



CERS Summer Institute eyes coordinated national rural road safety plan

U.S. Rep. **James L. Oberstar**, chairman of the House Transportation and Infrastructure Committee, joined leading state and national traffic safety researchers, policymakers, and professionals to develop a national action plan for U.S. rural road safety during the Center for Excellence in Rural Safety's annual Summer Institute on August 9 and 10. The two-day event was held this year on the University of Minnesota campus in Minneapolis.

"Safety has to be our first priority in transportation," Oberstar said, laying out a national vision for transportation that emphasizes safer rural roads as well as more collaborative research and development efforts. "We need to make those investment decisions today that



James Oberstar receiving CERS Congressional Founder award

leave a better America for those who come after us. You're doing that."

This year's Summer Institute focused on creating a national strategy to improve rural safety, especially by building on the success of programs like Toward Zero Deaths.

Many participants discussed the opportunity at hand to address rural safety needs at a coordinated national level as new federal transportation funding legislation is crafted to succeed SAFETEA-LU, which expired in October 2009.

"We still have a long, long way to go," explained **Barbara Harsha**, executive director of the Governors Highway Safety Association, in support of a national strategy on highway

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Research links transitway development to higher commercial and industrial property values

The Hiawatha light-rail line connecting downtown Minneapolis to the southern suburbs has increased the values of nearby commercial and industrial real estate, according to a new study by the Transitway Impacts Research Program (TIRP). Assistant Professor **Xinyu (Jason) Cao** of the Hubert H. Humphrey Institute of Public Affairs and graduate student **Kate Ko** of the Department of Applied Economics conducted the study.

The study examined the first operational section of the Hiawatha line, a 12-mile section of light-rail line with 17 stations. Construction on this portion of the line began in 2001 and was completed in 2004.

Cao and Ko studied the impact that proximity to light-rail stations has on commercial and industrial property values in the area within a one-mile radius of stations before and after completion of the Hiawatha line. They then compared these changes with property value changes in a slightly larger Twin Cities sub-region in order to discount overall price

fluctuations in the region's real-estate market.

The researchers identified five sets of key factors that determine commercial and industrial property values:

- Access to transportation, such as distance to a highway on-ramp or light-rail station
- Access to labor, such as the number of residents in neighborhoods
- Structural characteristics, such as number of building stories and square footage
- Socioeconomic factors of neighborhoods, such as median household income
- Proximity to employment centers, such as distance to downtown or shopping centers

They then used a statistical model to control for these factors and isolate the impact of light-rail transit access on commercial and industrial property values. The sales data used in the study begin in 2000, prior to the start of Hiawatha line construction. The

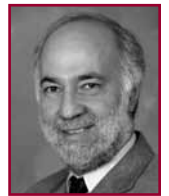
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Dan Sperling is fall luncheon speaker

Internationally recognized expert **Daniel Sperling** will discuss the sustainable community of tomorrow—what it will look like, how



Dan Sperling

we will get there, and what the policy implications will be—at the CTS Fall Luncheon. The event will be held December 7 at the McNamara Alumni Center on the Minneapolis campus.

Sperling is professor of civil engineering and environmental science and policy and founding director of the Institute of Transportation Studies at the University of California, Davis.

Sperling's areas of expertise include transportation technology assessment, energy and environmental aspects of transportation, and transportation policy. He was the founding chair of the Transportation Research Board's Sustainability and Transportation standing committee. He is widely cited in leading newspapers and has been interviewed many times on National Public Radio.

He is also coauthor (with Deborah Gordon) of the book *Two Billion Cars: Driving Toward Sustainability*.

More information and registration materials will be included with the October *CTS Report* and on the Web at www.cts.umn.edu/Events. **CTS**

CTS hosts international conference on network reliability

Researchers and professionals from around the world came to the Twin Cities campus in July to attend the Fourth International Symposium on Transportation Network Reliability. CTS hosted the event.

