

FY2007 ODOT RESEARCH PROBLEM STATEMENTS

MATERIALS

- Problem Title : Development and Comparison of Alternative Approaches in the Determination of the Chemical Manipulation of Soils and Pavement Design Inputs
- Problem Title : Database of Pedological Survey Information
- Problem Title : Longitudinal Joint Density and Permeability in Asphalt Concrete
- Problem Title : Determination of Reasonable and Prudent Modulus of Rupture Values for Typical ODOT Concrete Mix Designs
- Problem Title : Investigating the effects on concrete quality by optimizing concrete mix designs to produce the most cost efficient paving mixes
- Problem Title : Field Verification of Desired Structural Values of Stabilized Sub-grade Designs
- Problem Title : Oils in Asphalt Mixes
- Problem Title : Investigate the use of alternate materials (instead of HMAC) for non-erodible base courses underneath concrete pavements

DESIGN & CONSTRUCTION

- Problem Title : Investigate the Performance of UTW Projects on US-69 Near McAlester to Provide Longer Term Rehabilitation Options for Lower Volume Roadways
- Problem Title : Calibrate and Validate the Inputs Needed to Implement the Mechanistic-Empirical Pavement Design Guide

MAINTENANCE

- Problem Title : Investigate causes of premature longitudinal cracking on some new DJCP

PLANNING

- Problem Title : Statewide Level-of-Service Map and Model
- Problem Title : GIS Layer for Transportation and Economic Statistics
- Problem Title : Rail Needs Assessment
- Problem Title : Future effects of Rail Freight capacity on Oklahoma's highway system
- Problem Title : Truck Weight Enforcement

BRIDGE

- Problem Title : None at this time

ENVIRONMENT

- Problem Title : None at this time

TRAFFIC & SAFETY

- Problem Title : Modeling of 85th Percentile Speed for Rural Highways for Enhanced Traffic Safety
- Problem Title : A Study of Real Time Advance Warning of Highway Speed Conditions via Multi-Color Dynamic Roadside Map Display