



2024 ANNUAL REPORT

**COMPUTER
SERVICES
DEPARTMENT**

Introduction

The Computer Services department is responsible for maintaining all hardware, software, and network access for the various City departments. Hardware support includes the evaluation, purchase, installation, preventive maintenance, repair, and the inventory of supplies for the computer equipment throughout all City departments. Some of the hardware supported includes a high availability virtual failover cluster running 80+ virtual servers (including an on-premise Exchange server, CAD servers, and GIS server), firewalls, L3 switches, BYOD smartphones and every desktop/laptop/tablet and printer in the City. For software, we both assist all departments when researching new software, as well as work alongside them on the final implementation, testing and training of the new software installed on the City's network of servers. Our staff then provides ongoing first line support to the City's departmental personnel for all software operating on the City's network. We are responsible for administering the 3rd party packaged software applications on the network, performing periodic system software updates, and backing up all server data on a regular basis. Several City applications and reports are custom written and maintained by Computer Services staff as well. We provide basic operational support for various versions of Microsoft Office products such as word processing, spreadsheets, and calendar sharing.

Staffing

Staffing for the office consists of:

Brent Schroeder:	Information Services Manager (11 years' service time)
Charles Curley:	Network Administrator (10 years' service time)
Jason Dunn:	Software Developer (4 years' service time)
Troy Wahl:	Help Desk Technician (2-years' service time)

Key Activities

Computer Services Applications & Equipment

All of the various software modules used city wide are accessed by hardware located in 28 city department locations, as well as several County agency locations, including: Hancock County Sherriff's office, Adult Probation, Hancock County Court House, and Hancock County Prosecutor's Office.

Both physical and logical upgrades to the City's virtual infrastructure continued throughout the year, as well as major security patches. The Microsoft Windows servers are the central storage areas for departmental files.

The City maintains an enterprise grade MS Exchange server to provide email service to all City employees. Email, as well as calendars, tasks, contacts, etc. can be accessed via MS Outlook at the individual users' desktops, and available via OWA (Outlook Web Access), on any internet connected device (within the United States) including Android, and Apple smartphones. The

beginning steps have been started to migrate the City to a cloud based exchange system in the future.

The City utilizes MFA for access to the OWA web interface for email outside of the City network, as well as many physical desktop system. An MDM (Mobile Device Management) service has been implemented for access via the email app on BYOD smart devices.

The City's network is protected by a multiple layer defense which includes a DMZ between two layer 5 firewalls on each of our redundant WAN connections. We have started the process of searching for a replacement system for a current piece of equipment that will be End of Life mid-2026. We will start implementing this device in 2025.

The City's website (www.findlayohio.gov), delivers the City's departmental information via web pages to the World Wide Web. The site is hosted by a 3rd party vendor, and is located outside the City internal network. The City of Findlay's top-level domain (TLD) was migrated to .GOV in 2022. All websites internal and public facing were moved to this new domain, and all sites with the former TLD have been set to permanently redirect to the new domain. The wildcard SSL certificate for the old .COM URLs was allowed to expire in 2024, access to any City webpage resources must now use the .GOV top level domain. No further complaints have been received about .com links not working, any future complaints will be investigated, and updated information will be provided accordingly.

The Geographic Information System (GIS) is hosted internally on a VM, utilizing Esri software. The former GIS server is still running for legacy applications but is in the process of being decommissioned. The Esri GIS server stores and makes available the various Engineering mapping layers to city offices. The Police department is facilitating training on this system in order to keep maps updated for use by the Police department in emergencies.

The security camera system received a major upgrade this year, in the form of new physical hardware, as well as separating functions among virtual servers. We have also begun the process of moving to a new physical door lock system, that utilizes a much higher security standard for access. This process will continue until the old door lock system is eventually decommissioned. The security camera system now has a much-improved separate physical server for recording and video processing functionality. All other services and aspects of this system was moved to our virtual environment, to spread the increasing computing load. Additional cameras were added throughout the City as well. We have also deployed additional buttons to the panic button system that will alert the building to severe weather situations, building lockdowns, etc. Computer Services maintain all of these systems, but keep a contract in place for support by dedicated providers of each system.

