site selection; Multi-criteria analysis; Spatial analysis model