

# Publications Catalog

## Update

### Contents

Research Reports by Subject Area .....	1
<b>Transportation and the Economy</b> .....	1
<b>Transportation Infrastructure</b> .....	1
<b>Transportation Planning and the Environment</b> .....	2
<b>Transportation Safety and Traffic Flow</b> .....	2
Research Summaries .....	3
Annual Reports .....	4
Newsletters .....	4
Journals .....	4
Videos .....	4



This 2013 update supplements the *CTS Publications Catalog* published in 2004 and subsequent annual updates. A listing of all publications available from CTS along with ordering information are online at [www.cts.umn.edu](http://www.cts.umn.edu).

### Research Reports

Transportation-related research reports by University of Minnesota researchers, published by CTS, MnDOT, the Minnesota Local Road Research Board, and other sponsors in 2012. These reports are available in PDF format at [www.cts.umn.edu/Publications/ResearchReports/](http://www.cts.umn.edu/Publications/ResearchReports/).

#### Transportation and the Economy

##### *Benefit and Cost Analysis of the I-394 MnPASS Program*

Jason Cao, Henry Liu, Xiaozheng He, Zhiyi Xu, Arthur Huang, Lee Munnich  
Report no. CTS 12-03  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1632](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1632)

##### *Highway Cost Allocation and Determination of Heavy Freight Truck Permit Fees*

Diwakar Gupta, Hao-Wei Chen  
Report no. MnDOT 2012-14  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1746](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1746)

##### *Mileage-Based User Fee Policy Study: Supporting Technical Information*

Lee Munnich, John Doan, Matt Schmit  
Report no. MnDOT 2012-11  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1700](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1700)

##### *Potential Benefits of Mileage-Based User Fees to the Freight Industry and Industry Concerns*

Ferrol Robinson, David D. Coyle, Gerard McCullough  
Report no. MnDOT 2012-19  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1990](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1990)

##### *Using Twin Cities Destinations and Their Accessibility as a Multimodal Planning Tool*

Paul Anderson, David M. Levinson, Pavithra Parthasarathi  
Report no. MnDOT 2012-05  
<http://conservancy.umn.edu/bitstream/121730/6/MnDOT2012-05.pdf>

#### Transportation Infrastructure

##### *Development of Best Practices for Inspection of PT Bridges in Minnesota*

Kyle M. Berg, Andrea J. Schokker  
Report no. MnDOT 2012-09  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1684](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1684)

##### *Effects of Implements of Husbandry (Farm Equipment) on Pavement Performance*

Jason Lim, Andrea Azary, Lev Khazanovich, Shiyun Wang, Sunghwan Kim, Halil Ceylan, K. Gopalakrishnan  
Report no. MnDOT 2012-08  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1686](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1686)

##### *Full-Depth Precast Concrete Bridge Deck System: Phase II*

Max Halverson, Catherine E. French, Carol K. Shield  
Report no. MnDOT 2012-30  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2192](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2192)

##### *Instrumentation, Monitoring, and Modeling of the I-35W Bridge*

Catherine E. French, Carol K. Shield, Henryk K. Stolarski, Brock D. Hedegaard, Ben J. Jilk  
Report no. MnDOT 2012-24  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2126](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2126)

##### *Investigation of Low Temperature Cracking in Asphalt Pavements, National Pooled Fund Study -Phase II*

Mihai O. Marasteanu, William Buttlar, Hussain Bahia, Christopher Williams, Ki Hoon Moon, Eyoab Z. Teshale, Augusto C. Falchetto, Mugurel Turos  
Report no. MnDOT 2012-23  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2128](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2128)

##### *Mechanistic Modeling of Unbonded Concrete Overlay Pavements*

Roberto Ballarini, Minmao Liao  
Report no. MnDOT 2012-02  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1624](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1624)

##### *A Research Plan and Report on Factors Affecting Culvert Pipe Service Life in Minnesota*

Craig A. Taylor, Jeff Marr  
Report no. MnDOT 2012-27  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2160](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2160)

