

JULY REPORT

1995 A monthly report on transportation research, education, and information/outreach activities at the University of Minnesota

LOW-VOLUME ROAD CONFERENCE ATTRACTS OVER 350 PEOPLE

Over 350 persons from the U.S. and 18 foreign countries attended the TRB Sixth International Conference on Low-Volume Roads, held in Minneapolis on June 25-29. CTS hosted the event, along with the Finnish National Road Administration (FinnRA), the Transportation Association of Canada, the Minnesota Department of Transportation (Mn/DOT), and the Minnesota Local Road Research Board (LRRB). **Michael Wagner**, Nicollet County engineer, was a member of the conference steering committee, and **Bob Benke** of Mn/DOT was a committee liaison. Welcoming remarks were given by **Bob Johns**, CTS acting director; **James Denn**, Mn/DOT commissioner; and **Richard Hansen**, chair of the LRRB. Minnesotans gave the following presentations:

- "Asphalt Pavement Crack Filling in Northern Minnesota," **Gary Bruggeman**, Red Lake County; **Steve Voigt**, Marshall County; **Charles Magnusson**, Mn/DOT
- "Bituminous Pavement Design and Construction for Low-Volume Roads in Cold Climates," **Alan Forsberg**, Blue Earth County
- "Re-Evaluation of Seal Coating Practices in Minnesota," **David Janisch**, Mn/DOT
- "Application of Technology Transfer Principles to the Minnesota Technology Transfer Program," **Cheri Trenda**, CTS
- "Overview of the Mn/ROAD Pavement Structure Research Program," **David Johnson**, Mn/DOT
- "Characterization of Bituminous Materials at Mn/ROAD," **David Newcomb**, Civil Engineering
- "Lightweight Fill Materials for Road Construction," **Guy Kohlhofer**, Braun Intertec Corporation
- "Stop Versus Yield Signs on Low-Volume Rural Roads," **Dave Daubert**, Search Engineering
- "Research Implementation—Putting Research into Practice," **Michael Marti**, Braun Intertec Corporation
- "Waste Products in Highway Construction," **Chunhua Han** and **Ann Johnson**, Braun Intertec Corporation
- "Watershed Management with Respect to Low-Volume Road Drainage Detention Structures," **Thomas Behm**, Mn/DOT
- "Current and Future Perspectives of Low-Volume Roads Research," **Gene Skok**, Braun Intertec Corporation

Other highlights included a field trip to the Minnesota Road Research Project (Mn/ROAD), which included stops at the FinnRA Emulsion Gravel Mix Project and the Wright County Public Works facility; and tours of the Center's ITS LABORATORY and Mn/DOT's Traffic Management Center and Materials Research Laboratory. CTS is grateful to **Richard Sullivan** of Mn/DOT, **Wayne Fingalson** of Wright County, and FinnRA staff for their leadership in coordinating the field trip.

UNIVERSITY FORMS NEW SEARCH COMMITTEE FOR CTS DIRECTOR

Mark Brenner, acting vice president for research and acting dean of the Graduate School, has announced membership for a second CTS director search committee. Professor **Tom Scott**, director of the University's Center for Urban and Regional Affairs, will chair the committee. Members are: **John Adams**, Geography; **Sally Evert**, Metropolitan Council; **Peter Fausch**, Strgar-Roscoe-Fausch; **Donald Harper**, Carlson School of

Management; **A. Scheffer Lang**, CTS Executive Committee; **Laurie McGinnis**, CTS; **Panos Michalopoulos**, Civil Engineering; **Herb Mohring**, Economics; **Steve Novak**, Minnesota Senate; **Gene Ofstead**, Mn/DOT; **Mike Robinson**, Mn/DOT; and **Charles F. Louis**, Office of Vice President for Research and Graduate School. The committee held its first meeting in June. The deadline for applications is **September 29, 1995**. During the search **Gary DeCramer**, senior fellow with the Humphrey Institute, has been asked by Acting Director **Bob Johns** to assist him in developing programs for policymakers. DeCramer began a part-time appointment with CTS on June 1.

EMISSIONS SYMPOSIUM THIS MONTH; RURAL ITS CONFERENCE IN SEPTEMBER

The Center's symposium titled "Vehicle Emissions and Air Quality Symposium: A Forum on Prediction, Assessment, and Public Policy" will take place at the Radisson Metrodome in Minneapolis on July 26-28. Call **Catherine Ploetz** at (612) 626-2259 for a brochure or other information. Brochures and exhibitor information are also available for the 1995 National Rural Intelligent Transportation Systems (ITS) Conference, "Helping You Get There," which will be held in Duluth on September 10-12. Contact **Lori Graven** at (612) 625-9023.

