



GIS in Transit Conference

October 16-17, 2013 | Washington, DC

Mark Your Calendar for the **GIS in Transit Conference**, October 16-17, 2013, at the Keck Center of the National Academies in Washington, D.C.

Don't miss this unique conference for transit planners, managers, researchers and GIS industry experts who are interested in sharing ways to use geographic and spatial analysis in transit planning, operations, and marketing to increase efficiency and effectiveness.

Conference Registration

To register, visit <http://transitgis.org/conference/2013-conferences/registration/> to download the conference registration form or for a link to register online. The Conference Registration Fee Schedule is as follows:

	Early Rate (postmarked on or before September 6)	Regular Rate (postmarked after September 6)	Onsite Rate
Full Conference Registration	\$375	\$475	\$500
Student (providing proof of full-time student status)	\$100	\$125	\$150
One-day registration <i>Indicate the one day you will be attending:</i> - Wednesday, Oct 16 - Thursday, Oct 17	\$175	\$225	\$250

Early Registration Deadline: September 6, 2013

Conference Hotel Information

The conference hotels are the Hotel Monaco and Hotel George. The hotel per diem rate is \$226/night at each hotel. Reservations must be made by August 30th, 2013. After the cut-off date, the late reservations can be made until October 1st, 2013 with the hotel current rates. If you have any questions, please contact us at TransitGISConference@cutr.usf.edu.

Hotel Monaco – Guests may contact reservations at (877) 202-5411 and refer to the group name TRB130275 while making reservations for the conference. The Hotel Monaco website is www.monaco-dc.com.

Hotel George – Guests may contact the reservations team at (800)546-7866, and refer to the group name TRB130275 while making reservations for the conference. The George website is www.hotelgeorge.com.

More Information

Check <http://transitgis.org/conference/2013-conferences/> for more information or contact us via email us at TransitGISConference@cutr.usf.edu.

Reach this target market!
Sponsorship opportunities are available.

<http://transitgis.org/conference/2013-conferences/>

Conference Planning Committee

Linda Cherrington, Texas A&M
Transportation Institute (TTI)

Jeff Becker, Denver Regional Transit
District

Martin Catalá, USF Center for Urban
Transportation Research

Larry Harman, L.J. Harman Consulting

Narzul Islam, Federal Transit
Administration

Wendy Nelson, URISA

Michael Pack, University of Maryland

Tom Palmerlee, Transportation
Research Board (TRB)

Amber Reep, USF Center for Urban
Transportation Research

Jennifer Weeks, Transportation
Research Board (TRB)

Tom Scherer, Arlington County, VA

Kevin Webb, Conveyal

Ed Wells, Washington Metropolitan
Area Transit Authority (WMATA)

William Wiggins, Federal Transit
Administration

Letter from the Chair

Since 1999, the National Center for Transit Research (NCTR) has supported the National Transit Geographic Information Systems (GIS) Clearinghouse and produced seven national conferences for public transportation and GIS professionals. Through a partnership with the Urban and Regional Information Systems Association (URISA), NCTR bolstered the impact of the conferences in 2009 and 2011 and is pleased to announce an expanded collaboration with the Transportation Research Board (TRB) and the Federal Transit Administration (FTA) in 2013.

GIS in Transit is a unique conference specifically designed for transit planners, managers, researchers and GIS industry experts who are interested in sharing ways to use geographic and spatial analysis in transit planning, operations, and marketing to increase efficiency and effectiveness. The conference will:

- Provide GIS transit professionals an opportunity to learn from peers and industry experts (vendors, researchers, and practitioners)
- Discuss emerging trends in geo-spatial analysis and transit informatics
- Demonstrate the use of GIS data to improve transit efficiency and effectiveness
- Provide a forum for public-private discussions about practical applications of new technologies

The conference program is organized into 15 sessions that feature presentations on the use of GIS to enhance service planning and improve transit performance, transit agency GIS innovations and applications, and opportunities for public-private partnerships to create practical applications of new technology. A poster session will also provide the opportunity for dialogue between conference participants and presenters on featured GIS applications.

This is a great opportunity for exchange of ideas about how GIS initiatives can add value for transit. Join us for a schedule full of rich opportunities to share your ideas and learn from others.



