

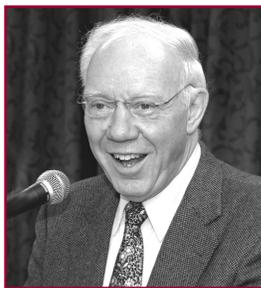


## Oberstar Forum: 'Non-motorized transportation'

Non-motorized modes of transportation—in other words, bicycling and walking—provide increased accessibility, community enhancements, and health benefits for many in our society. The fifth **James L. Oberstar** Forum on Transportation Policy and Technology will explore the value of integrating these modes into communities. The forum—“Transportation Choices: The Important Role of Walking and Biking”—will be held **April 10** at Coffman Memorial Union in Minneapolis.

The forum will explore several key aspects of investing in these modes, including:

- Integration of the design of non-motorized facilities into the community and transportation network
- The value of increased accessibility on economic activity, livability, and community identity
- Recreation and health benefits
- Safety concerns
- The role of local, state, and federal



James Oberstar

government, and the impacts of geography and culture

In the forum's opening session, Rep. Oberstar will share the vision set forth for non-motorized transportation in

SAFETEA-LU. Passed last year, the bill provides substantial federal funding to advance and evaluate walking and biking systems.

Next on the agenda is a keynote presentation featuring **Berthold Tillmann**, mayor of Münster, Germany. Recipient of a global “Most Livable Community” award,

Münster has a daily mode share of bicycling approaching 40 percent. Tillmann will offer his perspective on the role that bicycling and walking play in Münster's success as one of the world's most livable communities.

The forum then turns to two panel discussions. The first will review plans for non-motorized transportation in four U.S. communities. Speakers include **Lea Schuster**, director of Transit for Livable

## Inside

- Freight & Logistics Symposium ..... 2
- Minnesotans at TRB ..... 3
- ITSO conference..... 4
- Grad Certificate session ..... 4

Communities (St. Paul), and representatives from Wisconsin, Missouri, and California.

The second panel will discuss research and evaluation implications for non-motorized transportation. Panelists include three University of Minnesota researchers: **Kevin Krizek** and **Gary Barnes** of the Humphrey Institute of Public Affairs, and **Ann Forsyth** of the Metropolitan Design Center.

Rep. Oberstar will wrap up the event with closing remarks.

The forum is free and open to the public. Space is limited, however, so attendees are encouraged to register. For more information, see the enclosed brochure or visit the Oberstar Forum Web page at [www.cts.umn.edu/oberstarforum](http://www.cts.umn.edu/oberstarforum). **CTS**

## U of M researchers and CTS edit 'Access to Destinations' book

A new book that broadens our understanding of the concept of accessibility is now available. *Access to Destinations* is a 414-page collection of 17 research papers plus an introductory chapter by the editors:

Associate Professor **David Levinson** (Department of Civil Engineering) and Assistant Professor **Kevin Krizek** (Humphrey Institute of Public Affairs).

The papers resulted from the CTS “Access to Destinations” conference held at the University of Minnesota in November 2004. The conference was funded by University of Minnesota President **Robert**



David Levinson



Kevin Krizek

**Bruinink's** 21st Century Interdisciplinary Conference Series as well as CTS. Levinson and Krizek helped plan and moderate the conference.

The book is an up-to-date account of the

science and policy of accessibility. The wide-ranging papers cover transit, network growth, definitions, modeling, and more.

“This is a lively, readable, and intellectually rich exploration of accessibility, the most important characteristic of cities and their transportation systems,” writes Professor **Martin Wachs** in his review.

“The contributors explore many aspects of

accessibility and the loss of accessibility that comes with congestion. The result is fascinating, because their approaches are so different, yet complementary. [The book is] of equal interest to planners, engineers, and urbanists of all backgrounds.” Wachs, of the University of California, Berkeley, was the CTS luncheon speaker in spring 2004.

Accessibility and mobility are distinctly different concepts, writes Professor **Susan Handy** of the University of California, Davis, in her chapter. Mobility is the ability to get from one place to another; accessibility is the ability to get what one needs, through travel if necessary.

## Freight and Logistics Symposium:

# Industry transportation leader outlines freight challenges ahead

A number of infrastructure and capacity issues are putting the nation's transportation market in jeopardy, according to **John Ficker**, president of the National Industrial Transportation League (NITL).

