

MARCH REPORT

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

CENTER CONFERENCE BROCHURE AND REGISTRATION FORM AVAILABLE

The brochure and registration form for the Center's First Annual Transportation Research Conference on May 2-3 is enclosed with this *Monthly Report*. The conference will open with an introduction by University of Minnesota President **Nils Hasselmo**, followed by a series of concurrent technical sessions on various transportation issues and problems. Approximately 60 presentations will be made over the two-day conference. The luncheon presentation on May 3 will feature **David Forkenbrock**, director of the Public Policy Center at the University of Iowa, who will discuss the relationship between highway investments and economic growth. The conference will conclude with a panel discussion facilitated by Center Director **Dick Braun** on "Transportation Research: Who Conducts It and Why?" This panel discussion will include short presentations by **Robert Holt**, dean of the University Graduate School; **Eugene Ofstead**, assistant commissioner, Mn/DOT; **Dennis Cavanaugh**, former president and CEO, Soo Line Railroad; **Steven Novak**, Minnesota state senator; and **Curtis Johnson**, executive director of the Citizens League.

UNIVERSITY OFFERS SIX \$10,000 GRADUATE TRANSPORTATION FELLOWSHIPS

Through its newly created Institute on Advanced Transportation Systems, the Center for Transportation Studies will offer six \$10,000 graduate fellowships to students emphasizing transportation in their studies. The Advanced Institute, formed as part of the USDOT University Transportation Centers Program, will seek to facilitate an interdisciplinary education for graduate students within three University disciplines: civil engineering, management, and public affairs/planning. To be eligible for the fellowships, students must be accepted in one of the degree programs offered through the Department of Civil and Mineral Engineering, the Humphrey Institute of Public Affairs, or the Carlson School of Management, and must demonstrate an interest in pursuing coursework and research with a strong emphasis in transportation. For more information on the fellowships, contact **Amy Vennewitz** of the Center at (612) 625-3019.

OVER 110 ATTEND DEGROVE LUNCHEON

The Center's winter luncheon on February 15 featured **John DeGrove**, director of the Joint Center for Environmental and Urban Problems, Florida Atlantic and Florida International Universities, who spoke on "Florida's Adventures in Land Use Planning." DeGrove defined growth management not as "no growth" or "slow growth" but as rational planned growth that can benefit both the economy and the environment. Florida's comprehensive planning act, passed in 1985, requires localities to submit land use plans to the state that are consistent with plans of other localities and compatible with projected transportation capabilities. Funding sources for the level of growth must also be specified. The state has rejected half of the plans reviewed so far, many because of transportation inconsistencies. Negotiations are then held to forge compliance agreements. DeGrove believes the system is working well and holds promise for addressing additional issues such as affordable housing. He describes this system in a paper titled "Consistent, Concurrent, Compact: Florida's Search for a Rational Growth Management System"; to obtain a copy, call the Center at 626-1077.

PROFESSIONALS HEAR ABOUT FLORIDA GROWTH MANAGEMENT TECHNIQUES

In his visit to the Twin Cities, **John DeGrove** met with a number of local transportation professionals to discuss the intricacies of Florida's initiatives in growth management. The Center organized a session with University representatives **Ollie Byrum** of the Center for Urban and Regional Affairs and **Barbara Lukerman** of the Humphrey Institute; **Steve Alderson**, **Emil Brandt**, and **Carl Ohrn** of the Metropolitan Council; **Judy Hollander** of the Regional Transit Board; **Judy Orchard** of Minnesota Rideshare; and **Barbara Senness** of Improve 494. The group's discussion centered on Florida's recent growth management legislation. DeGrove stressed the need for the state to provide adequate funding to local governments to implement any requirements included in a growth management program.

CENTER RECEIVES 33 TRANSPORTATION RESEARCH PROPOSALS

University of Minnesota faculty, representing 22 disciplines, submitted 33 proposals in response to the Center's annual Request for Transportation Research Proposals. The request sought proposals that addressed five research issue areas (distributed with the January *Monthly Report*), as identified by the Center's Advisory Board and Executive Committee. A seven-member technical review committee will screen the proposals and make recommendations to the Center's Executive Committee, which will select projects for funding. Members of the technical review committee are **John Adams**, Geography Department; **Alan Ek**, Forest Resources Department; **Matthew Huber**, retired, Civil and Mineral Engineering; **Gary Scudder**, Carlson School of Management; **Robert Benke**, Mn/DOT; **Randall Erickson**, 3M Company; and **Carl Ohrn**, Metropolitan Council.

HUMAN FACTORS RESEARCH ON DRIVING OF THE ELDERLY

A report by Professor **Peter Hancock** of the University's Human Factors Research Laboratory was published last month titled *The Use of Driving Simulation for the Assessment, Training, and Testing of Older Drivers*. The report, initiated by the National Institute of Aging and facilitated by a grant from the Center, examines the application and utility of driving simulation for evaluating older drivers, who make up an increasing share of the population. This information can be used in the design of automobiles, roadways, and roadway communication symbols to help the elderly cope with progressively complex driving environments. Hancock is building a simulation laboratory in Norris Hall, which will be able to be used for research that can benefit Mn/DOT, the Department of Public Safety, and others involved in driving safety.

