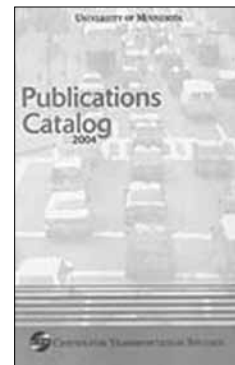


Publications Catalog

Update

Contents

Research Reports, by Subject Area	1
Transportation and the Economy	1
Transportation Safety and Traffic Flow	1
Transportation Infrastructure	2
Transportation Planning and the Environment	2
Research Summaries	2
Annual Reports	3
Proceedings	3
Videos	3
Newsletters	4
Journals	4



This 2010 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

Research Reports

Available for viewing online at:
<http://www.cts.umn.edu/Publications/ResearchReports/>

Transportation and the Economy

Advanced Acquisition of Right-of-Way: Best Practices and Corridor Case Studies

Sara Aultman, Adeel Lari
Report no. Mn/DOT 2009-07 (54 pp.)

College and University Campuses in Greater Minnesota as Traffic Generators

Barbara J. VanDrasek, John S. Adams
Report no. CTS 09-17 (59 pp.)

The Economic Impact of Upgrading Roads

Michael Iacono, David M. Levinson
Report no. Mn/DOT 2009-16 (75 pp.)

Harnessing Value for Transportation Investment: A Summary of the Study: Value Capture for Transportation Finance

Adeel Lari, David M. Levinson, Zhirong Zhao, Michael Iacono
Report no. CTS 09-18PS (16 pp.)

Technology Enabling Near-Term Nationwide Implementation of Distance Based Road User Fees

Max Donath, Alec Gorjestani, Craig Shankwitz, Richard Hoglund, Eddie Arpin, Pi-Ming Cheng, Arvind Menon, Bryan Newstrom
Report no. CTS 09-20 (76 pp.)

Understanding the Impacts of Transitways: Demographic and Behavioral Differences Between Hiawatha Light-Rail and Other Transit Riders

Report no. CTS 09-16 (57 pp.)

Value Capture for Transportation Finance: Report to the Minnesota Legislature

Michael Iacono, David M. Levinson, Zhirong Zhao, Adeel Lari
Report no. CTS 09-18S (56 pp.)

Value Capture for Transportation Finance: Technical Research Report

Adeel Lari, David M. Levinson, Zhirong Zhao, Michael Iacono, Sara Aultman, Kirti V. Das, Jason Junge, Kerstin Larson, Michael Scharenbroich
Report no. CTS 09-18 (373 pp.)

Transportation Safety and Traffic Flow

Automated Enforcement of Red-Light Running and Speeding Laws in Minnesota: Bridging Technology and Public Policy

John S. Adams, Barbara J. VanDrasek
Report no. CTS 09-26 (101 pp.)

Automatic Detection of RWIS Sensor Malfunctions (Phase I)

Carolyn Crouch, Donald Crouch, Richard Maclin, Aditya Polumetla
Report no. CTS 09-10 (53 pp.)

Automatic Detection of RWIS Sensor Malfunctions (Phase II)

Carolyn Crouch, Donald Crouch, Richard Maclin, Aditya Polumetla
Report no. CTS 09-11 (43 pp.)

Benefit: Cost Analysis of In-Vehicle Technologies and Infrastructure Modifications as a Means to Prevent Crashes Along Curves and Shoulders

Jaswandi T. Pitale, Craig Shankwitz, Howard Preston, Michael Barry
Report no. Mn/DOT 2009-39 (178 pp.)

Data Mining of Traffic Video Sequences

Ajay J. Joshi, Nikolaos P. Papanikolopoulos
Report no. CTS 09-25 (29 pp.)

Detection of Water and Ice on Bridge Structures by AC Impedance and Dielectric Relaxation Spectroscopy Phase I

John F. Evans
Report no. CTS 09-12 (27 pp.)

Development and Evaluation of a Cellular Phone Based Teen Driver Support System

Janet Creaser, Richard Hoglund, Michael Manser, Max Donath
Report no. CTS 09-22 (101 pp.)

