



Annual Report 2023





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Contents

From Director Kindell	4
The Telecom Creed	5
Team Telecom Profile and Overview	6-7
Team Telecom—Recognitions	8-11
Financials	12
Radio System	13-16
Dispatch Center Technology	17-19
CAD Interfaces	20
Mobile Systems for Field Users	21
Infrastructure Systems	22
9-1-1	23
Accounting + Administration	24
Supporting Communications	25-27
Records Management	28-29
Reports	30
Disaster Recovery	31
Physical Plant	32-33
Data Center	34
Cybersecurity	35-36
Maintenance Awareness	37
Partnerships	38
Telecom & Emergency Services - updates & improvements	39
Going Above & Beyond	40
Community Management	41-44



From Director Kindell

2023 began at a slow pace but, picked up as parts and systems finally started to trickle in that had been on order for so long. Vendors had also started completing projects that had been delayed. As the year progressed, we were working at 110% to implement the systems and updates.

Numerous cybersecurity incidents of notable significance garnered the attention of corporations, non-governmental organizations, and governmental bodies globally.

Telecom continuously focused on understanding the expanding landscape of cyber threats and identifying strategies to mitigate these risks, thereby enhancing resilience and recovery capabilities. To this end, Telecom committed significant resources to the deployment of advanced technological solutions such as Endpoint Detection and Response (EDR), Security Information and Event Management (SIEM), and Security Orchestration, Automation, and Response (SOAR). Furthermore, Telecom, at the direction of the Board of County Commissioners, began offering a series of cyber awareness educational programs. These events, attended by elected officials from various governmental bodies within Warren County, served as platforms to discuss potential cyberattack scenarios and the critical protective measures necessary to safeguard our collective digital infrastructure.

Telecom also began participating in a regional Cyber Collective of local governments and businesses in the region. The Go Cyber Collective shares real time information on active cyber-attacks and help our local government partners better protect themselves as a cyber-attack unfolds. Through the Go Cyber Collective, Telecom was honored to demonstrate our robust cyber patching methodology at a regional level.

Amidst the current national trend of subpar vendor support, in 2023 we encountered difficulties with one of our longtime cellular service providers. With a focus on ensuring the best possible service for our public safety users, we made the proactive choice to transition to an alternative provider that better aligns with our needs and expectations.

Some of the important upgrades and improvements we made in 2023 are, Dispatch 43" monitor upgrade, replaced UPS 1, initiated load power studies, pace planning and system updates for redundancy, a new microwave link to add network redundancy to Blackhawk tower, and continued deployment of public safety radio replacement security program.

Also in 2023, we bid farewell to two remarkable individuals whose retirements marked the departure of a wealth of knowledge and experience. Mike Callahan and Paul Bernard, with their combined 60 years of dedication and expertise, will be greatly missed and fondly remembered for their invaluable contributions to our team.



-serving Warren County since 1989



THE *Warren County - Ohio* TELECOM CREED

OUR MISSION

Established in 1985, Warren County Telecommunications has evolved into a 24/7 technology support provider for our partners in the public safety and government communities. With expertise in secure Data and Radio Systems, Public Safety Applications, Telephone, Training, and Administrative Support, we strive to provide reliable solutions that are in alignment with Warren County initiatives and leadership goals.

In support of this mission, we will:

- Partner with agencies and departments to understand their needs.
- Provide leadership, planning, and training for the effective use of emerging technologies.
- Demonstrate technical and operational excellence through a commitment to professionalism and continuous improvement.

OUR VISION

Warren County Telecommunications will be recognized as a high-performance team providing technical excellence that advances our partners in alignment with Warren County's mission and goals.

OUR CORE VALUES

Our core values drive and guide us as we serve our partners.

