



UNIVERSITY OF MINNESOTA
TWIN CITIES

Center for Transportation Studies
Department of Civil and Mineral Engineering
110 Civil and Mineral Engineering Building
500 Pillsbury Drive S.E.
Minneapolis, Minnesota 55455-0220

(612) 626-1077
Fax: (612) 624-0293

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CENTER FOR TRANSPORTATION STUDIES JULY REPORT

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

TECHNICAL REVIEW OF RESEARCH PROPOSALS IS COMPLETED

A peer review committee met in June to review the 31 transportation research proposals received in response to the Center's Request for Proposals (RFP). The committee members individually judged each proposal against the criteria set forth in the RFP and then met to compare and discuss their ratings. A tabulation of the final ratings and a summary of the reviewers' comments have been sent to the Center's Executive Committee, who will use up to \$600,000 of Center funds to support selected projects. Executive Committee decisions will be announced in July. The peer review committee included: Professors **John Adams**, **Alan Ek**, **Matthew Huber**, and **Gary Scudder** of the University of Minnesota; **Robert Benke** of the Minnesota Department of Transportation; **Dr. Randall Erickson** of 3M; and **Carl Ohrn** of the Metropolitan Council.

MN/DOT TO INSTALL NEW TRAFFIC MONITORING SYSTEM

The Minnesota Department of Transportation will use advanced highway technology developed by the University of Minnesota to improve traffic management. Sponsored by Mn/DOT, the Federal Highway Administration, and the Center for Transportation Studies, the project will install and test a video detection system developed by Professor **Panos Michalopoulos**. The system uses sensitive cameras and special computer software to collect data that can be used for traffic control and incident management. The project, announced in June by Mn/DOT Commissioner **Leonard W. Levine**, will begin this summer and should be completed in two to three years. The system will be tested initially with three existing cameras on I-35W in south Minneapolis before being installed on I-394 west of Minneapolis.

TRB FREEWAY OPERATIONS COMMITTEE MEETING HELD IN MINNEAPOLIS

The mid-year meeting of the Transportation Research Board Freeway Operations Committee was held in Minneapolis on June 26-27. Over 100 persons from both local and national transportation organizations attended the meeting. Mn/DOT Commissioner **Leonard Levine** welcomed the committee members to Minnesota, and **Gene Ofstead** and **Dick Stehr**, both of Mn/DOT, described freeway operations activities occurring in the Twin Cities. **Dick Braun** of CTS gave an overview of transportation research activities nationally and at the University, and Professor **Panos Michalopoulos** demonstrated his work in developing a video detection system. Major **Richard Steffen** of the Minnesota State Patrol spoke on freeway operations enforcement. **Glen Carlson** of Mn/DOT's Traffic Management Center was responsible for organizing and chairing the meeting's planning committee.

IN MEMORIAM: MILTON PIKARSKY

The Center reports with deep regret the death of **Milton Pikarsky**, who was the dinner speaker at the Center's first Advisory Board meeting in January. Pikarsky was distinguished professor and director of the Institute for Transportation Systems at the City University of New York and one of the nation's leaders in the field of transportation. He held many high-level positions, including chairman of the Chicago Transit Authority and chairman of the Transportation Research Board. His presence and insight will be missed by many transportation leaders, including CTS Director **Dick Braun**: "Transportation directors throughout the country looked upon him as our mentor. He molded the direction of transportation for decades to come, not only for his own area but for the entire country."

PROFESSOR HUBER HONORED AT RETIREMENT LUNCHEON

Matthew J. Huber, professor of civil engineering, is retiring after 21 years of service to the University. Over 100 faculty, students, professional colleagues, and friends attended a retirement luncheon honoring Professor Huber at the Campus Club on June 10. Huber is most noted for his contributions in the field of traffic engineering and for his work on traffic characteristics in the 1985 Highway Capacity Manual. In addition, Professor Huber served for a number of years as the director of undergraduate studies for the Civil and Mineral Engineering Department, and was admired and respected for his handling of the students' needs.

1989 HUBER AWARD RECIPIENT SELECTED

In 1987, the Center initiated an annual student award for an outstanding contribution to transportation research and writing. The purpose of the award is to promote excellence in the study of transportation and as such, is named for Professor **Matthew J. Huber** in recognition of his long and valuable contributions to teaching and research at the University. The recipient of the 1989 Huber Award is **Paramsothy Thananjeyan**. The Center selected Thananjeyan for his graduate thesis work on the "Application of Kalman Filtering Theory for Estimation of Traffic Parameters."

