

Information Systems

The Information Systems (IS) Department is responsible for implementing and maintaining technology solutions for all county departments as well as the server and network infrastructure required to support them. These solutions include the multitude of applications that county staff rely on to serve Eau Claire County residents every day. Everything from word processing and email to parcel management and Medical Assistance billing. As a result of recent organizational changes, IS is also responsible for phones and copy machines.

2018 Accomplishments

Applications

- alio –
 - In addition to normal alio upgrades that occur multiple times each year, a new procurement card process was implemented, capturing additional information about each transaction and eliminating some of the manual portions of the process.
 - An interface from NetTime, the timecard tracking application, to alio was completed, eliminating some of the manual steps in the payroll process.
 - Monthly alio intelligence training sessions were held to show alio users how to create their own reports to give them better access to their financial information.
- Office 365 –
 - Microsoft Office 365 was implemented countywide providing county staff access to the most up to date office productivity suite. Now that we are at the current version, we can take advantage of additional productivity tools such as OneNote and SharePoint that were not available to us before.
- Highway –
 - We worked with Planning & Development GIS staff and Mandli Communications on a project to capture LIDAR data for all county roads. This data will be used to develop a sign database that the Highway Department will use to manage their signs throughout the county. Highway field workers will use a mobile app to update the information.
- Human Services –
 - There was a lot of activity associated with Avatar, the Human Services electronic health record and billing application. Joxel was brought in to review how the application was currently being used and make recommendations to improve and expand its functionality. This started with the fiscal modules and has now moved to the clinical module. This is a major project that will continue into 2019.
 - Other Avatar modules were also acquired with implementation beginning in 2018. Those modules include Identity Manager which will simplify access to Avatar by utilizing the same user ID and password that is used for network access, document scanning to bring external documents into the electronic health record and Appointment Scheduling which is needed to support the Behavioral Health Clinic.

- Sheriff –
 - Spillman, the law enforcement application used by the Sheriff's Department, is now being used for records management by all law enforcement agencies in Eau Claire County. By sharing the same application, it is much easier for law enforcement agencies to share information and intelligence.
 - The Sheriff's Department completed the migration from Uniform Crime Reporting (UCR) to Incident Based Reporting (IBR). IBR crime reporting system enables law enforcement agencies to collect more comprehensive crime data than the statistical figures captured in the UCR Summary system.
 - The Sheriff's Department added 20 new video surveillance cameras to improve visibility and security in the jail. The new jail has been online for 6 years now and we are beginning to experience camera failures. This will need to be considered for budgeting going forward.
- Laserfiche –
 - Utilization of Laserfiche, the document scanning application, continues to expand. A new project to manage contracts was started in collaboration with the City of Eau Claire. Once finished for the City, the framework should be able to be used by the County with only minor modifications.
 - Another project to automate expense reporting was started but was tabled when workflow issues surfaced that could not be resolved. As we learn more about developing Laserfiche applications and workflows, we may be able to come back to this project and finish it.
- Parks & Forest –
 - Similar to the dam monitoring that is already being done, river monitoring of the Eau Claire River at the Highway K and Highway G bridges was implemented.

Infrastructure

- Upgraded the UCS (Unified Computing System) chassis, the core of our virtual server environment, with new hardware increasing CPU, memory and data transfer capacities.
- Upgraded VMware, the virtual server operating system, from version 6.0 to 6.5 on all VMware hosts.
- Implemented Microsoft BitLocker encryption on all County laptops.
- In 2018 the county network was extended to Chippewa Valley Regional Airport control tower. This year we took advantage of that by building a disaster recovery datacenter in the secure environment of the tower. Redundant equipment at that location will enable critical county applications to continue to operate in the event of a critical failure at the datacenter in the courthouse.
- IS worked with Facilities and CINC on a plan to extend the County network to the new Union Tower.
- Upgraded wireless access points in Human Services and in the Courthouse on ground, first, and second floors.
- Upgraded the Courthouse network cores to new hardware.
- Upgraded the jail network cores with repurposed hardware.
- Upgraded main network firewalls to Firepower threat defense.
- Upgraded Virtual Private Network (VPN) and wireless firewalls with repurposed

hardware.

- Upgraded the VoIP phone system and related phone system components to current versions.
- Upgraded the network switches on the second floor of the Courthouse and in Human Services.
- Upgraded the equipment at the Lake Altoona Clubhouse and the Lake Altoona dam after the City of Eau Claire upgraded their tower from WiMAX to LTE.
- Extended the Lake Eau Claire fiber network to both the new and existing garages and installed wireless access points in both buildings.
- Connected county employees at the West Central Drug Task Force to the County network.
- Partnered with Packerland Broadband to connect the Fall Creek ADRC location.

