Bradford County, Florida
Implementation of ArcGIS Online

Located in northern Florida, Bradford County has a population of close to 30,000. Its county seat is Starke. In 2001, the County Appraiser began the process of establishing a GIS for the County's parcels. At that time, the County consisted of a little more than 12,000 parcels. Using Esri's ArcView 3.3 software, the County established a parcel database that was linked to their ownership database which is stored on an IBM AS400 computer. Today, the County is comprised of more than 15,000 parcels and their GIS is based upon Esri's ArcGIS 10.3 software. Bradford County utilizes in-house staff to maintain their parcel database. Additional datasets such as street centerlines, municipal boundaries, waterways, parcel numbers and dimensions, ortho-imagery, etc. are utilized to aid in the maintenance of the parcel database.

Recognizing the importance and benefit of employing a GIS, the County's Information Technology department has undertaken the task of implementing a County-wide implementation of ArcGIS Online. Utilizing Esri's cloud based computing environment it is planned to have all of the County's departments employing ArcGIS Online as part of their daily operations. To assist the County in the implementation, the County contracted with The CEDRA Corporation to assist with the: (a) configuration of ArcGIS Online, (b) data acquisition, (c) map and application generation and (d) training of County staff with the goal of making County staff self-sufficient.

ArcGIS Online Configuration

Implementing ArcGIS Online requires some initial configuration in terms of defining organizational settings, users, groups and so forth. This was the first task performed in the ArcGIS Online implementation. Working with the County's IT staff, The CEDRA Corporation assisted the County in defining these settings for the various County departments. Once a procedure for this work was established, County IT staff are now able to maintain their ArcGIS Online account on their own.

Data Acquisition

Obviously, the County had a robust and up-to-date parcel data layer but the various County departments required other datasets such as flood zones, contours, bicycle paths, municipal boundaries and so forth. The first question is, where does one go to get the data that the County desired. The second question is, how does this data get into ArcGIS Online. As it turns out, Florida's Department of Transportation, Department of Environmental Protection, Department of Environmental Protection and other governmental agencies had a lot of the data that the County desired. When adding data into ArcGIS Online, the most common way is to add a Tiled Map or Feature Service. Fortunately, the agencies mentioned above offered URLs for these types of services. For those datasets where a Tiled Map or Feature Service was not available, such as the County's parcels, a service had to be created using the ArcGIS Desktop software.
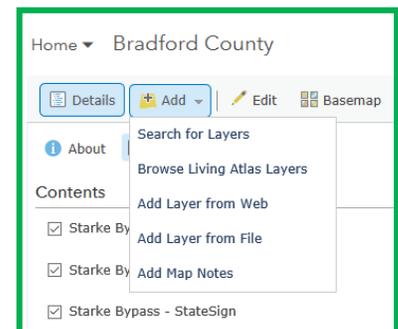
Figure 1 - Adding Services

Map and Application Generation

Once the Tiled Map and Feature Services were available the County was able to create maps for the various departments. Each department had different requirements so maps specific to each department were created. Using the Add tab shown in Figure 1, it was possible to add County generated services or services from other agencies. In the case of the latter, the only information that had to be specified was the URL to the service.

Shown in Figure 2 is an example of a map that was created for the County that incorporated FLDOT

data for a proposed bypass for the City of Starke. For the bypass dataset, FLDOT provided the County a CAD drawing in DGN format. CEDRA then converted this data into a file geodatabase and published a Feature Service containing the various layers comprising the bypass. In addition to the bypass, the map also contains the County's parcel data layer along with a number of other layers.
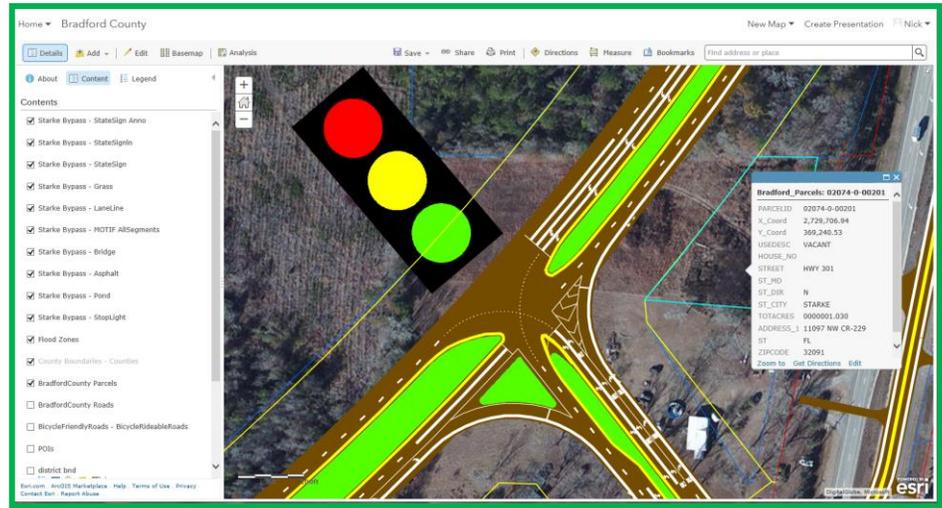
Figure 2 - ArcGIS Online Map containing Proposed City of Starke Bypass, County Parcels and other Layers

Training

Using CEDRA's remote desktop sharing and online meeting capabilities, CEDRA trained County staff in creating ArcGIS Online users, maps, applications, service sharing (private or public) and generic ArcGIS Online operations. The design of ArcGIS Online is highly intuitive enabling one to become familiar and proficient with the software very quickly. The training was organized into groups based upon their ArcGIS Online roles, that is, administrators, publishers and users.

The CEDRA Corporation

CEDRA has over thirty years of experience in developing, maintaining and marketing world-wide, mapping, engineering and GIS based software products for municipalities, tax assessors, industry, engineering firms, and others. Its professional services division offers database management, database building, data capture, asset inventory and management system development, application software development/customization and training services providing an efficient environment for implementing the company's products. As a long time Esri authorized developer and reseller, CEDRA is extremely knowledgeable in the development, use, implementation and integration of Esri's desktop and server based GIS software. CEDRA has also assisted numerous municipalities in the implementation and deployment of ArcGIS Online and Survey123 for ArcGIS.

The CEDRA Corporation

Implementers of ArcGIS Desktop, Server, Online and CityEngine Technology

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