



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

September 1, 1988

CENTER FOR TRANSPORTATION STUDIES SEPTEMBER REPORT

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

WORK PROGRAM FOR FISCAL YEAR 1989

The Center held planning sessions during July and August to discuss its priorities for the 1989 fiscal year. Professor **Fred Beier**, who has expertise in strategic planning in transportation, and three members of the Center's Interim Advisory Committee--**Pete Fausch**, **Jim Newland**, and **Bill Smith**--participated in these sessions. The result is a set of priorities and goals for this fiscal year that follow the broad direction recommended by the Interim Advisory Committee. These goals are being published in a work program that will be available this fall. In future years, the Center's annual work program planning process will take place in the spring, with heavy involvement of advisory committees.

PERMANENT ADVISORY BOARD

In the next month, the Center will be inviting several Minnesota leaders to serve on its Advisory Board. This board will include representatives from University departments, elected officials, public agencies, private industry, non-profit organizations and the public. The board will have an Executive Committee, which will begin meeting immediately with Center staff to review the 1989 work program and provide direction on Center activities. A full Advisory Board meeting is planned for this fall. Additional committees and task forces will be formed in the future for specific Center programs.

SURVEY RESULTS

A questionnaire was included in the mailing of the report of recommendations by the Center's Interim Advisory Committee. Approximately 150 people returned the questionnaire; over 100 indicated an interest in participating on Center committees or task forces. The questionnaire asked what issues the Center should be addressing. Some of the most commonly mentioned roles for the Center included: identifying emerging issues and trends in transportation; providing linkages to University expertise for

assistance in public policy development; acting as a technology transfer agent in the application of transportation research; providing continuing education efforts for managers and professionals; and improving the education of transportation students.

CENTER MAILING LIST

The Center's mailing list has rapidly grown to include over 900 names. There undoubtedly are some errors. If the information on your mailing label needs to be corrected, or if you know of someone who wants to be added to the mailing list, please call **Cindy Holton** or **Jennifer Klaus** at 626-1077.

TRANSPORTATION LIBRARY

In the 1970s, an urban transportation library was started at the University, using federal funding and funding from the Center for Urban and Regional affairs (CURA). As federal funds were cut in the 1980s, the library gradually ceased operations, although its collection of materials is still available in the Civil and Mineral Engineering Building. Center staff are working closely with **Peggy Wolfe**, the CURA librarian who developed the transportation library; **Pam Newsome**, a librarian from the Minnesota Department of Transportation (MnDOT); and **Ray Bohling**, a librarian from the Institute of Technology, to determine what should be done with this collection and how the Center can provide library services in the future.

FACULTY ON AIRPORT EXPERT PANEL

Through efforts by the Center, several faculty members participated in expert panel sessions held in August on the costs and benefits of alternative metropolitan airport scenarios. **John Brandl** and **Bob Einsweiller** from the Humphrey Institute, **Fred Beier** from the School of Management, **John Cummings** from the School of Architecture, **Herb Mohring** from Economics, and **Wilbur Maki** and **Philip Raup**, from Agriculture and Applied Economics, joined **Dick Braun** and **Bob Johns** from the Center in sessions with other panel members assembled by the Metropolitan Council. Much of the discussion focused on the relationship between the metropolitan airport and Minnesota's economy. Will a new, larger airport enhance Minnesota's position in the international economy? Will Minnesota's economic position be harmed by staying with an airport that may ultimately reach capacity? **John Kari** of the Metropolitan Council has more information on this study.

VIDEO TECHNOLOGY FOR TRAFFIC MANAGEMENT

Professor **Panos Michalopoulos** of the Civil and Mineral Engineering Department has developed a promising new technology for improving traffic management. Using video cameras and computerized image-processing, this technology provides data on traffic volumes, speed, vehicle types, and levels of congestion--information that

is needed by traffic engineers to develop strategies for managing congestion. He is working closely with **Glen Carlson**, Director of MnDOT's Traffic Management Center, to test this technology on Twin City area freeways, and has demonstrated it to MnDOT's Commissioner **Len Levine** and his staff. Demonstrations have also been requested by the Federal Highway Administration and by transportation agencies in California, New York, Toronto, and Spain. Private companies have also indicated an interest in this technology.

