

COCHISE COUNTY LEGACY PROJECT

Information Technology

HISTORY

As far back as the Stone Age, humans have had the need to share and record information.

Not only did our cave man predecessors create depictions of animals and plants on cave walls, they also used symbols that may suggest the creation of an early form of written language. Researchers have determined that cave art could date back 30,000 years.

Right in our own back yard, near Millville on the banks of the San Pedro River, you can view ancient Hohokam-era petroglyphs on The Millville Petroglyph Trail.

Smoke signals, the oldest form of long-distance communications, date back to 200BC. In ancient China, soldiers would use smoke signals to send warnings of impending attacks from tower to tower on the Great Wall.

Closer to home, the Heliograph was used in the Apache campaign as a fixed fort-to-fort network. These mirrored long-distance communication devices that used reflected sunlight to send signals were positioned on mountain tops in the Huachuca, Chiricahua and Graham mountains.

In 1844, Samuel Morse sent the first telegraph message, from Washington, DC to Baltimore, MD. laying the groundwork for telephones, faxes and Internet.

In 1881, a telegram was sent to the sheriff of Tombstone from the Pima County Justice indicating the Earp group should be arrested. The manager of the telegraph office showed the message to Wyatt Earp before delivering it to the sheriff allowing the group time to get out of town.

Today...

We can communicate by email, text, tweets, Facebook, instagram, rather than reaching for our piece of obsidian to carve our messages on a rock wall.

We send long distance communications to anywhere in the world, transmitted in lightning speed, by microwave and fiber networks instead of starting fires or capturing sunbeams.

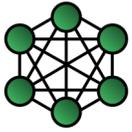
We use Voice Over Internet telephones and all kinds of mobile devices to speak directly with or send messages to our colleagues, friends and family rather than tap out the dits and dahs of Morris Code.

And all of this technology now has to be managed and maintained. The Cochise County Information Technology Department provides the county government with centralized computer, Internet / Intranet, telephone-related services.

Our "customers" are the other county departments, and our services cover the spectrum of information and telecommunication technology. Data processing services include programming, operating, and maintaining servers, and mid-range computer systems.

In the area of technical support, we assist in the selection, installation, configuration, and maintenance of microcomputer systems, software, and peripherals.

As Cochise County's "telephone company," Information Technology installs, maintains, and operates the telephone network in all county offices.



COCHISE COUNTY LEGACY PROJECT– IT

HISTORY

In December, 1981 a cooperative governmental agreement was approved by resolution for data processing services to be shared with Cochise College. The resolution also approved the lease and license with Sperry Univac for terminals and printers. Also in December, Cochise County formalized a resolution to change pay days to every other Friday because of this agreement to share computer time with Cochise College.

The payroll was the first program to be entered into the computer. Later Accounts Payable and Receivable applications were added. The college used the system during the day, the county's time was at night.

The original location was located on Quality Hill, at 181 Cross Avenue in Old Bisbee. The building is now referred to as the NOC (Network Operations Center) and is our operations center for critical communication services.

In 1983, a resolution was approved to establish a Cochise County Data Processing Department to provide services such as maintenance of public records, financial accounting data management and otherwise store, maintain and provide County records of significant amounts. The Recorder's Office was the first office to fully computerize Voter Registration files in 1985.



SperryUnivacSystem80.20 - Mainframe computer used at Cochise College



The TRS80 was the computer of choice in the early 80's and used floppy discs and Word Perfect for word processing.

IT DIRECTOR HISTORY

Verlyn Mason 1983 – 1991

William Golden 1991—1996

Earl “Slim” Tighe 1996 – 1998

Howard Christiansen 1998 – 2001

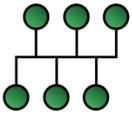
James Norris 2001 – 2006

Patrick Hartley 2007 – 2010

Travis Cutright 2011 – 2013

Tyson Mock 2013 – 2015

David Raber 2016 – Current



COCHISE COUNTY LEGACY PROJECT– IT

HISTORY



FIRST IT DIRECTOR - Verlyn Mason - 1983-1991

Mr. Mason was critical to the formation of the current IT Department. In 1981 while he was the Director of MIS at Cochise College he greatly contributed to the success of the shared data processing services program between the county and the college. He began working with computers in the 1950s while serving in the Air Force. He became the informal part-time Director of Cochise County IT shortly after the Board of Supervisors approved the creation of the IT Department.

