

Development of a Subgrade Stabilization Protocol for Design and Construction Control

NM13MSC-03

Budget: \$225,000 **Duration:** 30 months

Project Summary

The purpose of this research is to develop a design and construction protocol on stabilization of subgrade soils and base materials designed specifically for New Mexico's distinctive geologic composition. The protocol will enable geotechnical, pavement, materials, design, and construction engineers and project managers to apply the most cost-effective solutions for the various subgrade conditions encountered on projects.

Unstable and unsuitable subgrade for pavements has contributed to large expenditures for remediation and loss of pavement structure due to inadequate design and/or construction management decisions. This is due to a wide range of conditions including pumping, high Plasticity Indices, high sulfate content and low Resistance Value (R-value). Each project has resulted in the need to "reinvent the wheel" with no consistent applications of subgrade stabilization with the best decision for the given conditions.

Project Deliverables

1. Subgrade Stabilization Manual for Design and Construction Control
2. Geographical map identifying soil characteristics which are at high risk for subgrade failure



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To Be Determined

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