Development of a New Tracking System Based on CMOS Vision Processor Hardware: Phase I

Hua Tang
Report no. CTS 09-04 (59 pp.)

Development of a Platoon Priority Control Strategy with/out Smart Advance Warning Flashers for Isolated Intersections with High-Speed Approaches

Henry Liu, Sundeep Bhimireddy
Report no. Mn/DOT 2009-23 (83 pp.)

Development of Data Warehouse and Applications for Continuous Vehicle Class and Weigh-in-Motion Data

Taek Mu Kwon
Report no. Mn/DOT 2009-33 (106 pp.)

The Effect of Sleep Deprivation on Driving Performance

John Bloomfield, Kathleen A. Harder, Benjamin J. Chihak
Report no. CTS 09-03 (50 pp.)

Estimating Running Time and Demand for a Bus Rapid Transit Corridor

Jessica Horning, Ahmed M. El-Geneidy, John Hourdos
Report no. CTS 09-24 (69 pp.)

Feasibility of a Quantitative Rural Safety Policy Improvement Index (RSPII): Phase I

Keith Knapp, Kelcie Young, Brad Utecht
Report no. CTS 09-14 (80 pp.)

Identifying Methods and Metrics for Evaluating Interagency Coordination in Traffic Incident Management

Robert G. Feyen, Chinweike Eseonu
Report no. CTS 09-13 (96 pp.)

In-Situ Vehicle Classification Using an ILD and a Magnetoresistive Sensor Array

Stanley G. Burns
Report no. CTS 09-06 (82 pp.)

Multiuse, High Accuracy, High Density Geospatial Database

Bryan Newstrom, Curtis Olson
Report no. CTS 09-05 (34 pp.)

Rapidly Deployable Low-Cost Traffic Data and Video Collection Device

Jory A. Schwach, Ted Morris, Panos Michalopoulos
Report no. CTS 09-21 (72 pp.)

Real-Time Nonintrusive Detection of Driver Drowsiness

Xun Yu
Report no. CTS 09-15 (27 pp.)

Responding to the Unexpected: Development of a Dynamic Data-Driven Model for Effective Evacuation

Henry Liu, Saif E. Jabari
Report no. Mn/DOT 2009-36 (129 pp.)

Using Archived Truck GPS Data for Freight Performance Analysis on I-94/I-90 from the Twin Cities to Chicago

Chen-Fu Liao
Report no. CTS 09-27 (98 pp.)

Warning Efficacy of Active Versus Passive Warnings for Unsignalized Intersection and Mid-Block Pedestrian Crosswalks

Thomas J. Smith, Curtis Hammond, Guruprasad Somasundaram, Nikolaos P. Papanikolopoulos
Report no. Mn/DOT 2009-03 (141 pp.)

Transportation Infrastructure

Asphalt Mixture and Binder Fracture Testing for 2008 MnROAD Construction

Mihai O. Marasteanu, Ki Hoon Moon, Mugur Turos
Report no. Mn/DOT 2009-42 (39 pp.)

Bridge Health Monitoring – A Survey of Methods

Andrew Gastineau, Tyler Johnson, Arturo E. Schultz
Report no. Mn/DOT 2009-29 (194 pp.)

Crack and Concrete Deck Sealant Performance

Karl Johnson, Arturo E. Schultz, Catherine E. French, Jacob Reneson
Report no. Mn/DOT 2009-13 (268 pp.)

Development of Flexural Vibration Inspection Techniques to Rapidly Assess the Structural Health of Rural Bridge Systems: Phase II

Brian Brashaw, Robert Vatalaro, Xiping Wang, Matthew Verreux, Kevin Sarvela
Report no. Mn/DOT 2009-40 (124 pp.)

Hydraulic and Mechanical Properties of Recycled Materials

Satish Gupta, JeongGyu Kang, Andry Ranaivoson
Report no. Mn/DOT 2009-32 (219 pp.)

Mechanistic Modeling of Unbound Granular Materials

Bereket Yohannes, Kimberly Hill, Lev Khazanovich
Report no. Mn/DOT 2009-21 (109 pp.)

