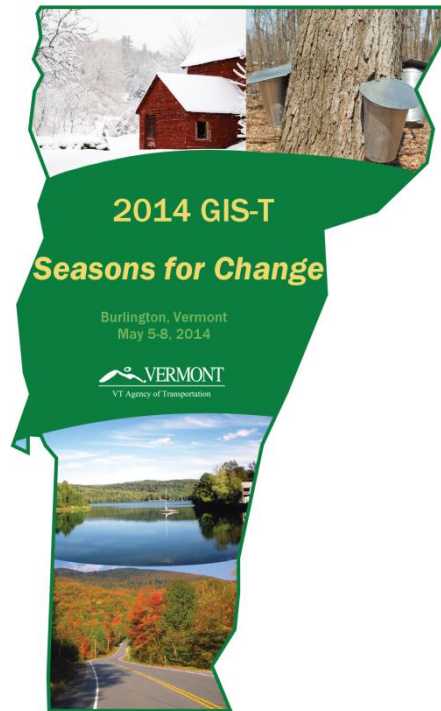


Preliminary Program



GEOSPATIAL INFORMATION SYSTEMS FOR TRANSPORTATION SYMPOSIUM

To provide a forum for transportation officials from State, Province, Federal, and
Municipal Agencies to discuss GIS and transportation issues

May 5 – 8, 2014
Workshops – May 5, 2014
Burlington, Vermont

Sponsored by:

AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

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The twenty-seventh annual GIS-T Symposium – *GIS-T 2014* – provides a forum for professionals interested in the design and use of Geospatial Information Systems for Transportation. This meeting brings together individuals from education, the private sector, and all levels of government for a full day of workshops on May 5, 2014 and three full days of conference activities on May 6 – 8, 2014.

WHO SHOULD ATTEND?

- ❖ Transportation professionals who need to know how to better utilize GIS and related systems.
- ❖ Executives and managers concerned with management and institutional issues.
- ❖ Information Technology and GIS professionals from both public and private organizations:
 - Transportation Engineers and Planners
 - City, County & Regional Planners
 - Educators
 - Elected Officials
 - Environmental Scientists & Regulatory Specialists
 - GIS and Information Systems Managers and Specialists
 - Consultants and Service Providers

SESSIONS

Keynote Speaker – Frank Winters is the Director of the New York State GIS Program Office. He also shares responsibility for the NYS GIS Coordination Program. Frank has a Master of Science in Geography from the University of Idaho, and has been involved with GIS in New York State Government for more than 20 years, 14 of which were in transportation.

State Summary & Roll Call of States – Summary results from a survey sent to GIS representatives in each state will be presented and one representative from each country, state, province, or local agency are asked to briefly describe the status of their GIS implementations and challenges they may face.

Concurrent Sessions – The Symposium will feature seven concurrent sessions, each consisting of multiple tracks of presentations. In addition to the independent tracks planned for GIS-T, there will be opportunities for participants to attend tracks sponsored by GIS-T offering a way of further enhancing the attendee's experience.

GIS Mapping Gallery – Successful GIS projects and Web Mapping applications will be showcased through map products and electronic displays. Prizes will be awarded on a variety of criteria, and all attendees are encouraged to submit multiple GIS products reflecting their own agency's work. For detailed category and submission information please visit the Symposium website www.GIS-T.org. Mapping Gallery entries must be received by April 26th, 2014 to be eligible for display and awards.

Check WWW.GIS-T.ORG for the most current information.

General Schedule

	Monday May 5, 2014	Tuesday May 6, 2014	Wednesday May 7, 2014	Thursday May 8, 2014	
7:00 AM	Registration Breakfast <i>Workshop Attendees Only</i>	Registration Breakfast	Registration Breakfast	(Sleep In!!!)	7:00 AM
8:00 AM	Workshops (see p4) 1. AASHTO TIG II: Implementing UPLAN in your State 2. Safety Analysis, Modeling & GIS 3. Keeping the Street Layer Current 4. Use of FHWA Probe Data – Impacts on State LRS	Opening Session Welcome To Vermont Keynote Speaker Frank Winters (see p10)	Roll Call Round Table Sessions Asset Management Enterprise GIS (see p11)	Registration Breakfast	8:00 AM
9:00 AM		Break	Trivia	Session 6 (see p19) 1. Local Roads and HPMS 2. Web Planning Tools 3. LiDAR and Imagery 4. Interactive Data	9:00 AM
10:00 AM		Break	Break	Break	10:00 AM
11:00 AM	Lunch - Workshop Attendees Only	State Summary & Roll Call of States (see p10)	Trivia	Session 7 (see p20) 1. Developing a Comprehensive Network 2. Mobile GIS 3. 3D Visualization 4. Geospatial Data Management	11:00 AM
12:00 PM	Lunch Provided	Lunch Provided	Session 3 (see p16) 1. Multi-Level Linear Referencing Systems 2. Routing 3. Process Improvements 4. Transportation Dashboards/Visualization	Box Lunch Next Host State Presentation Awards/Drawings/Raffle	12:00 PM
1:00 PM	Workshops (see p4) 5. Implementing SHRP II C40 Environmental Databases and Tools 6. GIS Capability Maturity Model 7. Enhancing the Use of GIS to Support Asset Management Requirements Under MAP-21 8. Specifications for All Public Road Maps and the new FHWA Functional Classification Manual	Session 1 (see p14) 1. Federal Programs 2. Transportation Planning 3. Real Time Technology 4. Disaster Response Tools	Session 4 (see p17) 1. All Roads Network 2. Transportation Modeling 3. Transportation Asset Management 4. Web Portals and Viewers	Symposium Wrap-Up Come join us for a debriefing of this year's symposium and planning for the next year. Refreshments Provided!	1:00 PM
2:00 PM	Break	Break	Break	2:00 PM	
3:00 PM	Break	Session 2 (see p15) 1. Federal Initiatives 2. Enterprise Planning 3. Technology Solutions 4. Environmental Management	Session 5 (see p18) 1. Multi-Level Road Networks 2. Crash Analysis 3. Managing Assets 4. Data Management and Visualization	3:00 PM	
4:00 PM	Break	GIS Gallery Voting ends at 6:30 (see p10)	Break	4:00 PM	
5:00 PM	Technology Hall Reception (see p10)	Technology Hall Reception (see p10)	Wednesday Night Social 5:30pm to 10:00pm (see p12)	5:00 PM	
6:00 PM	Technology Hall Open	Technology Hall Open	Technology Hall Open	6:00 PM	
7:00 PM	Technology Hall Open	Technology Hall Open	Technology Hall Open	7:00 PM	
8:00 PM	Technology Hall Open	Technology Hall Open	Technology Hall Open	8:00 PM	
9:00 PM	Technology Hall Open	Technology Hall Open	Technology Hall Open	9:00 PM	
10:00 PM	Technology Hall Open	Technology Hall Open	Technology Hall Open	10:00 PM	

GIS-T Workshops – Monday, May 5

Four tracks for workshops are available at the 2013 GIS-T Symposium. Participants may pick one from the morning and one from the afternoon. Lunch is provided to workshop attendees.

