GIS CUSTOM SERVICES

CONSULTING   DATASET DEVELOPMENT & INTEGRATION

Needs/Cost Benefit Analysis

Excited, curious or confused about the potential for GIS in your organization? Spatial Systems has been implementing these technologies for years. Allow us to evaluate your needs, project the potential for savings or increased revenues, and otherwise explain the potential for GIS in your business.

GIS Systems/On-Site Consulting

Maybe you need a little help bringing it all together. No one ever said GIS could be integrated overnight. Let us come on-site, provide implementation management and QA/QC to help you enable this time and money saving technology.

Web-Based Hosting

Perhaps you don't really want the hassle of building and maintaining a GIS internally. Consider allowing Spatial to host your GIS data or its services and make GIS functionality available to you and/or your clients over the Internet.

GIS?

A user-applied toolbox and a technology on the verge of revealing itself to everyone.

PUBLIC SECTOR.
Local Government; City Government; State Government; Federal Government.

PRIVATE SECTOR.
Utilities; Lawyers; Consultants; Marketing & Real Estate Professionals.

NON-PROFIT SECTOR.
Centers for Research; Universities; application-specific foundations …and the list goes on.

Wide-Format Scanning

Make it digital! Convert maps, blueprints, and imagery into a new theme/layer for your GIS. Unlimited length specifications with widths accepted up to 50". B/W, full-color, with various resolutions and output formats available.

Registration

Align your new data to fit your old, or convert your data to the statewide "standard", NAD 83Meters.

Vectorization

Take all of your hardcopy or image files and turn them into topologically structured GIS compatible layers, with attribute links to your database.

Integration

Combine the new datasets with your existing data or models to fully integrate GIS technology with your legacy data systems.

GIS APPLICATION DEVELOPMENT

❑ **GUI Development**

❑ **Internet Enabling of Client Datasets for Intranet/Internet Applications**

❑ **Custom Mapping Applications**

10TH ANNIVERSARY 1995 - 2005

SPATIAL SYSTEMS ASSOCIATES, INC.

GIS TRAINING

❑ **Private and Group Instruction Available**

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SPATIAL SYSTEMS ASSOCIATES, INC.
BRINGING GEOGRAPHIC INFORMATION SYSTEMS TO THE USER COMMUNITY

summer 2006

ANNIVERSARY ISSUE! * MUNICIPALITIES

Better Public Service Through GIS

By: Henry Weissenberger, Senior GIS Consultant, SSA

Local government professionals play a key role in managing communities we would all want to call home. Local governments improve the quality of life in our cities and counties through their involvement in some or all of the following activities:

✓ land use regulation
✓ infrastructure support
✓ the provision of emergency response services
✓ economic development programs
✓ health and housing services
✓ transit services
✓ recreational facility services
✓ education services.

All of these functions can be performed better if GIS tools and services are available to the professionals. This article illustrates just some of the many ways GIS has been used by our clients to better serve their citizens.

Land Use Regulation

Land use regulation begins with knowing where a given parcel of land is located. SSA's founders managed the creation of the Maryland PropertyView product on behalf of the State Department of Assessment and Taxation in the mid 1990's—that product is still in use by many agencies and is still a fundamental tool for land use planning in many areas.

For analytical work in this field vectorized parcel data is essential, and SSA has completed many parcel vectorization assignments. To carry out this work, we have trained our staff in the use of parcel maintenance tools we developed, both to accomplish "heads up" vectorization and co-ordinate geometry vectorization. The illustration on page two shows a screen shot of our parcel maintenance tool that was used for the vectorization of over 170,000 parcels for the District of Columbia Government.

Infrastructure Support

Water, stormwater and sewer services are often hidden from public view, but their correct functioning is essential to our way of life. Aside from the physical aspects of these systems, there are financial and regulatory frameworks which influence the management of these systems. Again, GIS is a useful tool to help in this complex task.

Mapping the location of the systems is essential to

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Spatial Systems Associates, Inc. Ten and Counting…

10th Anniversary!