Statistical Methods for Materials Testing

Diwakar Gupta, Amy Peterson
Report no. Mn/DOT 2009-41 (74 pp.)

Subsurface Drainage Manual for Pavements in Minnesota

Caleb Arika, Dario J. Canelon, John Neiber
Report no. Mn/DOT 2009-17 (194 pp.)

Use of Fly Ash for Reconstruction of Bituminous Roads

Craig Benson, Tuncer Edil, Paul Bloom, Ali Ebrahimi, Brian Kootstra, Lin Li
Report no. Mn/DOT 2009-27 (333 pp.)

Transportation Planning and the Environment

Access to Destinations: Application of Accessibility Measures for Non-Auto Travel Modes

Kevin Krizek, Michael Iacono, Ahmed M. El-Geneidy, Chen-fu Liao, Robert Johns
Report no. Mn/DOT 2009-24 (53 pp.)

Cost Analysis of Alternative Culvert Installation Practices in Minnesota

Brad Hansen, John L. Nieber, Chris Lenhart
Report no. Mn/DOT 2009-20 (85 pp.)

Evaluating Roadway Subsurface Drainage Practices

Dario J. Canelon, John Neiber
Report no. Mn/DOT 2009-08 (139 pp.)

ITS and Transportation Safety: EMS System Data Integration to Improve Traffic Crash Emergency Response and Treatment

Ben Schooley, Tom Horan, Nathan Botts, Aisha Noamani
Report no. CTS 09-02 (36 pp.)

Implementation of Methodology for Weed Management Practices, Phase II

Caleb Arika, Donald Wyse, John L. Nieber, R Moon
Report no. Mn/DOT 2009-28 (105 pp.)

Itasca County Area Transportation Study

Frank Douma, Yingling Fan, Ferrol Robinson, Gina Baas, Colin Cureton, Matt Schmit
Report no. CTS 09-28 (107 pp.)

Post-Construction Evaluation of Forecast Accuracy

Pavithra Parthasarathi, David M. Levinson
Report no. Mn/DOT 2009-11 (87 pp.)

Social Networks and ICT in Location Choice

Nebiyou Tilahun, David M. Levinson
Report no. CTS 09-19 (192 pp.)

Superbus Phase I: Accessory Loads Onboard a Parallel Hybrid-Electric City Bus

Jeffrey Campbell, David B. Kittelson
Report no. CTS 09-23 (35 pp.)

Transitway Data Management Project

William Craig
Report no. CTS 10-03 (59 pp.)

Research Summaries

Automated Enforcement of Red-Light Running and Speeding Laws in Minnesota: Bridging Technology and Public Policy
CTS Research Brief 2010-01, 2 pp.

How Light-Rail Transit Improves Job Access for Low-Wage Workers

Transitway Impacts Research Program
CTS Research Brief 2010-02, 2 pp.

The Hiawatha Line: Impacts on Land Use and Residential Housing Value

Transitway Impacts Research Program
CTS Research Brief 2009-02, 2 pp.

Demographic and Behavioral Differences between Hiawatha Light-Rail and Other Transit Riders

Transitway Impacts Research Program
CTS Research Brief 2009-01, 2 pp.

Annual Reports

2009 CTS Annual Report
(2.4 MB PDF) 36 pp.

2009 ITS Institute Annual Report
(2.6 MB PDF) 56 pp.

2009 Local OPERA Program Annual Report
(366 KB PDF) 20 pp.

Proceedings

Minnesota Pavement Conference Session Summaries

February 12, 2009, St. Paul, Minnesota
<http://www.cts.umn.edu/Publications/ProceedingsPresentations/Proceedings>
(437 KB PDF) 8 pp.

Toward Zero Deaths 2009 Conference

October 28-29, 2009, Duluth, Minnesota
http://www.minnesotatzd.org/events/conference/2009/documents/TZD09_wb.pdf
(2.85 MB PDF) 24 pp

Freight and Logistics Symposium

December 4, 2009, Minneapolis, Minnesota
http://www.cts.umn.edu/Events/FLOGSymposium/2009/documents/fllog2009_wb.pdf
(230 KB PDF) 8 pp.

