

# REPORT

CTS

MAY 1997

## Sabo Speaks at ITS Luncheon

U.S. Representative **Martin Sabo** gave his outlook for transportation funding at an April 2 luncheon meeting in Minneapolis. ITS Minnesota hosted the luncheon, with assistance from CTS.

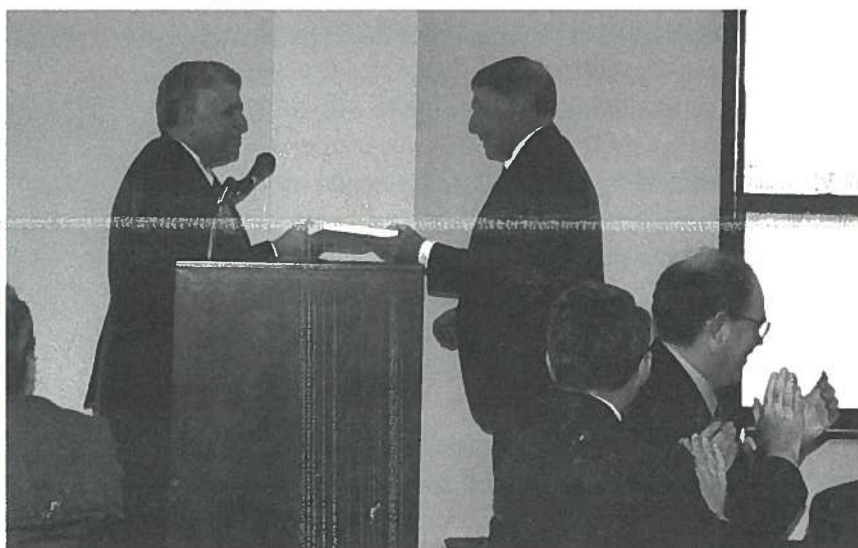
After introductions by ITS Minnesota president **Jeff Benson**, Commissioner **James Denn** of the Minnesota Department of Transportation (Mn/DOT) presented a plaque to Sabo in honor of his "efforts in sustaining ITS programs in Minnesota." Denn credited Sabo's role for helping to enable the long-term planning and continuity that makes Intelligent Transportation Systems (ITS) a success in Minnesota.

In his remarks, Sabo gave strong support for ITS. "Pursuing ITS makes incredible sense," he said, especially given the nation's need to make the transportation infrastructure work as efficiently as possible. He praised the success of Minnesota Guidestar—the state's ITS program—in deploying ITS technologies, adding that the same type of planning and discipline that marks Guidestar needs to be applied to the rest of the country if widespread deployment is to succeed. *(Please see within for a related item about ITS deployment.)*

He then updated the audience on the reauthorization of the Intermodal Surface Transportation Efficiency Act, known as ISTEA II. "Funding this year is still an open question," he said, and very tough choices are ahead if money is to be found for areas underfunded in the president's proposal, such as airport construction and transit. He predicted that funding for ITS will continue to grow and will not be affected by the infighting over the federal allocation formula—a

battle he estimates could last until fall. He also noted the growing support for a transitway in the Hiawatha corridor in Minneapolis, and said he would continue trying for increased funding for that initiative.

Sabo then toured the Center's ITS LABORATORY and the University's Human Factors Research Laboratory.



Commissioner James Denn (left) presents a plaque to Rep. Martin Sabo in honor of his contributions to ITS in Minnesota.

## Public & Private Sectors View Progress of SAFETRUCK

Professor **Max Donath** of Mechanical Engineering hosted presentations on and demonstrations of the "SAFETRUCK" Program on April 10-11. The sessions were held as part of a meeting of the ITS America Advanced Vehicle Control Systems Committee.

Designed to improve the safety of heavy vehicles, SAFETRUCK is a joint program of CTS, Mn/DOT, the Mechanical Engineering department and its Center for Advanced Manufacturing, Design and Control, and several private firms. It involves the evaluation of new sensor and control technologies to determine their impact on

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Conference is May  
13-14! Call 612-626-  
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safety, regulation, vehicle, and road design. This includes technologies that prevent road departure accidents, reduce/detect driver fatigue and/or loss of control, and detect obstacles and execute collision avoidance countermeasures. Initial testing and development is taking place on the low-volume road loop of the Minnesota Road Research Project (Mn/ROAD) site near Monticello, which was the location of the demonstrations.

