**A GENERAL STUDY ON THE LIFE CYCLE COST ANALYSIS FOR ROADS**

**ABSTRACT**

Life cycle cost analysis of existing road is becoming more significant to determine the proper

time of maintenance and the proper action, which should be taken for maintenance. An efficient

maintenance policy is essential for a cost-effective, comfortable and safe transportation system.

But, the decision to maintain the road facilities, consider a number of possible ways from routine maintenance action to reconstruction of the road network. Moreover, an economic analysis of a road network is dependent upon a number of factors, which are responsible for deciding road serviceability level. Optimization model is an analytical model, which helps to make a cost benefit analysis and compare that with various possible alternatives to give out the best possible activity within the allocated budget, before being carried out in field work.

In the present study, the aim was to develop a general optimization model to give the most cost effective activity. The choice of maintenance action is divided in four groups from no action to rehabilitation. Various factors like traffic growth, environmental conditions are taken into account, along with the International Roughness Index (IRI). „C‟ language program is used to formulate the model.