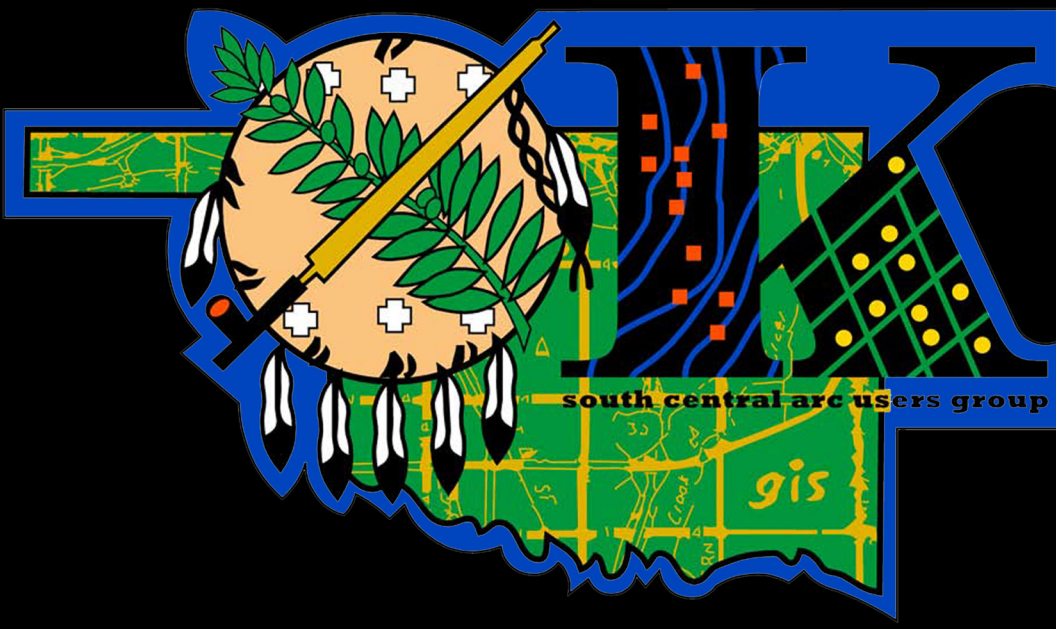
10TH Anniversary



2007 Oklahoma SCAUG Conference

October 9, 2007

Oklahoma City, OK

Dear Oklahoma SCAUG members and attendees:

On behalf of the Oklahoma SCAUG Steering Committee, welcome to Oklahoma City and the 10th Annual Oklahoma SCAUG Conference.

Colin Powell once said, "There are no secrets to success. Don't waste your time looking for them. Success is the result of perfection, hard work, learning from failure, loyalty to those for who you work, and persistence."

We want to thank each of you who have contributed to making GIS the success that it is in Oklahoma.

Additionally, we would like to thank each of our sponsors and vendors for their tremendous support of this conference. This event would not be possible without them. Please take time throughout the day to view the various GIS products and services they offer.

Finally, remember to turn in your Salary Survey and Conference Survey to get your SCAUG memorabilia at the Registration Table. While there, vote for your favorite map in the Map Poster Contest. We are in our 3rd year of the "Where in Oklahoma" contest, so guess the town represented on the map for a chance to win a great SCAUG prize.

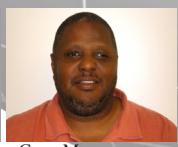
Have a wonderful, information-filled day at the Oklahoma SCAUG Conference!

Respectfully,

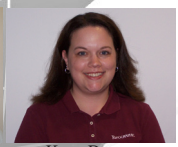
2007 Oklahoma SCAUG Steering Committee

Chuck Sloan • Cliff Montgomery • Michelle Matthews • Kate Burch • Shellie Willoughby • Katy Rich • Robert Stokes • Thomas Tollett • Charles Brady, III


Chuck Sloan


Cliff Montgomery


Michelle Matthews


Kate Burch


Shellie Willoughby


Katy Rich


Robert Stokes


Thomas Tollett


Charles Brady, III

Table of Contents

SCHEDULE

7:30 am - 8:25 am	Registration opens with Vendor Exhibits
8:30 am - 10:00 am	Welcome - Main Conference Hall
	Opening Keynote Breakfast with Tony Spicci, MO State GIO
10:00 am - 10:45 am	Vendor Break (Visit with Vendors and Vendor Bingo)
10:45 am- 12:25 pm	ESRI Doctors Office - Main Conference Hall

User Presentations

10:45 am - 11:15 am

Cherokee Nation's 2010 Census CDP's
David Justice, Cherokee Nation — Room 109/110

Integrity Management and GIS
Shelia Wilson, PODS — Room 111/112

Geospatially Enabling 4H – From Cows and Cookies to Geospatial Technology
Nathan Mattox, Univ. of Missouri — Room 210

11:20 am - 11:50 am

Census 2010 LUCA Program
Craig Best, US Census Bureau — Room 109/110

Implementation and Management of a GIS in the Oil and Gas Industry
Julie Parker, Chesapeake Energy — Room 111/112

Learning the World Through GISci
Stephen O'Connell, OSU Geography — Room 210

11:55 am - 12:25 pm

Basic Photogrammetry as it Relates to Aerial Mapping
Brian Falls, Aerial Data Service — Room 109/110

Spatial Model for Protection of the Edwards Aquifer
Joe Chapa, City of San Antonio — Room 111/112

Modeling the Potential Geographic Distribution of Species in Oklahoma
Priscilla Crawford, OK Natural Heritage Inventory — Room 210

SCHEDULE

12:30 pm - 1:15 pm Lunch/ Poster Competition - Main Conference Hall

Panel Discussions

1:15 pm - 2:15 pm

Where to Find Data
Craig Best, Stacia Canaday, Scott March — Room 109/110

How to Get Involved in the GIS Community
Justin Cure, Tony Spicci, Robert Stokes, Shellie Willoughby — Room 111/112

