



Planning & Research Problem Statement

Materials

Problem Title : Longitudinal Joint Density and Permeability in Asphalt Concrete

Problem Statement:

Low density at longitudinal joints causes asphalt pavements to deteriorate more quickly. The low density allows water to enter the pavement section, increasing its susceptibility to stripping. ODOT does not currently have a test method or specification directly targeting a solution to this problem.

The research should detail ways other agencies are dealing with this problem. It should provide test data documenting a representative sampling of densities at and around the longitudinal joint on a representative sampling of asphalt roadways. It should correlate, if possible, field permeability testing with longitudinal joint density. It should recommend a definitive method to perform field permeability tests.

The research should involve a literature search documenting the ways other agencies are dealing with this problem. It should also involve field work and laboratory testing to provide information around which a test method and/or specification could be written.

The field testing should determine the density on top of and around longitudinal joints. Field permeability tests should be performed in the same areas and correlated.

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