

# A STUDY ON THE LINEHAUL-FEEDER VEHICLE ROUTING PROBLEM

卓裕仁, 林志勳

Transportation Technology and Logistics Management

Management

m9203001@chu.edu.tw

## Abstract

Recently, some carriers used large truck as the virtual depot to replenish small trucks. This study aims to propose a model, Linehaul-Feeder Vehicle Routing Problem (LFVRP) to deal with the pre-mentioned case. Moreover, a metaheuristic method combining the Backtracking Adaptive Threshold Accepting (BATA) with neighborhood search heuristics is presented to solve the LFVRP. To identify the performance of BATA, a set of 58 LFVRP instances is generated to conduct computational experiments. Results indicated that the proposed BATA for solving the LFVRP is feasible and efficient.

Keyword : Linehaul-feeder; Vehicle routing; Backtracking adaptive threshold accepting.