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[www.cts.umn.edu/publications/newsletters](http://www.cts.umn.edu/publications/newsletters)

Print Newsletters

**CTS Report**

A monthly report on transportation research, education, and outreach at the University of Minnesota (monthly)

**ITS Institute Sensor**

Research advances from the Intelligent Transportation Systems (ITS) Institute (periodic)

**Minnesota LTAP Exchange**

A newsletter of the Minnesota Local Technical Assistance Program (quarterly)

**AirTAP Briefings**

News and how-to information for personnel operating, maintaining, and administering Minnesota's public-use airports (periodic)  
 Available in both print and electronic formats

E-mail Newsletters

**CTS Research E-News**

The latest announcements and findings in transportation research (monthly)

**Access to Destinations E-News**

Updates on the Access to Destinations Study, featuring research results, event announcements, and related information (periodic)

**CTS Freight & Logistics E-News**

News and events from the community of freight and logistics professionals (periodic)

**Community Transportation E-News**

Events and initiatives involving non-traditional transit and services (periodic)

**Minnesota LTAP Hot Topics**

New publications and resources from various sources, plus other items of interest to local agencies (periodic)

**TERRA E-News**

A newsletter for the Transportation Engineering and Road Research Alliance (quarterly)

# Publications Catalog

## Update

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This 2007 update supplements the *CTS Publications Catalog* published in 2004 and subsequent annual updates. A complete listing of all publications available from CTS and ordering information may be found online at:

[www.cts.umn.edu/publications](http://www.cts.umn.edu/publications)

**Research Reports**

**Transportation and the Economy**

***Beyond Business as Usual: Ensuring the Network We Want Is the Network We Get***  
 David M. Levinson, Norah Montes de Oca, Feng Xie  
 Report no. Mn/DOT 2006-36  
[www.lrrb.org/pdf/200636.pdf](http://www.lrrb.org/pdf/200636.pdf)  
 (6.8 MB PDF) 206 pp., \$36.00

***Capacity Expansion in the Twin Cities: The Roads-Transit Balance***  
 Gary A. Davis, Kate Sanderson, HunWen Tao  
 Report no. Mn/DOT 2006-44  
[www.lrrb.org/pdf/200644.pdf](http://www.lrrb.org/pdf/200644.pdf)  
 (300 KB PDF) 63 pp., \$21

***Politics and Freeways: Building the Twin Cities Interstate System***  
 Patricia Cavanaugh  
 Report no. CURA 06-01  
[www.cts.umn.edu/pdf/CURA-06-01.pdf](http://www.cts.umn.edu/pdf/CURA-06-01.pdf)  
 (4 MB PDF) 136 pp., \$29

***Reasons for Recent Large Increases in Commute Durations***  
 Gary Barnes  
 Report no. Mn/DOT 2007-02  
[www.lrrb.org/pdf/200702.pdf](http://www.lrrb.org/pdf/200702.pdf)  
 (400 KB PDF) 63 pp., \$21

***Urbanization of Minnesota's Countryside, 2000–2025: Evolving Geographies and Transportation Impacts***  
 John S. Adams, Barbara J. VanDrasek  
 Report no. Mn/DOT 2006-23  
[www.lrrb.org/pdf/200623.pdf](http://www.lrrb.org/pdf/200623.pdf)  
 (3.4 MB PDF) 256 pp., \$40

**Transportation Safety and Traffic Flow**

***Better Understanding the Potential Market of Metro Transit's Ridership and Service***  
 Kevin Krizek, Ahmed M. El-Geneidy  
 Report no. CTS 06-09  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=160](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=160)  
 (296 KB) 39 pp., \$19

***Blind Deconvolution of Vehicle Inductance Signatures for Travel-Time Estimation***  
 Taek Mu Kwon  
 Report no. Mn/DOT 2006-06  
[www.lrrb.org/pdf/200606.pdf](http://www.lrrb.org/pdf/200606.pdf)  
 (1.35 MB PDF) 64 pp., \$21

