



SAFETEA-LU workshop gives insight into new bill

“SAFETEA-LU is good news for the country and for Minnesota,” said Lt. Gov. **Carol Molnau** in her opening remarks at the SAFETEA-LU Minnesota Workshop, held in St. Paul on October 6. Molnau, who also serves as commissioner of the Minnesota Department of Transportation (Mn/DOT), was one of an array of speakers who introduced the provisions and policy implications for Minnesota of the new federal transportation reauthorization bill.

Signed by the president on August 10, the 1,700-page bill provides \$286 billion for federal fiscal years 2004–09, an inflation-adjusted increase of 5 percent for highways and 16 percent for transit. Minnesota receives the second highest proportional increase of all states, at approximately 46 percent.

The workshop, said **Robert Johns**, CTS director and workshop co-moderator, was the only one of its type



Lt. Gov. Carol Molnau



Tom Sorel



Robert Johns

held in the nation to present the new legislation. Workshop sponsors were Mn/DOT, the Federal Highway Administration (FHWA), and the Minnesota Department of Public Safety (DPS), with CTS serving as host. Several state legislators and their staffers were among the large turnout of more than 320 people, Johns noted, along with representatives of all levels of government, industry, the University of Minnesota, and local media.

SAFETEA-LU, Molnau explained, “provides funding for highways, transit, safety, freight, planning, and research—all the things we need to move forward in this state.” After two years of extensions, the bill was “greatly needed” to enable state and local government to deliver numerous transportation projects. “We intend to put the funding to good use, build more, build faster, be innovative, and build better,” she said.

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Access to Destinations projects underway

CTS has begun research in the interdisciplinary “Access to Destinations” Study. The research program follows the national Access to Destinations conference that brought researchers from around the world to Minneapolis in November 2004 (see www.cts.umn.edu/publications to download the proceedings). The following five projects have been approved for funding:

Development of Accessibility Measures, David Levinson, Civil Engineering (CE). Sponsor: Mn/DOT.

The goal of this research is to develop a set of possible performance measurements that can be used to analyze variable sets of historical land use and travel time data—including data from the freeway networks, surface streets, transit systems, and non-motorized travel—to understand accessibility. Transportation agencies can use these measures in a variety of operational planning and public involvement

activities to ascertain how investments, transportation strategies, and land use policies affect the performance of the transportation-land use system.

Refining Methods for Calculating Non-Auto Travel Times, Kevin Krizek, Humphrey Institute of Public Affairs. Sponsors: Hennepin County and Mn/DOT.

This research will generate and refine methodologies for calculating non-auto (transit, bicycle, walking) travel times between origins and destinations within the Twin Cities. When married with detailed measures of land use activity, these derived travel times can then be used as required input parameters to calculate the accessibility of destinations within the metro area using differing modes of transportation.

Estimation of Arterial Travel Times, Gary

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ITS Institute launches new Web modules for high school students

The Intelligent Transportation Systems (ITS) Institute at CTS recently launched two new Web modules to help high school students learn about transportation technologies.

- The new Topographic Mapping module introduces students to techniques of accurate mapping and the role of digital maps in new transportation technologies.
- The Human Factors module explores the important issue of how human capabilities and limitations affect the design of vehicles and transportation systems.

The new modules join previously developed modules on the Global Positioning System and freeway ramp metering. All were designed by **Mark Tollefson**, ITS Institute K-12 education coordinator and a high school science teacher. The Web modules are intended for classroom use, and feature guided exploration of Web-based resources along with lab exercises that let students immediately practice using what they have learned.

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New U of M report: homeland security and the trucking industry

Since the terrorist attacks of September 11, 2001, the trucking industry has been among the transportation sectors receiving increased attention due to security concerns. The large carrying capacity and high level of access that make trucks invaluable freight haulers also make them potentially dangerous weapons. In response, the trucking industry has stepped up its exploration of new technologies meant to ensure that cargo, drivers, and vehicles comply with security standards.

The Intelligent Transportation Systems (ITS) Institute at CTS recently collaborated with the International Truck and Engine Corporation and the American Transportation Research Institute—the trucking industry’s research arm—to evaluate security technologies applicable to commercial vehicle operations (CVO). A report synthesizing findings from the research is now available from the

ITS Institute.

The report, by ITS Institute director **Max Donath, Dan Murray, and Jeff Short**, documents existing and developing trends in CVO economics and technology investments (with an emphasis on onboard systems), and their interrelationships with security preparedness and homeland security issues and imperatives. An in-depth review of smart-card applications, biometric verification systems, and cargo management devices is included.

