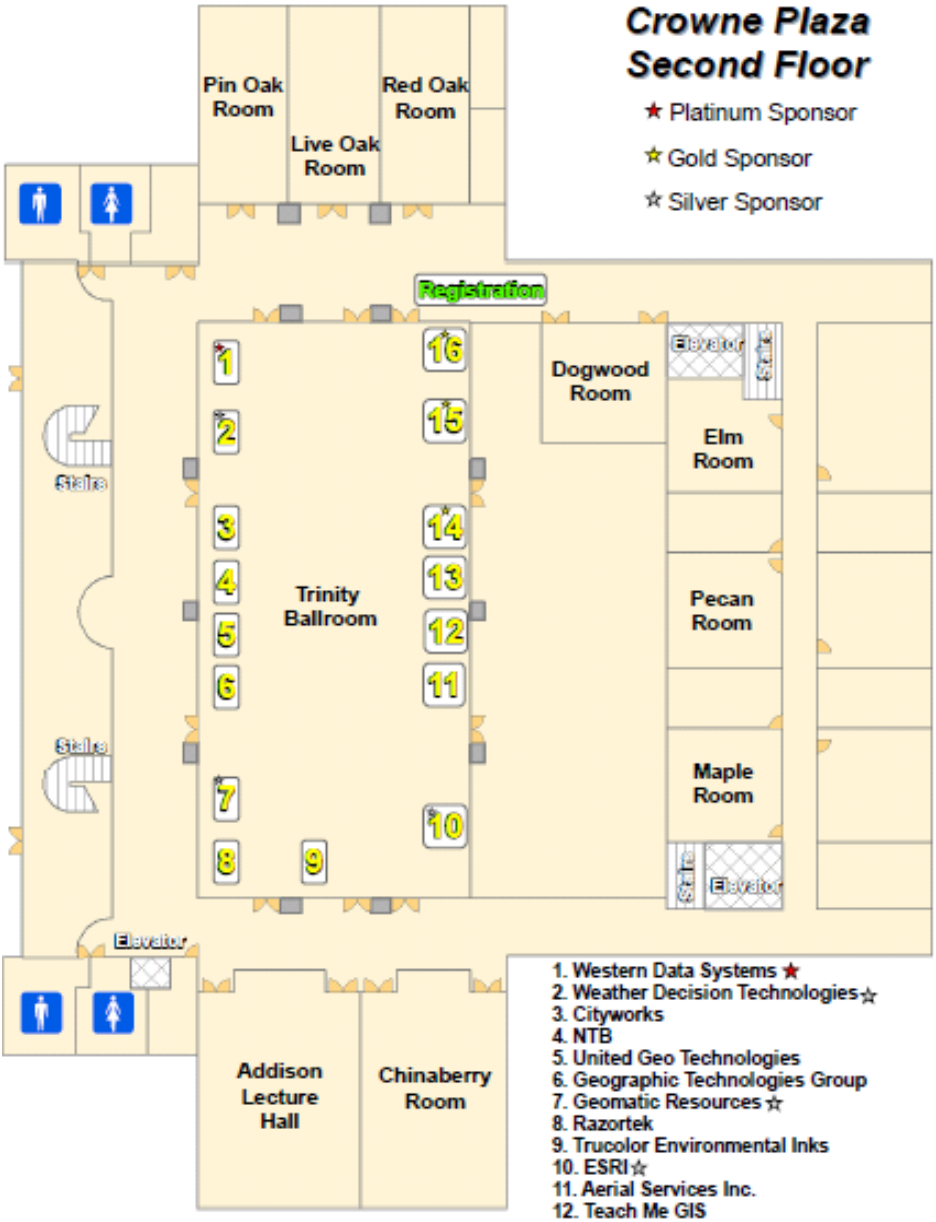
ADDISON

SCAUG 2013 ~ APRIL 8 - 12

VENDOR HALL LAYOUT



1. Western Data Systems ★
2. Weather Decision Technologies ☆
3. Cityworks
4. NTB
5. United Geo Technologies
6. Geographic Technologies Group
7. Geomatic Resources ☆
8. Razortek
9. Trucolor Environmental Inks
10. ESRI ☆
11. Aerial Services Inc.
12. Teach Me GIS
13. EnerGov
14. Surdex ☆
15. CDM Smith ☆
16. Latitude Geographics Group Ltd. ☆

Please take a moment to thank the vendors for their interest & contributions to SCAUG over the years.

TABLE OF CONTENTS

Vendor Hall Layout	**Front Inside Cover**
Presidential Address	**1**
Old Meets New SCAUG Mascot	**2**
SCAUG Officers	**3**
General Agenda	**4**
Training Classes	**6**
Directions to Brookhaven College	**7**
Training Workshops	**8**
Save the Date	**9**
Events Summary	**10**
Vendor Sponsorships	**11**
Esri Lightening Talks	**12**
ESRI Technical Session Schedule & Abstracts	**13**
Founders & Thumbs Up Awards Winners	**15**
Contributor Recognitions	**16**
User Presentation Session Schedule & Abstracts	**17**
Map Gallery Abstracts	**25**
Vendor Biographies	**27**
GISP Checklist	**38**

PRESIDENTIAL ADDRESS

Welcome to the 23d Annual Regional SCAUG Conference in Addison, Texas. The DFW region has long been a leader in technology and a stronghold of SCAUG. Whether you traveled a long distance to come to the conference or you left home this morning to arrive here only a few minutes later we appreciate the diversity you bring to the group and thank you for your personal investment in SCAUG. In a society that promotes the disconnect of personal services SCAUG brings a personal touch to an otherwise technical profession.

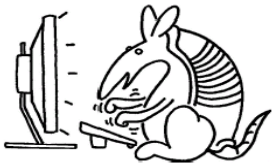
During the past year SCAUG has continued to strive to bring more professional resources to the users in the region. Many of you have benefitted directly from meetings, increased training opportunities, conferences, job postings, scholarships and other resources SCAUG provides. SCAUG is also compiling historical information and posting it online to assist with professional certification as well as document the rich history that SCAUG has enjoyed. When you look at the major events in the SCAUG region over the past 20 years chances are good that a SCAUG member has played a key role in the event. Our profession may be a small portion of the population but it provides an essential function that today's society cannot function without.

Look back over the past 20+ years regarding GIS and see how much the field has changed. GIS in mainstream industries as a thriving profession was almost unheard of in years past. How many of you had to re-write your own job descriptions in recent years to define what you have come to count as your normal workflow that did not exist when you were hired? Technology that was only a dream 10 years ago is now a free downloadable app without any interaction with a single person. While this convenience is definitely needed the importance of knowing specific individuals in your profession most definitely cannot be replaced. It is truly an immeasurable resource to be able to contact a friendly coworker in another state just as easy as across the hall for advice. This resource of personal investment in individuals should be one of your primary goals over the next few days.

Sincerely,
Charles Brady III, GISP
SCAUG President

OLD MEETS NEW SCAUG MASCOT

"TUG the Arcadillo"
Circa 1990



"TUG the Arcadillo"
Circa 2013

In 1990 "TUG the Arcadillo" started GISing the region with the Texas ARC/INFO User Group

How we store our geographic data has changed from coverage to shapefile to geodatabase

What geographic technology we utilize has changed from ARC/INFO to ArcView to ArcGIS

Where we gather to share and learn geographic technology has changed over the years

YEAR	LOCATION	YEAR	LOCATION
1990	College Station, Texas	2002	Fort Worth, Texas
1991	Denton, Texas	2003	Oklahoma City, Oklahoma
1992	San Antonio, Texas	2004	Irving, Texas
1993	Houston, Texas	2005	San Antonio, Texas
1994	Corpus Christi, Texas	2006	Fort Worth, Texas
1995	Dallas, Texas	2007	New Orleans, Louisiana
1996	Austin, Texas	2008	Corpus Christi, Texas
1997	San Antonio, Texas	2009	Austin, Texas
1998	NO CONFERENCE	2010	Fort Worth, Texas
1999	Fort Worth, Texas	2011	San Antonio, Texas
2000	San Antonio, Texas	2012	McAllen, Texas
2001	San Antonio, Texas	2013	Addison, Texas

"TUG the Arcadillo"
GISing the SCAUG Region Since 1990

SCAUG OFFICERS

President: Charles Brady III, GISP
City of Ardmore, Oklahoma

Vice President: Shellie Willoughby, GISP
Oklahoma Office of Geographic Information, Oklahoma City, Oklahoma

Treasurer: James Allen
Carter County, Oklahoma

Secretary: Katy Rich
Access Midstream, Oklahoma City, Oklahoma

Past President: Joe Chapa, GISP
Principal Meridian Consulting, San Antonio, Texas

