the
GIS PROFESSIONAL

A publication of the Urban and Regional Information Systems Association

Issue 237 • May/June 2010

IN THIS ISSUE

ArcGIS Server solution promotes synergy among local government entities

City View Application Combines Collaboration with Integration

By Kevin Willis, GISP, Lake County GIS Director & Sue Carroll, GISP, GIS Project Manager

Highlights:

- County/City collaboration eliminates duplication of work and is more efficient
- Land use research is quicker and easier to visualize

In the last several years GIS technologies have overwhelmingly become the tool of choice to combine collaboration with integration. Many times this produces enterprise solutions among similar but separate entities. Lake County (Florida) has joined forces with eight local municipalities to provide citizens with an Interactive GIS Web Map named City View, which displays City Zoning and City Future Land Use for all participating municipalities in a single web application. Re-using existing data, the application takes advantage of both county and city sources of information resulting in a collaborative effort that promotes synergy and eliminates duplication of work.

Background:

Hosting an Interactive GIS Web Map can be a daunting task and not all municipalities in Lake County have the resources to tackle it. Nor should they when the County itself has access to data, hardware, and software to provide such services. In the spirit of collaboration, Lake County GIS has hosted several city web maps featuring zoning and future land use data over the years. Originally, eight separate web maps were hosted as a courtesy to the local municipalities on the county's ArcIMS web platform. When the county GIS Division upgraded to the more efficient ArcGIS Server platform, it only made sense to upgrade the City View maps as well.

The Issue:

The question arose, "Is hosting eight separate city maps the most efficient use of the new server and staff time to keep information up to date?" The answer, obviously, was "no". In taking advantage of the opportunity to upgrade the existing ArcIMS web maps to ArcGIS Server, the county wanted to create a more positive and intuitive experience for the user and combine disparate data from multiple sources into a single application. Also on the agenda was a desire to maintain a standard look and feel between the City View application and the county's existing Interactive GIS Map.

The Solution:

In order to meet the goal of a standard look and feel, it was decided to duplicate the existing Lake County GIS Interactive Map using ESRI's ArcGIS Server platform, rename it to City View, and change some of the data available for viewing. This preserved all the familiar functionality so users would not have to learn to use two different maps. In addition, all city zoning and future

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land use data were combined to create two all-city feature classes. There was one feature class for zoning and one feature class for future land use, rather than separate feature classes for each city.

Lake County does not currently permit outside agencies access to its SDE geodatabase, and has not implemented web editing yet; however, participating cities periodically upload new data to a secure FTP site and a county GIS Analyst updates the geodatabase used in the web application. Lake County GIS is continually seeking how to best leverage GIS resources efficiently to benefit the broadest range of users at the lowest overall cost.

The final product resulted in Lake County's new City View interactive map which now makes all participating city land use data available in one map. The user can interactively zoom to a desired area, or use the *Zoom to* dropdown list of cities to go directly to the extents of one of the participating cities. The *Identify* button allows users to see exactly what zoning code or future land use designation is on a particular property. The *Help* page lists the participating cities' web pages where additional information can be obtained, along with an explanation of how each of the buttons function. Users can also search for specific properties using various criteria.

All data layers are organized into logical groups based on themes in the table of contents. The county's base map features are in a group called *BASE FEATURES* (including such layers as streets, lakes, parcels, etc...) and individual city layers are grouped by city name. The user can turn on or off a whole city with a single click, making the data more easily accessed and understood. The thematic group layers concept used in all our GIS interactive maps should make City View easy to use especially for those users who are already familiar with the ArcServer based County View interactive map.

The Benefit:

Combining all the city data into two layers (city zoning and city future land use), and creating a single web map to query and display the data has saved development and maintenance time for county staff. For city staff, time once spent answering phone calls and inquiries concerning land use codes can now be redirected to more productive work. It has also provided valuable information to the public in a single location. Research has become easier and decisions can now be made quicker.

City View may become the flagship project that will open the door to additional future intergovernmental collaboration efforts utilizing GIS technologies. It is often during challenging economic times that sharing of data and resources is more acceptable and can enhance efficiencies which produce more all-encompassing solutions to best leverage GIS technology investments. Federal, state, and local governments are realizing that GIS technologies add tremendous value by visualizing choice across all business functions.

City View brings separate city Proposed Zoning and Future Land Use data into a seamless view to better leverage this valuable data at no additional cost to the cities.

Furthermore, many entities are realizing that GIS technologies often champion a cause greater than itself as intergovernmental collaboration becomes more than just a buzzword these days. Collaboration is becoming more integrated into the strategic plan of many organizations, and at the very least within IT and GIS entities. The goal is to "help people make better decisions" and achieving this through economies of scale where applicable. City View is an excellent example of how this can be accomplished.