As members of Telecom, we are committed to:

- **Collaboration:** We are dedicated to a constructive, team-oriented environment, gathering varied perspectives, sharing knowledge, leveraging unique skills, and building effective partnerships.
- **Continuous Improvement:** We strive for operational excellence through the on-going development of our individual team members and technology.
- **Innovation:** We encourage creative and critical thinking.
- **People:** We respect, care for, and actively listen to our coworkers and agencies.
- **Service:** We push our limits to provide consistent, agile, reliable, and accessible services to all.
- **Transparency:** We maintain open communications and ethical business processes to be accountable in our interactions and our work.

OUR DECISION CRITERIA

1. Is it good for Warren County?
2. Is it good for our Partners?
3. Is it good for our Taxpayers?

Team Telecom - Profile and Overview

WHO WE ARE

Leadership Unit

- ◇ Paul Kindell, Director
- ◇ Gary Estes, Deputy Director
- ◇ Josh Moyer, Public Safety Systems Manager (Promoted 12/2023)
- ◇ Lisa Hicks, Community Manager
- ◇ William Cornett, Cybersecurity Analyst
- ◇ Tim Simpson, Technologist
- ◇ ALL Unit Leaders serve as well

The Leadership Unit is made up of the Director, Deputy Director, Managers, Unit Leaders and our Technologist. They are responsible for a significant amount of our organization's decision-making processes. This Unit also includes our Security Officer who oversees our Security programs responsible for the Governance, Risk, and Compliance of the Public Safety Network.

Support Services Unit

- ◇ Kristy Oeder, Office Administrator
- ◇ Jessica Johnson, Administrative Assistant
- ◇ Debbie Griffith, Administrative Assistant
- ◇ Kim McKinney, Administrative Assistant

The Support Services Unit maintains departmental accounts receivables/payables, inventory, personnel records, county phone system billing, county wide cellular phone account and prepares purchase orders and payroll. The unit also assists the Director with annual budget preparation, answers county switchboard and performs administration support for units.

Infrastructure Systems Unit

- ◇ Dustin Flint, Infrastructure Systems Manager
- ◇ Jordan Snyder, Infrastructure Systems Supervisor
- ◇ Tyler Blair, Infrastructure Systems Analyst 1
- ◇ Charles Zugaro, Infrastructure Systems Analyst 1

The Infrastructure Systems Unit area of responsibilities that affect all County employees and what other county employees may know us for are the 911 system, Mitel Phone System, Campus Panic Buttons and the overhead paging systems.

Other areas of responsibilities that are Public Safety Network (PSN) specific, which a typical county employee may not know about are Data Center Operations, Enterprise Time System, PSN Network infrastructure, PSN Virtual infrastructure, PSN Backup system, PSN Security, Power Systems. This unit supports and maintains the Enterprise Network backbone that carries Warren County Water & Sewer (WCWS), Supervisory Control and Data Acquisition (SCADA) and Remote Location connectivity.

Team Telecom - Profile and Overview

Communications Systems Unit

- ◇ Corey Burton, Communications Systems Manager
- ◇ Alex Mokrycki, Communications Systems Supervisor
- ◇ Steve Jennison, Communications Systems Analyst

The Communications Systems Unit maintains the "Public Safety Radio System" that consists of 9 radio towers spread across the county, used by over 3,100 radio users to communicate with each other. They maintain generators at each site and the microwave used to connect them. We also care for the radio consoles in Dispatch, used to communicate with Police and Fire Agencies/Units, as well as the Emergency Radio Cache (Hotboxes).

Data Systems Unit

- ◇ Jeff Cegin, Data Systems Manager
- ◇ Joseph Newton, Data Systems Supervisor
- ◇ David Shiverdecker, Data Systems Analyst 2 (promoted 12/2023)
- ◇ Rhonda Bernard, Applications Analyst 1
- ◇ Jeremiah Marcum, Database Administrator
- ◇ Philip Bomer, Data Systems Technician 2
- ◇ Tommy Kramer, Data Systems Analyst 1
- ◇ Jeff Boutell, Data Systems Technician 1

The Data Systems Unit supports client side services. Some of their areas of responsibilities include Installation and support of all desktops in Telecom and Emergency Services, all dispatch workstations, over 300 mobile computers across the Police and Fire agencies in the county, and over 200 virtual desktops used by various agencies via Citrix. We provide remote connectivity for water department workers to the water plants.