A Message From Larry E. Newman, President, SSA

Spatial Systems Associates, Inc. is celebrating its tenth anniversary, an important milestone in our company's life. When I founded the Company in 1995 I acted on my belief that GIS was a technology that would play an increasing role, both in the engineering field where I had first employed it and in the broader economy and society. The evolution of ESRI's products and their adoption by many users, both public and private as well as the introduction of web applications such as Google Earth, confirms that our vision of the importance of GIS was essentially correct.

The company had, like many others, humble beginnings, a rented space in Laurel with myself as its full time employee. Eric Stetser joined the firm in 1996 as its Vice

check out our website, complete with online store for your convenience! www.spatialsys.com

Public Service Continued from Page 1

provide the basic answer to the question "Where are the service areas?" From that basic piece of information managers can begin to analyze the operating environment—where are the users

of the system, how are they connected, where does the water flow, who will be affected by a service cut off to effect repairs and the like.

Combing the GIS data with an asset management system helps managers respond to other operational needs—life cycle analysis of components, identification of material types and age—as well as financial reporting requirements under GASB 34—what is the historic cost of the system (or its components) and what is the replacement cost.

Finally, there are regulatory requirements relating to NPDES compliance, which means, among other things, that mangers have to document locations of stormwater systems so that

sources of pollution can be identified and treated.

SSA has built data sets and designed GIS applications that meet a variety of infrastructure support activities, from NPDES mapping support in Frederick County, MD to stormwater easement mapping in Fairfax County, VA to the creation of a location based drawing management system for the City of Salisbury/Wicomico County MD Department of Public Works.

Emergency Response Services

The introduction of Phase II wireless compliance requirements for 911 first responders created a nationwide need for accurate base mapping. Land based telephones invariably have an address that is recorded in a master address list and can be located, as long as the information is up to date. This need was one of the main drivers of "city style" addressing that replaced the rural route address system in the 1990s.

The growing use of cell phones made it necessary for the locations of the callers to be displayed, even though there is not always an address associated with the location of the cell phone caller. The telephone industry responded with two types of solutions—triangulation to find a caller based on the relationship of the signal to the cell tower system and the use of GPS chips in handsets, which tends to give a much more precise location. Either way, dispatchers now

have to deal with call locations, not street addresses.

SSA has been very active over the last four years helping emergency management agencies prepare for the Phase ll wireless demands. We have helped counties acquire aerial photography, which is the base of all mapping efforts; developed street centerline files and address point information to help the dispatch operators route responders; built applications to maintain the data sets we built and produce map books and finally, in five counties we have carried out street level address verification projects.

GIS for Your Agency

Spatial Systems Associates, Inc. (SSA), an ESRI reseller and developer for the last ten years, builds GIS and web based applications that assist local governments in better serving their citizens. Good data is the foundation of any GIS, and Spatial Systems Associates has a long history of helping build accurate data sets in a cost effective manner. Also, we offer consulting and support services to local governments to leverage their investment in staff and data, obtaining a better return on that investment. How can we help you?