About the Author(s)

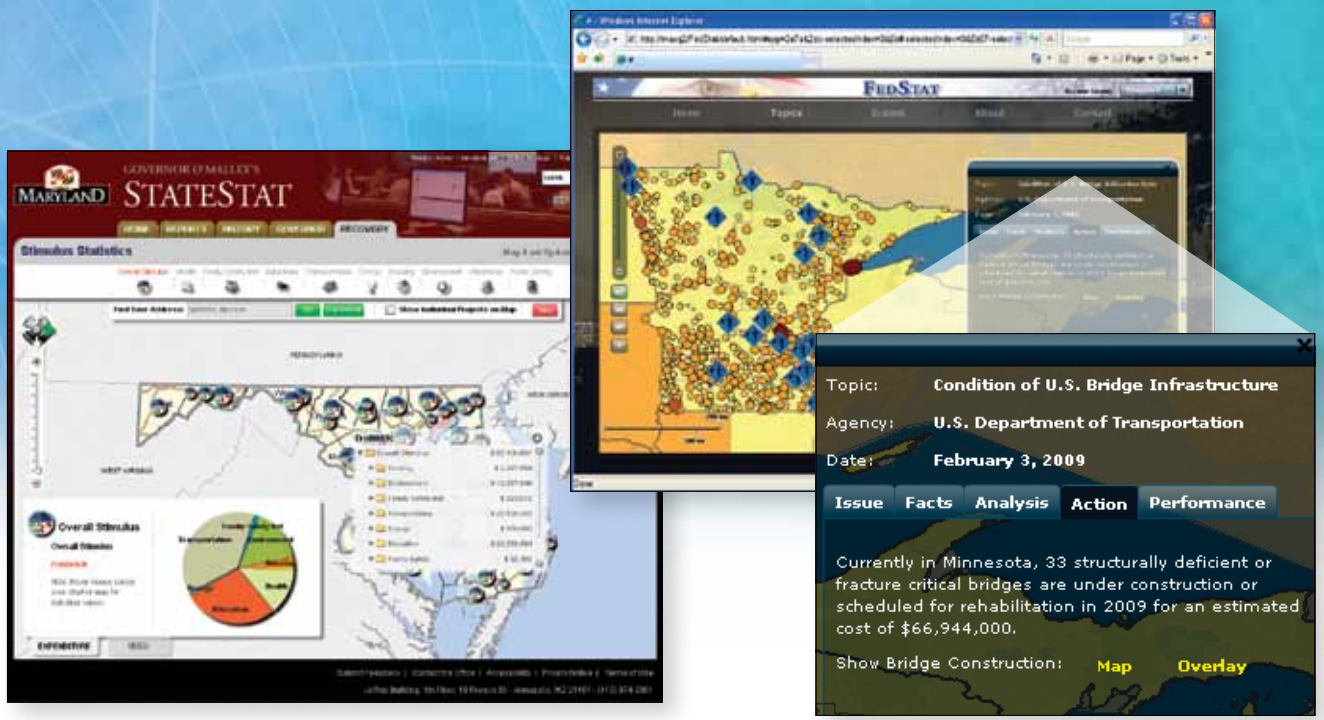
Kevin Willis, GIS Director, with an M.C.S.E., and M.B.A. in Information Technology Management. Sue Carroll, GIS Project Manager, helped implement this initiative.

Additional Credits

Erikk Ross, Programming and Application Support Services Director, and Matt Michaelson, Senior GIS Programmer Systems Analyst, assisted with the design and deployment to the web using ArcGIS Server.

More Information

For more information, contact Kevin Willis, GIS Director (kwillis@lakecountyfl.gov) or Sue Carroll, GISP and GIS Project Manager (scarroll@lakecountyfl.gov). City View webpage at: http://gis.lakecountyfl.gov/CityView/



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Delivering GIS to the Masses: A County Technol

By Benita Staples, GIS Analyst, Mecklenburg County, Charlotte, NC

The idea of sharing geospatial information and data is not a new or groundbreaking concept. Much of the information that we come in contact with on a daily basis is possible because "we" as an information centered community have openly shared our data either by choice or mandate. Popular examples being, the United States Census Bureau, and the United States Geological Survey (USGS). The United States Census Bureau, mandated by U.S. Code Title 13 and 26 to collect and publish quality data about the nation's people and economy, has gone from lists and paper maps to internet surveys and downloadable data. The USGS has been collecting and sharing surveys of this country since the late nineteenth century producing simple land description information in the beginning and now advanced imagery and topographic data. As technology has improved so has the ability for these agencies to provide better quality and more accessible information. While these examples are national entities, agencies on the local level have also participated in this growth and open exchange of information with some benefit from technology. This article will look at Mecklenburg County's progression using technology highlighting two projects, the DELD and the GIS Data Center, used to better service its constituents and provide the best geospatial information.

Mecklenburg County and the Vision for Sharing Data and Information

Mecklenburg County, located in the piedmont region of North Carolina, whose dominating county seat, Charlotte, has grown from bustling mill town to the urban metropolis and most populous municipality in the state. Artist Rob Carter created a video about this area where he depicts the change over time in the area and states that it is "…one of the fastest growing cities in the country, primarily due to the influx of the banking community, resulting in an unusually fast architectural and population expansion that shows no sign of faltering despite the current economic climate…" (Watch the video here http://www.robcarter.net/Vid_Metropolis.html).

It is because of this explosion of growth in architecture and population and economic climate that the Mecklenburg County Geospatial Information Services department has been charged with continuing to keep its community informed while not putting a strain on the department itself. The department states on its website (http://www.charmeck.org/DepartmentsGeospatial+Information+Services/Home.htm) that its mission is "To provide quality geospatial data and technology solutions, empowering customers of Mecklenburg County to make data-driven decisions" with a vision "To be recognized as the national leader in local government geospatial technology delivery and preferred provider of geospatial data".

