

عنوان مقاله:

A Multi-Attributive Border Approximation Area Comparison Solution for Risk Assessment of Rock Falls in Rural Mountainous Roads

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خلاصه مقاله:

Designing and exploitation of mountainous roads is commonly comprised of numerous risk during their life time. The most expected danger relatively is rock fall occurrence. This dangerous phenomenon causes different issues for transportation, such as road closure and disrupt transportation or delay in travel time. Studying the contingency of the abovementioned features, foremost rock falls and landslide, is generally conducted through field inspection beside data gathering and utilizing aerial maps and photos. Regarding to that, safety audit datum, slope stability, weather information, topography and surveying data, geological definition of region, etc. are all essentially required to perform a mathematical ranking procedure for the sections of the case study. As a case study, 9 stations were selected in Yasuj – Semirom road which divided the path to different sections. The stations were identified due to the resembling properties of sections such as sight distance, annual traffic, side slope, weather conditions, etc. Using the MABAC method, the sections that had a greater distance from the boundary of the similarity zone as a determining index had a higher risk. The most important parameters in the risk of sections were slope heights, rock fall frequency and sight distance. The results of this study can be used to improve the safety of mountain road sections, especially in .conditions of budget constraints

كلمات كليدى:

Mountainous road, risk, Rock fall, Prioritization, Ranking

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