

ANALYSIS OF DECAY CURVES OBTAINED WITH HDM-4 AND MICRO PAVER FOR A STUDY SECTION ON THE FREEWAY MEXICO-QUERETARO

NOÉ HERNÁNDEZ FERNÁNDEZ & JORGE ALARCÓN IBARRA

Universidad Michoacana de San Nicolás de Hidalgo, México.

noe.hdz@hotmail.com,

jorge.alarcon.ibarra@hotmail.com

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The study discusses the application of two forecasting models for a study section located in the Mexico – Queretaro freeway, one of the most important roads of Mexico, also one of the busiest. The models used are the Micro PAVER and HDM-4.

To apply the model of the Micro PAVER is necessary to calculate the Pavement Condition Index, obtained from the inventories of damage. For the HDM-4 is necessary to incorporate information to damage models, this information was obtained from the indicators evaluated, subsequently performed the calibration of the deterioration models to ensure greater accuracy in predicting the condition.

After the implementation of both systems, we made a comparison of the results obtained with each of the prediction models for a period of 15 years. In the case of Micro PAVER was observed that during the period of analysis, the pavement is in good condition, above the critical PCI value adopted to describe the condition of the pavement. For the HDM-4, was observed in a short period of time the maximum value of IRI established was passed, placing the pavement condition in a poor state.