URISA PROCEEDINGS

**Papers from the GIS in Addressing Conference of the
URBAN AND REGIONAL
INFORMATION SYSTEMS ASSOCIATION**

August 14-17, 2005
Austin, Texas

Pages 1-11 Abstracts

Papers and Presentations
Monday, August 15, 2005

Room: Salon E, 3rd Floor
Welcome and Keynote Address
8:30 – 10:00 AM
Ron Cramer, 2005 Conference Chair, and representatives from URISA and NENA will welcome attendees and make a few announcements before introducing the keynote speaker, Dr. Bill Munn.

9-1-1 and GIS: A Successful Marriage
Dr. Bill Munn, Tarrant County 911 District, Ft. Worth, TX
Starting in the early 1980's, a technology known as "Enhanced 9-1-1," or "E9-1-1," revolutionized the processing of answering calls from persons reporting crimes, fires, accidents, medical, and other emergencies. The new technology, beginning with the larger urban areas, was implemented across the US, with only the more sparsely-populated areas still without it. Even as enhanced technology was being introduced, the explosive growth of wireless technology soon negated much of the gain, as 9-1-1 centers received a growing number of 9-1-1 calls from wireless customers, some in desperate situations, they were unable to help due to lack of location information. The sheer volume of calls which could potentially result from one incident compounded the problem. The result has been a marriage of location technology and public safety telecommunications (Phase II) deployed to meet requirements for location and accuracy set by the FCC in response to the plight of wireless users. The resulting growth of location technology and its deployment to the nation's 9-1-1 call centers is revealing not only new technology to public safety, but new opportunities for cooperation between those who deliver and process emergency calls, GIS, and those who respond to all types of emergencies.
Dr. Munn will discuss the growing role of GIS in the delivery of emergency calls, new applications for GIS in public safety communications, and some possibilities for the future.

About the Speaker:
Dr. Munn has been the Executive Director of the Tarrant County 9-1-1 District since 1985. His district currently provides Enhanced 9-1-1 service to 1.9 million people in Tarrant and Dallas Counties in North Texas. Bill is also currently a member of the Board of Directors of the National Emergency Number Association (NENA). In addition to his duties with NENA, Bill serves as president of the Texas 9-1-1 Alliance, a consortium of 20 Texas 9-1-1 districts. He served two full terms on the Commission State Emergency Communications, having been appointed by Governor Bill Clements in 1987 and re-appointed by Governor Ann Richards in 1993. He holds a BBA from Texas Tech, an MPA from Southern Methodist University, and a Ph.D. in Urban and Public Administration from the University of Texas at Arlington. He has served as an Adjunct Assistant Professor for Embry-Riddle Aeronautical University. Dr. Munn has authored one textbook, *Human Resource Management* in 9-1-1, and is currently completing a second textbook, *Strategic Planning for Public Safety Communications.*

10:00 – 10:15 AM
Refreshment Break – Capitol Foyer

Educational Sessions
10:15 – 11:45 AM

Room: Salon ABC

13   **How to Set Up a GIS Addressing Database from Start to Finish *State and Local Government: Supporting Address Data Sharing, Addresses and the Election Process, and Those Quirky, Inconsistent Addresses.***
Are you frustrated with multiple addressing systems across jurisdictional boundaries? This session focuses on data sharing and maintenance between state and local governments. A look at how local jurisdictions are using Parcel based GIS for the Election process, and the history of local addressing systems and the legacy systems you may already be dealing with.
Mike Walls, Atos Origin, Inc., Lexington, KY

28   Creating Address Ranges from Imperfect Address Data – *Paper*
Ed Wells, GISP, Office of the Chief Technology Officer, Washington, DC
Fan Zhao, Razavi Application Developers, Inc, Centreville, VA

Room: Salon D
Hot Topics and Emerging Technologies

Bringing the Census Data Up To Date – The Plan for 2010
The Census Bureau is working to improve the address file it uses to conduct and control the 2010 Census. This session focuses on initiatives to improve the address inventory and geocoding quality.

38   Updating the Census Address File with Building Coordinates – *Presentation*
Daniel Reyes, US Census Bureau, Geography Division, Washington, DC

Plans for the 2010 Census Local Update of Census Address Program
Lornell A. Parks, US Census Bureau, Washington, DC

Room: Salon FGH
Technologies for Assigning and Using Addresses

What the USPS looks for in an address. What works, what doesn't and why it doesn't
This session will provide an inside look, from an expert within the postal service, as to how the postal service uses addresses. All elements of the delivery address will also be discussed, including numbering, street names, use of directionals (both pre and post), etc.

