University of Minnesota
CTS
Center for Transportation Studies
REPORT
A monthly report on transportation research, education, and outreach activities at the University of Minnesota
January 2010

Sabo Lecture: Clear goals, accountability needed for transportation policy

The Bipartisan Policy Center's National Transportation Policy Project (NTPP) held a public forum November 23 in Minneapolis. The forum was part of a dialogue across the country regarding the recommendations in the NTPP's June 2009 report, *Performance Driven: A New Vision for U.S. Transportation Policy*.

The forum was held in conjunction with the Martin Olav Sabo Lecture Series and was sponsored by the Hubert H. Humphrey Institute of Public Affairs and CTS. The McKnight Foundation and SUPERVALU, Inc. provided additional sponsorship.

The Bipartisan Policy Center (BPC) was formed in 2007 by four former U.S. Senate majority leaders to develop and promote solutions that can attract public support and political momentum.

J. Brian Atwood, dean of the Humphrey Institute, and former U.S. Rep. **Martin Olav Sabo,** an NTPP co-chair, gave welcoming remarks. Under the nation's current approach to transportation policy, Sabo said, funds are distributed with little or no analysis of costs and benefits. Combined with insufficient funding levels, this approach "results in a transportation system that is losing effectiveness and directly affecting our global competitiveness," he said.


Martin Sabo


Joshua Schank

Joshua Schank, director of transportation research at the BPC, presented key points of the NTPP report. The report recommends that U.S. transportation policy be more performance-driven, more directly linked

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Toward Zero Deaths Conference explores traffic safety culture, ideas for change


Jim Hedlund

Driver distraction has come to the top of the transportation safety agenda, as more and more states are considering banning text messaging or cell phone use while driving. At this year's Toward Zero Deaths (TZD) Conference, **Jim Hedlund,** a consultant with Highway Safety North, discussed the distracted driving pandemic in terms of "traffic safety culture" and offered thoughts on why driver behaviors and attitudes need to change.

The TZD annual conference serves as a forum for sharing information on how to reduce the number of fatalities and injuries on Minnesota roads. This year's event, held October 28 and 29 in Duluth, Minnesota, drew over 600 attendees.

In 2006, the AAA Foundation for Traffic Safety commissioned Hedlund to synthesize several research articles addressing safety culture from the diverse perspectives of more than 20 top researchers from fields including public health, public policy, social psychology, and civil engineering.

The key characteristics of culture as it relates to traffic safety in the United States are complacency and indifference, Hedlund said. "As a nation, we accept more than 40,000 traffic fatalities and 2.5 million injuries each year. Traffic crashes are the leading cause of death for children, adolescents, and young adults in the United States, but they are not seen as a major public health problem."

According to Hedlund, national, state, and local governments themselves can get in the way of changing traffic safety culture primarily because such a change isn't a priority. Scarce resources and questions about the government's role versus individual control are obstacles as well.

It has been possible to change traffic safety culture, he said, such as in the case of child

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Inside

CTS Scholar featured in documentary

The Minnesota Gerontological Society (MGS) has co-produced with Twin Cities Public Television (tpt) a one-hour documentary—"Love of Car: Transportation as We Age"—aimed at raising awareness and stimulating dialogue in the state about older driver and community mobility issues.

The documentary includes interviews of seniors who are either contemplating no longer driving or have already gone through that transition. It weaves those stories with interviews of experts and demonstrations of solutions.

Mike Manser, director of the HumanFIRST (Human Factors Interdisciplinary Research in Simulation and Transportation) Program and a CTS Scholar, is one of the experts featured.

Partners in the project include Mn/DOT, the Department of Public Safety, Senior LinkAge Line, AAA, and the Minnesota Partnership for Safe Mobility.

The documentary will periodically air on Minnesota tpt channels until November of 2010. See www.tpt.org for channels and show times.

Streaming video of the program and additional resources and links are available at www.mngero.org. **CTS**

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to a set of clearly articulated goals, and more accountable for results, he said.