The Tyler New World servers controls the interfacing tools used for patrol car computer access to Ohio LEADS, and the Computer Aided Dispatching system via cellular cards on each system, among other things. All additional servers make up the hardware necessary for the various departmental software applications which primarily run in a Microsoft Windows Server environment. Due to additional security requirements, we have implemented an entirely new hardware-based VPN in all cruisers, as well as implementing a MFA login process for all computers with access to CJIS.

We are expanding our use of Linux throughout the cluster as well, and have begun to standardize on CentOS / Redhat. While we do still have Ubuntu VM's running these will eventually be phased out for CentOS.

Some, but not all of the departmental software applications include: CMI - Utility Billing, City Tax - City Income Tax, Tyler New World Suite & NICE – Police, ContentVerse & CourtMaster 2000 - Municipal Court.

The network supports resource sharing, and provides seventeen remote offices with a direct fiber optic connection to the central network servers. The network also provides Internet access to the entire City network through redundant fiber connections managed by two separate ISP's connected at 2 different physical locations. An emergency backup cellular device on the FirstNet network is also maintained for emergency access to WAN in the event physical infrastructure loss to other ISP's.

Computer Services Activities

Our new computer management system has continued to function well for our department and we have begun utilizing additional features within the software to use it to its fullest potential. This system is being used to keep inventory on hardware and software as well as allow troubleshooting, remote access, and patch management among other things. We have switched to a perpetual license model for this software which requires lower annual service fees, as we feel comfortable continuing use of the software in the foreseeable future. We have implemented several additional layers of security both within this system, and by using this system for City computers. We hope to continue building on this system with the multiple product offerings from this company which will ultimately streamline our processes and improve security and end-user support at the same time.

It was decided in 2024 that the City would be moving to an MS365 tenant for email functionality starting in 2025. This was in large part due to the upcoming end of support for on premise Exchange, and the lack of release of a replacement version. All users and accounts were inventoried and planned in order to budget for licensing costs going forward. This implementation is planned to occur in 2025.

MFA was implemented on all PD computers in 2024, users are now required to present an ID Badge in addition to a PIN to login to any computer in the Police Department. This was implemented as a requirement from LEADS, but we plan to use this as an opportunity to increase security across all City computers. All City employees have been issued new ID badges that can facilitate this new login procedure, and the infrastructure is in place allowing us to spread this implementation to other City computers easily. As of 2024, the Municipal Court requested the use of MFA for computer logins, so this was rolled out to their department as well. As of the end of 2024, we were in the final stages of completing that department.

In addition to the VMWare failover host in place at our dark backup site, and additional matching host was installed at the Police Dispatch dark backup site, specifically for use with New World, and other PD related software. This hardware was purchased using state 911 funds, so use of it is limited to support of 911. This machine can run all Police systems in a completely segregated network, utilizing on site desktop computers.

The fiber loop has maintained 100% up time throughout 2024. We updated two sites that were missing redundant links; however, the redundant links are not currently geographically diverse. We will investigate adding this diversity to further secure our connection. Each City building currently has a minimum of dual 10Gb links back to the municipal building, which is well beyond

current usage. Some sites have been migrated to simplex fiber connections to allow us to utilize the fibers more efficiently. So far this has been going smoothly, and this process will likely continue into the future.

The primary backup repository is maintained at our DR site. This repository was replaced in 2024 with a hardened Linux repository capable of storing over 500TB of data, which will give us plenty of room to grow.

The Police department NICE recorder has continued to operate on a virtual machine. The old physical NICE server remains in a powered down state and is periodically started when old recordings need accessed. The physical system is planned to be decommissioned in 2025 as the recordings age out of retention requirements.

Necessary updates and fixes were installed on all of our third-party software applications running on the network servers, network PCs and Police Department Laptops in the cruisers. The Computer Services staff attempts to minimize the downtime caused by these installations by performing them either after hours or during low volume processing times for the various affected personnel. The various software upgrades performed throughout the year included Exchange 2016 updates, CMI Authority updates, New World updates, CourtMaster updates, Pitney Bowes updates, as well as general Windows Server updates.