Conference Coordinator: Betsi Chatham, GISP
City of Fort Worth, Texas

Conference Coordinator Elect: Lydia Sauceda, GISP
CPS Energy, San Antonio, Texas

North Texas Representative: Anne Mackey, GISP
Tarrant County Transportation, Texas

South Texas Representative: Kari Prell
Quantum Resources Management, LLC, Houston, Texas

Louisiana Representative: Shane Diaz
MSD GIS Services, Apple Springs, Texas

Mississippi Representative: Lauralee Gann
Everything is Somewhere, LLC., Sardis, Mississippi

Oklahoma State Representative: Darryl Williams
U.S. Geological Survey, Oklahoma City, Oklahoma

ESRI Representative: Karen Lizcano
ESRI - San Antonio, Texas

GENERAL AGENDA

	Monday, April 8th	
TIME	**EVENT**	**PLACE**
7:30 - 8:00	Shuttle To Brookhaven College	Crowne Plaza Lobby
7:30 - 8:30	Registration	Brookhaven College & Crowne Plaza
8:30 - 5:00	Migrating to ArcGIS 10.1 for Server	Brookhaven College H105
8:30 - 5:00	ArcGIS Desktop III: Performing Analysis	Brookhaven College H112
8:30 - 5:00	Python Scripting in ArcGIS	Brookhaven College H113
8:30 - 5:00	ArcGIS for Server: Sharing GIS Content on the Web	Crowne Plaza Dogwood
11:30 - 1:00	Lunch On Your Own	
5:00 - 5:30	Shuttle To Crowne Plaza	Brookhaven College
	Tuesday, April 9th	
TIME	**EVENT**	**PLACE**
7:30 - 8:00	Shuttle To Brookhaven College	Crowne Plaza Lobby
7:30 - 8:30	Registration	Brookhaven College
8:30 - 5:00	Migrating to ArcGIS 10.1 for Server	Brookhaven College H105
8:30 - 5:00	ArcGIS Desktop III: Performing Analysis	Brookhaven College H112
8:30 - 5:00	Editing in ArcGIS 10.1	Brookhaven College H113
8:30 - 5:00	ArcGIS for Server: Sharing GIS Content on the Web	Crowne Plaza Dogwood
11:30 - 1:00	Lunch On Your Own	
5:00 - 5:30	Shuttle To Crowne Plaza	Brookhaven College
5:30 - 7:00	Registration	Crowne Plaza Whispering Oaks
6:00 - 8:00	Meet & Greet	Crowne Plaza Whispering Oaks

With your conference badge receive 20% off Lunch Buffet at Crowne Plaza's

In-house Restaurant

GENERAL AGENDA

	Wednesday, April 10th	
TIME	**EVENT**	**CROWNE PLAZA**
7:30 - 8:30	Breakfast Buffet	Trinity Ballroom
7:30 - 5:00	Registration	Gallery
9:00 - 10:15	SCAUG Business	Trinity Ballroom
10:15 - 10:30	Morning Break	
10:30 - 11:30	ESRI Plenary	Trinity Ballroom
11:30 - 1:30	Lunch on Your Own	
1:30 - 2:30	Esri Technical Session I	2nd Floor
2:45 - 3:45	Esri Technical Session II	2nd Floor
4:00 - 5:00	Esri Technical Session III	2nd Floor
	Thursday, April 11th	
TIME	**EVENT**	**CROWNE PLAZA**
8:00 - 9:30	Continental Breakfast	Trinity Ballroom
7:30 - 12:00	Registration	Gallery
8:00 - 4:00	Vendor Hall	Trinity Ballroom
8:00 - 3:00	Map Gallery	Trinity Ballroom
8:00 - 9:15	Vendor Visit	Trinity Ballroom
9:15 - 10:15	Session Track I	2nd Floor
10:30 - 11:30	Session Track II	2nd Floor
11:30 - 1:00	Vendor Networking Lunch	Trinity Ballroom
1:00 - 2:00	Session Track III	2nd Floor
2:15 - 3:15	Session Track IV	2nd Floor
3:15 - 4:00	Vendor Visit	Trinity Ballroom
3:30 - 4:00	Vendor Ticket Prizes & Map Gallery Awards	Trinity Ballroom
	Friday, April 12th	
TIME	**EVENT**	**CROWNE PLAZA**
8:30 - 12:00	The GISCI Certification Program Application Support	Red Oak
8:30 - 12:00	Lost in LiDAR	Live Oak
8:30 - 12:00	GPS Field Skills through Geocaching	Pin Oak

TRAINING CLASSES

MONDAY, APRIL 8th 8:30am to 5:00pm
H105 at Brookhaven College
Migrating to ArcGIS 10.1 for Server

H112 at Brookhaven College
ArcGIS III: Performing Analysis

H113 at Brookhaven College
Python Scripting in ArcGIS

Dogwood at Crowne Plaza
ArcGIS for Server: Sharing GIS Content on the Web

TUESDAY, APRIL 9th 8:30am to 5:00pm
H105 at Brookhaven College
Migrating to ArcGIS 10.1 for Server

H112 at Brookhaven College
ArcGIS III: Performing Analysis

H113 at Brookhaven College
Editing in ArcGIS in 10 & 10.1

Dogwood at Crowne Plaza
ArcGIS for Server: Sharing GIS Content on the Web

Shuttle Service to Brookhaven College
Shuttle Service to Brookhaven College will depart from the Crowne Plaza Hotel between 7:30am and 8:00am. Please meet in the Crowne Plaza Hotel Lobby. Shuttle Service back to the Crowne Plaza Hotel will depart from Broookhaven College at 5:00pm.

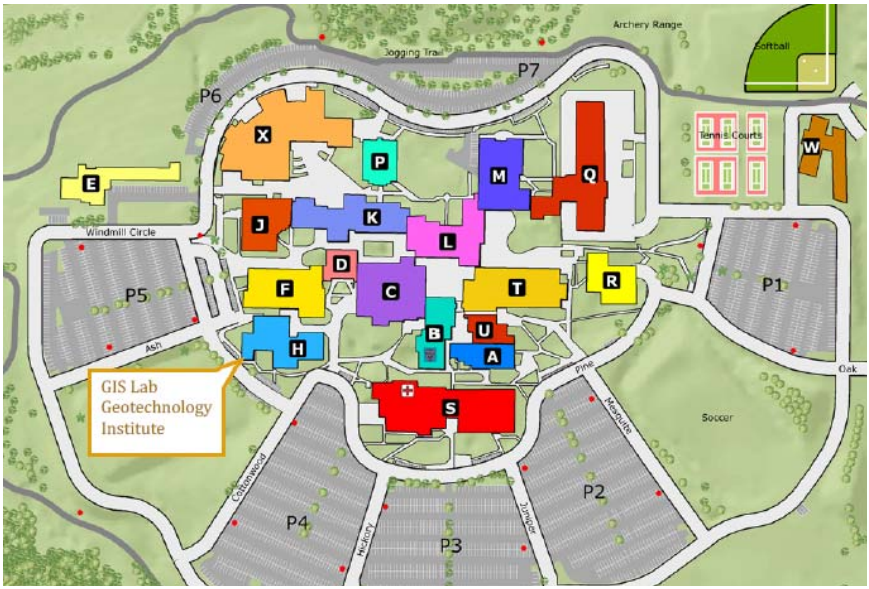
Directions to Brookhaven College
Please refer to page 7.

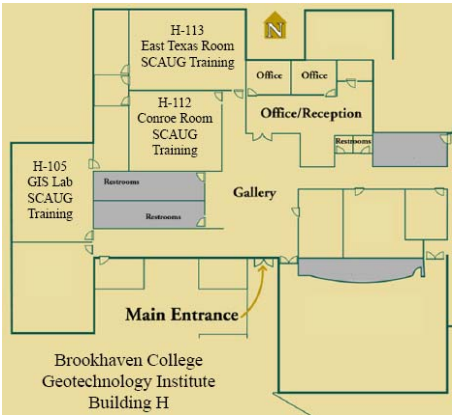
Crowne Plaza Training Class
The Crowne Plaza Training Class is located in Dogwood which is located on the 2nd Floor on the southside of the hotel just east of the elevators. Please refer to page 8.

DIRECTIONS TO BROOKHAVEN COLLEGE

Brookhaven College Geotechnology Institute
Building H
3939 Valley View Lane
Farmers Branch, Dallas, TX 75244-4997

From the Crowne Plaza take a RIGHT on Midway Road, pass Spring Valley, and then take a RIGHT on Alpha Road. Alpha Road steers south, and then steers back west, and then turns into Valley View Lane. Brookhaven entrances begin on south side of campus, enter and **PARK in P4**.