IN MEMORIAM: MICHAEL EHRLICHMANN

Michael Ehrlichmann, former member of the Center's Executive Committee and Advisory Board, died in May. Ehrlichmann was chair of the Regional Transit Board from 1989 to 1993. He had also served as president of the United Handicapped Federation, vice chair of the Metropolitan Center for Independent Living, and chair of the State Council on Disability, where he helped write and gain passage of initiatives that made Minnesota a leader in disability rights and protections. CTS deeply regrets his passing.

RESEARCHERS DEVELOP PRINCIPLES FOR CREATING BUSLINE AMENITY CORRIDORS

Research Fellow **Mary Vogel**, Professor **Roger Martin**, and Associate Professor **Lance Neckar** of Landscape Architecture recently completed a project on "Busline as Amenity Corridor: Urban Design to Enhance Personal Safety and Increase Transit Use." The project's objective was to create and identify strategies to improve the current bus system and transform bus routes into identifiable, memorable "amenity corridors." The researchers defined a bus amenity corridor as a recognizable, pedestrian-friendly environment along a bus line that knits the community together and provides a framework for community development and redevelopment. As part of their project they studied a bus corridor in the metro area that runs from Minneapolis to Edina, as well as seven types of districts found along the corridor. Each district represents a type of physical environment found elsewhere in the metro area: for example, Uptown represents a regional shopping center and entertainment district; 50th and France represents a suburban downtown. The results of the study are principles describing desired physical characteristics of a bus amenity corridor that could be considered when building or enhancing a corridor. The Regional Transit Board sponsored the project. To obtain a copy of the final report, call CTS at (612) 626-1077.

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CITIZEN JURY VOTES AGAINST CONGESTION PRICING

A majority of a 24-member citizen jury of Twin Cities metro-area residents recently voted against congestion pricing in an exercise conducted by the Jefferson Center for New Democratic Processes. The "Citizens Jury on Traffic Congestion Pricing" was part of a number of citizen outreach efforts of the Humphrey Institute's independent national study on congestion pricing. It will also function as one component of the Minnesota Legislature-directed Mn/DOT and Metropolitan Council study on using congestion and road pricing to finance transportation projects. Jury members felt that congestion pricing would shift traffic to local streets and be an unpopular and expensive way to collect a tax. They also felt that improving bus service and encouraging car pools is the best way to reduce congestion. In response to the jury, Professor Emeritus **Herbert Mohring** and doctoral student **David Anderson** of the Department of Economics defended congestion pricing in the June 20 Minneapolis *Star Tribune*. They maintain that through tolling, enough revenues would be generated to compensate those who lose from congestion pricing, with substantial funds left over for road and transit improvements. Mohring and Anderson are conducting research on congestion pricing through the Center's research program.

HUMAN FACTORS LAB COMPLETES NEW WRAPAROUND SIMULATOR

The University's Human Factors Research Laboratory (HFRL), directed by Professor **Peter Hancock**, has completed construction of a wraparound driving simulator. The simulator is a driving research apparatus measuring 19 feet across and 12 feet high. The 360-degree environment surrounds a 1985 Acura Integra and displays a high-fidelity driving simulation generated with a Silicon Graphics ONYX computer. Research topics currently being studied with the simulator include collision avoidance, time-to-collision, visual sensitivity, perceptual functioning, and the influences of environmental parameters on the modulation of driver speed. The HFRL lab and the Center's ITS LABORATORY have recently hosted a number of visitors, including **Kristen Hoeschler** from U.S. Rep. **Martin Sabo's** office; **LaRon Smith** from the Los Alamos TRANSIM project; **Tom Urbanik** of the Texas Transportation Institute; and representatives from Penn State, ITS Minnesota, and US WEST.

