

ADVISORY BOARD HOLDS FALL MEETING

The Center's Advisory Board met on October 19 to discuss directions and priorities for the Center in the areas of transportation research, education, and information. The Board first heard from three U of M professors whose research is representative of the three research emphases defined last year by the Board. Professor **Wilbur Maki** described how strategic directions for transportation will be improved through research on the relationship of the economy to transportation. Professor **Panos Michalopoulos** spoke on improving the management of the transportation system through use of video technology for traffic management. Professor **David Newcomb** presented the potential gains from pavement research as an example of the technological innovation needed in transportation. Through small group discussions, the Board generated new research issues and began to address education and information issues in transportation. The Board's Executive Committee, chaired by **Ray Lappegaard**, will use these issues and needs to help develop the Center's annual work program.

WILLIAM SMITH HONORED AT ADVISORY BOARD MEETING

William Smith, a CTS Advisory Board member and retired vice president of General Mills, was honored at the Advisory Board meeting for his contributions to the Center. Smith was instrumental in helping furnish the Center's offices in the Civil and Mineral Engineering building and has been an active supporter of the Center. CTS Director **Dick Braun** presented Smith with a plaque that will be displayed in the Center's reception area. The plaque commemorates the work of Smith's father, **Earl B. Smith**, who was a pioneer in Minnesota transportation.

SPRING CONFERENCE PLANNING UNDERWAY

The Center will sponsor its first annual research conference on May 2-3, 1990, at the St. Paul Hotel. A conference planning committee of transportation professionals is being formed to help guide the Center in developing this conference. The conference will concentrate on transportation research issues and will use concurrent sessions to feature U of M faculty who have received funding through CTS. Transportation practitioners from the public and private sectors will be invited to join the faculty in presenting their research results. The next *Monthly Report* will include more information on this conference and will issue a Call for Presentations. Please consider presenting or having your staff present the results of transportation studies that your organization has conducted.

CTS RESEARCH PANELS FORMED

Research panels have been formed for the 17 research projects funded last year through the Center's Request for Proposals. A variety of people responded, representing many transportation organizations and disciplines. The enclosed list of panel members shows that a few of the panels are quite large. We have

decided at this point not to limit the size, but to tailor each meeting to handle the number of people on the panel. Professors and students are now beginning their research and will hold initial panel meetings this fall or winter. The Center will send notices and information to panel members.

RESEARCH PANEL MEETING ON TRANSPORTATION AND THE ECONOMY

The project that received the greatest interest from prospective panel members was the planning study that will define a major research effort on how transportation relates to the economy of the Upper Midwest. The Center's next Request for Proposals will ask for research proposals that address the various components of this study. Center Executive Committee members **Ed Schuh**, dean of the Humphrey Institute, and **Fred Beier**, associate dean of the Carlson School of Management, are working with Professor **Wilbur Maki** of Agricultural and Applied Economics to define the scope of this study. They will join CTS Director **Dick Braun** on November 17 in a meeting with the 47 panel members to discuss plans for this project. This meeting is open to the public and will be held from 10:00 a.m. to 12:00 p.m. in Room 180A of the Humphrey Institute.

TRANSPORTATION SEMINARS GENERATE INTEREST

The first two transportation seminars sponsored by the Center were well attended and have generated additional interest in the Minnesota legislature. Professor **Yorgos Stephanedes** spoke about research he has conducted on the influence of transportation investment on the economy, and Professor **Jerry Fruin** presented research he has conducted on management of the rural road system. Approximately 30 people attended each seminar, with several organizations represented as well as students and other faculty. **Tom Johnson**, executive director of the Transportation Study Board, has asked the Center to coordinate a presentation by these two professors at a future Study Board meeting, tentatively planned for November 29. The Study Board was formed by the legislature and is co-chaired by Representative **Henry Kalis** and Senator **Keith Langseth**.

TRANSPORTATION CAREERS SERIES BEGINS

The Center initiated its Transportation Careers Series last month with seminars by **Dick Braun** and Mn/DOT Deputy Commissioner **Douglas Differt**. The seminars create a setting for transportation executives to speak to U of M students about possible careers in transportation-related fields. Differt talked about career opportunities available within Mn/DOT for students from multiple disciplines and also discussed Mn/DOT's growing need for engineers. Currently, Mn/DOT hires about 25 civil engineers each year, and Differt expects this number to rise in the future as an increasing number of engineers retire. Braun spoke of his career in transportation and described CTS, its programs, and how it can help students interested in pursuing a career in transportation. Approximately 25 students attended each seminar. The final seminar this quarter will feature **Judy Hollander** of the Regional Transit Board; future seminars will also feature executives from the private sector.

PATENT IS RECEIVED FOR CENTER-SPONSORED RESEARCH

A group led by Professor **Panos Michalopoulos** has received a patent for the technology it developed through its research on video detection systems to improve traffic management. The research was partially sponsored by CTS, the Federal Highway Administration, and the Minnesota Department of Transportation. This technology will be tested on I-394 in Minneapolis under a \$1.4 million contract recently signed with

the Federal Highway Administration and Mn/DOT. The demonstration project will place approximately 20 video cameras along the I-394 corridor. The video detection system will collect and analyze traffic information for use by traffic managers, the State Patrol, and drivers so that traffic flows are improved. Negotiations are underway between the University and several companies on the potential for manufacturing and marketing this system.

