

依消防勤務空間位置探討消防服務範圍及派遣原則 -以彰化縣為例

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摘 要 消防工作近年來一直受到社會高度關注，不管是發生地震、颱風、水災、火災、爆炸等災害，消防人員總是第一時間奔走於事故現場，加上瓦斯外洩、捉蜂捕蛇、車禍、自殺、急病等事故，都會撥打 119 請求協助。為因應逐年成長的勤務量，消防單位不斷汰換老舊救災裝備，購置新式車輛器材提升搶救效率，並成立訓練中心辦理技能證照訓練，致力提升個人救災救護能力，然而在消防隊轄區劃設卻缺乏一套準則指南，原因在於消防勤務屬性取決於地理環境及社會文化各異，難以用單一文字規範衡量，因此本研究嘗試使用地理資訊系統網絡分析功能，以模擬真實路網結構劃設消防服務區範圍，另結合實際歷史救護案件空間資料，檢視消防服務缺乏地區，並提出最適派遣原則。

關鍵詞：網絡分析、消防服務範圍。

Explore the Scope of the Fire Service and Fire Dispatch Duty in Accordance with the Spatial Location - in Changhua County as an Example

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ABSTRACT In recent years, the fire service has been highly concerned about the community, whether it is the occurrence of earthquakes, typhoons, floods, fires, explosions and other disasters, firefighters are always running in the first scene of the accident. When people experiencing distress moments, such as gas leaks, catch bee snake, car accidents, suicide, sudden illness and other accidents, they will call 119 for assistance. In response to the growth of the amount of duty each year, fire departments keep to replace the old equipment, purchase new equipment to enhance the rescue efficiency, and set up the training center for skills training in order to enhance the personal rescue aid ability. However, the area designated in the fire brigade is lack of a criterion guide because the fire duty properties depend on the geographical environment and socio-cultural vary. It is difficult to measure with a single text specification. Therefore, this study attempts to use geographic information system network analysis functions to simulate the real structure of the road network and to designate fire service area range. In addition, it's also combination with the actual history of the ambulance case of spatial data, find out the areas which are lack of fire service, and try to get fire dispatch principle.

Key Words : network analyst, the scope of the fire service.

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