Computational Model for Allocating the Road Pavement Funds between Implementing Units: Case Study in Tanzania

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Abstract

This article reports on a particular module of Road Maintenance Management System was developed with the purpose of distributing Roads Maintenance Fund for the road network between the implementing units. This computational model was developed by optimizing three major parameters: priority ranking model, road network length model and budget needs model.

It is concluded that the multi stage Model combining road network length, priority ranking as well as maintenance needs provides a rational approach for allocation of maintenance fund to implementing agencies.

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Index Terms

Computer Science

Information Sciences

Keywords

Road Management System, Budget split, Asset Management, Homogeneous Sections, constrained budget, unconstrained budget, Road Fund Allocation.