

OCTOBER REPORT

1994 A monthly report on transportation research, education, and information/outreach activities at the University of Minnesota

CENTER ISSUES CALL FOR PRESENTATIONS FOR 1995 CONFERENCE

The Center for Transportation Studies has issued a Call for Presentations for its Sixth Annual Transportation Research Conference. Enclosed with this report, the call invites all interested individuals to submit a one-page abstract for a presentation (or poster) at the conference, to be held May 2-3, 1995, at the Sheraton Park Place in Minneapolis. If you or your organization would like to share the results of your efforts in transportation-related fields, please submit an abstract by **November 30**. CTS Councils helped review and update the call at their fall meetings, and formed subcommittees to finalize the conference sessions. A new feature of the 1995 conference will be an exhibit area on May 2. In addition, several potential workshops—such as Minnesota Technology Transfer (T²) Program courses—are being planned for May 1, the day before the conference.

TIMOTHY HAU IS FALL LUNCHEON SPEAKER

The Center's fall luncheon presentation will be held on Wednesday, December 14, and will feature **Professor Timothy D. Hau** of the University of Hong Kong, who will present "Congestion Pricing: From Concept to Policy Implementation." Hau has conducted research on the transport system of Hong Kong, including controversial electronic road pricing field trials. Until this past September he was on a four-year leave with the World Bank in Washington, D.C., most recently studying public pricing issues in the Public Economics Division of the Policy Research Department. Previous work with the World Bank included research into the pricing and investment of roads in developing countries, which resulted in several World Bank working papers on both the principles of and the technologies for road pricing. He holds master's and doctoral degrees in economics from the University of California, Berkeley. Please return the enclosed form by **December 7** to make your reservation.

TRANSPORTATION / LAND USE SYMPOSIUM SCHEDULED FOR NOVEMBER

CTS is cosponsoring a symposium titled "Transportation and Land Use" on Wednesday, November 16, in Fargo, N.D. This half-day event is a sequel to last February's well-attended symposium on "Transportation and the Community" held in Burnsville. The half-day symposium will demonstrate how a variety of interests can be brought together to find solutions to problems commonly associated with development. Case studies reflecting actual land use/transportation challenges will be presented by a panel representing four distinct interests: engineering; land use/urban design; transit; and private development. Two Minnesotans will serve as panelists: **Dan Krom**, program manager with Mn/DOT's Office of Transit, and **Professor Bill Morrish**, director of the University of Minnesota Design Center for the American Urban Landscape. Morrish will also present the closing luncheon speech. **Laurie McGinnis**, CTS research coordinator, will moderate the event. Symposium sponsors are the North Dakota Technology Transfer Center, the Fargo-Moorhead Metropolitan Council of Governments, and CTS. For a copy of the brochure and registration information, please contact the Center at (612) 626-1077.

CENTER COMPLETES MOVE TO NEW OFFICE SPACE

The Center moved into its new office space on Monday, October 3. The new space is located on the second floor of the Transportation and Safety Building, 511 Washington Avenue S.E., Minneapolis. A skyway connects the new offices to the rebuilt Washington Avenue Parking ramp on the corner of Washington Avenue and Harvard Street. CTS will announce plans for an open house in future issues of the *Monthly Report*.

LOW-VOLUME ROAD CONFERENCE ANNOUNCEMENT ENCLOSED

An announcement is enclosed for the Sixth International Conference on Low-Volume Roads, to be held at the University of Minnesota, June 25-29, 1995. The conference is organized and conducted by the Transportation Research Board (TRB), and hosted by CTS and an international cohost team. The preliminary program with complete registration information will be mailed in January 1995; if you would like to receive this information, please complete the enclosed form and mail it to the address shown.

RESEARCH PROJECT YIELDS FOUR REPORTS IN TRANSPORTATION TRENDS

A study led by Professor John Adams of the Department of Geography titled "Transportation Use in Minnesota" has yielded four reports:

- Long Distance Commuting in Minnesota
- Transportation-Based Classifications of Minnesota's Counties and Metropolitan Area Tracts Using Measures from the 1990 Census of Population and Housing
- Data Sources for Use in Conducting Travel Behavior Research
- Modeling Commuter Flows Among Local Labor Markets in Minnesota, 1970-90

The work interpreted the results of the 1990 Census of Population and Housing, and was carried out by a Geography team of Professor Adams and graduate students M. J. Loughlin, Barbara Van Drasek, and Elvin Wyly. The project sponsor was the Minnesota Department of Transportation. For copies of the reports call Mn/DOT's Office of Research Administration at (612) 282-2274.

