

應用模糊層級分析法評估彰化縣市區道路鋪面之損壞因素  
The Study of Damage Factors of Urban Road Pavement in Changhua County:  
The Application of Fuzzy Analytic Hierarchy Process

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中文摘要

市區道路鋪面與汽車機駕駛人接觸頻繁，使用感受深刻，因此地方首長多將路面平整列為施政重點，使市區道路鋪面維修成為重要之交通工程項目，實有必要對於影響其鋪面損壞之因素予以評估。本文鑒於影響各地方市區道路鋪面損壞之因素比例不盡相同，乃以彰化縣所屬各鄉鎮市公所管轄之市區道路為例，利用模糊層級分析法針對市區道路鋪面之損壞因素進行評估，據以研擬因應對策。研究結果顯示影響彰化縣市區道路鋪面之損壞因素以「施工因素」為最，其次為「管理因素」。而於 22 項細部影響因素，重要性最高的前三項依序為：「地下管線設置或修復後回填不實」、「瀝青面層滾壓時溫度不合規定」及「基、底層滾壓不足」。最後則據以提出相關建議供主管機關參考。

關鍵字：市區道路；模糊層級分析；彰化縣

## Abstract

The quality of urban road pavement is closely linked with vehicle drivers, and local leaderships mostly aim to provide smooth pavement as their key policy. Hence it is necessary to perform the factors evaluation of urban road pavement in order to promote road paving maintenance as main topic of traffic engineering. Due to the fact of each County/City take different weight in factors evaluation, cases of the study are defined as urban road of each township which governed by Changhua County. Fuzzy Analytic Hierarchy Process (FAHP) is applied and in search of the countermeasures. Research results indicate the important factors through expert questionnaires; the first important variable is “Construction factor” and next is “Management factor”. Among the 22 sub-factors, the result also point out most important 3 factors in orders are “Dishonest of the underground pipeline backfill after the installation or repair”, “Disqualified temperature setting during overlay works of asphalt layer”, “Insufficient roller-passing in road’s base and sub-base layer”. Base on the study result which can provide the reference and suggestion for competent governments and authorities.

Key words : Urban road pavement; Fuzzy analytic hierarchy process; FAHP;  
Changhua county