About 40 people attended the event, including representatives of the Federal Highway Administration (FHWA), the National Highway Transportation Safety Administration, Mn/DOT, 3M, Ford, Eaton, Caltrans, Carnegie Mellon, and GM. Donath's group successfully demonstrated the ability of a tractor-trailer to automatically stay in its lane based on Global Positioning System (GPS) satellite signals.

## Spring Maintenance Expo Draws Record Crowd

Patching potholes, filling cracks, and removing graffiti—these are just three of the topics that drew a record crowd of over 700 persons to the Minnesota Spring Maintenance Conference in St. Cloud. Held on April 9-10, the event was designed for city, county, and state maintenance operators and supervisors along with transportation and research implementation personnel.

Expo sponsors were Mn/DOT, the Minnesota Local Road Research Board (LRRB), the Minnesota Street Superintendents' Association, the Minnesota Public Works Association, and the Minnesota Technology Transfer (T<sup>2</sup>) Program of CTS.

The expo followed a similar event last October that focused on winter maintenance issues. The fall expo had evolved from the old Mn/DOT "Snowfighter Rodeo" into a

much larger event where maintenance workers from cities and counties could also share their experiences. (The Second Annual Fall Maintenance Expo is being planned for later this year.)

The spring expo featured over 60 concurrent session presentations covering maintenance innovations in Minnesota. Topics included pavement maintenance, bridge and concrete maintenance, safety, traffic and sign management, roadside management, gravel roads, maintenance management systems, and human relations.

**Paul Keranen** of Mn/DOT Maintenance Operations gave the opening comments, and LRRB chair **Michael Sheehan** gave the welcoming address along with Commissioner **James Denn**. **Cheri Trenda**, director of the T<sup>2</sup> Program, and **Tom Struve** and **Dave Hutton**, members of the T<sup>2</sup> Steering Committee, moderated sessions. In addition, **Kathy Baker** and **Ken Nelson** of Mn/DOT gave presentations about activities of the Circuit Training and Assistance Program (formerly known as the Circuit Rider Van Program), a joint initiative of Mn/DOT, the LRRB, the FHWA, and Minnesota T<sup>2</sup>.

## Logistics Forum Proceedings, ITS Deployment Report Available

CTS has published proceedings from the Policymakers' Forum held last February 12. The forum, titled "Logistics—Keeping Minnesota Competitive," featured a keynote speech by **Don Schneider** of Schneider National and a panel session with **Carl Olson** of Marvin Windows, Professor **Frederick Beier** of the Carlson School of Management, **Roger Wigen** of Roger Wigen Associates, and Professor **Frank Dooley** of North Dakota State. For a copy of the 40-page proceedings, call CTS at 612-626-1077. Copies will also be available at the CTS conference on May 13-14.

The U.S. General Accounting Office published a report in February titled *Urban Transportation: Challenges to Widespread Deployment of Intelligent Transportation Systems*. The report, GAO/RCED-97-74, cites Minnesota Guidestar as an example of a successful deployment effort. For a copy call the GAO at 202-512-6000 or download a copy from the GAO Web site, <http://www.gao.gov>.

## CTS Chair Is County Engineer of Year

At its annual meeting in March, the National Association of County Engineers (NACE) selected **Doug Weiszhaar** of Stearns County as Rural County Engineer of the Year. Weiszhaar, chair of the



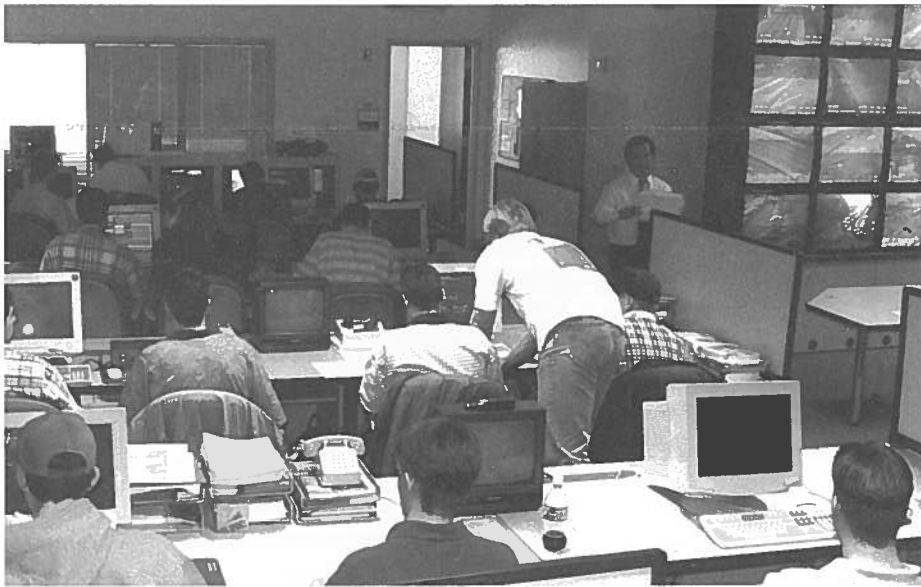
The Spring Maintenance Expo included a technology and equipment fair along with over 60 concurrent session presentations.

