SUMMARY

Transportation is one of the significant cost components in overall logistics costs. Various innovative techniques are now undergone by many companies to reduce the cost of transportation. One of the most effective ways is to consider the consolidation of delivery. Principles of consolidation are economies of scale, where more and more items are transported in one vehicle, and then the cost per unit becomes smaller. This research is the development of the consolidation model, which refers to delivery of journals and previous research and development of software called ConsLoad. Shipment consolidation model development involves several variables such as vehicle specifications (capacity, volume, and the number of feasible loading and shipping costs of each type) and the specification of order (weight, volume, deadlines and truck access) to determine the configuration of a vehicle to transport order. The goal is to minimize the total cost of shipping orders. Development of a model and then poured in a software tool to facilitate decision-making for the user. The result is a configuration of vehicles to transport (combined) order with a cheaper cost than the company’s initial conditions. Software related to the consolidation model has been successfully developed. This software has been able to facilitate the completion of the consolidation that occurred where delivery involves a network of the sender, recipient, or third parties from sending.