Mike Erlandson, vice president for government affairs with SUPERVALU and an NTPP member, moderated a panel discussion with Minnesota leaders about the opportunities and challenges for implementing recommendations for reform.

Tom Sorel, commissioner of the Minnesota Department of Transportation, said many state DOTs are concerned about the impact of strong national performance measures on states such as Minnesota that already drive decisions using their own measures. Federal policy shouldn't prescribe, he said; "it should prompt states to innovate."

Peter Bell, chair of the Metropolitan Council, said the report is "very much on the right track" but raised concerns about what baselines would be used and whether variables such as different economic conditions in different states would be considered.

Peter McLaughlin, a Hennepin County commissioner, pointed out the importance of getting an "appropriate distribution of power among decision makers" and the need for strong metropolitan planning organizations.

State Rep. **Mary Liz Holberg** said the report's concepts "can help move forward a transportation system that makes sense." The challenge is funding: "Everybody knows the state is broke, just as the federal government is," she said.

State Sen. **D. Scott Dibble** said "Minnesotans are very willing to pay for value" of investments they can see and understand. "Our job is to talk with constituents about what is possible…and how we pay for it."

Following the panel, **Richard Mudge**, vice president of Delcan Corporation, reviewed highlights of a report prepared by his firm in support of the NTPP. The report provides performance metrics for evaluating transportation programs. He was introduced by **Laurie McGinnis**, acting director of CTS.

Peter Bell, Mary Liz Holberg, Peter McLaughlin, Scott Dibble, and Tom Sorel

Mike Erlandson

Douglas Holtz-Eakin

Emil Frankel

Charles Zelle, president of Jefferson Lines and co-chair of the Itasca Project Transportation Task Force, gave the local business community perspective. Members in the employer-led alliance believe a robust transportation system is critical for economic health and quality of life, he said.

Douglas Holtz-Eakin, an NTPP member and former director of the Congressional Budget Office, presented the luncheon keynote. He was introduced by **Lee Munnich**, director of the State and Local Policy Program at the Humphrey Institute.

According to Holtz-Eakin, transportation policy "should not only help us recover from the recession but grow successfully in the years to come." Policy should identify high-value projects and focus carefully on how money is spent.

Holtz-Eakin also noted "severe political obstacles" to reform: partisanship, modal politics, and earmarks. "Congress is a long way from having capacity to analyze a full range of policy options, free of ideology," he said. "Whether for modal or regional interests, there is a public perception that Congress cannot rise above narrow interests to pursue the broader goals of the nation."

Emil Frankel, director of transportation policy at the BPC, gave concluding remarks. The NTPP is meant to stimulate debate and get people talking about things differently—about goals, outcomes, measurement, performance, and accountability. "If we can begin the process of shifting the debate to these terms, we will have achieved our purposes," he said.

To view the video of the event, please see www.cts.umn.edu/Events/SaboLecture/2009. To read more about the center and the NTPP report, see www.bipartisanpolicy.org. **CTS**

Faculty news

A paper based on research conducted under the "Reducing Greenhouse Gas Emissions from Transportation Resources in Minnesota" study was published in the journal *Environmental Science & Technology*. The paper's authors were **Adam Boies, Steve Hankey, David Kittelson, Julian Marshall, Peter Nussbaum, Winthrop Watts,** and **Elizabeth Wilson**. CTS received an appropriation from the Minnesota Legislature to lead the study. For more about the study and a link to the paper, see www.cts.umn.edu/Research/GreenhouseGas.

A project led by CTS Scholar **Carissa Schively Slotterback** and her colleagues won a National Planning Award for Best Practices from the American Planning Association. "Design for Health," a collaborative project among the University of Minnesota, Cornell University, and the University of Colorado, integrates human health issues into planning and environmental design using innovative, practice-oriented tools. The project was also recognized with an award for research by the Environmental Design Research Association. **CTS**

Transitway impacts highlighted in research briefs

University of Minnesota researchers have completed a pair of studies examining the economic and behavioral impacts of the Hiawatha light-rail transitway in Minneapolis. Research briefs highlighting findings from the study are now available and will soon be followed by full research reports.

