

Development of a fares structure for the three wheelers

K.M. Nishantha¹ and J.M.S.J.Bandara²

¹Post Graduate Student, Department of Civil Engineering, University of Moratuwa
Sri Lanka

²Professor, Department of Civil Engineering, University of Moratuwa, Sri Lanka
bandara@uom.lk

Three wheelers have a significant contribution towards the road transportation as a popular para-transit mode in the country. Three wheeler transports is highly unregulated at present and is mainly criticized for its “unfair” fares structure. Many three-wheeler users feel that they are often exploited by drivers who over-state distance and charge higher fares. It is also observed that the fares are usually inconsistent and may vary from operator to operator in addition to the distance travelled and journey time. Further three wheeler meters are calibrated arbitrarily by operators.

This study is an attempt to explore the cost recovery in three three-wheeler transport and thereby to develop a systematic fare structure. Absence of a proper fare structure for three wheelers causes inconvenience to both operators and passengers. Therefore development of a fares structure would lead to minimization of imbalances and inefficiency in the service under prevailing fares structures. At present, passengers are charged with a minimum fee of Rs. 50 up to the first kilometer and henceforth each kilometer is charged at a rate of Rs. 40 per km. There is no systematic procedure to charge for two way trips and waiting time and there is no systematic procedure available at present for the revision of fares with fluctuation of major cost components. In order to revise three-wheeler fares with frequently fluctuating input price levels, such as fuel price, percentage contribution of each cost component in the total operational cost (Rs/km) were calculated. A reasonable fare structure is proposed considering share of each cost component with profit mark up.

First step is identifying variants of three wheeler operation and the second step is identifying different cost components. Three wheeler types are major variant and ten different cost components have identified such as Fuel cost, Operator’s salary, Service cost, Tires cost, Tube cost , Repairs and maintenance cost, Annual overheads ,Depreciation , Interest on capital and Risk on enterprise (for profit mark up).

After quantifying identified cost components Questionnaire survey was conducted. The cost of operating a three wheeler over one km distance was computed based on the information collected. Each cost component is quantified for each three wheeler type and then the actual

distribution of each cost component was studied. Finally operational cost was calculated using the average value of each component and each cost component was calculated on the basis of rupees per kilometer.

A fares structure should be transparent, simple and understandable by each party to be effective and fares structure is the instrument to recover cost and it acts as the communicator between operator and the passenger of the transport service. After considering the present operational cost and cost recovery of a three wheeler including the profit markup a new fares structure is proposed for the convenience of both operators and passengers.

Key Words: fares structures, para-transit mode