

# Preliminary Program



**Houston, Texas - March 17 - 19  
21st Annual**

## 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

**March 17 - 19, 2008**

**Workshops - March 16, 2008**

**Westin Galleria & Westin Oaks Hotel  
Houston, Texas**

**Sponsored by:**

American Association of State Highway and Transportation Officials



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The twenty-first annual GIS-T Symposium - *GIS-T 2008 Small Steps, Giant Leaps* – provides a forum for professionals interested in the design and use of GeoSpatial Information Systems for Transportation. It brings together individuals from education, the private sector, and all levels of government for a full day of workshops March 16, 2008, and three full days of conference activity, March 17 - 19, 2008.

## 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 Specialists
  - Consultants and Service Providers

## SESSIONS

**Keynote Speaker – Dr. John J. Pelizza** – Dr. Pelizza, our keynote speaker, will talk about how to develop strategies for individuals to follow so they can be top performers and lead healthy and happy lives. The founder of Pelizza & Associates, an organization designed to help people grow personally and professionally, Dr. Pelizza has dedicated himself to helping others . . . feel BETTER and do BETTER -- to helping people maximize their personal wellness and growth.

**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 mention the status of their GIS implementations and challenges they may face.


**Concurrent Sessions** – The Symposium will feature six concurrent sessions, each consisting of four tracks of presentations. During the first concurrent session, the Symposium will host the Student Paper Contest; open to technical research papers written by students currently enrolled in a university or college.

**GIS Gallery** - Successful GIS projects will be showcased through map products and displays. Prizes will be awarded to the Best Representation in each of four categories – 1) Transportation Publication; 2) Information Usage; 3) Public Presentation; and 4) Effective Cartography. All attendees are encouraged to submit multiple GIS products reflecting their own agency's work to the symposium. For detailed category and submission information please check the [www.GIS-T.org](http://www.GIS-T.org) website.

**Panel Discussion Sessions** – The Symposium will feature one panel discussion on Tuesday morning, titled *Disaster Response in Transportation Agencies*.

**Virtual Technical Tour** – This session gives Symposium attendees an opportunity to virtually explore **Microsoft Virtual Earth**. Kevin Adler of Microsoft presents a dynamic, multi-media presentation focusing on the utilization of Microsoft Virtual Earth for GIS Applications.

# General Schedule

	Sunday March 16, 2008	Monday March 17, 2008	Tuesday March 18, 2008	Wednesday March 19, 2008
7:00 AM	<b>Registration</b> Continental Breakfast	<b>Registration</b> Continental Breakfast	<b>Registration</b> Continental Breakfast	<b>(Sleep In!!!)</b>
8:00 AM	<b>Morning Workshops</b> 1. Bringing GPS Into Perspective- A Workshop for GIS Managers 2. A Six-Pack of Avoidable, Seemingly Difficult, Major RFP Problems and Solutions 3. 3D Geospatial for Transportation: Best Practices and Project Implementation Methods 4. Multi-Level Linear Referencing Systems (MLLRS) Maintenance for State Transp. Databases	<b>Opening Session</b> <b>Welcome To Houston</b>	<b>Panel Discussion</b> <b>Disaster Response in Transportation Agencies</b> Marvin Koleis - Moderator	<b>Registration</b> Continental Breakfast
9:00 AM		<b>Keynote Speaker</b> <b>Dr. John J. Pelizza</b>		<b>Session 5</b> 1. Management System 2. Data Collection 3. Right-of-Way GIS 4. Routing
10:00 AM		<b>Break</b>	<b>Break</b>	<b>Break</b>
11:00 AM		<b>State Summary &amp; Roll Call of States</b>	<b>Session 3</b> 1. Enterprise Data 2. Web GIS 3. Federal GIS 4. Safety	<b>Session 6</b> 1. Data Management 2. LRS / LRM 3. Database Design 4. Local Government GIS
12:00 PM	<b>Lunch - Workshop Attendees Only</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Box Lunch</b>
1:00 PM	<b>Afternoon Workshops</b> 1. Requirements for a State-wide 3-D, Real-time Positioning Infrastructure to Support Transportation Systems 2. Enterprise Information Integration 3. Microsoft Virtual Earth - In Depth 4. Introduction to GIS Web Services	<b>Session 1</b> 1. State of Texas 2. Student Paper Contest Winners 3. GIS Planning 4. Mobile GIS	<b>Session 4</b> 1. GIS Data Sharing 2. GIS/CADD Integration 3. Imaging 4. GIS Planning	<b>Next Host State Presentation</b>
2:00 PM		<b>Break</b>	<b>Break</b>	<b>Awards/Drawings</b>
3:00 PM		<b>Session 2</b> 1. Google Earth Apps 2. Enterprise GIS 3. ITS / GIS 4. LRS / LRM		<b>Virtual Tour Session</b> <b>Microsoft Virtual Earth</b>
4:00 PM		<b>Break</b>	<b>Break</b>	<b>Symposium Wrap-Up</b> Come join us for a debriefing of this year's symposium and planning for the next. <b>Refreshments Provided!</b>
5:00 PM	<b>Break</b>	<b>Birds of a Feather &amp; GIS Gallery</b>	<b>Tuesday Night Social</b>	
6:00 PM	<b>Technology Hall Reception</b>	Technology Hall Open		
7:00 PM	<b>Technology Hall Reception</b>			
8:00 PM				
8:30 PM				

# GIS-T Workshops – Sunday, March 16

There will be four tracks for workshops presented at the 2008 GIS-T. All workshops are half-day workshops. You may pick one from the morning and one from the afternoon. Lunch is provided to workshop attendees.

