Surabaya has been the trading and international service city in the east side of Indonesia. It also be the gate of the investment in East Java because of its transportation infrastructure availability, such as Juanda International Airport, Tanjung Perak Seaport, etc. However, this availability of infrastructure is not supported yet by the availability of public transportation around the city itself and affecting the citizens preference of their private transportation. It has made the growth of private transportation from year to year. The government of Surabaya responds this situation by serving Surabaya Mass Rapid Transit, Boyorail and Surotram which expected to raise the efficiency of citizen’s mobility. This development of Surabaya Mass Rapid Transit followed by the provision of mini bus feeder to fulfill the demand.

This research explores the optimization of the routes and the number of feeders need for Surabaya Mass Rapid Transit Boyorail where the model built is using the linear programming to solve this problem. This model used is Multiple Depot Vehicle Routing Problem (MDVRP).

The result shows the optimal routes for each cluster are 23 feeder for cluster 1, 53 for cluster 2, and 12 for cluster 3.

Keyword: Feeder, Monorail, Multiple Depot, Rute, Surabaya, Vehicle Routing Problem.