

REPORT

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

March 2002

Oberstar Forum to feature keynote by Secretary Mineta

“How Should Transportation Change After September 11?” This is the question that national and Minnesota leaders in transportation will address at the inaugural **James L. Oberstar Forum** on Transportation Policy and Technology. It will be held April 29 from 1:00 p.m. to 4:30 p.m. at the Radisson Metrodome Hotel, University of Minnesota East Bank Campus. U.S. Department of Transportation Secretary **Norman Mineta** is the invited keynote speaker.

The University is establishing this ongoing forum to address national issues related to transportation policy and technology. The forum is named after Minnesota Congressman James L. Oberstar, a long-time leader in creating national transportation policy and establishing research and education programs in transportation technology.

The first Oberstar Forum will explore how our vision for transportation should change after September 11, with a focus on long-term structural shifts. Topics will include implications for the different modes of transportation, the needs and opportunities for technology development, the role of government and the regulatory environment, and research questions that need to be addressed by academic institutions.

The forum will feature a keynote address by Secretary Mineta followed by a panel discussion with leaders involved in the movement of people and goods. The panelists, including national public and private

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James Oberstar

Public service is theme for Sabo Lecture Series event

U.S. Congressman **Martin Olav Sabo** will present “A Vision for Public Service” April 15 at the inaugural event of the Martin Olav Sabo Lecture Series. It will take place from 10:45 a.m. to 12:15 p.m. in the Cowles Auditorium of the Hubert H. Humphrey Institute of Public Affairs, University of Minnesota West Bank Campus.

The Martin Olav Sabo Lecture Series is a forum for distinguished individuals to address the challenges of public service for our states and nation. The series honors the public service career of Congressman Sabo, who has had a distinguished career of more than four decades of public service at both state and federal government levels. He served as a member of the Minnesota State House of Representatives for 18 years, including six years as speaker and four years as minority leader. Sabo has represented the city of Minneapolis and surrounding suburbs as a member of the U.S. House of Representatives for 24 years. He has held major leadership roles, including serving as chair and ranking member of the House Budget Committee, and currently serves as ranking member of the Transportation Appropriations Subcommittee, member of the National Security Subcommittee of Appropriations, and member of the Subcommittee on Interior Appropriations.

The Humphrey Institute’s State and Local Policy Program is administering the Sabo Lecture Series. An RSVP is requested but not required; call **Janice Young**, 612-626-0347, or e-mail jyoung@hhh.umn.edu. 



Martin Sabo


Program for CTS annual research conference in the mail

The preliminary program (with registration form) for the CTS Thirteenth Annual Transportation Research Conference is being mailed this month. The conference will be held May 22–23 in Touchstone Energy@Place at RiverCentre in St. Paul.

The conference luncheon will feature a presentation by **Bruce Katz**, senior fellow at the Brookings Institution, titled “The New Metropolitan Reality.” Katz

will illustrate the negative fiscal, social, and environmental consequences of sprawling metropolitan growth patterns. His speech will focus on the trends and patterns facing cities and metropolitan areas, in particular, transportation issues and policy opportunities. He will then describe the new “smart” agenda that is emerging in states and regions across the country, arguing that the main elements of

this agenda involve advances in regional governance, land preservation, growth management, infrastructure, and urban reinvestment.

The April *CTS Report* will have additional information about the conference program, sessions, and speakers. For extra programs call **Shirley Mueffelman**, 612-624-4754, or e-mail smueffel@cce.umn.edu. 

CTS helps to create Braun Chair

CTS is collaborating with the Institute of Technology's Department of Civil Engineering (CE) to establish a new endowed faculty chair in transportation engineering. The **Richard P. Braun CTS Chair** will be named in honor of **Dick Braun**, the Center's founding director and a visionary industry leader in transportation engineering throughout his career.

Royalties from Autoscope™—an invention in traffic detection technology developed by CE professor **Panos Michalopoulos**, sponsored by CTS and Mn/DOT, and patented by the University—will support the endowment. “The CTS Executive Committee chose to invest these funds in an endowment, which will benefit the education of transportation engineering students forever,” says **Robert Johns**, CTS director. “Mn/DOT's leadership fully endorses this effort.”