## MORNING SESSIONS

### 1. Bringing GPS Into Perspective - A Workshop for GIS Managers and Practitioners

**Instructor: Jonathan Cobb, Waypoint Technologies**

This workshop will incorporate a combination of lecture, dialogue, and hands-on field exercises to introduce participants to the benefits, limitations, and future potential of the global positioning system ("GPS") as a tool for capturing and/or verifying feature locations and attributes for use in a GIS environment. This workshop is appropriate for individuals with minimal to moderate experience with GPS, and is comprised of four primary elements:

1. GPS: A Brief History
2. Current Status of GPS and Complementary Systems
3. A Look Into the Future of GPS
4. Field Exercise (optional)

### 2. A Six-Pack of Avoidable, Seemingly Difficult, Major RFP Problems and Their Simple Solutions

**Instructor: Michael Asner, Michael Asner Consulting**

#### **Not any six problems . . .**

This presentation does not deal with just any six RFP problems. There are hundreds available.

#### **Avoidable problems . . .**

Rather it deals with avoidable problems, problems that can be mitigated or eliminated by activities you can do before issuing an RFP or by requirements or information that you put in the RFP.

#### **Difficult problems . . .**

It deals with seemingly difficult problems. Problems that have been identified by procurement people over the last five years.

#### **Major problems . . .**

It deals with major RFP problems, problems that can poison the RFP process, problems that can produce high risk solutions that are likely to fail.

#### **Avoidance technique . . .**

Finally it deals with how to avoid these problems by adopting well established best practices selected from more than sixty jurisdictions.

#### **A Six-Pack of Avoidable, Seemingly Difficult, Major RFP Problems and Their Simple Solutions**

1. Budget – Every proposal is over budget.
2. Risk – All the proposals are mediocre and contain significant risks of failing.
3. Expertise – You can't tell if the key players possess the critical skills needed for this project.
4. Project Plan – You can't tell if the project plan will actually work.
5. Staffing – You don't know if the proposal staff can do the job nor if they will show up.
6. Past Performance – You don't know how to evaluate the vendor's past performance or whether they are embellishing their record, misleading you, or simply writing fiction.

#### **What You'll Learn – How to avoid these major problems by creating a better RFP, by inserting additional requirements or conditions.**

- Three simple ways to get every proposal within your budget
- How to perform a risk analysis
- How to specify expertise in an objective, measurable way
- The critical elements of a project plan
- The information required on a resume
- How to contractually ensure that proposed people show up
- How to evaluate past performance



### 3. 3D Geospatial for Transportation: Best Practices and Project Implementation Methods

**Instructor: Tim Case, Parsons Brinckerhoff**

The convergence of new technologies and business requirements is fostering a new wave of 3D applications. Implementing these systems in state and local agencies requires a new set of skills and knowledge that most professionals have yet to develop. This course is a great way to get started or expand your 3D know-how.

A wide range of users may create, navigate, and analyze entire metropolitan regions or a single city block within these systems. Transportation agencies are using 3D data and visualization tools to support public involvement, planning and design, construction management, emergency preparedness, and many other business practices.

This course introduces the data, systems, and processes to be considered when implementing 3D applications including Google Earth, ArcGIS Explorer, 3ds Max, and over 30 other software tools. Using extensive case studies, attendees will learn how to navigate the dizzying array of options and prepare for a sustainable 3D geospatial practice.

### 4. Multi-Level Linear Referencing Systems (MLLRS) Maintenance for State Transportation Databases

**Instructors: Gerald Dildine, ITIS, Inc.  
Dr. Simon Lewis, PhD, GIS-man, Inc.**

MLLRS was defined within the work of NCHRP 20-27 a number of years ago. Some of the promise of MLLRS was to provide support for: a) Multiple LRMs, b) Temporality, c) Event stability, and d) Multiple cartographic datasets. In recent years and driven by Safety, Gas Tax, HPMS, and R/W exchanges, there has been a growing need to expand support from “on system roads” to support “all public roads” within the DOTs. Yet to date, relative few commercial products have been built to realize the promise of MLLRS.

In the past couple of years, Nevada DOT, along with a major GIS vendor, and ITIS, teamed to create commercial products to perform MLLRS maintenance. ITIS, as NDOTS primary consultant overseeing the implementation of this work, has gained considerable knowledge in how to implement MLLRS Maintenance within DOTs.

In order to share some of the knowledge gained from this experience. ITIS has volunteered to provide this workshop on MLLRS Maintenance. This workshop will cover to the following major topics:

- Understanding MLLRS
- MLLRS data model and extensions for local roads
- Dealing with time in the model
- Maintenance functions necessary for MLLRS
- Approaches to managing statewide transportation databases
- Maintenance function extensions for statewide transportation databases
- Integrating local government transportation related data into statewide databases
- Standards issues and coordination approaches for statewide databases.
- Implementing MLLRS in a multi-vendor environment

This workshop will provide “real-world” experience and “how-to” direction on how to move forward with implementation of MLLRS.