<p>Workshop 1</p> <p>AASHTO TIG II: Implementing UPLAN in your State</p> <p>John Parker PennDOT</p>	<p>Workshop 2</p> <p>Safety Analysis, Modeling & GIS</p> <p>Craig Thor FHWA Turner Fairbanks Research Lab.</p> <p>William Johnson Colorado DOT</p>	<p>Workshop 3</p> <p>Keeping the Street Layer Current</p> <p>Jay Clark Critical Infrastructure Mapping</p> <p>James E. Mitchell, Louisiana DOTD</p>	<p>Workshop 4</p> <p>Use of FHWA Probe Data – Impacts on State LRS</p> <p>Keith Hangland HERE Corp.</p> <p>Jared Causseaux, Florida DOT</p>
<p>Workshop 5</p> <p>Implementing SHRP II C40 Environmental Databases and Tools</p> <p>Debra Nelson NYS DOT Stephan Andrie TRB</p> <p>Steve Ziegler, ICF</p> <p>Dr. Patrick Huber, UC Davis</p> <p>Mary Grace Lewandowski, St. Louis MPO</p> <p>Mary Gray, Parsons</p>	<p>Workshop 6</p> <p>GIS Capability Maturity Model</p> <p>URISA Management Institute</p> <p>Al Butler, City of Ocoee, FL</p> <p>Allen Ibaugh DTS</p>	<p>Workshop 7</p> <p>Enhancing the Use of GIS to Support Asset Management Requirements Under MAP-21</p> <p>Katie Zimmerman Applied Pavement Technology</p> <p>Frances Harrison, SpyPond Partners</p> <p>Connie Gurchiek, Transcend Spatial Solutions</p> <p>William Johnson, Colorado DOT</p>	<p>Workshop 8</p> <p>Specifications for All Public Road Maps and the new FHWA Functional Classification Manual</p> <p>Joe Hausman FHWA</p>

MORNING SESSIONS **(8:00 AM – 12:00PM)**

Workshop 1 UPLAN ASSHTO TIG: Implementing UPLAN in your State

Instructor: John Parker Pennsylvania DOT

This workshop will focus on the different experiences that several of the 13 States had in implementing UPlan. After an initial overview of the AASHTO Technology Implementation Group (TIG) project for UPlan, several States will demonstrate their version of UPlan and discuss the challenges and benefits of implementing UPlan in their State.

UPlan is a powerful yet easy to use web based decision-support mapping and informational tool for completing complex planning and project development tasks. It allows complete or selective data sharing among various work units within the state DOT. It also allows selective data sharing between state DOTs and with the public.

UPlan is a GIS based tool that organizes data into a spatial format and viewed in a user friendly way that allows 'data to become information'. It is a web based application that allows collaboration with agencies, utilities, and others in a way that is very unique. Currently, 13 States are implementing their version of UPLAN to strengthen partnerships with local governments, MPO's, Transit Agencies, utilities, SHPO and many others. They share data in a common location and can view, analyze and discuss it in ways they have never had before. The transparency of information and analysis is the hallmark of UPlan.

13 States across the nation have been selected to participate in implementation efforts on UPLAN as part of the AASHTO Technology Implementation Group (TIG). This workshop is aimed at discussing progress of implementations that have happened so far, challenges that have been met and overcome in terms of technology and organizational acceptance, specific examples and use cases of the technology and the lessons learned. It is a great forum for other States to see if a UPLAN or other internet based collaboration effort will help them and to make contacts that can help them get started.

Workshop 2 GIS Safety Analysis Tools

Instructors: Craig Thor FHWA
William Johnson Colorado DOT

A transportation data system that operates on a GIS platform can link crash, roadway, traffic, and other data sources through common geographical references. Many State and local jurisdictions recognize the benefits of a transition to a GIS-based traffic data system to support their safety decision making processes. At the same time, other States and jurisdictions are just beginning to identify the role of a GIS-based transportation data system to support their future needs. In either case, the improved analytical capabilities offered by GIS-based safety analysis tools can streamline and inform safety decisions effectively and more completely than traditional safety analyses of isolated data sources. Opportunities to capitalize on these benefits come in many forms including "off the shelf" tools, advanced analytical processes, or data visualization methods. Various jurisdictions are already implementing these tools and capabilities and have identified the benefits and challenges of specific approaches. In response to the momentum in the direction of GIS-based safety decision making, there will be an opportunity to highlight successes, discuss challenges, and identify out next steps during this workshop. Topics of conversation will include the availability of tools, the level of implementation, and the resulting benefits and challenges. There will be presentations, discussions, and a Peer Exchange session to directly discuss challenges and future needs. Please consider joining us for this event.

Workshop 3 Keeping the Street Layer Current

Instructors : Jay Clark, Critical Infrastructure Mapping LLC
James E. Mitchell, Louisiana Dept. of Transportation & Development

This workshop will be targeted to individuals who are responsible for the management of transportation related street and POI data. We will cover the topics below in a mixed lecture/participation format to allow each participant to leave with an understanding of how they can provide a continuously maintained data set that will support Map-21 infrastructure goals.

The material will explain the process of understanding what kind of service levels and ROI the data must provide. We will concentrate on a clear Database Feature Model description for tasks like Geocoding, Routing, LRS Management, and specific use cases provided by attendees. We will cover the process for doing the "carpentry of conflation" and how to go about accepting data using a sampling plan. Emphasis is placed on releasing updates early and often.

Samples of Database Feature Modeling Docs, Generic Record Layouts, and Quality Documents will be provided. Agenda:

- 1) Making the plan
 - a. Scope
 - b. Method
 - c. Quality Control
- 2) Executing the Plan
 - a. A pilot project
 - b. Nailing down the changes
 - c. Creating the PMP
- 3) Accepting the Data
 - a. Sampling Model
 - b. Redo-avoidance
 - c. Change Orders
- 4) Keeping it Going
 - a. Local Source Data
 - b. Keep the plan alive!

Workshop 4 Use of FHWA Probe Data – Impacts on State LRS

Instructors: Keith Hangland HERE Corp.
Jared Causseaux, Florida DOT

In 2013, FHWA issued a contract to the HERE Inc., a Nokia Business (formerly NAVTEQ), to provide traffic speed data in the National Performance Management Research Data Set. (NPMRDS). The NPMRDS will support the Freight Performance Measures and Urban Congestion Report efforts of FHWA. As part of the contract the data was made available to State DOTs and MPOs. As of October 2013, 21 States, 49 MPOs and 1 Canadian agency had signed agreements to use the data. The data set includes average travel times for passenger vehicles and large trucks in 5 minutes time intervals, 24 hours a day, 7 days a week for the entire National Highway System. The travel times are derived from a number of sources including mobile phones, vehicles, and portable navigation devices. Freight probe data is obtained from the American Transportation Research Institute leveraging embedded fleet systems. The summary data is provided on Traffic Message Channel sections. Given the interest by States and MPOs in making use of the NPMRDS, this workshop will cover what the data is, how Agencies can access it, the geospatial formats of the information and how it can be conflated to the State's linear referencing system.

AFTERNOON SESSIONS **(1:00 PM – 5:00PM)**

Workshop 5 Implementing SHRP II C40 Environmental Databases and Tools

Instructors: Debra Nelson NYS DOT
Stephen Andrie TRB
Steven Ziegler, ICF International, Inc.
Nary Grace Lewandowski, East-West Gateway Coordinating Council
Mary Gray, Parsons, Inc.
Patrick Huber, University of California Davis

Substantial strides have been made in addressing the process- and policy- related challenges that impede integrated transportation and ecological decision making. The work conducted through the Strategic Highway Research Program (SHRP 2) projects on "Integration of Conservation, Highway Planning, and Environmental

Permitting Using an Outcome-Based Ecosystem Approach,” and “Development of an Ecological Assessment Process for Enhancements to Highway Capacity” enhanced the process by developing the Integrated Ecological Framework (IEF) to guide the flow of work.

