

Project Title: Design of Flexible Vehicle Management Systems for Mass Customised and Sustainable Paratransit Services

研究項目: 車輛靈活管理系統設計: 輔助客運服務達致大量客制化及可持續性

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Funding Scheme: Research Grants Council - Faculty Development Scheme (RGC)

Project Reference No.: UGC/FDS14/E06/17

## Abstract

Given the current ageing population and limited social welfare expenditure, scholars are renewing their interests in how community organisations can operate to sustainably serve various needs of people with travel inconvenience in society. This research aims to design flexible vehicle management systems that enhance the management of various paratransit services through better system design and optimisation of vehicle resources.

The study scope of paratransit services includes schedule route, dial-a-ride, feeder and pooled dial-a-ride. Users who require those services have different expectations for travelling times, prices, service frequencies as well as pick-up and drop-off locations. This variety of service requirements poses numerous new challenges for community organisations to sustain paratransit services. Hence, it is essential to innovate options for a holistic approach to coordinating various types of service in a common sharing platform, which meet people's diverse needs in a more efficient way. We expect the outcomes of this research would support the policy review and operational improvements for community organisations.