## **AFTERNOON SESSIONS**

### 1. Requirements for a State-wide 3-D, Real-time Positioning Infrastructure to Support Transportation Systems

**Instructors: Dr. Roy Dokka Louisiana State Univ. Center for GeoInformatics  
Dr. Jim Mitchell, Louisiana Department of Transportation and Development**

Participants will be exposed to the theory of real-time satellite positioning networks (RTNs), their design and construction, operational capabilities, and spatial limitations of current technology. Discussions will also include spatial datums and how RTNs can support GIS accuracy assessment, and construction. Presentation will highlight transportation examples from Louisiana.

## 2. Enterprise Information Integration

**Instructor: Bill Boland & Dr. Max Wyman, Terra Genesis**

Information integration has been a driving purpose behind geographic information systems for decades. This is due in large part to so many items modeled by information systems having an associated location which may be mapped, queried, and correlated. This is particularly true for location-rich transportation data. Through the years however, GIST professionals have focused more on the mechanics of getting spatial data to work together and less on the greater information integration objective.

This workshop discusses enterprise information integration (EII) as the established discipline and united approach to assimilation of all information types into homogenous corporate information. A detailed look at how EII precursors such as enterprise resource planning (ERP), data warehousing (ETL), enterprise application integration (EAI), and other technical approaches may compare with EII. And lastly, criteria for comparing and selecting various information integration strategies will be compiled, together with techniques for calculating the return on investment for various information integration methods. Throughout the workshop, emphasis will be placed on GIS as a means to integration rather than an integration end: in essence a tool rather than a trade.

## 3. Microsoft Virtual Earth - In Depth

**Instructor: Marc Schweigert, Microsoft Corp.**

The Virtual Earth Platform from Microsoft is an integrated set of services that combines unique aerial, and satellite imagery with best-of-breed mapping, location and search functionality. Marc Schweigert from the Microsoft Public Sector Developer and Platform Evangelism Team will provide a technical instruction on Adding Mapping Capabilities to your Government Applications with Virtual Earth. Learn to program with the Virtual Earth Map Control and take your websites and applications to the next level by integrating the Virtual Earth Platform to deliver highly visual and locally relevant information consumers most care about. Marc also will cover how to extend your agency's ESRI investment with fusion server technologies made possible by our partner ecosystem.

After attending this session you will:

- Have a thorough understanding of the capabilities and features of the Virtual Earth platform
- Know what it takes to build your own solutions leveraging Virtual Earth
- Learn about third party products which enable you to leverage your existing GIS information visualized using Virtual Earth faster

## 4. Introduction to GIS Web Services

**Instructor: Frank Winters, New York State Office of Cyber Security & Critical Infrastructure Coordination**

The use of Geographic Information Systems (GIS) and Web Services by State agencies and local government has been growing rapidly. We have witnessed the growth of both GIS and web service uses for emergency services, capital project planning, real property assessment, economic development, health services, environmental analyses, land use planning, facility management, highway safety, and much, much more. In short, both GIS and web services are vital tools for effective decision-making and improving government services.

This workshop will introduce attendees to the fundamental concepts of GIS web services and raise their awareness of how to leverage the Internet to utilize geographic data without having the need to host the GIS data and/or develop necessary tools. Topics to be incorporated in this workshop include an explanation of web services, the various web service types and their application, the basics of data use via web service platforms and current programs and available resources for use in the integration of web service with GIS technologies. Demonstrations will cover the existing methods of integrating GIS data with web services. This is not a hands-on GIS developers' workshop meant to provide attendees with technical content on how to build web services. The target audience for this workshop is GIS practitioners and those who would like to understand what web services are and how they can be utilized in the workplace.

## **TECHNOLOGY RECEPTION – TECHNOLOGY EXHIBITS OPEN**

**(SUNDAY 5:30 PM TO 7:30 PM)**

**(MONDAY 6:30 PM TO 8:30 PM)**

The Technology Hall opens on Sunday evening at 5:30 pm with a reception for all Symposium attendees and guests. On Monday, 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 8:30 pm on Monday.

On Tuesday, it will be open from 7:00 am to 4:00 pm.

On Wednesday, it will open at 7:30 am and end at noon.

## **Opening Session / KEYNOTE SPEAKER**

**(MONDAY 8:00 AM TO 10:00 AM)**

**Dr. John J. Pelizza**

Nationally known, Dr. Pelizza is a leading authority on wellness, change process, stress management, productivity, team building and personal growth. He is a dynamic speaker to over 2000 business, professional and civic groups throughout North America.

John J. Pelizza, Ph.D., received his Bachelor of Science Degree from Pittsburg State University, Pittsburg, Kansas and his Master's Degree from Temple University, Philadelphia, Pennsylvania. John received his Doctor of Philosophy Degree from the University of New Mexico at Albuquerque, Albuquerque, New Mexico.

The founder of Pelizza & Associates, an organization designed to help people grow personally and professionally, Dr. Pelizza has dedicated himself to helping others . . . feel BETTER and do BETTER -- to helping people maximize their personal wellness and growth.

John's books include: A Journal to Live By, The Big Secret, There's Magic in Discovery, Foot in the Door and Thoughts to Make You Think and Feel Better. He has also recorded three audio tapes, titled "Keys to High Energy Living", "Staying Motivated During Change" and "21 Ways to Get Up & Go!" He also publishes a quarterly newsletter, "Pelizza's Positive Principles for Better Living". <http://www.pelizza.com>

## **STATE SUMMARY AND ROLL CALL OF STATES**

**(Monday 10:30 AM to 12:00 noon)**

Summary results from a survey sent to GIS representatives in each state will be presented. The Roll Call of States features one representative from each country, state, province, or local agency to briefly mention the status of their GIS implementations and challenges that they face.

