

A Comparison of Actual Transport Demand at Modern Supermarkets and Supply Attributes Stipulated in Sri Lankan Regulations

Tissa U. Liyanage and Maheen T. Ranasinghe

Abstract: The level of transport demand for modern commercial facilities is different with respect to the type of business activities. Hence the supply of transport related facilities such as parking facilities, roadway width, number of flow lanes at access, pedestrian facilities is required to fix at different level. The present practise for estimating the demand for parking facilities are to follow the UDA regulations and use the pre-estimated unit rates based on the net activity area of different commercial facilities. However, it was observed that such estimated parking facilities are not always match with the actual demand and hence, there is an impact to the internal and external traffic environment of the development. It is expected that the demand for transport facilities are supplied adequately by the development itself during the design stage to mitigate the negative impact to the traffic environment by the new developments.

The approach of this research paper is an attempt to compare the actual situation of the demand and supply attributes of the transport facilities those have provided in selected supermarket facilities in Colombo and suburban areas. Review of adequacy of the estimated parking supply for the actual demand, comparison of the estimated in and out movements with the actual traffic flow, actual parking duration and its variation for the locality are some of the expected outcomes of this study. The recently established selected supermarkets have been observed for developing above relationship and the outcomes are expected to improve the accuracy of future forecasting methodologies for estimating the parking demand and the traffic flows at new developments in Colombo and Suburban Areas.

Keywords: Supermarkets, Suburban Area, Parking Demand, Parking Supply, Traffic Impact Assessment (TIA)