PARK IN LOT P4 FOR FREE

TRAINING WORKSHOPS

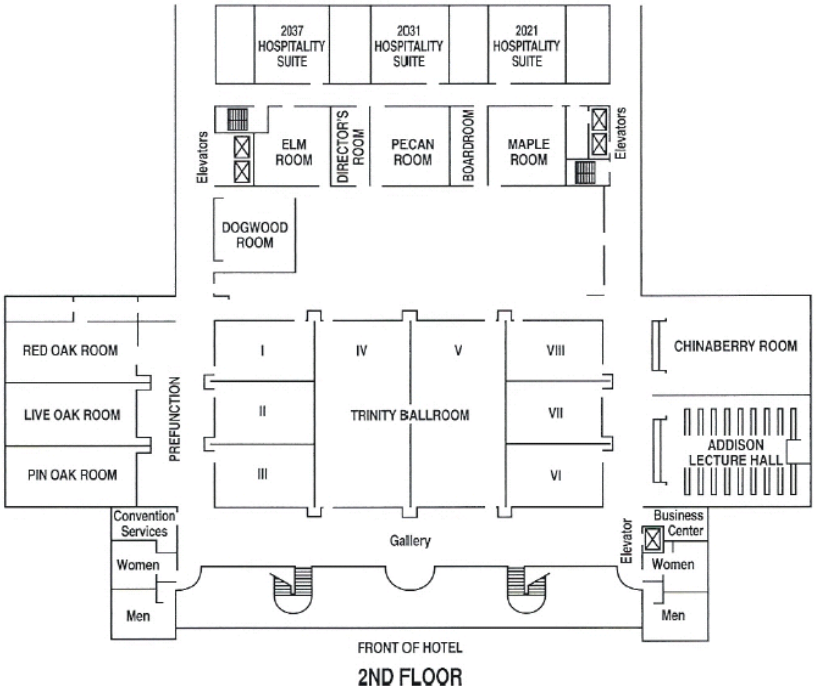
FRIDAY, APRIL 12th 8:30am to 12:00pm
RED OAK
The GISCI Certification Program Application Support

LIVE OAK
Lost in LiDAR

PIN OAK
GPS Field Skills through Geocaching

Half-Day Training Workshops
Take advantage of one of three half-day workshops for only $50! Check out class availability at the Registration Desk.

CROWNE PLAZA MEETING SPACE FLOORPLAN



SAVE THE DATE

ESRI International User Conference
July 8th – 12th, 2013
San Diego, California

16th Annual Oklahoma South Central Arc User Group Conference
September 24th, 2013
Oklahoma City, Oklahoma

24th Annual South Central Arc User Group Conference
March 10th – 14th, 2014
Woodlands, Texas

Special thanks to the following agencies for allowing their employees to volunteer to serve on the SCAUG Board:

Access Midstream
Carter County, Oklahoma
City of Ardmore
City of Fort Worth
CPS Energy
ESRI
Everything is Somewhere, LLC. (EIS~GIS)
Oklahoma Office of Geographic Information
MSD GIS Services
Principal Meridian Consulting
Quantum Resources Management, LLC
Tarrant County
U.S. Geological Survey

EVENTS SUMMARY

Meet & Greet at Crowne Plaza Whispering Oaks Room
Tuesday, April 9th 6:00pm - 8:00pm

Start your conference week off by attending the Meet & Greet at the Crowne Plaza. Catch up with the old and meet the new over drinks and finger foods.

Opening Breakfast & ESRI Plenary in Trinity Ballroom
Wednesday, April 10th 7:30am - 11:30am

The official kickoff of the conference includes annual SCAUG business items: conference materials and agenda, Founders and Thumbs Up Awards, announcement of 2013-2014 SCAUG Officers and 2014 conference details. Following these business items Esri staff will host the plenary with a presentation highlighting new and upcoming technologies from Esri.

Vendor Hall in Trinity Ballroom
Thursday, April 11th 8:00am - 4:00pm

The conference schedule has special Vendor Visit Times throughout the day to accommodate more one-on-one time to see the innovative technologies and solutions our vendors have to offer. Inside your conference name badge you should find two tickets that can be placed in any of the Vendor Ticket Prize Drawings. Be sure to visit vendors for extra tickets to submit, which gives you a better chance of winning a prize. Winners can only win one prize! Remember to place your name and phone number on tickets to claim your prize. Must be present to win!!! Prizes and submittal boxes will be showcased at Registration until 3:30pm.

Map Gallery in Trinity Ballroom
Thursday, April 11th 8:00am - 2:00pm

Your colleagues have taken research and analysis and put them on the map! The Map Gallery provides a visual sense of the power of geospatial technology. Between sessions walk through the Map Gallery to see many of our colleagues' projects. Don't forget to cast your ballot at Registration for the Map Gallery no later than 2:00pm.

Vendor Networking Lunch in Ballroom
Thursday, April 11th 11:30am - 1:00pm

Meet in the Vendor Hall for lunch, networking and good conversation.

Vendor Ticket Prizes & Map Gallery Awards in Trinity Ballroom
Thursday, April 11th 3:30pm - 4:00pm

Be sure to stay and congratulate the winners of the Vendor Ticket Prizes and Map Gallery. You might be one of the lucky winners yourself!!!

Half-Day Workshops
Friday, April 12th 8:30am – 12:00pm

Take advantage of one of three half-day workshops for only $50! Check out class descriptions and availability at Registration. Half-day workshops are listed on page 8.

VENDOR SPONSORSHIPS

PLATINUM

GOLD

SILVER

Weather Decision Technologies, Inc.

ESRI LIGHTENING TALKS

Thursday, April 11th
ESRI Booth in Vendor Hall

We'll be delivering the following short presentations; join us and learn how Esri can help you and your organization accomplish your goals.

Time	Topic
8:30 – 8:45am	Maps for Office
9:00 – 9:15am	Land Records
9:30 – 9:45am	City Engine
10:00 – 10:15am	Community Analyst
10:30 – 10:45am	Managing Content in AGO
11:00 – 11:15am	Staff Development Planning
11:30 – 11:45am	Training Options
12:00 – 12:30pm	Story Maps
1:00 – 1:15pm	Community Base Maps
1:30 – 1:45pm	Dashboard/Collector App
2:00 – 2:15pm	ArcGIS Online Application Templates
2:30 – 3:00pm	City Engine
3:00 – 3:15pm	ArcGIS on your smart phone
3:30 – 3:45pm	Dashboard/Collector App

				11
1				5
		1	5	20
	2	2		20
		4		19
24	15	7	18	11

MATHEMATICAL MIND PUZZLE

Try to fill in the missing numbers.

The missing numbers are integers between 0 and 9.

The numbers in each row add up to totals to the right.

The numbers in each column add up to the totals along the bottom.

The diagonal lines also add up to totals on the right.

ESRI TECHNICAL SESSION SCHEDULE

Wednesday, April 10th

RED OAK		
Session Track I 1:30pm - 2:30pm	**Session Track II 2:45pm - 3:45pm**	**Session Track III 4:00pm - 5:00pm**
Geography as a Platform Gary Scoffield	**Building Your Geospatial Platform** Karen Lizcano	**Creating & Sharing GEOInformation Products** Karen Lizcano

LIVE OAK		
Session Track I 1:30pm - 2:30pm	**Session Track II 2:45pm - 3:45pm**	**Session Track III 4:00pm - 5:00pm**
ArcGIS in Water Utilities Mark Robbins	**Spatial Analysis** Brig Bowles	**Maximizing Your Imagery & LIDAR Data** Brig Bowles

PIN OAK		
Session Track I 1:30pm - 2:30pm	**Session Track II 2:45pm - 3:45pm**	**Session Track III 4:00pm - 5:00pm**
GIS in Emergency Management Craig Morgan	**ArcGIS in Government – Community Basemaps 2.0** Pam Kersh	**Location Analytics** Pam Kersh

ESRI TECHNICAL SESSION ABSTRACTS

Wednesday, April 10th

Session Track I – 1:30pm to 2:30pm

Geography as a Platform
Gary Scoffield, ESRI — Red Oak

The role of geography is a platform for understanding the world. GIS is making geography come alive. It condenses our data, information, and science into a language that we can easily understand: maps. These maps help us integrate and apply our knowledge. The same maps tell stories. We need to better harness the power of GIS maps to engage everyone, telling the stories of what's happening to the world and creating maps that create a better future, a future with better outcomes. At the same time, other trends, such as widespread measurement, big data, and ubiquitous computing, are advancing rapidly, including Software as a Service computing, device computing with lightweight and locationally aware applications, as well as supporting scientific exploration and innovation. The convergence of GIS with these trends will enable us to integrate geographic knowledge into everything we do. This new pattern integrates all types of geographic information—maps, data, imagery, social media, crowd sourced information, sensor networks, and much more. Geography and GIS are breaking down the barriers between different workflows and

disciplines and bringing them together. This will enable us to better collaborate, share and approach problem solving and decision making more holistically.