## **STUDENT PAPER SESSION**

**(Monday 1:30 PM to 3:00 PM)**

This year GIS-T presents the third annual Student Paper Session. Student winners, selected by the planning committee, will present their technical research papers focused on developing solutions for current GIS-T issues. The students will take home a \$250 or \$500 award.

## **BIRDS OF A FEATHER**

**(Monday 5:00 PM to 6:00 PM)**

Each year at GIS-T the planning committee schedules concurrent sessions under the heading of *Birds of a Feather*. These sessions are designed to give Symposium participants an opportunity to present questions as well as issues of concern to some of the leading technology companies that serve our GIS in Transportation niche. Past symposiums have featured two or three of these companies.

For GIS-T '08 we would like to encourage participants to submit their questions and concerns in advance of the symposium. The GIS-T Symposium planning committee will then forward those questions to the technology companies. The planning committee will also be able to determine how many concurrent sessions we should accommodate, based upon the number of questions directed at each technology company. **When you register, please take a few minutes to identify those areas of concern or interest that you have, and thank you for your participation.**



**GIS GALLERY**  
**(Monday 5:00 PM to 6:30 PM)**

The GIS-T Symposium provides a showcase for attendees to display GIS-generated mapping and poster products. This is an opportunity to share techniques and applications with peers in the transportation GIS community. A dedicated time will be made available on Monday evening to browse and discuss the various entries. Come see how States are using GIS to advance their work. A panel of judges evaluates each submission, and awards are given within each category [Transportation Publication; Information Usage; Public Presentation; and Effective Cartography] during the Wednesday Symposium lunch. Every state and transportation organization is strongly encouraged to submit examples of their work. Attendees will be able to view maps for the duration of the Symposium. You can avoid traveling with a map tube by sending it well in advance to Dan Wyly, at the address shown on the back page, no later than March 10, 2008.

**SPOUSE TOURS**  
**Monday, March 17 - Houston Livestock Show and Rodeo**  
**(8:30 AM to 3:00 PM)**

Bring your hat and boots! The [Houston Livestock Show](#) is the world's largest livestock exhibition as well as the world's largest rodeo event. The 20 day event is held at Reliant Park in Houston, Texas and features bull riding, livestock judging, concerts, a parade, a carnival, trail rides, barbecue and wine competitions, shopping, sales, and auctions. Although the rodeo performance is in the evening, there are continuous activities during the day.

In this gigantic, one-of-a-kind Western shopping mall, show patrons can purchase everything from Western clothes, horse trailers and gourmet food to unique arts and crafts and agricultural machinery. All types of food can be found as well, from traditional barbecue to fine cuisine. There is something to please everyone's palate in Reliant Center, Reliant Arena and throughout Reliant Park. Also visit Agventure to learn about agriculture and how it affects you every day. Nearly every species of livestock can be found inside this fun and educational area with live animal exhibits.

We will spend the majority of the day at Reliant Park departing from the hotel at 8:30 am, arriving at approximately 9:00 am with lunch on your own, and returning to the Westin by 3:00 pm.

**Tuesday, March 18 – Museum of Natural Science**  
**(8:30 AM to 2:30 PM)**

The [Houston Museum of Natural Science](#) is the 4<sup>th</sup> most visited museum in the nation. The Museum is a five part complex housing the Burke Baker Planetarium, Wortham IMAX Theatre, Cockrell Butterfly Center and three floors of natural science halls and exhibits including the world famous Cullen Hall of Gems and Minerals. There is much to see and learn! You will have the opportunity to visit one of three special exhibits.

**Lucy's Legacy, the Hidden Treasures of Ethiopia** - Discover the rich history and culture of Ethiopia, the cradle of mankind. From the rock-hewn churches of Lalibela and the massive, ancient obelisks at Axum to the beautiful highlands of Gondar and the arid desert in which the famous fossil Lucy was discovered, **Lucy's Legacy** tells the amazing story of Ethiopia over the past 5 million years. In addition to the fossil of Lucy, over 100 artifacts such as ancient manuscripts and royal artifacts from a dynasty Ethiopians believe stretches back to the son of the biblical King Solomon and the Queen of Sheba will be on display.

**Leonardo da Vinci: Man, Inventor, Genius** - Leonardo da Vinci was one of the greatest geniuses the world has ever known. More than 500 years ago, Da Vinci designed flying machines, robots, submarines, underwater breathing gear and solar powered industries. This remarkable internationally acclaimed exhibition displays over 60 models of Da Vinci's famous machines, inventions and designs based on ancient codices.

**CSI: The Experience:** The Experience is a completely immersive exhibit that invites visitors to enter "crime" scenes where they identify and record evidence. It takes them inside "laboratories" for scientific testing and to "autopsy" rooms for pathology analysis. Then it returns them to the "office" to build their case, based on the scientific evidence. The exhibit brings to life real scientific principles and the most advanced scientific techniques used today by crime scene investigators and forensic scientists.

We will depart from the hotel at 8:30 am, arrive at the museum at approximately 9:00 am, and depart from the museum at 12:30 pm. Lunch will be provided at the legendary El Patio Mexican Restaurant prior to returning to the Westin by 2:30 pm.