The report is available online at www.cts.umn.edu/publications/reports/reportdetail.pl?id=1015. **CTS**



Register for Freight and Logistics Symposium

There’s still time to register for the Ninth Annual Freight and Logistics Symposium. The event, to be held December 2 in Minneapolis, will focus on the economic impacts of freight mobility on the Upper Midwest. Speakers will discuss the growing regional demand for freight transportation capacity, emerging supply-chain and infrastructure approaches to capacity challenges, the critical role of security in the supply chain, and more.

John Ficker, president of the National Industrial Transportation League, will give the keynote, titled “Freight Mobility, Transportation System Capacity, and the Economic Challenges Ahead.”

The symposium is sponsored by CTS in cooperation with Mn/DOT, the Minnesota Freight Advisory Committee, the Council of Supply Chain Management Professionals, and the Metropolitan Council.

For additional information, contact **Katie Kjeseth**, 612-624-3708, conferences5@cce.umn.edu. You may also register online at www.cts.umn.edu/events/logsymposium. **CTS**

CTS represented on transit coordination committee

A growing number of Americans cannot drive because of age, medical condition, or disability, and many others are unable to afford their own vehicle. Although health and human-service agencies help fill this mobility gap, their operations and eligibility requirements are often uncoordinated and their services overlap.

To foster the coordination of health and human-service transportation in the state, Minnesota Governor **Tim Pawlenty** has established the Interagency Committee on Transit Coordination. The committee will survey existing transportation alternatives, best practices, and coordination strategies that have worked in Minnesota and other states and develop a series of recommendations for improving the level of transportation coordination.

The formation of this committee parallels that of the Interagency Transportation Coordinating Council, which was established by a 2004 presidential executive order to address similar objectives at the federal level. The order directs multiple federal departments and agencies to work together to ensure that transportation services are seamless, comprehensive, and accessible.

Members of the state committee are **Randy Halvorson** (chair), Minnesota

Department of Transportation; **Robert Johns**, CTS; **David Christianson**, Metropolitan Council; **Lynda Boudreau**, Minnesota Department of Human Services; **Doug Stang**, Minnesota Department of Health; **Toni Baker**, Minnesota Board on Aging; **Tom Lencowski**, Minnesota Department of Education; **Joan Willshire**, Minnesota State Council on Disabilities; and **Bob Isaacson**, Minnesota Department of Employment and Economic Development.

The committee’s first meeting, held in September, included a presentation on the “coordination dilemma” by **Hal Freshley** of the Board on Aging; a federal/state background by **Noel**

Shughart of Mn/DOT; a public transit overview by **Dave Christensen** of the Met Council and Shughart; and a review of a Mn/DOT and Met Council coordination study by **Robbie Sarles** of RLS & Associates.

The committee will provide the governor with a brief report of its recommendations by November 1 of each year.

This initiative is related to CTS and Hennepin County efforts in community transportation, including an electronic newsletter and a Web site. For more information, see www.cts.umn.edu/ct. **CTS**



Molnau also thanked the SAFETEA-LU Work Team, led by **Brad Larsen**, federal relations manager with Mn/DOT's Office of Government Relations, for analyzing the bill's impacts on Minnesota. The team, with representatives of the FHWA, Mn/DOT, DPS, the University, and other agencies, "was a great example of what can be accomplished by working together for a common goal," she said.

Next at the podium was **Tom Sorel**, FHWA Minnesota division administrator and workshop co-moderator. People have asked him, he began, if there is anything controversial about the bill. "The controversy...was the time it took to get the bill," he answered. "Now we're at the time to implement the bill and move on."

SAFETEA-LU "is evolutionary, not revolutionary," Sorel continued. It builds on TEA-21 (enacted in 1998), which in turn had built on ISTEA (enacted in 1991). The next bill, he predicted, will be more like the revolutionary ISTEA, which "changed the ways we did business."

Although the bill's passage ushers in a time of uncertainty and even confusion, Sorel said, it is also an exciting time to shape the future and explore innovation. "All in the room are in a position to

SAFETEA-LU
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not revolutionary."

—Tom Sorel, FHWA



Brad Larsen

affect it and to give input on policy," he concluded. "You are all part of the process, and all are key to moving this legislation in Minnesota."

The agenda then moved to eight sessions featuring presentations by key leaders and question-and-answer periods with expert panelists.

