

GeoSpatial Advisor™

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Calendar of Events: October-November

November 12 – Veterans Day Observed

November 13-14 – Seven Hills Users Group of GIS (SHRUG) Meeting; Tallahassee, Florida

November 15-16 – Post-SHRUG Training Classes, Tallahassee, Florida

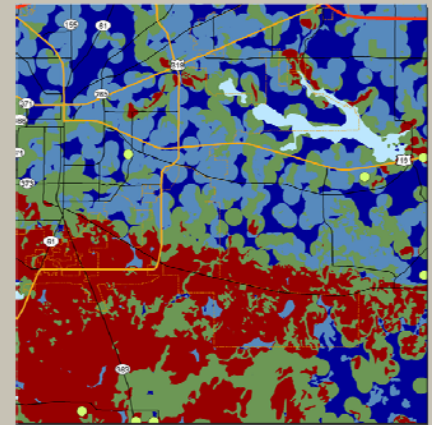
November 22, Thanksgiving Day

Your input and feedback is very important to us: we invite you to write an article or letter to be included in the GeoSpatial Advisor. Just email your piece to Alex Wood at awood@adgeo.net for consideration.

(AGI reserves the right to excerpt, condense and/or grammatically edit your document to fit our newsletter format.)

Leon County Board of County Commissioners Accepts the LAVA Project Results

On Tuesday, the Leon County Board of County Commissioners voted unanimously to accept the results of the Leon Aquifer Vulnerability Assessment, or LAVA, and amendments to the County's Evaluation and Appraisal Report as related to the LAVA model ([read more](#)). The LAVA project was taken on by the Tallahassee-Leon County Planning Department earlier this year to help them reach the goals set forth in their Infrastructure Phasing Report.



The Infrastructure Phasing Report seeks to: supplement planning for extension of central water and sewer services to all properties within the City's municipal services area; augment the prioritization process for determining future infrastructure improvements; help address septic tank abatement and future utility expansion; and enhance protection of Wakulla Spring. Essentially, the LAVA project provides planners with a powerful tool to help determine which areas in the existing municipal service area occur in high vulnerable areas of the Floridan Aquifer System, and ultimately prioritize the extension of infrastructure to those areas.

The LAVA project is based on the same methodology that was used in the Florida Geological Survey's Florida Aquifer Vulnerability Assessment project completed in 2005. The County's digital elevation model (based on highly-resolved LIDAR) was used in development of model input and greatly increased the resolution of these datasets. The model inputs include LIDAR-derived estimated karst features (sinkholes, etc.), a thickness model of aquifer confinement, and the rate water moves through soil (as soil hydraulic conductivity). The model is trained using water quality information derived from ground-water wells. Jay Johnson, GISP of the Tallahassee-Leon County GIS Department was responsible for the development of the GIS model of the estimated karst features layer.

The model will serve its intended purpose well, but will also be a beneficial tool to other departments and programs in Leon County including: identification of potential recharge areas, wellhead protection, springshed protection, and storm-water management.

Links

This geo-exploration tool can be fun – add your own places of interest and view others. It can really soak up some time!
<http://www.wikimapia.org/>

Read about AGI in the news:

"New maps show aquifer vulnerable in Leon, Wakulla"
<http://www.tallahassee.com/apps/pbcs.dll/article?AID=/20071010/NEWS01/710100323/1010>

"Leon Co. moves forward on septic systems"
<http://www.tallahassee.com/apps/pbcs.dll/article?AID=2007710090340>

References:

van Wyngaarden, R., and Waters, N., 2007, *An Unfinished Revolution, Gaining Perspective on the future of GIS*, in *GeoWorld*, v. 20, no. 9, p. 22.

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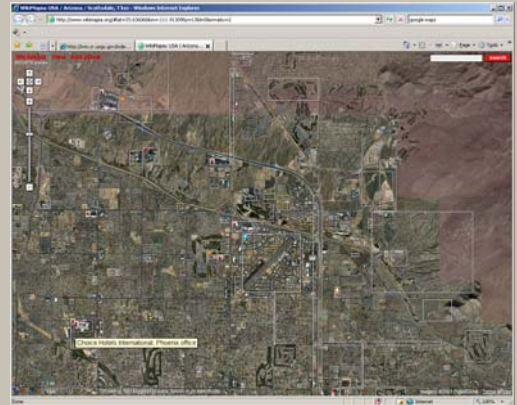
850/580-4GIS



True Geographic Information Systems vs. Geo-exploration Tools

GIS continues its transformation from a powerful computing tool, to a full-fledged industry complete with academic programs, certifications and its own lingo. As part of this revolution, the general public's awareness of and demand for location intelligence continues to evolve. This is reflected in the rapid growth of online mapping tools like Google Earth, Yahoo Maps, Microsoft Virtual Earth and ESRI's ArcGIS Explorer.

Some have speculated that the prevalence and popularity of these tools is a shortcut around full service GIS and doesn't comply with the same accuracy standards that GIS experts have carefully established over the years. Further, datasets of geo-exploration tools are not always held to the same standards and could result in sloppy map applications prone to errors.



Though these geo-exploration tools (van Wyngaarden and Waters, 2007) are not true GIS, it seems to us that the overall trend is very positive for the GIS world – the more geographically aware users there are out there, the greater understanding they will have of location intelligence and of the true value of GIS. These tools offer huge benefits for GIS consultants and clients including the access of spatial datasets quickly and easily with only a web link and a lightweight, low-cost desktop application.

Geo-exploration tools are highly useful, fun to use, and greatly expanding the use of geographic information in the everyday world. Some industries of note include real estate, business intelligence, and tourism. Using some of the tools out there, one can "drive" down a street they've never actually visited, compare property values of adjacent areas, and view nearby points of interest. And with no programming experience, a GIS user can even link imagery from these geo-exploration providers to their own GIS projects to cut down on imagery management and storage locally.

Miscellaneous: Greenness Maps by the USGS

Using satellite data, the U.S. Geological Survey has been compiling vegetation condition, or 'greenness' maps for the lower 48 United States since 1989 to support forest fire assessment, drought monitoring and many other uses. Greenness can be a relative indicator of the health of vegetation and help in the assessment of environmental conditions that are favorable for vegetation growth.

Each week a new map is produced, so very detailed comparisons and trends can be evaluated to help determine an area's progression relative to greenness or prevalence of vegetation. You can access the U.S. greenness maps via an internet mapping service called the [Integrated Vegetation Mapping Viewer](#).

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