The research, part of the CTS Transitway Impacts Research Program (TIRP), was conducted by **Edward Goetz** and **Jeff Mattson** of the Center for Urban and Regional Affairs and by **Jason Cao** of the Humphrey Institute of Public Affairs.

The Hiawatha Light-Rail Transit Line, completed in 2004, connects downtown Minneapolis and its southern suburbs. Since its opening, the service has proven extremely popular with commuters; the most recent regional transportation plan identifies several potential transit corridors in the Twin Cities metropolitan area, and planning for an additional east-west line linking Minneapolis and downtown St. Paul is now under way. In this context, thorough analysis of the effects of the Hiawatha Line is seen as essential to future transit planning.

A Hiawatha Line train passes new multi-family housing constructed near the transitway.

Cao's component of the study focused on the demographic and behavioral differences between transitway riders and other transit riders in the Twin Cities area. Among the issues explored were differences between "choice" riders (those who choose to use transit rather than driving their own cars) and "captive" riders who have no other mode option; ways of accessing the transitway (including park-and-ride lots and pedestrian access); and the residential locations of transitway riders.

Goetz and Mattson, by contrast, examined the economic impacts of the transitway. The researchers found that the transitway has increased the values of both single-family and multi-family residential properties in surrounding areas, and they estimate that the total residential property value increase exceeds $47 million. In addition, the transitway has spurred new housing construction in the nearby area relative to a control area.

Support for the research was provided by CTS, the Metropolitan Council, the University Metropolitan Consortium, Mn/DOT, and the counties of Anoka, Hennepin, Ramsey, and Washington through the Transitway Impacts Research Program. Other TIRP partners include the cities of Minneapolis and St. Paul, the Itasca Project, Metro Transit, and Dakota County.

Demographic and Behavioral Differences between Hiawatha Light-Rail and Other Transit Riders and *The Hiawatha Line: Impacts on Land Use and Residential Housing Value* are available from the TIRP Web page at www.cts.umn.edu/Research/Transitways. **CTS**

Mn/DOT conducts peer review of project management practices

Mn/DOT's Office of Project Scope and Cost Management hosted a Project Management Peer Review that involved practitioners from the Arizona, Washington, Utah, Virginia, and Pennsylvania departments of transportation. Other peer reviewers included **Laurie McGinnis,** acting director of CTS, and representatives from the Federal Highway Administration and the transportation consulting firm CH2M Hill.

Mike Barnes

Jean Wallace

Jean Wallace, Mn/DOT's Project Scoping Section director, managed the peer review. CTS staff led by **Jim Grothaus**, director of training and technical assistance, provided coordination support for the effort.

"The peer review was designed to benchmark our success and the success of what others in the industry are doing," said **Mike Barnes**, Engineering Services Division director. "Our project management is very visible to the public, and this process will help as we move toward strengthening public trust."

Commissioner **Tom Sorel** said the process was valuable, offering Mn/DOT the chance to be introspective, share experiences, and learn from others.

For four days in October, about 150 Mn/DOT employees were interviewed and participated in the review. Participants focused their discussion on four areas—project phases, functional areas, program management, and initiatives and support. Peer reviewers listened to Mn/DOT staff talk about project management, but they also shared best practices from their own organizations.

In preparation for the interviews, the Office of Project Scope and Cost Management surveyed project managers, functional groups, and management staff in mid-September to gather information about their processes and thoughts for improvement in project management within Mn/DOT.

Recommendations and observations from the peer review will help identify opportunities for improvement and focus on creating, implementing, supporting, and sustaining a stronger project management culture within Mn/DOT.

"We heard a lot of great information in the interviews," said Wallace. "Everyone was very open and honest about identifying both best practices and challenges."

A report based on the results of the review is online at www.dot.state.mn.us/cost-estimating/peer-review/index.html.