Additional steps have been taken throughout the year to increase the overall security of the City's network. Some of these steps include upgrades to physical equipment, and a multiple layer approach to security. We have been making strides toward further network segregation, each implementation of a new server has been installed on its own segregated network with least privilege principals in place. We are continuing use of the same AV vendor that we have utilized the past 3 years. Performance has been very good, and no major occurrence have happened since its implementation. The City had no major virus incidents, and takes the utmost level of caution where any potential virus or intrusion attempt is observed. We have maintained, or improved all other security implementations in place. We ensure all end users complete annual security training to spot and report phishing emails among other items. We also test users periodically via several popular means of virus deployments. Any failure of these tests is taken as an opportunity to provide further training. We have performed several combs of our edge firewall rules, as well as UTM rules to remove anything no longer needed, and combine rules where beneficial. During 2024 Computer Services performed additional "pen testing" on public facing connections. No weaknesses were discovered during these tests; however, it is something that continues to be scrutinized, and monitored.

Patching of all end user devices continues to be a priority, and is maintained by our computer management system. All OS and critical third-party patches are installed within 24 hours of release, with all other patches being installed weekly all after-hours

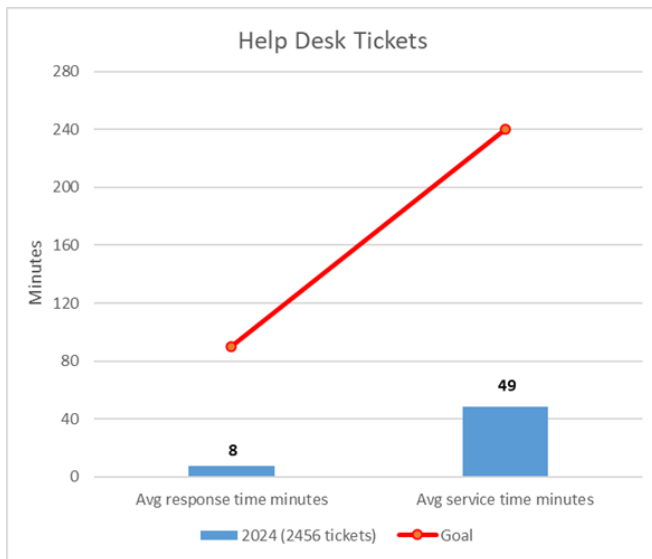
The Tyler New World system, which is a joint City/County CAD system utilized by the City PD, FD, Engineering, as well as County Sheriff and Jail staff has been Live for over 5+ years now. The system is regularly updated and new features are being brought online throughout the year. This system utilizes 16 virtual servers that Computer Services works closely with Tyler to maintain and keep things as stable and fast as possible. We also work jointly with County IT staff in order to allow network communication via fiber for County Sheriff office to connect into this system. County IT personnel are able to create and remove County employee accounts from our AD infrastructure via a web-interface. This reduces the load on City IT staff for maintaining County employees.

The security camera system continues to expand where needed, albeit in a much slower and more controlled manner. New cameras are now being deployed on an as needed basis, as well as some cameras being updated for different use cases. The server that maintains these cameras was designed to allow for continued growth going forward. The camera system utilizes the city owned fiber loop to propagate this service to all of our remote offices. Additionally, each camera has redundant onboard storage in the event of lost network connectivity. This eliminates the need for multiple servers at each location, and streamlines Dispatch and Police department access to all cameras.

Desktop computer deployment was very limited in 2024 due to the implementation of a new replacement schedule. Computers in previous years were ordered with higher resources to hopefully allow them to be utilized for a longer period. This has worked in our favor thus far and will allow us to spread out computer replacement over a much larger span of time.

All Computer Services staff were maintained throughout 2024. It was discussed with the administration, and approval was given near the end of 2024 to add a System Administrator position to the team in 2025. Additionally, a position currently held by the PD will be moved to the Computer Services department. This person will be dedicated to the support of the Police department, however, will work closely with all Computer Services staff. Our Software developer has communicated his intention to retire at the end of 2026, which is still the plan. Further discussion was had about the future of the position beyond his tenure. The Computer Services office will likely transition the software developer role to a Cyber Security role, as City maintained applications are almost no longer existent. The current software developer has agreed to begin transitioning into this role as he nears retirement. We are planning to make a lateral move into this new role in 2025 or early 2026.

