The road is kind of infrastructure which is used for transportation and has an important role in economic activities and equitable development. With the increasing number of population growth, resulting in traffic increased which makes the load path is no longer compatible with the previous planning that occurs especially in Madura. So, it’s needed a road widening and pavement to accommodate the volume of traffic which pass through the area. The use of CTB pavement is expected to be useful because the price is not too expensive but have good endurance, so that it can be an alternative CTB in anticipation of growth in the volume of heavy vehicle traffic.

The purpose of this thesis is to calculate both pavement thickness, calculate the total cost of construction and maintenance of both the pavement, looking for a cost friendly method ND Lea, and compare the two pavement economically with Benefit Cost Ratio calculation. It will discuss the comparison between the use of flexible pavement construction Untreated Base and Cement Treated Base (CTB), which in terms of economic analysis. Studies discussed include: Calculating thickness of the two pavement constructions; calculate the cost of construction of
both the pavement; periodic and routine maintenance on both of the pavement; and analyze the economic feasibility with BCR calculation.

**Keywords**: Flexible pavement, Cement Treated Based (CTB), Analysis and Evaluation of Economic