

## CHAPTER VI

### CONCLUSION AND SUGGESTION

#### 6.1 Conclusion

Based on the discussions above, the researcher has made a conclusion in response to the problems formulation in the previous chapter. The conclusion is as follows:

1. The Holmes and Parker result shows that by using Holmes and Parker algorithm the vehicle routes is better than the current routes implemented by the company. The difference of total cost between two routes is IDR 73.403 per month with the new vehicle routes total cost is IDR 3.628.187 per month and vehicle routes are Truck: Depot- Taji Nasrudin- Budi Sondakan- Agus- Maju Mapan- RS Yarsis- Londo- Bandara- Depot, Panther: Depot- Palang Kereta Hotel Agas- Iskak- Kendali- Matahari- Teguh- Muhammad dkk- Indomet- Prasasti- ABC-Sendang Mulia- Surya-Hadi S- Depot.
2. The Holmes and Parker algorithm generates the distance of two vehicles to conduct the new routes are shorter than the current route. The distances traveled by truck in the new route are 24.755 meters in a day and panther are 25.959 meters in a day. With the difference with current route 1.337 meters for truck and 3.766 meters for panther.

## 6.2 Suggestion

Finally, the researcher added some suggestions as a consideration for the next future research about Heterogeneous Fixed Fleet Vehicle Routing Problem:

1. To solve the HFFVRP with big problem (number of customers and vehicle) using Holmes and Parker algorithm requires a computer programming to produce solution in short time and also to solve the HFFVRP which has ration of total demand in vary and vehicles capacity is close to one, it necessaries to modify the objective function to adequate the infeasibility solution, especially if using Holmes and Parker algorithm.
2. It necessary to solve HFFVRP in the exact solution because there is still no research to solve the HFFVRP with exact solution yet.