Geocoding
Charles Brady, Ray Hardy, Clifford Montgomery — Room 210

2:15 pm - 3:00 pm Afternoon Break with Vendors - Main Conference Hall

ESRI Technical Sessions

3:00 pm -3:45 pm

Desktop Mapping and Usability Improvements
Ken Smith — Room 109/110

Introduction to Cartographic Representations
Ray Hardy — Room 111/112

Designing a Version Workflow for Your Organization
Stacia Canaday — Room 210

3:50 pm - 4:35 pm

Desktop Mapping and Usability Improvements
Ken Smith — Room 109/110

Introduction to Cartographic Representations
Ray Hardy — Room 111/112

Designing a Version Workflow for Your Organization
Stacia Canaday — Room 210

4:40 pm - 5:00 pm Closing Remarks and Prize Giveaways - Seminar Room

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Anthony A. Spicci

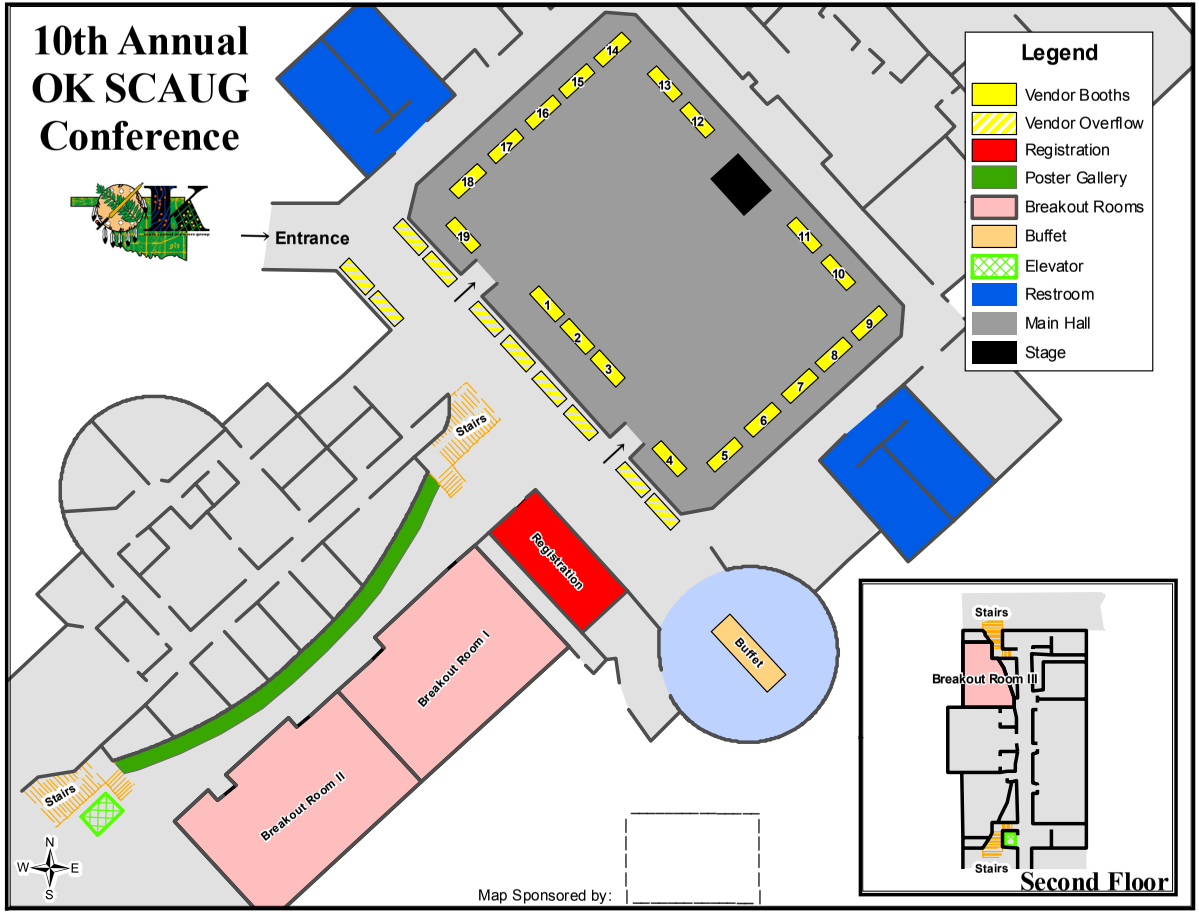
MO State Geographic Information Officer
Missouri Office of Administration –
Information Technology Services Division

Tony is the Geospatial Information Officer (GIO) for the State of Missouri. He began his career with the Department of Conservation in 1992 where he implemented a pilot program that studied the feasibility of implementing GIS for project support within the Department. During his tenure at MDC he has expanded the scope of the GIS program from a project support tool to an enterprise-wide application in which all staff has access to a full range of geospatial technologies. In his role as state GIO, Tony initiated the first state-wide aerial photography project since 1995 and is working towards implementing a governance model to help Missouri effectively govern its GIS program.

Tony has been very active in facilitating the use of GIS throughout the state and nation and has served in numerous leadership roles. Tony has been an active member of the National States Geographic Information Council (NSGIC) since 1996 and was elected to the Board of Directors in 2002. Tony served as the President of NSGIC in 2005-2006 and is currently the Past President. At the state level, Tony has served as the Chair of the Missouri GIS Advisory Committee for five terms and recently served as the Vice-Chair. With his appointment to State GIO, he has taken on the responsibility of coordinating geospatial policy and legislative efforts for the committee. Regionally, Tony has been very active with the Mid America GIS Consortium's (MAGIC). Tony has served as the Consortium Chair of MAGIC and also served as the Symposium Chair MAGIC Symposiums in 2002, 2004 and 2008.

Tony is an authorized instructor for a number of ESRI classes. He has been providing GIS software training for over 10 years, having instructed over 400 students. In addition to teaching courses in ArcView and ArcGIS, he frequently teaches workshops and seminars at conferences. He recently founded Geographic Information Technologies, a company dedicated to bringing affordable training to the GIS user.