Other projects

- The Public Service Commission (PSC) awarded a Broadband Expansion grant to Eau Claire County and its private partner Packerland Broadband to upgrade the wireless equipment on four existing Eau Claire County towers. This will improve broadband speed and coverage for Eau Claire County residents in those areas.
- The PSC grant also included a redundant link from the Fall Creek tower to the Mount Tom tower. This not only provides a backup connection for internet customers but will also provide a backup connection for Law Enforcement voice communications when it is fully implemented.
- The IS team implemented formal change control processes in 2018 that considers cross functional impact, end user communication, risk mitigation, rollback procedures, and planned downtimes. Change control has allowed the IS department to obtain departmental awareness of changes that may have an impact on users and processes. IS continues to learn how to best communicate across internal disciplines to maximize planning prior to outages or major changes.
- Worked with Human Services to implement teleworking for Economic Support Specialists.
- Implemented Knowbe4 to provide phishing testing and training for county staff.

Alignment with Strategic Plan

As shown above, IS continues to collaborate with departments and partners across the County and beyond to develop and implement innovative technology solutions. A great example of this is the work we are doing with Packerland Broadband, utilizing the PSC Broadband Expansion Grant to improve rural broadband access in the eastern part of Eau Claire County. We hope to continue working with Packerland Broadband to improve rural broadband in Eau Claire County.

Future Opportunities

The addition of the Lead Systems Analyst / Project Manager position in the IS Department enabled the analyst team to pilot industry standard project management techniques for small and medium sized projects in 2018. Pilot project documentation included project charter and project workplan documentation. Initial learning experiences on early project work will lead to full team adoption and widespread use in 2019, leading to more accurate predictability of workloads, project costs and deliverable dates.

As mentioned above, organizational changes that were part of the 2019 budget, moved responsibility for IP phones and copy machines to the IS Department. IS already supports the County's nearly 300 cell phones. While IS has always been involved supporting IP phones and copiers from the network perspective, this change adds the day-to-day operational support of more than 600 phones and 50 copy machines to the IS workload including the accounting process required for chargeback to departments. Needless to say, we are looking for ways to automate as many of the manual processes as possible.

Mobility remains a high priority but is both an opportunity and a challenge. The opportunity for county staff is that it gives them the ability to work from anywhere at any time, enabling them to provide better service to customers and clients. The challenge is connectivity and security. Eau Claire County is primarily rural, and coverage is not always available. Dealing with these coverage issues is a challenge. Security is also a challenge with these portable devices that have access to the County's applications and data. We will continue to work with county staff so they can take advantage of the opportunities that mobility provides while minimizing the potential for security issues.

Mobility is also a high priority for constituents, but again, it is both an opportunity and a challenge. The expectation of the general public is that government information and services are available 24x7 via the internet and other online means. Eau Claire County has lagged in this area and we need to focus on improving our online capabilities.

In conclusion, IS will continue to support and enhance our existing applications and infrastructure while looking for cost effective opportunities to implement new technology solutions, enabling county staff to be more efficient and effective.

#2 Help Desk		Budget	Levy			FTE's
		\$387,074	\$387,074			4.50
The Help Desk keeps individual county staff productive by providing day-to-day application assistance and hardware support. This assistance and support addresses issues, which are typically errors or problems that prevent staff from effectively doing their work. It also addresses requests, which typically do not prevent staff from doing their work but do need to be completed at some point.						
OUTPUTS						
		2014	2015	2016	2017	2018
Number of desktop computers:		453	365	325	298	296
Number of laptops computers:		120	154	214	265	440
Number of MS Surfaces:		9	30	37	15	15
Number of iPads:		36	52	52	43	46
Number of iPhones:		26	45	40	182	270
Number of Android smartphones:				13	13	13
Number of netmotion laptops:		45	45	45	45	50
Number of netbooks:		15	15	3	3	3
Number of printers:		175	149	153	152	155
Number of desktop applications:		30	30	30	30	30
Number of tickets requiring immediate response:		356	217	198	130	68
Number of tickets in the system:			2054	2107	2792	5406
Performance Goal	Outcome Measures	Benchmark	2015	2016	2017	2018
To provide day-to-day technical support to individual county staff.	On average, Help Desk tickets requiring immediate response will be open less than 1 day	1.00	0.25	0.29	0.74	1.03
	On average, Help Desk tickets will be open less than 3 days	3.00	3.59	3.15	3.43	3.79
Totals		Budget	Levy			FTE's
		\$2,246,094	\$2,136,286			11.50