Center's Infrastructure Council since 1990, has been a county engineer / assistant engineer for the past 21 years. In addition, **Duane Blanck** (Crow Wing County) was installed as NACE president-elect, and **Don Wisniewski** (Washington County) was elected and installed as the northcentral regional vice president.

## ITS Lab Hosts Class, Visitors

Dr. **Eil Kwon**, senior research associate with CTS, organized and lectured at a lab session held in the Center's ITS LABORATORY. The session supplemented the University's Civil Engineering (CE) course 5200, "Geometric Design of Highways," taught by Professor **Gary Davis**. The session introduced highway capacity software to University undergraduate students.

The ITS lab was also visited in April by over 70 guests from the Nebraska, Iowa, and Wisconsin DOTs as part of the FHWA's Executive Intelligent Transportation Initiative (ITI) Scanning Tours. The group visited Mn/DOT's Traffic Management Center and the 3M Cottage Grove test site as part of their visit as well.



*University students attend a CE class in the ITS lab.*

## Participants Hear Success Stories & Challenges at Bike Summit

Sixty persons attended the Twin Cities Bicycle Transportation Summit on April 19 in the Humphrey Center. The event was sponsored by the Minnesota Coalition of Bicyclists, with assistance from the University's Parking and Transportation Services.

Attendees were bicycle transportation planners, advocates, and activists from across the Twin Cities region, including participants from as far away as Chisago County

and Faribault. Many members of the University community attended, including **Mara Krinke**, a research assistant with the Humphrey Institute's State and Local Policy Program (SLPP), who gave a presentation about the SLPP's research on the 29th Street Corridor in Minneapolis, and **Steve Sanders** of Parking and Transportation Services, who spoke on bicycling at the University.

Presentations and roundtable discussions focused both on the successes in improving bicycle transportation in the region as well as on the remaining challenges.

A complete report on the summit will be available later this month. The report will include the summit materials, notes from each of the roundtable discussions, and a contact list of participants. For a copy call **John Levin**, 612-724-3660, or e-mail him at [bikesummit@freenet.msp.mn.us](mailto:bikesummit@freenet.msp.mn.us).

## CTS Staff Meet with ITS World Congress, Korean Officials

**Dennis Foderberg**, director of the Center's ITS Institute Program, and Dr. **Eil Kwon** attended the board meeting of the ITS World Congress in Seoul, South Korea, last month.

They also participated in a meeting of the International Program Committee, which is planning the ITS Fourth World Congress conference in Berlin this October and the Fifth World Congress in Seoul next year.

In addition, Foderberg and Kwon met with Seoul transportation officials to explore development of a technical assistance program. Kwon gave seminars to three groups—the Seoul Development Institute, the Korea Transport Institute, and the Korean Highway Corporation—about Minnesota freeway operations systems, focusing on real-time ramp metering and traveler information systems being tested by Mn/DOT. Seoul metro officials are interested in learn-

ing more about this technology and may potentially send staff to Minnesota for training.

## Faculty Awarded Research Contracts

Professor **Barbara Lukermann** of the Humphrey Institute has signed an addendum to a contract to provide Mn/DOT's Office of Strategic Initiatives with environmental scanning on the issues of telecommunications, demographics, and transportation initiatives. She held a workshop at Mn/DOT on March 31 for a group of Mn/DOT managers to discuss her issues paper on these topics.