A barrier to applying the new methods is access to reliable environmental data at the planning stage of projects or programs of projects. To address this, SHRP 2 launched four projects in the C40 Series. The first is C40 (A) - *Integration of National-Level Geospatial, Ecological Tools and Data*. The primary objective of this project is to develop an integrated, geospatial, ecological screening tool for early transportation planning that produces results that can carry through and inform the environmental review process. This tool will advance both *Eco-Logical* and the IEF by providing the transportation community with the means to identify and analyze environmental impacts at a regional scale. There are many emerging tools, but none appear to meet this objective.

This objective was accomplished through development of a geospatial tool, accessed on the Web, which draws much of its data and perhaps analytical capabilities from existing tools largely through Web services. This will leverage, possibly through portals established by others, existing and emerging tools and data sets for efficient and effective environmental analysis in transportation planning, corridor planning, and programming. The tool will, at a minimum, help users investigate, identify, and obtain data and other information useful for environmental screening in transportation planning. A secondary objective is to support collaborative decision making as embodied in the Integrated Ecological Framework.

It is recognized that some jurisdictions are already using geospatial tools for ecological analysis in transportation planning and programming. They have a lot to offer to a developer of a national one-stop-shopping tool and may have already developed approaches that are transferable to others.

Three projects were awarded under C40B to agencies with some form of an ecological screening tool or process to improve what they are doing and explore transferability to other locations. The objectives of C40(B) project are to:

1. Provide proof-of-concept that application of geospatial tools and data in the transportation planning and programming (pre-NEPA) phases of delivering new highway capacity is workable and can be of sufficient quality to be used in subsequent project-level environmental review.
2. Demonstrate this capability in the partnership context of the Integrated Ecological Framework described above. (From SHRP 2 C06 projects)
3. Show how methods they developed could be transferred to other geographical areas and identify what other jurisdictions would have to do to follow this approach.
4. Work with the C40A contractor to collaborate on the design of an integrated geospatial ecological screening tool and test the tool on a real project.
5. Evaluate the integrated geospatial tool developed by the C40-A researchers.

This workshop will talk about GIS tool development through the SHRP projects and the ones used in the proof of concept studies.

Workshop 6 GIS Capability Maturity Model

Presented by the URISA GIS Management Institute®

Instructors: AI Butler, City of Ocoee, FL
Allen Ibaugh, Data Transfer Solutions

The GIS Management Institute helps organizations identify and implement enterprise GIS management practice improvements. GIS managers will increase return on investment and maximize the effective use of GIS for their enterprise business goals with GMI products and services. Both the GIS Capability Maturity Model and the Geospatial Management Competency Model are key components of the GIS Management Institute.

GIS development typically starts as an idea and progresses towards full maturity. However, the reality of enterprise GIS operations is that development is limited by available funds. Often GIS starts as a capital project with the system designed to create the 'best GIS possible' with the funds at hand. This development scenario leads to frequent compromise and deferral of many aspects of ideal GIS development in order to 'go operational' quickly and start delivering value for the agency's investment. Even if a GIS implementation project is completed successfully, it does not mean that an agency has a mature GIS, or even a cost-effective GIS operation. A 'Capability Maturity Model' is defined as a tool to assess an organization's ability to accomplish a defined task or set of tasks. Typically a numeric rating system is used for a high-level comparison and analysis purposes.

The newly revised URISA GIS Capability Maturity Model (GISCMM) will be described, along with its relationship to the GIS Management Institute®, including development of the GIS Management Body of Knowledge. The current development status of the GISCMM will be discussed and future uses and activities outlined. These will include development of new GIS management best practices and the offering of an enterprise GIS accreditation service.

Workshop attendees will receive copies of the GISCMM. An exercise will be conducted during the workshop, where attendees will be asked to perform an initial assessment of their agency by applying the GISCMM. This workshop will be of value to those interested in the development, implementation, and use of GIS management professional standards and best practices.

Workshop Outline:

- What is a capability maturity model?
- Origins of the GIS Capability Maturity Model
- URISA steps in
- The URISA Geospatial Management Competency Model
- Babinski's Theory of GIS Management
- Development of the revised, peer-reviewed URISA GIS Capability Maturity Model
- Exercise: The URISA GIS Capability Maturity Model – Step by Step
- Exercise: Attendee discussion and feedback
- The pivotal role of the GIS CMM in the GIS Management Institute®
- The role of the GIS Management Institute® in enhancing sustainable Enterprise GIS
- The role of the GIS Management Institute® in developing professional GIS managers
- The GIS Management Institute® next steps

By the time of the workshop, URISA will have developed an online tool to assist agencies in walking through the process and focusing on how to move forward in maturity. The objective of this workshop is exposed the participants to the GIS CMM process and to facilitate a discussion of how State DOTs can apply this process to their organizations.

Workshop 7 Enhancing the Use of GIS to Support Asset Management - Requirements Under MAP-21

Instructors: Katie Zimmerman Applied Pavement Technology
Frances Harrison, SpyPond Partners, Inc.
Connie Gurchiek, Transcend Spatial Solutions, Inc.
William Johnson, Colorado DOT

The MAP-21 legislation requires states to develop risk-based asset management plans for pavements and bridges on the National Highway System (NHS). Agencies are encouraged to expand the content of these plans to include all assets within the highway right-of-way.

At a minimum, an asset management plan should include a summary of assets and their condition, asset management objectives and measures, a summary of gaps between actual and targeted conditions, lifecycle cost and risk management analysis, a financial plan, and investment strategies. GIS technology can

significantly contribute to the development of an effective asset management plan by integrating data sets and analyzing geospatial data to support investment decisions. In addition to data integration and analysis, GIS can also effectively communicate the outcomes and benefits of asset management.

During this workshop, which draws on the results of a study currently being completed under the National Cooperative Highway Research Program (NCHRP 08-87), you will learn how states have successfully used GIS to support the following asset management efforts:

- Understanding the state of the assets.
- Assessing and managing risk.
- Identifying needs and work candidates.
- Packaging projects into effective programs.
- Managing and tracking work activities.

You will also be introduced to a new Implementation Guide that will help you advance use of GIS for asset management. You'll find out how the Colorado DOT has been applying techniques from this Guide, and you'll see a demonstration of new GIS capabilities for risk-based asset management that may be added in the future.

Workshop 8 Specifications for All Public Road Maps and the new FHWA Functional Classification Manual

Instructors: Joe Hausman FHWA

FHWA recently issued requirements for State DOTs to provide Measured Route Basemap of all Non-Federal Public roads in each state as part of the HPMS Submittal. These requirements are based on needs to analyze Safety, Bridge and performance data at the local level. They are also based on growing concerns that there are several versions of a "National" highway network within the Federal Government. With that, the Office of Management and Budget (OMB) has given clearance to the HPMS for the collection of All Public roads from state DOTs.

Language in the 2012 USDOT MAP-21 legislation identifies funding opportunities for state DOTs to submit a complete roadway network for all public roads starting in 2014.

FHWA has just completed creating a specification for a local road LRS to support the all roads network. This session will cover what is included in this specification.

FHWA also has just updated the 1989 functional classification manual. For the first time it includes considerations for how functional classification data is expressed in GIS. The workshop will include a discussion of the update and its impact on State and local GIS / data collection efforts.

TECHNOLOGY RECEPTION – TECHNOLOGY EXHIBITS OPEN

(MONDAY 5:30 PM TO 8:00 PM)

(TUESDAY 6:30 PM TO 8:00 PM)

The Technology Hall opens on Monday evening at 5:30 pm with a reception for all Symposium attendees and guests. On Tuesday, Symposium participants are welcome to attend another reception starting at 6:30 pm.