FUNDING FROM FEDERAL RESEARCH PROGRAMS

The Center is a member of a consortium that was recently designated as one of the ten transportation centers in the country to receive federal funding for transportation research (one center for each federal region). This consortium includes western universities and is coordinated by North Dakota State University. **Dick Braun**, a member of the consortium coordinating committee, will soon have information on the funds available to the University of Minnesota. The Center is also part of a consortium coordinated by Purdue University that has submitted a proposal to the federal Transportation Systems Center.

LCMR TRANSPORTATION RESEARCH

Two transportation-related proposals from the University were submitted this year to the Legislative Commission on Minnesota Resources (LCMR). One was developed by Professors **Alan Ek**, **Dietmar Rose**, **Timothy Knopp**, **Sean Elliot** and **Howard Hoganson** of the Forest Resources Department. Their research would develop planning tools for evaluating the ecological, social, and economic impacts of road system development on forest management, addressing issues such as the demand for timber access, impacts of tourism, and the sensitivity of wildlife. The second proposal was submitted by Professor **Michael Flickinger**, Director of the Institute for Advanced Studies in Biological Process Technology. He proposes to conduct research that would develop low-cost processes from waste products to produce CMA, a salt substitute for de-icing roads.

COLD WEATHER RESEARCH

An activity that the Center has been working closely with MnDOT on--the development of a cold region pavement test facility--may become part of a statewide effort to promote Minnesota for cold weather research. Governor **Rudy Perpich** has established a Blue Ribbon Commission to investigate the creation of a Cold Weather Resource Center. This center would provide assistance to organizations wishing to conduct research in cold weather and provide linkages to facilities throughout Minnesota, such as MnDOT's pavement facility, to promote their availability for research. The Governor has appointed **Dick Braun** as chair of this commission.

URISA ADDRESSES TRANSPORTATION INFORMATION SYSTEMS

The annual conference of the Urban and Regional Information Systems Association (URISA) had several sessions on information systems for transportation. There was strong interest in the use of geographic information systems (GIS) for transportation planning. **Bob Johns**, from the Center, is on URISA's special interest group for transportation. Information about this conference is available from him by calling 626-1077. **Will Craig**, from CURA, also represented the University at the conference. He is Past President of URISA and is currently active in developing URISA's research agenda.

UPCOMING TRANSPORTATION EVENTS

This section will be included in every monthly report. If you have an event you would like publicized, please call the Center at 626-1077.

September 28-29 Annual Sea Grant conference, "The 21st Century: The Great Lakes/Seaway System." Thunder Bay, Ontario. Contact: **Dale Baker** at UMD (218) 726-8106 or **Nora Logan** at Thunder Bay Harbour (807) 345-6400.

September 28-30 Annual Metropolitan Planning Organization conference, "Transportation Futures." Sunwood Inn, St. Paul. Contact: **Steve Alderson** at Met Council 291-6337 or **Kathy Briscoe** at MnDOT 296-1614.

October 12-14 Annual Minnesota Public Transit Association Fall Conference, "Building Alliances." Hilton Inn, Minneapolis. Contact: **Dale Maul** at MPTA 349-7685.

October 17-19 Third National Conference by the Transportation Research Board Task Force on High-Occupancy Vehicles, "1988 National HOV Facilities Conference." Marriott City Center, Minneapolis. Contact: **Katie Turnbull** at RTB 292-8789.

October 17-21 Third National Conference on Weigh-In-Motion, sponsored by FHWA, MnDOT, Iowa DOT, and Wisconsin DOT, "Applications and Future Directions." St. Paul. Contact: **Dick Stehr** at MnDOT 296-7968 or **Gary Graves** at MnDOT 296-1671.