Tony was born and raised in Upstate New York. He earned a B.A. in Geography from Geneseo and an M.A. in Geography from the University of Missouri. Tony serves as a Lieutenant in the Boone County Fire Protection District and a Technical Information Officer for Missouri Task Force 1, having dedicated over half of his life to the volunteer fire service. He also coordinates GIS activity for both the Fire District and Task Force. Tony lives in Columbia with his wife Aimee, daughter Sophie and their three cats. On Saturdays in the fall, Tony can be seen driving Truman the Tiger around on his taxi (a restored 1954 White fire engine) at Mizzou football games.


10th Annual
OK SCAUG
Conference
Entrance
Legend
Vendor Booths
Vendor Overflow
Registration
Poster Gallery
Breakout Rooms
Buffet
Elevator
Restroom
Main Hall
Stage
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
Stairs
Registration
Breakout Room I
Breakout Room II
Buffet
Stairs
N
W
E
S
Map Sponsored by:
Stairs
Breakout Room III
Stairs
Second Floor

User Presentations

10:45 - 11:15

2010 Census CDP's

David Justice, Cherokee Nation

Mapping of Tribal Communities for the Census Designated Places program. Presentation of the Census Bureau's Census Designated Places (CDP) program, and Cherokee Nation's process for adding and editing the CDP list.

Pipelines: Integrity Management and GIS

Sheila Wilson, Pipeline Open Data Standards

This presentation addresses the uses of GIS with respect to pipeline integrity on liquid, transmission lines. The Department of Transportation rules as established by Congress state that most pipeline operators are required to develop a risk-based assessment of the pipeline, also known as pipeline integrity. The intent of the risk-based assessment is to determine the areas of highest risk to the people and environment in the case of a release. GIS provides the tool to gather, sort, and analyze data for the risk assessments.

Geospatially Enabling 4H: From Cows and Cookies to Geospatial Technology

Nathan Mattox, University of Missouri

4H is a program centered in teaching youth good life skills. But how does that translate from the Cows and Cookies traditional 4H programs to the more technology driven world we live in today? Geospatial Technologies hold a world of promise for enabling the technology adept Digital Generation to use their interest in technology to become a greater asset to their community. Come and see how 4H is addressing this need by developing programs aimed at engaging youth in community minded geospatial technology projects and how you as GIS professionals can become a part of this growing program.

11:20 - 11:50

2010 LUCA Program

Craig Best, US Census Bureau

The Local Update of Census Addresses program (LUCA) is a partnership program that will allow the US Census Bureau to benefit from local knowledge in developing its Master Address File for the 2010 Census. State and local governments can contribute to a more complete and accurate census for their community by reviewing and commenting on the list of housing units and group quarters' addresses that the Census Bureau will use to deliver questionnaires within their community. The LUCA program is the only opportunity available to local governments to review and comment on the census address list during the Census process.

In this promotional workshop, we will:

- Describe the LUCA purpose, benefits, and schedule
- Describe the LUCA participation options
- Describe the Security and confidentiality requirements
- Describe the Participation responsibilities
- Determine the best participation option for your jurisdiction

This promotional workshop will help prepare you for participation in the LUCA program which is scheduled to begin in summer of 2007.

Implementation and Management of a GIS in the Oil and Gas Industry

Julie Parker, Chesapeake Energy Corporation

When incorporating a geographic information system into any business or organization, gaining the proper level of support is key. Support should be gained from both the Upper Management level as well as the User level to help ensure the implementation will be a success. Ms. Parker's presentation will cover different methods for the implementation of GIS, including the route taken by Chesapeake Energy Corporation.

Learning the World Through GISci

Stephen M. O'Connell, Oklahoma State University

This presentation examines the possibilities of improved Geographic Education using geo-spatial technologies. A key component will discuss results of the NSF-funded Geography Education program, Rural Alliance for Improving Science Eduction (RAISE). Over three years, middle and high-school students in RAISE classrooms were exposed to unique GIS-based curricula. A review of lesson plans, pre-/post-test results, and student/instructor reactions are included.

User Presentations

11:55 - 12:25

Basic Photogrammetry as it Relates to Aerial Mapping

Brian Falls, Aerial Data

The basics of photogrammetry in respect to aerial mapping will be the topic of this presentation. Key points will cover the capture of aerial photography suitable for mapping, the application of planimetric and terrain mapping data and the techniques and tools used to collect it.

Spatial Model for the Protection of the Edwards Aquifer

Joe Chapa, City of San Antonio

The City of San Antonio, Texas, commissioned a Scientific Evaluation Team to develop a spatial model analyzing sensitive lands for protection of the Edwards Aquifer. The Edwards is the primary water supply for the region. The study area covered nearly 1,500 square miles. The model was built upon ArcGIS ModelBuilder, Spatial Analyst, and Python scripting functionality. Three submodel components were developed: permeability was composed of slope, geology, soils, caves, and faults; biology used vegetation and endangered karst invertebrates; and watershed utilized stream orders, parcel size, and adjacency. A weighted overlay was applied to the results, producing a score raster for the entire study area. Using zonal statistics, parcel features were assigned a final score and ranked by standard deviations into six tiers. The model took approximately 4.5 hours to analyze eighteen input datasets and produced a final parcel feature class of more than 80,000 records.

Modeling the potential geographic distribution of species in Oklahoma

Priscilla H. C. Crawford, Oklahoma Biological Survey

Potential distribution models use environmental data in combination with known species occurrence information to make predictive maps of species distributions. Modeling the distribution of species has become a widely used technique in ecology. Its applications include biodiversity mapping of lesser-known regions, land conservation planning and management, prediction of areas vulnerable to invasive species, and potential species distribution shift due to climate change. Models can be developed from a variety of algorithms to predict the probability of an area to be occupied by the species of interest. The efficacy of an algorithm to accurately predict a species distribution varies based on the quantity of occurrence data and the relationship the species has with its environment. There is no one best algorithm for all species. The Oklahoma Natural Heritage Inventory (ONHI) and Oklahoma Biological Survey (OBS) have begun to use models to better understand the distribution of species in our state. We will discuss the steps taken by the ONHI and OBS to set up a GIS for modeling purposes, to chose modeling algorithms, and produce preliminary results of the initial model runs.