Civil engineering associate professor **David Levinson**, the Braun/CTS chair in transportation engineering, gave opening and closing remarks. He and CE assistant professor **Henry Liu** played key roles in bringing the event to Minneapolis. They were also members of the local organizing committee along with **Gina Baas**, assistant director of education and outreach at CTS.



David Levinson



Henry Liu

In the opening plenary session, Levinson, Liu, and **Brian Kary** of the Minnesota Department of Transportation gave a presentation titled “Reliability in Practice: The Fall and Rise of the I-35W Mississippi River Bridge.”

Recognizing that the tragic failure of the I-35W bridge offered a unique opportunity to study the effects of a massive unplanned network disruption, Levinson and Liu worked with CE graduate students **Shanjiang Zhu**, **Feng Xie**, **Xiaozheng He**, and **Nebiyu Tilahun** as well as **Kathleen Harder**, director of the University’s Center for Design in Health, on a series of studies analyzing travel patterns and route choice. They found that several weeks were required for traffic to re-equilibrate in the aftermath of the disruption, and that the benefits of the new I-35W bridge were not distributed evenly throughout the metropolitan area.

Zhu and fellow CE graduate students **Xiaolei Guo** and **Saif Jabari** gave presentations at the conference.

Nearly 100 conference attendees discussed both recent research and future directions in this increasingly important field of research. The scope of the symposium included all aspects of analysis and design to improve network reliability, such as user perception, public policy, travel behavior, vehicle routing and scheduling, and intelligent transportation systems to improve network reliability. Conference presentations are online at www.instr.org.

This is the second academic paper conference hosted by CTS in as many years, following the Fourth International Transport Economics Conference held in June 2009. **CTS**

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data continue through 2008, the most recent available sales figures. All sales data were adjusted to constant year 2000 dollars.

The researchers found the Hiawatha line has increased the value of commercial and industrial properties within a nearly one-mile radius of light-rail stations. Property value benefits to local communities include:

- After the light-rail line was completed in 2004, prices per building-square-foot increased from \$36 to \$56, controlling for other factors. This suggests higher demand for properties within the station area.
- Property values increase the closer the properties are to a light-rail station. For example, a property located a quarter-mile from a light-rail station will command more than a similar property located a half-mile from a station.
- The positive effect on property values extends to properties as far as 0.9 mile from the light-rail transit station—farther than the positive impact of other light-rail systems studied elsewhere in the country.

The researchers note that their results should be interpreted cautiously. The

study is unable to predict the net economic effect of the light-rail line across the entire region. In addition, the economic effects of the LRT line may differ in different areas it serves.

Impacts of the Hiawatha Light Rail Line on Commercial and Industrial Property Values in Minneapolis (CTS 10-05) and a corresponding research brief are available on the TIRP Web site: www.cts.umn.edu/Research/Featured/Transitways/index.html.

The program was launched in 2006 by the Hennepin County–University of Minnesota partnership and has grown to include a mix of University, local,

regional, and state partners.

In previous TIRP research, Center for Urban and Regional Affairs director **Edward Goetz** identified positive impacts on residential property values along the Hiawatha LRT corridor (CTS 2009-02); Cao found that light rail serves both riders who depend on transit and those who use transit by choice (2009-01); and Humphrey Institute assistant professor **Yingling Fan** found that the Hiawatha light-rail line has significantly improved accessibility to low-wage jobs (CTS 2010-02). Final reports and corresponding research briefs are on the TIRP Web site. **CTS**



Commercial properties near the Lake Street station (photo Matt Miranda)

TERRA hosts events, publishes sustainability fact sheet

The Transportation Engineering and Road Research Alliance (TERRA) held two events in August highlighting sustainability.

The first was a TERRA Innovation Series event in Madison, Wisconsin. The innovation series consists of various events in TERRA-member states focusing on transportation engineering and road research. This year's offering, hosted by TERRA in cooperation with the Wisconsin Department of Transportation, was held in conjunction with the 2010 Mid-Continent Transportation Research Forum.