ArcGIS in Water Utilities
Mark Robbins, ESRI Live Oak

ArcGIS for Water Utilities is more than a set of maps and apps for rapid deployment of GIS technology in a utility. It is a methodology based on GIS and water utility best practices. During this presentation the Esri Water Utility Practice will discuss; the advantages of the ArcGIS for Water Utilities approach, what resources and tools are available, how ArcGIS Online is enabling utility workers in ways never capable before, future trends in GIS for water utility management and what every GIS & utility manager must consider when deploying GIS as a key business system for utility management.

GIS in Emergency Management
Craig Morgan, ESRI Pin Oak

Session Track II – 2:45pm to 3:45pm

Building Your Geospatial Platform
Karen Lizcano, ESRI Red Oak

ArcGIS Online is a cloud-based, collaborative content management system for maps, applications, data, and other geographic information. With ArcGIS Online, organizations of all sizes can manage their geospatial content and publish their maps, applications, data, and hosted services online. Topics will include the value of ArcGIS Online to an organization, types of data that ArcGIS Online can use, publishing capabilities, configuration of ArcGIS Online for your organization, administration of content and users, and security.

Spatial Analysis
Brig Bowles, ESRI Live Oak

We will look at how you share your analysis both within your organization and with a much broader audience. This presentation will help you to understand what a geoprocessing package is, how to create a geoprocessing package, and how geoprocessing packages can be used to share analysis workflows and enhance collaboration.

ArcGIS in Government – Community Basemaps 2.0
Pam Kersh, ESRI Pin Oak

You can contribute your organization's geographic content and become part of the Community Maps Esri publishes and hosts online. This program is available to all ArcGIS users and other data providers interested in making their basemap content broadly available for use by the ArcGIS community. We will show you how to get started during this presentation and how the information is used.

Session Track III – 4:00pm to 5:00pm

Creating & Sharing GEOInformation Products
Karen Lizcano, ESRI Red Oak

In this presentation, the presenter will show how and why you can use ArcGIS Online to host and share your services. These hosted services scale to meet demand and can be used to extend your GIS capabilities. You can take advantage of your ArcGIS Online subscription to make your services available to specific groups or even open them to the general public. We will also demonstrate best practices for authoring maps using ArcGIS for Desktop as well as how to publish your maps to ArcGIS Online as a hosted service. You will learn how

to enable a web map with editing capabilities and how map features can be edited remotely in a browser.

Maximizing Your Imagery & LiDAR Data
Brig Bowles, ESRI Live Oak

This session will provide attendees with a first look at the new capabilities of ArcGIS for Imagery Management. This optimized implementation of ArcGIS 10.1 for Server was developed by Esri Professional Services for publishing, managing, and serving large holdings of imagery, lidar, and other raster products. Supporting topics will include discussions on the best practices for structuring mosaic datasets, implementing imagery management in the cloud, and providing imagery services for ArcGIS Online and Portal for ArcGIS.

Location Analytics
Pam Kersh, ESRI Pin Oak

The solution for BI and GIS integration is Esri Location Analytics. Location analytics augments mission-critical, enterprise business systems with content, mapping, and geographic capabilities through complementary and nondisruptive technology. A location analytics solution seamlessly integrates maps into the target BI application using technology that's native to the underlying business system.

CONGRATULATIONS ARE IN ORDER

Founders Award Winner
Pam Jurney
Red Plains Professionals, Inc.
Edmond, Oklahoma

Thumbs Up Award Winner
Jim Steil
Mississippi Automated Resource Information System (MARIS)
Jackson, Mississippi

CONTRIBUTOR RECOGNITIONS

A huge thank you to the following organizations for their gracious donations

Brookhaven College
Geotechnology Institute
Training Facilities

Lower Rio Grande Valley Development Council
9-1-1 Department
Conference Guide

TruColor Environmental Inks
Printing & Mounting of
Conference Signage

CDM Smith
City of Fort Worth Emergency Management
Surdex
Tarrant County 911
Tarrant County Emergency Management
Conference Bag Gift Items

USER PRESENTATION MORNING SESSIONS SCHEDULE

Thursday, April 11th

RED OAK	
Session Track I **9:15am - 10:15am**	**Session Track II** **10:30am - 11:30am**
A Network Analyst Approach to Wrong Way Driving in San Antonio, Texas Ray Maldonado **Data Integration in Building Virtual Models** Erik Singels, Brent Vollmar, Adewale Okunoren, & Carlos L. V. Aiken	**10 Ways to Improve Your Public Safety with GIS** James Kelt **Analyzing Demographic Data For Transportation Planning** Bryson Koziell, Ram Maddali & Yagnesh Jarmarwala

LIVE OAK	
Session Track I **9:15am - 10:15am**	**Session Track II** **10:30am - 11:30am**
Unique Weather Content and Geospatial Technology For Weather Sensitive Organizations DeWayne Mitchell **Tower, this is GIS Requesting A Flyby** Andrew Clem	**History Cartography in Contemporary GIS** Dustin Holt **AGS and The Ugly Truth: Your Paper Map Is Out Of Date** Gabriela Voicu & Bret Fenster

PIN OAK	
Session Track I **9:15am - 10:15am**	**Session Track II** **10:30am - 11:30am**
Can GIS Be Agile? Tim Nolan **Crowdsourcing and Citizen Engagement** David Holdstock	**Deploying Esri-Based Web-GIS Applications Across Multiple Platforms & Mobile Devices** Scott Stafford-Veale **Automating Processes Using Model Builder, Python & Windows' Task Scheduler** Kelly Klose

USER PRESENTATION MORNING SESSIONS ABSTRACTS

Thursday, April 11th

Session Track I – 9:15am to 10:15am

A Network Analyst Approach to Wrong Way Driving in San Antonio, Texas

Ray Dominic Maldonado, TxDOT, SA-BC MPO, SA WWD Task Force — Red Oak

San Antonio, Bexar County is the seventh largest populated city in the United States*, and resides centrally in the state of Texas, which ranks first in total roadway miles by ownership with over 300,000mi. built for public use**. With such a vast roadway infrastructure comes many problems to include Wrong Way Driving (WWD).

Despite a downward trend in total crashes, wrong way driving persists in San Antonio, but the origins and routes taken by such drivers are still largely unknown. By developing a geoprocessing task – geographically enabled Python script – to route such crash incidents from their likely point of origin -- alcohol serving facilities -- specific analyses can be performed using the resulting polyline dataset to make several conclusions based [its] spatiotemporal attributes.

Data Integration in Building Virtual Models

Erik Singels, Brent Vollmar, Adewale Okunoren, & Carlos L. V. Aiken — Red Oak

University of Texas at Dallas students with a variety of backgrounds are creating a photorealistic three-dimensional (virtual) model of a campus building (the Research and Operations Center - ROC) at the highest possible accuracy and resolution. Graduate students from Geoscience and Geospatial Information Science departments are collaborating to seamlessly combine available airborne LiDAR and photography with our own acquired terrestrial LiDAR data and oblique photography. Throughout this process, high precision GNSS is used to ensure proper integration.

The data are of different types, formats, resolutions, timeframes, coordinate systems, and datums. A variety of LiDAR, Camera, and GNSS hardware and software is used. The challenges faced and their solutions are discussed. The ultimate goal is to generate very high accuracy and resolution virtual models of the campus.

Unique Weather Content and Geospatial Technology for Weather Sensitive Organizations

DeWayne Mitchell, Weather Decision Technologies — Live Oak

Weather Decision Technologies, Inc. (WDT) routinely uses geospatial technology for a variety of purposes including but not limited to historical weather assessments, real-time monitoring of severe and hazardous weather and automated alerting for impending severe weather. Naturally, weather data are well suited for GIS applications and geospatial analysis. WDT generates a suite of unique weather datasets including but not limited to lightning threat and occurrence, precipitation accumulation, wind speed and hail analyses. Furthermore, these data are readily made available for desktop, online and mobile applications for the purpose of situation awareness and decision making. The technology and applications leveraged by WDT include ArcGIS desktop, ArcGIS Server and custom mapping applications developed and deployed by WDT using Google Maps and MapBox. Ultimately, the goal is to prevent property losses and keep people safe from hazardous weather. WDT will illustrate how specific weather content is generated and how geospatial technology is used to expose this weather content within weather-sensitive industries to help keep people safe.