***Bus Signal Priority Based on GPS and Wireless Communications Phase I—Simulation Study***  
 Chen-fu Liao, Gary A. Davis  
 Report no. CTS 06-07  
[www.cts.umn.edu/pdf/CTS-06-07.pdf](http://www.cts.umn.edu/pdf/CTS-06-07.pdf)  
 (712 KB) 87 pp., \$23

***A Case Control Study of Speed and Crash Risk, Technical Report 2: Bayesian Reconstruction of Traffic Accidents and the Causal Effect of Speed in Intersection and Pedestrian Accidents***  
 Gary A. Davis  
 Report no. CTS 06-01B  
[www.cts.umn.edu/pdf/CTS-06-01B.pdf](http://www.cts.umn.edu/pdf/CTS-06-01B.pdf)  
 (173 KB PDF) 50 pp., \$20

***A Case Control Study of Speed and Crash Risk, Technical Report 3: Speed as a Risk Factor in Run-off Road Crashes***  
 Gary A. Davis, Sujay Davuluri, Jian Ping Pei  
 Report no. CTS 06-01C  
[www.cts.umn.edu/pdf/CTS-06-01C.pdf](http://www.cts.umn.edu/pdf/CTS-06-01C.pdf)  
 (345 KB PDF) 45 pp., \$19

***Contraflow Transportation Network Reconfiguration for Evacuation Route Planning***  
 Shashi Shekhar, Sangho Kim  
 Report no. Mn/DOT 2006-21  
[www.lrrb.org/pdf/200621.pdf](http://www.lrrb.org/pdf/200621.pdf)  
 (1 MB PDF) 48 pp., \$19

***Development of Efficient Integrated Data Archival/Retrieval Model for RWIS, RTMS, and Loop Traffic Data***  
 Taek Mu Kwon  
 Report no. Mn/DOT 2006-22  
[www.lrrb.org/pdf/200622.pdf](http://www.lrrb.org/pdf/200622.pdf)  
 (1.1 MB PDF) 59 pp., \$20

***Developing ITS to Serve Diverse Populations***  
 Frank Douma  
 Report no. Mn/DOT 2006-41  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=310](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=310)  
 (13 MB PDF) 348 pp., \$49

***Development of a Novel Tilt-Controlled Narrow Commuter Vehicle***  
 J Gohl, Rajesh Rajamani, P Starr, Lee Alexander  
 Report no. CTS 06-05  
[www.cts.umn.edu/pdf/CTS-06-05.pdf](http://www.cts.umn.edu/pdf/CTS-06-05.pdf)  
 (5.6 MB PDF) 191 pp., \$34

***Identification and Simulation of a Common Freeway Accident Mechanism: Collective Responsibility in Freeway Rear-end Collisions***  
 Gary A. Davis, Joel Swenson  
 Report no. CTS 06-02  
[www.cts.umn.edu/pdf/CTS-06-02.pdf](http://www.cts.umn.edu/pdf/CTS-06-02.pdf)  
 (165 KB PDF) 34 pp., \$18

**How to Obtain These Publications**

This 2007 update supplements the *CTS Publications Catalog* published in 2004 and subsequent annual updates. It lists transportation-related research reports produced by faculty and researchers at the University of Minnesota and published by CTS, the Minnesota Department of Transportation (Mn/DOT), or the Minnesota Local Road Research Board (LRRB). This update also features publications, videos, and other materials produced by CTS and its affiliated programs.

