Cheng-Chang Lin\* (cclin@mail.ncku.edu.tw), 1 University Road, Department of Transportation Science, National Cheng Kung University, Tainan, 701, Taiwan. The expected utility model on carrying capacity allocation for express carriers.

The time-definite express freight delivery common carriers publish tariffs and deliver express freight shipments door-to-door with guaranteed delivery times. The carriers also bid on the time-indefinite cargo of key accounts to fill up otherwise unused carrying capacity. The carrying capacity allocation model is to determine prices for express freight and also to decide whether to bid on the cargo of key accounts so as to fill the available carrying capacity in a way that maximizes profit. We modeled this integral-constrained concave program in link formulation and demonstrated computationally using Taiwan's largest time-definite LTL freight carrier. (Received August 29, 2018)