Tower, this is GIS Requesting a Flyby
Andrew Clem, GISP, CDM Smith Live Oak

Many have heard the Airports GIS buzz and just as many are wondering what is next for GIS. Airports GIS is one of these next steps. As part of its NextGen program, the Federal Aviation Administration (FAA) is using GIS as its standard for collecting and managing aeronautical geospatial data. What has traditionally been known as the Airport Layout Plan (ALP) will soon become the Electronic Airport Layout Plan (eALP). Through its early Advisory Circulars and pilot testing, GIS support of the FAA's forward-thinking NextGen plan has created quite a buzz. This 30,000 foot view presentation will cover an overview of NextGen, take a look at some of the characteristics of the eALP, and gain an understanding of how GIS will be supporting the entire effort.
Keywords: GIS, FAA, airport, eALP, ALP, airport layout plan

Can GIS be Agile?
Tim Nolan GISP, Collin County IT Pin Oak

Purpose: Identify How Agile Development Principles Apply to GIS teams
Agile software development has formally been around since 2001. However, the spirit of Agile has been with us since we started doing stuff together. Working with each other, collaborating with customers and responding to change (see Agile Manifesto) are all core to Agile, but are also the mantra of a polite society.
We will discuss how Agile principles can be used for GIS projects and requests. We will exhibit how Scrum can be used to manage project requirements and tasks. We will even cover how to estimate or size work to be done.
The presentation will examine Agile/Scrum in progress. We'll demonstrate how we manage effort and each other. What has improved since going Agile? What still needs work? And finally, why this works for GIS and government agencies?

Crowdsourcing and Citizen Engagement
David Holdstock, Geographic Technologies Group Pin Oak

As GIS professionals we have to stay on top of industry trends and demands from citizens. Citizens and their organizations are demanding transparency and applications which allow citizen engagement and interactivity. This session will discuss some of the latest trends in the industry and showcase some of the latest tools. GIS centric tools for citizen engagement will be detailed to include 311 and Public Safety citizen engagement. These tools elevate a GIS program.

Session Track II – 10:30am to 11:30am

10 Ways to Improve Your Public Safety with GIS
James Kelt, Geographic Technologies Group Red Oak

GIS in public safety is grossly underutilized. This session will identify how GIS should be utilized in Public Safety and the tools needed for success.

Analyzing Demographic Data for Transportation Planning
Bryson Koziell, GISP, Ram Maddali, P.E. & Yagnesh Jarmarwala, CDM Smith Red Oak

Travel demand models are used for transportation planning and to project future traffic volumes. These models require accurate population and employment data inputs, which are widely available through several sources. This presentation will focus on available population and employment data sources such as Census, LEHD, County, and State data that can be used to support transportation planning and the development of models. Limitations of the datasets and associated resources and costs will be discussed as well as how the different datasets can be compared to one another in a GIS environment to produce future population and employment forecasts. During the presentation we will

discuss techniques for importing, working with, and displaying population and employment data in a GIS environment, and how GIS can be used to enhance transportation planning and traffic projections.

History Cartography in Contemporary GIS
Dustin Holt, Choctaw Nation of Oklahoma — Live Oak

Historical cartography played a major role in the development of the United States, and the settling of the West. The rectangular survey system was a key component in private property rights and laws. Although many of us look back at the maps and feel nostalgic about the past and the people that created them, they are still just as valuable today in the modern world of GIS. This presentation will focus mostly on the use of U. S. Geological Survey maps from the 1870's to the 1890's, but can be applied to many other types and periods of historical cartography.

AGS and The Ugly Truth: Your Paper Map Is Out of Date
Gabriela Voicu & Bret Fenster, Collin County — Live Oak

Collin County GIS produces a lot of paper maps for various departments, but we continue to try to talk people into using web maps for their daily work. The maps we plot are usually outdated within a short period of time due to annexations and ongoing editing. We'll show you our ArcGIS Server sites and how we use ArcGIS Online for spatial projects.

Deploying Esri-based Web-GIS Applications Across Multiple Platforms and Mobile Devices
Scott Stafford-Veale, Latitude Geographics — Pin Oak

Many organizations today are building mapping applications using ArcGIS Server and technologies such as Flex, Silverlight, and JavaScript/HTML5. Historically these mapping applications were viewed only on traditional desktop machines, however, there is increasing demand to deploy them in the field on mobile devices including smart phones and tablets that use iOS, Android, and Windows Phone operating systems. These devices consume a combination of browser-based and native applications, and are beginning to include cloud-based services such as ArcGIS Online.
With varying levels of support across these platforms for each client technology, what is the best way for GIS administrators to build applications that can be viewed cross-platform by the greatest number of people? With growing sets of mobile users, administrators are forced to balance browser compatibility issues with limited resources to build and maintain applications from multiple software vendors. This presentation will introduce the Spatial Application Infrastructure (SAI) concept, a more efficient way of deploying mapping applications.

Automating Processes Using Model Builder, Python and Windows' Task Scheduler
Kelly Klose, GISP, City of Mansfield — Pin Oak

Using Python to run geoprocessing tasks outside of ArcGIS can speed workflows. Tasks requiring simple user input such as query variables for data extraction may be run as standalone applications, without the need to load data into ArcGIS. Models created in Model Builder may be exported to stand-alone Python scripts, and Windows' built-in Task Scheduler may be used to execute those Python scripts at the required time. Data can be processed, compiled, and placed on local network drives and FTP sites, or compressed and sent to recipients via email. Checks of data may be performed, allowing users to be notified when others have made updates to data. Various tasks may be automated through the use of Model Builder, Python, and Task Scheduler, either together or separately.

USER PRESENTATION AFTERNOON SESSIONS SCHEDULE

Thursday, April 11th

RED OAK	
Session Track III **1:00pm - 2:00pm**	**Session Track IV** **2:15pm - 3:15pm**
Building a Pipeline Design Support System With GIS Jeff Coffey, Mark McGuire & John May **Visualizing Ownership and Maintenance Responsibilities Through GIS** Jenni Moore	**Smarter Cities - Deploying Arc GIS For Local Government & ArcGIS Online** David Holdstock **Can ArcGIS Online Transform Your Organization? Come Find Out!** Krystal Clem

LIVE OAK	
Session Track III **1:00pm - 2:00pm**	**Session Track IV** **2:15pm - 3:15pm**
Implementation of a GIS System to Support Garland ISD James Walker **Breaking Down Barriers For GIS Use - New and Innovative Tools For Enterprise-Wide Enablement and Integration** David Holdstock	**Public Asset Management** Brent Wilson **Basics of Asset Management and GIS** Leann Wheeler

PIN OAK	
Session Track III **1:00pm - 2:00pm**	**Session Track IV** **2:15pm - 3:15pm**
Leveraging Esri Technology to Drive Intelligent Business Decisions: How The Mosaic Spatial Analytics Team Adds Value David Drury **Using SQLite in ArcGIS Python Scripts** Leslie Morgan	**Using GIS To Update The TxDOT Field Services Pricing Model** John May & Jim Crisp **GIS In Mississippi: Advancements, Resources, and Struggles** Scott L Trapolino

USER PRESENTATION AFTERNOON SESSIONS ABSTRACTS

Thursday, April 11th

Session Track III – 1:00pm to 2:00pm

Building a Pipeline Design Support System with GIS

Jeff Coffey, TRWD, Mark McGuire & John May, IEA, Inc. Red Oak

Traditionally Geophysical survey data is collected in the field, processed and manually interpreted by geoscientists, assembled into large bound reports, and then distributed to a client. These reports are then used by design engineers to identify subsurface characteristics that influence design criteria for pipelines. For the leaders of Tarrant Regional Water District (TRWD) this process needed an upgrade to support the nine separate engineering design teams for a new 152 mile pipeline. GIS was identified as a powerful alternative to the traditional bound report because it enabled the sharing of the geophysical data to support their design, construction, and maintenance of the pipeline. IEA worked with TRWD to design a process to address conversion of the manually developed geophysical interpretations into an existing Enterprise GIS. Implementation of this process required work with external RDMS, 3D georectification, and data extraction, and synchronization with an SDE distributed data model designed by TRWD.