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[www.cts.umn.edu/publications](http://www.cts.umn.edu/publications)

*Improving the Ability of Drivers to Avoid Collisions With Snowplows in Fog and Snow*  
Albert Yonas, Lee Zimmerman  
Report no. Mn/DOT 2006-29  
[www.lrrb.org/pdf/200629.pdf](http://www.lrrb.org/pdf/200629.pdf)  
(400 KB PDF) 33 pp., \$18

*A Nonlinear State Space Approach to Arterial Travel Time Prediction*  
Jiann-Shiou Yang  
Report no. Mn/DOT 2006-05  
[www.lrrb.org/pdf/200605.pdf](http://www.lrrb.org/pdf/200605.pdf)  
(1.75 MB PDF) 73 pp., \$22

*Real-Time Traffic Prediction for Advanced Traffic Management Systems: Phase III*  
Gary A. Davis, Yorgos J. Stephanedes, Chang-Jen Lan  
Report no. CTS 06-06  
[www.cts.umn.edu/pdf/CTS-06-06.pdf](http://www.cts.umn.edu/pdf/CTS-06-06.pdf)  
(9.3 MB PDF) 104 pp., \$25

*Review of Michigan's Rural Intersection Crashes: Application of Methodology for Identifying Intersections for Intersection Decision Support (IDS)*  
Howard Preston, Richard Storm, Max Donath, Craig Shankwitz  
Report no. Mn/DOT 2006-33, Series: Report #3 in the Series: Toward a Multi-State Consensus on Rural Intersection Decision Support  
[www.lrrb.org/pdf/200633.pdf](http://www.lrrb.org/pdf/200633.pdf)  
(3.2 MB) 58 pp., \$21

*Review of North Carolina's Rural Intersection Crashes: Application of Methodology for Identifying Intersections for Intersection Decision Support (IDS)*  
Howard Preston, Richard Storm, Max Donath, Craig Shankwitz  
Report no. Mn/DOT 2006-32, Series: Report #2 in the Series: Toward a Multi-State Consensus on Rural Intersection Decision Support  
[www.lrrb.org/pdf/200632.pdf](http://www.lrrb.org/pdf/200632.pdf)  
(2.1 MB) 56 pp., \$20

*Safety Effects of Left-Turn Phasing Schemes at High-Speed Intersections*  
Gary A. Davis, Nathan Aul  
Report no. Mn/DOT 2007-03  
[www.lrrb.org/pdf/200703.pdf](http://www.lrrb.org/pdf/200703.pdf)  
(646 KB PDF) 69 pp., \$22

*Statistical Modeling for Intersection Decision Support*  
Gary A. Davis, Nebiyou Tilahun, Paula Mesa  
Report no. Mn/DOT 2006-03, Series: Report #2 in the Series: Developing Intersection Decision Support Solutions  
[www.lrrb.org/pdf/200603.pdf](http://www.lrrb.org/pdf/200603.pdf)  
(850 KB PDF) 39 pp., \$19

*Stopping Behavior at Real-World Stop-Controlled Intersections With and Without In-Lane Rumble Strips*  
Kathleen A. Harder, John Bloomfield, Benjamin J. Chihak  
Report no. Mn/DOT 2006-42  
[www.lrrb.org/pdf/200642.pdf](http://www.lrrb.org/pdf/200642.pdf)  
(22.2 MB, 364 pp.) \$51

## Transportation Infrastructure

*Application of Precast Decks and Other Elements to Bridge Structures*  
Charles M. Bell, Catherine E. French, Carol K. Shield  
Report no. Mn/DOT 2006-37  
[www.lrrb.org/pdf/200637.pdf](http://www.lrrb.org/pdf/200637.pdf)  
(6.4 MB PDF) 271 pp., \$42

*Fatigue-Resistant Design for Overhead Signs, Mast-Arm Signal Poles, and Lighting Standards*  
Robert Dexter  
Report no. Mn/DOT 2006-07  
[www.lrrb.org/pdf/200607.pdf](http://www.lrrb.org/pdf/200607.pdf)  
(3.28 MB PDF) 190 pp., \$34