##### *Structural Evaluation of Asphalt Pavements with Full-Depth Reclaimed Base*

Shuling Tang, Yuejian Cao, Joseph F. Labuz  
Report no. MnDOT 2012-36  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2260](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2260)

##### *Validation of Prestressed Concrete I-Beam Deflection and Camber Estimates*

Cullen O'Neill, Catherine E. French  
Report no. MnDOT 2012-16  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1742](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1742)

## Transportation Planning and the Environment

### *Accessibility, Network Structure, and Consumers' Destination Choice: A GIS Analysis of GPS Travel Data and the CLUSTER Simulation Module for Retail Location Choice*

Arthur Huang, David M. Levinson  
Report no. CTS 12-14  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2180](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2180)

### *Assessing Neighborhood and Social Influences of Transit Corridors*

Yingling Fan, Andrew Guthrie  
Report no. CTS 12-19  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1788](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1788)

### *Assessment and Recommendations for the Operation of Standard Sumps as Best Management Practices for Stormwater Treatment (Volume 2)*

Kurtis D. McIntire, Adam Howard, Omid Mohseni, John S. Gulliver  
Report no. MnDOT 2012-13  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1722](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1722)

### *Deployment of Practical Methods for Counting Bicycle and Pedestrian Use of a Transportation Facility*

Guruprasad Somasundaram, Vassilios Morellas, Nikolaos P. Papanikolopoulos  
Report no. CTS 12-01  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1644](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1644)

### *Dynamics of Cross-Sector Collaboration: Minnesota's Urban Partnership Agreement from Start to Finish*

John M. Bryson, Barbara C. Crosby, Melissa M. Stone, Emily Saunoi-Sandgren  
Report no. CTS 12-04  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1646](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1646)

### *Economic and Environmental Costs and Benefits of Living Snow Fences: Safety, Mobility, and Transportation Authority Benefits, Farmer Costs, and Carbon Impacts*

Gary Wyatt, Diomy Zamora, David Smith, Sierra Schroeder, Dinesh Paudel, Joe Knight, Don Kilberg, Dean Current, Dan Gullickson, Steven J. Taff  
Report no. MnDOT 2012-03  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2238](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2238)

### *ITS and Transportation Safety: EMS System Data Integration to Improve Traffic Crash Emergency Response and Treatment - Phases IV and V*

Ben Schooley, Tom Horan, Yousef Abed, Abdullah Murad  
Report no. CTS 12-27  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2178](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2178)

### *ITS Personal Data Needs: How Much Do We Really Need to Know?*

Frank Douma, Thomas Garry, Stephen Simon  
Report no. CTS 12-21  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2250](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2250)

### *Maximizing the Benefits of Transitway Investment*

Yingling Fan, Nebiyou Tilahun  
Report no. CTS 12-16  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2198](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2198)

### *The Public Land Survey Records in Minnesota: An Inventory and Description of the Deputy Surveyor Contracts in the Minnesota Historical Society Collections*

Rod Squires  
Report no. CTS 12-02  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1618](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1618)

### *Smartphone-Based Travel Experience Sampling and Behavior Intervention among Young Adults*

Yingling Fan, Qian Chen, Chen-Fu Liao, Frank Douma  
Report no. CTS 12-11  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1726](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1726)

### *Understanding the Use of Non-Motorized Transportation Facilities*

Greg Lindsey, Kristopher Hoff, Steve Hankey, Xize Wang  
Report no. CTS 12-24  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1754](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1754)

## Transportation Safety and Traffic Flow

### *Aggregating VMT within Predefined Geographic Zones by Cellular Assignment: A Non-GPS-Based Approach to Mileage-Based Road Use Charging*

Brian Davis, Max Donath  
Report no. CTS 12-28  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2124](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2124)

