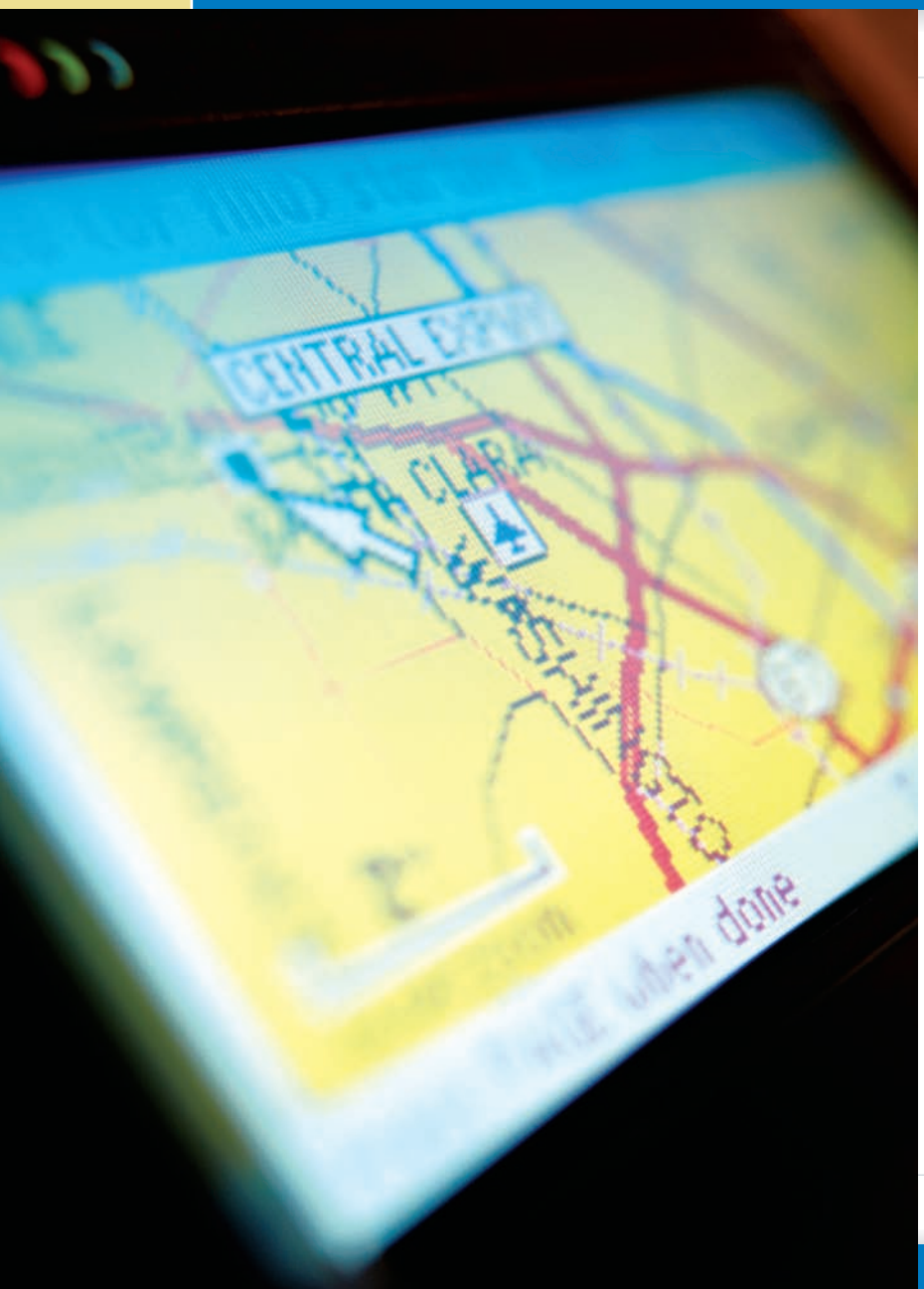
# ArcWeb Services MARKS THE SPOT




## On-demand mapping can do more — a lot more — than you might think.

When people think GIS, they think ESRI. Tucked away in the quiet bedroom community of Redlands, Calif., ESRI has established itself as the nation's leading GIS provider. Now ESRI is taking GIS to a powerful new level with ArcWeb Services, which offers fully hosted on-demand mapping and GIS.

