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Scheduling of Bus Fleet Departure Time Based on Mathematical Model of Number of Bus Stops for Municipality Bus Organization

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Abstract : Operating Urban Bus Transit System is a phenomenon that has a major role in transporting passengers in cities. There are many factors involved in planning and operating an Urban Bus Transit System, one of which is selecting optimized number of stops and scheduling of bus fleet departure. In this paper, we tried to introduce desirable methodology to select number of stops and schedule properly. Selecting the right number of stops causes convenience in accessibility and reduction in travel time and finally increase in public preference of this transportation mode. The achieved results revealed that number of stops must reduce from 33 to 25. Also according to scheduling and conducted economic analysis, the number of buses must decrease from 17 to 11 to have the most appropriate status for the Bus Organization.

Keywords : number of optimized stops, organizing bus system, scheduling, urban transit
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