

Alabama DOT:

Alabama Report Questions on NDT Testing

1. What NDT testing methods for concrete materials, concrete pavements, and overlays are you trying?
 - We perform pavement smoothness testing, pavement friction testing and FWD testing
 - We are currently using GPR on the I-59 project to locate voids under pavement slabs
 - We have looked into scanning for dowel bar alignment and thickness measurements using the MIT Scan T2, which was provided/conducted by the FHWA Mobile Concrete Lab and for research purposes only.
 - Maturity meters are allowed on new PCC Pavement construction for releasing traffic only; NOT for acceptance purposes.

2. In your experience, how does the reliability of NDT testing methods compare to traditional testing methods?
 - For pavement smoothness and friction testing, NDT is the traditional method. FWD testing can provide load transfer efficiency, PCC modulus of rupture and PCC elastic modulus. We're not aware of another test method for load transfer efficiency.
 - We believe GPR technology is fairly accurate, but it is technician dependent on correct interpretation.
 - Based upon the "limited" data we received from the FHWA Mobile Concrete Lab on the I-59 project, the MIT Scan T2 measurements would have yielded the same pay factor results as did the measured core thicknesses.