Other supported users include Human Services and CSEA. Our analysts work closely with vendors in support of the Computer Aided Dispatch (CAD) system, Law and Fire record reporting, and other systems. Also our analyst who handles the Geographic Information System (GIS), generates maps and updates routing for quicker emergency responses. The Data systems Unit built and also maintains a reporting warehouse that is utilized by the Sheriff's office and several court related departments including Juvenile, Probation, Prosecutors, and others.

AuxComm (Auxiliary Communications) Program

- ◇ Jason Shatto, AuxComm Unit Leader
- ◇ Greg Santaromita, AuxComm Unit Supervisor

The AuxComm is an outreach program, made up of ham radio operators, utilizing volunteers to support Emergency Communications as defined by Federal Emergency Management Agency. The purpose and mission of AuxComm is to provide reliable alternate communications support for Warren County Emergency Management Agency (EMA).

Team Telecom—Recognition



Below is our 2023 Team at a glance. We like to help create an environment where employees are seen, hence building a workplace where people acknowledge and value each other. It also sends a message of our positive work culture to the outside world.



Charles Zugaro
Infrastructure Analyst 1
 April 2023

Tim Simpson
Technologist
 April 2023

Jordan Snyder
Infrastructure Systems Supervisor
 August 2023

Olivia Siegmann
Spring/Summer Intern
 March 2023

2023 New Team Members and Spring/Summer intern



Team Telecom—Recognition



Telecoms Key Accomplishments in 2023 | Telecom Excellence & Promotions

Telecom Performance

Great performance is noticed at Telecom by the Team Leads and colleagues in many ways. The following staff were recognized for going over and above in their previous roles, and acquired new skills and knowledge. These individuals chose to challenge themselves, continued learning, developing their abilities and were contributors to our overall success in 2023.

2023 Promotions/Transitions are as follows:

- ⇒ Josh Moyer— Applications Analyst 2, CAD Administrator **PROMOTED** to Public Safety Systems Manager
- ⇒ Philip Bomer—Data Systems Technologist 2 **PROMOTED** Data Systems Technologist 3
- ⇒ David Shiverdecker—Application Analyst 1 **PROMOTED** Application Analyst 2
- ⇒ Tommy Kramer—Communications Systems Analyst 1 **TRANSITIONED** to Data Systems Analyst 1

Telecom Excellence Award 2023

An annual award for the Telecom Team Member, who stood out as an example of Telecom’s (6) core values is given every year. The **2023 Winner** was **Philip Bomer**, Data Systems Technologist 3. He was nominated by Lisa Hicks, Community Manager, and Jordan Snyder, Infrastructure systems Supervisor. Both Jeff Cepen, Data Systems Manager and Joe Newton, Data Systems Supervisor, worked with his mom (who lives out of state) and provided “test” Teams Calls to make sure she could support her son’s award from afar! What a perfect surprise for Philip!

Philip’s attributes include being proactive, interacts well with interna and external customers, works with a positive attitude and demeanor, strong work ethic, thinks outside the box, provides open dialogue, great at troubleshooting and problem solving skills, gives great in-sights and helpful tips, and he always gives so much of himself in his role.

Honorable mentions:

- David Shiverdecker (endorsed by Tim Simpson)
- Dustin Flint (endorsed by Gary Estes)
- Joseph Newton (endorsed by Jeff Cepen)
- Tommy Kramer (endorsed by Corey Burton)
- Kim McKinney (endorsed by Kristy Oeder)
- Tyler Blair (endorsed by Dustin Flint)



Team Telecom—Recognition

Telecom's Key Accomplishments in 2023 | Continuing Education/Training

Telecom places significant value on continuing education and certifications because they enhance our knowledge base, augment our skill sets, equip us for additional responsibilities, ensure our competitiveness in the industry, qualify us for advanced work practices, and contribute to our long-term viability.