The Technology Hall will open at 12:00 noon and close at 8:00 pm on Tuesday.

On Wednesday, it will be open from 7:00 am to 5:00 pm.

On Thursday, the Technology Hall will open at 7:30 am and end at noon. Participants are encouraged to visit with industry specialists to discuss solutions available in today's consulting community.

Opening Session / KEYNOTE SPEAKER

(TUESDAY 8:30 AM TO 10:00 AM)

Frank Winters is the Director of the New York State GIS Program Office. He also shares responsibility for the NYS GIS Coordination Program. Frank has a Master of Science in Geography from the University of Idaho, and has been involved with GIS in New York State Government for more than 20 years, 14 of which were in transportation.

GIS in Emergency Response, Sandy and Beyond, It seems that every major disaster has brought a heightened need for spatial information. Super Storm Sandy was no exception. During Sandy, GIS people were deployed at several locations and response work benefited. After the waters receded and recovery began however, is when unprecedented reliance on GIS was seen. When Governor Cuomo created the 2100 Commission, along with the Ready and Respond Commissions, GIS was front and center. This presentation will cover the GIS work done in support of these commissions, the recovery effort, and policy development.

STATE SUMMARY AND ROLL CALL OF STATES

(Tuesday 10:30 AM to 12:00 noon)

Summary results from a detailed survey sent to GIS representatives in each state will be presented. The Roll Call of States also features one representative from each country, state, province, or local agency briefly describing the status of their GIS implementations and the challenges that they face. Additionally, the Roll Call offers a time for attendees to put a face with a name and to make plans for continuing discussions with their peers

GIS GALLERY

Along the Promenade – Web Demos in Emerald I

(Tuesday 5:00 PM to 6:30 PM)

GIS-T 2014 invites registered attendees to participate in the GIS-T Mapping Gallery. In this showcase attendees will be able to display the creative ways they have found to communicate their work through Web applications, GIS generated mapping and poster products. This is an opportunity to share techniques and applications with peers in the transportation GIS community. Come and see how states are using GIS to advance their work. A panel of judges will evaluate each map and mapping application; awards will be presented during the Wednesday Box Lunch. Awards for the maps displayed will be given in the categories of: Transportation Publication, Information Usage, Public Presentation, and Effective Cartography. Winners in the Savvy Web Mapping category will also receive awards. Send your maps and posters to the Vermont Agency of Transportation at the address listed on the last page of this program. This year presenters are also asked to submit a PDF of their map or poster. Detailed guidelines for paper and web mapping application submissions are outlined at www.gis-t.org.

Roll Call Round Table Discussion Session
(Wednesday 8:00 AM to 10:00 AM)
TWO CONCURRENT SESSIONS

The following discussion themes were chosen by the GIS-T Planning Committee based on a review of topics submitted by symposium participants for the 2013 Roll Call of States: Symposium participants are encouraged to participate in the discussions, bring their issues, and share their experiences.

Developing, Building, and Using a Statewide Road Basemap
Moderator: Jay Clark, Critical Infrastructure Mapping LLC

Federal mandates and the demands of managing a modern transportation system require states to build and maintain a “complete,” seamless geospatial database of roads. This session will explore the strategies and methods to successfully accomplish this enormous task. In addition, the basemap’s role in developing an enterprise GIS will be addressed.

The Data Life-cycle; Collecting, Managing, Updating, and Disseminating Data
Moderator: John Farley, NCDOT

This session will follow the “data life-cycle” from beginning to end. Data of all sorts are continuously collected by the many different business units in a DOT. They all have one common element; a location on the agency’s linear referencing system. This session will address the issues of collecting data from disparate sources, manage them, and provide the means to share data across the enterprise.

WEDNESDAY NIGHT SOCIAL

Dinner Cruise on the Spirit of Ethan Allen

(Wednesday 5:30 PM to 10:00 PM- leave time may change)

Lake Champlain is the largest freshwater lake in the U.S. after the five Great Lakes, and is one of Vermont's most sought after destinations. The best way to enjoy the lake is aboard The Spirit of Ethan Allen Lake Champlain's premier cruise vessel. Savor the majestic beauty of the Adirondack and Green Mountain ranges that surround the lake. Come celebrate a spring evening on Lake Champlain Spirit style! We'll cruise, dine, exploring some of Vermont's cuisine and artisan beers, and then celebrate the setting sun over the majestic Adirondack Mountains. Bring your cameras—the largest recorded mass sighting of Champ, our elusive lake monster, was aboard the Spirit of Ethan Allen.

Buses will depart the Sheraton Hotel starting at 5:30pm and will return at the conclusion of the cruise.

THURSDAY LUNCH

(12 – 1:30 pm)

Box Lunch is provided for presentation of awards, next host state presentation and drawings for prizes.

SYMPOSIUM WRAP-UP AND DEBRIEF

(1:30 – 3 pm)

Come join us for a debriefing of this year's conference and preliminary planning for next year.
Refreshments provided.

GUEST TOURS

**Tuesday, May 6th –
(8:00 AM to 12:00 PM)**

A Taste of Vermont

Join us for a day touring and sampling some of Vermont's more famous products. The day starts with a tour of The Green Mountain Coffee Roasters facility in Waterbury VT, information available at <http://www.greenmountaincoffee.com/visitor-center.aspx>, as they describe it:

Green Mountain Coffee Café & Visitor Center
Located in Waterbury's historic train station

- Location
- Directions
- Café Menu
- History
- Interactive Tours

The Green Mountain Coffee experience comes to life in Waterbury's beautifully restored, historic train station. Cutting edge design and world-class exhibits offer a multi-sensory depiction of the coffee bean's long journey from "tree to cup." Browse a gift shop full of handicrafts from around the world.

After your self-guided tour, relax with a delicious cup of coffee and enjoy a fresh made baked item, sandwich, salad or other tasty treat. We encourage you to try our free coffee-of-the-day samples.

We will then continue north on VT 100 to the village of Stowe where shopping and lunch on your own will be the agenda, information about stores and restaurants are available at: <http://www.gostowe.com/>.

This will be followed by a tour and tasting at Ben & Jerry's in Waterbury where you are sure to find a funky flavor that suits your taste, more at <http://www.benjerry.com/scoop-shops/factory-tours>.


**Wednesday, May 7th –
(9:30 AM to 3:30 PM)**

The Vermont of Yesteryear

This day will be spent touring the Shelburne Museum in Shelburne, VT. The museum offers something for everyone, whether it is viewing one of the many unique collections on display or walking the decks of the restored steamboat Ticonderoga and everything in between. Additional information is available at <http://shelburnemuseum.org/>.