The Birth of the DELD

To meet the needs of the ever-increasing development community and the escalating constituents, the department began to offer more than spreadsheets and printed maps to the sporadic flow of consumers in and out of the office. As GIS technology became more widely accepted and understood by the development and real estate community and the personal computer was more common, the decision was made to offer data and maps digitally on CD-ROM in various formats (AutoCAD drawings, GIS shapefiles, PDFs, JPEGS, etc) in an effort to save time, resources and provide high resolution and accurate data that could be easily edited. This technological step up was taken even further when the county's Light Rail project was adopted and accepted in 1998 to support the county's 2025 Integrated Transit/Land Use Plan. The collection of data, the frequency of the data inquiry, and the compilation of information necessary to support the light rail design team and the developers looking to build around the project, became a strain on the current staff. The strain was relieved with the creation of the Demographic Employment and Land Development (DELD) Information System. The DELD was initiated by the Mecklenburg County Department of Engineering and Building Standards and brought to fruition by collaboration between Mecklenburg and University of North Carolina at Charlotte-Department of Geography and Earth Sciences. The DELD compiled geographical information onto eight easy-to-use CD-ROMs and would make the data accessible to the technical and non-technical user. Technical users classified as those who have access to

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desktop mapping software or GIS used in data analysis, manipulation and visualization. Non-technical users are those individuals who would like to access the information in the form of images and text. Seven of the eight disks in the set provide aerial photography, planimetrics, topography, and parcel information along with prepackaged ArcView Projects, Themes, Metadata, documentation and PowerPoint presentations in what were known as DELD Deluxe. The remaining disk is a multimedia application that allows for the non technical user (and technical user) to view and print images/text relating to demographic, employment, and land development and is known as DELD Lite.

The decision to provide the DELD proved to be a good decision and became a frequently requested product/service. So much so, a position was created to maintain, support and distribute this product freeing up the other staff to focus efforts on other mapping and land records services.

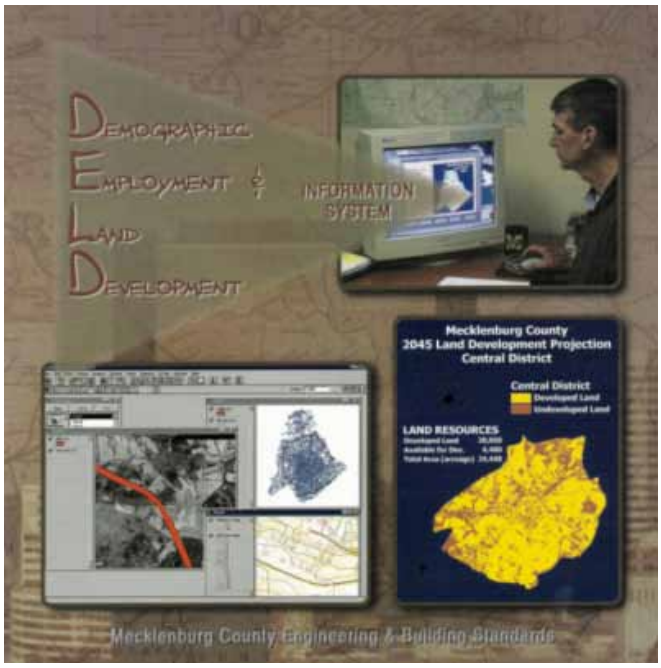

Figure 1: Cover of the Instruction Manual for DELD Information System

Presenting the Data Center

As the request for the DELD package continued, more and more support was needed as data changed and became out of date. In an effort to continue to be a preferred provider of geospatial information, Mecklenburg County's newly consolidated Geospatial Information Services (GIS) department needed to adapt its approach to data delivery. The department begins to take the next step and offer information via the World Wide Web with a creation of a Spatial Data Warehouse. This served as a means to reach even more of the community but required subscription requests to be submitted and accepted before downloading information which was managed by the new GIS department staff position. At the same time the GIS department was supporting the DELD and managing data warehouse subscriptions, the Mecklenburg County Department of Code Enforcement was in the process of creating an online permitting website to better provide its services to its consumers. GIS approaches Code Enforcement's vendor about the process and procedure to create an online payment website. After some brainstorming, meetings with developers and reorganization of data, the next big venture in Mecklenburg County's GIS data delivery was the GIS Data Center. The GIS Data Center provides a means for anyone anywhere to gain twenty-four hour access to current data and custom maps/documents. The website allows for anyone, technical and non-technical, interested to create an account (that is completely managed by the website and user) and select data or custom projects (previously requested) from a dashboard, add them to a cart, enter shipping and/or payment information then instantly download most data sets at their desktops and personal computers. At the same time the website allows for the employee in the position dedicated to data distribution to spend less time packaging and preparing data, less time answering calls about forgotten subscription passwords, as well as, increasing the ease of updating data.

The Hope for the Future

Mecklenburg County has gone from drawing, to printing, to distributing paper maps and spatial information; then to burning digital data to CD-ROMs to individuals, to packing CD-ROMs to meet the needs of various groups; then on to creating a digital warehouse and then finally a data website. There has definitely been a journey down the technology timeline for the purpose to achieve the vision of being a preferred provider of spatial data. Mecklenburg County continues to attempt to be a pioneer in spatial data delivery currently providing all these services mentioned in this article to some degree. The hope for the future is that as the technology becomes more user friendly, geospatial information becomes more popular and governments become more flexible, the data exchange will go both ways, allowing

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Delivery GIS *continued from page 5*

the geospatial information community of analysts, programmers, developers, etc., to submit and receive accurate data with the same ease. In the meantime, Mecklenburg County will continue to brainstorm methods and cooperate with external agency efforts such as NC OneMap and ESRI's Community Map to deliver GIS to the masses and embracing technology as a means to an end.

