



Oberstar Forum to focus on transportation financing

SAFETEA-LU was the largest surface transportation investment in the nation's history. What does the future hold for its successor? Policymakers and researchers will offer their ideas at the seventh **James L. Oberstar** Forum on Transportation Policy and Technology, April 7 in Minneapolis.



James Oberstar

The forum will explore recommendations from a report created by the National Surface Transportation Policy and Revenue Study Commission. Members of the U.S. House Transportation and Infrastructure Committee, which Congressman Oberstar chairs, were briefed on the commission's report—titled *Transportation for Tomorrow*—at a January hearing. "This report is about the transformation of transportation policy for the 21st century," Oberstar declared. Committee members said the recommendations would provide a sound basis

for consideration in the development of a new surface transportation bill by the next Congress.

SAFETEA-LU (the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) authorized programs for the five-year period of 2005 through 2009. It guaranteed funding for highways, highway safety, and public transportation totaling \$244.1 billion.

The public portion of the Oberstar Forum will begin at 1:30 p.m. with a keynote presentation by Congressman Oberstar. Panel discussions will then follow with commission members and other state and national leaders.

The forum is free and open to the public. Space is limited, however, so attendees are encouraged to register.

A brochure will be mailed with further details, and updates will be posted on the Oberstar Forum Web page at www.cts.umn.edu/oberstarforum. **CTS**

Liu wins national CUTC award

Assistant Professor **Henry Liu** of the Department of Civil Engineering is the recipient of the 2007 New Faculty Award from the Council of University Transportation Centers (CUTC) and the American Road & Transportation Builders Association.



Henry Liu

The award is presented to an outstanding new faculty member in a field related to transportation who has not yet received tenure. It carries with it a significant stipend. He received the honor at CUTC's Tenth Annual Awards Banquet in Washington, D.C., last month.

A CTS Faculty Scholar, Liu earned his Ph.D. in civil and environmental engineering at the University of Wisconsin–Madison in 2000.

Liu's major research interests include traffic control and operations, transportation network modeling, and traffic simulation. His current

research activities include arterial data collection and signal optimization, real-time traffic management for emergency evacuation, analytical dynamic traffic assignment, and application of microscopic traffic simulation models.

In addition, Liu and CE associate professor **David Levinson**, a previous CUTC New Faculty Award winner, are leading a team that is analyzing traffic patterns after the loss of the I-35W bridge in Minneapolis, funded by a grant from the National Science Foundation.

"Henry is doing a great job and I was pleased to nominate him," said CTS director **Robert Johns**, who presented the award. "Besides leading numerous research projects and being a popular teacher, Henry has developed strong relationships with several sponsors and partners." **CTS**

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Freight planning in an uncertain world

Planning adequately for tomorrow's transportation infrastructure is a daunting task in today's uncertain world. An increasingly global economy, shifting trade patterns, and population growth in the face of already strained local and national resources—and an aging transportation infrastructure—all contribute to the challenge.

In the keynote speech at the 11th Annual Freight and Logistics Symposium in Minneapolis on November 30, **Richard Stewart**



Richard Stewart

presented an overview of changes in technology and transportation during the last 40 years and shared thoughts for the future.

Stewart, director of the Transportation and Logistics Research Center at the University of Wisconsin–Superior, pointed out the considerable challenges posed by capacity, congestion, and the cost to upgrade and construct new transportation infrastructure. "Lack of a national transportation policy creates difficulties for us because we [as a nation] lack vision of where we want to be in 10 to 20 years," Stewart told the audience of freight and logistics professionals, policymakers, and research-

TRB annual meeting features AIA study, other U of M research

The CTS Moving Communities Forward study, sponsored by the American Institute of Architects (AIA), was one of the topics covered by presenters from the University of Minnesota at the Transportation Research Board's 87th annual meeting, January 13–17, 2008.

University of Minnesota faculty, researchers, and graduate students presented projects ranging from bus operations to biofuels throughout the five-day event in Washington, D.C., which brings together more than 10,000 researchers, students, and professionals from around the world.

The Moving Communities Forward session was presided over by **Robert Johns**, CTS director, and featured study researchers **Lance Neckar** (Landscape Architecture), **John Adams** (Geography/Humphrey Institute), and **Carissa Schively Slotterback** (Humphrey Institute of Public Affairs). The study explored the role of well-designed transportation facilities in enhancing communities. CTS was chosen to conduct the study by AIA, funded by a grant from the Federal Highway Administration.

