

# MARCH REPORT

March 1, 1992

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

## CONFERENCE BROCHURE AND REGISTRATION FORM AVAILABLE

The preliminary conference program and registration form for the Center's Third Annual Transportation Research Conference on May 5-6 are enclosed with this issue of the *Monthly Report*. The conference will open with a plenary session featuring Patricia Waller, director of the University of Michigan's Transportation Research Institute. Other highlights are two luncheon presentations--the first on May 5 with Brian Clymer, administrator of the Federal Transit Administration, and the second on May 6 with Mn/DOT Commissioner James Denn. The conference will also feature over 75 presentations arranged in a concurrent session format, with five highlighted sessions on the following topics: "Aviation and Minnesota's Economy," "Minnesota Guidestar IVHS Implementation," "Regional Transportation Planning," "Mn/ROAD Research Update," and "The New Trip to Work." For further details contact Lori Graven at (612) 625-9023.

## HASELKORN LUNCHEON ATTRACTS OVER 150

Over 150 persons attended the Center's winter quarter luncheon on February 13 featuring Professor Mark Haselkorn, chair of the Department of Technical Communication at the University of Washington, who spoke on "Understanding Commuter Behavior: Helping the Public Deal with Traffic Congestion." Haselkorn described how Advanced Traveler Information Systems (ATIS)--using dedicated radio/cable stations, changeable highway signs, and other means--can help commuters avoid (and thus reduce) traffic congestion. He based his remarks on the development of a real-time, interactive ATIS for the Seattle area called *Traffic Reporter*. An important element of *Traffic Reporter*, he said, was the detailed survey his research team distributed to 15,000 Seattle commuters to gauge their needs and behavior. The resulting database was used to estimate how many drivers might modify their commute based on traffic information, and then shape *Traffic Reporter* to meet their needs. Sixteen percent of the survey respondents indicated a willingness to alter their commute prior to departure, a figure that, Haselkorn stressed, may sound small but if realized could roughly halve the number of traffic delays. A brief paper describing *Traffic Reporter* is available by calling the Center at (612) 626-1077.

## HUMPHREY INSTITUTE HOLDS FORUM ON TRANSPORTATION AND THE ECONOMY

Last month the Humphrey Institute of Public Affairs held a half-day forum on a federally funded initiative titled "Transportation and Economic Development in the Upper Midwest--New Models for Federal, State, and Local Cooperation." Co-sponsored by CTS, the forum was the first policy consultation of this initiative, which is directed by Lee Munnich of the Institute's State and Local Policy Program. The forum featured an introduction by G. Edward Schuh, dean of the Institute, as well as presentations by Thomas D. Larson, administrator of the Federal Highway Administration (see next article), and Arthur Rolnick, senior vice president of the Federal Reserve Bank of Minneapolis. Also included was a panel discussion with Mary Anderson, chair of the Metropolitan Council; Senator Gary DeCramer, chair of the Senate Transportation Committee; Darryl Durgin, deputy commissioner of Mn/DOT; Allen Housh, vice president of transportation at Cargill; and Dick Braun of CTS. Dennis Cavanaugh, retired CEO of Soo Line Railroad and former member of the CTS Executive Committee, provided closing remarks.

## LARSON CALLS FOR STRATEGIC TRANSPORTATION INVESTMENTS

FHWA administrator **Thomas Larson**, the keynote speaker at the Humphrey Institute consultation, gave his perspective on the new Intermodal Surface Transportation Efficiency Act (ISTEA). He noted that a driving force behind the Act is the increasing realization by Congress that investment in public infrastructure will raise U.S. productivity. Transportation is at the heart of many issues, more so than ever before, he declared, and transportation professionals will find many opportunities. However, he cautioned that they will also face challenges in finding public resources, and will need to make public investment decisions strategically. Larson described how ISTEA brings a new dimension of communication between federal and state governments, with new roles and expanded flexibility, and with the burden of choice (e.g., for highway versus transit decisions) on local governments. He called on universities to respond to these changes by training transportation professionals with new skills and by helping to generate advanced technology through research and development programs. He also emphasized the need for involvement of the private sector in determining the strategic investments needed for the public infrastructure.

