MAXIMIZING THE PASSENGER’S COMFORT IN THE MADRAS TRANSPORTATION CORPORATION USING FUZZY PROGRAMMING

W.B. Vasantha Kandasamy and V. Indra

This paper aims to achieve the goal or more precisely the fuzzy goal viz to maximize the comfort of the passengers in the metropolitan transport corporation using Fuzzy goal programming (FGP) and Fuzzy cognitive Map (FCM). We establish in this paper for this problem the FCM approach yields a better result than the FGP approach to the problem FCM gives us the optimal factor responsible for the comfort where as the FGP approach gives us only a upper bound or a lower bound for the variables.

For this we have used the route from K.K. Nagar to Parry’s Corner; There are different nodes connecting these two nodes and there are different types of services like normal, limited stop service, express service and night service. We have collected the raw data from the passengers who travel in this route on regular basis. Based on the data we estimate the choice of the people. First solve the problem using FGP and then FCM. We prove for this problem, FCM has a edge over the FGP due to several factors, like simplicity and so on, Java program is used to simplify calculations.