Key Performance Indicators (KPIs)



More details on Key Performance Indicators can be found at:

www.findlayohio.com/performance

Objectives for the Next Year

In 2025, the IT Department will prioritize the migration to Microsoft 365 (MS365) for email and office tools. This transition will enhance reliability, communication, and improve productivity across all departments. By shifting to MS365, we aim to provide employees with modern tools that allow a higher level of accessibility and collaboration. This move will also ensure security is up to date using Microsoft's latest versions of office, keeping our systems in line with industry standards.

Another key initiative for 2025 will be the migration of all desktop computers to Windows 11. With Windows 10 reaching its end of life (EOL) in the coming years, upgrading to Windows 11 is critical to ensure continued support and access to the latest security features. This upgrade will improve the overall performance, functionality, and security of our desktops, reducing the risk of vulnerabilities associated with outdated software. The migration plan will include thorough testing and a streamlined deployment process to ensure minimal disruption.

To further enhance security, the department will focus on standardizing the software across all desktop systems. By minimizing the number of applications installed and ensuring that only essential software is used, we can reduce potential security risks. Regular patch management will be a top priority, ensuring that all desktops are kept fully up to date with the latest security updates. This approach will strengthen the City's defense against cyber threats, ensuring that systems remain secure and compliant.

In 2025, we will continue to upgrade physical security infrastructure by installing adding doors in the Municipal building to the new Door Lock system. This upgrade will enhance access control and improve the overall safety of employees and sensitive areas within the facility. The new system will provide more robust security features, including remote management interoperability with the security camera system, and real-time monitoring, ensuring that the building remains secure at all times.

Additionally, the City will roll out a new Wi-Fi system across all sites. This system will provide faster, more reliable internet access for employees and visitors, ensuring consistent and efficient network experience. The rollout will be strategically planned to minimize downtime and ensure seamless connectivity throughout all City locations, improving overall operational efficiency.

The Computer Services Department will continue to roll out Multi-Factor Authentication (MFA) for computer logins across the remaining City departments. This initiative will significantly enhance security by requiring multiple forms of verification before granting access to systems. By adopting MFA, we will reduce the risk of unauthorized access to sensitive information and strengthen the City's cybersecurity posture as part of a broader commitment to protecting public resources and data.

Network security will continue to be an important initiative. We are exploring different systems as our current system will be end of life in 2026. This will be a multi-year process due to the complexity and scale of the system. We hope to have a new system selected in 2024 and purchase in 2025. We will likely spend most of that year performing the migration via a slow methodic process. We will work to close any potential security holes, and increase network security via hardware, and configuration changes.

Computer Services personnel will continue to pursue training in areas that can be of greatest benefit to the management of the city's network. We plan to purchase online training accounts for all Computer Services personnel that can be used to gain knowledge of products and systems used by the City, and hopefully obtain certifications in various fields.

The Computer Services Department will continue to support all of the existing applications running on the city's network, both 3rd party and custom written. Maintenance programming and user help support for the various application systems will consume much of our time. We will make ourselves available to discuss and analyze the technical needs of the various city departments. We will strive to become more efficient and cost effective through the use of technology advancements within the city's network environment.

Budget Summary Sheet

We calculate how much money should be charged back against a department based on the percent their department used of the total services and resources made available by the Computer Services department. The total of the Computer Services projected budget is multiplied by that percent, providing the amount to be charged in that particular department's budget. The items considered in services and resources are: equipment, number of users, application use, internet access, phones, printers, cloud faxing, programming, and project time that will be spent on anticipated projects in a particular department for the coming year. You can find a departmental break down listed in Table A-1.