### *Analysis of GPS-based Real Time Attitude Determination System for ITS Application*

Demoz Gebre-Egziabher, Fidelis A P Lie  
Report no. CTS 12-36  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2196](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2196)

### *Connected Vehicles Program: Driver Performance and Distraction Evaluation for In-vehicle Signing*

Janet Creaser, Michael Manser  
Report no. CTS 12-05  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1678](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1678)

### *Cooperative Intersection Collision Avoidance System -- Stop Sign Assist: Experiments to Validate Use of an In-Vehicle Interface Design*

Ensar Becic, Michael Manser, Janet Creaser, Max Donath  
Report no. CTS 12-09  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1712](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1712)

### *Development and Field Demonstration of DSRC Based V2V-Assisted V2I Traffic Information System for the Work Zone*

Buddhika Maitipe, Umair Ibrahim, M. Imran Hayee  
Report no. CTS 12-18  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1736](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1736)

### *Development of Freeway Operational Strategies with IRIS-in-Loop Simulation*

Eil Kwon, Chongmyung Park  
Report no. MnDOT 2012-04  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1626](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1626)

### *Development of Next Generation Simulation Models for the Twin Cities Freeway Metro-Wide Simulation Model—Phase 1*

John Hourdos  
Report no. CTS 12-34  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2186](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2186)

### *Development of Novel Hydrogen-Based Power Systems for ITS Applications: Phase-I*

Venkatram R. Mereddy  
Report no. CTS 12-38  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2208](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2208)

### *Development of a New Tracking System Based on CMOS Vision Processor Hardware, Phase II Prototype Demonstration*

Hua Tang, Li Peng  
Report no. CTS 12-08  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1710](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1710)

### *Development of a Weigh-Pad-Based Portable Weigh-In-Motion System*

Taek Mu Kwon  
Report no. MnDOT 2012-38  
[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2254](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2254)

***Estimating and Measuring Arterial Travel Time and Delay***

Henry Liu, Xinkai Wu

Report no. CTS 12-20

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2094](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2094)

***Estimation of Vehicle's Lateral Position via the Lucas-Kanade Optical Flow Method***

Jiann-Shiou Yang

Report no. CTS 12-31

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2174](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2174)

***Estimation of Winter Snow Operation Performance Measures with Traffic Data***

Eil Kwon, Seongah Hong, Soobok Kim, Soobin Jeon

Report no. MnDOT 2012-40

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2210](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2210)

***Identifying Issues Related to Deployment of Automated Speed Enforcement***

Frank Douma, Lee Munnich, Joe Loveland, Thomas Garry

Report no. CTS 12-23

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1752](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1752)

***Impacts of Minnesota's Primary Seat Belt Law***

Frank Douma, Nebiyou Tilahun

Report no. CTS 12-06

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2228](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2228)

***Improving the Safety and Efficiency of Roadway Maintenance Phase I: Developing a Robotic Roadway Message Painter Prototype***

Ryan G. Rosandich

Report no. CTS 12-17

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1730](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1730)

***Inexpensive 2D Optical Sensor for GPS Augmentation***

Pi-Ming Cheng, Craig Shankwitz, Eddie Arpin

Report no. CTS 12-37

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2204](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2204)

***Infrared Thermal Camera-Based Real-Time Identification and Tracking of Large Animals to Prevent Animal-Vehicle Collisions (AVCs) on Roadways***

Debao Zhou

Report no. CTS 12-15

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1728](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1728)

***Integrated Approach for Noninvasive Detection of Driver Drowsiness***

Xun Yu

Report no. CTS 12-32

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2176](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2176)

***Intelligent Pavement for Traffic Flow Detection - Phase I***

Xun Yu

Report no. CTS 12-29

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2150](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2150)

***Intelligent Pavement for Traffic Flow Detection - Phase II***

Xun Yu

Report no. CTS 12-30

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2148](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2148)

***Investigating the Effectiveness of Intelligent Lane Control Signals on Driver Behavior***

Kathleen A. Harder, John Bloomfield

Report no. MnDOT 2012-22

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1820](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1820)

