

A Study of the Operations Selection for Adaptive Reuses of Public
Unoccupied Spaces

衛萬明, 王維民

Architecture and Urban Planning

Architecture

weiming@chu.edu.tw

Abstract

The selection of different operations types for the adaptive reuses of public unoccupied spaces is a Multi-Criteria Decision Making (MCDM) problem. Prior research for the selection of different alternatives (in this case, it means operations types) does not reflect interdependencies among criteria and candidate alternatives. To consider alternative interdependent property provides valuable cost savings and greater benefits to public sections. When we evaluate alternative problems, we need to collect a group opinion because to know the interdependence relationship among criteria and criteria in considered alternative problems is very important. In order to collect group opinion for interdependent alternative problem, we use expert interview. In this paper, we suggest an improved operations type for the adaptive reuses of public unoccupied spaces alternative selection methodology which reflects interdependencies among evaluation criteria and candidate alternatives using analytic network process (ANP) approach. In this research, we suggest such an approach for interdependent alternative selection for the operations types of the adaptive reuses of public unoccupied spaces alternatives selection problems using Fuzzy Delphi technique, and ANP concept. The application of the proposed methodology is illustrated through an example. Using this method we solve problems having multiple criteria and interdependence.

Keyword : Public Unoccupied Spaces; Adaptive Reuses; Interdependence; Fuzzy Delphi; Analytic Network Process