## **The Galleria Mall (Anytime)**

With its stunning architecture, exceptional store mix and distinctive style of entertainment, the [Galleria Mall](#) has established itself as the #1 shopping and tourist destination in Houston with over 24 million annual visitors. Set beneath spectacular glass atriums, The Galleria features more than 375 fine stores and restaurants and an impressive ice rink. This world-class shopping complex showcases the best names in retailing including Neiman Marcus, Cartier, Gucci, Macy's, Tiffany & Co., Saks Fifth Avenue, The Sharper Image, Ralph Lauren Collection, Louis Vuitton and Houston's only Nordstrom.

The Galleria is the fourth largest mall in the nation highlighted by nine types of stone, suspended glass balconies, three types of wood, glass skylights, and plush leather seating. With three office towers, two hotels, 2.4 million square feet of retail space, and a variety of restaurants, The Galleria is a city within a city.

### **PANEL DISCUSSION**

## **Disaster Response in Transportation Agencies (Tuesday 8:00 AM to 10:00 AM)**

### ***Moderator: Marvin Koleis – Colorado DOT***

Events over the past decade have placed a spotlight on the complex nature and numerous challenges faced by transportation practitioners as it relates to dealing with disasters. Forced to the forefront during these events is the importance of the nation's transportation infrastructure in supporting daily life and commerce, as well as the critical role transportation plays in rendering necessary aid to areas impacted by a disaster. Panelists will use the recently published report titled *Disaster Response in Transportation Planning*, which was prepared as part of *NCHRP Project 08-36, Task 69 (03)*, National Cooperative Highway Research Program, Transportation Research Board, as a foundation upon which to discuss their experiences and perspectives relative to disaster preparedness and response.

### **Panelists include:**

- Henry Cordova - Broward Metropolitan Planning Organization
- Chris Van Slyke - Houston-Galveston Area Council
- Gerald Schumacher - California DOT
- Texas DOT

### **TUESDAY NIGHT SOCIAL**

## **Space Center Houston**

**(Tuesday 4:00 PM to 10:00 PM)**

The [Space Center Houston](#) offers a myriad of interactive fun and adventure at Houston's #1 attraction.

Six different major activities open on to an immense five-story Plaza, which is the focal point for a variety of ever changing exhibits. Large format space films in the "Mazda – Space Center Theater". See actual space suits from the many years in the "Astronaut Gallery". Learn more about life on the International Space Station in "Living in Space". Investigate the various levels of the Space Shuttle inside an actual space shuttle mockup. Feel the force of a Space Shuttle launch and learn more about NASA and the space program in the "AAA –Texas Mission Status Center". Touch an actual moon rock or walk inside the Skylab Trainer in the "Destiny Theater and Starship Gallery". Also "behind the scenes" tram tours of NASA's Johnson Space Center including the historic Apollo era Mission Control and the astronaut training facilities.

We will depart from the hotel at 4:00 pm and arrive at the Space Center approximately 5:00 pm. A Texas barbeque buffet dinner will be served in the Astronaut Gallery at approximately 7:45 pm. Snacks and beverages will be available earlier in the evening. Buses will depart from the Space Center beginning at 9:00 pm returning to the Westin by 10:00 pm.

### **Virtual Tour**

## **Microsoft Virtual Earth**




## **Enabling Data Access, Visualization, Analysis and Insight**


**(Wednesday 1:30 PM to 3:00 PM)**

Government agencies are challenged to provide an ever-expanding palette of services to their constituents while making critical decisions in a complex world. Microsoft Virtual Earth is a robust platform for building cost-effective, flexible and accurate spatial solutions that disseminate data quickly, streamline processes, and improve users' decision making and response time. This session will demonstrate how to extend ESRI investments and will include real world Public Sector solutions built on the Virtual Earth platform.

# CONCURRENT SESSION 1

1:30 PM MONDAY, MARCH 17

<b>1.1 State of Texas</b>			
Moderator:			
	1.1.1	From Space to Database at the Speed of Light	James Johnson Texas DOT Austin, TX
			Andre Fuegner Texas DOT
	1.1.2	Enterprise Information Integration: Many Small Steps for One Giant Leap	Jim Patterson Texas DOT Austin, TX
	1.1.3	Managing TxDOT Highway Improvement Projects in a Web-based GIS Environment	Nicholas Koncz Texas Transportation Institute San Antonio, TX
			Cesar Quiroga
<b>1.2 Student Paper Contest</b>			
Moderator:			
	1.2.1	Winners To Be Announced	
	1.2.2	Winners To Be Announced	
	1.2.3	Winners To Be Announced	
<b>1.3 GIS Planning</b>			
Moderator:			
	1.3.1	VDOT Strategic Planning -Revisiting the Mission	Lowell Ballard Timmons Group Richmond, VA
			Melaine Seigler Virginia DOT
	1.3.2	Using GIS for Pedestrian and Bicycle Planning	Kirk Weaver Michael Baker Jr., Inc. Princeton, NJ
	1.3.3	Bicycle Level of Service-The first GIS Decision Support System in Maryland DOT	Kaushik Dutta Maryland State Highway Administration Baltimore, MD
<b>1.4 Mobile GIS</b>			
Moderator:			
	1.4.1	Benefits of Spatially-enabled Mobile Workforce Management to the Transportation Enterprise	Bruce Aquila Intergraph Corp. Huntsville, AL
	1.4.2	Mapping Utilities with Mobile GIS Applications	Kristy M. Capobianco Reynolds, Smith and Hills, Inc. (RS&H) Jacksonville, FL
	1.4.3	The Application of Mobile Mapping Technology and AVI Video Log Assets For Government Data Collection Projects	Doug Von Koenig Tele Atlas Lebanon, NH

The  symbol indicates a session from Texas, the Host State.