*Impact of Alternative Storm Water Management Approaches on Highway Infrastructure: Guide for Selection of Best Management Practices—Volume 1*  
Caleb Arika, Dario J. Canelon, John L. Nieber, Robert D. Sykes  
Report no. Mn/DOT 2005-49A  
[www.lrrb.org/pdf/200549A.pdf](http://www.lrrb.org/pdf/200549A.pdf)  
(1 MB PDF) 60 pp., \$21

*Impact of Alternative Storm Water Management Approaches on Highway Infrastructure: Project Task Reports—Volume 2*  
Caleb Arika, Dario J. Canelon, John L. Nieber, Robert D. Sykes  
Report no. Mn/DOT 2005-49B  
[www.lrrb.org/pdf/200549B.pdf](http://www.lrrb.org/pdf/200549B.pdf)  
(5.9 MB PDF) 211 pp., \$36

*Load Rating of Composite Steel Curved I-Girder Bridges Through Load Testing with Heavy Trucks*  
Dan P. Krzmarzick, Jerome F. Hajjar  
Report no. Mn/DOT 2006-40  
[www.lrrb.org/pdf/200640.pdf](http://www.lrrb.org/pdf/200640.pdf)  
(21.6 MB PDF) 546 pp., \$70

*MnROAD Lessons Learned*  
Derek Tompkins, Lev Khazanovich  
Report no. Mn/DOT 2007-06  
[www.lrrb.org/pdf/200706.pdf](http://www.lrrb.org/pdf/200706.pdf)  
(914 KB PDF) 63 pp., \$21

*Moisture Effects on PVD and DCP Measurements*  
Joel Swenson, Bojan Guzina, Joseph F. Labuz, Andrew Drescher  
Report no. Mn/DOT 2006-26  
[www.lrrb.org/pdf/200626.pdf](http://www.lrrb.org/pdf/200626.pdf)  
(85.7 MB PDF) 549 pp., \$69

*Resilient Modulus and Strength of Base Course With Recycled Bituminous Material*  
Woosung Kim, Joseph F. Labuz  
Report no. Mn/DOT 2007-05  
[www.lrrb.org/pdf/200705.pdf](http://www.lrrb.org/pdf/200705.pdf)  
(11.7 MB PDF) 270 pp., \$42

*Strength and Stability of Prestressed Concrete Through-Girder Pedestrian Bridges Subjected to Vehicular Impact*  
Eray Baran, Arturo E. Schultz, Catherine E. French  
Report no. Mn/DOT 2007-08  
[www.lrrb.org/pdf/200708.pdf](http://www.lrrb.org/pdf/200708.pdf)  
(10.6 MB PDF) 244 pp., \$39

*Use of Adhesives to Retrofit Out-of-Plane Distortion Induced Fatigue Cracks*  
Yuying Hu, Carol K. Shield, Robert Dexter  
Report no. Mn/DOT 2006-04  
[www.lrrb.org/pdf/200604.pdf](http://www.lrrb.org/pdf/200604.pdf)  
(11.1 MB PDF) 260 pp., \$41

## Transportation Planning and the Environment

*Access to Destinations: Development of Accessibility Measures*  
Ahmed M. El-Geneidy, David M. Levinson  
Report no. Mn/DOT 2006-16  
[www.lrrb.org/pdf/200616.pdf](http://www.lrrb.org/pdf/200616.pdf)  
(2.3 MB PDF) 125 pp., \$27

*Asking the Right Questions About Transportation and Land Use: Access to Destinations Study Research Summary No. 1*  
Center for Transportation Studies  
Report no. CTS 07-03  
[www.cts.umn.edu/access-study/publications/documents/2007-0315\\_AccessSummary.pdf](http://www.cts.umn.edu/access-study/publications/documents/2007-0315_AccessSummary.pdf)  
(1.2 MB PDF) 5 pp., \$15