Texas A&M Transportation Institute (TTI)
Conference Chair



Linda K. Cherrington
Conference Chair

Wednesday, October 16, 2013

8:30-10:00am

Opening Session—Linda K. Cherrington, *presiding*
Texas A&M Transportation Institute (TTI)

Using GTFS for Transit Scenario Modeling—
Kevin Webb, *Conveyal*

Google Transit with Real-Time Feed—Brian Ferris,
Google

Geographic Information Systems in Transit:
A Federal Perspective—**Therese McMillan**, *Federal
Transit Administration*

10:30am-12:00pm

Innovative Transit Mapping and Design

Innovations in Multimodal, Schematic Transit
Mapping—Margaret Finch Carragher, *Georgia Institute of
Technology*

Spider Maps: A Summary of Best Practices and
Guide to Design and Implementation—
Margaret Finch Carragher, *Georgia Institute of Technology*

Building a Web Map of Metro Rail Services in Los
Angeles County—Bin (Owen) Mo, *California State
University, Los Angeles*

Modeling and Mapping Metro's Rail Stations—
Minhua Wang, *Washington Metropolitan Area Transit
Authority (WMATA)*

Collecting, Presenting, and Managing Geospatial Transit Data

Using 3-D Demographics Analysis in
Geographic Information Systems for Transit
Planning and Design—Brian Reed, *Parsons Brinckerhoff*

Providing Bus Stop Amenity and Accessibility
Information via WMATA's Public Website—
Diwakar Sharma, *WMATA*

Five Transit Agencies, One Goal: Big Savings
Through Partnership and Innovation—
Mazedur Rahman, *M2 Traffic Management, LLC*

Spatial Analysis for Replanning Service Networks and Areas

Integrating Transit Data into Geographic
Information Systems to Facilitate Service Planning
and Network Development¹—Forest Yang and Lindsey
Radford, *Strathcona County Transit*; and Matthew Lee, *Steer
Davies Gleave*

Geographic Information Systems in Transit Planning:
Lessons Learned from Bus Restructuring Program in
Bogota, Colombia—Álvaro Caviedes, *Universidad de los
Andes, Colombia*

Measuring Transit Coverage Level of Service in U.S.
Border Cities—Luis David Galicia, *Texas A&M University*

1:00-2:30pm

Title VI and Paratransit

Geographic Information Systems for Title VI
Compliance—Zachariah Van Gemert, *Denver Regional
Transportation District (RTD)*

Interactive Web-Based Mapping for Title VI Analysis
and Public Transit System Data Management—
Nicholas E. Lownes, *University of Connecticut*

Geographic Information Systems in Paratransit—
A. Jeff Becker, *Denver RTD*

Delivering Agency Geographic Information Systems: Transit Geographic Information Systems Tools

Chicago Transit Authority Transit Ridership
at Detailed Spatial Resolution: Two In-House
Geographic Information Systems Tools—
Maulik Vaishnav, *Chicago Transit Authority*

Strategies for Organization, Validation, and
Distribution of Transit Geographic Information
Systems Data—Jonathan Wade, *Denver RTD*

WMATA's Metroview: Delivering Geographic
Information Systems Benefits Across the Enterprise
via Web Services—Anurag Mehta, *WMATA*

Integration and Analysis Tools for Transit
Geographic Information Systems Data—
Chetan Joshi, *PTV America, Inc.*

Bus On-Board Spatial Data Collection for Service Planning, Performance Analysis, and Origin- Destination (O-D) Trip Definition

Geospatial Analysis in Transit Demand Estimation
Utilizing Intelligent Transportation Systems
Applications—Peter Bang, *Regional Transportation
Commission of Washoe County*

Implementation of a Web-Based, Geospatial Transit
Performance Data Archive—Jonathan Makler, *Portland
State University*

Passenger O-D Trip Table from Farebox Receipts—
Kelly Chan, *HDR Engineering, Inc.*

¹ Multiple authors contributed to the research, but one author will make the presentation.