The funding and finance session began with an overview by Larsen. SAFETEA-LU is not revolutionary, he agreed, but it "definitely is a record-setting bill in terms of funding level, the size of the bill—and length of title." (SAFETEA-LU stands for the Safe, Accountable, Flexible, Efficient Transportation Equity Act for the 21st Century: A Legacy for Users.)

Many of the provisions in SAFETEA-LU require additional federal guidance and rulemaking, Larsen explained, and a corrections bill is likely (much like the corrections bill that passed about a year after TEA-21's passage). He warned, however, that legislators do more than just correct technical errors in such bills: "they can make policy changes, redirect and increase funding, and designate additional earmark projects." A corrections bill is unlikely in the next few months, he said, "primarily because federal congressional transportation leaders don't want to...provide a legislative vehicle whereby Congress might take some funding away from SAFETEA-LU and put it toward hurricane relief." Many believe that as long as the corrections bill isn't introduced too early, he added, such a change is "highly unlikely."

In the research session, **Sue Lodahl**, director of Mn/DOT's Research Services Section, reported that SAFETEA-LU pro-

vides a "significant increase in research funding, with many new programs and opportunities." It also marks a "continued shift of resources to universities and states," she said. Also in the session, Johns gave highlights of University of Minnesota funding under the bill, including \$16 million for the Intelligent Transportation Systems (ITS) Institute and an increase for the Minnesota Local Technical Assistance Program (LTAP), both housed at CTS, and the new Rural Safety Center of Excellence at the Humphrey Institute. (See the October *CTS Report* at www.cts.umn.edu/publications for details.)

Other workshop sessions and presenters were:

- Highway Programs: **Linda Zemotel**, Investment Management, Mn/DOT
- Planning: **Peggy Reichert**, Investment Management, Mn/DOT
- Environment: **Frank Pafko**, Environmental Services, Mn/DOT
- Safety, Operations, ITS: **Bernie Arsenneau**, Traffic, Security, and Operations, Mn/DOT; **Kathy Swanson**, Traffic Safety, DPS; **Marthand Nookala**, Operations, Safety and Technology, Mn/DOT
- Transit, Passenger Rail, Bike, Pedestrian: **Natalio Diaz**, Metropolitan Transportation Services, Metropolitan Council; **Donna Allan**, Transit, Mn/DOT
- Motor Carrier, Rail, Freight, Hazardous Materials: **Ward Briggs**, Freight and Commercial Vehicle Operations, Mn/DOT

Powerpoints of the event are posted on Mn/DOT's Web site: www.dot.state.mn.us/safetea-lu. **CTS**

CE seeks practitioner-mentors for capstone course

The Department of Civil Engineering (CE) at the University of Minnesota is again seeking volunteers to serve as practitioner-mentors in its Capstone Design course. The purpose of this course, required of all seniors, is to prepare them for their professional career by integrating basic material learned during the civil engineering undergraduate program to address real-life design problems provided by their mentors.

Each practitioner-mentor presents a problem statement for a design project to be solved. Students then form teams of

four or five to work with the individual practitioner-mentors in addressing the design problems at the feasibility level. The students meet with their practitioner-mentor once per week at a place chosen by the mentor. The mentors receive professional development hours for their efforts.

If you are interested in becoming a mentor-practitioner for a transportation-related project, please contact Professor **Panos Michalopoulos** at 612-625-1509 (micha001@umn.edu). Spring semester begins in January. **CTS**

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CTS outreach and education coordinator **Stephanie Jackson** says the Web modules are a way to get pre-college students interested in the diverse educational and career opportunities available in the transportation world. To encourage teachers to try out the modules in their own classrooms, CTS distributed the modules on CD-ROM to metro high schools; all the modules are also available on the ITS Institute Web site at www.its.umn.edu/education/modules.

For more information, contact Jackson at sjackson@cts.umn.edu or 612-624-8398. **CTS**

Exhibitors sought for Career Expo

CTS is cosponsoring the 11th Annual Transportation Career Expo on March 2, 2006. As part of this event, representatives from a variety of companies and public agencies will set up exhibits in order to inform expo participants about their organizations and job opportunities.

Enclosed with this *Report* is a call for exhibits. If you would like your organization to participate in this event, please fill out



and return the registration form. For more information contact **Mindy Carlson** at 612-625-1813, jones154@cts.umn.edu. More details to come in future issues of the *Report*. **CTS**

CTS seeks nominees for Research Partnership Award

CTS is accepting nominations for the 2006 Research Partnership Award. Initiated in 1996, the award is designed to recognize research projects within the CTS program that have resulted in significant impacts on transportation. Criteria and submission instructions are in the enclosed form.

