

EXAMINING AUTOCORRELATIONS IN SOME INDICATORS OF SERVICE QUALITY IN PUBLIC PASSENGER TRANSPORT SYSTEM

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Abstract

A key factor for successful management of the public passengers transport system is creating an exploitation plan in advance. This plan is important because it ensures high level of service quality, decreasing the costs for system maintenance, planning and predicting the future development of the urban transport systems, increases traffic safety and reduces environmental problems. Four basic elements of the public passengers transport system are expectation time of buses, in dependence of deviation of the timetable; idle time at the bus stop; intensity and velocity of the traffic flow. The goal of this study is to examine the existence of autocorrelation in each of these elements. Using mathematical statistics as an instrument in exploring real data for two bus lines in Bourgas an assessment and prediction for their future change is shown.

Keywords

public passenger transport system, transport service, quality of service, time series, autocorrelation



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