

Abstract

Computer Simulation of the Transportation System in the Kingston Metropolitan Region.

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The public transportation system in Jamaica's Kingston Metropolitan Region, regularly undergoes changes to improve its service to the travelling public. Changes, usually results in adjustments to the overall number of seats in operation. Deciding how to make these adjustments, though neither simple nor trouble-free, can be more easily done with the appropriate tools.

Computer simulation is one such tool. It was applied to the KMR public bus transit system to develop a computer simulation model. The model was used to examine various operating options to determine ways of improving transit service to the Jamaican metropolitan travelling public. Operating options consisted of various combinations of number of buses operating on the route, and the number of seats per bus. The model was also used to examined scheduled versus unscheduled operation.

It is concluded that the number of buses and the size of each bus, and not just the total number of seats, is important for efficient service. Also, scheduled operation provides a more efficient service to the public than unscheduled operation.