ArcWeb Services' chief advantage is that it allows government agencies to incorporate GIS capabilities into their processes without hosting data or developing applications. ArcWeb Services delivers highly secure, highly reliable access to vast amounts of up-to-date information. Instead of investing in more hardware and software, an agency simply subscribes to ArcWeb Services and accesses the service through a custom-built portal that looks just like a part of the agency's Web site.

"It is completely hosted," said James Killick, development manager for ArcWeb Services at ESRI. "The way you access it is through a set of Web services. You can access satellite and aerial imagery, flood zone information from the Federal Emergency Management Agency (FEMA), real-time traffic and weather patterns — a whole host of applications. It's not just about putting dots on maps. It can be used for far more powerful applications that go beyond just the map."

## ESRI and the City

Big solution for a small community.

Deciding where to locate a business is a make-or-break decision for owners. Finding the right locale can be a shot in the dark. Choose wrong, and it may not be long before the windows are boarded up.

But business success isn't only important to company owners. Local government leaders also must cultivate a good business climate to ensure the prosperity of their communities. In Westerville, Ohio, the local government offers an innovative solution to spur economic development.

Using ArcWeb Services from ESRI, Westerville allows users to find out everything there is to know about an available piece of property within the city.

"We have a Web site available that shows properties and sites," explained Westerville IS Director Todd Jackson, formerly the city's GIS manager. "You can go to the site and specify the type of land available. You can see square footage information, you can dynamically request demographic reports for a user-selected radius, and you can get contact information for the property."

The ArcWeb Services solution is a joint venture set up by Westerville and shared by the Westerville Community Partnership, which is devoted to helping the city develop economically. Users generate reports and maps that are up-to-date and comprehensive. The solution allows Westerville to be highly responsive to information requests. The city is better able to generate interest among those looking to locate their businesses, and it improves the overall service capabilities of the city.

"We are trying to make the information gathering process easier for interested parties," said Jackson. "We don't want to have a company not choose Westerville because they couldn't get information quickly enough."

With more than 38,000 residents, a city of Westerville's size typically has a modest IT budget. Integrating the city's existing Available Properties economic development Web site with the demographic information available through ArcWeb Services made the project a reality. The city did not have to buy additional hardware or software to get the project up and running. And offering such a powerful tool might just give Westerville the competitive edge it's looking for.

"Right now, people expect information to come back to them more quickly," said Jackson. "They want quality information. We want to get that quality information back to them more quickly than the next community."

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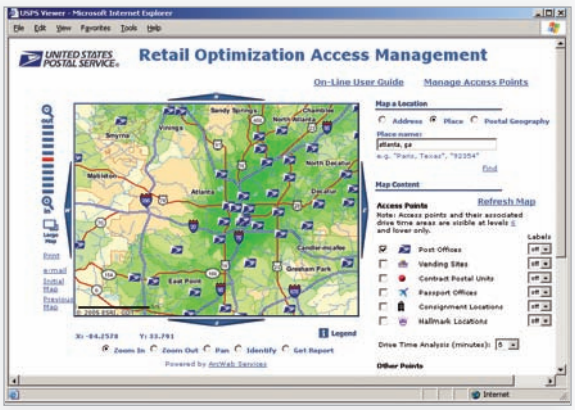
Governments at all levels are discovering just how valuable ArcWeb Services can be. For example, a municipality might use ArcWeb Services to track sex offenders. A county could provide real-time road closure data on its Web site or post the locations of restaurants that violate health code. An even simpler application might be merely offering constituents a locator map for government services or offices.

From handy to mission-critical, the mapping applications made possible by ArcWeb Services are limitless. ESRI also offers demographic data in thousands of categories. There are broad data sets like population and income, and narrowly focused sets like consumer spending and visitor information.