## MINNEAPOLIS TRANSPORTATION MANAGEMENT ORGANIZATION SUPPORTED

CTS has joined the Center for Urban and Regional Affairs (CURA) in supporting the staffing of the Transportation Management Organization (TMO) that is being developed in downtown Minneapolis. CTS and CURA will fund a part-time graduate student, who will help set up and staff the TMO. Located on the skyway system, the TMO will be an information resource for commuters. Plans are being made for making available up-to-date information on transit schedules, highway conditions, and other factors that affect people's transportation decisions. The TMO, led by **Glenn Olsen**, is being developed by the Downtown Business Council, the City of Minneapolis, and the Regional Transit Board. In the future, it will be considered as a site for implementing advanced traveler information systems that will be developed by Mn/DOT, the RTB, and MTC, as part of the Guidestar intelligent vehicle/highway systems program. **Mike Monahan**, Minneapolis traffic engineer, has stated that the city is also looking at other sites to disseminate travel information.

## PLANNING BEGINS FOR TRANSPORTATION EXECUTIVE COURSE

The Center has established a task team to work on the development of a one-week course for transportation executives. The Executive Development Center of the Carlson School of Management will assist CTS in developing and administering this course. Task team members include **Randy Halvorson**, **Bob Johns**, **Connie Kozlak**, **Sue Muehlbach**, **Don Raisanen**, **Karl Rasmussen**, **Steve Theis**, and **Glen Van Wormer**. **Bill Scheurer** and **Sue Holmes** from the Executive Development Center are facilitating the course development. This course will deal with societal trends, emerging issues for transportation, organizational management, and strategic leadership. It will focus on transportation from the public sector viewpoint but is expected to deal with many issues that face both the public and private sectors. The first course is tentatively scheduled for November 2-6, 1992. More information will be available in the coming months.

## NATIONAL IVHS PLANS BEING DEVELOPED

**Gene Ofstead**, assistant commissioner of Mn/DOT, and **Dick Braun**, Center director, spent two days in Washington D.C. with a select group of ten IVHS AMERICA officials and Federal Highway Administration (FHWA) staff reviewing FHWA's proposed program for IVHS for 1992 and 1993. The major emphasis will be on critical corridors and other corridors where various aspects of IVHS will be demonstrated. The IVHS AMERICA Coordinating Council, chaired by Braun, also met in February to review a draft of its strategic plan, which the USDOT will use in its report to Congress. A demonstration of the Orlando TravTek project, which involves in-vehicle navigation systems, also took place at this meeting. In this joint venture, General Motors has equipped 100 Oldsmobile Toronados with computer-driven maps, automatic location systems, audio systems,

and routing software to guide travelers to their destinations. Some 6,000 volunteer drivers--primarily AAA members--will use the Toronados to test the public's acceptance of advanced traveler information systems. Orlando traffic engineers will share data and evaluate the project's impact on travel.

### GUIDESTAR EXECUTIVE COMMITTEE HEARS FEDERAL AND STATE UPDATE

The Minnesota Guidestar Executive Committee, chaired by Mn/DOT Commissioner **Jim Denn** and co-chaired by **Dick Braun**, met on February 18 to discuss state and federal directions in IVHS. **George Schoene** from FHWA in Washington D.C. presented initial plans for using the IVHS funding available from the new transportation act. **Gene Ofstead** and **Jim Wright** of Mn/DOT reviewed several projects being planned by the Guidestar Steering Committee, and presented ideas on the organizational structure that will be used for the multiple agencies and organizations involved in Guidestar. There was significant discussion and interest by Executive Committee members **Mary Anderson**, **Mike Christenson**, and **Mike Ehrlichmann** about the possibilities IVHS offers for improving transit systems.

### CENTER PARTICIPATES IN LCMR PROPOSALS

Last month the Center assisted faculty from several departments in developing and submitting eight proposals to the Legislative Commission on Minnesota Resources (LCMR). The LCMR had issued a Request for Proposals listing 53 priority funding strategies designed to help maintain and enhance Minnesota's natural resources. Researchers were asked to direct their proposals towards a specific priority strategy. Three researchers submitted proposals that address an energy strategy--Professors **David Kittelson** and **David Hofeldt** of Mechanical Engineering, on reducing emissions and increasing energy efficiency; and Professor **Barbara Kanninen** of the Humphrey Institute, on innovative transportation programs. Professor **David Newcomb** of Civil and Mineral Engineering submitted a proposal that addresses a mineral resources strategy for concrete aggregate; and Professor **Cesar Farell** of Civil and Mineral Engineering submitted another on land use and environmentally sensitive development strategies. The Center will work with these researchers on agency cooperation, outreach, and technology transfer activities. The Commission will make its funding recommendations to the Legislature by August 1992 for the estimated \$29 million in research funding that will be available for the biennium ending June 1995.

