APPLICABILITY AND EFFECTIVENESS OF THE PARK AND RIDE SYSTEM FOR KANDY CITY

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DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

Applicability and Effectiveness of the Park and Ride System for Kandy City

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Kandy is the main city in Kandy district and Central province of Sri Lanka. As a result of increased car ownership with increase of income level among other reasons, modal share of public transport has decreased over the years. This will increase congestion of roads, reduction of mobility and reliability. One possible option is to reduce the private vehicle users to public transport modes or combination of both private vehicles with public transport mode. "Kandy City Transport Study, (KCTS)" and "Kandy Transport Improvement Program, (KTIP)" have proposed strategic plans to improve transportation system in Kandy city. Furthermore three Satellite Stations were proposed at Getambe, Katugasthota and Thennakumbura with Kandy Multimodal Transport Terminal. In this research, applicability and effectiveness of the park and ride system to Kandy city was studied. Recent studies found that 59.5% of passenger vehicles' trips end are in Kandy CBD. Willingness to use of park and ride system among private vehicle users were assessed through questionnaire.

Questionnaire was mainly focused on traveler's background information, travel behavior data, satisfaction of present transport mode and important factors for better Park and Ride system. Trip information data and other information given by the responders were analyzed through the statistical methods. Finally acceptability of the proposed Park and Ride system was analyzed with monthly income level, average travel time, average trip length, expected waiting time on average journey and average walking distance from point of egress from the public transport mode.

According to the results, acceptability of the proposed Park and Ride system mainly depends on present mode of transport, monthly income level and travel time. Travel distance, waiting time and average walking distance from the point of the egress from the public transport to destination are independent with acceptability of the proposed Park and Ride system. The most of responders were not satisfied with the current travel time, pedestrian walkways. Responders are expecting comfortable public transport system with high frequency for successful proposed Park and Ride system in Kandy city.

Key words: Park & Ride System, Private vehicle users, Public transport

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