CONCURRENT SESSION 1

1:30 PM TUESDAY, MAY 6

1.1 Federal Programs			
Moderator:			
1.1.1	The New and Improved National Transportation Atlas Database	Mark Bradford US DOT/BTS Bureau of Transportation Statistics Washington, DC	
1.1.2	Census Transportation Planning Products (CTPP) Program Crash Course	Penelope Weinberger AASHTO Washington, DC	
1.1.3	The New & Improved Transportation Subcommittee	Raquel Hunt USDOT/FRA Washington, DC	Mark Bradford USDOT/BTS Bureau of Transportation Statistics Washington, DC
1.2 Transportation Planning			
Moderator:			
1.2.1	Identifying Best Practices for Transportation Data	Al Butler URISA Orlando, FL	
1.2.2	Customizing Road Networks for Transportation Planning	EunSu Lee, PhD, GISP Upper Great Plains TI Fargo, ND	Nimish Dharmadhikari Upper Great Plains TI Fargo, ND
1.2.3	Establishing a Single Source of Truth for Transportation Project Selection	Keith Dotson KY Transportation Cabinet Frankfort, KY	
1.3 Real Time Technology			
Moderator:			
1.3.1	Snow Plow Tracking - Year 3	Eric Abrams Iowa DOT Ames, IA	
1.3.2	Realtime Mobile GIS	Matt von Wahlde Geonetics, Inc Boston, MA	Kevin Lopes MassDOT Boston, MA
1.3.3	Where the Technology Meets the Road	Russell Minich Timmons Group Richmond, VA	
1.4 Disaster Response Tools			
Moderator:			
1.4.1	Georgia DOT Emergency Operations Center (EOC)	Teague Buchanan Georgia DOT Atlanta, GA	
1.4.2	Standing up a Real-time Road Closure Web Site in Under 5 Hours	Will Allender Larimer County Fort Collins, CO	
 1.4.3	Unmanned Aerial Vehicles (UAV) for Disaster Response and Recovery	Jarlath O'Neil-Dunne University of Vermont Burlington, VT	Adam Zylka University of Vermont Burlington, VT



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CONCURRENT SESSION 2 3:30PM TUESDAY, MAY 6

2.1 Federal Initiatives			
Moderator:			
2.1.1	GIS Impacts of the New Federal Programs	Ben Williams FHWA Resource Center Atlanta, GA	Mark Sarmiento US DOT/FHWA Planning Washington, DC
2.1.2	FHWA's Public Road Geospatial Representation Study	Joseph Hausman US DOT/FHWA Washington, DC	
2.1.3	State use of FHWA's probe data - FHWA's Every Day Counts II Geospatial Initiative	Mark Sarmiento US DOT/FHWA Planning Washington, DC	
2.2 Enterprise Planning			
Moderator:			
2.2.1	Enterprise Data Collaboration: South Carolina Department of Transportation's (SCDOT) Environmental Project Screening Application - Phase 2	Bruce Aquila Intergraph Corporation Madison, AL	
2.2.2	Solving NPDES Regulatory Requirements by Leveraging the AGO Platform	Morris Walton, EIT VDOT Richmond, VA	Tim Abdella, GISP JMT Technology Group Sparks, MD
2.2.3	Projects, Programs, the STIP and MAPS: Sharing your Project Info with the Enterprise	Lynsee Gibson South Carolina DOT Columbia, South Carolina	Mitch Stephens PMG Software Professionals Cumming, Georgia
2.3 Technology Solutions			
Moderator:			
2.3.1	Paths Toward CAD and GIS Interoperability	Bo Guo, PE, PhD Gistic Research, Inc Tempe, AZ	
2.3.2	Solving Data Challenges for Implementing Linear Referencing Systems for Asset Management	Dave Campanas Safe Software Surrey, BC Canada	Fred Judson Ohio DOT Bowling Green, OH
 2.3.3	Making ROW Data Accessible: the Vermont Agency of Transportation's Solution	Ryan Cloutier Vermont Agency of Transp. Montpelier, VT	John Roache Applied Geographics, Inc. East Hartford, CT
2.4 Environmental Management			
Moderator:			
2.4.1	Speeding Project Delivery with Mobile Technology: Wetland Delineation Tool	Lled Smith HDR Portland, OR	Robert Kirkman HDR Portland, Oregon
2.4.2	Streamlining and Lowering the Cost of Stormwater Inspection at Mississippi DOT	Mike Cresap Mississippi DOT Jackson, MS	David Holmes Intergraph Corp Huntsville, AL
2.4.3	Asset Management for Closed Storm Drain System	Ramzi Bannura Anne Arundel County Annapolis, MD	Jesse Jay Transcend Spatial Solutions Sarasota, FL

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CONCURRENT SESSION 3 10:30 AM WENDESDAY, MAY 8

3.1 Multi-Level Linear Referencing Systems			
Moderator:			
3.1.1	Mississippi DOT's Enterprise Linear Referencing System Vision	Evan Wright Mississippi DOT Jackson, MS	Bruce Aquila Intergraph Corporation Madison, Alabama
3.1.2	MLRS Development for Baton Rouge, Louisiana	Justin Priola City of Baton Rouge Baton Rouge, LA	
3.1.3	Enterprise Linear Reference System Development: West Virginia's Experience	Yueming Wu West Virginia DOT Charleston, WV	
3.2 Routing			
Moderator:			
3.2.1	Managing Roadway & Bridge Events that affect OSOW Vehicle Routing	James Brown Intergraph Corporation Madison, AL	Jay Adams Oklahoma DOT Oklahoma City, OK
 3.2.2	Establishing Roadway Priority in Statewide Roadway Snow and Ice Control Operations	James L Sullivan UVM Tran. Research Center Burlington, VT	
3.2.3	Optimizing PennDOT's Snow Routes and Planning Process with GIS	Sandra Tosca, P.E. Pennsylvania DOT Montoursville, PA	Nate Reck GeoDecisions Camp Hill, PA
3.3 Process Improvements			
Moderator:			
3.3.1	A Time for a Change: Rethinking GIS to a Transportation Enterprise.	Will Holmes KY Transportation Cabinet Frankfort, KY	
3.3.2	Integrating spatial and aspatial data for asset management, analysis and reporting	Marc Kratzschmar Bentley Systems Fort Plain, NY	Brett Juul Oregon DOT Salem, OR
3.3.3	Success Through Innovation and Adaptation	John Hudler Georgia DOT Chamblee, GA	
3.4 Transportation Dashboards/Visualization			
Moderator:			
 3.4.1	Student Paper - TBD	Dapeng Zhang Rensselaer Polytechnic Institute Troy, NY	
3.4.2	Transportation Integrated Enterprise Solution	José Colón Washington DC DOT Washington, DC	Tim Abdella JMT Engineering Washington, DC
3.4.3	Mobility and Economy Dashboard: Promoting Maryland SHA's Performance-Based Approach to Safety and Mobility Improvement	Laurie Goudy Maryland State Highway Adm. Baltimore, MD	Candice Ottley-Francois, CAPM, GISP JMT Technology Group Sparks, MD

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CONCURRENT SESSION 4



1:30 PM WEDNESDAY, MAY 7

4.1 All Roads Network			
Moderator:			
4.1.1	Working with local government to build a complete dataset (build it once, use it many)	David Blackstone Ohio DOT Columbus, OH	Daniel Casey Digital Data Technologies, Inc. Columbus, OH
4.1.2	One Maryland One Centerline	Erin Lesh, GISP Maryland State Highway Adm. Baltimore, MD	Marshall Stevenson III Whitney Bailey Cox & Magnani, LLC Baltimore, MD
4.1.3	Arizona Achieves ARNOLD!	Joe Breyer Works Consulting LLC Gilbert, AZ	James Meyer Arizona DOT Phoenix, AZ
4.2 Transportation Modeling			
Moderator:			
 4.2.1	Optimizing pedestrian system function and experiential quality with integrated network and agent-based simulation models	Nathan Reigner University of Vermont Burlington, VT	Jeremy Wimpey Applied Trails Research State College, PA
 4.2.2	Using UrbanSim for Residential Energy Demand Modeling in Chittenden County	Timothy Pede UVM Tran. RC Burlington, VT	
 4.2.3	Sustainable Transportation Planning for Rural, Recreational and Park Landscapes: Calibrating Levels of Service for Multiple Modes	Nathan Reigner University of Vermont Burlington, VT	Xiao Xiao University of Vermont Burlington, VT
4.3 Transportation Asset Management			
Moderator:			
4.3.1	PAMS: Leveraging a GIS-Based Pavement Assessment and Management System to Validate and Justify Roadway Project Formulation	Candice Ottley-Francois, CAPM, GISP JMT Technology Group Sparks, MD	Erv T. Beckert, PE Prince George's County, DPIE Largo, MD
4.3.2	Report Out on NCHRP 08-87 : Successful Practices in GIS-Based Asset Management	Frances Harrison Spy Pond Partners, LLC Arlington, MA	Connie Gurchiek Transcend Spatial Solutions Sarasota, FL
4.3.3	Risk-Based Asset Management for DOTs and Local Governments	Jason Amadori DTS Orlando, FL	
4.4 Web Portals and Viewers			
Moderator:			
4.4.1	A Web-Based Map Viewer for Posting and Reviewing Highway Functional Classification Changes in New Mexico	Bruce Spear Cambridge Systematics Cambridge, MA	Paul Sittig New Mexico DOT Santa Fe, NM
4.4.2	Integrating cultural resources and GIS into transportation planning	Derek Peck Iowa DOT Ames, IA	
4.4.3	GeoTRAQS: Georgia DOT's GIS Portal	Teague Buchanan Georgia DOT Atlanta, GA	Tim Poe, GISP Georgia DOT Atlanta, GA

