

## OPTIMAL ALLOCATION OF BUSES IN CITIES THROUGH DIFFERENT TARGET POINTS: GOAL PROGRAMMING APPROACH

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### Abstract

In this paper a Goal Programming Model for city Transport system is developed. This Model is developed with special reference to the Imphal city in Manipur. This approach deals with the analysis of multiple conflicting objectives such as-maximizing the revenue, occupancy and minimizing the operational cost, travel time and allocating the total number of buses to each sector through some specified control/target points. An efficient city transport system has been designed with the application of this model by allocating priorities on different objectives. With the scheduling of the buses on the routes through the specified target points, achievement of goals (achieving maximum occupancy, revenue while ensuring minimum operational cost and travel time etc.) can be satisfactorily maintained.

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Key Words : *Goal programming, Priorities, Routing and scheduling, Multiple conflicting objectives.*

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