TABLE A-1

DEPARTMENT	Computers	Phones	Fax	Servers	Printers	Users	Apps	Internet	Proj Hrs	Proj Pts	Prog. Units	Usage %	Budget Amt
Airport	5	4	0	18	3	5	7	5	60.00	12.00	5.0	3.09%	\$26,747.46
Auditor	14	8	1	18	4	7	10	17	60.00	12.00	5.0	3.80%	\$34,147.19
City Council	2	2	0	14	0	11	6	0	20.00	4.00	0.0	2.01%	\$18,332.05
Civil Service	1	1	0	17	2	4	6	1	5.00	1.00	5.0	2.41%	\$20,403.93
Comp Serv *	7	6	0	8	1	6	7	28	400.00	80.00	5.0	4.54%	\$0.00
Dispatch	11	25	1	41	3	11	15	10	150.00	30.00	0.0	6.61%	\$58,929.96
Engineering	14	11	0	21	7	8	10	10	40.00	8.00	0.0	3.77%	\$34,177.03
Fire	32	39	1	36	7	68	13	19	150.00	30.00	10.0	7.54%	\$78,373.16
HRPC	6	8	0	18	2	6	9	6	5.00	1.00	0.0	2.72%	\$24,352.55
Income Tax	11	9	1	19	7	6	7	9	200.00	40.00	10.0	4.54%	\$39,830.35
Law Director	3	2	0	18	5	6	9	4	5.00	1.00	0.0	2.69%	\$23,286.67
Mayor	6	8	1	20	4	3	9	4	50.00	10.00	0.0	3.21%	\$27,986.80
Muni Court	56	44	2	28	35	26	13	34	70.00	14.00	25.0	8.20%	\$79,993.48
NEAT (Removed)	0	0	0	0	0	0	0	0	0.00	0.00	0.0	0.00%	\$0.00
Police	79	54	2	46	21	73	18	52	200.00	40.00	25.0	11.89%	\$152,694.80
PW - Cemetery	2	3	0	17	2	3	6	2	5.00	1.00	0.0	2.31%	\$19,689.36
PW - Recreation/CUBE	14	11	0	18	4	7	10	11	20.00	4.00	0.0	3.26%	\$29,865.67
PW - Streets	9	10	1	17	3	9	11	8	20.00	4.00	5.0	3.06%	\$28,197.96
PW - Traffic Lights	2	2	0	17	1	3	5	2	5.00	1.00	0.0	2.25%	\$19,135.54
HR Director	1	1	0	17	1	1	7	1	5.00	1.00	0.0	2.24%	\$18,580.26
Safety Dir	0	0	0	0	0	0	0	0	0.00	0.00	0.0	0.00%	\$0.00
Service Director	2	1	0	17	1	1	8	1	5.00	1.00	0.0	2.30%	\$19,129.14
Treasurer	1	1	0	17	0	1	4	1	2.00	0.40	0.0	2.11%	\$17,517.73
Water Billing	22	11	1	23	4	10	11	10	150.00	30.00	10.0	5.08%	\$45,973.18
Water Dist.	9	5	0	21	2	14	10	5	100.00	20.00	5.0	3.87%	\$34,921.57
Water Treatment	12	23	1	20	4	19	11	7	200.00	40.00	5.0	4.57%	\$43,454.19
WORC (Removed)	0	0	0	0	0	0	0	0	0.00	0.00	0.0	0.00%	\$0.00
WPC/Sewer Maint	13	15	0	17	5	27	13	10	90.00	18.00	0.0	3.72%	\$36,960.41
Zoning	5	3	0	18	2	3	8	3	30.00	6.00	0.0	2.72%	\$23,345.56
TOTALS *	339	307	12	541	130	338	243	260	2047.00	409.40	115.0	104.54%	\$956,026.00

2025 Computer Services Budget (Less Internet/Phone/Fax/PD Helpdesk)		\$814,018.00
2024 Internet Charge		\$27,600.00
2024 SIP Trunk + Management Charge		\$28,852.00
2024 Cloud Fax		\$2,020.00
MS365 Charge		\$51,000.00
2025 PD Helpdesk Employee		\$32,536.00
TOTAL 2024 Computer Services Budget Request		\$956,026.00

2024 Computer Services Budget Request	
* Computer Services Usage is subtracted from totals before % is calculated for departments	
Computers = 1 point for each individual system	
Internet = Internet usage based on # of computers from total yearly internet charge	
Phone = Phone usage based on # of phone from total yearly Phone charge	
Servers = 4 point for physical or virtual server	
Printers = 1 point for each individual printer	
Users = 0.3 points for each user over the total number of computers for a department (this accounts for shared systems)	
Apps = 1 point for each application used by the department	
Projects Points equals .20 points per man hour for these estimated project hours	
* 648 of the total Project Hours are shared equally by the 27 Departments	
Programming Units to maintain their custom application = 5 points per application (some are split)	
Usage % is calculated as: (Computers+Servers+Printers+((Users-Computers)*.3)+Applications+Proj Points+Programming Units)/	
(The totals of columns B C D E G H - Computer Services amounts))	
Internet & Phone usage is calculated separately based on the actual yearly cost of each service, and the actual number of users and Phones	