USING GIS TO CREATE AN EMERGENCY ACTION PLAN FOR VARIOUS FLOOD EVENTS

TRACY SCOPEL AND CARRIE LANDGRAF, THE BENHAM COMPANIES, LLC

In order to comply with Federal Energy Regulatory Commission (FERC) requirements, an electric cooperative needed to create an Emergency Action Plan to assist local authorities in the event of a river flooding. To understand the sequence of events that would take place under various flood conditions, the following questions needed to be answered:

- Given a scenario such as heavy rain or a breach of one or both of the hydroelectric dams that the cooperative operates, what areas might flood?
- Given their locations along the river, which structures would be affected during a particular flooding scenario?
- If an area should flood, what is the best route to safety?

This project employed a number of ArcGIS tools and extensions for both analysis and delivery. Linear referencing tools were used to calculate river miles to help identify timings for the flood events and also to help identify when and if specific structures would be vulnerable. The Spatial Analyst and 3D Analyst extensions were used to generate the areas of potential inundation from HEC-RAS outputs and contour data. Map books with a road index for easy reference were created with the ESRI Developer's Sample MapBook extension. To take advantage of high-resolution imagery and enable zooming into smaller areas, ArcPublisher will be used to create an electronic (ArcReader) version of the map books for Emergency Management personnel to deploy in the field.

A VIEW FROM ABOVE

KEVIN DAUGHERTY, CHEROKEE NATION

Aerial imagery has become an integral resource for Cherokee Nation's GeoData Center. Utilizing imagery for planning Cherokee Nations development projects as well as seeing current structures assists in the decision making process. With the use of GIS and GPS we are able to keep track of valuable resources such as natural, utilities and Tribal lands. Having access to these decision making tools helps the Cherokee Nation progress as a better informed Nation.

CONTRIBUTIONS OF AMERICAN INDIANS AND ALASKA NATIVE VETERANS, AMERICAN INDIANS IN THE U.S. MILITARY

VERLITA SUGAR, CHEROKEE NATION

Presentation of the lasting contribution of the American Indians in the U.S. Military in Oklahoma

Poster Presentations

Services of the Chickasaw Nation

Dawn M Sowinski, The Chickasaw Nation

The Chickasaw Nation will present a poster that exhibits some of the services that we (as a Nation) provide to Chickasaw citizens. The mission of the Chickasaw Nation is "to enhance the overall quality of life of the Chickasaw people" and in the Geography & Statistics section, we aim to do so by providing a tool to decision-makers within the tribe, as well as providing maps of our services to our Chickasaw citizens.

A Project for Chacraseca, Nicaragua

Greg Kirby, City of Broken Arrow

The poster will focus on a small village known as Chacraseca which is a farming comarca southeast of Leon - Nicaragua. The Pastoral Committee ask me to help them track their census so they could determine which sectors were the most populated with habitants and also to determine which areas needed a safe water source. The map will show the Community area, the 11 different sectors, and their populations.

Using GIS to Digitize EMS Service Areas

Calais Selfridge and Katy Rich, Oklahoma State Dept. Health

The purpose of this project was to digitize EMS station service areas current as of summer 2007 to show all stations and their levels of care on a map of Oklahoma. This map will allow EMS providers to see where coverage and/or medics are lacking and the public to see which EMS stations serve their counties.

ArcMap Version 9.2 software was used to convert hard-copy maps of individual service areas to digitized maps of each coverage area. These maps were combined on one digitized map of ALL service areas in the state. ArcMap also was used to layer, label, and organize those maps for easier navigation.

This poster shows a map of Oklahoma, illustrating separate EMS station service areas with designated colors and labeled with each station's license number. It also shows places where coverage areas overlap and where there is no coverage at all.

Future work will include developing an interactive mapping website where service providers and the general public can look at an address in the state and see which station serves it. Each station's area will show the number of paramedics, intermediate EMTs, and basic EMTs providing care, so shortages of medics will be evident. Also, areas not covered - where service area boundaries need to be adjusted- will be easily visible on the website to allow individual stations to work with the state to eliminate those gaps. This will help EMS providers improve services to the community and help the state better manage Emergency Medical Services.

APPLYING TARGETING RESULTS TO IMPROVE WATER QUALITY IN OKLAHOMA STREAMS

STACEY DAY, OKLAHOMA CONSERVATION COMMISSION

The Oklahoma Conservation Commission Water Quality Division uses GIS technology as a vital tool for priority watershed projects. As the State's technical lead on nonpoint source (NPS) pollution, the OCC has prioritized Oklahoma streams according to severity of water quality impairments. Within high priority watersheds, GIS data is used to identify possible sources of NPS pollution and to target areas for implementation of practices to rectify the problems. Maps showing "hotspots" of pollution are produced from GIS data on factors which affect water quality such as soil type, climate, land use, elevation, roads, and population density in order to determine the best plan of action for addressing the water quality problems in a specific watershed. This assures that the highest funding priority goes to implement practices in the areas which are contributing the most pollution to streams and, thus, greatly increases the odds of significantly improving water quality in the area. This poster illustrates how these concepts were used in a project to address NPS pollution in the Lake Wister watershed.

GEOCACHING

DONNA BJORDAHL, TOPOGRAPHIC MAPPING COMPANY

Geocaching is an outdoor treasure hunting game in which the participants use a Global Positioning System receiver or other navigational techniques to hide and seek containers (called "geocaches" or "caches") anywhere in the world. A typical cache is a small waterproof container containing a logbook and "treasure," usually toys or trinkets of little value. The coordinates of a cache are posted on a website for other geocachers to obtain and seek out the cache using their GPS unit. The finding geocachers record their exploits in the logbook and online. Geocachers are free to take objects from the cache in exchange for leaving something of similar or higher value, so there is treasure for the next person to find.

Oklahomans are very active in this game with teams formed throughout the state. In Oklahoma City, monthly event caches bring hunters together from around the Metro to meet and exchange stories of successes and failures. Newbies are welcome and can pick up useful tips from veterans who are more than happy to share.

