

ArcGIS Explorer used as a decision making and marketing tool that illustrates GIS value

Lake County GIS Technologies are Leveraging the Playing Field

By Kevin Willis, Lake County GIS Director

Highlights:

- **Explain your GIS environment visually and audibly within the free ArcGIS Explorer interface.**
- **You are only limited by your imagination as to what you present and how.**
- **Task based functions can easily be understood to spark new ideas for other GIS implementations based on business needs.**

Lake County Florida is located in Central Florida, Northwest of Orlando. Lake County has 1,156 square miles of which 203 square miles of it is water (17.58%). Historically a rural county, Lake County has experienced more than a 25% population growth from 2000 to 2006 and was ranked as the 23rd fastest growing county in the United States with a population approaching 300,000. As a result, the county struggled to maintain the expanding infrastructure. This provided an opportunity for the county to utilize and explore other GIS technologies. Recently, the Lake County GIS Division aspired to better inform the public as to the how and where GIS technologies are contributing to the county in a positive manner. We wanted to continue to encourage county departments to evaluate how GIS can add value in areas not yet considered.

The Challenge

Having to explain the sometimes daunting task of what GIS is, and its benefits to someone who does not have a technical background can make for a long conversation. In addition, with all the new and innovative GIS formats being developed and consumed, Lake County GIS desired an easier way to demonstrate these values without spiraling into the technical abyss of deep explanations. GIS needed a way to collectively educate others in understandable terms. A picture is "worth a thousand words", so a video presentation seemed appropriate to broaden GIS awareness.

GIS technologies are not leveling the playing field but rather leveraging it by adding value through identifying cost savings and allocating resources more efficiently. GIS technologies are helping people make better decisions, and ArcGIS Explorer 900 is the tool that can meet the challenge to better educate others concerning this value.

The Solution

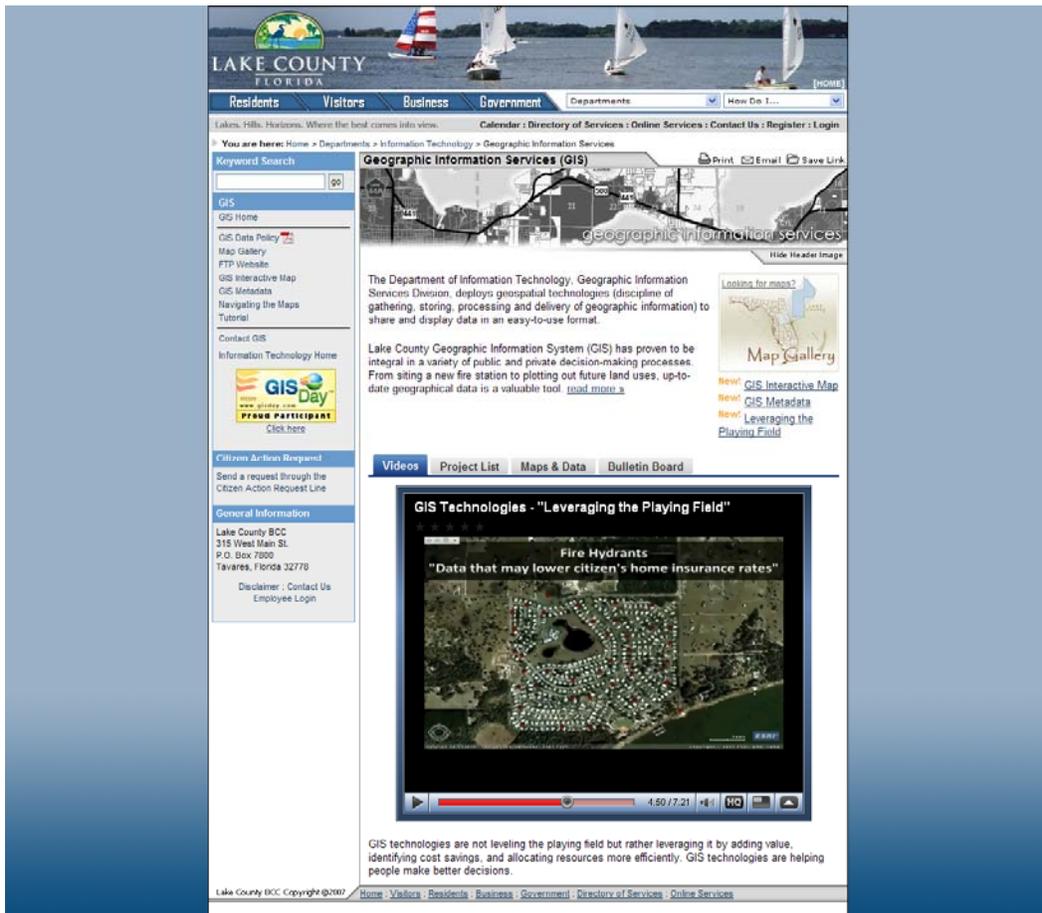
Lake County GIS looked to the ESRI ArcGIS Explorer software based solution to better communicate visually how GIS technology is adding value across county business functions. ESRI's ArcGIS Explorer is the tool of choice to effectively demonstrate with real world examples, of how GIS technologies provide exceptional benefit to the public at large by being a solutions provider. These GIS enabled solutions often add value to the level of service the county provides to the citizens through cost savings, data analysis, and project modeling and visualization.

