Exploratory Data Analysis of Passenger Movement on Delhi Urban Bus Route

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Abstract : Intelligent Transportation System is an integrated application of communication, control and monitoring and display process technologies for developing a user–friendly transportation system for urban areas in developing countries. In fact, the development of a country and the progress of its transportation system are complementary to each other. Urban traffic has been growing vigorously due to population growth as well as escalation of vehicle ownership causing congestion, delays, pollution, accidents, high-energy consumption and low productivity of resources. The development and management of urban transport in developing countries like India however, is at tryout stage with very few accumulations. Under the umbrella of ITS, urban corridor management strategy have proven to be one of the most successful system in accomplishing these objectives. The present study interprets and figures out the performance of the 27.4 km long Urban Bus route having six intersections, five flyovers and 29 bus stops that covers significant area of the city by causality analysis. Performance interpretations incorporate Passenger Boarding and Alighting, Dwell time, Distance between Bus Stops and Total trip time taken by bus on selected urban route.

Keywords : congestion, dwell time, passengers boarding alighting, travel time
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