



Non-Destructive Testing

Applications: Pavement Evaluation of Asphalt, Concrete, Base Material for Municipalities, Departments of Transportation, Airports and Airfields, Private Owners of Parking/Driving Facilities

GROUND has provided non-destructive testing throughout the western states for over 14 years. Using a JILS Falling Weight Deflection (FWD) Machine, we are able to accurately determine the existing condition of asphalt and concrete pavements used for applications ranging from residential subdivisions to International Airport runways. Deflection testing allows computation of the existing modulus of a paving material. Data obtained can be correlated to remaining life of a driving surface, condition of pavement at or near the end of a warranty period, quality of pavement section, overlay recommendations to achieve a specified life, or other rehabilitation recommendations.

GROUND utilizes a JILS Falling Weight Deflection (FWD) machine. The machine has a GPS, automatic pavement temperature recording, loading capabilities ranging from 4,000 pounds to over 40,000 pounds, and user-friendly windows interface allowing for quick data quality calibration.

Data obtained from the FWD testing is input into the software packages DAPS, Darwin, ELSM, and others for back-calculation of the effective structural number of specific pavement sections.

References: CDOT, City and County of Broomfield, City of Thornton, FHWA, SDDOT