February 8, 2016
Information Technology Budget Request Summary
Prepared by Lori Tomlin, Technology and Communications Director

Haywood County is making progress to update our technology. Still in many areas, the network, telecommunications, and computer equipment is outdated and not compatible with the technical standards of today's requirements to interface with all aspects of our infrastructure and law enforcement systems.

There are seven major areas of technology and communications that need to be included in the upcoming budget projection. Each is listed below along with the projected cost to replace the equipment with upgraded hardware and software. It is understood that this project will be spread over two to three years as appropriations are available. Current pricing is given.

1) Network Infrastructure:
The core network appliances installed at most of our facilities need replacement due to the age of the equipment. Many of our locations have network equipment that has been in service twice the life expectancy of the product, and there is a mixture of brands and functionality that needs to be consistent for support and performance. This creates issues.

The County is fortunate to own fiber that extends from one end of our demographical region to the other. This has been in service for nearly a decade. To improve performance to all facilities on our network, an upgrade to the speed from 100MB to 10GB connections should coincide with the network equipment upgrade.

The estimated cost to complete the network upgrade is $314,000.

2) Telecommunications:
There are approximately 374 outmoded analog telephones in use today that should be upgraded to be compatible with our digital network. Additional ports and licenses will be required to install these IP phones on our existing telecommunication network.

The estimated cost to add the telephones, IP Gateways, and licensing is $86,000.

3) Server Monitoring and Data Storage:
Software to monitor 24 x 7 system activity for performance, availability, and intrusion detection of critical systems would insure proper oversite without needing additional server support personnel. Record retention requirements and accessibility to historical data is imperative. Adequate data storage for the volume of records, emails, and data accessed by our user base has doubled over the past three years. We have encountered the existing threshold for processing and data capacity in recent months. We've taken action to correct the situation but it is only a temporary solution. The projection of data growth and retention for storage, along with professional design services to insure data recovery in the event of damage or a sudden loss is necessary.

The estimated cost to monitor systems and expand our data storage is $235,000.

4) Law Enforcement Technology:
The majority of the computer hardware used by the Haywood County Sheriff's office has been in service for nearly a decade and is in poor condition and much of it needs to be replaced to meet the utilization and security requirements. The mobility of our Law Enforcement officers requires rugged laptops and portable printers in the vehicles. The age of the existing equipment has exceeded its life expectancy and security standards, and has been repaired numerous times. Computers and monitors installed in many offices have been repurposed and are failing to operate. Our ability to continually service this equipment and allow for reliability of operations has long passed.

The estimated cost to replace laptops, printers, desktops, and monitors is $173, 510.

5) Software Updates:
Microsoft will discontinue support for the Windows 7 Operation System in July 2017. This will require purchasing Microsoft software licensing for 220 of our users to upgrade to Windows 10 and other compatible Office products. Microsoft licensing will need to be renewed for 400 of our users in April 2017.

The estimated cost to be compliant with Microsoft licensing requirements is $84,604.

6) Virtualization Expansion:
Desktop virtualization has been the technology implemented for approximately half of the users throughout Haywood County. We need to continue to expand desktop virtualization to other key departments that would benefit financially and most importantly with desktop support and performance by replacing old desktops with virtual clients.

The estimated cost to continue our expansion of desktop virtualization is $61,250.

7) Computer Upgrades and Replacements:
Not all computers in service throughout Haywood County can be virtualized due to software compatible and specific user requirements. Replacing approximately 25 desktop computers, 25 laptop computers, and 100 monitors would be necessary for 5%-10% of our user community.

The estimated cost to upgrade computers and monitors is $49,750.

The total cost of projected spending to upgrade the Haywood County network infrastructure, telecommunications equipment, server environment, data storage, Law Enforcement equipment, County desktop user software and hardware is $1,004,114.

Respectfully Submitted,

Lori Tomlin