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Strategies to clear road maintenance backlog

Authors: [Harry Evdorides](#), Dipl-Ing., PhD, CEng, Eurlng, MCIHT, , [E. Nyoagbe Nyoagbe](#), ... Show All

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Abstract

Over time roads deteriorate under the combined effects of traffic and the environment. However, due to budget constraints and ageing road networks many road organisations are unable to accomplish road maintenance programmes in a timely fashion resulting in a backlog of road maintenance. To address this, this paper explores the development of road maintenance strategies to deal with the problem of road maintenance backlog. The analysis presented is an analytical methodology that seeks to address the what, why, when and where questions of the maintenance backlog in a robust scientific manner. Maintenance strategies based on technical engineering and economic approaches are defined and evaluated using the World Bank's model for road investment appraisal, HDM-4. The results show that with such an analysis the problem of road maintenance backlog can be resolved through the definition of strategies and standards that conform to budget and time constraints and are tailored to the needs of road network's managing authority.

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