LARRY NEWMAN, President
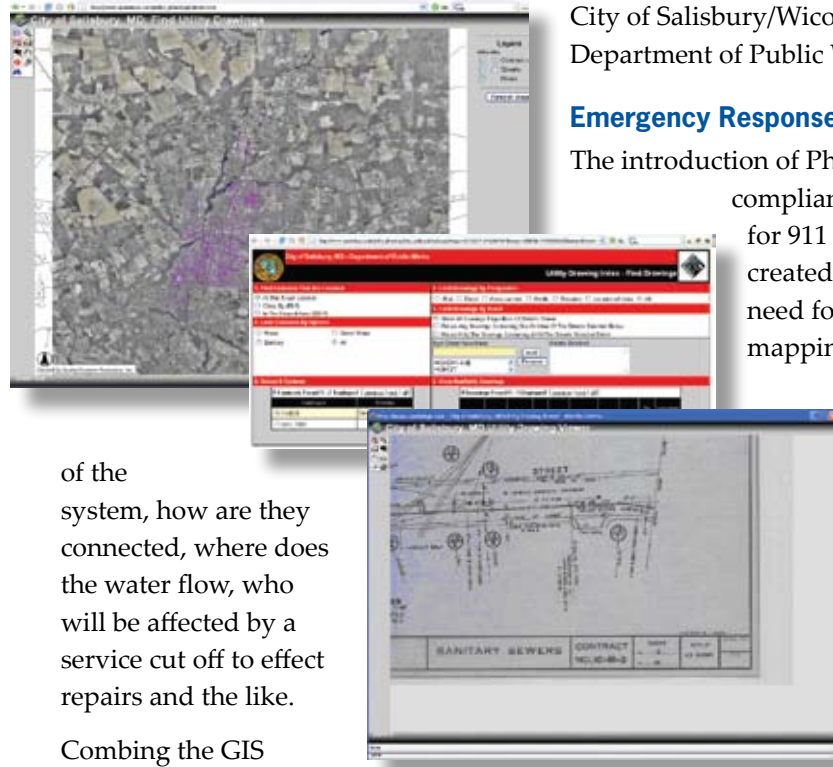
ERIC STETSER, Vice President

Tenth Anniversary Continued from Page 1

President. With support from the Maryland Department of Economic Development's Technical Incubator Program the firm moved to a high tech campus in 1999 at the University of Maryland, Baltimore County. That location was our home for three years as we grew our business and added staff. Thanks to our success, we outgrew those quarters and in 2003 moved to our current location in Columbia.

Our business has grown, and we expect it will continue to grow, thanks in large part to the dedication of our staff members, who brought expertise and enthusiasm in the new field of GIS. Because of their efforts we have been able to demonstrate our value to a broad range of clients, some of whom have maintained a relationship with us from almost Day One. We now number thirty, and are always looking for more dedicated people to join our ranks.

A major factor contributing to our growth was our success in having our firm included in a variety of government contracts, such as Maryland's Technical Services Procurement (TSP), and Consulting and Technical Services (CATS) contracts, as well as the federal General Services Administration's Information Technology Schedule and Fairfax County VA's IT/GIS support contract. The availability of these contracts makes it much simpler for many of our government clients to select our firm when they need GIS services.

Finally, we all recognize that our growth would not have been possible without the trust and support of our many clients over the years. We recognize that they placed their trust in us by doing business with a small, new firm, when they may have had other choices. Our record of service delivery and client satisfaction hopefully demonstrates that this trust was not misplaced. We wish to thank our clients for their business over the last ten years. We all look forward to many more years of successfully supporting our clients' GIS needs as the industry continues to evolve.

ESRI Continued from Page 2

compile actual descriptions of return on investment experiences. These descriptions clarify new applications or improvements to business processes that have resulted in substantial savings or new revenues for governments. Some of these ROI stories can be found on the ESRI Web site at http://www.esri.com/industrial/localgov/business-case.html.

The ROI experienced by each municipality is unique to its conditions. Some of the common themes of these experiences include reducing staff time required to perform repetitive tasks or support public information inquiries at the counter; substituting automated GIS procedures for costly outsourcing of mapping functions; identifying lost revenues in the form of taxes and fees that were not being collected; and successfully using detailed GIS analysis and mapping to support grant and other funding applications.

Many benefits of enterprise GIS are not readily expressed in terms of ROI. These benefits often take the form of improved decision making through access to more complete data resources. Examples of these qualitative benefits of enterprise GIS include:

- ☐ A consolidated perspective on the use of GIS applications and data throughout the municipal government.
- ☐ The elimination of redundant data collection and management.
- ☐ The development and distribution of the core GIS data layers for the municipality, each from its definitive source.
- ☐ Opportunities for process reengineering with a spatial focus that will improve overall efficiency.
- ☐ A simplified approach to GIS implementation and integration through the development of architecture templates and enterprise GIS best practices.
- ☐ A simplified user experience for locating, understanding, and using municipal data layers.

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