*Chemical Inventory and Database Development for Recycled Material Substitutes*  
Kim E. Grosenheider, Paul Bloom, Thomas R. Halbach, Matt Simick  
Report no. Mn/DOT 2006-28  
[www.lrrb.org/pdf/200628.pdf](http://www.lrrb.org/pdf/200628.pdf)  
(600 KB PDF) 149 pp., \$29

*Developing a Simple System for Public Involvement Conflict Management*  
Gary Barnes, Stephanie Erickson  
Report no. Mn/DOT 2006-24  
[www.lrrb.org/pdf/200624.pdf](http://www.lrrb.org/pdf/200624.pdf)  
(100 KB PDF) 28 pp., \$17

*Erosion Risk Assessment Tool For Construction Sites*  
Bruce Wilson, Aleksey Sheshukov, Reid Pulley  
Report no. Mn/DOT 2006-27  
[www.lrrb.org/pdf/200627.pdf](http://www.lrrb.org/pdf/200627.pdf)  
(600 KB PDF) 72 pp., \$22

*The Safety of Pedestrian and Bicycle Travel in Minnesota: Inventory, Analysis and Prospectus*  
Kevin Krizek, Gavin Poindexter, Ahmed M. El-Geneidy, Edward Sanderson  
Report no. Mn/DOT 2007-04  
[www.lrrb.org/pdf/200704.pdf](http://www.lrrb.org/pdf/200704.pdf)  
(2 MB PDF) 114 pp., \$26

*The Transportation Needs of People with Developmental Disabilities*  
Rania Wasfi, David M. Levinson  
Report no. CTS 07-02  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=156](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=156)  
(2.1 MB PDF) 97 pp., \$25

*The Transportation Needs of Seniors*  
David M. Levinson, Rania Wasfi  
Report no. CTS 07-01  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=156](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=156)  
(4 MB PDF) 182 pp., \$25

*Water Quality Performance of Dry Detention Ponds with Under-Drains*  
Chaudhry F. Hussain, Joshua Brand, John S. Gulliver, Peter Weiss  
Report no. Mn/DOT 2006-43  
[www.lrrb.org/pdf/200643.pdf](http://www.lrrb.org/pdf/200643.pdf)  
(5.1 MB PDF) 89 pp., \$24

## Annual Reports

*2006 CTS Annual Report*  
[www.cts.umn.edu/publications/annualreports](http://www.cts.umn.edu/publications/annualreports)  
(5.2 MB PDF) 44 pp.

*2006 ITS Institute Annual Report*  
[www.cts.umn.edu/publications/annualreports](http://www.cts.umn.edu/publications/annualreports)  
(3.6 MB PDF) 56 pp.

*2006 Local OPERA Program Annual Report*  
[www.mnltap.umn.edu/programs/opera](http://www.mnltap.umn.edu/programs/opera)  
(536 KB PDF) 12 pp.

## Proceedings

*AirTAP Fall Forum*  
October 11–12, 2006, Breezy Point, Minnesota  
[www.cts.umn.edu/publications/proceedings](http://www.cts.umn.edu/publications/proceedings)  
(739 KB PDF) 8 pp., \$16

*2006 CEO Leadership Forum: Advancing Practice in State DOTs from Good to Great Summary Report*  
September 24–25, 2006, Minneapolis, Minnesota  
[www.transportation.org/meetings/CEOLeadership](http://www.transportation.org/meetings/CEOLeadership)  
(5.4 MB PDF) 34 pp., \$18

*10th Annual Freight and Logistics Symposium*  
December 1, 2006, Minneapolis, Minnesota  
[www.cts.umn.edu/publications/proceedings](http://www.cts.umn.edu/publications/proceedings)  
(364 KB PDF) 8 pp., \$15

*10th Annual Minnesota Pavement Conference Session Summaries*  
February 16, 2006, St. Paul, Minnesota  
[www.cts.umn.edu/publications/proceedings](http://www.cts.umn.edu/publications/proceedings)  
(1.4 MB PDF) 22 pp., \$16