In 1984 he resigned from Cochise College and became the full-time County Director.

In 1983, he developed the first computerized voter registration system for the Recorder's Office and in 1985 a record-keeping in-house system was added.

Unfortunately, Mr. Mason has since passed away. His daughter Camille has graciously agreed to share the following memories in honor of her dad...

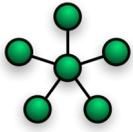
"My dad was very excited to take on the job of Director of Data Processing (as it was called then) at the County. In the 1960's he was one of a handful of men in the armed forces selected to accelerate computer automation of the military. In his 20 years in the Air Force, he moved 21 times... going from base to base building out their computer operations centers from scratch. After retiring from the Air Force in 1971, he worked in the private sector until moving to Bisbee in 1980. He worked the first couple of years at Cochise College in Douglas, but he could not pass up the opportunity the County offered him to get back to his roots -- both in working for the government and in building out a computer operations center from scratch.

At first, Cochise College refused to accept his resignation. They stated they would not let him go until he found his own replacement. This was not very easy in the early 1980's -- computer experience of any kind was still rare then. While the college performed a search for his replacement, he actually worked both jobs at the same time. He would go to the college in the wee hours of the morning, come home for a quick lunch, and then go work at his office at the County through the evening. This went on for quite a long while, and he was exhausted.

He quickly found that not all of the employees at the County welcomed him or the changes a Data Processing department would bring. Some people feared their jobs would go away. Some people feared they would not get raises because building a computer operations center was so expensive. Some people just didn't like the idea of change in general. My dad was disappointed by the attitudes of some, but this wasn't his first rodeo. He knew that once people saw how much their work could be improved with the assistance of computers they would come around. And he still maintained his sense of humor through it all. One of the things he asked for as part of this new job was a covered truck that could be used to safely haul computer equipment from one place to another (computers were pretty huge back then). The cargo area needed to be protected from the elements and locked for safety. When they took my dad to introduce him to his new county vehicle, he was quite surprised. "You are giving me a hearse!?" he said. It turns out it was a vintage ambulance, but it was black and long and did, indeed, look just like a hearse. After his initial shock, he laughed and laughed about it. He thought it was great fun driving that 'hearse' around. He joked about putting a skeleton in the back to surprise anyone who tried to look inside. He even loaned it out to other County employees to be driven in a couple of the Bisbee 4th of July parades. "

My dad really loved his time at the County. It was hard work, and he was a very exacting manager who demanded excellence not only of himself but also from his team. My dad's motto at work and home was always, "If you aren't going to do something well, you shouldn't do it at all." However, if you were a hard worker, diligent, and willing to learn, you were worth your weight in gold to him and would always have his loyalty. He built a team at the County that he was very proud of, and he talked about them fondly with his family at home. He enjoyed building camaraderie amongst his team by starting traditions like potluck dinners on election nights and other times when the team had to work overtime for special projects. In his later years at Cochise County, he very much enjoyed his work with leaders from other counties in Arizona to share ideas and pool resources. Some of this work extended well beyond the IT world. He was a strong influencer for the work that was done to pool buying resources amongst county to buy better health insurance and other benefits for County employees at lower costs.

My dad was always very proud to be an employee of Cochise County and would be so pleased to know that his hard work there is still remembered! "



COCHISE COUNTY LEGACY PROJECT– IT

HISTORY

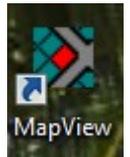
Walter Domann - GIS



Walter started in September 1994 and, along with GIS staff, evolved the GIS from a standalone system used by a few staff members to produce paper-copy maps and reports to an Enterprise system where all county staff has access to the same interactive GIS tools and business information. The system innovation also included the integration of precision GPS coordinates via a geodetic control network and the implementation of a low-distortion coordinate system (Cochise County LDP) that better represents ground distances making our land records and other geospatial data more reliable where business processes require precise measurements.

