State DOT: Texas

State Report Questions on MEPDG Implementation

1. Summarize your state's status as far as MEPDG Implementation.
    Texas CRCP-ME design procedure was developed under TxDOT research project 0-5832. 3-dimensional finite element was used to estimate concrete stresses at the middle depth of the slab. Statewide CRCP performance data has been used to calibrate the M-E design model.

2. What efforts have been made toward local calibration?
    TxDOT is working at the validation of this model under TxDOT research Project 0-6274. We will collect more field data which will include:
    a. Various gages will be instrumented at different locations in the slab to actually measure concrete stresses and values for other pertinent variable, such as relative humidity in concrete, steel stress, and coefficient of thermal expansion of concrete.
    b. Slab support characterization – FWD, Plate bearing testing and DCP test will be conducted on treated subgrade and subbase.
    c. Structural evaluation of concrete slab
    d. Subbase friction evaluations

3. What additional information/support would assist your state with implementation?