Travel Behaviour of Public Transport Passenger at Kandy City under Unplanned Terminal Setup

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Abstract: Kandy is the 6th largest city in Sri Lanka which has 158,561 of population as per the survey carried out by Census Department of Sri Lanka in 2012. Kandy is the most developed city within Kandy District and hence significant trips are terminated at City Centre as the destination itself and for transfers to other destinations connected through the public transport supply setup at present. As an ancient city, Kandy is in high demand as a tourist destination. Presently, Kandy City is facilitated with both rail and road transport network. Kandy Railway Station, Good Shed, Torrington and Clock Tower bus terminals as well as the bus stops at Kandy Hospital are the key public transport terminals located in the heart of Kandy City. However, poor mode integration at the public transport terminals has lead for an inefficient transport supply system in Kandy as at now. As a result of this improper connectivity among public transport terminals, excessive passenger detouring, excessive walking distances, high magnitude of transfers are observed. All the above matters has significantly affected to the prevailing traffic congestion in Kandy City Roads.

As a result of the excessive transfers due to present unplanned terminal set up, there are increased substantial unproductive travel distances for the public transport users encouraging them to use para transits modes which create more congestion situation in the city centre. Kandy City shows some special transport activity demand attributes where weekends are much congested as weekdays due to the tourist attractions as well as for weekend private tuition classes. The major national schools are located at the heart of the city and hence, there are many educational based trip attractions by public and private passenger vehicles creating congestion waves in the morning and mid peaks.

The public passenger OD data covering over 20,000 passengers over 4 days in Kandy City Terminals are used to identify the travel behaviour of the present users. The analysis is focused on how they manage with the existing transport supply setup and what major issues are required to be addressed in planning of future multi model public transport terminal in Kandy City. Category analysis techniques for various transport attributes such as travel distance, purpose based travel, transfer and interconnectivity between the Terminals has been focused in this research paper.

Keywords: Travel Distance, Transfers, Trip Purpose, Public Passenger Demand, Mode Shift