

A monthly report on transportation research, education, and outreach activities at the University of Minnesota

MINNESOTANS ACTIVE AT TRB CONFERENCE

A number of Minnesotans made presentations at the annual Transportation Research Board conference last month in Washington, D.C. The conference, which attracted over 5,000 persons, featured the following University presentations:

- "A Statistical Method for Identifying Locations of High Crash Risk to Older Drivers," Professor **Gary Davis** and **Konstantinos Koutsoukos**, Civil and Mineral Engineering
- "Control Emulation Method for Evaluating and Improving Traffic-Responsive Ramp Metering Strategies," Professor **Yorgos Stephanedes**, **Eil Kwon**, and **Kai-Kuo Chang**, Civil and Mineral Engineering
- "Employment Impacts of State Highway Investment along Major Highway Corridors," Professor **Yorgos Stephanedes**, Civil and Mineral Engineering (with **Kostas G. Zografos**, University of Miami)
- "Real-time Urban Traffic Control," Professor **Yorgos Stephanedes**, Civil and Mineral Engineering
- "Comparative Performance Evaluation of Incident Detection Algorithms," Professor **Yorgos Stephanedes**, Professor **Panos Michalopoulos**, and **Athanasios Chassiakos**, Civil and Mineral Engineering
- "Development of an Improved High-Order Continuum Traffic Flow Model," Professor **Panos Michalopoulos** and **Ping Yi**, Civil and Mineral Engineering, and Professor **Anastasios Lyrintzis**, Aerospace Engineering and Mechanics
- "Strategic Management Implications of Intelligent Vehicle/Highway Systems," **Robert Johns**, Center for Transportation Studies

Other presenters from Minnesota were **John Kari** of the Metropolitan Council, who discussed airport planning; **Edward Fleege** of Mn/DOT, who presented research concerning a highway deicing chemical; and **Robert Benke** of Mn/DOT, who presided over a session on neural network applications in engineering. Also, 16 University students attended the TRB meeting with support from CTS. The Center awards stipends to students each year based on criteria related to the students' research and coursework in transportation.

CTS TO HOST SIXTH INTERNATIONAL CONFERENCE ON LOW VOLUME ROADS

The Center, with the help of the Minnesota Department of Transportation, the Local Road Research Board, and several other Minnesota organizations, was selected as the host agency by the Transportation Research Board for the 1995 International Conference on Low Volume Roads. The Finnish National Road Administration will join the Center as co-host, assisting in recruiting papers and publicizing the conference throughout Europe. It is expected that one of the themes of the conference will address how to minimize the impact of the freeze/thaw cycle on low volume roads. By 1995, research results on this topic will be available from Mn/DOT's Minnesota Road Research Project (Mn/ROAD), using the test facility being constructed along I-94 near Monticello. The conference will also address many other engineering, planning, and policy issues facing low volume roads. **Bob Johns** will represent the Center on the TRB conference steering committee, which will begin developing a call for papers this year. The Center will be recruiting papers from Minnesota faculty, county engineers, consultants, and others to ensure a strong showing by Minnesota researchers. The Center is grateful for the active support by Mn/DOT offices, led by **Dick Sullivan** and **Dennis Carlson**, and the Minnesota Local Road Research Board, chaired by **Mike Wagner**, as well as several other individuals on a 22-person planning committee, for their help in the development of the CTS proposal.

SPEAKERS ANNOUNCED FOR CTS CONFERENCE

The Center's third annual conference, to be held May 5-6 at the Radisson Hotel Saint Paul, will include three general sessions with honored guest speakers. The opening plenary session on May 5 will feature **Patricia Waller**, director of the University of Michigan's Transportation Research Institute and a national expert on safety and human factors issues. The luncheon speaker on May 5 will be **Brian Clymer**, administrator of the Federal Transit Administration (formerly the Urban Mass Transit Administration), while the luncheon on May 6 will feature Mn/DOT Commissioner **James Denn**. Further details will be included in the Center's preliminary conference program, which will be mailed with the *March Report*. Also, the Center's winter quarter luncheon is being held later this month (February 13); see the Upcoming Events section for details.