CTS Executive Committee member **Doug Differt** is chairing a fundraising committee to raise private and corporate support for the chair. The committee is seeking to raise \$500,000 that will create the equivalent of a \$1.5 million permanent endowment fund to support the chair in perpetuity. This effort has a unique matching opportunity that will triple the impact of each gift made to the



Richard P. Braun



Panos Michalopoulos

fund. CTS will match dollar-for-dollar all private and industry contributions. CE will match contributions through a permanent commitment of annual department funds. Members of the fundraising committee are:

- **Darrel Berkowitz**, Toltz, King, Duvall, Anderson & Associates
- **Tom Chaffin**, 3M
- **Tom Eggum**, City of St. Paul
- **Peter Fausch**, Stgar-Roscoe-Fausch
- **Dave Holt**, Minnesota Asphalt Pavement Association
- **Larry Koenig**, Elk River Concrete Products
- **Larry Molsather**, Barr Engineering
- **Wayne Murphy**, AGC of Minnesota
- **Bill Russell**, Image Sensing Systems
- **Chuck Siggerud**, Short Elliot Hendrickson
- **Doug Weiszhaar**, Mn/DOT

The Braun CTS Chair is a leadership position that will build on the legacy started

by Professor **Matthew Huber** and foster innovation in the transportation engineering academic program. Under the new chair's leadership, the Richard P. Braun Transportation Engineering Program will be expanded to include a combination of the following:

- New undergraduate courses in transportation and traffic planning, design, and engineering
- New short courses for professionals in transportation and traffic planning, design, and engineering
- A series of seminars or workshops at various locations, including on-site at Mn/DOT, for government and private sector transportation engineers

Braun earned his bachelor's and master's degrees in civil engineering from the University. His career with the Minnesota Department of Transportation spanned 30 years, including various research positions and eight years as commissioner. He also chaired the Twin Cities Metropolitan Airports Commission.

For more information about how you can help, please contact **Jennifer Clarke** in the Office of Development and External Relations at 612-626-9354, 800-587-3884, or e-mail jlclarke@itdean.umn.edu. **ITS**

New report examines crash causes, data

Far more people are injured and die annually in motor vehicle crashes than in catastrophic events like nuclear power plant meltdowns, yet the latter—unlike car crashes—are thoroughly scrutinized to determine how they could be prevented. Similar systems for analysis should be in place in the traffic safety system, where drivers need to be made aware of road hazards and the decisions they should make to avoid them.

These recommendations were recently published in *A Re-assessment of Road Accident Data-Analysis Policy*, an ITS Institute report by Professor **Alfred Marcus** of the Carlson School of Management and former University researcher **Eitan Naveh**. In the report, the researchers examine theories on what they term high-consequence, low-probability events like nuclear power plant meltdowns and apply them to low-consequence, high-probability events such as automobile crashes. The researchers examine driving conditions and the decisions drivers make as factors that can lead to fatalities and injuries, then describe the models found in state crash data publications that traffic safety officials use for understanding fatalities and injuries. These models are compared with the instructional material that is used in state driving educational manuals in order to investigate how to improve the collection and use of road traffic safety data, based on analysis of the existing data and its use.

Through the investigation, the researchers found that the most sig-

nificant condition leading to a fatality or an injury was driving on a rural road, and the most significant driver decision was choosing not to use a seat belt.

How factors combine to cause fatalities and injuries was also examined.

In the study of state driving instruction manuals, the researchers discovered that about one-third of the pages in a typical manual are devoted to what traffic safety officials consider the chief reasons for fatalities and injuries. Although the current data collected in Minnesota provided a number of strong predictors of fatalities and injuries relating to the conditions a driver faces and the actions that a driver takes, overall the data's ability to explain crash severity could be better, the researchers say. They contend that improved theory could inform data collection and result in more powerful predictive models for use in programs to educate drivers.

To download a copy of the full report, visit www.its.umn.edu/publications. **ITS**



Pavement Conference: Techniques from Australia to Minnesota

Participants at the Sixth Annual Minnesota Pavement Conference were treated to news of pavement methods from places as varied as France, South Africa, and Australia—and of course Minnesota. Mn/DOT and the Minnesota Technology Transfer Center were sponsors of the February 21 event in St. Paul.



Gerry Rohrbach accepts the Pavement Conference Award as Pat Hughes looks on.

Pat Hughes of Mn/DOT moderated the opening plenary session and presented the Annual Pavement

Conference Award to Gerry Rohrbach of Mn/DOT. Rohrbach, with a long history of contributions to the pavement field, credited his staff “for making him look good.”