The August 20 event focused on the topic of sustainability in transportation, particularly on pavement-related measures such as recovering asphalt from recycled

shingles, using porous pavements to reduce runoff, and using fly ash to stabilize bases. These approaches can provide environmental benefits as well as cost-savings.

The welcome and introduction were given by **André Clover**, TERRA co-chair and administrative engineer of best practices and legislative initiatives with the Michigan DOT, and **Rory Rhinesmith**, division operations director with the Wisconsin DOT. The Michigan and Wisconsin DOTs are TERRA Board members.

The second event was a behind-the-scenes look at the MnROAD live transportation laboratory along Interstate 94 near



André Clover

Albertville, Minnesota, on August 23. TERRA and the Minnesota Department of Transportation hosted the open house. **Bernie Arseneau**, Mn/DOT director of policy, safety and strategic initiatives, welcomed attendees on behalf of department commissioner **Tom Sorel**. MnROAD operations engineer **Tim Clyne** moderated the daylong event.

Attendees saw how road and pavement engineering innovations are developed, tested, and prepared for implementation on Minnesota roads, and also learned preliminary results of ongoing projects. An afternoon session focused on lessons learned from a SHRP 2 (Strategic



Bernie Arseneau

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safety to overcome significant cultural and state-level legislative barriers. "We don't value highway safety. We think fatalities and injuries are just part of the cost of doing business."

The Summer Institute, moderated by CERS director **Lee Munnich**, featured speakers from across the nation, including **J. Peter Kissinger**, president and CEO of the AAA Foundation for Traffic Safety; **David Kelly**, principal with Storm King Strategies; **Roger Wentz**, executive director of the American Traffic Safety Services Association; **Carrie Kissel**, senior program manager for transportation and economic development with the National Association of Development Organizations; **Beth Alicandri**, director of the Office of Safety Programs at the Federal Highway Administration; **Brian McLaughlin**, senior associate administrator for traffic injury control at the National Highway Traffic Safety Administration; **Pam Fischer**, director of the New Jersey Division of Highway Traffic Safety; and **Dia Gainor**, bureau chief of the Idaho Emergency Medical Services Bureau.

Leaders from Minnesota included **Bernie Arseneau**, director of policy, safety and strategic initiatives at the Minnesota Department of Transportation; **Cheri Marti**, director of the Minnesota Office of Traffic Safety; and **Scott Zietlow**, M.D., chair of the surgery



Lee Munnich



Barbara Harsha



J. Peter Kissinger



Beth Alicandri



Pam Fischer

department at the Mayo Clinic.

CTS director **Laurie McGinnis** and Humphrey Institute of Public Affairs associate dean **Greg Lindsey** joined Munnich in providing opening remarks. Lindsey, who is also a member of the CTS Executive Committee, stressed the need for a collaborative, performance-based approach to rural transportation safety. "We're not going to solve the problem alone," he said. "There are a lot of organizations, a lot of people, that are going to play a role in raising the awareness and focusing on what needs to be done."

Other speakers included CERS research director **Tom Horan**, who introduced version 3.0 of the online crash-mapping tool Safe Road Maps. Horan and researcher **Benjamin Schooley** also shared the latest about their ongoing CERS research to improve rural emergency response and the quality of health care outcomes. In addition, **Max Donath**, director of the Intelligent Transportation Systems Institute at CTS, discussed projects under way to support novice teen drivers using

special safety technology in vehicles.

Topics covered at the Summer Institute also included performance-based assessment, systemic roadway safety improvements, developing and communicating best practices, rural speed management and traffic enforcement strategies, and formation of a national coalition for progress in rural safety.

This was the fifth annual CERS Summer Institute. The two-day gathering is aimed at sharing information, setting research priorities, and developing strategies for improving rural transportation safety.

CERS, established by the 2005 federal transportation act, is a joint program between the University of Minnesota's Hubert H. Humphrey Institute of Public Affairs and CTS. For more information, see www.ruralsafety.umn.edu. **CTS**

CTS posts jobs on LinkedIn, ceases print insert

Starting this month, the *CTS Report* mailing will no longer include the Careers in Transportation insert. This decision is in line with communications trends in which jobs are advertised online rather than in print.

