

## **ABSTRACT**

*City transportation (Angkot) is one type of public transportation that is began to be abandoned because it has so many shortcomings such as congestion, fleet that piled up at one point and many other. therefore, a solution is needed to optimize the use of city transportation and become a better transportation. in order to optimizing city transportation, there are three viewpoint that determine the optimal benchmark. the viewpoint is taken from the passanger, the driver, and the relevant goverment specifically Department of Transportation and Department of City Planning. By considering their perspective, can be sought ways to make use of public transportation can be maximized. Determining the optimal route is one way to maximize the use of public transportation. The method chosen in optimizing this angkot route is Genetic Algorithm method used while the case is the Vehicle Routing Problem. Vehicle Routing Problem are problems that require a vehicle to depart from one point to the next to resupply and require it to return to the starting point. The Genetic Algorithm method itself plays a role in determining the route to be passed. The results of this method would then be used to calculate the number of buses required for each route.*

*Keyword : Transportation, Bandung, public transportation, optimize, route, Vehicle Routing Problem, Genetic Algorithm*