NEWS

TRB
TRANSPORTATION RESEARCH BOARD
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News Release

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PAPER EVALUATING REFLECTIVE CRACK INTERLAYER MIXES
WINS TRB'S K. B. WOODS AWARD

"*Field and Laboratory Evaluation of a Reflective Crack Interlayer in New Jersey"* earned the Transportation Research Board's (TRB's) K. B. Woods Award for its authors Thomas A. Bennert and Ali Maher, of Rutgers University. The award for the winning paper, which will be published in the *Transportation Research Record: Journal of the Transportation Research Board,* No. 2084, will be presented on January 13, 2009, at the Thomas B. Deen Distinguished Lecture and Presentation of Outstanding Paper Awards during the Board's 88th Annual Meeting. The K. B. Woods Award, given annually for the best paper in the area of design and construction of transportation facilities, honors the 19th Chairman of the Board's Executive Committee.

The award-winning paper explores the research conducted both in the field and in the laboratory to evaluate reflective crack relief interlayer (RCRI) mixes as a means of mitigating reflective cracking in composite pavements in New Jersey. Extensive field testing, including falling weight deflectometer (FWD) and weigh-in-motion (WIM) sensors, was used to establish applied loads and the resultant movements in the pavement structure. The resultant field movements provided the testing parameters for the laboratory study. The laboratory study evaluated the reflective cracking potential through bending and expansion/contraction–type

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movements of plant-produced asphalt mixes consisting of different aggregate gradations and asphalt binder types commonly used in New Jersey for Portland cement concrete pavement overlays. Research results indicate that the combination of FWD and WIM data can provide valuable information for establishing realistic parameters for laboratory validation of asphalt mixes. Also, the authors found that there was a benefit to using RCRI mixes that consist of a fine aggregate gradation and polymer-modified asphalt binders to minimize reflective cracking potential.

Thomas Bennert is a Senior Research Engineer for the Center of Advanced Infrastructure and Transportation (CAIT) at Rutgers University. His research interests include mechanistic pavement design, advanced characterization of pavement materials, reflective cracking analysis and mitigation, functional characteristics of pavements, and recycled materials in pavements. He holds B.S. and M.S. degrees from Rutgers University, and is currently completing a Ph.D., also at Rutgers. Bennert is active on TRB's Non-bituminous Components of Bituminous Mixtures and Pavement Rehabilitation Committees.

Ali Maher has served as the Director of CAIT since the center's inception in 1998, where his main responsibilities include growing the center into an active and successful transportation infrastructure resource program operating at the national level. Maher served concurrently as Chair of the Department of Civil Engineering from 1995 to 2007. His research interests include ground improvement, soil dynamics, infrastructure management, nondestructive testing, environmental geotechnology, and new technology vehicles. A member of the editorial board of the ASTM and American Society of Civil Engineers (ASCE) journals, Maher has been honored with several prestigious awards, including AASHTO's Trailblazer Award and ASCE Educator of the Year. He currently serves as TRB's University Representative for Rutgers University. Maher holds bachelor's, master's, and doctoral degrees, all in civil engineering, from the University of Michigan, Ann Arbor.

More than 10,000 policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions are expected to attend the Transportation Research Board (TRB) 88th Annual Meeting, in Washington, DC, January 11-15, 2009. The meeting, held at the Marriott Wardman Park, Omni Shoreham, and Hilton Washington hotels, includes more than 3,500 presentations in 600 sessions and workshops covering all aspects of transportation.

The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. TRB facilitates the sharing of information on transportation practice and policy by researchers and practitioners; stimulates research and offers research management services that promote technical excellence; provides expert advice on transportation policy and programs; and disseminates research results broadly and encourages their implementation. A major focal point of TRB's activities, the Annual Meeting provides an opportunity for transportation professionals from all over the world to exchange information of common interest.

WOODS/88 -more-

Organized in 1920, TRB is a division of the National Academies, which include the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council. The nation turns to the National Academies for independent, objective advice on issues that affect people's lives worldwide.

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