

COMPUTER ASSISTED LIFE CYCLE COSTING OF ROAD ASSETS FOR DISASTER ZONE IN PADANG INDONESIA

Insannul Kamil¹, Buang Alias², Hakim Mohammed³, Nilda Tri Putri⁴, Dio P. Hasian⁵

^{1,2,3} Faculty of Geoinformation and Real Estate, Universiti Teknologi Malaysia

^{4,5} Department of Industrial Engineering, Faculty of Engineering Andalas University, Indonesia

Email: sankamil@yahoo.com

ABSTRACT

Efficiency and effectiveness of current road preservation program should be improved. Increased efficiency can be done in road preservation program by minimizing the use of available resources such as rehabilitation cost in life cycle, or cost average in the medium term. Whereas increased effectiveness can be obtained through improved quality, performance and extended design life. Current road preservation can't compensate for the road damage because road construction just oriented to initial costs such as construction cost without considering the future costs and shorter design life. Life cycle costing approach can solve this problem and produce optimal cost in road infrastructure management.