ABSTRACT

This research is about optimization route search along Hall Station - Dago in Bandung. This route determination using demographic data such as employment, productive age and gender. It also uses public place scattered along the route. Population data and public places are used to determine the weights in each segment of the road. Population data and public places is the data point that the next multi-criteria each of these criteria would be global weight through Hirarchy Process Analytical methods. The greater the weight on each road, then the likelihood of users of public transportation will be even greater. Weights are in each road segment is represented by a directed graph Floyd-Warshall algorithm used to determine the optimal route of a directed graph is created. Routing the results obtained from three experiments are the most optimal to pass two mandatory layover points namely Jalan Yogya Sunda and RS Borromeus. Load factor on its route is 53% and it takes about 1 hour and 1 minute 6 seconds. These are generated through the following paths.

. Jalan Otto Iskandar Dinata - Jalan Stasiun Timur - Jalan Perintis Kemerdekaan - Jalan Braga - Jalan Lembong - Jalan Veteran - Jalan Sunda - Jalan Baranang Siang - Jalan Jenderal Ahmad Yani - Jalan Gandapura - Jalan Gudang Utara - Jalan Bangka - Jalan Belitung - Jalan Banda - Jalan Aceh - Jalan P. Seram Luwuk Banggao - Jalan Letnan Laut Raden Eddy Martadinata - Jalan Ir. H. Djuanda - Jalan Tengku Umar - Jalan Dipatiukur - Jalan Ir. H. Djuanda in 8,8 kilometers

Kata Kunci : Optimization, Floyd-Warshall, *shortest path, routing, Analytical Hierarchy Process*