



ABSTRACT

This paper focuses on the determinants that affects when introducing Electronic Toll Collection systems to Sri Lankan expressways. The study is focusing on a new implementation hence the drawbacks of the current cash based tolling system is identified. At the moment cash is the only available option for the expressway users. With the rapid growth of the traffic density, not only the normal roads but also the expressways are eventually getting congested especially near the toll gates. Therefore, Sri Lankan government is on the process of introducing electronic payment mechanisms but only one prepaid payment option been considered in this aspect where the users do not have a liberty to select. Hence the purpose of this research is to identify the user preference between prepaid and postpaid Electronic Toll Collection methods and to identify the determinants that affect such choice. Based on the literature, a structured questionnaire survey has prepared and interviews were carried out in order to collect primary data. 230 responds were able to collect within the months of November and December 2014 which were used to test the significance of the identified variables using Person's Chi-squared statistics and binary logistic regression analysis. Secondary data has been collected using literature and previously published reports from RDA, National Transport Commission, Ministry of Transport and The Central Bank. Based on the results it was concluded that only the convenience and vehicle category have a significant association with the dependent variable of ETC method while combined effect of convenience and vehicle category too have a significant relationship to the dependent variable.

Key Words: Electronic Toll Collection; Srilankan Expressways; Prepaid and Postpaid payments; User Preference.