This map shows some of the caches around OKC and will give the cache name along with the X-Y coordinates.

MAPPING WITH RECREATIONAL GRADE GPS

MATTHEW COLLIER, UNIVERSITY OF OKLAHOMA

Recreational grade GPS (RG) is sufficient for many mapping purposes. This poster will present ideas to aid in choosing between professional and RG equipment. It will also focus on maximizing your returns if you choose RG for your mapping projects.

Poster Presentations

Expanding Municipal GIS with Internet Mapping

Chris Hill, Meshek & Associates

The availability of GIS data continues to grow at an exponential rate. From handheld GPS to the latest GIS software innovations, GIS continues to expand its influence on our daily activities. However, GIS implemented at the municipal level, especially at smaller communities, still proves to be an expensive proposition. The additional cost of software, data, staff, and training expenses can prevent many communities from using GIS. To provide GIS to communities with a limited staff and/or budget, alternatives to the traditional implementation of GIS need to be evaluated. One of the more popular alternatives has been the use of an Internet mapping service that brings GIS functionality to an internet user. By using an internet GIS viewer, the municipality can enjoy the city-wide functionality of GIS without having to build its internal employment infrastructure to support GIS. This poster is intended to highlight the functionality and simplicity of using a web-based GIS for managing municipal resources and infrastructure.

GEOCODING

PANEL MEMBERS: CHARLES BRADY III, CITY OF ARDMORE; RAY HARDY, ESRI; CLIFFORD MONTGOMERY, CITY OF BROKEN ARROW

The Geocoding session will display a wide range of geocoding aspects from various sources. ESRI will showcase some of their geocoding tips as well as some valuable resources utilized in today's workflow. City / County integration of separate geocoding standards will also be discussed by various professionals throughout Oklahoma. If you are starting an application requiring geocoding or an expert in the field there should be a topic that will interest you.

HOW TO GET INVOLVED IN THE GIS COMMUNITY

PANEL MEMBERS: JUSTIN CURE, SCAUG PRESIDENT; TONY SPICCI, MAGIC CONSORTIUM CHAIR; ROBERT STOKES, OK GITA PRESIDENT; SHELLIE WILLOUGHBY, OK GI COUNCIL REPRESENTATIVE

If you want to become more involved in Oklahoma GIS and know what is going on in this growing field, this panel discussion is for you! This session will focus on the various GIS organizations that are currently active in Oklahoma. You will learn more about the goals and focus of each group, how often they hold meetings, how you can get involved, and why you would want to be a part of these organizations. The discussion will provide time to ask questions about the Oklahoma GIS Community and how you can get involved.

WHERE TO FIND DATA

PANEL MEMBERS: CRAIG BEST, US CENSUS BUREAU; STACIA CANADAY, ESRI; SCOTT MARCH, CENTER FOR SPATIAL ANALYSIS

This is the ultimate question for the GIS Professional! "Where can I go online to find the data I need for my GIS?" If you are in need of quality Oklahoma and perhaps national data, look no further than this panel discussion. This session will focus on various data sources available on the web and how affordable they can be. The discussion will include what data is available, how to access it and how the data can be used.

ESRI Technical Sessions

Designing a Version Workflow

Stacia Canaday, ESRI **Room 210**

This session will offer insight into multiuser geodatabase versions. You'll learn tips and tricks for version creation, organization and management. The presenter will also showcase scripts and developer samples that can help you work with your versions. No matter if you are exploring the idea of a multiuser geodatabase for your organization or if you have already implemented a version workflow, this session will help you understand versioning best practices.

Desktop Mapping and Usability Improvements

Ken Smith, ESRI **Room 109/110**

There have been many changes and improvements designed into the latest release of ArcGIS Desktop. The Desktop Mapping and Usability Improvements session will take a look at the new tools introduced at version 9.2 as well as improvements made to many of the existing tools. We will also review a number of tips and tricks that you can use in ArcMap to become more productive and reduce errors. Additional items of interest will cover topics related to the display, symbolization, and navigation shortcuts in ArcGIS Desktop.

Managing Cartographic Representations

Ray Hardy, ESRI **Room 111/112**

Cartographic representations allow users to override and customize the way symbology is rendered on a map. This session will highlight the setup of representations and take a look at examples of cartographic improvements that are possible. Each improvement will be illustrated by defining a representation rule and enacting a geometric effect. This session will encourage you to experiment with representations and help you get started by demonstrating just how easy it is to enhance the quality of your maps.

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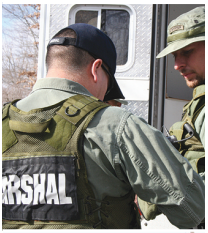

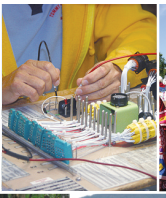

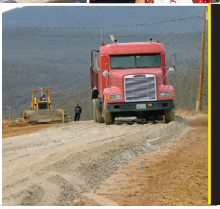

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Mayes Emergency Services Trust Authority
Northern OMA Development Authority
OK Economic Development Authority
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Pottawatomie County
Rogers County Assessor
Southwestern Oklahoma Dev. Authority
Tulsa County Health Department
Tulsa County Highway Department

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Sequoyah Fuels Corporation
SUN Oil Company
Tetra Tech
White Hawk Gas
Williams Energy
Williams Exploration & Production
Williams Natural Gas

Choctaw Electric Co-op
Cookson Hills Electric Co-op
Cotton Electric Co-op
Indian Electric Co-op
Ketchum Public Works Authority
Lake Region Electric Cooperative, Inc.
Latimer County Rural Water Dist.
Northfork Electrical Cooperative, Inc.
Pittsburg County Rural Water Dist. No. 6
Ponca City Energy
Rogers Water Utilities
Rural Water District No. 5
Rural Water District No. 7
Washita County Rural Water Dist. No. 3
Western Farmers Electric Co-op

Blackshare Environmental
General Dynamics
Geo Information Systems
Ground Water Protection Council
KPMG International
Los Angeles Community Dev Bank
Mercy Health System
OK Boll Weevil Eradication Org.
TouchStar Technologies, L.L.C.
Visual Lease Services, Inc.
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Pittsburg State University
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University Of Central Oklahoma
University of Oklahoma
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Aerial Data Service is the largest full-service photogrammetric firm in the State of Oklahoma. With offices in Tulsa, Oklahoma, and Austin, Texas, ADS provides aerial photography and photogrammetric mapping to hundreds of engineering firms and governmental agencies across the country.