Benita Staples is employed as a GIS Analyst by the Mecklenburg County Geospatial Information Services Mapping and Project Services division, facilitating data distribution and completing custom GIS analysis and mapping projects. She graduated from North Carolina Central University with a Bachelor's Degree in Environmental Science and University of North Carolina at Charlotte with a Master's Degree in Geography. Contact Mrs. Staples with questions or to get geospatial information via email benita.staples@mecklenburgcountync.gov.

Submit BI, GIS, or other geospatial technology related ideas that you would like to publish or have this editor review in a future article to Keri Shearer GISCommunity@gmail.com.

Featured Links and Resources

1) Metropolis, Ron Carter. http://www.robcarter.net/Vid_Metropolis.html. (Last accessed Apr 2010)
2) Mecklenburg County Geospatial Information Services http://www.charmeck.org/Departments/Geospatial+Information+Services/Home.htm (Last accessed May 2010)
3) Mecklenburg County Spatial Data Warehouse. http://dwexternal.co.mecklenburg.nc.us/ids (Last accessed March 2010)
4) Mecklenburg County GIS Data Center. http://gisdata.mecklenburgcountync.gov. (Last accessed May 2010)
5) United States Census Bureau. http://www.census.gov (Last accessed Apr 2010)
6) United States Geological Survey. http://www.usgs.gov (last Accessed Apr 2010)
7) Mecklenburg County Engineering and Building Standards (2004) Demographic Employment and Land Development Information System Manual. Charlotte

Figure 2: Mecklenburg County GIS Data Center Dashboard

2011 Conferences Announced

February 28-March 3, 2011
GIS/CAMA Technologies Conference
Memphis, Tennessee
Call for Presentations Coming Soon!

June 27-30, 2011
GIS in Public Health Conference
Atlanta, Georgia
Call for Presentations Coming Soon!

GISCorps has launched its 60th Mission!

In April 2010, GISCorps received a request for a volunteer from one of its long time partners; Information Management and Mine Action Program (iMMAP). This project was GISCorps' 60th mission!

iMMAP is assisting the Chadian Independent Electoral Commission (CENA) in Chad. The goals of this project are to geo-reference +/-10,000 polling stations for the entire country and then add attribute data such as type of polling station, mobile network operator available, accessibility, and time to reach from the sub-district center to that dataset. This dataset will be used for the preparation of the upcoming legislative elections due in September 2010. After developing a job description the search for volunteers began and the recruitment will be concluded shortly.

Another recruitment is in progress for a project in North Korea. That project is in partnership with the World Food Program (WFP) and iMMAP. 20 digitizers will be compiling features such as settlement points, transportation (roads, foot path, and railroads), rivers and lakes (complete with attributes) from 400 map sheet. This project will be managed by two GISCorps volunteers; Chris Zumwalt from California and Carol Kraemer from Georgia. Karen Payne of ITOS will be assisting with this project as well.

Our Vietnam project in partnership with CartONG was completed in April. The overall goal of the project was to support the Vietnamese government to find a mechanism to improve the livelihood of the poor by increasing the value of their forests through a pilot study in two regions in the Central Highlands of Vietnam. CartONG and Jason San Souci, the GISCorps volunteer have written a detailed report which is posted on the website.

In October 2009, we were approached by Professor Michelle Thompson of University of New Orleans – Department of Planning and Urban Studies (UNO-PLUS). She requested a volunteer with expertise in ArcGIS Server. Rafael Ferraro from Virginia has been working with UNO-PLUS team since then and has developed an IMS application which soon be launched publicly. Screenshots of the application are posted on our website.

The project to develop several datasets for a flood stricken region in Albania is progressing and in early April the partner agency asked for four additional volunteers which were deployed and put in direct contact with them. More information about the project is posted on the website.

With the 60th mission, the count of our deployed volunteers will reach 180 (including North Korea's 20 volunteers). We are extremely proud of our volunteers' selfless service and their desire to make a positive difference in the world.

For more details and to read the details of our projects, visit our website at: www.giscorps.org

GIS and Smart Grid Analysis: Challenge & Opportunity

By Steven E Collier, Vice President of Business Development, Milsoft Utility Solutions

Summary — The Smart Grid is emerging just as geospatial information systems (GIS) have become widely deployed among electric utilities. GIS can enhance the value and visibility of Smart Grid applications for both utilities and their customers. However, some challenges must be addressed in order for GIS to integrate successfully with electric grid modeling and analysis, and integral application of a Smart Grid. The challenges can best be met through industry standard, real-time, web services data bus interfaces like MultiSpeak.

Electric Circuit Analysis

Electric utilities have for decades used advanced computer software to simulate and analyze electric transmission and distribution networks (i.e., grids) for planning and operations. The advent of the Smart Grid will result in significant advances in the sophistication and power of grid analysis software. As GIS becomes the foundation for utilities' asset management and data display, it will be crucial to integrate grid modeling and analysis with it.

This will be a challenge because the data, analytical methods and software used for circuit modeling and analyses are not primarily geospatial, even though the physical system being modeled is. Key considerations for electric circuit modeling are: the electrical characteristics of nodes (points at which wires or equipment are deemed to be connected) and elements (power lines and devices between nodes), the network topology, and how the electrical characteristics vary as a function of time, the physical environment and the manner in which electric energy is inserted and extracted.