Visualizing Ownership and Maintenance Responsibilities through GIS

Jenni Moore, Bartlett & West Red Oak

Ownership and maintenance responsibilities of assets change frequently and are often not documented outside of the legal contract in layman's terms. A Visual Ownership and Maintenance (VOM) program can be developed to specifically maintain this data. A key component to this program is the use of GIS to represent both historical and current contracts. Spatial analysis can be conducted on this geographic data for reporting purposes. The VOM program can also provide a means to demonstrate future options prior to new agreements being made between participating parties. This presentation will focus on how the VOM program can be used within the railroad industry for documenting the track ownership and maintenance responsibilities of the parent railroad and the industrial companies receiving rail service.

Implementation of a GIS System to Support the Garland Independent School District

James Walker, Garland ISD Live Oak

For the past few years Garland ISD has been exploring the potential of GIS as a tool for the facility management department. One of our major projects has been the standardization of CAD drawings and a workflow for converting CAD floor plans to feature classes so that changes can be made in CAD and quickly updated to GIS. This past summer we sent workers to verify information in every room of every building in 7 high Schools, 12 Middle Schools, and 47 Elementary schools, as well as other administrative, athletic and special use facilities.

Other GIS projects include

- The creation of a parcel level geocoding service to precisely locate student addresses which is critical for determining things such as bus eligibility.
- Creating transportation zone maps for internal use and publication on the GISD web site.
- Mapping of sprinkler system, irrigation zones, mowing zones, and a tree inventory.
- Analysis of facility capacity and usage.
- Network Analyst based bus routing program working with U.S. Computing Inc, an ESRI business partner.
- Creation of internally used web applications built using Adobe Flex; these are currently used by members of the administration and by the student services department. Plans are underway to expand the internal user list.

Breaking down Barriers for GIS Use - New and Innovative Tools for Enterprise-Wide Enablement and Integration
David Holdstock, Geographic Technologies Group Live Oak

Organizations continue to fight the battle of having silos of data. GIS has become the one tool that allows organizations to integrate all of their IT data. This session will highlight an innovative enterprise toolset that enables organizations to leverage their GIS data with their existing non-spatial data.

Leveraging Esri Technology to Drive Intelligent Business Decisions: How the Mosaic Spatial Analytics Team Adds Value
David Drury, Mosaic Pin Oak

Mosaic is a marketing firm with offices in Dallas and Toronto that provides "in-store" marketing and merchandizing services to a wide variety of leading manufacturers. One of the key services provided by Mosaic is influencing consumer purchasing decisions with in-store executions to drive sales for the manufactures we represent.
The Mosaic Spatial Analytics Team supports marketing and in-store executions by providing the Mosaic Business Units with locational intelligence to drive their client opportunities. This presentation will provide an overview of how the Spatial Analytics Team leverages esri technology and the analysis and models that are utilized to drive decision making.
Spatial analytics that will be discussed include Business Analyst tools, Spatial Analysis tools, optimum location model and market potential model.

Using SQLite in ArcGIS Python Scripts
Leslie H. Morgan, Ph.D., GIS Nuts Pin Oak

SQLite is an open source, widely deployed SQL database engine that is included in the Python standard library (Python 2.5+). It requires no configuration, and the data is stored in a single file or in memory. Attribute data in an ArcGIS feature class or table can be easily transferred to and from a SQLite table, functionality that has been made easier and more efficient with the new data access module (arcpy.da) in ArcGIS 10.1. SQLite supports most standard SQL (SQL92), making it straight-forward to write queries involving aggregate functions and table joins. This presentation will introduce the Python SQLite3 module in the context of an ArcGIS Python script tool, demonstrate data transfer to and from a file geodatabase, and show some of the query functionality available in the SQLite module.

Session Track IV – 2:15pm to 3:15pm

Smarter Cities - Deploying Arc GIS for Local Government and ArcGIS Online
David Holdstock, co-owner of Geographic Technologies Group Red Oak

Success Stories from the United States – This session will highlight successful implementations of ArcGIS for Local Government and ArcGIS Online for government organization in the United States.

Can ArcGIS Online transform your Organization? Come Find Out!
Krystal Clem, CDM Smith Red Oak

There has been a lot of talk about ArcGIS Online (AGO) for Organizations and how it can change the way we use GIS. AGO has the potential to create greater transparency within organizations via quickly making GIS data available to non GIS Staff and the public. It also increases efficiency in data sharing and collaboration. This presentation will explore how the AGO Platform can change the way your organization does GIS, including tips and tricks for setting up your account, sharing data, estimating credits and quickly deploying mobile and web applications with minimum programming skills. Additionally, this presentation

will cover some of the add-on functionality available to the AGO Organizational account such as Maps for Office and Collector for ArcGIS.

Public Asset Management
Sub Title: The complete lifecycle of city and county assets.
Brent Wilson, Azteca Systems, Inc | Cityworks® Live Oak

It's no secret - local governments face some hefty financial challenges. From staffing to statutes, the cost to ensure the health, safety and well-being of their citizens is pushing city and county officials to do more with less. More than 15 years ago, Cityworks changed the game in asset and maintenance management with a solution that directly leverages an agencies GIS. For the first time, this unique approach put their spatial data to work in an application built specifically to track and extend the lifecycle of the public infrastructure. Today, nearly 500 organizations around the world are Empowering GIS™ for Public Asset Management with Cityworks, improving customer service and lowering operational costs.

Basics of Asset Management and GIS
Leann Wheeler, CDM Smith Live Oak

As organizations continue to watch assets deteriorate, break, and even explode, the need for quality asset management becomes more and more important. But what does that mean? Is field collecting the data enough? This presentation will cover the basics of asset management of which GIS is an important part. Developing the correct GIS environment is critical to collecting data today, maintaining assets tomorrow, and integrate with key systems.

Using GIS to update the TxDOT field services pricing model
John May, IEA, Inc. & Jim Crisp, TxDOT Dallas District Pin Oak

The Texas Department of Transportation (TxDOT) is required to comply with the National Discharge Pollutant Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) program. This means it must map and inspect all outfalls along the TxDOT right of way within regulated areas. Traditionally TxDOT has used a uniform pricing model for these services. The model assumes a water crossing every 2,000 feet along TxDOT roadway and 4 outfalls at each crossing, yielding an average of 10.5 outfalls per mile. This was used to estimate the labor needed to map and inspect a length of road. To measure the accuracy of the pricing model GIS datasets were analyzed to identify stream crossings within the state. Field surveys were performed to test the predictions made by the GIS and a matrix was developed comparing the results of the field surveys, GIS analysis and current assumptions concerning the frequency of outfalls.

GIS In Mississippi: Advancements, Resources, and Struggles
Scott L. Trapolino, DeSoto County GIS Department Pin Oak

Our presentation is a statewide collaboration of projects to inform SCAUG members of GIS work in Mississippi.

MAP GALLERY ABSTRACTS

Thursday, April 11th

Digital Elevation Model 2011 – North Central Texas
Bret Fenster, Collin County

The Texas Natural Resources Information System (TNRIS) recently coordinated the acquisition of high resolution LiDAR data for the Upper Trinity Basin in North Central Texas. This map portrays the Digital Elevation Model mosaic derived from the LiDAR/DEM tiles.

Collin County Annexation – The Last Ten Years
Bret Fenster, Collin County

Explosive municipal and residential growth has occurred in Collin County over the last ten years and the Administrative Director for the county recently requested a map that would represent these changes over time and help reshape the county Fire Districts. The Fire Districts have not changed a great deal since they were mapped in the early 1990s. They provide boundaries for the rural volunteer and municipal Fire Departments and represent reimbursement zones for emergency calls in unincorporated Collin County. This map will serve as coordination and planning document as we redefine these emergency response areas.

Visualizing Ownership and Maintenance Responsibilities through GIS
Jenni Moore, Bartlett & West

Ownership and maintenance responsibilities of assets change frequently and are often not documented outside of the legal contract in layman's terms. A Visual Ownership and Maintenance (VOM) program can be developed to specifically maintain this data. A key component to this program is the use of GIS to represent both historical and current contracts. Spatial analysis can be conducted on this geographic data for reporting purposes. The VOM program can also provide a means to demonstrate future options prior to new agreements being made between participating parties. This presentation will focus on how the VOM program can be used within the railroad industry for documenting the track ownership and maintenance responsibilities of the parent railroad and the industrial companies receiving rail service.

