

TEMPERATURE CORRECTION OF HMA MODULI BASED ON IN SITU PAVEMENT DATA

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ABSTRACT

Rational pavement management requires estimation of HMA moduli from in situ data for detailed structural evaluation of in service pavements. Considering that the HMA moduli are strongly influenced by temperature during the survey, a correction to a reference temperature is needed. Therefore the choice of the temperature correction equation is a critical impact factor in terms of selection of a reasonable pavement rehabilitation strategy. In order to investigate whether the use of in situ pavement data would improve correction effectiveness of HMA moduli, a road experiment was conducted. Field data was utilized for development of two temperature correction equations, which were then implemented for temperature correction of backcalculated moduli. Furthermore, related algorithms from the international experience were also utilized for comparative purposes. The overall analysis showed that temperature correction based on backanalysis of in situ data is quite promising. The related findings and results are displayed and discussed thoroughly.