

Current Technology Project Summary 2009-2010

The Technology Department works with other departments on a project basis. Listed below are the current projects that are being addressed by the Technology Department along with a status indicator.

Orthophotography

Every four years a fly over to photograph the county is contracted for GIS. An RFQ was issued by a seven county consortium which Catawba County is a member and a vendor chosen. The photos were taken in the February to March timeframe when there was minimum foliage on the trees. The data is available in-house and on the GIS website. Completed December 2009

100% Complete

On Budget

On Time



Oblique Photo Project

In addition to the regular orthophotographs, we also contracted for oblique photography to provide us side angle views of buildings. This service is beneficial in several departments. In particular, Emergency Services and Law Enforcement personnel find it valuable to see the buildings from several angles when responding to calls; they're able to see the front door of a house, the back door, the windows and more. The service provides the Economic Development Commission valuable information at their fingertips to pass along to their potential clients. The Tax Office finds the photography beneficial in reducing potential grievances through visual data to support evaluations and notices. And, the Planning Office has the ability to evaluate sites for new developments and proximity to neighborhood, schools, and other structures. They are able to measure angles, area, distance, height, and width of any structure or property. In addition, they can view parcels and structures from multiple directions to identify modifications to properties not recognizable from traditional ortho images. Completed August 2009

100% Complete

On Budget

On Time



Permit Center Application Replacement

The old permitting software was replaced with new software to better address the needs of the building community and the internal operations of the permitting and inspections. The new system tracks everything related to the building process from planning and permitting to final inspection. Contractors can request inspections online and inspectors are assigned automatically through the system. Work assignments are delivered in the field to inspectors and completed inspections are uploaded immediately back to the system. At that point, the results are available online. The system offers complete workflow for all aspects of the process.

The plan review module, which is the next step, will complete the integrated electronic document review utility, which allows all aspects of the plans review process in a digital environment and eliminates printed blueprints. The plan review module will support many electronic drawing formats, enable reviewers to complete digital markups and approval stamps. The module will provide electronic version control and audit trail.

The plan review module will integrate with each municipality's review and automate the entire process from beginning to end across all entities involved.

90% Complete**On Budget****On Time****Courtroom Audio Visual Update**

The Technology Department is working with court officials to update the audio visual equipment in at least one of the current courtrooms at the request of judges. This will allow for the presentation of evidence from a wide variety of electronic sources including DVD, CD, overhead document camera and computer based input. Target completion date is March 2010.

80% Complete**On Budget****On Time****Newton Jail Security Upgrade**

The old jail at the Justice Center is being upgraded with security cameras, automatic doors and alarm systems using IP based products. This will bring the old jail up to the standards of the new jail. This project has been delayed 2 months due to backorder of cameras and change of scope on the new console. New target March 2010

90% Complete
On Budget
On Time



SharePoint Services

At the July 2008 Department Head meeting, it was decided to add SharePoint services to our existing Office platform. SharePoint is a complete set of work environment tools from collaboration, planning and scheduling to document storage and management. SharePoint allows multiple users to work on the same document and tracks all changes and versioning. The main purpose for using SharePoint is to provide a place for collaboration and at the same time have a common storage area for institutional knowledge. Since this is a service that will continually grow as the organization produces new documents and updates past documents, the planning of its structure is critical. To address this, training is being scheduled for Technology staff. A design team has been created and a plan for implementation is being carried out. Training will need to be provided for all users that are creating and managing a site. While many of the features are very easy to use and tie closely to Office, it is important that sites are set up correctly and that security is set properly to allow the correct users of the site proper access to information.

90% Complete
On Budget
On Time



Web Site Redesign

In coordination with the Public Information Officer, the current Catawba County web site is being evaluated and is being upgraded to offer new services to the public. The Technology Department is working with each department to review the services that each department offers and how to best present those services to the public. The changes incorporate many of the Web 2.0 design concepts. Along with this redesign, Catawba County is strengthening its presence with Web 2.0 services including Facebook and Youtube. Due to the dynamic nature of the web site, work will continue indefinitely on this project.

90% Complete
On Budget
On Time



Web Site Redesign Note: While the web site has been redesigned, it is very dynamic and will constantly be updated and redesigned. Recent additions include RSS feeds for

job posting and podcasting of weekly news reports and public information announcements. Social Media tools like Facebook, Twitter, Flickr, and YouTube have also been added.

PeopleSoft/Laserfiche Integration

Electronic document storage will be phased in to replace paper files and make docs accessible via PeopleSoft Financials. Target Date June 30, 2010

**10% Complete
On Budget
On Time**



Online Applications for Social Services

Social Services plans to offer online eligibility calculation for reference and online eligibility applications. March 1, 2010.