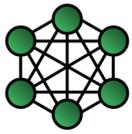
Walter also played a key role in the implementation and evolution of the county 9-1-1 and Computer Aided Dispatch (CAD) mapping systems. Both mapping systems rely heavily on comprehensive, current and accurate geospatial data to provide quick and reliable information for both landline and wireless call routing and records management at county PSAPs.

He was also the principle author and proponent of the county Open Geospatial Data Policy. The goal of the Open Geospatial Data Policy is to advance the objectives of the Cochise County Strategic Plan, the e-Government Task Force and to support open data trends in Government. The Policy has increased the accessibility and use of county geospatial data, improved organizational efficiencies and demonstrated the value of public information as a community resource. The Policy has also increased awareness and interaction with citizens and organizations by providing county business information on an interactive Web map or geospatial data for external public or private applications at no cost.



In April of 2012, the Arizona Professional Land Surveyors (APLS) presented Walter with the prestigious APLS Geospatial Professional Award during their yearly conference in Tempe, AZ.

Walter retired from the Cochise County GIS department March 11, 2015.



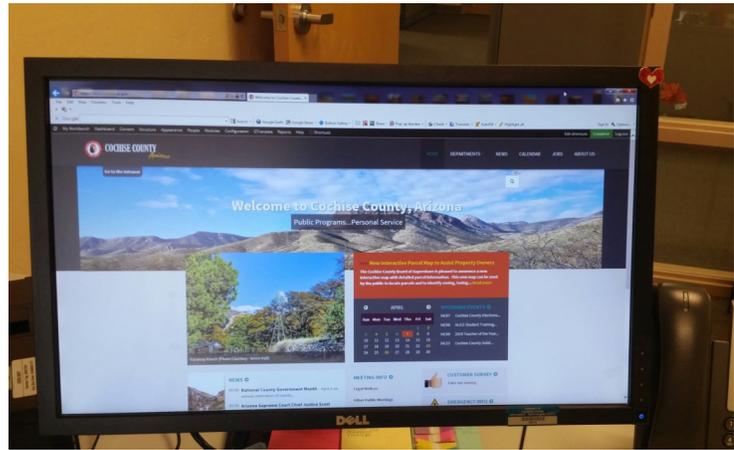
COCHISE COUNTY LEGACY PROJECT- IT

HISTORY

Old and New Equipment



OLD CRT MONITOR



NEW FLAT SCREEN MONITORS REPLACED CLUNKY CRT MONITORS



EARLY TOSHIBA SATELLITE LAPTOP



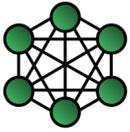
NEW WIRELESS ERGONOMIC KEYBOARD WITH DETACHED NUMERIC PAD



IBM SMALL FORM FACTOR COMPUTER
REPLACED THE FULL-SIZE COMPAQ TOWER



TRACK BALL MICE TO MODERN OPTIC WIRELESS MOUSE



COCHISE COUNTY LEGACY PROJECT- IT

HISTORY



OLD PUSH-BUTTON TELEPHONE



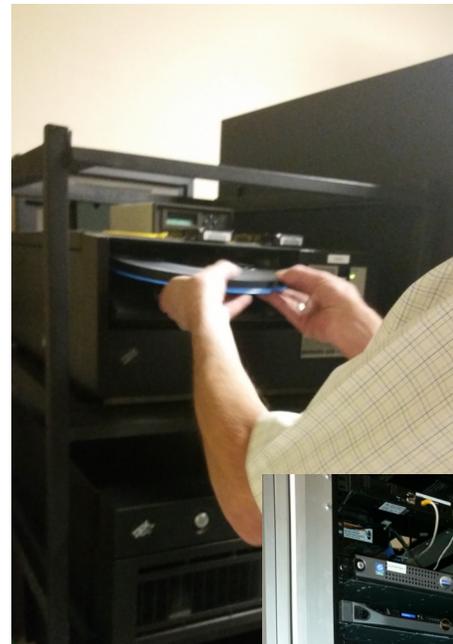
NEW CISCO VOIP TELEPHONE



NEW CISCO CONFERENCE TELEPHONE



TAPE DRIVES, FLOPPY DISCS TO THUMB DRIVE



HARD DRIVES FROM OLD TO MODERN