The study was also featured in TRB's January 23 *Transportation Research E-newsletter*. For more about the study, see www.movingcommunitiesforward.org.

Other University of Minnesota faculty

and students presenting at TRB included:

Civil Engineering: **Adam Danczyk, Gary A. Davis, Andrew Drescher, Paul Hambleton, Xiaozheng He, Kimberly Hill, John Hourdos, James Saif Jabari, Lev Khazanovich, David Levinson, Chen-Fu Liao, Henry X. Liu, Wenteng Ma, Mihai O. Marasteanu, Panos G. Michalopoulos, Andrew Odlyzko, Nebiyou Tilahun, Derek Tompkins, Carly Turgeon, Mugurel Turos, Xinkai Wu, Feng Xie, Hui Xiong, Bereket Yohannes, Shanjiang Zhu**

Hubert H. Humphrey Institute of Public Affairs: **Xinyu (Jason) Cao, Jordan Deckenbach, Frank Douma, Steve Frooman, Jessica Horning, Michael Iacono, Keith Knapp, Lee W. Munnich, Gavin Poindexter, Elizabeth Wilson**

Applied Economics: **C.F. Runge**

Geography: **Francis Harvey**

Northland Advanced Transportation Systems Research Laboratories (NATSRL): **Bibhu Aryal, Taek M. Kwon**

In addition, **Fred Corrigan**, executive director of the Aggregate & Ready Mix Association and chair of the CTS Executive Committee, presented "TERRA: Advancing Innovations in Road Engineering Through a Dynamic Partnership." He made the presentation in a session on innovative research partnerships cosponsored by the TRB Conduct of

CTS director to chair TRB council

Robert Johns has been appointed chair of the TRB Technical Activities Council. TRB executive director **Robert Skinner** announced the appointment at the TRB Executive Committee meeting during the TRB annual meeting.

The Technical Activities Council guides the work of more than 200 technical committees and identifies emerging topics of interest to the transportation community. The council also fosters outreach efforts to other transportation organizations and groups. The chair represents the council at TRB Executive Committee meetings and serves on the committee's Subcommittee on Planning and Policy Review.

Johns will chair the council effective April 15, 2008, for a three-year term. He succeeds **Neil Pedersen**, administrator of the Maryland State Highway Administration. **CTS**

Research Committee, which is chaired by CTS associate director **Laurie McGinnis**. TERRA, the Transportation Engineering Road Research Alliance, is a research governance structure formed in 2004 to foster a comprehensive road research program (www.terraroadalliance.org). **CTS**

TRB sessions look at information 'findability,' knowledge management

This year's TRB Annual Meeting featured many sessions related to the importance of managing data, information, and institutional knowledge to support decision making in transportation.

Gina Baas, CTS director of communications and outreach, participated on a panel that explored leveraging research information and processes for Web publishing. She described the research management systems that CTS is able to leverage for creating content for the CTS and program Web sites.

Another session, "Memory Is a Terrible Thing to Waste," presented different approaches to preserve institutional knowledge about transportation. Speaker **Francis Francois**, former chair of AASHTO, discussed current and planned efforts to improve information access,

findability, and institutional knowledge through Transportation Knowledge Networks (TKNs).

CTS—led by librarian **Arlene Mathison** and Baas—is on the project team for the follow-up National Highway Cooperative Research Program (NCHRP) Project 20-75 (www.cts.umn.edu/Research/Featured/NCHRP20-75/), which is developing a business plan for implementing TKNs (see sidebar).

Another session, "Findability of Transportation Information," was moderated by **Frances Harrison** of Spy Pond Partners, principal investigator for NCHRP Project 20-75. Presenters shared methods and tools organizations can use to make high-quality content more easily "findable." **CTS**

Vision for Transportation Knowledge Networks

- Lessons learned from any transportation organization are readily available to others facing similar challenges.
- No transportation organization pays to reinvent the wheel—it is easy to find out what has been done before.
- It takes minutes, not hours or days, to find current, relevant, and accurate information about any transportation-related topic.
- A secure national archive is in place to hold important documents and data sets for transportation professionals of today... and tomorrow.