# CONCURRENT SESSION 2

3:30 PM MONDAY, MARCH 17

<b>2.1 Google Earth Applications</b>		
Moderator:		
2.1.1	How Iowa DOT use Google Earth and Maps	Eric Abrams Iowa DOT Ames, IA
2.1.2	Exposing Manitoba Highway Conditions in Google Earth	Shawn Cruise Manitoba Infrastructure and Transportation Winnipeg, Manitoba
2.1.3	GRIP Goes Google	Jay Adams Oklahoma DOT Oklahoma City, OK
		Jesse Jay GeoDecisions
<b>2.2 Enterprise GIS</b>		
Moderator:		
2.2.1	Washington DOT-Spatial growing pains in a dynamic Enterprise environment	Shawn Blaesing-Thompson Washington State DOT Olympia, WA
2.2.2	Florida DOT Enterprise GIS – Establishing a Business Case	Jared Causseaux Florida DOT Tallahassee, FL
		Tejaswi Tharakabhushanam Cambridge Systematics
2.2.3	Enterprise GIS Transportation Solutions for the Navajo Nation	Bryan McFadden Data Transfer Solutions Charlotte, NC
<b>2.3 ITS / GIS</b>		
Moderator:		
2.3.1	GIS Lane Closure Management Application	Mike Pordes Patrick Engineering, Inc. Chicago, IL
2.3.2	Traffic Management Centers; The Confluence of ITS and GIS	Wayne Spaulding GeoDecisions Philadelphia, PA
		Connie Gurchiek GeoDecisions
2.3.3	GIS and ITS for Integrated Corridor Management	Yushuang Zhou Cambridge Systematics Oakland, CA
<b>2.4 LRS / LRM</b>		
Moderator:		
2.4.1	Data Maintenance of a multi-level LRS as practiced in the Geo Trans data model	Phil Hardy Intergraph Corp. Mission Viejo, CA
2.4.2	GIS Maintenance Tools to Support a Multi-Year Linear Reference Network used for Transportation Planning	Brian Hoeschen Jacobs Carter & Burgess Denver, CO
		Lavanya Vallabhaneni Maricopa Assoc. of Gov.
2.4.3	Implementing the Canadian National Road Network linear referencing data model at New Brunswick DOT	Marc Kratzschmar Exor Corp San Diego, CA
		Pablo Romero New Brunswick DOT




# CONCURRENT SESSION 3


10:30 AM TUESDAY, MARCH 18

<b>3.1 Enterprise Data</b>			
	Moderator:		
3.1.1	The Pennsylvania Turnpike Commission's Executive Information System: A True Geospatial Information Management System	James E Vitale W.E.C. Engineers, Inc. Bridgeville, PA	
3.1.2	Breaking down the silos (Location, Location, Location)	Cindy Owings Maine DOT Augusta, ME	
3.1.3	Improving National Transportation Geospatial Information	Reginald R. Souleyrette Iowa State University Ames, IA	
<b>3.2 Web GIS</b>			
	Moderator:		
3.2.1	GIS 2.0:Web 2.0 Meets GIS	Mark Alexander ISC Tallahassee, FL	
3.2.2	Web Portals for Sharing and Integrating GIS Data (WA-Trans One-Road Pilot)	Michael Leierer Washington State DOT Olympia, WA	
3.2.3	Using Enterprise Data to Support Oversize Vehicle Permitting	Kevin Hunt New York State DOT Albany, NY	
<b>3.3 Federal GIS</b>			
	Moderator:		
3.3.1	What's going on at FRA?	Raquel Wright USDOT/Federal Railroad Administration (FRA) Washington, DC	
3.3.2	Latest Efforts in updating the Census Transportation Planning Package (CTPP)	Mark Bradford US DOT Bureau of Transportation Statistics Washington, DC	
3.3.3	How Freight Moves: Estimating Mileage and Routes Using an Innovative GIS Tool	Steve Lewis USDOT / BTS Washington, DC	Felix Ammah-Tagoe E-Ternational Research
<b>3.4 Safety</b>			
	Moderator:		
3.4.1	Using GIS for Analyze Crash Data in the I-95 Corridor	Bruce Spear Cambridge Systematics Bethesda, MD	
3.4.2	Improving Work Zone Traffic Analysis with GIS – the Development of an Enterprise Application at the Oregon Department of Transportation	Robert Kirkman HDR Engineering, Inc Salem, OR	
3.4.3	A Crash Mapping and Analysis Application	Feng Lu PB Americas Inc. New York, NY	Michael Briggs Mid-America Regional Council