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CONCURRENT SESSION 5



3:30 PM WENDESDAY, MAY 7

5.1 Multi-Level Road Networks			
Moderator:			
5.1.1	All Roads Lead to Rome	John Farley NCDOT Raleigh, NC	Jackie Magnant Esri Alpharetta, GA
 5.1.2	The Vermont Master Road Centerline Data Layer : A Dataset for All Seasons	Johnathan Croft Vermont Agency of Transportation Montpelier, VT	Sara Moulton Vermont Agency of Transportation Montpelier, VT
5.1.3	Minnesota Shared Centerlines Initiative	Peter Morey Minnesota DOT Saint Paul, MN	Dan Ross Minnesota Geospatial Office Saint Paul, MN
5.2 Crash Analysis			
Moderator:			
5.2.1	Analyzing Delaware's Crash Data for MAP-21's HSIP and Federal Reporting	Nate Reck GeoDecisions Camp Hill, PA	
5.2.2	Moving to a web based mapping application for coding crashes	Brett Juul Oregon DOT Salem, OR	
5.2.3	Geolocating All Crashes on All Roads	Kathleen Hancock Virginia Tech Falls Church, VA	
5.3 Managing Assets			
Moderator:			
5.3.1	NJTPA Asset Management Model	Justin Furch Michael Baker Jr., Inc. Hamilton, NJ	
5.3.2	Development of a Spatial Database for Roadway Intersections	Eric Green Kentucky Transportation Center Lexington, KY	
5.3.3	Local Government MUTCD Sign Compliance Program	Tom Tiner Michael Baker Jr., Inc Hamilton, NJ	
5.4 Data Management and Visualization			
Moderator:			
5.4.1	You want WHAT? WHEN? HOW?	Thomas Martin Minnesota DOT Oakdale, MN	
 5.4.2	Vermont Route Logs: Python-driven Map Automation with Straight Line Diagrams	Kerry Alley Vermont Agency of Trans. Montpelier, VT	Michael Trunzo Vermont Agency of Tran. Montpelier, VT
5.4.3	Enhancing PennDOT's GIS Data Sharing and Development Processes	Kelly Fisher GeoDecisions Camp Hill, PA	

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CONCURRENT SESSION 6


8:30 AM THURSDAY, MAY 8

6.1 Local Roads and HPMS			
Moderator:			
6.1.1	Progression towards Perfection : Changing the Way ALDOT Collects and Maintains HPMS Data	Jeromy Barnes Alabama DOT Montgomery, AL	Joe Lambrix Atkins North America Atlanta, GA
6.1.2	Meeting Federal Reporting Requirements	Hussein S Elkhansa MSE, GISP West Virginia DOT Charleston, WV	William G. Schuman Transcend Spatial Solutions Nevada, IA
6.1.3	HPMS 2010 Database Maintenance Application and Functional Class Review	Kevin McElwain Michael Baker Jr., Inc. Hamilton, NJ	
6.2 Web Planning Tools			
Moderator:			
6.2.1	Project Prioritization with GIS	John Farley NCDOT Raleigh, NC	Eric Floss Esri Alpharetta, GA
6.2.2	Interactive Maps Replacing On-Line PDF Documents : Proposed Web Application for the 2014 Boston Region Transportation Plan	Mary McShane CTPS Boston, MA	
6.2.3	I Drive Arkansas	Sharon Hawkins Arkansas State Hwy & Tran. Dept. Little Rock, AR	
6.3 LiDAR and Imagery			
Moderator:			
 6.3.1	Stone Walls and Lime Kilns: LiDAR Investigation and the Vermont Cultural Landscape	Brennan Gauthier Vermont Agency of Tran. Montpelier, VT	
6.3.2	Street Level Panoramic Imagery	José Colón Washington DC DOT Washington, DC	Tim Abdella JMT Engineering Washington, DC
 6.3.3	Rapid Assessment of Storm-related Damage Using Commercial Remote-sensing Imagery	Sean MacFaden University of Vermont Burlington, VT	Jarlath O'Neil-Dunne University of Vermont Burlington, VT
6.4 Interactive Data			
Moderator:			
6.4.1	GIS Based Non-Signalized Intersection Data Inventory Tool to Improve Traffic Safety in Alabama	Andrew Graettinger University of Alabama Tuscaloosa, AL	Jenny Bleiholder Alabama Department of Transportation
6.4.2	Taking GIS to the trails at CDOT	Allison Bejarano Colorado DOT Denver, CO	Brian R. Sovik PhD, PMP, GISP Data Transfer Solutions, LLC Orlando, Florida
6.4.3	Visualizing Transportation Assets	Jesse Jay Transcend Spatial Solutions Sarasota, FL	Hussein Elkhansa West Virginia DOT Charleston, WV

