GMS-2 + FAST™

Topcon Positioning Systems (TPS) and GeoAge join to combine TSP's hand-held GIS mapping system—GMS-2—with GeoAge's FAST™ data collection and mapping software. Users will benefit from high performance end-user solutions in such industries as utilities, engineering, public works, and environmental management. Topcon and GeoAge will work together to help customers configure the best solutions to meet their needs.

Mike Weir, TPS director of sales-GIS, said "this partnership will enable GIS system managers to rapidly equip field crews with digital photography and sub-meter GPS capabilities in one compact, rugged hand-held unit." By eliminating the need for separate hardware components, "the FAST / GMS-2 solution delivers cost-effective, high performance workflow," said Jeff Arnold, president of GeoAge.

The benefits of the solution are:

- The ability to rapidly build special data collection menus to meet specific field requirements;
- Provides world's leading hand-held GPS platform to GeoAge users;
- Provides GIS end-user expertise and application development experience to the Topcon distribution channel and user base;
- Links GeoAge and Topcon Positioning Systems distribution channels giving the end-user seamless support on both hard-ware and software performance, and;
- Provides true field-to-finish application from data collection to enterprise integration.
- The GeoAge product portfolio extends from form design to data collection and enterprise integration of accurately col-lected field data. With GeoAge FAST software, a GMS-2 user can quickly customize forms and be collecting field data within hours. The data can then be uploaded to an enterprise system on the desktop, over the web, or through secure wireless communications to a server.

Weir said, "The GMS-2 with GeoAge FAST software will provide excellent opportunities for Topcon distributors to increase their Topcon product portfolio. This partnership increases our software for the GMS-2 to include: TopSURV GIS data collection software; TopPAD, GIS data collection software built on the ESRI ArcPad platform, and; GeoAge's FAST software, supporting multiple vertical applications."[www.topconpositioning.com; www.geoage.com]

Topcon total station security

Optional password protection provides security

A new security feature in the onboard software of Topcon's total stations provides users with the option to require password entry for the GTS-100N, CTS-3000, GTS-230W, and GPT-3000W/LW series total stations. Surveyors now have a way of preventing equipment theft By requiring a password to power on and operate the instrument, owners will be able to better protect their equipment from being used if stolen. "Thieves will learn that there is not a market for a Topcon total station made inoperable by password protection," said Scott Langbein, TPS product marketing manager.

Submeter differential correction signals with BR-1

Additional reception possibilities

Topcon Positioning System's GMS-2 now has an option that increased real-time correction capabilities of the GMS-2 hand-hld receiver—the BRI-1 Coast Guard beacon receiver. With this additional receiver option, real-time correction reception becomes possible in areaz where it might not have been previously, The Coast Guard bacon is a free, land-based radio signal that is not easily interrupted by obstructions—trees, buildings, and natural terrain obstacles. The BR-1 has four channels and provides users with up to four consistently available corrections signals to achieve sub-meter, real-time accuracies in the field.

industry news

Innovative use of GIS technology

GIS, a software tool for exploring geographic relationships to better understand how the world works and how it is evolving, connecting, and changing, is making its presence felt in railroading and crime prevention. Virtually unlimited amounts of information can be linked to a geographic location, allowing users to see regions, counties, neighborhoods, and the people who live in them with clarity and solve real-world problems from tracking delivery vehicles to modeling global atmospheric circulation.

Union Pacific Railroad, a recipient of ESRI's Special Achievement in GIS Award at the 27th Annual ESRI International User Conference in San Diego, California, uses GIS technology to make better decisions in various business practices. The Engineering department uses GIS to determine where track work is necessary; the Real Estate and Tax departments use the technology to manage property; Marketing determines proper rates, target areas, and shipping routes with the GIS; and the Risk Management/Safety Needs department use GIS to maintain real-time geographic information in case of emergencies. Externally, customers can visit the Railroad's online GIS application to view shipments on an interactive map.

The City of Hartford Police Department uses ArcGIS software as an enterprise GIS platform supporting intelligence-led policing efforts. The department also uses CrimeView crime analysis software from the Omega Group. Since implementing GIS, the department has achieved lower crime rates in a number of areas.

The 18-square miles City of Hartford has a population of 124,300 that swells to 400,000 during the daytime. It has more than 19,000 parcels and 44,500 addresses. The Hartford Police Department handles nearly 225 serious crimes per week and receives approximately 350,000 calls for service annually. "GIS has provided an invaluable means for better crime analysis, decision making, and communication, which has brought great success to the department," said Daryl K. Roberts, chief of police.

The department made the decision to implement GIS after recognizing the benefits of crime mapping as a tool for crime analysis. The agency was awarded a Community-Oriented Policing Services (COPS) grant from the United States Department of Justice, which provided the funding necessary to purchase the required hardware and software.

