Comparison of flexible pavement performance using Kenlayer and Chev PC software program

ABSTRACT

The objective of this study is to compare the performance of flexible pavement using KENLAYER and CHEVRON PC Software. KENLAYER Computer Program has been used for determining the damage ratio using distress models. CHEVRON computer software has been used for predicting the pavement performance in terms of stresses, strains, and deflections using pavement deterioration models. Prediction of pavement performance has been carried out using Asphalt Institute (AI) models in both KENLAYER and CHEV PC Computer Program to determine pavement performance. The strain output obtained by CHEV PC software was less than that obtained by KENLAYER. Comparison of pavement life has been made and pavement life due to horizontal tensile strain at the bottom of asphalt concrete layer has been found to be governing. Finally, the analysis of test data indicates that the life of pavement predicted by CHEV PC is greater than that predicted by KENLAYER.

Keyword: Pavement performance; Comparison KENLAYER and CHEV PC software; Design life; Asphalt Institute models