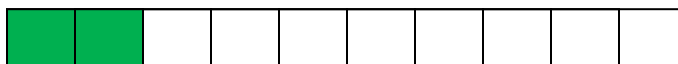
**5% Complete
On Budget
On Time**



Video Production/Training

Many departments are interested in using video to provide information cheaper to the public as well as internal staff. The County's dedicated YouTube channel provides a web presence in this format. We are providing the services now and are developing training so the County can further leverage this technology. This is an ongoing project.

**20% Complete
On Budget
On Time**



Infrastructure Upgrade

Provide redundant paths for data and eliminate single points of failure in the system. This will consist of a wireless bridge from one side of the county to the Government Center and redundant fiber paths on the Newton campus.

**90% Complete
On Budget
On Time**



Computer Replacement

Replace 20 percent of the desktop and notebook computers, excluding DHR agencies, to maintain compatibility with other agencies and software standards.

**90% Complete
On Budget
On Time**



Tax Mapping Project

Development of a new tax mapping application to replace the existing application currently used by the Tax Mapping Staff. This is necessary because of the format for storing this type of data has changed and our current format will eventually not be supported. Implementation now scheduled for April 2010

80% Complete
On Budget
Rescheduled

**Master Address Point Layer**

Development of a points layer containing all known E-911 addresses—including Catawba County and the municipalities. This layer will eventually be used in the Communications Center and by all applications integrated with GIS that use addresses. The layer was created by combining tabular data from our parcel based addresses and our multiple address table. Each jurisdiction will be responsible for maintaining the addresses within their area. Catawba County staff created the layer, established editing protocols, and is working with municipal staff to train on editing procedures. This will be a high priority project over the next several months.

50% Complete
On Budget
On Time

**School Surveillance by Sheriff's Department**

Several schools throughout Catawba County have surveillance systems that are accessible via the Internet. The Sheriff's department can more fully respond to incidents at schools if they have access to the surveillance systems. This project is designed to give video access to schools that have the required technology installed. A grant was secured to expand the functionality of the existing wireless infrastructure. Installing wireless access points at schools, improving wireless access in the SWAT vehicle and improving the camera systems with partnered school systems. Target Production Date: July 2009.

100% Complete
On Budget
On Time

**800 MHZ VIPER System**

This project is to enhance our ability to talk to Public Safety officials in our county and surrounding counties. We have coverage issues in the county with the current VHF system that must be addressed. Viper is already established here and the build out of tower sites is taking place in our area. By partnering with the North Carolina State Highway Patrol, Catawba County can upgrade its communications system using the infrastructure provided by the state. Target Date: Open at this time due to funding. Two grants are being considered at this time. The AFG Grant has been funded for \$803,694 and will provide over 300 radios to fire, rescue and EMS.

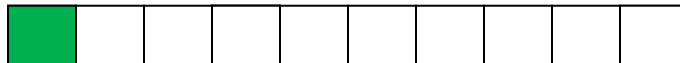
40% Complete
On Budget
On Time



Baker Mountain Tower Site

This project will upgrade the tower site on Baker's Mountain providing coverage to the State's Viper system and enhance coverage in Catawba County. It will also enable Catawba County to move its current transmit and receive site to this tower and will enable our site to be on a more stable site location. Would remove us from a lease agreement we are paying for. Schedule dependent on North Carolina State Highway Patrol.

10% Complete
On Budget
On Time



VisionMobile and AVL for Emergency Vehicles

Catawba County has been using VisionAir products since March 1998. Catawba County is currently utilizing VisionAIR Computer Aided Dispatch, Records Management System, Field Based Reporting, Fire Service Management, GeoLynx Mapping, and the Jail Management System.

VisionAIR mobile enhances our current investment by enabling the flow of information to and from units in the field. In addition to data and reports, it incorporates GPS tracking with Automated Vehicle Locating (AVL). Units can then be dispatched based on the closest available unit as opposed to the current base dispatched method. Once dispatched, call information will be sent to the unit's onboard computer with address and mapping directions for the incident.

Catawba County will benefit from this purchase in the following way:

- Increase Officer Safety using GPS and AVL technologies
- Improve Response Times by having visual maps of the nearest Public Safety Units

- Improve Response Times by sending information of dispatched calls to the Public Safety Units
- Delivers valuable information to Public Safety laptops from existing databases (warrants, criminal history, hazmat, etc.)
- Officer's can enter reports directly from the field

VisionMOBILE is designed to fully enhance the VisionAIR Public Safety Suite that Catawba County currently uses and transform the Catawba County's Public Safety division into a mobile platform.

**90% Complete
On Budget
On Time**

