



THE TRANSPORTER

A Newsletter From The Center For Integrated Transportation Systems Management



Fall 2011

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University Research Technology Transfer Day

Written by: Masoud Hamedi

The Center for Integrated Transportation Systems Management (CITSM) of the Department of Civil and Environmental Engineering at the University of Maryland organized a one-day demonstration/exhibition of prominent university transportation products, that are developed with US DOT sponsorship, in partnership with the DOT's Research and Innovative Technology Administration (RITA). This event was held on April 6, 2011, in the DOT Headquarters building in Washington, D.C. The purpose of this event was to highlight the accomplishments and show the impact of DOT's college- and university-based research and education programs. In addition, this event highlighted the transfer of technology from the university transportation programs in use at various federal, state and local agencies.

The original idea for this event was conceived during the RITA Administrator, Mr. Appel's visit to CITSM in July 2010. The permission from RITA to organize this event was granted in late December and the original announcement for the event was sent via e-mail on January 12, 2011. A planning meeting was held in the annual TRB meeting in which several of University Transportation Center directors participated. The solicitation for the abstracts of the research to be showcased in this event was sent out on January 31st, 2011. Despite the short notice and the short time window for submission, 57 high quality abstracts were received.

Despite the desire to accommodate all abstracts that were submitted, because of the limited space some tough choices had to be made and therefore, the abstracts were sent for external review. The reviews were double blind and each abstract was reviewed by 3 reviewers. The evaluation criteria

included:

1. Quality and intellectual merit of the research;
2. Significance of contribution to the state-of-the-art and practice;
3. National relevance and potential for national use;
4. Observed or potential impact, and,
5. Relevance to the DOT strategic research directions and research priority areas.

Following the review process, 27 abstracts were selected for presentation in this event. Researchers representing 25 different universities, Federal Highway Administration and Federal Aviation Administration, attended the event and showcased some of the outstanding and high impact research that is sponsored by



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the US Department of Transportation. Six of the projects that were presented in the poster session were also selected for podium sessions in which the researchers shared their experiences in bringing their research to practice. Two of the CITSM projects led by Drs. Mehdi Kalantari Khandani and Gang Len Chang were selected for presentation in this event. Dr. Chang's project was also presented in one of the podium sessions.

The event started by a welcoming address from Mr. Peter Appel who introduced Mr. John Porcari, Deputy Secretary of Transportation, former State of Maryland Secretary of Transportation, and former University of Maryland Vice President for Administration. Following Mr. Porcari's remarks, Mr. Greg Nadeau, Deputy Administrator, Federal Highway Administration spoke and then Dr. Ali Haghani, Chairman of the Department of Civil and Environmental Engineering and the Director of CITSM welcomed the event participants who were university program directors, faculty/staff, involved students, U.S. DOT personnel, state DOT personnel, and other interested parties. This event was open to the media.



From left: Mr. Peter Appel, Dr. Ali Haghani, Mr. Greg Nadeau
More information available on <http://urtttd.umd.edu>

Staff

BIOGRAPHY



KAVEH FAROKHI SADABADI

Mr. Sadabadi is a PhD candidate in the field of transportation at the civil and environmental engineering department of the University of Maryland. He holds two Master of Science degrees from University of Texas at Arlington and Sharif University of Technology in transportation planning and engineering. His main areas of interest are vehicular traffic operations, freeway and arterial traffic monitoring and control. In the past few years, he has submitted his work to the Transportation Network Modeling (ADB30) and Traffic Flow Theory (AHB45) committees of the Transportation Research Board. He has had several presentations during the TRB annual meetings and his work has been published in the TRR journal.

Recently, Mr. Sadabadi has been focused on dynamic vehicular traffic modeling, data fusion, and traffic estimation in the context of short term travel time prediction. He has developed a systematic framework and model to incorporate travel time data into traffic estimation process. Since 2008, he has been actively involved in developing relevant guidelines and algorithms for innovative traffic monitoring technologies such as Bluetooth signature matching.

Simulation Tools for Transportation Analysis and Evaluation

UMD Transportation Seminar Series
Friday, Nov 18, 2011 from 2:30 to 3:30 pm
Pepco Room (1105), Kim Engineering Building

Speaker: Dr. David Yang has a broad range of research, government, and industry experience in transportation, especially in areas related to traffic operations, transportation safety, and Intelligent Transportation Systems (ITS). Dr. Yang joined Federal Highway Administration (FHWA), U.S. Department of Transportation (U.S. DOT) at the beginning of 2008. He is responsible for traffic modeling and simulation research at FHWA's Turner-Fairbank Highway Research Center. David manages multiple research projects that use computer simulation tools to examine topics such as the impact of driver behavior on traffic flow and congestion; the effect of driver decision on traffic operations; and the relationship of driver performance and transportation safety. Prior joining FHWA, David worked in private consulting firms and as a research engineer at U.S. DOT's Volpe National Transportation Systems Center and conducted vehicle safety and driver behavior research.

Dr. Yang has authored/co-authored more than forty journal articles, conference papers, and government reports. David became the chair of TRB's User Information Systems Committee in 2010 and he is also a member of TRB's Traffic Law Enforcement Committee. Additionally, Dr. Yang represents FHWA on TRB's 'Strategic Highway Research Program 2' Technical Coordinating Committee. David serves on the editorial board of the Journal of Intelligent Transportation Systems and was guest reviewer for other technical journals and conferences.

David attended Purdue University and received his Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in the field of civil engineering. lower-income households.



ABOUT CITSM

The Center for Integrated Transportation Systems Management (CITSM) at the University of Maryland College Park was established as a tier I university transportation center in 2008. The goal of the center is the Development of Advanced Technology, Improved Processes, and Enhanced Organizational Structures for the Integrated Management and Operation of Transportation Facilities and Corridors.

The CITSM focuses on the development of tools, processes and institutional relations that foster seamless management and operations of today's transportation infrastructure. Such seamless operations will be derived from concentrating on the overall mission of transportation agencies rather than the narrower objectives of individual institutions and facilities. Integrated operation of the transportation infrastructure as a system rather than a collection of individual resources, offers the potential for significant improvements in system efficiency as measured by reductions in travel time and congestion along with improvements in travel reliability. Integrated system operation will have a positive impact on the nation's economy, safety, air quality and energy consumption.

The theme of the Center is "Integrated Transportation Systems Management." The Center conducts research and provides education and technology transfer related to this theme. The objective of this research is to provide improved mobility and reduced congestion for travelers and shippers using the nation's transportation infrastructure. The emphasis of this work is on the integrated management of the transportation systems at all levels including planning, engineering, and operations. The University of Maryland has selected this theme because of its potential for significantly improving transportation system mobility and reliability, as demonstrated by numerous prior research projects conducted by its faculty and staff. A second, but equally important, objective of the Center is to educate the next generation of transportation engineers and planners with the tools needed for seamless management and operations of today's transportation infrastructure and the deep understanding of the benefits of such a fully integrated system.



**Center for
Integrated Transportation
Systems Management**

1173 Glenn L. Martin Hall
University of Maryland
College Park, MD 20742

Phone: 301.403.2069
Fax: 301.403.4591
www.citsm.umd.edu