ADS is dedicated to providing quality work and using the most sophisticated technology available in the industry. Established in 1964, ADS became incorporated in 1973 and a 100-percent woman-owned firm in 1984. ADS currently employs a staff of 36, including three American Society of Photogrammetry and Remote Sensing (ASPRS) Certified Photogrammetrists, two American Society of Photogrammetry and Remote Sensing (ASPRS) Certified Technologists, one Geographical Information System Professional (GISP), one Registered Land Surveyor and two ATP Rated Professional Pilots, who together comprise over 100 years of cumulative experience.

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an SAIC company

The ***Benham Companies, Inc.*** (Benham) was established in 1909 as an engineering firm. Since that time, Benham has grown and diversified to become a fully integrated design build company, embracing all elements of design, technology integration and environmental stewardship. Benham's services include: architectural and engineering, environmental consulting, systems engineering and integration, advanced communication systems, GIS services, and a variety of specialized consulting services. Our approach is to develop scalable, client-focused geographic solutions. On August 1, 2007, Benham became a wholly owned subsidiary of SAIC. This acquisition affords Benham the considerable technical expertise and capabilities of SAIC. If you would like additional information regarding Benham or SAIC, please do not hesitate to call us at 405-321-3895.

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Carter Burgess

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Carter & Burgess is a full-service engineering, architecture and planning firm focused on meeting aggressive project schedules by assembling multidisciplinary project teams to provide our clients specialized attention and service. Founded in 1939 in Fort Worth, Carter & Burgess has grown to rank among the nation's top planning and engineering firms. We offer a combined staff resource of more than 3,200 professionals in 32 offices across the nation. Carter & Burgess' six decades of practice have resulted in a solid foundation of experience and technical expertise and a dedication to integrity, excellence and quality service. Our talented Geographic Information Systems staff provide proactive and innovative solutions to clients in the following service areas:

- Water Resources
- Transportation
- Environmental
- Land Development
- Urban Planning and Design

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The Cherokee Nation is the federally recognized government of the Cherokee people and thereby has sovereign status granted by treaty and law. Tribal sovereignty is the right to self-governance. The seat of tribal government is the W.W. Keeler Complex near Tahlequah, Oklahoma, capital of the Cherokee Nation. The Cherokee tribal registry lists more than 250,000 members, and approximately half live within the 14-county jurisdictional boundary of the Cherokee Nation. The GeoData Center is an operational support function for the entire organization. The center provides technical and analytical support through the development and manipulation of spatial data.

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Coordinate • solutions

www.coordinatesolutions.com

Oklahoma City, OK
405.740.4324

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405.246.9396

Coordinate Solutions, Inc., a GIS consulting and software development firm with offices in Oklahoma City, OK and St. Augustine, FL, was founded in 2006. Coordinate Solutions offer a full line of GIS consulting services, from internet mapping solutions and custom desktop applications to needs assessment, spatial database management, and GIS training. We provide cutting edge application development services using the latest .NET technologies including Windows Presentation Foundation and Silverlight. Our clients represent all levels of government, profit, and non-profit private entities. With more than 20 years experience in the GIS profession, Coordinate Solutions is dedicated to wise use of resources, appropriate design, and turnkey operations.

For thirty years now, ***ESRI*** has been the world leader in the geographic information system (GIS) software industry. As the leader in GIS technology, ESRI offers innovative solutiosn that will help you create, visualize, analyze, and present information better adn more clearly. Working with location information, ESRI's GIS software adn solutions give you the power to solve problems you encounter every day. Organizations around the world, as well as local, state, and federal government agencies, are using ESRI GIS software to make smart and timely decisions. In fact, ESRI is leading the industry in providing mapping technology that meets today's global needs. http://www.esri.com

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FUGRO EARTHDATA, INC.

For over 52 years, ***EARTHDATA*** has provided mapping and GIS solutions for state, municipal, and federal government customers who rely on geospatial data for a variety of activities. Our aerial acquisition and processing capabilities include both film-based and digital imaging, as well as lidar, radar, thermal, and multispectral mapping systems. EarthData's GIS experts provide a full-range of services, including project consulting, geodatabase design, application development, web-based solutions, and spatial analyses. With our own acquisition-to-product delivery resources, EarthData has the flexibility to be innovative and responsive, the control to ensure quality and invest in technology, and the commitment to serve our nation's geospatial needs. EarthData boasts successful completion of 13 statewide mapping programs, over 60 recent local government projects and over 40 international projects spanning 6 continents.

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GRE
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GREAT RIVER ENGINEERING (GRE) is a full service GIS, Engineering, and Surveying company established in 1999. Our GIS services include geographic data development and conversion, full GIS implementation including the latest ArcServer technology, web mapping development, custom printed wall maps and map books, and customized on-site training and technical support. Our clients include municipalities, counties, utility companies and private organizations. GRE is an ESRI Authorized Value Reseller and Business Partner.

For over a decade, ***Geodynamic Solutions, Inc*** (GSI) has specialized in the design, development, implementation and training of enterprise-wide geospatial applications built upon the full suite of world-leading geographic information system (GIS) technology from Environmental Systems Research Institute, Inc. (ESRI). This experience has led to the development of several commercially available off-the-shelf products and literally hundreds of custom application solutions and consulting engagements contributing to our client's successes. Support extended to industry and governmental agencies required to manage large volumes of assets include oil and gas, pipelines, electric/gas utilities, city/county development, water and irrigation districts, telecommunications, forestry, transportation and mining. GSI is an authorized ESRI Business Partner, Developer and Training Center.

