TRB TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

Characterization and Prediction of Moisture-Induced Damage in Hot and Warm Asphalt Mixtures

November, 29 2010

Session Duration: 120 Minutes

Moisture-induced damage in asphalt concrete wearing surfaces may have detrimental consequences for the long-term mechanical performance & user safety of pavements. Several aspects of moisture-induced damage remain unknown. As a result, currently used methods to characterize moisture susceptibility are not producing reliable predictions in the field. Additionally, practitioners have concerns & questions regarding the moisture-induced damage performance of warm-mix asphalt mixtures due to the lower mixing & compaction temperatures. This webinar will explore ways to identify dominant material & structural properties contributing to moisture-induced damage. Presenters will discuss improvements to existing techniques, new moisture damage characterization techniques, & novel theoretical & numerical models intended to enhance in-time prediction & understanding of moisture-induced damage in hot & warm asphalt mixtures.

Webinar Agenda:
Introduction – Louay Mohammed, Louisiana State University
Field experience & current treatments – Adam Hand, Granite Construction, Inc.
Material production, mix design & pavement design effects on moisture damage – Mike Anderson, Asphalt Institute
Audience questions & answers, moderated by Louay Mohammed
Available test methods to predict moisture sensitivity of asphaltic mixtures & their reliability – Haleh Azari, American Association of State Highway Transportation Officials
Best practices on mitigation of moisture damage – Gayle King, GHK, Inc.
Audience questions & answers, moderated by Louay Mohammed
Outlook to the future & closure – Niki Kringos, Delft University of Technology