GARY DAVIS IS NEW TRANSPORTATION ENGINEERING PROFESSOR

Professor **Gary A. Davis** of the University of Washington has accepted the position of transportation engineering professor in the Department of Civil and Mineral Engineering, succeeding **Matthew J. Huber**. Professor Davis will begin his work at the University this month. Davis holds M.S. degrees in psychology and civil engineering from Eastern Washington University and the University of Washington, respectively, and has recently completed his Ph.D. in civil engineering at the University of Washington. His research experience includes developing and evaluating freeway traffic forecasting algorithms and researching options for freeway data base storage.

U OF M SUBMITS TRAVEL BEHAVIOR INVENTORY PROPOSAL

Professor **Yorgos Stephanedes** of the Department of Civil and Mineral Engineering has submitted a proposal to a metropolitan task force that would provide data for research on travel forecasting and simulation methods. This information would be collected in conjunction with the Travel Behavior Inventory being planned for the Twin Cities area by the Metropolitan Council, Mn/DOT, and the Regional Transit Board. A task force, led by **Bob Morgan** of the City of Minneapolis and coordinated by **Steve Alderson** of the Metropolitan Council, is defining the work program for this large data collection effort, which will be implemented at the same time as the 1990 Census. **Bob Johns** of CTS, a

member of the task force, will work with Stephanedes, other task force members, and the three agencies to determine the scope and potential benefits of the U of M proposal.

PAPER ON CAR-DRIVER BEHAVIOR PRESENTED AT NATO CONFERENCE

Professor **Peter A. Hancock**, who will join the University's Department of Physical Education and Recreation in August, recently presented a paper in Gothenburg, Sweden, at the 12th NATO Conference on Experimental Safety Vehicles. The paper is titled "Car-Driver Behavior in Differing Driving Maneuvers." Currently with the University of Southern California, Dr. Hancock has done extensive research on conspicuity, which involves the ability of an object to be noticed against a given background. His research has focused on motorcycle conspicuity and has been partially funded by the Motorcycle Safety Foundation.

BRIDGE RESEARCH PROJECT EXTENDED

Professor **Ted Galambos** of the Department of Civil and Mineral Engineering has received a six-month extension and additional funding from the National Cooperative Highway Research Program (NCHRP) for his project, "Inelastic Bridge Rating." The project involves joint work with Iowa State University. Professors **Catherine French** and **Roberto Leon** of the department are also participating on the project.

MN/DOT HIRES RECENT GRADUATES FOR ENGINEER ROTATION PROGRAM

As part of its graduate engineer rotation program, Mn/DOT hired 25 new civil engineers this year, twelve of whom are recent civil engineering graduates of the University of Minnesota. The graduate engineer rotation program provides training to new engineers by requiring them to rotate among various sections of the department. Graduate engineers rotate into a new position every six months for a period of two years, after which they are assigned to a permanent position.

U OF M STUDENTS COMPETE IN ASCE CONCRETE CANOE RACE

Twelve civil engineering students from the University of Minnesota competed in the national finals of the American Society of Civil Engineers' second annual concrete canoe race held in Lubbock, Texas, June 23-25. The crew, organized by senior **Sandy Anderson**, placed eighth out of a field of 18 teams. In April the students won the regional competition in Platteville, Wisconsin, using a 260-pound canoe. Since last fall over two dozen students, advised by Professor **Catherine French**, have been researching concrete properties, canoe design, and concrete barge design in order to prepare for the contest. The national championship and a \$5,000 scholarship were awarded to students from the University of California, Berkeley.

UPCOMING TRANSPORTATION EVENTS

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

- August 6-10 URISA '89, Urban and Regional Information Systems Association Conference, "Charting the 90s: New Visions for Urban Technology." The Boston Marriott Copley Place. Contact: **Tom Palmerlee** of URISA, (202) 543-7141.
- August 13-16 1989 Highway Users Midwest Transportation Conference, Madden's Resort, Brainerd. Contact: **Carol Lovro** of Highway Users Federation, 290-0025.
- September 19-21 "Great Lakes Ports in a Changing Economy," Holiday Star Plaza, Merrillville, Indiana. Sponsored by Minnesota Sea Grant Extension Program, Burns International Harbor, the Indiana Regional Economic Development Institute, and the Great Lakes Commission. Contact: **Barbara Liukkonen** of Minnesota Sea Grant, (218) 726-8106.