The electrical characteristics are determined by the laws of physics and are only partially dependent upon the geospatial configuration and physical attributes of the underlying electric utility wires and equipment. Yet, because an electric grid is physical and the physical assets are geospatially located, electric utility planning and operating staff find it useful to view some analysis results (e.g., voltages, currents, power flows, phase angles) on stylized connectivity diagrams, known as one line diagrams, and on actual maps of the physical facilities with the underlying geography.

Electric Utility Mapping & GIS

Electric utilities use maps for many reasons unrelated to the calculations needed for grid simulation and analysis. These include navigating and locating facilities and equipment, locating and dispatching crews, managing right of way, identifying geographic franchised service areas, identifying ownership boundaries, and planning the locations of new facilities.

The advent of computer aided drafting (CAD) software helped utilities to address several problems that plagued physical maps including time and labor required to create and update them, limited quality of and accuracy of originals and reproductions, limited capacity for data, and proliferation of maps of different vintages and content. While a profound improvement, CAD maps are computer generated images with no implicit intelligence about connectivity and very limited descriptive and limited data about the items represented on the map.

Thanks to Moore's Law, the power of computers and software has increased exponentially, making it possible to represent the physical assets of the grid with nearly unlimited detail and accuracy. In addition, it is possible to interact through the GIS with information contained in separate data bases. Ubiquitous geographic positioning systems (GPS) and the wide availability of two-way, digital, high speed communications via Internet Protocol (IP) have made it possible for many different users to simultaneously enter, update, query, analyze and display not only geo data and data from other data bases, but also live data from various intelligent electronic devices using GIS is a versatile and powerful graphical user interface (GUI).

But, while GIS is ideal for creating, managing, and displaying geo-data, it has been a challenge to use it for grid modeling and analysis.

Challenges for Circuit Analysis with GIS

There are several challenges that make it difficult to use GIS software for electric T&D network modeling and analysis:

A GIS representation of the physical assets in an electric grid does not inherently create or maintain the connectivity information necessary for circuit analysis. There are a variety of ways to superimpose connectivity on a GIS representation. However, GIS software is designed for geo locating assets and linking data to their location. While it is generally convenient to make changes or additions to the physical assets via GIS, it is extremely difficult within the GIS data and

computational environment to develop the logic and algorithms necessary to translate such a change into grid connectivity and circuit analysis necessary for planning and operations. This can be done much more readily in separate, scientific software applications.

Circuit analysis requires the simultaneous combination of the electrical characteristics described above analyzed according to physical laws (e.g., Ohm's Law, Thevenin's Law, Kirchoff's law), all accomplished via complex matrix algebra and calculus carried out through iterative computer algorithms. While some of the results may be conveniently displayed via GIS, the underlying computations are not readily accomplished with GIS software.

The data required for circuit analysis is not likely to originate or be maintained in a geo database with GIS tools. Much of the data will come from sources other than the GIS. The kinds of data required include: (1) customer power demand and energy consumption, either actual data or projected estimates, (2) the connectivity and of the elements of the grid, (3) the electromagnetic and electrostatic characteristics of circuit elements, and (4) physical condition of the assets, and (5) the physical environment (e.g., wind, lightning, temperature, humidity, ice, contamination, etc.). As utilities move toward a "Smart Grid" and what is referred to as "Active Grid Management," the circuit analysis will be carried out more and more in real time. The circuit analyses will most likely be driven by the engineering and operations staff, not the mapping or asset management staff. Again, while readily displayed via GIS, the underlying data manipulation and computations cannot be accomplished in the relational database structure of GIS.

GIS software, because of the detail of the attributes and the sophisticated computer graphics required for display can be slow when called up the first time, when refreshed to reflect changes in the grid,

Smart Grid *continued from page 9*

or when panning and zooming. Changes in the grid can occur literally at the speed of light. This is at least frustrating and at worst unacceptable for a utility employee who is running and reviewing scores of scenarios for planning, or panning and zooming to identify the location of an event (e.g., service outage, safety hazard, or equipment failure), especially during an emergency, or attempting to query or operate a SCADA or AMR device.

It is likely that GIS will ultimately be the cornerstone of grid planning, operations and maintenance. It will also be extremely important in the monitoring and management of the Smart Grid. As a result, there have been and will continue to be many attempts to incorporate electric grid modeling and analysis into GIS. These will have only limited success. Software that has been designed and refined to manage and display data in a geographical context is not optimum for modeling dynamic networks, whether they be T&D circuits, air traffic flows, fluid dynamics, or weather systems. It's the difference between representing an operating machine and representing the size and location of the physical parts of the machine. The former involve complex scientific modeling and analysis while the latter requires powerful relational database management and sophisticated graphics.