3:00–4:30pm

Visualizations in Transit Planning

Geographic Information Systems for Transportation Corridor Planning—*Zachariah Van Gemert, Denver RTD*

New Datasets and Visualizations in Transit Planning—*James Christopher Wong, Georgia Institute of Technology*

Geographic Information Systems–Based Rail Line Asset Viewer—*Minhua Wang, WMATA*

Census Transportation Planning Products Program Crash Course—*Penelope Weinberger, American Association of State Highway and Transportation Officials*

Public Transit Modeling

Toward More Realistic Estimation of Energy Consumption with General Transit Feed Specification and National Elevation Data Set¹—*Jan-Mou Li and Zhenhong Lin, Oak Ridge National Laboratory*

Geographic Information Systems Estimation of Transit Access Parameters for Mode Choice Models—*Ronald Eash, Parsons Brinckerhoff*

General Transit Feed Specification–Based Geographic Information Systems Tool for Creating Practical Applications—*Sang Gu Lee, East–West Gateway Council*

Better Spatial Tools and Concepts for Evaluating Transit Coverage Level of Service: Commute Trips, Connectivity, and Continuous Accessibility

I'll Take You There: Using Longitudinal Employer–Household Dynamics Data to Measure Transit Coverage Level of Service—*Stephen Crim, Mobility Lab*

Role of Transit Connectivity in a Multimodal Transportation Network—*Anupam Anand, University of Maryland College Park*

Evaluating and Planning Transit Service Using Continuous Accessibility—*Andrew Owen, University of Minnesota, Twin Cities*

4:30–6:30pm

Poster Session and Reception (Preliminary List of Posters)

Calculating Food Deserts for the Transit-Dependent Population: What Southwest Ohio Regional Transit Authority Time-of-Day Effects Do We See?—*Melinda Morang, Environmental Systems Research Institute*

Evaluation of Geographic Information Systems Spatial Analysis Tools in the Resolve of Service Areas for Transportation Systems: Case Study of the Bus Rapid Transit Transmilenio Station “Portal Norte”¹—*Daniel Paez and Álvaro Caviedes Cómbita, Universidad de Los Andes, Colombia*

Geographic Information Systems Methodology for Cycling Investment Prioritization Using Cadastre and Urban Form Information—*Alvaro Caviedes, Universidad de los Andes*

Transit Accessibility and Its Effects on Mode Share: An Application of Geospatial Analysis and Logistic Regression¹—*Nilesh Deshpande and Kaitlin Morano, Georgia Institute of Technology*

Carbon Footprint of Induced Traffic from Highway 25 Extension Project—*Md Shohel Reza Amin, Concordia University*

Thursday, October 17, 2013

8:00–9:30am

Transit Agency Geographic Information Systems Innovations and Applications

Solving the One-to-Many Dial-a-Ride Problem Using Hierarchical Binary Trees—*Hani Al Naghi, American University of Beirut, Lebanon*

Geographic Information Systems Support of New Jersey Transit's Smart Bus Program—*Glenn Newman, New Jersey Transit*

Big Data Made Accessible—*Elizabeth Donahue, Chicago Transit Authority*

Time-Based Linear Referencing in Transit Geographic Information Systems: A Working Prototype at WMATA—*Anurag Mehta, WMATA*

Transit Geographic Information Systems on the Web: Expanding Their Reach

Creating Web-Based Real-Time Interregional and Intermodal Public Transportation Navigation Tools from Boston to Cape Cod for the Summer of 2013—*Lawrence Harman, U. Shama, M. Pacha-Sucharzewski, GeoGraphics Laboratory, Bridgewater State University; and Matthew Lesh, Federal Transit Administration*

Revealing the Journey: the Role of Coordinated Geographic Data in Improving Urban Mobility—*David Figueroa, T-Kartor Sweden USA*

National Environmental Policy Act and Preliminary Engineering Working Together through Web-Based Geographic Information Systems—*Brian Reed, Parsons Brinckerhoff*

Using Web-Based Geographic Information Systems to Visually Depict the Predicted Effects of Bus Frequency Changes on the Chicago Transit Authority Network¹—*Raymond Chan, Ömer Verbas, and Hani Mahmassani, Northwestern University*

¹ Multiple authors contributed to the research, but one author will be make the presentation.

