City View Application Combines Collaboration with Integration

A Case Study

Highlights

- County/City collaboration eliminates duplication of work
- Combining data into a single application is more efficient
- Land use research is quicker and easier

Return on Investment (ROI)

- Maintenance of a single application rather than many saves time
- The public gets quick access to disparate data for better decision making

Contact Us

For more information, contact:
Kevin Willis, GIS Director
(kwillis@lakecountyfl.gov)
Lake County Office of Information Technology/GIS Division

In the last several years GIS technologies have overwhelmingly become the tool of choice to combine collaboration with integration. Many times this produces enterprise solutions among similar but separate entities. Lake County has joined forces with eight local municipalities to provide citizens with an Interactive GIS Web Map named **City View**, which displays City Zoning and City Future Land Use for all participating municipalities in a single web application. Re-using existing data, the application takes advantage of both county and city sources of information resulting in a collaborative effort that promotes synergy and eliminates duplication of work.

Background:

Hosting an Interactive GIS Web Map can be a daunting task and not all municipalities in Lake County have the resources to tackle it. Nor should they when the County itself has access to data, hardware, and software to provide such services. In the spirit of collaboration, Lake County GIS has hosted several city web maps featuring zoning and future land use data over the years. Originally, eight separate web maps were hosted as a courtesy to the local municipalities on the county's ArcIMS web platform. When the county GIS Division upgraded to the more efficient ArcGIS Server platform, it only made sense to upgrade the City View maps as well.

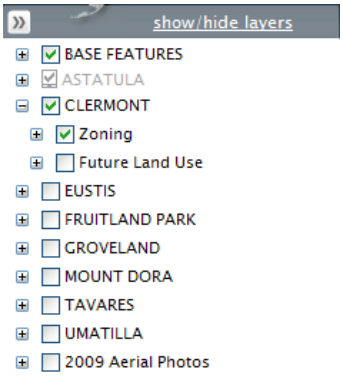
The Issue:

The question arose, "Is hosting eight separate city maps the most efficient use of the new server and staff time to keep information up to date?" The answer, obviously, was "no". In taking advantage of the opportunity to upgrade the existing ArcIMS web maps to ArcGIS Server, the county wanted to create a more positive and intuitive experience for the user and combine disparate data from multiple sources into a single application. Also on the agenda was a desire to maintain a standard look and feel between the City View application and the county's existing Interactive GIS Map.

The Solution:

In order to meet the goal of a standard look and feel, it was decided to duplicate the existing Lake County GIS Interactive Map, rename it City View, and change some of the data available for viewing. This preserved all the familiar functionality so users would not have to learn to use two different maps. In addition, all city zoning and future land use data were combined to create two all-city feature classes. There was one feature class for zoning and one feature class for future land use, rather than separate feature classes for each city.

Lake County does not currently permit outside agencies access to its SDE geodatabase, and has not implemented web editing yet; however, participating cities periodically upload new data to a secure FTP site and a county GIS Analyst updates the geodatabase used in the web application. Lake County GIS is continually seeking how to best leverage GIS resources efficiently to benefit the broadest range of users at the lowest overall cost.



The final product resulted in Lake County's new City View interactive map which now makes all participating city land use data available in one map. The user can interactively zoom to a desired area, or use the *Zoom to* dropdown list of cities to go directly to the extents of one of the participating cities. The *Identify* button allows users to see exactly what zoning code or future land use designation is on a particular property. The *Help* page lists the participating cities' web pages where additional information can be obtained, along with an explanation of how each of the buttons function. Users can also search for specific properties using various criteria.

All data layers are organized into logical groups based on themes in the table of contents. The county's base map features are in a group called *BASE FEATURES* (including such layers as streets, lakes, parcels, etc...) and individual city layers are grouped by city name. The user can turn on or off a whole city with a single click, making the data more easily accessed and understood. The thematic group layers concept used in all our GIS interactive maps should make City View easy to use especially for those users who are already familiar with the ArcServer based County View interactive map.

The Benefit:

Combining all the city data into two layers (city zoning and city future land use), and creating a single web map to query and display the data has saved development and maintenance time for county staff. For city staff, time once spent answering phone calls and inquiries concerning land use codes can now be redirected to more productive work. It has also provided valuable information to the public in a single location. Research has become easier and decisions can now be made quicker.

City View may become the flagship project that will open the door to additional future intergovernmental collaboration efforts utilizing GIS technologies. It is often during challenging economic times that sharing of data and resources is more acceptable and can enhance efficiencies which produce more all encompassing solutions to best leverage GIS technology investments. Federal, state, and local governments are realizing that GIS technologies add tremendous value by visualizing choice across all business functions.

Furthermore, many entities are realizing that GIS technologies often champion a cause greater than itself as intergovernmental collaboration becomes more than just a buzzword these days. Collaboration is becoming more integrated into the strategic plan of many organizations, and at the very least within IT and GIS entities. The goal is to "help people make better decisions"