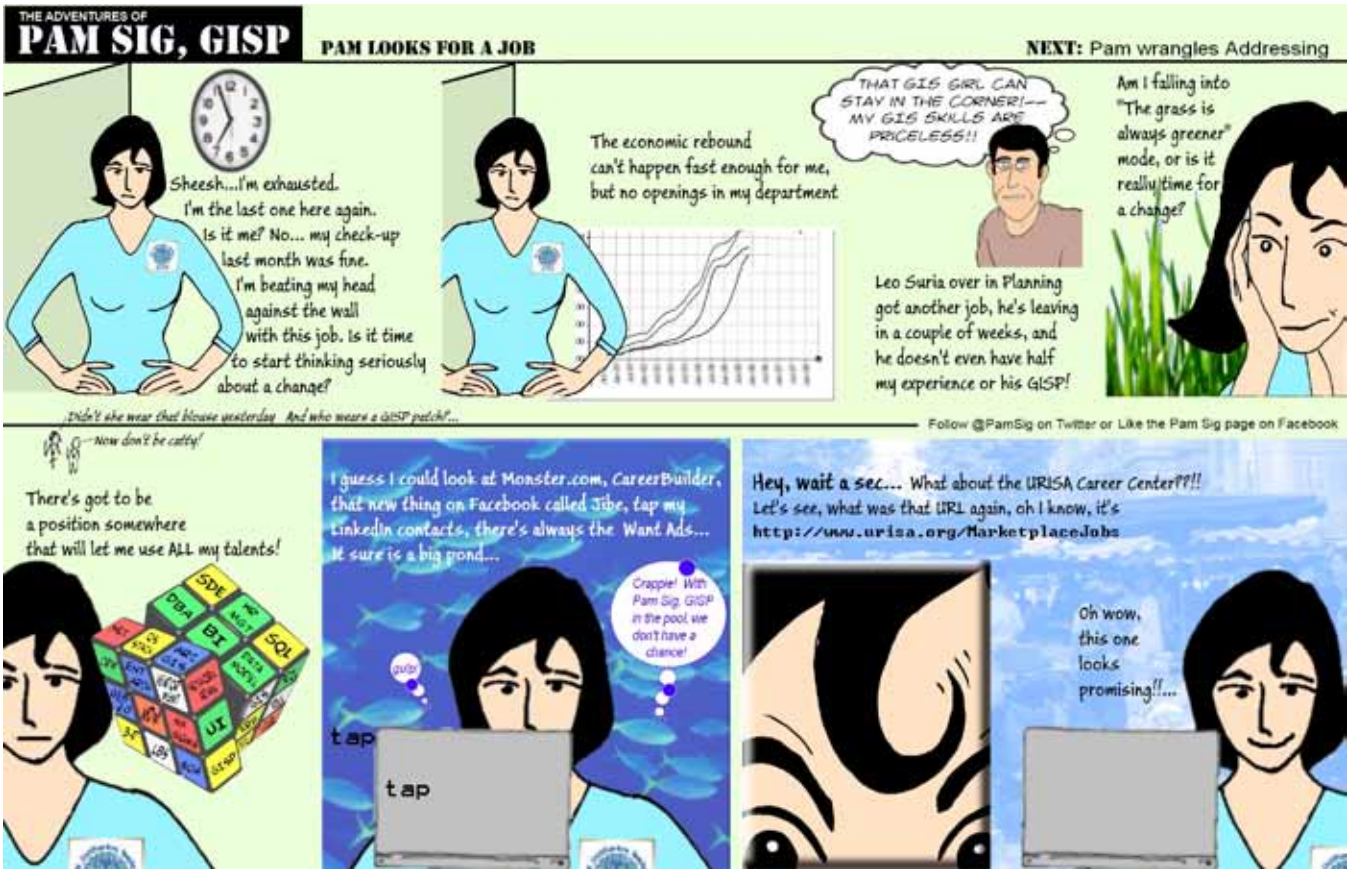
Conquering the Challenge

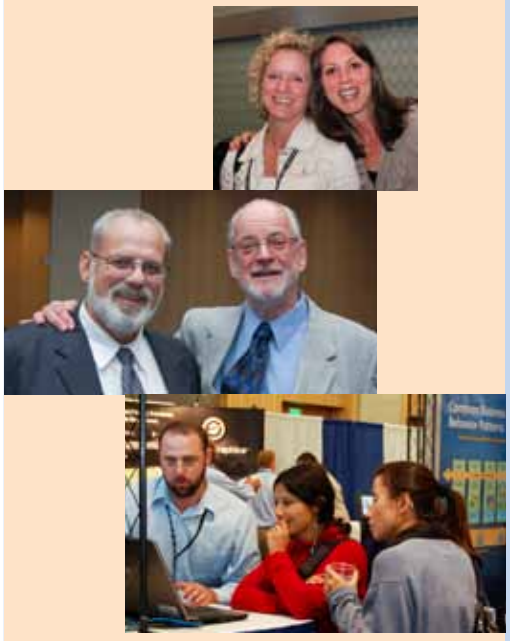
The secret to integrating electric grid analysis with GIS is not to try to do circuit analysis with the GIS software. There is an old saying, "If the only tool you have is a hammer, everything starts looking like a nail." If GIS is a hammer, circuit analysis is not a nail. It's something else entirely.

Don't try to shoehorn circuit analysis into a GIS relational data base environment that is impossibly ill-suited for it. Nobody even tries to create electric grid analysis capabilities inside the CIS system. Nor does anyone try to merge a CIS system into the meter data management system (MDMS). Trying to do this would be comparable to trying to integrate the air traffic control system into an airline's reservation and ticketing system. Why would you even want to try?