"We cannot continue to operate our freight system and move the goods of this country unless we're willing to put forth some effort," Ficker said, predicting the need for freight capacity to double in the years ahead. He addressed a group of 125 freight and logistics professionals, policymakers, and researchers at the CTS Ninth Annual Freight and Logistics Symposium held in Minneapolis on December 2, 2005.

CTS director **Robert Johns** introduced Ficker, noting how the symposium is a rare intersection of public- and private-sector interests as well as academic research. Johns also introduced **Greg West**, Twin Cities roundtable president of the Council of Supply Chain Management Professionals (CSCMP), who outlined CSCMP's educational efforts.

In his keynote speech, Ficker reviewed constraints such as freight bottlenecks at jammed U.S. ports as well as intermodal and interior waterway constraints as a result of Hurricane Katrina. But he added that a number of "one-percent" solutions, such as shifting shipments to Gulf ports and improvements at rail lines, will continue to contribute to smoother freight moves for 2005 and 2006. The bad news is the approved federal transportation bill, even at \$286 billion, will still limit improvements to and expansion of infrastructure given cuts to intermodal projects and stretched dollars. "It's not enough in the right spots," Ficker said. "There's loss of purchasing power with the Highway Fund being significantly impacted by inflation."

NITL is working with private- and pub-

lic-sector transportation groups to form a national freight transportation policy to address transportation issues. "We need more interaction between the public sector, the private sector, and the academic sector," Ficker said, urging necessary collaboration among the three groups in order to bolster the nation's freight transportation network, ensuring the United States' position as a global leader in transportation. To emphasize his point, he called on attendees to become "apostles of transportation and logistics."

### Ficker called on attendees to become "apostles of transportation and logistics."

Following Ficker's lead, a panel discussion turned to the Midwest transportation infrastructure and weighed how manufacturers' logistics costs affect corporate decision making. **Cheryl Amborn**, global transportation manager at Cummins Power Generation, outlined issues at the international manufacturer, including longer clearance times due to increased security measures at borders and delays or inconsistent transit times from port and rail congestion. She presented remedies to combat transportation cost increases such as consolidating at inbound points of entry and on daily outbound shipments.

Panel moderator **Ron Dvorak**, sales representative for xpedx, presented on behalf of Polaris. He cited fuel cost increases, driver shortages, and high turnover, along with regulatory costs, as particularly challenging for the manufacturer. Infrastructure constraints for Polaris include the inability to run double-trailer trucks on Minnesota roads, he noted.

**Tom Bland**, customer order fulfillment



Greg West



John Ficker



Cheryl Amborn



Ron Dvorak



Tom Bland



Richard Murphy Jr.



Cecil Selness



Karen Donohue

manager for the medical division at 3M, said 3M views logistics costs as a part of total delivered cost, including factory costs. Like other manufacturers, 3M consolidates shipments and encourages customers to order less frequently to save processing and transportation costs. Bland noted shipping from the division's single Iowa distribution center allows for reliable transits up to seven days nationwide.

The panel suggested successful manufacturers must be agile today in managing transportation. Examples include switching ports and modes as necessary, examining alternatives like intercoastal shipping, and obtaining security certification under the Customs-Trade Partnership Against Terrorism (C-TPAT) program.

More than a dozen participants posed questions to panelists—some around security and border delays, lack of rail service, just-in-case inventories in light of capacity issues, and disaster preparedness. Panelist answers suggested that significant room for improvement lies in Minnesota infrastructure including rural-outstate service issues, better rail access, and more standardized truck and road requirements.

A few participants focused questions on 3M's inventory and capacity issues. Bland said lessons learned from Hurricane Katrina can apply to preparing for an avian flu outbreak, which calls for increased buffer stock. "Right now the transportation network isn't able to respond as quickly as [it has] been in the past," he said.

Next, three panelists broadened the discussion toward supply-chain and infrastructure approaches related to capacity challenges, moderated by **Richard Murphy Jr.**, president of Murphy Warehouse and CTS Executive Committee chair. One approach, according to **Karen Donohue**, associate professor at the University of Minnesota's Carlson School of Management, is smarter logistics. She outlined innovative supply-chain strategies such as cross docking, merge-in-transit programs, and the sales agent model of regionalized warehousing.