TRANSPORTATION EDUCATION FOCUS GROUPS MEET

Last month the Center and the Continuing Education Office sponsored three focus groups to discuss the education needs of transportation professionals. The meetings were a follow-up to the education survey distributed last fall by the CTS Education Council, chaired by **Jim Newland**. The transportation executives listed below participated in the focus groups and helped identify education needs for new employees as well as training needs for current employees. CTS will use the results of the survey and focus groups to improve transportation education opportunities at the University.

Engineering/Construction: **Dave Koski, Duane Haukebo, Robert Benke, Gene Ofstead, Jim Benschhoff, Chuck Siggerud, Char Zimmer, Jim Schrantz, Dick Sullivan, Mike Gillen**

Logistics/Distribution: **John Winkler, Ron Lifson, Bill Jordan, Bill Smith, Allen Enge, Gerry Brown, Darrell Schierman, Dennis Cavanaugh, Bob Dirckes, Maria Francis**

Planning/Policy: **Peg Reichart, Donn Wiski, Fred Corrigan, Howard Preston, Fred Tanzer, Bob Dietrich, Carl Ohrn, Steve Alderson, Randy Halvorson, Judy Hollander, John Mullan, John Velin**

CTS EDUCATION/EXTENSION PLANS DISCUSSED WITH FEDERAL OFFICIALS

The Center is accepting applications until **February 14** for a new program director position that will manage CTS education and extension programs. Responsibilities for the position, which was advertised in Twin Cities newspapers on January 19, will include directing the Minnesota Technology Transfer (T²) Program sponsored by the Federal Highway Administration (FHWA) and the Local Road Research Board. While in Washington last month for the TRB meeting, **Dick Braun** and **Bob Johns** discussed Center plans with **Janet Coleman** and **Gary White** of FHWA and other T² directors for Federal Region 5. They also heard about potential directions of the T² program as a result of the Intermodal Surface Transportation and Efficiency Act (ISTEA).

USDOT OFFERS INTERNSHIP PROGRAM FOR STUDENTS

The U.S. Department of Transportation is seeking applications from qualified students to participate in the "Spring and Summer Transportation Intern Program for Diverse Groups." This program will offer interns a ten-week agenda of research, work experience, and travel intended to expose students to the field of transportation. While open to all students, the program is designed to attract and promote the entry of women and members of minority groups, who traditionally have been underrepresented in the transportation professions. Each intern will spend several weeks working at a selected transportation agency in Washington, D.C., and also visit transportation facilities in several major cities. Five students will be selected for the spring program (April 6 to June 12), and ten will be chosen for the summer program (June 8 to August 14). Interns will receive a \$3,500 stipend plus travel expenses. To obtain an application, students may stop by the Center offices or call (612) 626-1077. Applications must be postmarked no later than **February 28**.

IVHS AMERICA PLANS FOR ANNUAL MEETING IN MAY

The IVHS AMERICA annual meeting in Newport Beach, California, May 17-20, 1992, is planned to provide a unique showcase and a one-stop learning experience for those determining the future of Intelligent Vehicle/Highway Systems around the world. A total of 24 technical sessions are scheduled that will inform participants of the most significant IVHS accomplishments in the past year and highlight the most important emerging trends and issues, in the United States and abroad. The meeting will also feature a number of exhibits and demonstrations. The program planning committee, including **Bob Johns** of CTS and **Gene Ofstead** of Mn/DOT, met during the week of TRB to review the sessions being planned. The final program will be approved by the IVHS AMERICA Coordinating Council, chaired by **Dick Braun** of CTS. For more information about the meeting, contact IVHS AMERICA at (202) 857-1202.

HUMAN FACTORS LABORATORY HOSTS TOUR

Last month Professor **Peter Hancock**, director of the Human Factors Research Laboratory, organized and conducted a tour of the facility for officials from several organizations. Participants included **Robert Nicholson** of the National Highway Traffic Safety Administration; **James Denn** and **James Wright** of Mn/DOT; and **Tom Boerner** of the Minnesota Department of Safety. The laboratory is an important component of Minnesota Guidestar and has attracted considerable attention lately, including a tour in December by several members of the Senate Transportation Safety Subcommittee.

