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AN EXAMPLE FOR STRATEGIES OF TURKISH HIGHWAY PAVEMENT MAINTENANCE WORKS

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ABSTRACT

Overloading of axles on Turkish highways in spite of the regulations, decreases the service life of our roads. Heavy vehicles form approximately 50 % of the total traffic in Turkey; sometimes this value goes up to 70 %. Since loading control is inadequate and overloading is common, insufficient bearing capacity is observed on most of the roads.

This study is made to make a contribution to the planning of highway pavement structural maintenance work with regard to the Pavement Management System application in Turkey. In this study, longitudinal evenness values (RN-Ride Number) that the General Directorate of Highways in Turkey accepts as the pavement performance indicator, traffic volumes and climatic conditions are considered as parameters in modeling the pavement performance. Later, the model is used to estimate the cost of structural maintenance according to the maintenance year.

As a conclusion, it is stated that this model, which shows the change performance (deterioration) of the road pavement in time and enables the determination of the time and cost of the necessary structural maintenance, can make a contribution to the establishment of a method that aims at repairing the pavement deterioration on Turkish highways according to a plan.

KEY WORDS: Structural Maintenance, Pavement Management System