**Cecil Selness**, director of Mn/DOT's Office of Freight and Commercial Vehicle operations, outlined proposed state leg-



Michael Laden

# University researchers, CTS staff participate in TRB Annual Meeting

Driver behavior, pavement construction, congestion mitigation, land use, and traffic modeling are just some of the topics discussed by researchers from the University of Minnesota, the Metropolitan Council, and the Minnesota Department of Transportation at the 85th Annual Meeting of the Transportation Research Board, January 22–26, in Washington, D.C.

More than 40 University of Minnesota faculty, research staff, and graduate students participated in a variety of panels and poster sessions throughout the five-day event that brings together researchers, students, and professionals from around the world.

Following is a list of University of Minnesota presentations. For a full listing of sessions and activities for University, Mn/DOT, and Met Council presenters, download the *Minnesota Guide to TRB Annual Meeting Presentations* at [www.cts.umn.edu/pdf/MinnesotaGuide\\_TRB.pdf](http://www.cts.umn.edu/pdf/MinnesotaGuide_TRB.pdf).

- “Micro-Foundations of Congestion and Pricing,” **David Levinson**, Civil Engineering (CE)
- “Working With Inductance Loop Data,” **Taek Kwon**, University of Minnesota Duluth
- “Executive-Level Accountability and Measures for Research,” **Robert Johns**, CTS
- “Effects of Bus Stop Consolidation on Passenger Activity and Transit Operations,” **Ahmed M. El-Geneidy**, CE
- “If Collaboration is an Afterthought, Think Again!” **John Bryson**, Humphrey Institute of Public Affairs
- “Model Reference Adaptive Control

Framework for Real-Time Traffic Management Under Emergency Evacuation,” **Henry X. Liu**, CE

- “Improving Minnesota’s Stratified Ramp Control Strategy,” **Baichun Feng, John Hourdakos Hourdos, Panos G. Michalopoulos**, CE
- “A Decomposition Scheme for Continuous Network Design Problem with Asymmetric User Equilibrium,” **Henry X. Liu**, CE
- “Modeling Intersection Driving Behaviors: Hidden Markov Model Approach,” **Xi Zou, David Levinson**, CE
- “Accelerated Loading Testing of Stainless Steel Hollow Tube Dowels,” **Lev Khazanovich, Iliya Yut, Derek Tompkins, Arturo Schultz**, CE



- “Pedestrian Activity, Lifestyles, and Residential Location Decisions,” **Kevin J. Krizek**, Humphrey Institute
- “Aggregation Bias,” **Gary A. Davis**, CE
- “Network Expansion Decision Making in the Twin Cities,” **David Levinson, Norah Montes de Oca**, CE
- “Reflecting on Transit-Supportive Home Loans a Half-Decade Later,” **Kevin J. Krizek**, Humphrey Institute
- “Longitudinal Analysis of Effect of Bicycle Facilities on Commute Mode

Share,” **Gary R. Barnes, Kristin Bethany Thompson**, Humphrey Institute

- “Evaluation of Subgrade Resilient Modulus Predictive Model for Use in 2002 Design Guide,” **Lev Khazanovich, Clara Celauro, Bruce Chadbourn, John Zollars, Shongtao Dai**, CE
- “A Link-Node Complementarity Formulation and Its Solution Algorithm for Asymmetric Traffic Assignment,” **Henry X. Liu**, CE
- “Advanced Truck Productivity Concepts: Research from Minnesota’s ITS Institute,” **Max Donath**
- “Ask the Experts: Panel of Distinguished Experts on Key Impaired-Driving Themes,” **Stephen M. Simon**, Law School
- “Value Pricing Education and Outreach Model: I-394, MnPASS Community Task Force,” **Lee W. Munnich**, Humphrey Institute, and **Kenneth Buckeye**, Mn/DOT
- “Minnesota Intelligent Intersection: Progress in Radar Detection,” **Craig Shankwitz**, Mechanical Engineering
- “Using Rich Site Summary to Inform Your Stakeholders,” **Arlene M. Mathison**, CTS
- “Economic Effects of Lifting Spring Load Restriction Policy in Minnesota,” **David Levinson**, CE, and **Ning Li**, Mn/DOT
- “Observation of Crack Propagation in Asphalt Mixtures Using Acoustic Emission,” **Xue Li, Mihai O. Marashteanu, Joseph Labuz**, CE **CTS**

## Freight from page 2

isolation to allow bigger, heavier trucks on Minnesota roads. Among a number of proposals—each of which involved adding axles to evenly handle more weight—he outlined the pros and cons of using six-axle 90,000-lb. gross vehicle weight (GVW) trucks on select roads versus today’s standard limit of 80,000-lb. GVW trucks.