City of Longview, Texas Municipal Tree Project
Wesley Stremmel, City of Lonview

Devastated by drought, Longview was forced to cut down many of the trees surrounding the municipal grounds for safety reasons. As a way to give back to the community, Keep Longview Beautiful teamed up with Texas A&M Forest Service and Longview Parks and Recreation to replace the loss. Thirty-one trees (18 native species) were chosen based on availability, growth requirements, and climate control. Longview GIS was asked to GPS potential locations and reference hazards, such as underground utilities. This map was created entirely within ArcMap 10. The center base map uses 2012 aerial photos and GPS locations to give the viewer an overview of the project. The inset images utilize Pictometry and two dimensional representations of the trees that are to be planted. This gives the viewer an idea of what the final project will look like.

Improving Safety and Security for San Antonio Public Housing Communities
Sara Eaves, San Antonio Housing Authority

The primary focus of SAHA's community safety and security program is to promote the safety of our residents and create partnerships with area law enforcement agencies. Through a partnership with the Bexar County Sheriff's Office, SAHA began receiving weekly arrest reports related to SAHA addresses. The goal is to enhance our efforts to promote a

safe environment for our residents through the enforcement of lease and community rules. Using a GIS, SAHA maps and tracks arrests across the city's public housing communities. Weekly reports are provided to property management for timely follow-up, while quarterly reports highlight summary information including geographic concentrations of arrest activity and arrest incident outcomes.

City of Fort Worth Water and Wastewater Redevelopment Capacity Analysis and CIP
Sherrie Hubble, Freese & Nichols, Inc.

The City of Fort Worth, Texas has targeted specific areas for redevelopment because they are expected to experience large-scale growth through the year 2050 due to various factors, such as access to transportation, proximity to higher education institutions, and development of mixed use urban villages. Freese and Nichols, Inc., an engineering firm, was retained to perform a capacity analysis of the water and wastewater systems for 24 designated redevelopment areas, ranging in size from 250 acres to 1,600 acres. The capacity analysis involved determining future demand on these systems based on future land use and population and employment projections. As part of the analysis, Freese and Nichols developed a series of maps for each redevelopment area that illustrates the steps involved in developing capital improvement recommendations for the City. The poster highlights this process with a sample set of maps from one of the redevelopment areas.

Crash Analysis using GIS
Nicole Bradstreet, Yagnesh Jarmarwala, Ram Maddali, CDM Smith

CDM Smith is assisting a public agency in developing a Corridor Implementation Plan for the Austin region. Crash data analyses were conducted using GIS for a 27.5 mile corridor of IH 35 between SH 45 N and SH 45 SE, based on publicly available data.
Crash data for eight segments of the corridor, covering four years, were plotted geographically based on coordinates from the crash database. Traffic volumes, highest severity (fatal) crashes and pedestrian and bicyclist fatalities were mapped. The analysis included breakdown between main lanes, frontage roads and ramps.
High frequency crash locations were identified and twenty and greater crashes at one location were mapped. Crash severities were summarized and displayed as either large circles or smaller dots. Clusters were drawn around fatal crash locations and summarized. The results of this analysis will assist in developing design improvement concepts to enhance mobility and safety along this heavily travelled corridor.

Drought Status of the Fort Worth District Lakes
Paula Rafferty, U.S. Army Corps of Engineers

An overview of the drought status of Army Corps of Engineers lakes in the Fort Worth District is illustrated with a U.S. Geological Survey (USGS) 90m hillshade map displayed at 70 percent contrast and a 30 percent transparency level. The hillshade is then laid over a National Geodetic Survey (NGS) topographic map. Labels are converted to annotation so that the lake status can be changed through table updates. The table contains relevant information about lake levels that are readily combined by simple code while the label properties contain the class symbologies that convey the drought conditions.

VENDOR BIOGRAPHIES

PLATINUM VENDOR

Western Data Systems is an Authorized Trimble Dealer and our only business is supplying spatial measurement and GPS related products. We do this in several ways.

1. We are a direct seller of Trimble GPS products in Texas and Oklahoma. We supply the entire Trimble line of Optical / GPS Survey, Mapping, Marine, and Seismic Products. Training, Technical Support and all Accessories your crew might need. With offices in DFW, Houston, San Antonio, Austin, McAllen, and Edmond OK. You have a GPS professional within close proximity to you at all times.
2. We offer fully integrated GPS based Hydrographic systems anywhere in the United States, complete with training and support.
3. We offer spatial measurement items including Lasers, Laser Scanners, GPS cameras, Bar Code scanners, Ground Penetrating Radar, Pipe Locators, Tablet PCs and much more. Also multiple software options to fit your application needs.
4. We have one of the largest Trimble GPS rental pools in the world. This equipment is available to a worldwide customer base. If your rental needs are for as little as one day or as long as one year, Western Data Systems can meet your needs. There are no other GPS rental companies that can combine the amount of equipment we have available with the technical support we can and do provide our customers.
5. Full Service centers for all the Trimble products we rent and sell.
6. Western Data Systems manages the largest private VRS network in the world. The network is available to both the survey & mapping communities. www.txrtk.com Check out our website for the office nearest you. www.westerndatasystems.com

GOLD VENDORS

CDM Smith provides lasting and integrated solutions in water, environment, transportation, energy and facilities to public and private clients worldwide. As a full-service consulting, engineering, construction and operations firm, we deliver exceptional client service, quality results and enduring value across the entire project life-cycle. GIS professionals at CDM Smith offer high-quality GIS design and management services to meet clients' specific needs. The firm combines its engineering, scientific, planning, and management experience with GIS solutions for many types of projects including; Facilities Management, Community Planning, Environmental Management,

Emergency Management, Watershed Management, Municipal Operations and Public Works In addition, CDM Smith has been a sustaining business partner of Esri since 1986—the first ENR-listed consulting firm to be part of Esri's program.

Latitude Geographics has helped people succeed with web-based geography by enabling them to make better decisions about the world around them. Geocortex software by Latitude Geographics transforms how organizations design, build and maintain Esri ArcGIS Server and ArcGIS Online applications.

Geocortex allows organizations to do more; faster, at less cost and risk. Our off-the-shelf approach makes it easy to create and maintain applications while ensuring end-users consistently benefit from a positive web-based GIS experience. Best of all, organizations effectively future-proof their ArcGIS investments by readily accommodating technology change over time. in 2010 Latitude Geographics was recognized as an Esri Worldwide Partner of the Year and one of the first to be named as an Esri Platinum Partner. Please visit www.geocortex.com for more information.

Surdex has been recognized as a premier geospatial data provider since 1954, supplying accurate information on time and within budget. Our success is attributed to our focus on client satisfaction through timely delivery of quality products and continuous innovation from our investment in staff and equipment resources. Surdex provides orthophotography; planimetric and topographic maps; LiDAR; and geographic information solutions to both governments and private companies in North America. A distinguisher for Surdex is our focus on all phases of geospatial data services products, from acquisition—with our fleet of nine aircraft—through final production of all deliverables and data. We have a highly-trained and experienced staff that provides complete geographic solutions customized to each client's needs.

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Since 1969, **ESRI®** has been giving customers around the world the power to think and plan geographically. The market leader in GIS, ESRI software is used in more than 300,000 organizations worldwide including each of the 200 largest cities in the United States, most national governments, more than two-thirds of Fortune 500 companies, and more than 7,000 colleges and universities, applications, running on more than one million desktops and thousands of Web and enterprise servers, provide the backbone for the world's mapping and spatial analysis.

ESRI is the only vendor that provides complete technical solutions for desktop, mobile, server, and Internet platforms. Visit us at www.esri.com.

Weather Decision Technologies, Inc.

Founded in 2000, **Weather Decision Technologies** is a high technology leader in the weather industry, providing life-safety applications and weather decision support services and systems to our partners and customers. WDT services provide dynamic, web-based and mobile interactive mapping solutions for the world's leading local media companies. An ESRI partner since 2004, WDT provides GIS services which fuse our unique and innovate weather content with ArcGIS technology making it easy for customers to assimilate data. WDT maintains operational offices in Norman, Oklahoma, and Atlanta, Georgia.Corporate websites: wdtinc.com & weatherops.com.

STANDARD VENDORS

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Aerial Services, Inc. (ASI) is an integrated team of professionals providing premier Aerial Acquisition, Digital Ortho, Vector Mapping, Terrain & LiDAR services to government, utilities, engineers, and other geospatial clients. Based in the Iowa heartland for over 40 years, Aerial Services' Midwestern work ethic, cutting-edge technology, and experienced staff combine to harness the power of geographic information and provide solutions you need.
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Founded in 1986, **Cityworks Azteca Systems, Inc.** is the leading provider of GIS-centric Enterprise Management Systems. Created for local government, utilities and agencies, it is designed to leverage an organization's investment in Esri's leading GIS technology. Cityworks is powerful, scalable, and affordable, Empowering GIS for Asset Management, Permitting, Licensing™ and more.