Transportation task force completes UMore Park report

Six task forces have completed reports on innovative ways to integrate University of Minnesota research, education, and public engagement into the planning and development of the proposed new community at UMore Park.

The University of Minnesota Outreach, Research, and Education (UMore) Park is a 5,000-acre site 25 miles southeast of the Twin Cities at the suburban-rural interface, near Rosemount, Minn.

University strengths in transportation and infrastructure, education, technology, the environment, energy, health, arts and culture, and civic life, among others, will be core to the identity of the new community, adding value that benefits citizens and the broader region.

The transportation task force was co-chaired by **Robert Johns**, CTS director, and **Lee Munnich**, director of the State and Local Policy Program at the Humphrey Institute of Public Affairs.

Members of the transportation task force were **Bob Baker** of Parking and Transportation Services; **Lance Neckar** of Landscape Architecture; **David Levinson** and **Henry Liu** of Civil Engineering; **Carissa Schively Slotterback** and **Steve Kelley** of the Humphrey Institute; **David Kittelson** of Mechanical Engineering; **Kathleen Harder** of the Center for Sustainable Building Design; **Mark**

Hoisser of Dakota Area Resources and Transportation for Seniors; and **Ferrol Robinson** of SRF Consulting. **Greg Cuomo** is the UMore Park management team liaison, assisted by **Emily Swanson**. Humphrey Institute graduate student **Kelcie Young** also assisted the task force.

The task force concluded that the transportation system at UMore Park should fulfill three main goals:

- Maximize access to destinations: land use, design, and transportation choices that provide ease in reaching destinations
- Provide mobility choices: for all people, for all trip purposes
- Minimize transportation costs: time, energy, pollution, safety, implementation, maintenance, economic

The report then recommends 5 principles and 13 strategies (see sidebar) to implement these goals.

This initial academic mission process, which began in May 2007, included listening sessions with the general public and the University community. The academic mission executive report and the six task force reports provide emerging ideas that can be revised and enhanced over time.

UMore Park is among the largest contiguous properties in the United States that is owned by a land-grant university. The vision to build a University-founded com-

UMore Park Transportation Strategies

1. Integrate design, land use, and accessibility.
2. Provide densities and a mix of land uses to support multiple modes.
3. Foster community identity.
4. Facilitate nonmotorized transportation.
5. Provide ubiquitous and innovative transit services.
6. Provide personal transportation choices.
7. Reduce energy and emissions impacts.
8. Minimize harmful ecological impacts.
9. Design for safety and health.
10. Incorporate innovative goods movement and service delivery.
11. Use innovative financing and pricing for transportation infrastructure and services.
12. Connect the community.
13. Provide extensive sensing and data systems.

munity at UMore Park, a 25- to 30-year endeavor, was affirmed by the University's Board of Regents in November 2006.

Read the six reports, the overarching executive report with recommendations, and public comments at www.umorepark.umn.edu/Academic_Mission_Task_Forces.html. **CTS**

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ers. In addition, he said, explosive world population and economic growth, especially in China, India, and Indonesia, will continue to deplete global energy resources and trigger further shifts in trade patterns.

Stewart predicts rising energy costs will force changes in transportation, including a reversal toward more regionalized distribution to offset fuel costs and congestion delays. He cited the newly developing Canadian port of Prince Rupert, in British Columbia, as a promising alternative to congested U.S. ports on the West Coast. Prince Rupert also has provided an opportunity to further develop trade between the Upper Midwest and the Asia-Pacific region.

Next, a panel discussion focused on current challenges to the freight industry, moderated by **Richard Murphy**, president of Murphy Warehouse Company

and former chair of the CTS Executive Committee.

Leslie Blakey, executive director of the Coalition for America's Gateways and Trade Corridors, said the United States needs to broaden its perspective as China and other nations bolster their economic prowess. "We've taken for granted the way the United States has operated, the kinds of products we produce, and the way we expect to get products from the rest of the world—which is certainly changing very rapidly," she said, noting that Washington-based policymakers have been slow to recognize the urgency of the national transportation problem.

At the state level, **David Christianson**, an associate with SRF Consulting Group, discussed the impact on local transportation infrastructure from regional efforts to accommodate trade and economic

growth. Christianson said increases in crop and hog production—as well as the burgeoning ethanol market—has spiked demand for intermodal transportation while increasing stress on county roads. He emphasized the need for more intermodal access via short-line rail and improved roads, as well as a statewide road-testing program, to better gauge real load capacities on road surfaces and structures.

