MRT Jakarta is DKI Jakarta government idea for solving the transportation problem. MRT Jakarta construction which planned in year 2013 has two planned route which is south – north corridor and west – east corridor. But the route that planned did not occupied all DKI Jakarta area. Some area still need more transportation mode to reach MRT Jakarta. Feeder mode needed for support the maximum use of MRT Jakarta

This final project planned LRT (Light Rail Transit) route as MRT Jakarta feeder mode. LRT have more less capacity than MRT Jakarta. But it does not requires high cost for the construction. In this final project, one of the step for determine LRT route is transportation modeling on planned zone which will be implemented in planned route. This final project’s objective is to find transportation modeling for planned LRT route, LRT route demand, find the passanger assignement for LRT route, and LRT mode operational planning.

The result from this final project is the modeling of specified zone obtains a equations that will be used for determine demand of LRT route. With several variables included in the equation, it produced in existing year the maximum generation is 2340 and the maximum attractions is 1740, and for planned year, the maximum generation is 2830 and the maximum attractions is 2013. The generation and attraction result used in distribution analysis which obtained the maximum is 336,57 in existing year and 394,06 in planned year. For assignment analysis the maximum result is 7897,30 for existing year and 9722,88 for planned year.
The result from operational mode planning the headway is 12 minutes and the travel time is 1 hour with number of fleet 5 trains.

**Keywords**: feeder, LRT, modeling, MRT Jakarta, route