53   What the USPS Looks for in an Address – *Paper*
J. Larry Lindsey, Address Management Systems, Rio Grand District – USPS, San Antonio, TX

The Texas National Map *Felicia Retiz, Texas National Resources Information Services, Austin, TX*

Addresses and Centerlines - Leveraging and Enhancing Existing GIS Data
Marc Berryman, Greater Harris County E911 Network, Houston, TX

Roundtable Luncheon
11:45 AM – 1:00 PM
Room: Capitol View Terrace
All full conference registrants will enjoy the Roundtable Topic Luncheon. Choose the discussion table topic that most interests you and join in the conversation. It is an excellent opportunity for networking and picking up some helpful hints from your colleagues! Code enforcement/posting, working with Commissions/Councils, and public education are a few of the important topics to be discussed.

1. Address ordinances
2. Changing addresses: Politics, requirements, and how to minimize the angry citizen
3. Why is my address important? Public education
4. Address standards - What are they and how do we get all departments to use them?
5. Working Better Together! Cooperation between local USPS, telephone companies and others
6. Looking for trouble - bad addressing and 9-1-1
7. Data models for addressing
8. Addressing non-traditional features with the use of GPS
9. Addressing made easy, is there such a thing?
10. Public perception and the cold hard truth of re-addressing
11. GIS for addressing, how the heck do you guys do it?
12. How to manage the 3-ring circus - Coordinate, Communicate, and Cooperate
13. Data, cost, and resource sharing - How to find and fund the Holy Grail
14. GIS Certification
15. Let me eat in peace; I just need a short breather
16. Let me eat in peace; I just need a short breather
17. Pick your own topic

Educational Sessions
1:00 – 2:30 PM

Room: Salon ABC
How to Set Up a GIS Addressing Database from Start to Finish
A look at how local jurisdictions are using Parcel based GIS for the Election process.

59   Getting Out The Vote: Using Parcel-Based GIS in Today's Election Process – *Paper*
      Mary Johnson, Remington & Vernick Engineers, Haddonfield, NJ

Room: Salon D
Hot Topics and Emerging Technologies

Data Collection Variables and the USNG
This session will focus on the different technologies available for data collection, the importance of accurate point file data, and how the USNG (United States National Grid) can help to resolve nonstandard address issues.

 Importance of an Address Point File in GIS *Jeffrey Haney, Jackson County Technology Center, Independence, MO*

 Bladen County GIS and 9-1-1 Services Update *Eddie Staley and Chuck Wright, Withers & Ravenel, Cary, NC*

68   National Capital Region USNG Geo-Addressing Demonstration – *Paper / Map*
      Tom Terry, HQMC, Washington, DC

Room: Salon FGH
Technologies for Assigning and Using Addresses

Large-Scale Addressing Projects
Does the thought of assigning and maintaining addresses for your whole county or city keep you up at night? What if you had to perform that task for every county in your state? Or the whole country? Or for several countries? This session describes the processes used by agencies that tackle the really big addressing projects. Find out how addressing projects proceed at the state, national and global levels.

Statewide Addressing in New Mexico *Keith Cunningham, Spatial Data Research Inc., Lawrence, KS* Pitfalls of Maintaining an Address File *Daniel Reyes, US Census Bureau, Washington, DC*

88   Addressing and Geocoding of Demographic Data on a Global Basis – *Paper*
        Mark Leipnik, Sam Houston State University, Huntsville, TX Jennifer Lorca, University of Texas, Austin, TX

2:30 – 3:00 PM
Refreshment Break – Capitol Foyer

Educational Sessions
3:00 – 4:30 PM

Room: Salon ABC
How to Set Up a GIS Addressing Database from Start to Finish

104   ***Addressing Database Systems for County Government***
        Attend this session and see how two counties are designing or re-designing their databases. Ada County, Idaho is migrating to ESRI's Geodatabase and Fairfax County, Virginia completed a Master Address Repository using Oracle 9i.
        Sara Stolz, Ada County Assessor's Office, Boise, ID

125   Creating a Master Address Repository for Fairfax County, Virginia – *Presentation*
        Greg Thomas, Fairfax County, Fairfax, VA Priti Mathur, ARCBridge Consulting, Henrdon, VA Statewide 9-1-1 GeoDatabase Cooperative Effort *John Hunt, NCTCOG / RIS Department, Arlington, TX*

Room: Salon D
Hot Topics and Emerging Technologies
Assigning Addresses – A New Approach
How do you make sure everyone who needs new address information actually gets the information? This presentation will discuss a pilot project in New York that addresses this question.