CTS EVENTS/FACULTY ACTIVITIES

The Center's careers series resumed last month with a presentation by **Steven Alderson**, supervisor of transportation systems planning at the Metropolitan Council. The first faculty seminar of the quarter featured Professor **Gary Davis** of Civil and Mineral Engineering, who spoke on the "Solution of the Continuous Equilibrium Network Design Problem." An additional transportation seminar last month, co-sponsored by CTS and the Human Factors Research Laboratory, featured Professor **Paul Green** of the University of Michigan's Transportation Research Institute. Green discussed "IVHS: In-Vehicle Navigation Systems Research." In other news, Davis and Professor **Yorgos Stephanedes**, also of Civil and Mineral Engineering, were awarded a two-year, \$150,000 grant from the National Science Foundation to conduct research on "Stochastic, Dynamic Traffic Assignment and Real-Time Network Control." Davis was also recently appointed to the Transportation Research Board Task Force on Statistical Methods in Transportation, and to the Institute of Transportation Engineers' Committee to Review Statistical Evaluation of Traffic Safety Studies.

UPCOMING TRANSPORTATION EVENTS

If you have an event you would like publicized, please call **Pam Snopl** of the Center at (612) 624-0841. For other Center information, please call (612) 626-1077.

- Feb. 6 CTS Transportation Careers Series--a special session covering graduate engineer positions and summer employment opportunities at Mn/DOT; students may also register for one-on-one information interviews. **Darryl Durgin**, Assistant Commissioner, Minnesota Department of Transportation, 12:05-1:10 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Contact the CME advising office at (612) 625-9581 or Mn/DOT at (612) 296-1719.
- Feb. 13 Center for Transportation Studies Winter Quarter Luncheon and Speech: Professor **Mark Haselkorn**, University of Washington, "Understanding Commuter Behavior: Helping the Public Deal with Traffic Congestion." Radisson Hotel Metrodome, Minneapolis, 12:00-1:30 p.m. Contact CTS at (612) 626-1077.
- Feb. 20 CTS Faculty Seminar: "Strength Evaluation of Existing Bridges," by **Roberto Leon**, Civil and Mineral Engineering, 3:35-4:25 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Open to the public. Contact CTS at (612) 626-1077.

- Feb. 25-26 "Mainstream Minnesota Bicycling," 1992 Minnesota State Bicycle Conference, Saint Paul Hotel. Featuring **Josh Lehman**, national bicycle program manager for the USDOT. Call **Shawn Chambers** at (612) 296-1605.
- Feb. 27 CTS Transportation Careers Series--transportation leaders speaking to U of M students on career opportunities. **Robert Orthmeyer**, President, Braun Intertec Pavement, Inc., 12:05-1:10 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Contact CTS at (612) 626-1077.
- March 2-4 Low Volume Roads and Streets Workshop, La Quinta Inns Hotel, Arlington, Tex. Sponsored by the ASCE Highway Division, co-sponsored by the FHWA and USDA/Forest Service. Contact ASCE Conference Coordinator **Jodi Brill** at (212) 705-7350.
- March 5 CTS Faculty Seminar: "Ultra-Fine Atomization of Methanol for Spark Ignition Engines in Cold Weather Applications," by **David Kittelson**, Mechanical Engineering, 3:35-4:25 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Open to the public. Contact CTS at (612) 626-1077.
- March 12 CTS Faculty Seminar: "Exploring the Role of Computer Technologies as Mechanisms for Managing a Dispersed Work Force in Minnesota," by **Gerardine DeSanctis**, Information and Decision Sciences, 3:35-4:25 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Open to the public. Contact CTS at (612) 626-1077.
- March 20 "Parking in the Park," Second Annual Conference on Developing Environmentally Sound and Aesthetically Practical Parking Lots, Minnesota Landscape Arboretum, Chanhassen. Sponsored by the Minnesota Landscape Arboretum and the Minnesota Chapter of the American Society of Landscape Architects. Contact **Carol Spandl** at (612) 443-2687.
- May 5-6 CTS Third Annual Transportation Research Conference, Radisson Hotel St. Paul. Contact **Lori Graven** at (612) 625-9023.
- May 17-20 IVHS America Annual Conference, Marriott Newport Beach, Newport Beach, Calif. Contact **Bonnie Jessup** of IVHS AMERICA at (202) 857-1202.

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TRANSPORTATION
STUDIES

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