Next Buzz Powell, test track manager for the National Center for Asphalt Technology near Auburn, Ala., reviewed research efforts

at the NCAT pavement test track. Chuck Jahren, professor at Iowa State University, then presented “Low-Volume Roads in Australia.” He pointed out some of the differences in approach and expectations from the U.S.—for example, Australians, accustomed to long distances in the out-back, are more tolerant of dust on gravel roads and less likely to blame a transportation agency for damage to their autos from rough roads.

Duane Blanck, county engineer in Crow Wing County, gave highlights from the “Pavement Preservation Scanning Tour” during which he and 12 other U.S. officials traveled to France, South Africa, and Australia. He noted that a common thread in all three countries was a commitment to design and build long-lasting

structural pavement sections. The FHWA will publish an implementation plan with the tour’s findings and recommendations later this year.

Conference session topics included spring load restrictions, whitetopping, stone matrix asphalt, warranties, and geotextiles. Planning committee members from the University were Mihai Marasteanu and Gene Skok of the Department of Civil Engineering (CE), Jim Grothaus of CTS, and Lori Graven and Teresa Washington of the College of Continuing Education.

The pavement conference was preceded by the Second Annual Minnesota Road Research (Mn/ROAD) Workshop on February 20, where Mn/ROAD staff and others described what has been discovered to date at the facility. Mihai Marasteanu presented “Dynamic Modulus Testing of Asphalt Mixtures.” CE also sponsored the 50th Annual Geotechnical Engineering Conference on February 22. **CTS**

CTS looks at new ways to support faculty

As a first step toward increasing faculty participation in CTS, Center staff held a session this winter with 17 faculty representing nine departments. “Our success as a center depends on the success of faculty and academic departments that conduct transportation-related research and education. This meeting was a start at finding new ways CTS can support University of Minnesota faculty,” says Robert Johns, CTS director. Faculty attending the meeting were:

- Fred Beier, Marketing and Logistics Management
- Gary Davis, Civil Engineering
- Robert Dexter, Civil Engineering
- Max Donath, Mechanical Engineering and ITS Institute
- Andrew Drescher, Civil Engineering
- Jerry Fruin, Applied Economics
- David Kittelson, Mechanical Engineering
- Kevin Krizek, Humphrey Institute of Public Affairs
- David Levinson, Civil Engineering
- Mihai Marasteanu, Civil Engineering
- Alfred Marcus, Strategic Management and Organization
- Panos Michalopoulos, Civil Engineering
- Lance Neckar, Landscape Architecture
- Nikolaos Papanikolopoulos, Computer Science
- Arturo Schultz, Civil Engineering
- Tom Scott, Center for Urban and Regional Affairs
- Vaughan Voller, Civil Engineering

Topics included CTS performance measures and structure, over-read recovery, funding opportunities, proposal and reporting requirements, and working with Mn/DOT. Laurie McGinnis, CTS associate director, and Diana Flotten, CTS research coordinator, provided support for the meeting. A follow-up meeting is being planned for spring. **CTS**

Executive committee welcomes new members

The CTS Executive Committee, chaired by Professor Fred Beier, welcomes the following new members:



Anne Beers, Chief, Minnesota State Patrol



Margot Indieke-Cross, Accessibility Specialist, Minnesota State Council on Disability



Wayne Murphy, Executive Director, Highway-Heavy Division, Associated General Contractors of Minnesota



Lee Sheehy, Regional Administrator, Metropolitan Council



Charleen Zimmer, President, ZAN and Associates

Zimmer, who served as chair of the CTS Environmental Council for many years, succeeds Jim Newland as chair of the CTS Council Coordinating Committee. **CTS**

Oberstar from front

sector leaders, will discuss the impacts and policy implications of September 11 for transportation in Minnesota. Congressman Oberstar will close the forum with his insight on this topic and ideas on how Congress and the administration should address the issues raised at the forum.


The Oberstar Forum is being administered and hosted by CTS in partnership with its affiliated University colleges and campuses. It is free and open to the public, but attendees are encouraged to fill out the registration form in the enclosed brochure, as space is limited. For more information call Teresa Washington at 612-624-3745, or e-mail twashing@cce.umn.edu. **CTS**

Minnesota Public Radio to feature transportation April 8–12

Why is traffic congestion in the Twin Cities increasing so fast, and what can be done to help solve the problem? Minnesota Public Radio, during the week of April 8–12, will be looking for some answers in a week-long series of stories and a web site devoted to Minnesota transportation issues.


Mike Mulcahy, newsroom editor for the project, says, “While this sounds like a metro-only project, statewide funding and regulations contribute to the problem, and it can only be solved with the cooperation of the entire state.”

