

NEWS



TRANSPORTATION RESEARCH BOARD

500 Fifth Street, NW
Washington, DC 20001

For Immediate Release
News Release

Date: January 9, 2009
Contact: Russell Houston
(202) 334-3252
rhouston@nas.edu

PAPER ON ACHIEVING ENVIRONMENTAL JUSTICE AMONG PROTECTED POPULATION GROUPS WINS 2009 FRED BURGGRAF AWARD

The Transportation Research Board's Fred Burggraf Award, which recognizes excellence in transportation research by researchers 35 years of age or under, will be presented to the authors of the award-winning paper, "*Incorporating Environmental Justice Measures into Equilibrium-Based Network Design*," 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 recipients are Jennifer Duthie and S. Travis Waller, of the University of Texas, Austin. The Burggraf Award, which includes a cash prize, was established in 1966 to stimulate and encourage young researchers to contribute to the advancement of knowledge in the field of transportation. The award was named in honor of Fred Burggraf, who served as TRB's Executive Director from 1951 until his retirement in 1964. The award-winning paper has been published in the *Transportation Research Record: Journal of the Transportation Research Board*, No. 2089.

The award-winning paper proposes a new variation of the user equilibrium discrete network design problem (UE-DNDP) as a solution for achieving Environmental Justice (EJ) or

BURGGRAF/88

-more-

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

equity among protected population groups, such as minority and low-income groups. Nine potential objective functions that focused on maximizing equity of congestion and travel time

were developed, and the performance of each proposed formulation assessed by numerical analysis. The results of the numerical analysis suggest that both pareto-optimal and utility-based approaches can be successfully applied, and that the most effective formulations minimize the difference between the change in congestion or travel time across population groups due to the selected improvement projects.

Jennifer Duthie is on the faculty of the Division of Statistics and Scientific Computation at the University of Texas at Austin. She holds M.S. and Ph.D. degrees in transportation engineering from the University of Texas at Austin, and a B.S. degree in civil engineering, with a minor in operations research and management science, from Cornell University. Duthie's focus is on employing tools from network optimization and statistics to solve pressing policy problems, all within an analytical framework.

S. Travis Waller is an Associate Professor and Fellow of the Clyde E. Lee Endowed Professorship of Transportation Engineering in the Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin. He holds a B.S. degree in electrical engineering from the Ohio State University, and M.S. and Ph.D. degrees in industrial engineering from Northwestern University. Waller's primary research is in transportation network modeling with a focus on uncertain and dynamic system conditions. He is active on TRB committees in the Travel Analysis Methods and Operations groups.

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.

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.

###