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VANTAGE POINTS

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Geographic Technologies Group, Inc. (GTG) is one of the country's leading full-service local government GIS consulting companies. GTG's corporate headquarters is located in North Carolina, with regional offices in Florida, Texas, Ohio, and California. GTG has secured state, national, and international awards for software solutions and consulting services. Founded in 1997, GTG celebrates more than 15 years of growth and success.

Built on its tradition of deploying the very best GIS solutions for local government, GTG now has over 700 clients nationwide. A corporate culture of quality, understanding government operations, and commitment to our clients allows GTG to continue to build an outstanding GIS portfolio.

Established in 1986, **NTB Associates, Inc. (NTBA)** has experienced significant expansion in staff and capabilities. The professional staff includes GIS application specialist, programmers, database administrators, civil and structural engineers, and land surveyors. We provide expertise in the following areas:

- GIS/GPS
- Boundary Surveys
- Topographic Surveys
- Hydrographic Surveys
- Route and Utility Surveys
- Local Roadway/Drainage Improvement
- Major Highways and Interstate Design
- Hazardous Material Surveys
- Bridges and Structural Design
- Water/Wastewater Systems

In the GIS services area, NTBA provides clients with turnkey solutions for a wide variety of issues. Our services include:

- Database design, development, and management
- Asset Management/Work Order Management
- GIS needs assessments
- Project design and management
- ArcServer implementation
- Data conversion and creation
- System integration with GIS
- GPS field collection and inventories
- User training and support
- Custom application development
- Enterprise GIS solutions

RazorTek Inc. is a privately held GIS and Remote Sensing consulting firm specializing in design, development and automation of complex systems for spatial data display and analysis. Established in 2002, RazorTek serves both the private and public sectors in providing services and technology assistance. We also offer GIS training, data conversion services including imagery sales, processing, feature extraction. RazorTek is an authorized reseller for LizardTech (GeoExpress), RapidEye and a provider for satellite imagery from Digital Globe, GeoEye, Astrium, and provides aerial photography and LiDAR collects.

RazorTek is certified by the SBA as an 8(a) company and is also certified as a MBE(Minority Business Enterprise) by both the Uniform Certification Agency in Tennessee and the North Central Texas Regional Certification Agency in Texas.

If more information is required for RazorTek capabilities please contact us by email (danr@razor-tek.com) or call us at 901-922--5448.

Inner Corridor Technologies, Inc. – **TeachMeGIS** – is the leader in Geographic Information Systems (GIS) consulting and training. Staffed with GIS professionals who have extensive experience, our ESRI Certified Training Center offers high quality training locally and across the nation, at a reasonable price. Our professional GIS consulting staff are available for short- or long-term projects. Please call us if you need help meeting your company's GIS goals.

Trucolor is leveraging its 10 years of experience in postal meter ink supply by adding ink for large format and addressing applications to our current line of Neopost/Hasler and Pitney Bowes cartridges. Utilizing industry unique technology, we are able to re-create ink cartridges to exact OEM specs, with ink that meets or surpasses OE products in many cases, but at a cost that saves as much as 70% over OE product. Applications are already in place for many popular HP Designjet plotters with GIS and mapping applications , including the 500/800,

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T610/T620/T770/T790T1120/T1200/T1300/T2300, Z2300/Z3100/Z5200, 4000/4500, 5000/5500, Z6100 plus Roland, Mimaki and Mutoh. Additional applications are in development. Each tank is shipped in a self-mailer with a prepaid return label so empties can be recycled.

United Geo Technologies, LLC

United Geo Technologies, LLC. your geospatial service provider, offers a wide range of professional services such as photogrammetry, orthophotography, parcel mapping, and geographic information systems. This small, woman owned business has two Certified Photogrammetrist's on staff, and our personnel have extensive experience in the following areas:

- Airborne GPS
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- CAD (MicroStation and AutoCAD)
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- Digital Elevation Models (DEM)
- Digital Terrain Models (DTM)
- Digital Orthophotography and Mosaics
- Image Compression (MrSID, JPEG2000, ECW)
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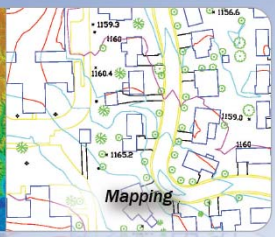

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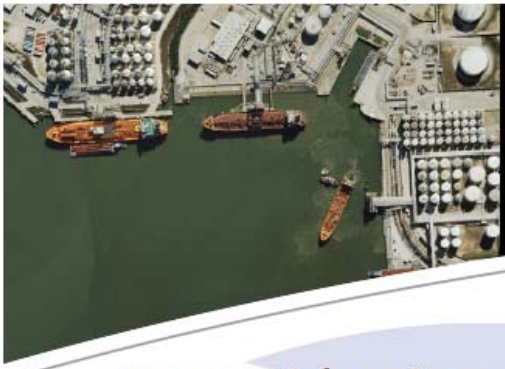

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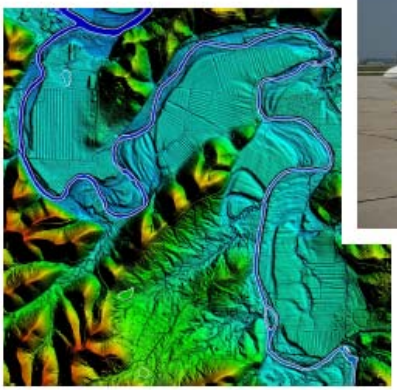
- LiDAR Acquisition and Processing
- Planimetric Mapping



OUR TOOLS

Z/I Intergraph *Digital Mapping Cameras*
Leica *ADS80 Pushbroom Camera*
Microsoft UltraCam *Xp Wide Angle Camera*
Leica *RCD30 Oblique Camera System*
Leica *ALS-70HP KHz LiDAR System*

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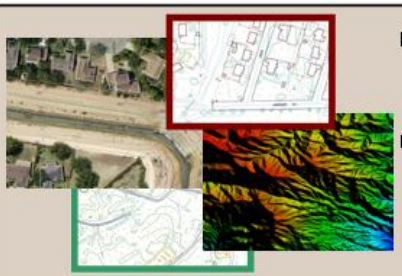

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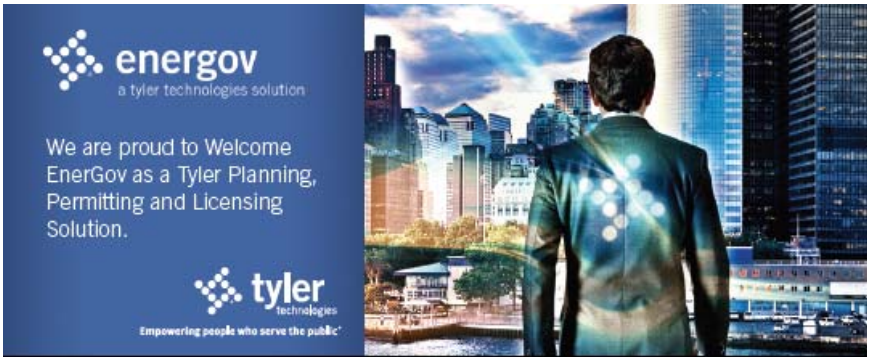

GISP CHECKLIST

23rd Annual SCAUG Conference in Addison, Texas

Description	Classification	Credit	Re-Cert Credit	Credits Earned
2½ Day Conference (20 hour)				
Attendee (0.1 x # of days attended)	EDU	0.25	3.33	
Presenter (1 point per instance)	CON	1	3	
Poster Presenter (1 point per instance)	CON	1	3	
Poster Award Winner	CON	2	6	
1/2 Day Training (4 hour)				
The GISCI Certification Program Application Support	EDU	0.1	0.67	
Lost in LiDAR	EDU	0.1	0.67	
GPS Field Skills Through Geocaching	EDU	0.1	0.67	
1 Day Training Instructor : _____	EDU	3	9	
1 Day Training (8 hour)				
Python Scripting in ArcGIS	EDU	0.2	1.33	
Editing in ArcGIS 10 and 10.1	EDU	0.2	1.33	
1 Day Training Instructor : _____	EDU	3	9	
2 Day Training (16 hour)				
Migrating to ArcGIS 10.1 for Server	EDU	0.4	2.67	
ArcGIS for Server: Sharing GIS Content on the Web	EDU	0.4	2.67	
ArcGIS III: Performing Analysis	EDU	0.4	2.67	
1 Day Training Instructor : _____	EDU	3	9	
Total GISP Credits Earned				

Training Certificate required for documentation credit

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