### REGISTRATION FOR SPRING TRANSPORTATION COURSES IN PROGRESS

Registration is now in progress for spring quarter transportation courses offered through the University's day school and Extension Office. The last day to register without paying a late fee is March 18; classes begin March 30. Two courses sponsored by the Center are being offered: Traffic Planning and Import Analysis (CE 5099), through the Department of Civil and Mineral Engineering, and a Transportation Seminar/Workshop (PA 5293), through the Humphrey Institute of Public Affairs. Professor **Gary Davis** of Civil and Mineral Engineering will teach the Site Analysis course on Tuesday and Thursday evenings from 4:40-6:30 p.m., and the Transportation Workshop will be taught by guest lecturers from various transportation professions on Wednesdays from 7:00-9:30 p.m. For registration information contact the Extension Office at (612) 625-3333.

### FACULTY ACTIVITIES

Professor **Raymond Sterling**, director of the Underground Space Center and president of the Minnesota section of the American Society of Civil Engineers (ASCE), hosted a special transportation presentation at the January ASCE meeting. The honored speaker was **Jack Lemley**, CEO of Transmanche-Link, the design/build consortium for the English Channel Tunnel, who discussed "The Channel Tunnel: Its Management and Impact on European Transportation." Many local transportation officials were on hand to hear Lemley describe how the \$14 billion

tunnel--which houses the most complex rail system in the world--will increase the efficiency of Europe's transportation system while reducing pollution. In February CTS Director Dick Braun made a presentation titled "Intelligent Vehicle/Highway Systems (IVHS)--A Role for Mechanical Engineers," for the Mechanical Engineer Graduate Seminar Program. The seminar was broadcast over the University's UNITE closed-circuit TV system to an overflow classroom and several local industries.

## CTS EVENTS

The Center held two careers presentations last month, the first featuring Darryl Durgin, deputy commissioner of Mn/DOT. Durgin's remarks served as the introductory session to an annual program in which Mn/DOT representatives hold one-on-one informational interviews with students to discuss Mn/DOT graduate training and summer employment opportunities. This year over 40 students participated in the program. A second careers presentation featured Robert Orthmeyer, president of Braun Intertec Pavement, Inc. In addition, a faculty seminar was given by Professor Roberto Leon of Civil and Mineral Engineering, who discussed "Strength Evaluation of Existing Bridges."

## UPCOMING TRANSPORTATION EVENTS

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

- 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 16-18 Conference on Strategic Management in Transportation Agencies, Sheraton Tampa East Hotel, Tampa, Fla. Sponsored by the Transportation Research Board Strategic Management Committee. Contact Reggie Gillum of TRB at (202) 334-2382.
- March 19 "Improving Quality and Productivity in the Logistics Process," Council of Logistics Management Twin Cities Roundtable Seminar, Holiday Inn International Airport, Bloomington. Featuring Larry J. Matthews, co-founder, Zytec Corp., and recipient of the 1991 Malcolm Baldrige Quality Award. Contact Carl Glotz at (612) 937-7816 or Bernard Madej at (612) 937-8500.
- 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 8 "The Quality Imperative," University of Minnesota Institute of Technology "Invents Tomorrow" Seminar Series. Featuring sessions at the Minneapolis Convention Center, followed by a keynote dinner presentation by Dr. Joseph Juran, founder of the Juran Institute, at the Minneapolis Marriott City Center. For further details contact Tom Clancy or Deborah Condon at (612) 374-1104; to register, call 626-1800.
- May 17-20 IVHS AMERICA Annual Conference, Marriott Newport Beach, Newport Beach, Calif. Contact Bonnie Jessup of IVHS AMERICA at (202) 857-1202.
- May 20-22 "Transportation: Opportunities for Economic Growth," Women's Transportation Seminar 1992 National Conference, Boston Park Plaza Hotel and Towers, Boston. Contact Helen Hall at (202) 223-9669.