



Pavement Engineering Services

GESTRA ENGINEERING INC



GESTRA's pavement engineering services include field and laboratory evaluation, and engineering services for highway pavement, airport runways and parking lots as required by Wisconsin Department of Transportation (WisDOT), Illinois Department of Transportation (IDOT), Federal Highway Administration (FHWA) and National Cooperative Highway Research Program (NCHRP).

Field Evaluation:

- Pavement Surface Evaluation Rating (PASER) & Pavement Failure Investigation
- Pavement Profiling, Roughness & Skid-resistance Testing
- Falling Weight Deflectometer (FWD) Testing
- Dynamic Cone Penetration (DCP) Testing
- Sub-surface Exploration (Drilling Services)
- Pavement (Asphalt & Concrete) Coring
- Ground Penetrating RADAR (GPR) Pavement Layer Evaluation.
- Profilograph
- Construction Material Testing and Inspection

Laboratory Evaluation:

- Subgrade and Base Course Testing (Index properties/gradation/permeability)
- Maximum Dry Density (Asphalt & Soil)
- Specific Gravity (Asphalt & Soil)
- Marshal Stability (Asphalt & Soil)
- Concrete Compression
- Asphalt Content

Engineering Services:

- Pavement Analysis & Design (MEPDG, WisPAVE, WAPA, IDOT Spreadsheet & AASHTO)
- Material Characterizations (Asphalt, Concrete & Aggregate)
- Subgrade Evaluation
- Superpave Mix Design
- Remaining Life Prediction of Existing Pavement
- Back Calculation of Layer Moduli.
- Pavement Rehabilitation Recommendation.
- Drainage Layer System Design & Evaluate Filter Media.
- Statistical Analysis & Probabilistic Design.