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HTSI is a provider of High Quality Pipeline data and associated facilities that cover the entire USA. Of Note is HTSI'S high resolution Oklahoma, Kansas and Colorado Pipeline, well\ facility location data that is the most complete and accurate data on the market today. In addition to our pipeline data HTSI has 1:24000 PLSS, DOQQ, DLG and Culture data for the USA.

Our most important intuitive and unique to HTSI is our Customer's ability to purchase our "Complete County Dataset" on line, have immediate delivery and be able create project for that county in just minutes. The "Complete County Dataset" contains all layers HTSI offers for that county such as pipelines, wells, PLSS and 15 more layers. Visit us on line at http://www.htsidata.com

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We've been servicing contractors and municipalities since 1970. ***Improved Construction Methods, Inc.*** is the name of our company and that name suggest our main objective, which is to provide the construction contractor or municipality with innovative and productive construction tools, equipment and methods of construction. We are pioneers, always on the leading edge of Construction Technology, Always! Not only are we committed to offering the latest and best construction methods and equipment, we are also committed to giving the best quality and service good people can give.

Our Sales representatives don't mind wading the mud and water to jobsites providing you with the quality equipment you find displayed on our web site. We provide service and rental on most products we sell. Our Service department provides quality repair service on ALL Brands of Pipe Lasers, Rotating Lasers, Gas Detectors, Pipe Locators and Surveying Instruments.

Pat White of ICM Oklahoma City Branch, Phone: 1-405-235-2609, Fax: 1-405-235-2610, http://www.improvedconstructionmethods.com

IT Nexus, Inc is a provider of Enterprise GIS software products and consulting services. We specialize in the delivery of GIS and IT solutions for municipal and state agencies. Our ITN Solutions Templates offer a range of server-based GIS applications that provide high-value enterprise solutions built for the ArcGIS server environment.

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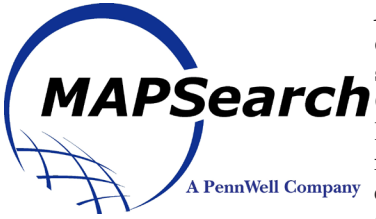

PennWell MAPSearch publishes GIS data for the Energy Industry. Petroleum sector data includes Natural Gas, Crude, Refined Products, LPG/NGL and Petrochemical pipelines and corresponding facilities. MAPSearch petroleum data coverage includes the United States, Canada, Mexico, Gulf of Mexico, and the Middle East. MAPSearch also offers Electric Power infrastructure data for the US and Canada. Fully attributed data includes transmission lines, power plants, substations and IOU, Municipal, and REA service territories.

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Meshek & Associates, PLC has 20 years of experience in general civil and water resource engineering, storm sewer and open channel system design, floodplain analysis, and roadway/water/sewer project design. For the past 9 years, we have also provided GIS services for stormwater management, municipal GIS asset/utility mapping, and internet mapping. Our municipal clients include the cities of Tulsa, Enid, McAlester, Ponca City, Jenks, Muskogee, Owasso, Bixby, Sand Springs, Sapulpa, Bartlesville, Miami, as well as Tulsa County, FEMA, Corps of Engineers and ODOT. Our firm employs 16 people; 6 PE's, 1 PLS, 4 GIS Specialists, 2 EI's, and CADD/Engineering technicians.

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The ***MidAmerica GIS Consortium, Ltd.*** is a nonprofit educational organization established to foster the applications of geographic information systems (GIS) and related spatial technologies in the mid-continent region.

Midwest A&E has been serving the Surveying and Engineering industry in Texas and Oklahoma for more than 50 years. Our knowledge of positioning and measurement applications, combined with our experience in GPS hardware, mapping software and services, enables us to provide complete solutions to our clients. By identifying an organization's unique challenges with field data capture and management, we define and implement a process improvement, which creates a positive financial results for clients in the private and public sectors.

Midwest A&E • Dave Henderson • 400 North Grove Road • Richardson, Texas 75081 • Toll Free (800) 442-5327 • Mobile (214) 686-0711 • http://www.midwestsurveyors.com

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Pictometry International's patented aerial imaging process captures georeferenced, high-resolution oblique (at an angle for a 3D-like view) and ortho (straight down) Intelligent Images® of counties and states. Combined with the company's interactive software solution, users can see everywhere, measure anything, and plan everything. The company has a growing customer base exceeding 400 counties, the State of Connecticut, the State of Massachusetts, the State of Rhode Island, federal government organizations, as well as private business users. Major metropolitan areas using Pictometry® include Atlanta, Baltimore, Boston, Houston, Indianapolis, Jacksonville, Los Angeles, Minneapolis, New York City, Philadelphia, San Francisco, and Washington, DC. Applications include 9-1-1, appraisers, assessors, emergency management agencies, engineering, financial institutions, fire departments, GIS, golf communities, homeland security, insurance, law enforcement, planning officials, real estate, transportation, and utilities.

Pinnacle Mapping Technologies, Inc., a woman-owned and veteran-owned small business, provides a broad range of photogrammetric and GIS services to clients in the private and public sectors. Our biggest strength is our people. Nearly half of Pinnacle's staff has served in senior management at larger mapping companies across the United States . We have seen what works and what does not; what emerging technologies to embrace and which ones to avoid. The net result is a small, dynamic company that can change its production very easily without distraction from corporate objectives or bureaucracy. At Pinnacle, we bring together our large company technical knowledge base within a smaller organization. Our customers feel like they are working with a large company that is in tune with quality assurance and customer satisfaction, they receive first-rate mapping products and they spend only a fraction of the cost a large company would charge for those services.

Stewart Geo Technologies, Inc. (SGT) is a professional services organization dedicated to providing geospatial solutions to agencies engaged in the design, construction and management of public infrastructure systems. Structured to accommodate time-critical and technically demanding projects, SGT supports its clientele with a broad range of geospatial technologies encompassing photogrammetry and geographic information systems.

