

Abstract

With tremendous urban population growth in the last few decades, mobility demands of the urban passengers have increased many folds. Such increase in demand has created pressure on the transportation infrastructure of the urban cities. To meet the mobility needs optimal utilization of available transportation infrastructure is vital. This can only be achieved by increasing the share of public transportation. Improvement in public transportation needs more attention due to enormous increase in the share of private vehicles causing congestion and deteriorating the urban environment. With increase in the capacity, improving the service quality of public transportation in terms of route planning, scheduling with emphasis to comfort, travel time and traffic planning is important. Hence, an investigation carried out on the opinion of the passengers' toward improvement in service quality is presented in this study. Willingness to pay method is used to capture the perception towards various service attributes. A stated choice experiment is designed and administered at Delhi, Hyderabad and Chennai; three major metropolitan cities of India. The study focuses on the willingness to pay for different levels of improvement in travel time and comfort. Data are analyzed by developing ordered logit model. The study clearly illustrated that passengers are willing to pay provided the service qualities are improved. Factors affecting the opinion of the passengers are their travel time, cost, family monthly income, motor vehicle ownership, age and the present level of comfort. The study also calculates the monetary value of increase in ratio of fare for specific levels of improvement in service qualities.

Keywords: Willingness to pay, stated preference, improvement in bus service quality, ordered logit model