8:00–9:30am (cont'd)

Geographic Information Systems Tools and Analysis for Bus Stop Management

Greenbelt Bus Stop Safety and Accessibility—
Matthew O'Connell, Sabra, Wang & Associates, Inc.

Eliminating Bus Stops: Evaluating Changes in
Operations, Emissions and Coverage—
Edmund J. Zolnik, George Mason University

Riding More Frequently: Disaggregate Ridership
Elasticity Estimation for Chicago's Bus Network—
Charlotte Frej, Northwestern University

10:00–11:30am

Web Mapping and the Cloud

Creating a Cloud-Based Geographic Information
Systems Web Application and Integration with
SharePoint—*Michael Hino, Long Beach Transit*

Can Cloud Computing Transform Geographic
Information Systems–Transit Business?—
Shirley Sywn-Tien Hsiao, Long Beach Transit

Web Mapping to Assist Americans with Disabilities
Certification and Paratransit Travel Training—
Hersh Singh, Regional Transportation Authority

Using Web Mapping and Desktop Geographic
Information Systems to Assist in Federal Transit
Program Management—*Lawrence Harman, U. Shama,
C. Van Zandt, GeoGraphics Laboratory, Bridgewater
State University; and D. Walsh, Cape Cod Regional Transit
Authority*

Public Transit Performance Measures—*Martin Catala, presiding, University of South Florida*

The Use of Web-based GIS Tools to Support Transit
Planning, Analysis and Multi-modal Projects—
Chris Wright, Oregon Department of Transportation

Customer-Oriented Transit Performance Measures—
Martin Catala, University of South Florida

The Application Programming Interface Advantage:
Utilizing Cloud Data Sources for Transit Modeling—
Catherine Theresa Lawson, State University of NY, Albany

Geographic Information Systems Tools and Analysis for Transit Facility Location

Depot Relocation Analysis—*Andrew Ferry,
Southeastern Pennsylvania Transportation Authority*

Quantifying Park and Ride Demand Using
Longitudinal Employer–Household Dynamics, O-D
Employment Statistics, and Case Study Analysis—
Jonathan Paul Brooks, Texas A&M University

Geographic Information Systems Methodology
for Bicycle Parking Planning in Bus Rapid Transit
Systems: Case Study in Bogota, Colombia—
Andrés Escobar Orjuela, Universidad de los Andes

11:30am–12:30pm

Closing Session—*Linda K. Cherrington, presiding, TTI*

Web-Based Accessibility Toolkit for Transportation
Planners—*Howard L. Slavin, Caliper Corporation*

What's Next for the Transit GIS Community? – A
Panel Discussion—*Ed Wells, WMATA; Michael Pack,
University of Maryland; and Martin Catala, USF Center for
Urban Transportation Research*

12:30pm

Adjourn

Sponsoring Organizations

NCTR (www.nctr.usf.edu)

The National Center for Transit Research (NCTR) was created at the Center for Urban Transportation Research (CUTR) as a result of Congressional designations of University Transportation Centers (UTC) in 1991. The objectives of UTCs are to advance the nation's transportation system through research, education, and technology transfer. Among the 22 UTCs in the country, NCTR is one of only two that are transit-focused. NCTR works closely with FTA and the Florida Department of Transportation (FDOT) to identify and conduct research projects intended to improve public transit safety, state of good repair, economic competitiveness, livability, and environmental sustainability. In addition to conducting extensive research, NCTR provides opportunities for students to become familiar with transit and alternative forms of transportation as a potential career.

URISA (www.urisa.org)

Founded in 1963, URISA - The Association for GIS Professionals - is a leading provider of learning and knowledge for the GIS community. URISA connects great ideas and great people to inspire leadership and achievement. We strive to provide exceptional educational experiences, a vibrant and connected community, and the essential resources you need to be successful in your career. URISA is a multidisciplinary association where professionals from all parts of the spatial data community come together to share concerns and ideas.

TRB (www.TRB.org)

The Transportation Research Board (TRB) is one of six major divisions of the National Research Council, TRB's mission is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest.

¹ Multiple authors contributed to the research, but one author will make the presentation.