INTELLIGENT VEHICLE/HIGHWAY CONFERENCE IN TORONTO

Dick Stehr, Mn/DOT freeway operations engineer, **Professor Panos Michalopoulos**, and **Dick Braun** attended an international conference on vehicle navigation and information systems in Toronto last month. Speakers reaffirmed that motorist information systems continue to generate a high interest level, and that the U.S. Department of Transportation is anxious to pursue Intelligent Vehicle Highway System (IVHS) technology. **Jim Pitz**, president of the American Association of State Highway and Transportation Officials, stressed the need for more field demonstrations of potential solutions and a better balance between basic research and demonstrations. Human factors issues were also highlighted at the conference, such as the concern that video displays for vehicle navigation may distract drivers and thus adversely affect road safety, particularly with elderly drivers.

PAPER PRESENTED AT HIGHWAY CONFERENCE IN SWEDEN

Professor **David Newcomb** of the Department of Civil and Mineral Engineering presented a paper at the "Strategic Highway Research and Traffic Safety on Two Continents" conference in Gothenburg, Sweden, this September. His paper was titled "Data Distributions for Resilient Modulus and Indirect Tensile Strength of Asphalt Concrete."

STUDY DEVELOPS CERTIFICATION STANDARDS FOR TRUCKERS

Personnel Decisions Research Institutes, Inc., a Minneapolis consulting firm directed by U Psychology Professor **Marvin Dunnette**, recently completed a nationwide study of the knowledge requirements of over-the-road truckers. The two-year project was conducted by Dr. **Steven Lammlein** with assistance from **Scott Johnson**, a U of M psychology graduate student. The project involved establishing a driver knowledge- and skill-based classification system for different types of heavy vehicles and designing tests for each vehicle type. The study results were used to develop a national certification examination recommended for use in licensing over-the-road truckers.

UPCOMING TRANSPORTATION EVENTS

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

- November 1 CTS Transportation Seminar: "The Energy Transportation System in Minnesota," by Professor **Donald Harper**, 3:00-4:00 p.m., 20 Hubert H. Humphrey Center, University of Minnesota, Minneapolis, Minnesota. Open to the public. Contact: **Amy Vennewitz** of CTS at (612) 625-3019.
- November 6-8 Bituminous Pavement Technology Professional Development Seminars, coordinated by Professor **David Newcomb**, Sheraton Midway Hotel, St. Paul, Minnesota. Sponsored by the Center for Transportation Studies. Contact: **Dick Grefe** of the U of M Department of Professional Development at (612) 625-0196.

- November 8 CTS Transportation Careers Series--transportation leaders speaking to U of M students on career opportunities. **Judy Hollander**, director of planning and programs, Regional Transit Board, 12:15-1:00 p.m., Commons Room, Hubert H. Humphrey Center, University of Minnesota, Minneapolis, Minnesota. Contact: **Amy Vennewitz** of CTS at (612) 625-3019.
- November 14 Center for Transportation Studies Fall Quarter Luncheon and Speech: **Nancy Rutledge Connery**, "The State of the Nation's Transportation Infrastructure." Radisson University Hotel Ballroom. Contact CTS at (612) 626-1077.
- November 15 "The Role of Transportation in Just-in-Time Manufacturing," Minneapolis Metrodome Hilton, Minneapolis. Sponsored by the Center for Transportation Studies. Contact: Professor **Donald Harper** at (612) 624-5833 or **Karen Goodner** at (612) 626-7113.
- November 17 CTS Research Panel Meeting: "Transportation and the Economy of the Upper Midwest," 10:00 a.m. to 12:00 p.m., 186 Humphrey H. Humphrey Center, University of Minnesota, Minneapolis, Minnesota. Open to the public. Contact **Amy Vennewitz** of CTS at (612) 625-3019.
- November 18 North Central Section of the Institute of Transportation Engineers Annual Meeting and Dinner, featuring a slide presentation by St. Thomas Professor **Tom Mega** on St. Paul's historical architecture. St. Paul College Club, St. Paul, Minnesota. Contact **John Hensrud** at 934-4160.
- November 28 Women's Transportation Seminar Annual Meeting: "USA: The Land of Opportunity for Entrepreneurs," by **Esperanza Guerrero**, president and CEO of the Metropolitan Economic Development Association, 5:30-8:30 p.m., University Club, St. Paul, Minnesota. Contact: **Amy Vennewitz** at (612) 625-3019.
- November 29 CTS Transportation Seminar: "Managing Roadside Vegetation Using Biological Agents," by Professor **Willard Koukkari**, 3:00-4:00 p.m., 205 Civil and Mineral Engineering Building, University of Minnesota, Minneapolis, Minnesota. Open to the public. Contact: **Amy Vennewitz** of CTS at (612) 625-3019.
- January 7-11 Transportation Research Board 69th Annual Meeting, Sheraton Washington Hotel and Omni Shoreham Hotel, Washington, D.C. Contact the conference registrar at (202) 334-2382 or 334-2934.