Abstract
The objective of the study was to compare the permeability and moisture susceptibility characteristics of pavements constructed with Superpave coarse mixtures and Marshall fine graded mixtures. The samples were evaluated in terms of:

• permeability, as measured by Florida DOT’s test procedure using falling head testing apparatus (AAHSTO T283)
• moisture susceptibility, as determined by tensile strength ratio
• stripping potential, as indicated by visual assessment

Results for the laboratory testing generally support the observations and investigations of others that Superpave coarse mixtures are “more permeable” than fine graded mixtures. Further, the analysis undertaken supports the hypothesis that this increased permeability is related to the air void matrix of Superpave coarse mixtures as influenced by gradation characteristics.

Key Words
Pavement permeability
Superpave
Aggregate gradation
Asphalt mix
Air Void

Distribution
Unlimited

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