In 2023, all 26 members of the Telecom team successfully completed all 17 Security awareness training modules. Since the introduction of this training initiative, both Telecom and Emergency Services have improved their phishing-prone rating from 28.6% to the current level of 8.4%.

Communications Systems Unit

- **Corey Burton:** L969 Communications Unit Leader (COML) Class
- **Tommy Kramer:** L969 Communications Unit Leader (COML) Class, Weather Spotter Training, Disaster Recover for Power Systems, In-Building Public Safety Communications Seminar (KY), Fire Departments Instructors Conference (FDIC) (Indianapolis)
- **Alex Mokrycki:** Weather Spotter Training, Disaster Recover for Power Systems, Norfolk Southern Safety Train Event, Command Vision Incident Command Training, CJIS Security & Privacy Training
- **Steven Jennison:** Weather Spotter Training

Infrastructure Systems Unit

- **Dustin Flint:** Cohesity – Platform Administration, Cohesity - Data protection Operations, Disaster Management for Electric Power Systems (MGT-345)
- **Jordan Snyder:** Fortinet Network Security Associate 1 (NSE1), Fortinet Network Security Associate 2 (NSE2) Completed, Understanding Auvik Features, Cohesity - Data Protection - Microsoft 365, Cohesity - Platform Foundations, Cohesity - Data protection Operations
- **Tyler Blair:** CompTIA Network+, CompTIA Server+, Ham Radio - Technician License Criminal Justice Information Services Security and Privacy Training Certification, Ham Radio - Technician License, Cohesity - Data Protection Operations
- **Charles Zugaro:** Fortinet Certified Associate in Cybersecurity, Fortinet FortiGate 7.4 Operator, HAM Technician and General Class Licenses, Cohesity Data Protection Operations, Nutanix Enterprise Cloud Administration, ISC2 Candidate

Data Systems Unit

- **Jeff Boutell:** Ohio Information Security Conference, NACo Enterprise Cybersecurity Leadership, Radar Omega Training, UPS Training, In-Service Day Training
- **Philip Bomer:** Radar Omega Training, UPS Training, In-Service Day Training
- **David Shiverdecker:** Various classes at Central Square Engage Conference, ArcGIS Survey123 Author a Survey on the Web Certificate, Cartography Certificate, ESRI Webinar field maps, Locution System Troubleshooting, DUO Authentication Methods and Devices, Duo Intro to Admin Panel, Duo Setup Apps, Duo End User mgt, Duo Enrollment Methods, Duo Level1 Admin, Duo Policy controls, Duo Liftoff, CJIS, ESRI webinar pub-

lic safety workflows, Radar Omega Training, UPS Training, In-Service Day Training

- **Rhonda Bernard:** Various classes at Central Square Engage Conference, CJIS Security and Privacy Training Certification, UPS Training, In-Service Day Training
- **Jeremiah Marcum** CJIS, UPS Training, In-Service Day Training
- **Joseph Newton,** Ohio Information Security Conference, ESO Insights Training, 911 Outage Roundtable, Locution System Troubleshooting, ESO RUG/Louisville, Fortinet Executive Connect/Sharonville, Cohesity Platform Foundations, Cohesity Data Protection Operations, CORSA Leave Requests+, Cohesity Platform Administration, Radar Omega Training, ProQA System Administration
- **Jeff Cepin:** TEEX Disaster Management for Electric Power Systems, 911 Outage Roundtable, Locution System Troubleshooting, Fortinet Executive Connect/Sharonville, Cohesity Platform Foundations, Cohesity Data Protection Operations, CORSA Leave Requests, Cohesity Platform Administration