***Investigation of Pedestrian/Bicyclist Risk in Minnesota Roundabout Crossings***

John Hourdos, Veronica Richfield, Melissa Shauer

Report no. MnDOT 2012-28

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2162](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2162)

***Performance Analysis of Squad Car Lighting, Retro-reflective Markings, and Paint Treatments to Improve Safety at Roadside Traffic Stops***

Jacob Fischer, Adam Krzmarzick, Arvind Menon, Craig Shankwitz

Report no. CTS 12-13

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1724](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1724)

***Prediction and Prevention of Tripped Rollovers***

Gridsada Phanomchoeng, Rajesh Rajamani

Report no. CTS 12-33

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2206](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2206)

***A Tracking-Based Traffic Performance Measurement System for Roundabouts and Intersections***

Hua Tang, Hai Dinh

Report no. CTS 12-10

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1718](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1718)

***Traffic Data Quality Verification and Sensor Calibration for Weigh-In-Motion (WIM) Systems***

Chen-Fu Liao, Gary A. Davis

Report no. CTS 12-26

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

[pdfdownload.pl?id=1944](http://pdfdownload.pl?id=1944)

***Ultra Reliable Detection of Imminent Collision for Enhanced Occupant Safety***

Saber Taghvaeeyan, Zhen Sun, Michael Mott, Rajesh Rajamani

Report no. CTS 12-07

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1744](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1744)

***Using a Smartphone App to Assist the Visually Impaired at Signalized Intersections***

Chen-Fu Liao

Report no. CTS 12-25

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1790](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1790)

***Vehicle Probe Based Real-Time Traffic Monitoring on Urban Roadway Networks***

Yiheng Feng, John Hourdos, Gary A. Davis, Michael Collins

Report no. CTS 12-35

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2188](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2188)

***Vehicle Speed Impacts of Occasional Hazard (Playground) Warning Signs***

Gary A. Davis, Keith K. Knapp, John Hourdos

Report no. MnDOT 2012-06

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1654](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1654)

**Research Summaries**

***Assessing Neighborhood and Social Influences of Transit Corridors***

Yingling Fan, Andrew Guthrie

CTS Research Brief 2012-05

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2182](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2182)

***Enhancing Bridge Safety and Operation with Response Modification***

Arturo E. Schultz

Report no. CTS Research Brief 2012-04

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1734](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1734)

***Enhancing Public Engagement in Transportation Policymaking (Research Brief)***

Zhirong Zhao, Kathryn S. Quick

Report no. CTS Research Brief 2012-01

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1620](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1620)

***How Affordable is Transportation?: A Context-Sensitive Framework (Research Brief)***

Yingling Fan

Report no. CTS Research Brief 2012-02

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1706](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1706)

### **Maximizing the Benefits of Transitway Investment (Research Brief)**

Yingling Fan, Nebiyou Tilahun

Report no. CTS Research Brief 2012-03

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1716](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=1716)

### **Research Summary**

Report no. CTS 12-16PS

[www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2194](http://www.cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2194)

## **Annual Reports**

### **2012 CTS Annual Report**

[www.cts.umn.edu/Publications/annualreports/documents/cts2012.pdf](http://www.cts.umn.edu/Publications/annualreports/documents/cts2012.pdf)

### **2012 ITS Institute Annual Report**

[www.its.umn.edu/Publications/AnnualReport/2012/documents/ITS-AnnualReport-12.pdf](http://www.its.umn.edu/Publications/AnnualReport/2012/documents/ITS-AnnualReport-12.pdf)

## **Newsletters**

CTS publishes print and electronic newsletters covering many facets of transportation. Subscribe online at [www.cts.umn.edu/Publications/](http://www.cts.umn.edu/Publications/).

### **CTS Catalyst**

A monthly publication on the latest transportation innovations at the University of Minnesota. Available in both print and electronic formats, Catalyst replaces the *CTS Report* and the *CTS Research E-News*.