The U.S. Postal Service uses ESRI's ArcWeb Services for a variety of tasks, ranging from establishing delivery routes to mapping demographic data.

ArcWeb Services can take this information and map it by time frame, area or just about any subset.

All this can be done without a single penny invested in new infrastructure or software. It is all hosted by ESRI. And ArcWeb Services boasts a 99.9 percent availability rate while delivering as many as 5 million maps per day. Governments searching for ways to stretch every dollar and expand constituent service now have an impressive and powerful option.

Agencies can choose from existing applications or work with ESRI to design applications specifically for their needs. The U.S. Postal Service, for example, uses

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— James Killick, *development manager, ArcWeb Services, ESRI*


Crisis management agencies use ESRI's ArcWeb Services to analyze disaster risks.

ArcWeb Services for everything from establishing delivery routes and drive times to locating sites for new facilities. Meanwhile, the agency accesses and maps demographic data to determine how better to serve citizens in a specified area.

At the same time, New York City currently is working with ESRI to develop an ArcWeb Services-based version of its popular 311 service, which will be used to report nonemergency situations like graffiti or broken fire hydrants.

Crisis management agencies, such as FEMA and the Department of Homeland Security (DHS), use ArcWeb Services to map and create valuable analyses of threats posed by terrorists and Mother Nature.

These services often hold great interest to smaller, local governments that would like to emulate New York or the DHS. With the ArcWeb Services outsourcing model, even small municipalities can leverage powerful GIS solutions in a cost-effective, reliable and secure manner, said ESRI's Director of Internet Services Mike Tait.

"It's not just the size but the availability as well," he said. "What happens when the power goes out? Is it a secure facility? Do they have hacker and virus

## Tackling Topography

ESRI helps the California Department of Fish and Game manage maps.

For many Californians, their only interaction with the state Department of Fish and Game (DFG) is when they purchase fishing or hunting licenses. What they may not realize is that the DFG plays a prominent role in conserving the environment.

The California DFG faces unique challenges because no other state has such a diversity of landscapes and ecosystems. One of the more successful land-management strategies employed by the DFG comes from using ESRI's ArcWeb Services.

The DFG uses detailed aerial imagery to oversee land throughout the state. These imagery products are extremely data-intensive — spanning hundreds of gigabytes of storage for the entire state. Letting ESRI's ArcWeb Services host and serve the imagery helps ease some of the data distribution and storage burden on the agency, according to Will Patterson, a GIS specialist for the California DFG.

Using ArcWeb Services, streaming aerial imagery is delivered across the Internet directly to mapping software used by DFG employees — providing detailed background data that can be displayed along with GPS points, study area boundaries and so on, said Patterson. "It's a very efficient and effective application. If we were to deliver such statewide imagery on media like CDs or DVDs, it would take a lot of time, money and hundreds of discs. Using ArcWeb Services gives us more time to focus on managing data unique to our department and less need to store and maintain current background imagery ourselves."

In addition to large volumes of aerial imagery, ArcWeb Services also provides current street map data from vendors such as Tele Atlas. These particular services are useful for making quick site maps complete with labeled roads and landmarks. Real-time mapping data for precipitation and traffic conditions are also offered in the ArcWeb Services package. These tools allow the DFG to create dynamic maps for various situations as needed.