For more information about the peer review, contact Wallace at 651-366-3181 or Jean.Wallace@state.mn.us. **CTS**

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passenger safety seats, which are now universal. "In order to work toward changing these issues, we need a vision of what the traffic safety culture should be. In the United States, our vision is to have fewer than 30,000 fatalities per year by 2011," Hedlund said. Individuals need to influence others in their workplace and personal life and learn from experience. "Look at examples of what cultures have changed and what the change agents were: can strategies used there be adapted elsewhere?"

Several University of Minnesota researchers presented at the conference. In a concurrent session on improving intersection safety through technology, Professor **Max Donath,** director of the ITS Institute at CTS, talked about research to help drivers better gage gap intervals and timing at intersections. For example, technologies such as site sensors and dynamic sign information can be used to warn drivers when it's unsafe to enter an intersection from a secondary road.

A panel discussion on speed featured **Keith Knapp**, director of transportation safety engineering for the Center for Excellence in Rural Safety (CERS), and Professor **John Adams** of the Department of Geography. Knapp discussed some effective speed reduction techniques for rural areas, including roundabouts, median islands, gateways, lighting, transverse markings, and color speed limit signs.

Adams provided an overview of his recent research (published by CTS) on automated enforcement and red-light running. Automated speed enforcement techniques include radar guns, laser devices that can pinpoint specific cars, recorders, cameras, and aerial speed measurement, among others. "Automated law enforcement is a touchy issue; both speed variation and speed itself are problems—there is a percentage of drivers who will always exceed the speed limit," Adams said.


Max Donath


Keith Knapp


John Adams


Lee Munnich

Adams said public education and other enforcement should be used to change driver behavior. "Adjusting speed limits has little effect on speed, which means that drivers tend to drive at a speed they're comfortable with despite posted limits," he said.

In a session on low-cost traffic safety improvements, Knapp reported preliminary findings from a study of centerline rumble strips. An implementation guide will be published at www.ruralsafety.umn.edu and will include final statistics. The overall conclusion of the study, he said, is "Rumble strips work."

Lee Munnich, director of CERS, discussed ideas for public policy efforts to address rural transportation safety. He said that the current Rural Safety Policy Improvements Index project is investigating, identifying, and quantifying the direct impacts to rural safety of changes in policy-based measures such as seat belt laws and sobriety checkpoints.

Toward Zero Deaths is a Minnesota partnership led by the Department of Public Safety, the Department of Transportation, and the Department of Health, in cooperation with the Minnesota State Patrol, the Federal Highway Administration, Minnesota county engineers, and CTS. The conference was hosted by CTS and sponsored by Mn/DOT, the Department of Public Safety, and the Minnesota TZD program.

A proceedings of the conference will be published in early 2010. To receive a copy, call CTS at 612-626-1077 or visit www.cts.umn.edu/publications. **CTS**

Fall seminars online

Topics ranging from driver performance to traffic management technologies were featured in the fall 2009 CTS Seminar Series. The seminars were webcast live and are archived as streaming video for viewing at www.cts.umn.edu/Events/SeminarSeries. **CTS**

Upcoming events

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

Feb. 3	9th Annual Road Salt Symposium. See www.mnltap.umn.edu/Events/RoadSaltSymposium.
Feb. 9	CTS Winter Luncheon, Minneapolis. See www.cts.umn.edu/Events/Luncheon/2010/Winter.
Feb. 11	14th Annual Minnesota Pavement Conference, St. Paul. See www.terraroadalliance.org/events.
March 2	Transportation Career Expo, Minneapolis. See www.cts.umn.edu/Events/CareerExpo.
March 3	54th Annual Asphalt Contractors' Workshop/Quality Initiative Workshop, Brooklyn Center. See www.asphaltisbest.com/calendar.asp.
March 18–19	Concrete Paving Association of Minnesota 49th Annual Concrete Paving Workshop, Breezy Point, Minn. See www.concreteisbetter.com.
Apr. 20–21	Spring Maintenance Training Expo, St. Cloud. See www.mnltap.umn.edu/Events/SpringMaintenanceExpo.
Apr. 27–28	21st Annual CTS Transportation Research Conference, RiverCentre, St. Paul. **CTS**