Leadership Unit

- **Josh Moyer**—International CAD Consortium Conference, Central Square User Conference, ESRI Online Conference, FDIC, Locution Admin Training, ProQA System Administration class
- **William Cornett:** SANS SEC566 Implementing and Auditing CIS Controls, GIAC GCCC Critical Controls Certification, 2023 SANS Incident Response Survey, Cloud Security Exchange, 2023 SANS CTI Survey: Keeping Up with A Changing Threat Landscape, 2023 Cyber Solutions Fest | Spring: Insider Threat & Malware, 2023 SANS Threat Hunting Survey: Focusing on the Hunters and How Best to Support Them, Cyber Threat Intelligence Summit Solutions Track 2023, Journey to the Center of the SOC 2023 Solutions Forum
- **Lisa Hicks:** Intro to Cybersecurity, Personality Preferences
- **Tim Simpson:** ESO Regional User Conference Louisville, KY, "How to craft a data-driven budget proposal to improve your agency"-ESO webinar, 12 hrs of ESO Insights instructor led / hands on webinar training (by ESO) re: EHR Basic, EHR Intermediate, EHR Advanced, Fire Incidents Basic, Fire Incidents Intermediate, and Fire Incidents Advanced, Radar Omega training

Administrative Unit

- **Jessica Johnson:** Corsa Training on How to Respond to Employee Leave Request & Playing Nice with Others, Spirit Seminars: Differences in Personalities Training.

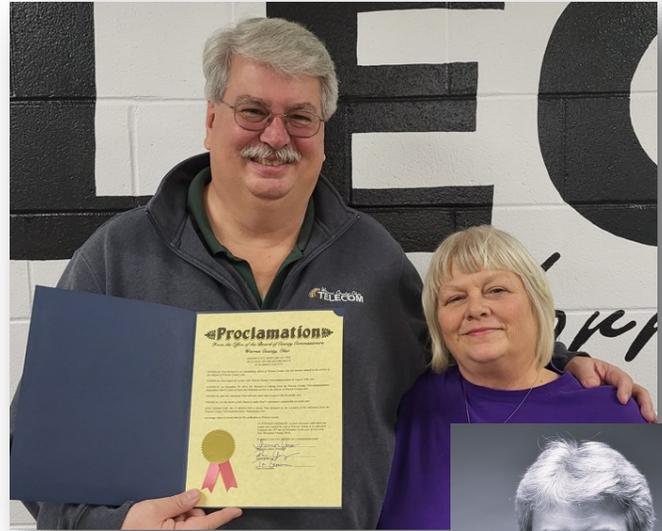
Team Telecom—Recognition

2023 Retirements—*Congratulations to these Retirees and all the incredible years of work they put into getting there.*

Paul Bernard

Paul retired on December 29, 2023. He was hired on August 1, 1988 as a dispatcher (5 years) by the Warren County Sheriff's Office under Sheriff James Collins, where everything was done on paper. He was promoted to Supervisor November of 1993 (8 years), later promoted to Printrak/Motorola Project Manager & CAD Administrator in 2001.

He transferred to Telecom approximately 2002. Along his journey, he accomplished much, starting with: "Go Live" for the county's first 9-1-1 system, and the switch to the 800 MHz radio system, used/managed 3 CAD, deployed the Printrak/Motorola CAD system on February 25th, 2003. Paul and his wife Rhonda spent many nights sitting up until 0400 hours learning and inputting data into the CAD system so it would be ready for the "Go Live". Paul was the only person at the time configuring the CAD system although did have some help from others, started implementation of the County Automated Voice Dispatch, and has announced numerous "Last Alarms" over his career. He also received the "Outstanding Citizen Award" from the Warren County Law Enforcement Association on March 14, 1992, for the call he took where a dog attacked a babysitter and trapped her in the house.



Mike Callahan

Mike retired on March 24, 2023. On March 31, 2023, we celebrated 30 years of dedicated service to Warren County Telecom! Mike Callahan was hired on November 14th, 1994 as an Electronics Technician 1 with the Warren County Telecommunications department.

In July 2008, he was transferred to the position of Telephone Technician 1, and ultimately promoted to Telephone Technician 3 in 2009. Mike is looking forward to working on his model airplanes and spending time with his grandkids. He also plans to continue working with his Ham Radio for many years to come!

During his retirement, Mike will enjoy spending time with his kids and grandchildren.