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CONCURRENT SESSION 7

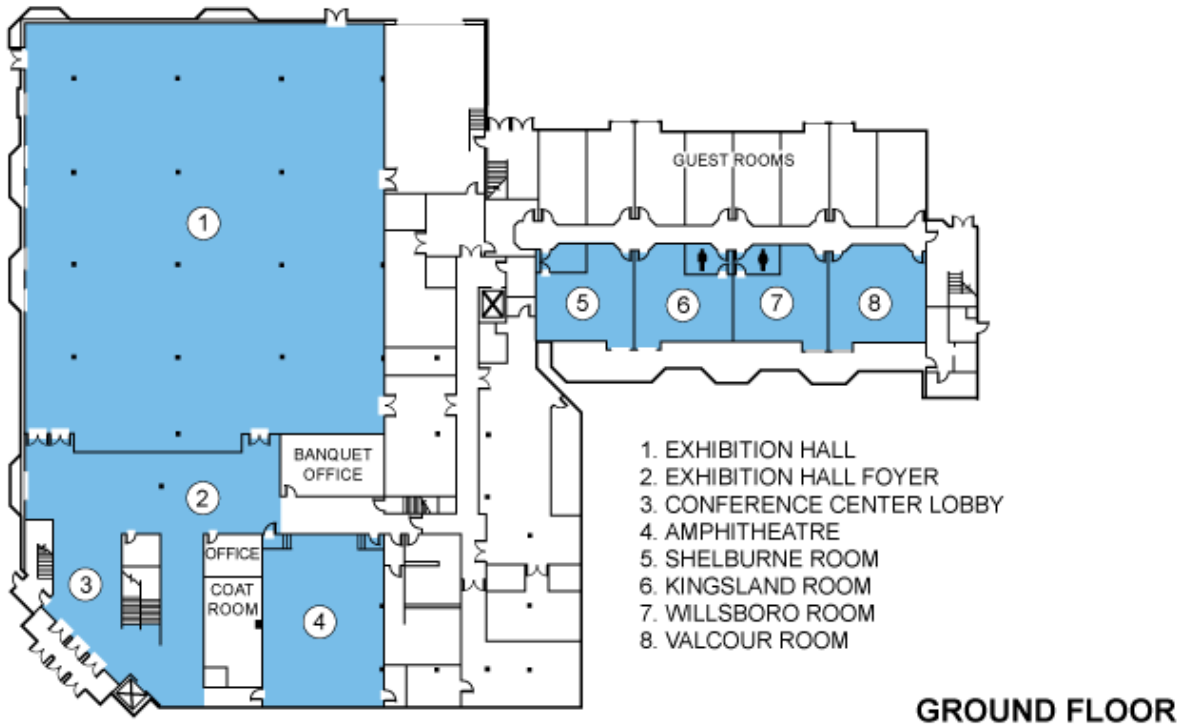
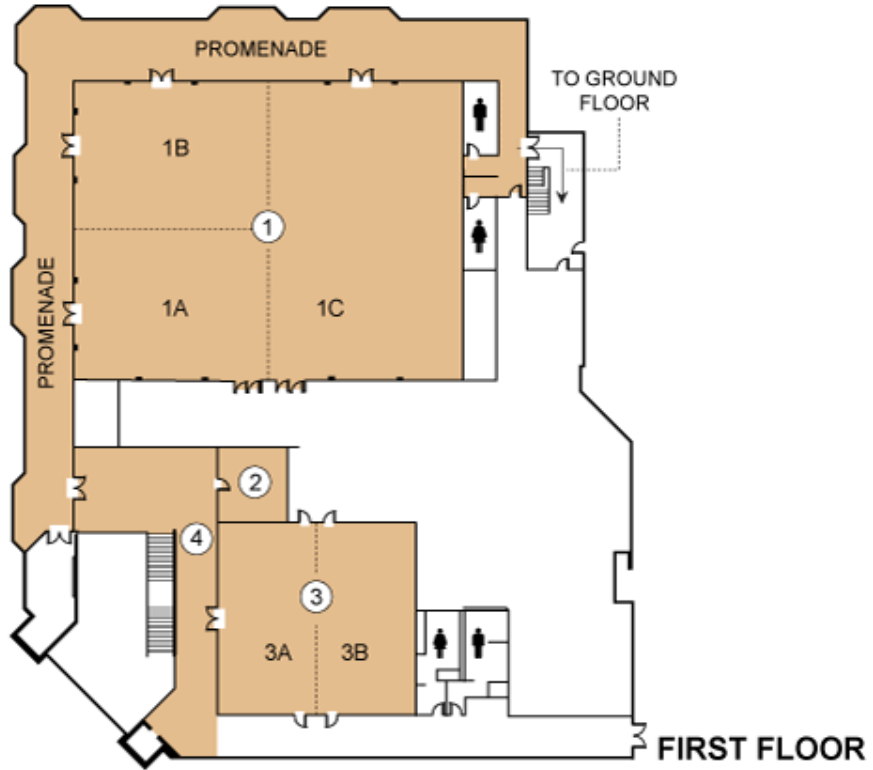
10:30 AM THURSDAY, MAY 8

7.1 Developing a Comprehensive Network			
Moderator:			
7.1.1	Improving Off-System Road Management using Local Governments	David Holmes Intergraph Corp Huntsville, AL	
7.1.2	Nevada DOT & Map-21 Made Possible with MapMerger Conflation	Stanley Dallal ESEA Los Altos, CA	
7.1.3	Wisconsin All Roads Network Planning and Implementation	Steven T. Parker, Ph.D University of Wisconsin Madison, WI	Kelly Schieldt Wisconsin DOT Madison, WI
7.2 Mobile GIS			
Moderator:			
7.2.1	Integrating Location Services and Embedded Road Network Data with Linear Referencing Systems on Smart Mobile Devices	Chris Zajac New Jersey DOT Trenton, NJ	Yu Luo Michael Baker International Horsham, PA
7.2.2	Department of Transport, Abu Dhabi Mobile Application "DARB Mobile"	Dr. Nassim Al-Abed Abu Dhabi DOT Abu Dhabi, Abu Dhabi	Rashid Al Naqbi Abu Dhabi DOT Abu Dhabi, Abu Dhabi
 7.2.3	On The Right Track: Managing Rail Assets & Property with Mobile and Web GIS	Stephen Smith VTrans Montpelier, VT	
7.3 3D Visualization			
Moderator:			
7.3.1	Using 3D data to Create an Electronic Airport Layout Plans	Ray Mandli Mandli Communications, Inc. Madison, WI	Larry Matke Mandli Communications Inc. Madison, WI
7.3.2	Visualization in GIS and 3D for Structure Data	Jeremy Shaffer Bentley Systems Pittsburgh, PA	Possible AASHTOWare Bridge Task Force Member Some State DOT
7.3.3	Use of 3D visualization for Asset Extraction on the San Diego MTS Rail	Ray Mandli Mandli Communications, Inc. Madison, WI	Larry Matke Mandli Communications Inc. Madison, WI
7.4 Geospatial Data Management			
Moderator:			
7.4.1	An Integrated GPS-based Mobile Data Collection and Web-based GIS Platform for Supporting GDOT's Pavement Rehabilitation and Design Processes	Zhaohua Wang Georgia Institute of Technology Suwanee, GA	Tim Poe, GISP; Teague Buchanan Georgia DOT
7.4.2	GeoIndex - A New Geolocation Methodology	Matthew Hudnal University of Alabama Tuscaloosa, AL	
7.4.3	Uses of Cloud Technologies for Geospatial Applications	Alisa Fine U.S. DOT Volpe Center Cambridge, MA	Paige Colton U.S. DOT Volpe Center Cambridge, MA

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CONFERENCE CENTER FLOORPLAN

- 1. EMERALD BALLROOM
 - 1A. EMERALD BALLROOM I
 - 1B. EMERALD BALLROOM II
 - 1C. EMERALD BALLROOM III
- 2. CARLETON BOARDROOM
- 3. DIAMOND BALLROOM
 - 3A. DIAMOND BALLROOM I
 - 3B. DIAMOND BALLROOM II
- 4. DIAMOND BALLROOM FOYER



- 1. EXHIBITION HALL
- 2. EXHIBITION HALL FOYER
- 3. CONFERENCE CENTER LOBBY
- 4. AMPHITHEATRE
- 5. SHELBURNE ROOM
- 6. KINGSLAND ROOM
- 7. WILLSBORO ROOM
- 8. VALCOUR ROOM

GIS-T Attendee Registration Form

Please use our easy On-line Registration at: <http://www.gis-t.org>, available on 2/4/14
ONE REGISTRATION PER PAGE PLEASE

NOTICE: IF YOU HAVE GUEST(S) ATTENDING, PLEASE SEE OUR GUEST REGISTRATION FORM

Name (Mr. Ms.) _____ Nickname _____
First Last

Address _____
Street City State ZIP

Business Name _____

Business Phone _____ Fax _____

Email: _____ GIS-T Attendee

FEES	Before/on 4/18/14	After 4/18/14	Total
GIS-T 2014 Symposium	\$295	\$350	\$
GIS-T 2014 Workshops	\$125	\$150	\$
Student - Symposium ³ & Workshops	\$100	\$125	\$
One Day-Symposium ⁴ <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thurs	\$150	\$175	\$
AMOUNT ENCLOSED			\$

