

Logit Choice Model for a Passenger Boat Service in the Wellawatte Canal

P. Sutharman¹, G. L. D. I. De Silva²

Abstract

Colombo is been transformed in to a modern city with the proposed Megapolis development in the Western Region. However, the quality and service of the public transport system is lacking which has prompted the use of private vehicles by the users to make their daily travel needs, which has resulted in heavy congestions during the peak times making the mobility to a standstill. Introduction of new transport modes have been the focus and one of the initiatives is to use the inland waterways as transport modes. A selected section has been the Wellawatte Canal that connects Wellawatte with Battaramulla making a essentially critical east west link within the city.

The objective of the paper is to develop a choice model to empirically understand the perception towards the boat service by the passengers. It explores how much time and money people are willing to spend for this particular journey with respect to different mode choices available for them. A stated preference survey was conducted to collect data from the potential users of the system and ALOGIT software was used to develop a logit choice model. Each individual was provided with 4 public and 3 private transportation options to select the preferable choice of travel.

The paper aims to discuss the individual's perception towards parking fees, fuel cost, access times, ride times and the fare for each mode which will provide a guideline to promote public transport among the transport users.

Key words: Stated Preference survey, Logit choice model, Mode choice

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1. Site Engineer, Maga Engineering Pvt Ltd. , suthaarman@gmail.com.
 2. Senior Lecturer, Department of Civil Engineering University of Moratuwa, dds@hbaspecto.com