# CONCURRENT SESSION 4


1:30 PM TUESDAY, MARCH 18


<b>4.1 GIS Data Sharing</b>			
Moderator:			
4.1.1	Roadway Network System (RNS)	Russell Minich Timmons Group Richmond, VA	Melanie Seigler Virginia DOT
4.1.2	Developing and Implementing a project requiring collaboration to succeed	Tami Griffin Washington State DOT Olympia, WA	
4.1.3	Ohio's Linear Based Referencing System, a true State and Local Government Partnership	Joseph Hausman The Ohio DOT Columbus, OH	Ron Cramer & Mark Wilcoxon Digital Data Technologies
<b>4.2 GIS / CADD Integration</b>			
Moderator:			
4.2.1	From GIS data to CAD graphics-Iowa DOT's workflow utilizing GeoMedia and MicroStation to develop map products	Nick Meurer Iowa DOT Ames, IA	Mark Hanson Iowa DOT
4.2.2	Integrating / Extracting Geospatial Data in a Stereo Base Map Environment for Transportation Corridors	John E. Matthews HSA Consulting Group, Inc. Tallahassee, FL	
 4.2.3	CAD/GIS Integration-How to make them fit	Vince Hamilton Michael Baker Jr. Inc. Houston, TX	
<b>4.3 Imaging</b>			
Moderator:			
 4.3.1	Trials and Tribulations of Completing the World's Largest Orthophotography Project	Brad Adams Bohannon Huston, Inc. Garland, TX	Mark Eder TxDOT Dallas District
4.3.2	Fusing LiDAR and Imagery: Providing effective solutions for Ohio's Transportation Infrastructure	Brian Stevens Woolpert, Inc. Dayton, OH	Dave Blackstone The Ohio DOT
4.3.3	The PA Map Program - Ortho and Lidar	Dr. Jay Parrish Dept of Conservation & Natural Resources Harrisburg, PA	Frank Desendi - PennDOT
<b>4.4 GIS Planning</b>			
Moderator:			
4.4.1	Emergency Evacuation Plans; Timelines- Why you need Them and Why They Don't Work	James E. Mitchell Louisiana DOTD Baton Rouge, LA	
4.4.2	Florida DOT's Strategic Investment Tool	Greg Yarbrough Wilbur Smith Associates Columbia, SC	Ed Hutchinson Florida DOT
 4.4.3	TxDOT's Statewide Planning Map	Michael Chamberlain Texas DOT Austin, TX	

The  symbol indicates a session from Texas, the Host State.

# CONCURRENT SESSION 5



8:30 AM WEDNESDAY, MARCH 19


5.1 Management Systems			
Moderator:			
5.1.1	Measuring and GIS-referencing of Network-level Pavement Deterioration in Post-Katrina Louisiana	Debbie Burns Roadware Group, Inc. Paris, ON	Jason Trotter Roadware Group, Inc.
5.1.2	A Pavement Management System for Pitkin County, CO	Jason Amadori Data Transfer Solutions Orlando, FL	
5.1.3	The Navajo County Integrated Information System	Stephanie Guzon Terra Genesis, Inc. Chandler, AZ	Max M Wyman Terra Genesis, Inc.
5.2 Data Collection			
Moderator:			
 5.2.1	Efficient Collection of Pavement Distress Data in an Urban Environment, A Case Study	Daryl Scott Public Works & Transp. City of Dallas Dallas, TX	Jason Dong Enterprise Information Solutions, Inc.
5.2.2	Data Acquisition For Better Roads -- Best Practices & New Technologies	John Auble Tele Atlas North America Inc. Lebanon, NH	
5.2.3	Alaska DOT&PF Photolog/GPS Data Collection – Year 2	Larry Mattke Mandli Communications, Inc Madison, WI	Kerry Kirkpatrick Alaska DOT&PF
5.3 Right-of-Way GIS			
Moderator:			
5.3.1	Nevada DOT's Integrated Right-of-Way Information Network (IRWIN)	Eric Warmath Nevada DOT Carson City, NV	Lania Rivamonte Smart Data Strategies
5.3.2	Right-of-Way and Real Property Intelligence: Sustainable Enterprise Solutions for Transportation Agencies and beyond.	Pierre le Roux Intergraph Corporation Huntsville, AL	
5.3.3	Managing Transportation Real Estate and ROW using GIS	Matt von Wahlde Geonetics Boston, MA	
5.4 Routing			
Moderator:			
5.4.1	Case Study - Ohio Franklin County Engineer's Snow Plow Routing Project	Howard Luxjho Transmap Columbus, OH	
5.4.2	Towards Secure Transportation Corridors: A GIS-based Framework for Knowledge Discovery	Auroop R Ganguly Oak Ridge National Laboratory Oak Ridge, TN	
5.4.3	Development of Diversion Routes for Interstate Highways in the Baton Rouge Area	John Wells Louisiana DOTD Baton Rouge, LA	Glen Graham G.E.C., Inc.

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# CONCURRENT SESSION 6

10:30 AM WEDNESDAY, MARCH 19

<b>6.1 Data Management</b>		
Moderator:		
6.1.1	Preserving the Past	Al Butler MilePost Zero Orlando, FL
6.1.2	INCOG Transportation Planning Department Spatial Data Management Workflow	Kevin Tartar Indian Nations Council of Governments Tulsa, OK
6.1.3	Making the Leap-Left Brain, Right Brain-Meeting the Data Needs of All of Your Customers	Drew Davis Larimer County Road and Bridge Department Fort Collins, CO
	Russell Page Exor Corporation	
<b>6.2 LRS / LRM</b>		
Moderator:		
6.2.1	Montana Department of Transportation (MDT) Location/Linear Referencing System (LLRS) Design Process	Marlin Sanders Montana DOT Helena, MT
		Bill Schuman GeoDecisions
6.2.2	How Iowa DOT is using it's Linear Referencing System	Eric Abrams Iowa DOT Ames, IA
6.2.3	Illinois Tollway LRS Implementation Strategy	Brian Fee Patrick Engineering, Inc Chicago, IL
		Scott Lueck PB Americas
<b>6.3 Database Design</b>		
Moderator:		
6.3.1	Geodatabase Design Considerations for Linear Assets in Roads Asset Management System	Ali Roshannejad City of Calgary Calgary, Alberta
6.3.2	Translating Disparate GIS data to and from a Standardized GIS database: A Case Study	Michael Leierer Washington State DOT Olympia, WA
6.3.3	Develop a Functional Class Geodatabase: Integrate Legacy Transportation Database with GIS Network	Hong Yu Cambridge Systematics Inc. Oakland, CA
		Kathleen Ramage Alaska DOT and Public Facilities
<b>6.4 Local Government GIS</b>		
Moderator:		
6.4.1	Building a GIS Fanbase	Gwen Ford City of High Point DOT High Point, N.C.
	6.4.2 Planning Programs at the Houston MPO	Suhag Kansara Houston-Galveston Area Council MPO Houston, TX
		Ernie Ott Citilabs
	6.4.3 Analysis and Integration of Spatial Data Used for Long-Range Transportation Planning Activities	Cesar Quiroga Texas Transportation Institute San Antonio, TX
		Nicholas Koncz