A wholly owned subsidiary of Stewart Title Company, SGT has provided mapping services for almost a half century. SGT offers the following services:

- Aerial Photography
- Digital Orthophotography
- GIS Application Development
- Vector Land Base Mapping
- Aerial Triangulation
- Digital Terrain Modeling
- GIS Database Creation
- GIS Implementation and Training
- Digitizing
- Image Plots
- Parcel Mapping

Strategic Consulting International is a full service consulting firm, providing opportunities for growth and development to public and private sector clients in the following areas:

- Geographic Information Systems (GIS)
- Global Positioning Systems (GPS)
- Information/Data Management
- Hosted/Managed GIS solutions
- Knowledge Management
- Training and Program Management

As one of the leading providers of GIS in the United States, SCI offers a full range of services, from initial feasibility studies through application and database development to full implementation and systems management. SCI maintains a unique portfolio of qualifications from the Environmental Systems Research Institute, Inc. (ESRI), which include ESRI business partner, authorized reseller and certified training statuses. SCI is also an authorized Trimble Navigation Limited GPS system reseller and carry the full line of Trimble GPS mapping products.

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Surveying • Mapping • GIS • GPS

Whether your GIS project requires highly accurate data or exceptional products and services, delivered at an affordable cost, look to Topographic. ***Topographic Mapping Company*** is one of the four companies under the Topographic, Inc. umbrella. GIS services, data development, and software are our specialties and have been since 1985. We provide high-quality GIS data to meet your needs including: cultural/physical data, digital land grid, contours, USGS digital raster graphics, aerial photography, and the Oklahoma Digital County Map Book. CAD services are also available along with on-site scanning and lamination. As Topographic, Inc. approaches its 50th anniversary in 2008 and with new management at Topographic Mapping Company, find out more about the company that helped build Oklahoma's GIS from the beginning and continues today.

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

1. We are a direct seller of Trimble GPS products in Oklahoma, Texas, and Arkansas. We can supply the entire Trimble line of GPS Survey, Mapping, Machine Control and
Seismic Products. Training, Technical Support and all Accessories your crew might need. With offices in Edmond OK, Dallas, Houston, San Antonio and Austin, 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 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.

Contact : Joel Clouse • Toll Free (866) 593-7652 • 2600 Linda Lane, Suite 10 • Edmond OK 73013 • www.westerndatasystems.com • gary@westerndatasystems.com

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Wind Environmental Services, LLC provides complete GIS solutions® to their clients, providing hardware, software, training, and support. They are an ESRI Authorized Business Partner, Consultant and Reseller; they also have an ESRI Authorized Instructor on staff. In addition they are resellers for Ricoh Geo-Imaging, Magellan Navigation, Laser Technology, LizardTech, and Juniper Systems. They also produce Wind Image™ Suite of products that provide image integration into ESRI ArcPad, and ArcMap software. In addition they proved ArcPad customization and custom application development. With their wide variety of products and services they can truly provide solutions to meet the need of any GIS or mapping project. For more information about any of their products or services stop by and visit there booth.

2007 OKLAHOMA SCAUG CONFERENCE GISP CREDIT CHECKLIST

½ Day Workshops (4 hour)	Classification	Credit	Credits Earned
GPS Fundamentals	EDU	0.1	_____
Communication & Networking for Tribal GIS Users	EDU	0.1	_____
FEMA HAZUS for GIS	EDU	0.1	_____
GISP Certification	EDU	0.1	_____
Workshop Instructor: _____	EDU	3.0	_____

(Workshop Certificate required for documentation credit)

SCAUG Conference (8 hour)	Classification	Credit	Credits Earned
Attendee: _____	EDU	0.1	_____
Presenter: _____	CON	1.0	_____
Poster Competition _____	CON	1.0	_____
Poster Award Winner _____	CON	2.0	_____

2 Day ESRI Training (16 hour)	Classification	Credit	Credits Earned
Intro to ArcGIS Server	EDU	0.4	_____
Advanced Analysis in ArcGIS	CON	0.4	_____
GIS QA / QC	CON	0.4	_____
Instructor : _____	CON	3.0	_____

(Training Certificate required for documentation credit)

Total GISP Credits Earned: _____

Past OK SCAUG Steering Committee Members

This year, as we celebrate ten wonderful years of SCAUG, we would like to say thank you to all the past Oklahoma SCAUG steering committee members who dedicated their time and energies into making this organization and this conference such a success. The Oklahoma GIS community is much stronger because of your dedication. We are indebted to you. . .

1997

Sara Cobb • Rich Davis • Jann Hook • Rachel Noon • Alan Rea • Jayne Salisbury

1998

Sara Cobb • Rich Davis • Jann Hook • Scott MacKelvie • Rachel Noon • Al Rea • Jayne Salisbury

1999

Stefanie Canno • Jun Gao • Joyce Green • Rory Hodgson • Mike Kapka • Geogre Nordahl • Kate Seney

2000

Kara Flynn • Genaro L. Garcia, Jr • Joyce Green • Ray Hardy • Julie Parker • Scott MacKelvie • Gary McElhaney • Jean Vieux • Scott Woodruff

2001

Steve Banks • Kara Flynn • Cari Harris • Kevin Koon • Gary McElhaney • Scott McKinney • Shellie Rudd • Kate Seney • Jerry Wright

2003

Charles Brady III • Joyce Green • Kevin Koon • Michelle Matthews • Scott McKinney • Angela Mead • Julie Parker • Kent Sanmann • Mike Sughru • Shellie Willoughby

2004

Charles Brady III • Kate Burch • Kevin Koon • Julie Parker • Mike Sughru • Shellie Willoughby • Scott Woodruff

2005

Melissa Baldwin • Charles Brady III • Kate Burch • Esther Goldsmith • Ray Hardy • Kevin Koon • Julie Parker • Mike Sughru • Shellie Willoughby • Scott Woodruff

2006

Melissa Baldwin • Charles Brady III • Elizabeth Kruger • Michelle Matthews • Clifford Montgomery • Sterling Overturf • Bob Pendergrass • Chuck Sloan • Thomas Tollett •Shellie Willoughby

2007

Charles Brady III • Kate Burch • Michelle Matthews • Clifford Montgomery • Katy Rich • Chuck Sloan • Robert Stokes • Thomas Tollett • Shellie Willoughby

South Central Arc Users Group