*Fifth Annual Oberstar Forum on Transportation Policy and Technology: Transportation Choices: The Important Role of Walking and Biking*  
April 10, 2006, Minneapolis, Minnesota  
[www.cts.umn.edu/publications/proceedings](http://www.cts.umn.edu/publications/proceedings)  
(920 KB PDF) 16 pp., \$16

*Toward Zero Deaths 2006 Conference*  
November 2–3, 2006, Duluth, Minnesota  
[www.cts.umn.edu/publications/proceedings](http://www.cts.umn.edu/publications/proceedings)  
(2.4 MB PDF) 16 pp., \$16

## Videos

*Local Government Video Catalog, 2006*  
[www.mnltap.umn.edu/pdf/VideoCatalog\\_2006.pdf](http://www.mnltap.umn.edu/pdf/VideoCatalog_2006.pdf)  
(1.1 MB PDF) 118 pp., \$26

*How About a Roundabout? The Minnesota Experience*  
Minnesota Local Road Research Board  
[www.mnltap.umn.edu/publications/videos/ModernRoundabouts](http://www.mnltap.umn.edu/publications/videos/ModernRoundabouts)  
Web streaming

## ITS Institute Seminar Series—Fall Semester 2006

Available for viewing online at:  
[www.its.umn.edu/seminars/2006/index.html](http://www.its.umn.edu/seminars/2006/index.html)

September 12  
*“Developing ITS to Serve a Diverse Population”*  
Frank Douma Assistant Director, State and Local Policy Program, Humphrey Institute, University of Minnesota—Twin Cities

September 26  
*“Addressing the Driver's Role in Motor Vehicle Crashes: Past Failures, Future Successes”*  
Rob Foss, Senior Research Scientist and Manager of Alcohol Studies, Highway Safety Research Center, University of North Carolina

October 10  
*“Development and Evaluation of a Novel Traffic Friendly Commuter Vehicle”*  
Rajesh Rajamani, Associate Professor, Department of Mechanical Engineering, University of Minnesota—Twin Cities

October 24  
*“Toward Scalable and Privacy-Aware Location-Based Services in Transportation”*  
Mohamed Mokbel, Assistant Professor, Department of Computer Science and Engineering, University of Minnesota—Twin Cities

November 7  
*“Portable Video Data Processor”*  
Nikos Papanikolopoulos, Professor, Department of Computer Science and Engineering, University of Minnesota—Twin Cities

November 21  
*“Collective Responsibility in Freeway Rear-end Collisions—An Application of Causal Models”*  
Gary Davis, Professor, Department of Civil Engineering, University of Minnesota

December 5  
*“Where is the U.S. VII Program Going?”*  
Ron Heft, Senior Principal Engineer, Nissan Technical Center—North America

## Technical Assistance Resources

*How About a Roundabout? The Minnesota Experience*  
Minnesota Local Road Research Board  
[www.mnltap.umn.edu/publications/videos/ModernRoundabouts](http://www.mnltap.umn.edu/publications/videos/ModernRoundabouts)  
Web streaming

*Local Government Video Catalog, 2006*  
[www.mnltap.umn.edu/pdf/VideoCatalog\\_2006.pdf](http://www.mnltap.umn.edu/pdf/VideoCatalog_2006.pdf)  
(1.1 MB PDF) 118 pp., \$26

*State Aid Concrete Pavement Rehabilitation Best Practices Manual 2006*  
Minnesota Local Road Research Board  
Manual Number 2006-31  
[www.lrrb.org/pdf/200631.pdf](http://www.lrrb.org/pdf/200631.pdf)  
(1.0 MB PDF) 40 pp.

*To Pave or Not to Pave? Making informed decisions on when to upgrade a gravel road Minnesota LTAP, 2006*  
Technical brochure and presentation  
[www.mnltap.umn.edu/resources/infrastructure/lowvolume.html](http://www.mnltap.umn.edu/resources/infrastructure/lowvolume.html)