CTS will continue to be a resource for employers who want to publicize their job opportunities. Employers may submit job opportunities using an online form (www.cts.umn.edu/Education/Careers/JobPostings/submit.html) or e-mail their ads to pubstudent@umn.edu.

Jobs are posted on the CTS Web site at www.cts.umn.edu/Education/Careers/JobPostings and to the CTS LinkedIn group at www.linkedin.com/groups?gid=2316997&trk=hb_side_g. There is no charge for the service. **CTS**

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New research reports available

The enclosed insert lists research reports written by University researchers and published by CTS, Mn/DOT, the Minnesota Local Road Research Board, and other sponsors from April through July 2010. **CTS**

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Highway Research Program) composite pavement project. **James Bryant**, a Transportation Research Board senior program officer for renewal, one of four focus areas of SHRP 2, expressed enthusiasm about the project and the project team during brief opening remarks.

The \$4 million SHRP 2 project is led by Applied Research Associates, Inc. (ARA), in partnership with its sub-contractors: Mn/DOT, the University of Minnesota, the University of California, and the University of Pittsburgh. **Mike Darter**, principal engineer with ARA and a member of the TERRA Research Committee, is principal investigator for the project.

In addition, University of Minnesota civil engineering professor **Lev Khazanovich** and researcher **Derek Tompkins** have key roles in the project.

TERRA also recently published the eighth in an ongoing series of TERRA fact sheets. The newest publication summarizes the Greenroads rating system for sustainable road design and construction. According to its developers—the University of Washington and CH2M Hill—the Greenroads standard helps show the public that the construction industry can become more sustainable.

TERRA is a research governance structure that brings together government,

industry, and academia in a dynamic partnership to advance innovations in road engineering and construction. TERRA event information and publications are online at www.terraroadalliance.org. **CTS**



Participants at the MnROAD open house

Upcoming events To see other events or publicize yours, visit www.cts.umn.edu/Events.

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| Sept. 22–24 | 2010 American Planning Association Upper Midwest Planning Conference, Mankato, Minn. See www.plannersconference.com . | Oct. 7–8 | AirTAP Fall Forum, Alexandria, Minn. See www.airtap.umn.edu . |
| Oct. 1 | CTS Transportation Alumni Group Homecoming Get-Together, Minneapolis. See www.cts.umn.edu/Education/Alumni . | Oct. 19 | ITS Minnesota Fall Industry Forum, St. Paul. See www.itsmn.org . |
| Oct. 6–7 | Minnesota Fall Maintenance Expo, St. Cloud, Minn. See www.mnltap.umn.edu/Events . | Oct. 25–26 | Toward Zero Deaths Conference, St. Paul. See www.minnesotatzd.org . |
| | | Nov. 17–19 | American Public Works Association – Minnesota Chapter Fall Conference and Workshop, Brooklyn Center. See http://cce.umn.edu/APWA-Minnesota-Chapter/index.html . |
| | | Dec. 3 | Freight and Logistics Symposium, Minneapolis. See www.cts.umn.edu/Events/FLOGSymposium . |
| | | Dec. 7 | CTS Fall Luncheon featuring Dan Sperling , Minneapolis. See www.cts.umn.edu/Events/Luncheon . |
| | | Dec. 8 | Minnesota Association of Asphalt Paving Technologists (MAAPT) 57th Annual Asphalt Conference, Brooklyn Park, Minn. E-mail info@mn-aapt.org . CTS |

Toward Zero Deaths Conference

Registration is under way for the 2010 Toward Zero Deaths Conference, which will be held October 25 and 26 in St. Paul. Sponsors are the Minnesota Departments of Public Safety, Transportation, and Health and the Minnesota Toward Zero Deaths program. For further information about the conference, contact **Nicole Freese**, 612-624-3708, cceconf5@umn.edu, or visit the Web site at www.minnesotatzd.org.