PAVEMENT MAINTENANCE AND REHABILITATION MANAGEMENT SYSTEMS FOR LOCAL ROAD AUTHORITIES - A CASE HISTORY

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ABSTRACT
When it comes to managing their pavement assets, local road authorities find themselves in a unique position. On the one hand, there is the need to produce pavement rehabilitation and maintenance budgets using rational, systematic approaches. On the other hand, funds are scarce and staffs generally lack pavement engineering expertise. To meet this challenge, an appropriate pavement management system (PMS) is required. Such a system must be sufficiently sophisticated, yet straightforward and transparent in use.

This paper outlines the development of a PMS specifically designed to meet the unique needs of local government authorities seeking to manage their pavement assets in a more systematic way. The paper briefly outlines the environment in which such systems must work to set the terms of reference, and then discusses data collection requirements, covers pavement deterioration, makes comments on maintenance and rehabilitation treatment selection, and lists the desirable budgeting capabilities.

The paper provides a case history, where the experience of a local road authority implementing the PMS system in the autumn of 2010 is given. The span of implementation, from planning field work through finalizing budgets is covered.

KEY WORDS: Pavement management, local government, case history, pavement condition index, budgeting