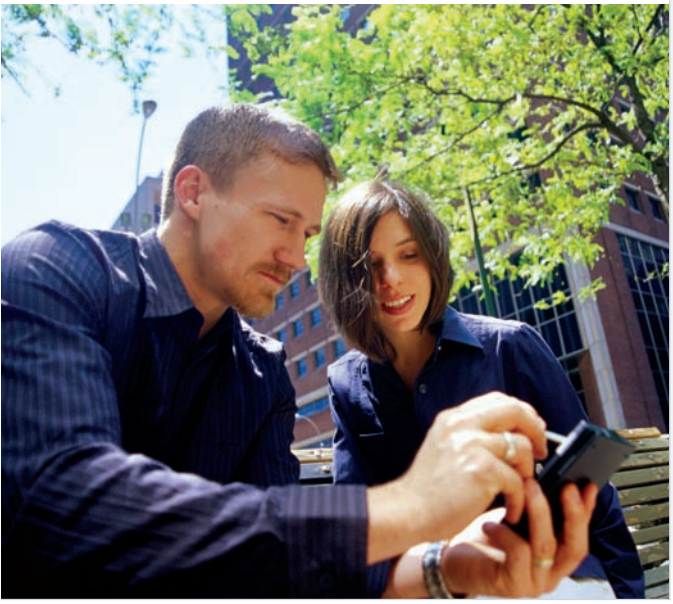
"We have reasonable guarantees with the services that the content will be up-to-date," said Patterson. "It makes it easy for our end-users to create maps with the most current data."

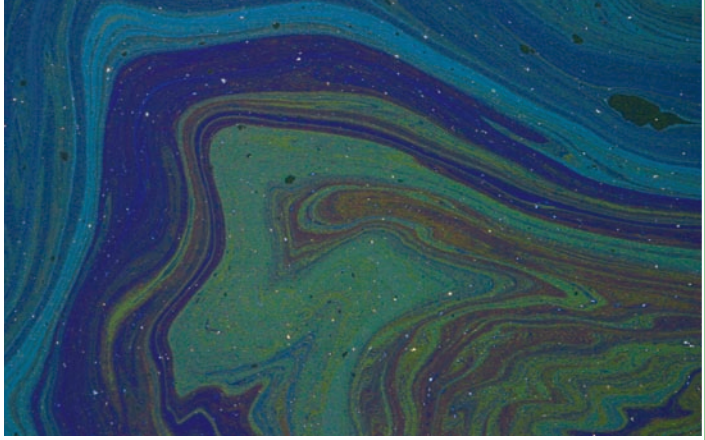
The DFG's mission is to conserve California's natural resources so all residents can enjoy them. Using ArcWeb Services helps make that job easier, more reliable and cost-effective.

protection? There are all these types of benefits with an outsourced model."

As most agency administrators are aware, total cost of ownership for IT solutions continues to rise. Outsourced solutions such as ArcWeb Services offer a way to avoid buying expensive new equipment while giving governments the tools they need to reduce costs, increase security and improve service.

Citizens and businesses are on the move and on the job 24 hours a day — and government must keep up. ArcWeb Services offers powerful tools that make vital information available on demand wherever it's needed, and the ArcWeb Services portal looks, acts and feels just like a part of the agency Web site it serves.





## GIS Environment

The U.S. Environmental Protection Agency uses ArcWeb Services to bring on-demand data to citizens.

Always-available government is the issue *du jour* at the state and local levels. In the federal government, the trend has been standard practice for some time. One agency leading this charge is the U.S. Environmental Protection Agency. The EPA has long advocated the use of advanced and cost-effective technology to achieve its mission. The agency relies on ESRI ArcWeb Services to help support its GIS and mapping needs.

The EPA works to protect the environment in numerous ways, one of which is informing and educating the public on environmental issues.

In an effort to make the EPA data more accessible and useful to both citizens and EPA employees, the agency uses ESRI ArcWeb Services to support a number of Internet-based GIS applications. Through the use of ArcWeb Services, the EPA has bettered the functionality of a number of Internet-based GIS applications. These applications support a variety of agency business requirements, including public access to environmental data and locational data improvement.

Using the ArcWeb Services platform, citizens and EPA staff have needed information at their fingertips. "As there is a continuing expansion of GIS capabilities via the Internet," said EPA Information Management Specialist Dave Catlin, "our goal is to harness this capability to meet agency business requirements by providing GIS functionality through the Internet directly to the desktop of decision-makers and the public."

By integrating mapping and GIS tools into a Web-based framework, the EPA is much better equipped to meet the requirements of an on-demand government enterprise.

"We can integrate data and maps in a single platform to create clear and understandable output," said Catlin. "That improves public access to our information. GIS helps the public have an eye into the EPA."

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