

Abstract

Toll plazas are often provided at an expressway or a highway. None of the widely used traffic manuals report the level of service standards for toll plazas. In this thesis, an attempt is made to determine the level of service at toll plaza using the driver perception of delay at toll plaza. A wide range of driver response data and vehicle movement data were collected at four different toll plazas located in Rajasthan and Uttar Pradesh. Data on perceived delay as well as perceived service quality were collected from drivers during the process of toll. A total of 2066 responses were collected from these toll plazas. An ordered response model using a perceived delay (latent variable) is developed. Threshold values on delay that defines the ranges of a priori chosen, analyst-defined level of service categories are obtained.