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# GIS-T Participant Registration Form

Please use our easy On-line Registration at:  
<http://www.gis-t.org>, available on 1/2/2008

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: \_\_\_\_\_

FEES	Before/on 2/22/08	After 2/22/08	Total
GIS-T 2008 Symposium <sup>1</sup>	\$275	\$325	\$
GIS-T 2008 Workshops <sup>2</sup>	\$150	\$175	\$
Student - Symposium <sup>3</sup> & Workshops	\$100	\$125	\$
One Day-Symposium <sup>4</sup> <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed	\$150	\$175	\$
<b>AMOUNT ENCLOSED</b>			\$

**Note on Fees**

1. Does not include workshop fees.
2. Workshop fee covers entire day (Sunday, March 16, 2008) and includes 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 Tuesday 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 Tuesday 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"/> Bringing GPS Into Perspective - A Workshop for GIS Managers and Practitioners	<input type="checkbox"/> Requirements for a State-wide 3D, Real-time Positioning Infrastructure to Support Transportation Systems
<input type="checkbox"/> A Six-Pack of Avoidable, Seemingly Difficult, Major RFP Problems and Their Simple Solutions	<input type="checkbox"/> Enterprise Information Integration
<input type="checkbox"/> 3D Geospatial for Transportation: Best Practices and Project Implementation Methods	<input type="checkbox"/> Microsoft Virtual Earth – In Depth
<input type="checkbox"/> Multi-Level Linear Referencing Systems (MLLRs) Maintenance for State Transportation Databases	<input type="checkbox"/> Introduction to GIS Web Services

**CHECK IN WILL BEGIN ON SATURDAY, March 15, FROM 3-6 PM FOR EARLY ARRIVALS and CONTINUES THROUGHOUT THE SYMPOSIUM**

**Please check one:**

Polo Shirt  XSmall  Small  Medium  Large  XLarge  XXL

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

# Guest(s) Registration Form

Please use our easy On-line Registration at:  
<http://www.gis-t.org>, available on 1/2/2008  
 This registration is for Guest(s) of Symposium Participants

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

**ADULT GUEST REGISTRATION**

Adult Guest Name ( Mr.  Ms.) \_\_\_\_\_  
First Last

Address \_\_\_\_\_  
Street City State ZIP

Business Name \_\_\_\_\_

Business Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail: \_\_\_\_\_

Fee includes Social on Tuesday night, Day trips on Monday and Tuesday and Continental breakfast each morning. Lunch will be provided on the Tuesday day 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* \$
--

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

**Please check one:**

Polo Shirt  XSmall  Small  Medium  Large  XLarge  XXLarge

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



# Houston, Texas – Lodging and Logistics

## **Hotel Accommodations**

THE WESTIN GALLERIA & WESTIN OAKS  
5060 West Alabama  
P. O. Box 4487  
Houston, Texas 77056  
Hotel: (713) 960-8100  
Fax: (713) 960-6502

GIS-T conference rate:

Single: \$105.00 + tax

Double: \$105.00 + tax

Guaranteed until February 14, 2008

Contact the hotel directly to request GIS-T rate

<http://www.starwoodmeeting.com/StarGroupsWeb/res?id=0705307357&key=2487C>

## **Airport Information**

Houston is serviced by two major airports.

**George H. Bush Intercontinental Airport** is approximately 27.4 miles from the hotel.

**William P. Hobby Airport** is approximately 16.5 miles from the hotel.

## **Shuttle Services**

**SuperShuttle Houston** provides airport shuttle service to and from the Westin Galleria Hotel and George H. Bush Intercontinental Airport. Service is also provided to and from William P. Hobby Airport.

<http://www.supershuttle.com>

## **Other Local Links**

Greater Houston Convention and Visitors Bureau: <http://www.visithoustontexas.com>

Houston Livestock Show and Rodeo: <http://www.rodeohouston.com>

Space Center Houston: <http://www.spacecenter.org/>

Houston Museum of Natural Science: <http://www.hmns.org>

Galleria Mall: <http://www.simon.com/mall/default.aspx?ID=805>

# GIS in Transportation Symposium 2008



Houston, Texas - March 17 - 19  
21st Annual

## GIS-T Symposium Affiliates

American Society for Photogrammetry and Remote Sensing  
Association of Metropolitan Planning Organizations  
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National Association of Regional Councils  
Transportation Research Board  
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- Federal Highway Administration
- Federal Transit Administration
- Research & Innovative Technology Administration

Urban and Regional Information Systems Association

GIS-T 2008

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