

運用DRTS服務型態填補新竹縣竹北市時空縫隙之評估分析(Assessment of DRTS Service to Analyze the Fill the Spatial-Temporal Service Gap for Jhubei City)

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摘要

In recent years, public transport environments have changed significantly with sharp reduction in the number of transit passengers. In response, public transportation companies have reduced bus service frequencies and/or even stopped bus service resulting in the creation of spatial-temporal service gaps, causing inconvenience for passengers in the off-peak hours. Moreover, people in some areas do not even have access to public transport services. Therefore, for those areas where the characteristics of peak and off-peak hours operations of traffic differs significantly, providing demand response transit service (DRTS) could be one of the solutions for the problems stated above. From the viewpoint of seamless transportation, this study will identify the spatial service gaps for different time periods and transform those gaps into the dispatching demand of the studied demand response transit service. This study further use the service pattern evaluation model developed in this study to screen the service models that best serve the demands. It is the hope of this study that by integrating the traditional public transportation and the demand response transit service, the goals of seamless transportation could be achieved in order to be in conforms to the overall social benefits. Using the Jhubei City in Hsinchu County as a case study, this study confirms that the integrated DRTS could increase the service rates of public transportation and reduce the operational costs of public transport companies, creating win-win situations for the public transport users, the fixed-routes public transport operators, and the DRTS operators.

關鍵字：seamless transportation , demand response transit service,
integrated DRTS