CENTER PARTICIPATES AT ANNUAL BIKE CONFERENCE

The Center was invited by **Jim Dustrude** of Mn/DOT to participate on a panel at the annual Bike Conference in February. **Bob Johns** presented the Center's plans for research, education, and information and discussed potential involvement of the Center in bicycle programs. For the last two years, the Center has funded bicycle activities on the University of Minnesota campus. Its future plans include funding bicycle-related research that responds to the needs of the legislature, Mn/DOT, DNR, and others, and potentially sponsoring a bicycle-related forum. Johns and Dustrude will work with **Ron Nickerson** of the legislative staff, **Paul Swenson** of DNR and others to plan these activities.

SCHOOL OF MANAGEMENT ASSISTS MN/DOT

The Carlson School of Management has been working with the Minnesota Department of Transportation to help determine new methods of allocating highway maintenance personnel to the state's maintenance areas. Professors **Gary Scudder** and **George Benson** have served in an advisory role to a Mn/DOT task force led by

Dick Klobuchar, which has recommended new criteria and formulas for allocating personnel. Following this effort, a team of four MBA students led by Professor James Scoville is conducting research and preparing more in-depth recommendations for four of the allocation formulas, which will be considered by Mn/DOT management in the future. Recently, a progress report meeting involving task force members, the professors, and the students resulted in a stimulating exchange of ideas and perspectives on this management challenge.

RESEARCH PANEL MEETS ON AIR TRAFFIC CONTROLLER RESEARCH

Professors Phillip Ackerman and Ruth Kanfer presented the research plan and preliminary findings for their project, "An Integrated Selection/Skill-Training Approach to Enhancing Air Traffic Controller Performance," to a joint meeting of the CTS Research Panel for this project and the Education Committee for the Mid-America Aviation Resource Consortium (MARC). MARC, coordinated by Dick Keinz, has been heavily involved in the development of the new air traffic controller training facility in Eden Prairie. Rich Pointer, the acting director of this facility, stated that the research is timely in helping develop new selection and training approaches that will be used to address the growing national need for more air traffic controllers.

COMMITTEES FORMING FOR ADVANCED TECHNOLOGIES CONFERENCE

Local committees are now being established for the Second International Conference on Applications of Advanced Technologies in Transportation Engineering, to be held in Minneapolis August 18-21, 1991. The conference, sponsored by the American Society of Civil Engineers (ASCE), will cover recent technological advancements and examine how emerging technologies can advance the design, construction, maintenance, and operation of surface transportation systems. If you would like to join a committee, contact Professor Yorgos Stephanedes, conference co-chair, at (612) 625-1305 or 625-5522.

CTS SEMINARS

The Center's transportation seminar on February 20 featured Professor Ted Galambos of the Department of Civil and Mineral Engineering, who discussed the inelastic rating of steel bridges. Galambos explained that new rating procedures can measure the inelastic reserve of steel beam and girder bridges. With the new procedures, bridges can be rated more accurately and deficient bridges can be better identified for immediate action. His research is sponsored by the National Cooperative Highway Research Program. The Center's transportation careers series featured two speakers last month: Dick Hanson, director of distribution for General Mills, on February 7; and Vern Genzlinger, director of public works, Hennepin County, on February 28. The speakers told students about transportation career opportunities in the private and public sectors, respectively. See the schedule below for upcoming seminars.

UPCOMING TRANSPORTATION EVENTS

If you have an event you would like publicized, please call the Center at (612) 626-1077.

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| March 6 | CTS Transportation Seminar: "Alternative Airport and Airway Pricing Systems," by Professor Herbert Mohring, 3:30-4:40 p.m., 210 Civil and Mineral Engineering, University of Minnesota, Minneapolis. Open to the public. Contact CTS at (612) 625-3019. |
| March 29-31 | ASCE Student Chapter 46th Annual Midwest Regional Conference, Radisson University Hotel, Minneapolis. Contact Joe Palo of the ASCE Student Office at (612) 625-6638 or Professor Cathy French at (612) 625-3877. |

- April 25-27 Metropolitan Planning Organization (MPO) Annual Conference, Townhouse Motor Lodge, Grand Forks, North Dakota. Contact Kathy Briscoe at (612) 296-1614.
- May 2-3 Center for Transportation Studies First Annual Transportation Research Conference, St. Paul Hotel, St. Paul, Minnesota. Contact CTS at (612) 625-3019.
- May 7-9 Second Midwest Regional Transit Conference and Expo, Minneapolis Hyatt Regency, Minneapolis. Contact Jan Hennings at (612) 338-7323.
- May 8 Minnesota Transit Laboratory International Workshop, Minneapolis Hyatt Regency, Minneapolis. Contact Jan Hennings at (612) 338-7323.