In reaction to the truck size and weight proposals, participants raised issues around both truck and vehicle driver safety. The consensus was that more training and awareness would be needed among both

groups of drivers. Selness said truck safety has increased in the state, as seen in a reduction of truck crash rates in recent years. He reported that some 85 percent of truck-vehicle crashes are determined to be the fault of the vehicle driver.

The third panelist, **Michael Laden**, founding principal of Trade Innovations, Inc., illustrated how an enterprise can use technology such as advanced container security devices to boost security. As an example he cited Target Corporation, which has leveraged technology since 9-11 to build a robust C-TPAT program cover-

ing physical, personnel, procedural, and IT security.

Finally, Ficker of NITL provided closing observations. He lauded attendees for their enthusiasm and start at forming a public-private-academic partnership so necessary to advance the entire U.S. transportation network. “Freight isn’t state only,” he concluded, underscoring the interdependent nature of the nation’s transportation network. “It’s regional at minimum, it’s national and international. These applications need to be broadened.” **CTS**

### Access from page 1

It is possible, she explains, to have good accessibility with poor mobility. For example, a community with severe congestion but where residents live within a short distance of destinations has poor mobility but may still have good accessibility. On the flip side, a community may have good mobility but poor accessibility: a smaller city may have ample roads and low levels of congestion but relatively few or inadequate destinations for shopping or other activities.

Published by Elsevier Ltd., the book was copyedited and produced by CTS editor **Peter Park Nelson**. It is available at [www.elsevier.com/transportation](http://www.elsevier.com/transportation).

The CTS Access to Destinations interdisciplinary research program (see [www.cts.umn.edu/access-study](http://www.cts.umn.edu/access-study)) is another outcome of the 2004 conference. Five research projects are under way with funding from various sponsors, and CTS is developing an outreach program with a grant from the McKnight Foundation. **CTS**

## ITSO conference to follow Career Expo

The Interdisciplinary Transportation Student Organization (ITSO) at the University of Minnesota is holding its second networking and paper presentation conference for students on Friday, March 3, at Coffman Union in Minneapolis. Guest speaker **Peter McLaughlin**, a Hennepin County commissioner, will discuss his experiences in the development of the Hiawatha Light Rail project.

Further information and the program will be released soon. Visit the ITSO Web site at [www.tc.umn.edu/~itso](http://www.tc.umn.edu/~itso).

ITSO's conference follows the CTS 11<sup>th</sup> Annual Transportation Career Expo, which will be held March 2 from 4:00 to 8:00 p.m., also in Coffman Union. For expo information, contact **Mindy Carlson** at 612-625-1813, [carlson@cts.umn.edu](mailto:carlson@cts.umn.edu). **CTS**

## Upcoming events

To publicize your event, call CTS at 612-626-1077, fax 612-625-6381, or e-mail [snopl001@cts.umn.edu](mailto:snopl001@cts.umn.edu).

Visit the CTS Web site—[www.cts.umn.edu](http://www.cts.umn.edu)—for more comprehensive event information.