Assigning Addresses in NYC - A Comprehensive Process for Sharing Information
Jean Carubia, NYC Dept of Finance, New York, NY

Incorporating Address Assignment and Maintenance into a Master Address Repository:
The Case of Washington, DC
Martha Lombard, GISP, Spatial Focus Inc., Birmingham, AL Mohammad Tariq,

Peak Technology Solutions, Inc., Olney, MD Using Live Metadata for Your Addresses *Martha Lombard, GISP, Spatial Focus, Inc., Birmingham, AL*

Mapping for 9-1-1, A Coordinated Effort
As the need for more accurate and current mapping data grows with the deployment of Phase II wireless, local and state governments search for ways to fund their mapping programs. This session will provide examples of how this has been accomplished through cooperative purchasing and alternative funding avenues. In addition, strong coordination between jurisdictions to overcoming technology differences and the ongoing maintenance of the data are keys to long-term success and will be discussed.

144   The Location Based Response System: A High –End Solution – *Presentation*
        Ronald Cramer, Digital Data Technologies Inc., Columbus, OH

Mapped ALI: A Coordinated Effort *Richard Kelly, Plant Equipment Inc., Austin, TX*

Networking & Sponsorship Reception
5:00 – 6:30 PM
Room: Salon E

Tuesday, August 16, 2005
Room: Salon E
Keynote Address
9:00 -10:00 AM

Address Standards Working Group Overview and Update
Martha Lombard, GISP, Spatial Focus Inc., Birmingham, AL
Ed Wells, GISP, Ed Wells, GISP, Office of the Chief Technology Officer, Washington, DC
Hilary Perkins, GISP, Jacobs Civil Inc., St. Louis, MO
A comprehensive address standard providing cross-data linkages across all levels of government is the goal of the Address Standards Working Group, which was convened by the Federal Geographic Data Committee (FGDC). This presentation will bring attendees up-to-date on the Group's progress in establishing data standards for content, transfer, and quality.

10:00 – 10:15 AM
Refreshment Break – Capitol Foyer

Educational Sessions
10:15 – 11:45 AM

Room: Salon ABC
How to Set Up a GIS Addressing Database from Start to Finish
Cincinnati Area GIS (CAGIS): How a Consortium of Over 3,000 Users Employ GIS-Based Addres Management
This session demonstrates a multi-agency effort in redefining how local government delivers services utilizing several integrated enabling technologies. One of those technologies is a GIS-integrated address management system.

GIS Integration Framework and Real-time Address Management for Local Government *Richard Allen, MAGIC, Cincinnati, OH*

Room: Salon D
Hot Topics and Emerging Technologies
Geo-Coding vs. Geo-Locating and an Intro to VoIP
Two new technologies will be discussed in this session. The concept of geo-locating will be explained. Discussion will center on its progression beyond conventional geo-coding. Voice Over Internet Protocol (VoIP) will also be defined and a discussion of how this will affect public safety will be conducted.

226   The Move from Geo-Coding to Geo-Locating – ***Paper***
        Matthew Hutchinson, Curtin University of Technology, Canton, OH Bert Veenendaal,
        Curtin University of Technology, Perth, Western Australia

VoIP - What is it and how will it affect public safety? *Mary Mulloy, Northwest Central Dispatch System, Arlington Heights, IL*

Enterprise 9-1-1 MSAG and GIS Management *Jerry W. Merlick, Contact One, Inc, Austin, TX*

Room: Salon FGH
Technologies for Assigning and Using Addresses
Addressing Approaches for the Entire Enterprise
Integration of address data across the entire enterprise sounds good in theory…but in reality, it can be fertile grounds for failure. This session presents three innovative approaches to the issues involved with address dissemination for the enterprise.