The 2005 recipient, "Fly Ash Screening Tool Investigation 795 Implementation," included partners from the University, Mn/DOT, several counties, and industry. Previous years' projects have ranged from a GPS parcel map inventory to an analysis of roofing shingles in asphalt concrete.

An evaluation committee will review the nominations and recommend a winning partnership to the CTS director for approval. The award will be presented at the CTS annual awards ceremony in April. Please return your nomination form to **Linda Preisen** of CTS by January 31, 2006. **CTS**

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Davis, CE. Sponsor: Mn/DOT.

The main objective of this project is to develop, test, and recommend methods for network-wide estimation and prediction of travel time on arterials.

Generation of Travel-Time Data for the Metro Freeway Network,

Taek Kwon, University of Minnesota Duluth (UMD), and **Eil Kwon**, Mn/DOT. Sponsor: Mn/DOT.

This collaborative effort between UMD and the Mn/DOT Office of Traffic, Security, and Operations will generate estimated travel-time data for selected routes in the metro freeway network using archived detector data. The resulting travel-time data could be used for various needs, including the estimation of network traffic performance at Mn/DOT as well as support for other research activities.

Twin Cities Metrowide Traffic Microsimulation: Feasibility Investigation, Panos Michalopoulos, CE.

Sponsor: Mn/DOT.

The goal of this first phase is to evaluate the feasibility of creating a metro-wide microscopic simulation model. The investigation will include questions such as: Which is the most appropriate simulation application currently on the market? Which will allow for the most cost-effective upgrades in order to meet all requirements? What are the data requirements of a metrowide model? **CTS**

Upcoming events

To publicize your event, call CTS at 612-626-1077, fax 612-625-6381, or e-mail snopl001@cts.umn.edu. Visit the CTS Web site—www.cts.umn.edu—for more comprehensive event information.

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| Nov. 16–17 | Toward Zero Deaths Conference, St. Cloud. Contact Shirley Mueffelman , 612-624-4754, conferences2@cce.umn.edu . | Feb. 16 | 10th Annual Minnesota Pavement Conference, St. Paul. Contact Shirley Mueffelman , 612-624-4754, conferences2@cce.umn.edu . |
| Nov. 16–17 | Minnesota Public Works Association Fall Conference, Brooklyn Park. Contact Oona Besse , 612-624-3492, conferences3@cce.umn.edu . | March 2 | Transportation Career Expo, Minneapolis. Contact Mindy Carlson , 612-625-1813, jones154@cts.umn.edu . |
| Dec. 2 | CTS Freight and Logistics Symposium, Minneapolis. Contact Katie Kjeseth , 612-624-3708, conferences5@cce.umn.edu . | March 8 | 12th Annual ITS Minnesota Spring Meeting & Information Exchange Forum, St. Paul. Contact Katie Kjeseth , 612-624-3708, conferences5@cce.umn.edu . |
| Dec. 6 | Minnesota Association of Asphalt Paving Technologists 52nd Annual Asphalt Conference. Contact Mike Marti , 763-249-6779, mmarti@srfconsulting.com . | March 16–17 | Annual Concrete Paving Workshop, Duluth. Call the Concrete Paving Association of Minnesota, 651-762-0402. |
| Jan. 17–20 | Minnesota County Engineers Association Annual Conference, Cragun's. Contact Oona Besse , 612-624-3492, conferences3@cce.umn.edu . | Apr. 5 | 5th Annual Road Salt Symposium, St. Cloud. Contact Jeanne Prok of the Freshwater Society, 952-472-3540, jeanne@freshwater.org . |
| Jan. 25–27 | City Engineers Association of Minnesota Annual Conference, Brooklyn Park. Contact Oona Besse , 612-624-3492, conferences3@cce.umn.edu . | Apr. 11–12 | Spring Maintenance Training Expo. Contact Shirley Mueffelman , 612-624-4754, conferences2@cce.umn.edu . |
| Feb. 9 | CTS Winter Luncheon with Leonard Evans , Radisson Hotel Metrodome, Minneapolis. Contact Katie Kjeseth , 612-624-3708, conferences5@cce.umn.edu . | May 10–12 | Minnesota Public Works Association Spring 2006 Conference, Grandview Lodge. Contact Oona Besse , 612-624-3492, conferences3@cce.umn.edu . |
| | | May 24–25 | CTS Seventeenth Annual Transportation Research Conference, Saint Paul. Contact Katie Kjeseth , 612-624-3708, conferences5@cce.umn.edu . CTS |