Jerry Fruin, associate professor of applied economics at the University of Minnesota, talked about the effects of biofuels on the economy and infrastructure. He cautioned that Minnesota and the rest of the nation aren't prepared for the infrastructure strains created by ongoing



Jerry Fruin

Professorship awarded to CTS researcher

Elizabeth Wilson is one of the recipients of the 2008 McKnight Land-Grant Professorships, announced by the Graduate School and the Office of the Provost. The goal of the program is to advance the careers of the University's most promising junior faculty at a critical point in their professional lives.

Wilson is an assistant professor of energy and environmental policy and law at the Humphrey Institute of Public Affairs. She holds a doctorate in engineering and public policy from Carnegie Mellon University.

Her areas of expertise include energy and environmental policy, regulatory and legal analysis of emerging technologies, and climate change.

Wilson is part of a multidisciplinary faculty team working with CTS to assess public policy and technology options for reducing the volume of greenhouse gases emitted from the transportation sector in Minnesota. CTS received an appropriation from the Minnesota Legislature last year to conduct the study, and will issue a full report by June 2008.

McKnight recipients are honored with the title McKnight Land-Grant Professor, a special award they will hold for two years. The award consists of a research grant in each of two years, summer support, and a research leave in the second year.

The winners were chosen for their potential for important contribution to their field; the degree to which their achievements and ideas demonstrate originality, imagination, and innovation; the significance of their research; and the potential for attracting outstanding students. **CTS**

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increases in corn production.

Catherine Petersen of CJ Petersen & Associates addressed Minnesota's growing role in the global economy. Petersen called for better information sharing to speed the movement of goods as well as a national database to measure U.S. logistics performance more accurately.

A second panel, moderated by **Bill Gardner**, transportation planning director at Mn/DOT, explored public policy alternatives for meeting freight industry

challenges. **Mike Wagner**, director of public works and county engineer for Nicollet County, said lack of state funding has forced the need to issue bonds for road enhancements, while lack of county resources prevents enforcement of weight limits on county roads.

Adolph Ojard, executive director of the Duluth Seaway Port Authority, outlined developments at the rapidly growing port. A number of world developments have made the Duluth port a dynamic one,

including wind turbine component shipments. "We're in a frenzy now with the wind energy business," he noted.

Blakey, also in this panel, noted that the nearly depleted Highway Trust Fund and inflationary effects on older tax programs beg the need for more public-private partnerships to fund transportation projects.

Proceedings of the conference will be published shortly. To receive a copy, call CTS at 612-626-1077 or visit www.cts.umn.edu/publications. **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.

March 5 52nd Annual Asphalt Contractors' Workshop/MN Quality Initiative Workshop, Brooklyn Center. See www.asphaltisbest.com or e-mail jthomas@mnapa.org.

March 13 Transportation Career Expo, Minneapolis. Contact **Mindy Carlson**, 612-625-1813, carlson@cts.umn.edu.

March 13–14 Concrete Paving Association of Minnesota 47th Annual Concrete Paving Workshop, Mankato. Contact **Deb LaValle**, 651-762-0402, www.concreteisbetter.com.

ITS Minnesota Annual Meeting and Exchange Forum
March 25, 2008, St. Paul
 See www.itsmn.org

Apr. 7 **James L. Oberstar** Forum, Minneapolis. Contact **Sara Van Essendelft**, 612-624-3708, cceconf5@umn.edu.

Apr. 15–16 Minnesota Spring Maintenance Training Expo, St. Cloud. Contact **Shirley Mueffelmann**, 612-624-4754, cceconf2@umn.edu.

Apr. 23–25 Minnesota Council of Airports Annual Conference, Bloomington. Contact **Judy Meyers**, 651-234-7232, 1-800-657-3922, judy.meyers@dot.state.mn.us.

Apr. 23–25 Minnesota Alcohol and Traffic Safety Association 34th Annual Conference, St. Cloud. See www.MATSA.us or call 1-800-362-3667, ext. 7307 or 7309.

May 20–21 CTS 19th Annual Transportation Research Conference, St. Paul. Contact **Sara Van Essendelft**, 612-624-3708, cceconf5@umn.edu.

Oct. 7–8 Toward Zero Deaths Conference, Rochester. **CTS**