FINNS TO TEST EMULSION GRAVEL PAVEMENT AT MN/ROAD FACILITY

The Finnish National Road Administration (FinnRA)—in cooperation with Mn/DOT, CTS, the Local Road Research Board, the city of Otsego, and Wright, Stearns, Benton, and Sherburne Counties—is demonstrating a new type of bituminous pavement for low-volume gravel roads. The project demonstrates Finland's "emulsion gravel" pavement along a one-mile stretch of township road near the Mn/ROAD facility in Otsego. The emulsion gravel pavement typically requires a thin mat over a prepared base, potentially cutting costs for labor and materials. Forty percent of Scandinavian roads have been paved with this material; many have been in service for several years without failure. The project will demonstrate any potential for application of this technology to low-cost shoulder resurfacing on state trunk highways and for resurfacing of county, township, and municipal roads. Coordinating the project with FinnRA are Paul Keranen, Paivi Martikainen, and Rick

Arnebeck of Mn/DOT; **Wayne Fingalson** of Wright County; **Doug Weishaar** of Stearns County; and **Larry Koshak** of the city of Otsego. The site is expected to be included in a field tour/trip during the Sixth International Conference on Low-Volume Roads (see above).

LOCAL ROAD RESEARCH BOARD SELECTS RESEARCH PROJECTS

The Minnesota Local Road Research Board (LRRB), chaired by **Dick Hansen** of St. Louis County, held its programming meeting on September 21 in the Twin Cities. The purpose of this meeting was to determine next year's program, which will expand significantly due to an increase in funding approved by the legislature last spring. The board listened to a variety of presentations by project proposers and selected four projects by University of Minnesota professors for funding in 1995. These projects include "Guidelines for Assessing Street Occupancy Charges" by **Raymond Sterling**, Underground Space Center; "Deformability Parameters of Lightweight Fills" by **Andrew Drescher** and **David Newcomb**, Civil Engineering (CE); and "Experimental Investigation of Bridges with Integral Abutments" and "Experimental Investigation of Two-Piece Precast Concrete Arch Connections" by **Catherine French** and **Carol Shield**, Civil Engineering, and **Ray Sterling**. In addition, **Robert Seavey** and **Tim Larson**, Forest Products, have been asked to develop a work plan for a project that would address the serviceability issues related to pavements and timber bridges.

IVHS RESEARCHERS FROM SPAIN VISIT MINNESOTA

Two faculty members from the University of Catalunya, Spain, who are involved in a University of Minnesota research project visited the state recently. Professor **Jaime Barcelo** presented a seminar on "Adaptive Control for Urban Networks" which covered state-of-the-art technologies that have been tested in several European locations under the European IVHS program, DRIVE. These technologies are being adapted in a Federal Highway Administration (FHWA) project recently awarded to the University of Minnesota, with Professor **Yorgos Stephanedes** of CE as principal investigator. The seminar was organized by CTS and was attended by researchers and transportation professionals. In addition, the CE department hosted Dr. **Rafel Grau**, who is also from the University of Catalunya and is participating in the FHWA project.

ANNOUNCEMENTS: RESEARCH AWARD; CALL FOR PAPERS; ELECTRIC TRANSIT SYMPOSIUM

The U.S. Department of Transportation (USDOT) has announced procedures for nominating individuals and organizations for the Secretarial Award for Excellence in Transportation Technology Research and Development. Awards are made annually to recognize research and development contributions advancing the ability of the U.S. transportation industry to compete globally. Applications must be postmarked no later than **October 30, 1994**. A Call for Papers has been issued for the Fourth International Conference on Applications of Advanced Technologies in Transportation, to be held in Capri, Italy, June 27-30, 1995. Abstracts are due **October 31, 1994**, and may be submitted to conference cochair **Yorgos Stephanedes** of Civil Engineering. St. John's University and the College of St. Benedict are hosting the National Electric Transit Symposium on October 21-22 in St. Cloud; CTS is one of several cohosts. Call 1 (800) 445-4394 for registration details. Copies of all three announcements are also available by calling CTS at (612) 626-1077.

UPCOMING TRANSPORTATION EVENTS

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

Oct. 21-22 National Electric Transit Symposium, Radisson Hotel, St. Cloud. Hosts: St. John's University and the College of Saint Benedict; cohosted by CTS. Call 1 (800) 445-4394.