239   Deploying Enterprise Addressing: Lessons Learned from the City of Hamilton, OH *Louis Schoolkate, GeoAnalytics Inc., Madison, WI Peter Thum, GeoAnalytics Inc., Madison, WI*

253   Remote Editing of ESRI Geodatabases Between Different Organizations – *Presentation Chris McPhilany, Houston-Galveston Area Council, Houston, TX*

Lunch on your own
11:45 AM – 1:00 PM

Educational Sessions
1:00 – 2:30 PM

Room: Salon ABC
How to Set Up a GIS Addressing Database from Start to Finish
Tough Decisions: Is it Time for Re-Addressing, Verification and Building a Centralized Address Database?
Unpopular decisions are common in government, so does it make sense to update legacy address systems? This session provides some guidelines on re-addressing, building a GIS based master address database, and address verification.

265   Is The Possibility of Re-Addressing on the Horizon? – *Presentation Jody Sayre, GeoCom Inc., St. Cloud, MN*

273   In MAD Pursuit of System-Wide Address Integration – *Presentation Jeff Saunders, Farallon Geographics Inc., San Francisco, CA*

284   Address Verification and Re-addressing: The Benefits and Stressors – *Presentation Cynthia Feirman, City of Sulphur, Lake Charles, LA*

Room: Salon D
Hot Topics and Emerging Technologies
Seamless Statewide GIS, Map Data in PDF, and Crime Mapping
This session will discuss ways to create a statewide GIS, how to distribute GIS data to the masses in PDF form, and how to use GIS data to assist in crime analysis.

Mapping Crime Risk from Historical Crime Data
Akinsola Fasubba, University of Leicester, London, England

302   Distributing Mapping and GIS Data to the Masses in Intelligent PDF – *Presentation Phil Lee, Layton Graphics Inc., Marietta, GA*

308   Building a Statewide Seamless E9-1-1 Road – *Paper / Presentation Tim Ray and David Morrison, South Carolina Budget & Control Board, Columbia, SC*

Room: Salon FGH
Technologies for Assigning and Using Addresses
Land- and Structure-Based Addressing Methods
Once the modeling, collection, and creation methods of addresses are determined, there still remains the issue of assigning the address to a physical location. Should the address be an attribute of a physical feature, such as a structure or a portion of the structure? Or should it be an attribute of a land lot, or the combination of several lots (a parcel)? Attend this session and hear about how three municipalities approach attributing their addresses to the correct physical location.

333   An Integrated Land Management System and Address Database – *Presentation*
         Craig Swisher, City of Dallas Development Services, Dallas, TX

355   Unit Level Addressing for GIS – *Presentation*
         Jeremy Jobe, Woolpert LLP, Indianapolis, IN

Educational Sessions
2:35 – 4:00 PM

Room: Salon ABC
How to Set Up a GIS Addressing Database from Start to Finish
Addressing Problems You'd Like to See Standards Cover --
This informal discussion will serve as a small group forum for participants at the conference to describe problems that they think need a standard or some other solution. The results of the discussion will be shared with the Addressing Standards Working Group and with the conference organizers for planning next year's sessions. So, come prepared to tell us what problems with addressing you're having that you didn't hear a solution for, or issues you want resolved in the standards. Suggestions for next year's conference will also be greatly appreciated. And, maybe, the panelists or other audience members can give you suggestions before we leave!

Room: Salon D
Hot Topics and Emerging Technologies
Professional Development and the Importance of ENP
Professional development is an excellent way to build your career. Unfortunately, there is no certification in addressing. However, both NENA and the GIS Certification Institute (GISCI) offer certification programs that enhance your professional credentials and prove to your peers and employers that you have the skills and knowledge to be certified**.** Attend this session and learn everything you need to know about earning your GISCI Geographic Information Systems Professional (GISP) certification and NENA's Emergency Numbering Professional (ENP) certification. This session is open to all conference attendees, and an open format is designed to answer your questions and get you started on your path to career development.

What is a GISP?
Kathrine Cargo, GISP, Orleans Parish Communication District, New Orleans, LA

What is an ENP?
Marc Berryman, Greater Harris County E911 Network, Houston, TX

Room: Salon FGH
Technologies for Assigning and Using Addresses *Addressing for Emergency Response*
Addressing for emergency response demands a high level of confidence in the accuracy of those addresses. A variety of methods for maintaining accurate address locations exist to help those whose responsibility it is to support that high level of confidence in the address data. Attend this session and hear about three examples of creating, collecting, and analyzing addresses for improved emergency response.