MN/DOT AND CTS INITIATE TRAINING PROGRAM FOR MN/DOT RESEARCHERS

Mn/DOT's Office of Research Administration (ORA), in cooperation with CTS, is designing a "Researcher Training Series" to improve the knowledge, skills, and abilities of those managing or conducting Mn/DOT research. The program is a series of training modules designed to help meet the research support needs resulting from the growth in Mn/DOT's research program. A program design team has met to define the scope and components of the series, identify training priorities, and examine alternative delivery formats. Team members are **Laurie McGinnis** and **Cheri Trenda** of CTS; **Micky Ruiz** and **Dave Johnson** of ORA; and staff from several Mn/DOT areas—**Rick Beck** (Traffic Research), **George Cochran** (Physical Research), **Lonnie Cowerd** (Employee Development), **Ed Fleege** (Duluth District), **Dave Janisch** (Materials Research), and **Paul Keranen** (Maintenance Research).

ITS AMERICA ISSUES CALL FOR PAPERS

The Intelligent Transportation Society of America invites all interested parties to submit papers on ITS to be considered for publication and presentation at the Sixth Annual Meeting of ITS America. The meeting will occur on April 15-18, 1996, in Houston. Subjects of interest include ITS benefits and market opportunities; technology developments and applications, test and evaluation results and deployments; and resolutions to

institutional, legal, environmental, societal, and safety issues. The paper submission deadline is **August 31**. For further information or a copy of the call, contact ITS America at (202) 484-4847; fax (202) 484-3483.

CTS SPRING EVENTS SERIES CLOSES; STUDENT JOB LISTING ATTACHED

The Center's spring events series closed with several presentations. Two CTS Faculty Seminars were held: **Dennis Foderberg** of the CTS/ITS Institute and **Olu Olofinboba** of the Human Factors Research Laboratory presented "Wraparound Driving Simulator for ITS"; Professor **Mark Snyder** of Civil Engineering presented "Development of New Criteria for Concrete Aggregate Durability Testing in Minnesota." The Careers Series ended with presentations by **Dennis Carlson**, vice president in transportation engineering at BRW, Inc.; **Michael Eastling**, Richfield city engineer; and **Richard Wolters**, director of engineering/training with the Minnesota Asphalt Pavement Association. In student news, CTS again includes with this *Report* a listing of student job/internship opportunities in transportation-related organizations. If your organization has student job openings, send postings to CTS to be included in upcoming issues of the *Report*.

UPCOMING TRANSPORTATION AND RELATED EVENTS

If you wish to publicize an event, call **Pam Snopl**, Center editor, at (612) 624-0841, or fax your announcement to (612) 625-6381. For other Center information, please call (612) 626-1077.

- July 9-11 1995 Minnesota Regional Railroad Association Annual Conference, Park Inn, Duluth. Invited speakers include U.S. Rep. **James Oberstar** and Mn/DOT Commissioner **James Denn**. Call **Rachel Christensen**, (612) 864-7201.
- July 9-12 "Change and Progress: A New Vision for Public Transportation," APWA and AASHTO 1995 State Affairs Conference, Minneapolis Hilton and Towers. Call **Rich Weaver**, (202) 898-4109.
- July 12 First Open-Invitation Luncheon of ITS Minnesota, Minnesota History Center, St. Paul. Call **Dan Berler**, (612) 686-6321.
- July 19 "Privatizing Public Works Services" Teleconference, Duluth, Rochester, Morris, and the Twin Cities. Host: Minnesota Public Works Association, in partnership with Minnesota T² and the Minnesota Local Road Research Board. Contact **Bev Ringsak**, (612) 625-6689.
- July 26-28 CTS Vehicle Emissions and Air Quality Symposium: A Forum on Prediction, Assessment, and Public Policy, Radisson Metrodome, Minneapolis. Cosponsors: Federal Highway Administration, Federal Transit Administration, Environmental Protection Agency. Call **Catherine Ploetz**, (612) 626-2259.
- July 30-Aug. 2 Pacific Rim TransTech Conference, in association with the Sixth International Conference on Vehicle Navigation and Information Systems, Washington State Convention Center and Trade Center, Seattle. Call **Vicky Hoffman**, (206) 448-2524.
- Sept. 10-12 "Helping You Get There": 1995 National Conference for Rural ITS, Holiday Inn, Duluth. Cosponsors include the Center's ITS Institute and Minnesota Guidestar. Call **Lori Graven**, (612) 625-9023.
- Oct. 11-12 102nd Annual Meeting of the Minnesota Transportation Alliance, Radisson Hotel, St. Paul. Contact **Jerry Anderson**, (612) 659-0804.
- Oct. 24-25 21st Annual Minnesota Public Transit Conference, Sheraton Metrodome, Minneapolis. Call **Lori Graven**, (612) 625-9023.