Note on Fees

1. Does not include workshop fees.
2. Workshop fee covers entire day (Monday, May 5th, 2014) and includes Breakfast and Lunch. This is not a per-workshop fee. Please select choice of workshops below.
3. Student Fee covers attendance at the Symposium, Workshops, Lunches, and Exhibit Hall Receptions. **Does not cover the Wednesday Social.** Please select choice of workshops below.
4. One Day Registration Fee covers attendance for one day at the Conference, Lunch, and Exhibition Hall Reception. **It does not include the Wednesday Social.**

Workshops (IMPORTANT: REGISTRATION FEE FOR THE SYMPOSIUM DOES NOT INCLUDE WORKSHOPS, SEE FEE LIST ABOVE)

Morning Session - Pick One	Afternoon Session - Pick One
<input type="checkbox"/> AASHTO TIG II: Implementing UPLAN in your State	<input type="checkbox"/> Implementing SHRP II C40 Environmental Databases and Tools
<input type="checkbox"/> Safety Analysis, Modeling & GIS	<input type="checkbox"/> GIS Capability Maturity Model
<input type="checkbox"/> Keeping the Street Layer Current	<input type="checkbox"/> Enhancing the Use of GIS to Support Asset Management Requirements Under MAP-21
<input type="checkbox"/> Use of FHWA Probe Data – Impacts on State LRS	<input type="checkbox"/> Specifications for All Public Road Maps and the new FHWA Functional Classification Manual

REGISTRATION WILL OPEN ON Monday, May 5th, AT 7:00 AM and CONTINUES THROUGHOUT THE SYMPOSIUM

PAYMENT BY CHECK, MONEY ORDER OR REGISTER ON-LINE USING CREDIT CARD

Send Registration & Check to
 Rose Braun
 Nebraska Department of Roads
 Business Technology Support Division
 PO Box 94759
 Lincoln, NE 68509
 Phone: 402-479-3696
 Fax: 402-479-3884

Make checks Payable to "GIS-T". Check <http://www.gis-t.org> for the most up to date information.

Refund Policy: All cancellations and refunds are subject to a \$50.00 processing fee. No refunds will be provided after April 29, 2014. To qualify for a full refund, a written cancellation notice must be sent to Rose Braun, 1400 Highway 2, PO Box 94759, Lincoln, NE 68509.

Guest(s) Registration Form

Please use our easy On-line Registration at:

<http://www.gis-t.org>, available on 2/4/14

This registration is for Guest(s) of Symposium Participants

Symposium Participant's Name (Mr. Ms.) _____
First Last

ADULT GUEST REGISTRATION (Includes Guest Tours, Breakfasts, Receptions, Wednesday Social, and Thursday Boxed Lunch.)

Adult Guest Name (Mr. Ms.) _____
First Last

Address _____

Business Name Street City State ZIP

Business Phone _____ Fax _____

E-mail: _____

Fees include continental breakfast each morning, day trips on Tuesday and Wednesday, and Social on Wednesday night. Lunch will also be provided on the Wednesdayday trip.

FEES

	Number of Registrants	Total
\$165.00		\$
TOTAL AMOUNT*		\$

CHILD(REN) REGISTRATION (Under age of 18)

Child(ren)'s Name(s)/Age(s)

M/F _____ M/F _____

M/F _____ M/F _____

FEES

		Number of Registrants	Total
Children Ages 6 & under	Free		\$
Age 7 - 18	\$35.00 for Each Child		\$
TOTAL AMOUNT			\$

GRAND TOTAL ENCLOSED FOR ALL REGISTRANTS	\$
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Send Registration & check to
 Rose Braun
 Nebraska Department of Roads
 Business Technology Support Division
 PO Box 94759
 Lincoln, NE 68509
 Phone: 402-479-3696
 Fax: 402-479-3884

PAYMENT BY CHECK, MONEY ORDER OR REGISTER ON-LINE USING CREDIT CARD

Make checks Payable to "GIS-T". Check <http://www.gis-t.org> for the most up to date information.

Burlington, Vermont – Lodging and Logistics

Hotel Information

The Sheraton Burlington Hotel and Conference Center

<http://www.sheratonburlington.com/> - please call to secure a room from the GIS-T Block.

870 Williston Road
Burlington, VT 05403
(802) 865-6600
Hotel Reservations: 888-627-7125

Overflow hotels:

DoubleTree by Hilton Burlington

1117 Williston Road, South Burlington, VT 05403
<http://doubletree.hilton.com/en/dt/groups/personalized/B/BTVDTDT-TFS-20140505/index.jhtml>

Holiday Inn

1068 Williston Road, South Burlington, VT 05403
AASHTO GIS-T Discounted Rooms at the Holiday Inn Burlington

All hotels provide complimentary shuttle service from/to the airport – see the Hotel Phone board in the first floor rotunda of the airport terminal, which will provide instructions on which shuttle to take.

Room prices \$124 are plus tax and include wifi – current tax rate is 13%

Internet: Included with rooms and in public spaces in the conference hotel.

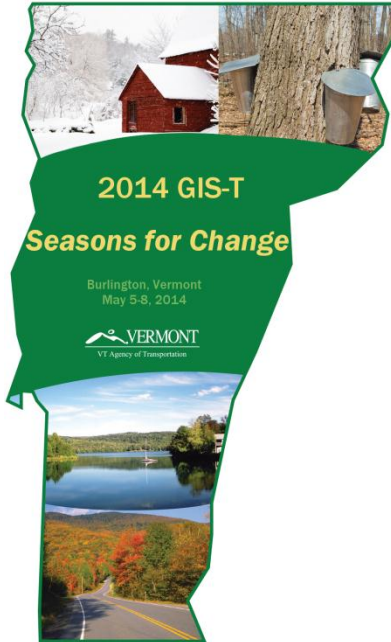
Weather in Burlington: The beginning of May, predictably, the temperature range is wide. May rarely sees 70 degrees, the average daily temperature is in the 60s. With evenings and early morning temps can dip into the 40s. A spring jacket is recommended.

Travel: Travel into Burlington by air is via the Burlington International Airport.
<http://www.burlingtonintlairport.com/>

Car Rentals: Rental cars are available from the BIA. Go to this link for more details:
<http://www.btv.aero/index.php/ground-transportation/rental-cars>

In the Area: Burlington is the home of Ben and Jerry's Ice Cream. Burlington is also home to Lake Champlain, the most historical body of water in North America. Visit the Lake Champlain Maritime Museum. Also in the area is the Echo Lake Aquarium and Science Center. While visiting also check out the Church Street Market place. <http://www.churchstmarketplace.com/> The University of Vermont is also in Burlington.

GIS in Transportation Symposium 2014



GIS-T Symposium Affiliates

- American Society for Photogrammetry and Remote Sensing
- Association of Metropolitan Planning Organizations
- Highway Engineering Exchange Program
- National Association of Regional Councils
- National States Geographic Information Council
- Transportation Research Board
- U.S. Department of Transportation
 - Federal Highway Administration
 - Federal Transit Administration
 - Research & Innovative Technology Administration
- Urban and Regional Information Systems Association

GIS-T 2014 - Local Host Contact

Vermont DOT

[Steph Magnan](#)

Vermont Agency of Transportation

Operations Technical Services

(802) 498-7044

steph.magnan@state.vt.us