There will continue to be a variety of separate databases and computational tools in each electric utility. While they need to be seamlessly integrated, they cannot be merged. What to do? The best software vendors have created the solution to this problem. They comply with industry standard, real-time, web services interfaces (e.g., MultiSpeak) that allow seamless integration with any other software that also complies with the standard. Only this way can each achieve its full potential in any electric utility. It is the best (and the only!) sustainable approach to getting the most out of GIS, whether it is providing data and displaying results of circuit modeling and analysis or acquiring and displaying data from ERP/CIS or monitoring and displaying real time electric grid status and characteristics.

If your GIS vendor tells you that their system incorporates T&D circuit analysis, you need to find out exactly how (and why?). Don't accept less than the very best and most user friendly circuit analysis application in order to get it inside the GIS application. You don't need to because there are vendors that integrate both. If your circuit analysis vendor tells you that they incorporate GIS inside their application, you need to find out exactly how (and why?). Don't settle for less than the very best and most user friendly GIS application in order to get circuit analysis inside. In either case, find a utility that is utilizing the full capabilities of the vendor's proposed solution to determine how well (or not) it is succeeding.





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President's Column

Better Technology is Not Always the Answer

It was the best of times, and it was the worst of times a few weeks ago in my hometown of New Orleans. The end of April is probably the best time of the year to be in the city: it is still cool at night, fragrant jasmine is blooming everywhere, and the New Orleans Jazz and Heritage Festival draws music lovers from around the world to bask in the incredible variety of live music. However looming over the festivities like heavy rain clouds was the specter of the ecological, cultural and economic disaster that was unfolding 45 miles south of the mouth of the Mississippi River, deep in the Gulf of Mexico. There, one mile below the water's surface, an untold amount of oil was hemorrhaging unabated from three wells drilled by British Petroleum Company. This activity was the result of an April 20th explosion and collapse of the drilling rig that claimed eleven lives.

Kathrine Cargo

In the weeks since the explosion, many revelations about the way the oil drilling business works have come to light. Similar to the Katrina experience that New Orleans had nearly five years ago; this accident is an engineering failure of massive proportions. It involves both public and private breakdowns in the process: poor decision-making, lax oversight, and the over-riding will to expedite a profit. The slow, ineffectual response to the leak, first by British Petroleum, then by the Federal government, is also eerily similar to situations witnessed after Katrina. Local Louisiana residents whose livelihoods depend on industries in the Gulf can only shudder to think about how long it is going to take to recover this time, if at all.

Bigger Than Katrina

However, the scope of the BP disaster is exponentially larger than the scope of the damage wrought by the storm and levee failures. This is a regional disaster that currently spans four states, has caused a moratorium on all future deep water drilling, has interrupted drilling on active wells and petroleum industry commerce, and led to a loss of livelihood for a least a generation of citizens who earn their living in and along the coast. This thing is bad, and along the Gulf coast we are all really, really depressed.

So, what can be done? Well, BP is trying every plan they can pull out of the air to stop the flow. All have been ineffective so far, but maybe by the time they make it to Plan Z, they will get it right. So that leaves us to ponder: what can be done to avoid this type of drilling disaster in the future?

Do the Right Thing

After following the Congressional hearings investigating the disaster and reading lots of sworn testimony, especially testimony provided by survivors of the explosion and the victims' families, I fully believe that this was a disaster that could have been avoided.

Simply put, gross human error caused this accident. Years ago, humans awarded drilling permits without performing due diligence on the applications. This made campaign contributors and tax revenue collectors happy because they were stimulating the economy. More recently, humans decided to replace heavy drilling mud with lighter seawater when sealing the recently drilled well. This saved money in the short run. Humans ignored the natural gas "kicks" that eventually led to the fatal explosion. This saved time in a production schedule that was three weeks late. Also, humans failed to diligently test the battery power of the blow-out preventer (BOP), the last line of defense in a long line of failed redundancy. At nearly every turn, it seems that safety standards, industry SOP's and professional ethics were compromised at best, and completely ignored at worst.

As GIS practitioners and professionals, we should pay close attention to this ripple effect of the mistakes made leading to the Gusher in the Gulf. We must recognize that the cumulative results of each of those lapses in human action and judgment are eleven dead men and destruction of the Gulf Coast. Little mistakes do add up, whether it is a mapping miscalculation or faulty data analysis. We should strive to always, as URISA's GIS Code of Ethics instructs, "Do the best work possible," and "Practice integrity, and not be unduly swayed by the demands of others." Learn and practice the URISA GIS Code of Ethics (http://www.urisa.org/about/ethics) in the work you do as if someone's life and livelihood depended on it. Be conscience of the ripple effect your work may have. Endeavor to do the right thing always. It can make a difference.

URISA's 5th Caribbean GIS Conference

December 6-10, 2010
Trinidad

Objectives of URISA's Caribbean GIS Conference

- To inform broad cross-section of Caribbean users about GIS technology and applications
- To share experiences regarding GIS implementation and management issues
- To establish new relationships with the vendor/ consultant community
- To provide workshops and sessions that are application driven, and are relevant to the Caribbean community of GIS users
- To foster a Caribbean GIS network
- To assess the state of readiness of national and regional Spatial Data Infrastructures

The Conference Program is developed through a Call for Presentations. Abstract submissions are reviewed and discussed by a group of volunteer committee members representing the Caribbean region and others with a keen interest in advancing technology solutions in the area. The conference includes a comprehensive Exposition and networking activities.

For details and updates, visit http://www.urisa.org/conferences/caribbean/info frequently!

Will you be at ESRI User Conference?