### **Minnesota LTAP Exchange**

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

### **AirTAP Briefings**

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

### **CTS Freight & Logistics E-News**

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

### **ITS Institute Sensor**

E-mail news update about research and educational activities at the Intelligent Transportation Systems (ITS) Institute (quarterly).

### **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).

## **Journals**

### **Journal of Transport and Land Use**

An open-access, peer-reviewed online journal publishing original interdisciplinary papers on the interaction of transport and land use  
[www.jtlu.org](http://www.jtlu.org)

## **Videos**

These and other videos are available at [www.cts.umn.edu/Publications/videos/](http://www.cts.umn.edu/Publications/videos/) and on the CTS YouTube channel: [www.youtube.com/ctsumn](http://www.youtube.com/ctsumn).

### **2012-13 CTS Research Highlights Video**

Highlights of 2012-13 include a smartphone app for people with visual impairments, research on safety in roundabouts for pedestrians and bicyclists, bicycle tracking using GPS, and a filter for removing phosphates from storm water.

### **2012-13 CTS Education Highlights Video: MnDOT Internship Program**

Participants in the 2012 summer internship program developed through a partnership among CTS, the ITS Institute, MnDOT, and Howard University describe their experiences and learnings.

### **2013 CTS Research Partnership Award: Pooled-fund study on low-temperature cracking in asphalt materials and asphalt pavement**

Describes the collaborative research that has led to the development of new testing methods, specifications, and models for selecting asphalt materials that are resistant to thermal cracking.

### **SMART Signal**

SMART Signal collects traffic data from signal controllers on arterial roads and generates real-time performance measures. Engineers can use this information to improve signal timing and reduce congestion.

### **Mobile Accessible Pedestrian Signal**

The prototype Mobile Accessible Pedestrian Signal (MAPS) system uses a smartphone app, GPS, and other technologies to help people with limited or no eyesight cross signalized intersections safely.

## **CTS Seminar Series—2012**

Available for viewing online at [www.cts.umn.edu/Events/SeminarSeries/2012/index.html](http://www.cts.umn.edu/Events/SeminarSeries/2012/index.html)

### **February 7**

#### **“Towards a Low-Temperature Performance Specification for Asphalt Mixtures”**

Mihai Marasteanu, Associate Professor, Department of Civil Engineering, University of Minnesota, Twin Cities

### **February 15**

#### **“Signalized Intersection Crossing for the Visually Impaired”**

Chen-Fu Liao, Educational Systems Manager, Minnesota Traffic Observatory.

### **February 21**

#### **“Costs and Benefits of Living Snow Fences”**

Gary Wyatt, Extension Educator, University of Minnesota Extension in Mankato

### **October 11**

#### **“25th Anniversary Seminar and Reception: Reinventing the User Experience in Transportation”**

Hani Mahmassani, Director, Northwestern University Transportation Center

### **October 18**

#### **“Transportation Impacts of Transitways: A Case Study of the Hiawatha Line”**

Jason Cao, Assistant Professor, Humphrey School of Public Affairs and Jessica Schoner, Graduate Student, Humphrey School of Public Affairs and Department of Civil Engineering

### **October 25**

#### **“Culvert Pipe Materials and Durability: Making the Right Selection for Minnesota”**

Jeff Marr, Associate Director of Engineering and Facilities, St. Anthony Falls Laboratory

### **November 1**

#### **“Left-Turning Buses: Driver Task Analysis, Pedestrian Collisions, and Possible Solutions”**

Ensar Becic, Research Associate, HumanFIRST Program of the ITS Institute.

### **November 8**

#### **“Innovative Parking Pricing”**

Adeel Lari, Director of Innovative Financing in the State and Local Policy Program, Hubert H. Humphrey School of Public Affairs.

## **How to Obtain These Publications**

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](http://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](mailto:cts@umn.edu)

Web: [www.cts.umn.edu](http://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.