

**MANAGING THE PROBLEM OF MAINTENANCE OF FLEXIBLE PAVEMENTS
WITH THE USE OF COMPUTER**

by

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ABSTRACT

The progressive damage of the road network is one of the most serious problems highway engineer has to face. The in time and proper maintenance of the pavement increases its duration of life. Economical and suitable maintenance techniques also make better use of final resources. Objective evaluation of the pavement condition and priority of actions to be taken are also critical factors. The vast amount of data in relation to the alternative maintenance methodologies can only be managed with the use of a suitable computerized programme, known in broad terms as pavement management system.

This paper presents a computerised programme for managing the problem of maintenance of flexible pavements. The programme, depending on the type of damages appeared on the under examination section of road or network of roads, proposes the most suitable methods of maintenance (therapy). The user has the ability to ask for the most economical suitable therapy or to select the ones he thinks are most appropriate. The programme also evaluates the condition of the sections and proposes a priority list of action. Finally, the programme can be used as reference text for getting more information on the causes of damages and the procedure of maintenance to be followed.

The collection of data is carried out manually by visual observation of the sections concerned employing experienced engineer or team of engineers. The evaluation of the pavement condition is carried out by using the : gravity factor, severity factor and the frequency factor. The program was written by the laboratory of Highway Engineering of the University of Thessaloniki, is known as PAVMAIN, and its current version is suited to the greek conditions.

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