Stop by the URISA booth and say hello!

Welcome New URISA Members

Ali Abdullah Aldosari, *King Saud University, Riyadh, Saudi Arabia*

Jonathan Jeffrey Bailey, *GISP, SpatialBridge, Ottawa, ON, Canada*

Marc R. Ball, *City of Roseville - Information Technology, Roseville, CA*

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Tyler Patrick Bragg, *GISP, Fayetteville, WV*

Misty Brewer, *Avery County, Newland, NC*

Yuval Brodsky, *Leiden, The Netherlands*

Donna Cameron, *Longmont, CO*

Steven Edward Collier, *Milsoft Utility Solutions, Abilene, TX*

Mark E. Crane, *GISP, Fuquay Varina, NC*

Kathleen Crawford, *NDNU, Englewood, CO*

Xavier Davis, *Peachtree City Water and Sewerage Authority, Peachtree City, GA*

Pradel Denis, *GISP, Engitek LLC, Miami, FL*

Paisly Di Bianca, *Chicago, IL*

Chris Dunlop, *GISP, City of Oregon City, Oregon City, OR*

Kathryn M. Field, *GISP, Michael Baker Jr., Inc., Alexandria, VA,*

Jason Paul Finley, *GISP, Fugro William Lettis & Associates, Valencia, CA*

Scott Flinders, *Tetra Tech, Boise, ID*

April Forsman, *Town of Sharon DPW, Sharon, MA*

Reba Franklin, *Lee County Port Authority, Fort Myers, FL*

W. Dustin Garrett, *Salt Lake City, UT*

Kendra Gibbons, *Coquitlam, BC, Canada*

James Gibson, *IBI Group, London, ON, Canada*

Vanessa Glynn-Linaris, *GISP, GeoRevs, LLC, Grand Canyon, AZ*

Robert Godfrey, *Gannett Fleming Inc, Gainesville, FL*

G. Miguel Guerrero M., *GISP, Peru*

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Bob Haas, *Oregon & SW Washington URISA, Bend, OR*

James Hagedorn, *Banner Associates, Brookings, SD*

Courtney E. Hart GISP, *Idea Integration, Gainesville, FL*

Patricia L Harvey, *GISP, The Schneider Corporation, Indianapolis, IN*

John W. (Bill) Hodge, *GISP, City of Midland, TX, Midland, TX*

Brandon Jones, *HDR Inc, Sacramento, CA*

Nicholas Jones, *GISP, Taylor Engineering, West Palm Beach, FL*

Nicholas Jones, *SIUE, Brighton, IL*

Ken Kato, *University of Oregon, Eugene, OR*

Nick Kenczka, *City of Gillette, Gillette, WY*

Peter S Keum, *GISP, Seattle, WA*

Bruce Wayne King GISP, *PE, Florida Rock Industries Inc, Jacksonville, FL*

David Lathrop Knoll, *City of Oregon City, Oregon City, OR*

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Songmei Li, *GISP, Rolling Meadows, IL*

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Kermit R Lund, *Gilroy, CA,*

Matthew J. Martin, *GISP, Harrisburg, PA*

Mita Mathur, *GISP, Loudoun County, Leesburg, VA*

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Catherine York, *Kennesaw, GA*

Michael J. Zapior GISP, *North Royalton, OH*

Mark Zuniga, *AMEC Paragon, Houston, TX*

Welcome New Business Member

SPATIALBRIDGE

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Introducing SpatialBridge. We're a new company that provides software architecture, design, and development services for GIS systems for the North American market.

Whether or not GIS is a part of your core business, we recognize that it's a tool to help your organization to achieve its business objectives. We know that your GIS system is not an end unto itself. Our goal is to help your organization bridge the gap between a box of GIS technology and the systems and software that support your core business objectives. Our approach is to provide quality, responsive, professional service to our clients without a high-pressure sales pitch. We believe that our success is founded on building lasting professional relationships with our clients and contributing to your ongoing success.

SpatialBridge has extensive experience in designing and implementing GIS systems in the local government, public transit, transportation, utilities, and defence sectors, primarily using ESRI technology.

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Have you talked to anyone about URISA lately?
The more members we have, the more knowledge can be shared!
Make it a point to talk to your colleagues about the organization and encourage them to join.

Introduce young professionals and students to URISA.
Let's expand the URISA Network together!

Mark Your Calendar!

August 16-18, 2010
URISA/NENA Addressing Conference
Charlotte, North Carolina

September 28-October 1, 2010
GIS-Pro 2010: URISA's 48th Annual Conference for GIS Professionals
Orlando, Florida

December 6-10, 2010
URISA's 2010 Caribbean GIS Conference
Trinidad

2011 Conference Dates

February 28-March 3, 2011
GIS/CAMA Technologies Conference
Memphis, Tennessee

June 27-30, 2011
GIS in Public Health Conference
Atlanta, Georgia

August 16-18, 2011
URISA/NENA Addressing Conference
Anaheim, California

November 1-4, 2011
GIS-Pro 2011: URISA's 49th Annual Conference for GIS Professionals
Indianapolis, Indiana

URISA

THE GIS PROFESSIONAL

A publication of URISA – The Association for GIS Professionals. URISA is a non-profit professional and educational association that promotes the effective and ethical use of spatial information and information technologies for the understanding and management of urban and regional systems. It is a multidisciplinary association where professionals from all parts of the spatial data community can come together and share concerns and ideas.

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