

Alabama Combines High-Tech Images with Valuable Data

By Mikel Chavers

After Hurricane Katrina hit the Alabama coastline in 2005, the state couldn't get its hands on imagery that showed what the coast looked like before the storm. Without the necessary images to compare and assess the damage, Alabama was in a tight spot.

"And so the governor said, 'hey look, time out, you know we've got a lot of counties that pay a lot of money to fly and collect imagery...but then when we have a big event like a Katrina and need to see that imagery—we can't get it. We've got to do better than that,'" said Jim Walker, director of the Alabama Department of Homeland Security.

So Gov. Bob Riley charged Walker and his department with solving the problem.

The images were out there, they were just scattered among the many state and local agencies. Walker set out to convince state and local groups to share their costly images. But in order to share that valuable information, Walker needed a program that was accessible and easy to use—something everyone could agree on and benefit from.

That answer came in August 2006 with the first phase of the new statewide program known as **Virtual Alabama**. The state bought an inexpensive license with Google Earth and with the Google platform, launched a way to allow every state official access to images of the entire state. The program is one of eight national winners of a CSG Innovations Award.

The images Alabama was stockpiling in the program are similar to satellite images found on Google Earth—only much better. Because most counties and regions pay to have aircraft fly over the area with special

high-tech cameras, the images on Virtual Alabama are sharp and more detailed, boasting a higher resolution.

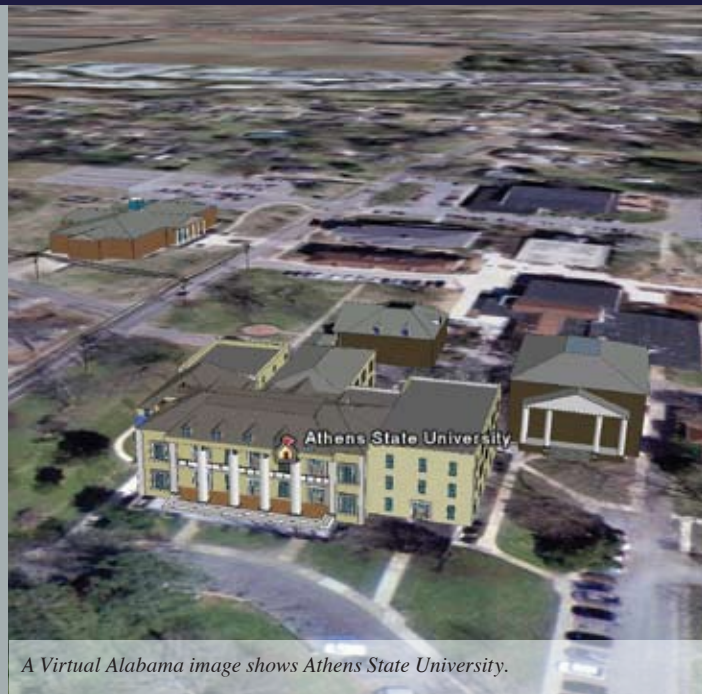
"For instance with a satellite, you may be able to determine that that's a building. But if you fly over in an aircraft you may be able to see a truck beside that building and you may be able to see a tire inside the back of the truck," said Norven Goddard, assistant director of science and technology for the state, on loan from the U.S. Army's Space and Missile Defense Command in Huntsville, Ala.

Virtual Alabama not only gives access to high-technology images, the program also stockpiles layers of useful data from just about every state and local agency.

By typing an address in Virtual Alabama, users can compile separate layers of information on top of a house or building. They can route power lines, water lines and gas lines. They can locate sex offenders in the area, the churches and median housing income to name a few, Walker said. All those layers of information are shared by the corresponding state or local agency that collects them and are all available on Virtual Alabama.

"And so you start thinking of ways to make government more efficient, because you populate some of this data and with a click of a button it's accessible to you," Walker said. "In state government oftentimes it would take hours, days, weeks of work to go find a piece of information. But once it's been loaded, it's there for you very quickly—so you're starting to make government more efficient."

And the information is powerful. When tornadoes passed



A Virtual Alabama image shows Athens State University.

through Alabama in February, the state instructed the civil air patrol to fly the path of the tornado to take pictures of all the damage, Walker said.

Those images are compared to the shots already available on Virtual Alabama. "It's irrefutable what happened in our state," Walker said. "It took all the guesswork out of disaster declarations."

That's because the state's revenue commissioners are popu-

lating land parcel information on top of the image—who owns the house and how much it appraised for—so the damage toll can be taken.

"You think of a layer of information that would be useful to you and it would probably be useful to somebody else—so what we've done in Alabama is we've now gone beyond homeland security and we've reached out to every cabinet agency," Walker said.

FAST FACTS

- With Virtual Alabama, the state avoided paying more than \$40 million for brand-new imagery, according to Jim Walker, director of the Alabama Department of Homeland Security. Instead, collecting all the state and local images already available proved a cheaper alternative—the Google Earth program license cost just less than \$150,000.
- The program has vans equipped with special radios that can communicate across department lines as well as special cameras and the latest connectivity equipment to communicate and send information to the Virtual Alabama database.
- As of May, the program had more than 3,000 state government users and imagery from all 67 state regions in the program.