Professors **Beth Walter Honadle** and **George Honadle** of Applied Economics have received a grant from Region X of the Association of Minnesota Counties with funding from the Minnesota Board of Government Innovation and Cooperation. In the project, "Defining the Role of the Twin Cities Metropolitan Counties Area in the Delivery of Services," the researchers will look at two pilot services: law enforcement and transit planning. The projected completion date is March 1998.

## TRB Seeks Applicants for IDEA Program

The Transportation Research Board (TRB) is seeking applicants for its Ideas Deserving Exploratory Analysis (IDEA) Program. The program explores the feasibility of unproven technical concepts, novel applications of proven concepts, or advances that have not yet been tried or tested for application in transportation practice.

IDEA is divided into three areas: (1) ITS-IDEA—advanced communications, information, sensor, and automated control technologies; (2) NCHRP-IDEA (National Cooperative Highway Research Program)—highway pavements and structures; and (3) Transit-IDEA.

The three programs are open to all individuals, entrepreneurs, and investigators from businesses, public and private universities, research institutions, federal labs, state and local governments, for-profit and not-for-profit organizations, and other research institutions.

For a copy of the announcement contact the TRB at 202-334-3568; fax 202-334-3471.

## Human Factors Researchers Publish Papers

Researchers affiliated with the University's Human Factors Research Laboratory have published the following:

- "A Computer-Based Methodology for Evaluating the Content of Variable Message Signage," **Douglas Wagner, Max Vercruyssen, and Peter Hancock**, *ITS Journal* 1997.
- "The Influence of Approach Angle on Estimates of Time-to-Collision," **Mike Manser and Peter Hancock**, *Ecological Psychology*, 8:71-99, 1996.
- "Assistance from Intelligent Transportation Systems," **Max Vercruyssen**, *Maximizing Human Potential*, American Society on Aging, vol. 4, no. 3, winter 1996-97.
- "On Convergent Technological Evolution," **Peter Hancock**, *Ergonomics in Design*, 4(1) 22-29, 1996.

- "Perception of Spatial Orientation in Real and Virtual Environments," **Eric Arthur, Peter Hancock, and Sue Chrysler**, *Ergonomics*, 40:69-77, 1996.
- "The Performance and Workload Effects of Task Display Re-location During Automation," **Peter Hancock and Steve Scallen**, *Displays*, 17:61-68, 1997.

## Upcoming Transportation and Related Events

To publicize an event contact **Pamela Snopl**, senior editor, 612-624-0841; fax 612-625-6381; e-mail [snopl001@tc.umn.edu](mailto:snopl001@tc.umn.edu). Visit the CTS Web site—<http://www.umn.edu/cts/>—for more comprehensive event information.

- May 13-14 CTS Eighth Annual Transportation Research Conference, Sheraton Park Place, Minneapolis. Contact **Catherine Ploetz**, 612-626-2259. A registration form is on the Center's Web site at <http://www.umn.edu/cts/Events/conf97.html>.
- May 18-21 TRB 3D in Transportation Symposium & Workshop, Minneapolis/St. Paul Airport Hilton. Hosts: Mn/DOT, FHWA. Call TRB, 202-334-2960.
- May 28 "Commercial Development, Minnetonka Marriott. Sponsor: Sensible Land Use Coalition. Call 612-474-3302.
- June 16-17 "Small Railroads and Economic Development—A Partnership," Radisson Metrodome, Minneapolis. Contact **Lori Graven**, 612-625-9023; Web <http://www.umn.edu/cts/Events/railroad.html>.
- July 27-30 Local Technical Assistance Program (LTAP) / T<sup>2</sup> Center Annual Conference, Duluth Entertainment Convention Center. Call **Lori Graven**, 612-625-9023; Web <http://patriot.net/~ltap/annual.html>.
- Aug. 24-27 Rural Advanced Technology and Transportation Systems International Conference, Big Sky, Mont. Call 406-994-6114.
- Sept. 14-18 American Public Works Association International Congress and Exhibition, Minneapolis Convention Center. Contact **Rick Person**, 612-266-6122.
- Oct. 5-8 American Society of Civil Engineers 1997 Annual Convention & Exposition, "Innovative Civil Engineering for Sustainable Development," Minneapolis Convention Center. Call 800-548-2723.
- Oct. 21-24 Fourth World Congress on Intelligent Transport Systems, Berlin, Germany. Call (49-421) 21 90 73; e-mail [CongressPartner@T-ONLINE.DE](mailto:CongressPartner@T-ONLINE.DE).