A highlight of the week will be broadcasts from a by-invitation-only forum that MPR, the Humphrey Institute, CTS, and the Minnesota Historical Society are planning for April 11. Speakers include state Representative **Carol Molnau**, Senator **Dean Johnson**, Mn/DOT Commissioner **Elwyn Tinklenberg**, and University of Minnesota geography professor **John S. Adams**.

For more details tune in to all MPR news information stations (KNOW-FM 91.1 in the Twin Cities) during the week of April 8. The web site will be at www.mpr.org. 

New editor, executive secretary hired

CTS welcomed two new hires in February. Editor **Michael McCarthy** was formerly an associate editor with *Catholic Digest* in St. Paul. He has also held reporting positions with *Northfield News*, *the Minnesota Daily*, and *the Boston Globe*.

Sharon Day was most recently a community program specialist with the Division of Epidemiology in the University’s School of Public Health. She has held a variety of positions in over 25 years of service to the University. 




Sharon Day and Michael McCarthy

T²/LTAP workshops and short courses

The Minnesota T²/LTAP Program has scheduled workshops on the following topics. For dates and locations, contact Teresa Washington at 612-624-3745, e-mail twashing@cce.umn.edu, or visit www.cts.umn.edu/t2/.

- Gravel Roads Maintenance and Design
- Roadside Vegetation Management & Erosion Control
- Preventive Maintenance for Public Works Equipment
- Hydraulic Design of Storm Sewer Systems

In addition, two one-day short courses for water resource professionals are scheduled for April 4 and 25 at the Earle Brown Continuing Education Center on the St. Paul Campus. “Using Natural Resources Conservation Service-Based Methods for the Design of Detention and Retention Basins,” taught by **Rocky Keehn**, Short Elliott and Hendrickson, meets April 4. It addresses practical and cost-effective ways to design detention and retention facilities.

On April 25, **Steven Klein**, Barr Engineering, will teach “Design, Construction, and Maintenance of Storm Water Treatment Basins and Erosion Control Measures.” It will focus on the latest permanent and temporary erosion control practices and innovations in surface runoff water quality treatment. The fee for each short course is \$250. For further information, e-mail rmartin@cce.umn.edu or call 612-624-3492. These short courses are sponsored by several departments at the University of Minnesota and the Minnesota Section, ASCE Water Resources Committee. 

Upcoming events

To publicize your event, call CTS at 612-626-1077; fax 612-625-6381; or e-mail snopl001@tc.umn.edu. Visit the CTS web site—www.cts.umn.edu—for more comprehensive event information, including schedules for ITS Institute and CTS seminars.

Mar. 27	“Livable Streets,” featuring Walter Kulash , P.E. Sponsor: Sensible Land Use Coalition. Call 952-474-3302.	Apr. 24–25	Minnesota Spring Maintenance Expo, St. Cloud. Call Jim Grothaus , 612-625-8373.	St. Paul. Call Shirley Mueffelman , 612-624-4754, or e-mail smueffel@cce.umn.edu .	
Apr.–May	League of Minnesota Cities Insurance Trust (LMCIT) 2002 Safety & Loss Control Workshops, cities across Minnesota. Call Chris White at 651-215-4069 or 800-925-1122.	Apr. 29	Oberstar Forum, Radisson Metrodome Hotel, Minneapolis. Contact Teresa Washington at 612-624-3745, twashing@cce.umn.edu .	July 14–16	2002 Midwest Regional & Shortline Railroad Annual Conference, Holiday Inn, New Ulm, Minn. Call Angela , 651-228-9757, or e-mail AAnderson@MandKLaw.com .
Apr. 8–12	Minnesota Public Radio “Focus on Transportation” week.	Apr. 20–25	CHI 2002 Conference on Human Factors in Computing Systems, Minneapolis. Visit www.chiplace.org .	Sept. 18–20	“Tools of the Trade,” 8th TRB National Conference on Transportation Planning for Small and Medium-Sized Communities, Crowne Plaza Hotel, Cincinnati, Ohio. Contact Kathy Briscoe at 652-296-1614 or kathy.briscoe@dot.state.mn.us . 
Apr. 15	Sabo Lecture Series, Humphrey Center, Minneapolis. Call Janice Young , 612-626-0347, or e-mail jyoung@hhh.umn.edu .	May 15–17	2002 WTS National Conference, Minneapolis Hilton. For more information go to www.wtsnational.org .		
		May 22–23	13th Annual CTS Transportation Research Conference, RiverCentre,		