Videos

Local Government Video Catalog, 2009
www.mnltap.umn.edu/pdf/VideoCatalog_2009.pdf
(1.2 MB PDF) 120 pp.

CTS Transportation Seminar Series—Fall Semester 2009

Available for viewing online at:
www.cts.umn.edu/Events/SeminarSeries/2009/

September 10

“The Implications of Current and Emerging Privacy Law for ITS”

Frank Douma, Assistant Program Director, Humphrey Institute of Public Affairs

September 17

“Value Capture for Transportation Finance”

Michael Iacono, Research Fellow, Department of Civil Engineering
Adeel Lari, Research Fellow, Humphrey Institute of Public Affairs
David Levinson, Assistant Professor, Department of Civil Engineering
Zhirong (Jerry) Zhao, Assistant Professor, Humphrey Institute of Public Affairs

September 24

“Effects of Alcohol on Motorcycle Riding Skills”
Janet Creaser, Research Fellow, HumanFIRST

October 1

“Urban Partnership Agreement: Technology and Collaboration in Effective Transportation Policy”

Melissa Stone, Professor, Humphrey Institute of Public Affairs
Emily Saunoi-Sandgren, Research Fellow, Humphrey Institute of Public Affairs

October 8

“Relieving Congestion and Saving Energy by Cooperative Intelligent Transportation Systems”

Steve Shladover, Research Engineer, California Partners for Advanced Transit and Highways (PATH)

October 15

“Evaluating Roadway Subsurface Drainage Practices”

John Nieber, Professor, Bioproducts and Biosystems Engineering

October 22

“Ramp Metering for Postponing Freeway Breakdown”

Lily Eleftheriadou, Professor and Director, Transportation Research Center, University of Florida

October 29

“The Economic Impact of Upgrading Roads”

Michael Iacono, Research Fellow, Civil Engineering

November 5

“Should I Drive or Should I Talk?”

Ensar Becic, Research Associate, HumanFIRST Program, University of Minnesota

November 12

“Speed and Efficiency in Government Procurement of Transportation-Related Construction Services”

Diwakar Gupta, Professor, Mechanical Engineering

November 19

“Non-Intrusive Detection of Driver Drowsiness”

Xun Yu, Assistant Professor, Mechanical and Industrial Engineering, University of Minnesota Duluth

December 3

“Battery-Less, Wireless Traffic Sensors”

Rajesh Rajamani, Professor, Mechanical Engineering

Newsletters

CTS publishes print and electronic newsletters covering many facets of transportation, including research, public policy, and engineering. Subscribe online at:
www.cts.umn.edu/publications/newsletters

Print Newsletters

Print newsletters may also be viewed online.

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)

Rural Safety News

The latest research and resources concerning rural safety from the Center for Excellence in Rural Safety, or CERS (quarterly)

CTS Freight & Logistics E-News

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

Transportation Education E-News

Informs university faculty of tools, initiatives, and activities for improving transportation education, especially in the field of transportation engineering (semiannual)

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)

TAG-line

Newsletter for members of the Transportation Alumni Group (quarterly)

Journals

Journal of Transport and Land Use

An open-access, peer-reviewed online journal publishing original inter-disciplinary papers on the interaction of transport and land use (quarterly)

www.jtlu.org

How to Obtain These Publications

This 2010 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.


Titles of publications are listed in alphabetical order under subject area. Most publications, where noted, are available in electronic format online at no charge. Publications also may be requested from CTS. A complete listing of all publications available from CTS and ordering information may be found online at:

www.cts.umn.edu/publications

Center for Transportation Studies
200 Transportation and Safety Building
511 Washington Avenue S.E.
Minneapolis, MN 55455-0375

Phone: 612-626-1077
Fax: 612-625-6381
E-mail: cts@umn.edu
Web: www.cts.umn.edu

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

 Printed on recycled paper with 30% postconsumer waste.