Demographic Research

ESRI's 2007 Community Sourcebooks of ZIP code demographics and county demographics and the Community Sourcebook™ America include ESRI's 2007/2012 demographic updates and projections for such data variables as population, age distribution, and income. Spending potential indexes are also included for 20 categories, including financial services, home improvement, entertainment, home furnishings, apparel, automotive aftermarket, health insurance, pets, and pet supplies. For more information about ESRI's Community Sourcebook products, call 800-292-2224 or visit www.esri.com/sourcebooks.

Advanced cadastre services

Ness Technologies, Inc., a global provider of information technology services and solutions and the Czech Office for Surveying, Mapping and Cadastre (CUZK) team up to develop a new generation of CUZK's real estate registry information system

(ISKN). Ness and CUZK have successfully cooperated since 1997, and Ness developed and implemented the ISKN information system, which went live in 2001. The cooperation between CUZK and Ness will result in a centralized ISKN version, ISKN 2008. The new version is expected to be completed in the second half of 2008.

"ISKN's new version must address the constantly growing volume of user requirements and range of provided services," said Karel Štencel, CUZK's deputy chairman. "We want ISKN 2008 to be one of the key systems supporting electronic communication in the public administration enabling it to respond flexibly to the new requirements of e-government, and to create support for changes we want to execute."

The ISKN 2008 system will also include a range of web services (such as notification of changes in real estate law), a reference guide to participants in a proceeding, enhanced electronic data transmission capabilities enabling external users to enter electronic data and messages via a web application, and the ability to work more efficiently using digitized documents. [media.int@ness.com; investor@ness.com.]

Search thousands of historic photos online

From the building of City Hall, to the oldest church in Pennsylvania, to American's most historic penitentiary, the Philadelphia Department of Records holds the country's largest municipal archive of historic photographs, totaling over 2 million images. Dating from the late 1800s, the photographs paint a stunning portrait of Philadelphia and its industry, architecture, culture, and people from all walks of life. Until recently, this vast collection was stored in the depths of the City Archives, with little to no availability to the public. Now, the Department of Records is making these photographs available to a worldwide audience for the first time through the website PhillyHistory.org.

This is made possible through an innovative web-based geographic information systems (GIS) application which enables PhillyHistory.org users to search for historic photographs based on locations and keywords. The Department of Records partnered with Avencia Incorporated, a Philadelphia-based geographic analysis and software firm, to develop a digital asset management system which allows employees of the Department of Records to upload scanned photographs, enter historic information, and assign a geographic location on a map.

In recent years, many archives, libraries and special collections have begun digitizing their contents and making them available to the public on the web, and most of these support search via keyword, topic or date. The software engine running PhillyHistory.org adds a geographic dimension, enabling search by address, intersection, place name and neighborhood. As a result, never-before-seen photographs within a certain neighborhood have become accessible by address, intersection, historic date, a place name, or other keywords, augmented with street maps showing their exact locations within seconds. The maps can also be panned and zoomed to adjust the geographic area of the search.

PhillyHistory.org features over 25,000 extraordinary photographs that open a window to the past with images of ships arriving at dock, industrial development, historic mansions, and horse-drawn carriages on cobble stone streets. Approximately 1,000 more images are added each month.

Additionally, the Philadelphia Historic Street Name Index matches up former street names to their current names, making it easy to find an historic building or an ancestor's former home. With over 40,000 unique visitors to-date, PhillyHistory.org has attracted the attention of historians, geographers, genealogists, researchers and history buffs in Philadelphia and around the world.

PhillyHistory.org also features a blog detailing the history behind many of the images, written by history graduate students who catalog and scan the photographs and research some the city's most fascinating stories, as well as historian guest bloggers.

"PhillyHistory.org is quite unique when it comes to historic photographs," says Robert Cheetham, President and CEO of Avencia. "Every record in the system is stamped with map coordinates, enabling geographic search and mapping capabilities that we haven't found in other municipal archives."

A new version of Avencia's software, called Sajara, is targeted by museums, libraries and archives for its improved search capabilities, more photos per screen, support for media other than photographs, and refined search categories. Sajara is built using software from ESRI) whose ArcGIS Server and ArcIMS products are used for map generation.

The City of Philadelphia has been recognized for its innovative use of geographic databases and received a Special Achievement in GIS award for DecisionMaps, a web-based mapping, business siting, and economic development tool. The City continues to work on the cutting-edge of GIS technology through projects such as PhillyHistory.org, ParcelExplorer which enables searches of real estate records, and the Crime Spike Detector, an application that analyzes crime trends and changes. As Philadelphia expands its pioneering citywide WiFi network, PhillyHistory.org will also be accessible with a cell phone or wireless internet-equipped pocket PC through PocketCulture.