- Oct. 24-25
Dec. 5-6 "Defensive Driving Course (8-Hour)-Basic," Minnesota Safety Council, St. Paul. Call **Regina Hoffman**, (612) 291-9150.
- Oct. 25 CTS Transportation Careers Series—transportation leaders speaking to U of M students on career opportunities. **Ronald Lifson**, Vice President of Manufacturing, Liberty Diversified Industries, 12:05-1:10 p.m., 215 Humphrey Center, Minneapolis west bank campus. Contact CTS, (612) 626-1077.
- Oct. 25 Delta Nu Alpha Transportation Seminar, St. Paul Technical College. Call (612) 930-7278.
- Oct. 25-26 20th Annual Minnesota Public Transit Conference, Sheraton Metrodome, Minneapolis. Contact **Lori Graven**, (612) 625-9023.
- Oct. 25-27 FHWA National Conference on Integrating Environmental Considerations into Transportation Planning, Regency Hotel, Denver. Call **David B. Foster**, (202) 366-2065.
- Oct. 27 CTS Faculty Seminar: "Making Buslines a Memorable Part of the City: A Case Study," by **Mary Vogel**, Landscape Architecture, 3:30-4:25 p.m., 205 Civil Engineering, Minneapolis east bank campus. Open to the public. Contact CTS, (612) 626-1077.
- Nov. 2
Dec. 21 "Federal & State DOT Regulatory Update/Commercial Vehicle Laws," Minnesota Safety Council, St. Paul. Call **Regina Hoffman**, (612) 291-9150.
- Nov. 3-5 36th Annual Forum of the Transportation Research Forum (TRF), Daytona Beach Marriott, Fla. Contact **Richard Beilock**, (904) 392-5058.
- Nov. 4 "Awair (A Workplace Accident Injury Reduction Act)," Minnesota Safety Council, St. Paul. Call **Regina Hoffman**, (612) 291-9150.
- Nov. 9 "Sustainable Development," 1994 American Society of Civil Engineers (ASCE) Transportation Conference, Holiday Inn Gateway Center, Ames, Iowa. Call **Don Wall**, (515) 294-3811 (content), or **Connie Middleton**, (515) 294-6229 (registration).
- Nov. 10 CTS Faculty Seminar: "Assessment of Wood Deterioration in Timber Bridges: Procedures and Technologies," **Robert Seavey** and **Tim Larson**, Forest Products, 3:30-4:25 p.m., 205 Civil Engineering, Minneapolis east bank campus. Open to the public. Contact CTS, (612) 626-1077.
- Nov. 16 CTS Symposium: "Transportation and Land Use," Doublewood Inn, Fargo, N.D. To register call (701) 232-3242; fax (701) 232-5043; or call CTS at (612) 626-1077 for a brochure.
- Nov. 17-18 Minnesota Public Works Association Fall Conference, Thunderbird Hotel, Bloomington. Call **Kathy Warren**, (612) 351-7432.
- Nov. 30 CTS Transportation Careers Series—transportation leaders speaking to U of M students on career opportunities. **Cathy Erickson**, Research Project Coordinator, Mn/DOT, 12:05-1:10 p.m., 205 Humphrey Center, Minneapolis west bank campus. Contact CTS, (612) 626-1077.
- Dec. 1 CTS Faculty Seminar: "On-Line Strategies for Optimal Intersection Control", **Yorgos Stephanedes**, Civil Engineering, and **Eil Kwon**, CTS/IVHS Institute, 3:30-4:25 p.m., 205 Civil Engineering, Minneapolis east bank campus. Open to the public. Contact CTS, (612) 626-1077.
- Dec. 8 44th Annual Concrete Conference, Earle Brown Center, St. Paul. Call **Catherine Ploetz**, (612) 626-2259.
- Dec. 14 CTS Luncheon Presentation: **Timothy D. Hau**, Professor, School of Economics, University of Hong Kong, "Congestion Pricing: From Concept to Policy Implementation," Radisson Hotel Metrodome, Minneapolis. Contact **Tina Anderson**, (612) 625-3465.
- May 2-3 CTS Sixth Annual Transportation Research Conference, Sheraton Park Place, Minneapolis. Contact **Catherine Ploetz**, (612) 626-2259.
- June 25-29 Sixth International TRB Conference on Low-Volume Roads, University Radisson Hotel, Minneapolis. Contact **Lori Graven**, (612) 625-9023.