Feb.–May	“Our Changing Cities: An Urban Lecture Series,” Department of Geography, Minneapolis. See <a href="http://www.geog.umn.edu/Events/Coffee_Hour.html">www.geog.umn.edu/Events/Coffee_Hour.html</a> .	March 16–17	Annual Concrete Paving Workshop, Duluth. Call the Concrete Paving Association of Minnesota, 651-762-0402.
Feb. 21	Transit Coordination Best Practices Forum, St. Paul. Contact <b>Julie Grazier</b> , 612-624-3044, <a href="mailto:conferences5@cce.umn.edu">conferences5@cce.umn.edu</a> .	March 22–23	Mn/DOT Environmental Stewardship and Streamlining Workshop, Brooklyn Center. Contact <b>Julie Grazier</b> , 612-624-3044, <a href="mailto:conferences5@cce.umn.edu">conferences5@cce.umn.edu</a> .
Feb. 21	Minnesota Surveyors & Engineers Society Annual Meeting/Luncheon, Minneapolis. Contact <b>Ann Manthey</b> , 651-457-2347, <a href="mailto:ann@mses.org">ann@mses.org</a> .	Apr. 5	5th Annual Road Salt Symposium, St. Cloud. Contact <b>Jeanne Prok</b> of the Freshwater Society, 952-472-3540, <a href="mailto:jeanne@freshwater.org">jeanne@freshwater.org</a> .
Feb. 22	“Eminent Domain: Ailment or Cure?” Sponsor: Sensible Land Use Coalition. Contact <b>Pat Arnst</b> , 952-474-3302, <a href="mailto:PFArnst@aol.com">PFArnst@aol.com</a> .	Apr. 10	5th James L Oberstar Forum on Transportation Policy and Technology, Coffman Memorial Union, Minneapolis. Contact <b>Shirley Mueffelman</b> , 612-624-4754, <a href="mailto:conferences2@cce.umn.edu">conferences2@cce.umn.edu</a> .
March 2	Transportation Career Expo, Minneapolis. Contact <b>Mindy Carlson</b> , 612-625-1813, <a href="mailto:carlson@cts.umn.edu">carlson@cts.umn.edu</a> .	Apr. 11–12	Minnesota Spring Maintenance Training Expo, St. Cloud. Contact <b>Shirley Mueffelman</b> , 612-624-4754, <a href="mailto:conferences2@cce.umn.edu">conferences2@cce.umn.edu</a> .
March 2	50th Annual Asphalt Contractors’ Workshop/Minnesota Quality Initiative Workshop, Brooklyn Center. Contact the Minnesota Asphalt Pavement Association, 651-636-4666, <a href="mailto:info@mnapa.org">info@mnapa.org</a> .	Apr. 17	Graduate Certificate in Transportation Studies Information Session, Minneapolis. Contact <b>Stephanie Jackson</b> , 612-624-8398, <a href="mailto:sjackson@cts.umn.edu">sjackson@cts.umn.edu</a> .
March 3	ITSO Networking and Paper Presentation Conference, Minneapolis. Visit <a href="http://www.tc.umn.edu/~itso">www.tc.umn.edu/~itso</a> .	Apr. 26	8th Annual Harbor Safety Committee Conference, Washington, D.C. Cosponsors: U.S. Coast Guard and the Marine Board/Transportation Research Board of the National Academies. Visit <a href="http://www.TRB.org/Conferences/HSCC">www.TRB.org/Conferences/HSCC</a> .
March 8	12th Annual ITS Minnesota Spring Meeting & Information Exchange Forum, St. Paul. Contact <b>Heather Dorr</b> , 612-625-5267, <a href="mailto:conferences5@cce.umn.edu">conferences5@cce.umn.edu</a> .		

## CTS to hold Grad Certificate info session

Take a step toward continuing your education: attend a Graduate Certificate in Transportation Studies information session. The session will describe the program, course requirements, and more.

**When:** Monday, April 17

**Time:** 6:00–7:00 p.m.

**Location:** Humphrey Center–Room 215

**Parking and Directions:** [www.hhh.umn.edu/about/contact/parking.html](http://www.hhh.umn.edu/about/contact/parking.html)

Walk-ins welcome! To pre-register or for more information, visit

[www.cts.umn.edu/certificate](http://www.cts.umn.edu/certificate) or contact

**Stephanie Jackson** at 612-624-8398, [sjackson@cts.umn.edu](mailto:sjackson@cts.umn.edu).

CTS launched the certificate program in 2001 together with the University of Minnesota Graduate School to help transportation professionals expand skills and prepare for leadership opportunities, as well as to provide an additional credential for graduate students. **CTS**

May 10–12 Minnesota Public Works Association Spring 2006 Conference, Grandview Lodge. Contact **Oona Besse**, 612-624-3492, [conferences3@cce.umn.edu](mailto:conferences3@cce.umn.edu).

May 24–25 CTS Seventeenth Annual Transportation Research Conference, St. Paul. Contact **Shirley Mueffelman**, 612-624-4754, [conferences2@cce.umn.edu](mailto:conferences2@cce.umn.edu). **CTS**