Lake County GIS is using the ArcGIS Explorer software solution as a window to view the synergies that GIS technology creates. This technology enables other providers and consumers of data to consider how GIS technologies can better serve their customers with the services they provide. GIS technologies can be a cost savings mechanism if implemented in such a fashion, and GIS technologies can leverage county resources to provide risk management benefits. Over the past two years, Lake County GIS' enterprise environment has initiated many solutions that address real world issues.

Lake County GIS put into action a hybrid model approach to data sharing and data custodianship. The hybrid approach trains non-GIS staff to use GIS technologies at a basic level within their departments. These users or GIS liaisons are mentored by the GIS Division staff. This model works to extend the county's use of GIS and allows the GIS staff to focus proactively on data analysis and modeling. This win-win strategy can be best illustrated through the ArcGIS Explorer 900 solution. This solution better informs the general public on the intrinsic value GIS technologies provide as a visual tool to communicate these implementations. Using the new ArcGIS Explorer we can also demonstrate to others the advantages of using ESRI offered layer files, layer packages, web map services, KML/KMZ, and shared content within the GIS community available at the ArcGIS Online website.

The Results

Lake County GIS recently created a seven minute video with audio narration titled *GIS Technologies-"Leveraging the Playing Field"*, that highlights through an ArcGIS Explorer presentation our local data such as KML's, services, embedded video, graphics, and text, and added audio narration of how GIS is being implemented in the county to "help people make better decisions". ArcGIS Explorer assists citizens to use their tax payer generated GIS data within an easy to use and powerful interface for their specific needs at no additional cost. This application can perform like a decision support service (DDS) to the extent that it has the potential of allowing users to render decisions based upon scenarios displayed within ArcGIS Explorer.



GIS data can be leveraged to yield a solid return on investment (ROI) through analysis and proximity tools.

This video had its premier showing on our Lake County GIS Day Event in November of 2009 and has been placed on the Lake County GIS Home Webpage so visitors to our site can better understand and visualize how GIS is being utilized throughout the county. Lake County GIS' efforts have also been showcased on the [ESRI ArcGIS Explorer home page](#). This tool is an excellent resource to market and champion stakeholders, foster cooperation and partnerships within our local communities, and to share in the GIS technology driven successes of our organization. ArcGIS Explorer is an excellent marketing tool for Lake County GIS technologies. Specifically, ArcGIS Explorer has raised awareness of the new Economic Development Property Finder application, which strives to attract new businesses and increase job opportunities within Lake County. The greatest benefit reaped from the use of this interface is the powerful and interactive presentations that can be embellished upon to communicate geographically what is occurring in a near real time manner.



ArcGIS Explorer can utilize both map services and local data (mashups) to create powerful analysis and customizable maps. This example communicates critical intrinsic value quickly and in an understandable format.

Lake County presented how GIS technologies contribute to local government business needs such as a the ArcGIS Server based Economic Development Property Finder application, the GIS Interactive Map, the Future Land Use Map, Fire Rescue Response Boundaries with accompanied analysis, annexations, streets, address points, and tax parcel data maintenance and representation. Lake County also presented how GIS technologies assisted with grant application efforts from both a mapping and data analysis posture.

ArcGIS Explorer integrates projects and programs effortlessly to provide a clearer understanding from a dashboard perspective which decision makers can quickly understand. It is estimated that 80% of all databases can be displayed visually, and for Lake County we understand that GIS technology breathes life into our databases. The end result is optimizing how and where we use county resources to glean the greatest return on investment.

About the Author

Kevin Willis, GIS Director, with an M.C.S.E., and M.B.A. in Information Technology Management.

Additional Credits

Corey Mathis, GIS Analyst, created the GIS tasks and edited them within the ArcGIS Explorer software. Doug Woodyard, Telecommunications Manager, assisted with final video and audio adjustments, Mike Bowers, Director of the Water Resources Management Division, did the narration, and the Information Outreach Division assisted with embedding and formatting the video within the GIS home web page.

More Information

For more information, contact Kevin Willis, GIS Director (kwillis@lakecountyfl.gov) or to view the video visit the Lake County GIS home webpage at:

http://www.lakecountyfl.gov/departments/information_technology/geographic_information_services/