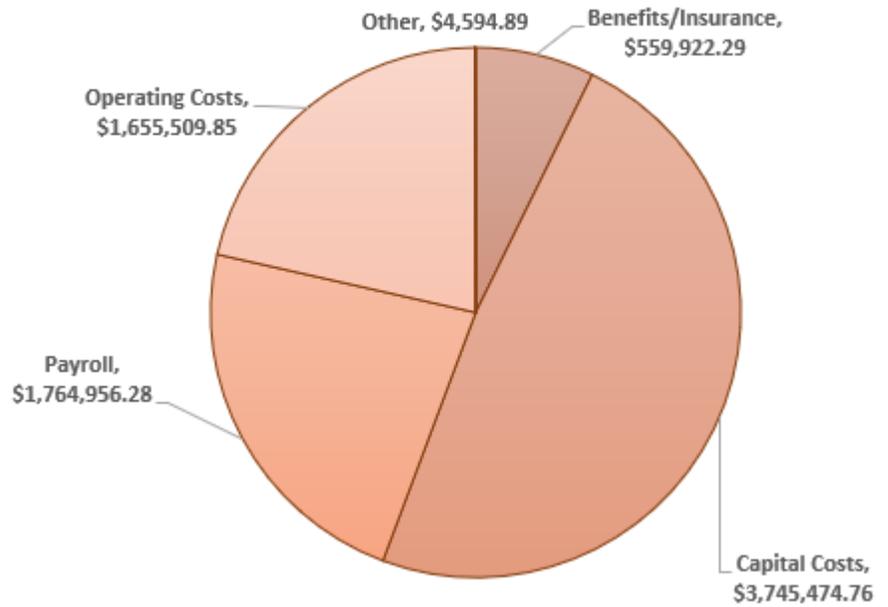


Administrative Assistants, Jessica Johnson and Debbie Griffith in 2023

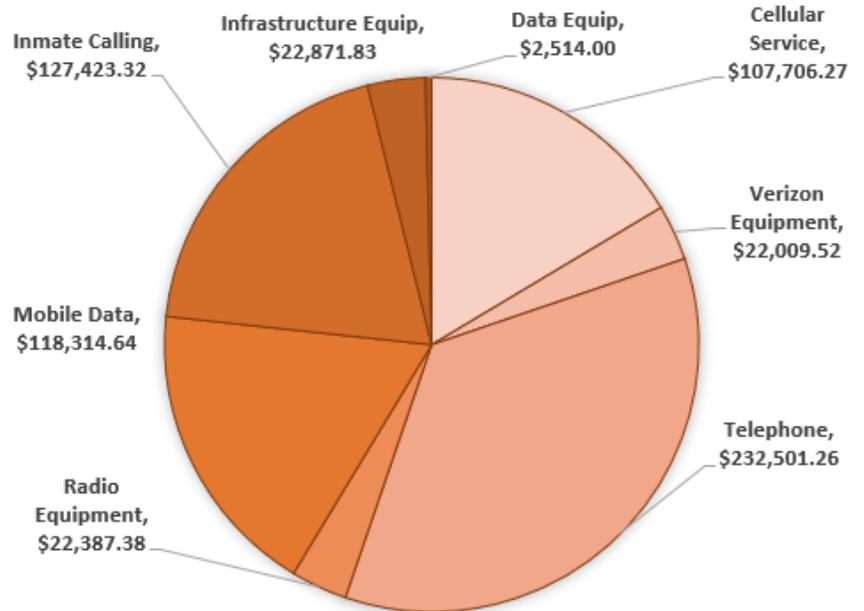


Financials

2023 Expenditures



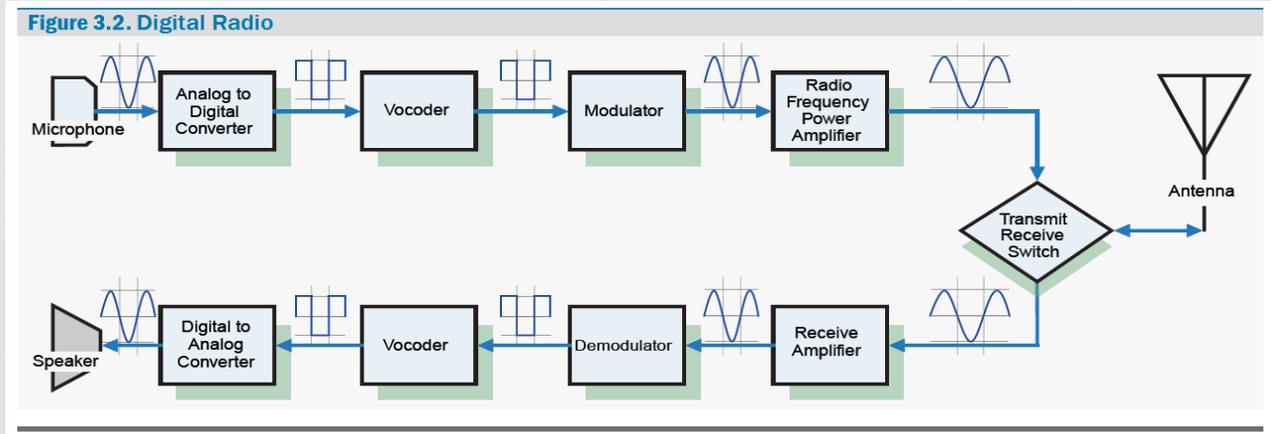
2023 COST RECOVERY



Debbie Griffith has been serving Telecom since 2003 & Jessica Johnson since 2005. They have the ability to process, examine and analyze numbers, especially to determine exactly how much money is available and needed!

Radio System

What happens after you push-to-talk but before people can hear you...



Source: U.S. Fire Administration Voice Radio Communications Guide for the Fire Service (FEMA), June 2016

82 agencies + 61 schools in Warren County utilize our Digital MARCS P25 Radio System

Federal Due to Caesar Creek, we share talkgroups with Army Corps of Engineers and Coast Guard Auxiliary.

Interoperability with the State If a large-scale emergency occurs, we have the same talkgroups as other MARCS agencies. The Ohio Department of Natural Resources at Caesar Creek and the Ohio Department of Rehabilitation and Correction (prison probation officers) both have our talkgroups.

RTICP Telecom's Director & Community Manager maintain a 100-page Regional Tactical Interoperable Communications Plan outlining how counties in Southwest Ohio will communicate with each other. The Warren County Commissioners passed a resolution to adopt the plan in 2018.

Strategic Roaming is limiting radio traffic through the state to reduce potential busy signals. Director Kindell is an active member of the Statewide Interoperability Executive Committee (SIEC). A statewide Strategic Roaming plan recommends that local channels only work in and around one's county.

Regional We share an interoperability communications channels with neighboring counties willing to mutual aid. Our 83TAC talkgroups work on MARCS towers within our county and one-county surround, allowing neighboring counties to hear our traffic from their station.

Countywide Per the Board of County Commissioner's Radio Distribution Policy, all public safety agencies within Warren County are provided radios, at the Commissioner's expense, to utilize the countywide radio system. The obvious benefit of this is interoperability between agencies. Some departments opt to purchase additional radios and several other agencies such as Transit, Engineers Office, Public Works, and the Water Department conduct business on our system. All three PSAPs (Warren County,

Lebanon, and Franklin) utilize our radio system.

Radio Authentication Required The State of Ohio MARCS is requiring that all radios have Link Layer added for security purposes by July 1, 2025. The cost for Warren County agencies is being coordinated between Telecom and Motorola, but Telecom is offering to handle as much of the labor as possible at no cost to our partners.

Public safety radios provided by Telecom under the Board of County Commissioners' radio distribution plan will be flashed or replaced with radios that have Link Layer Authentication at Telecom's discretion and at little to no expense to the department. Public safety departments who own additional radios beyond the scope of the BOCC's radio distribution plan will be financially responsible for purchasing the flash kit and if an X-series radio (XTS, XTL), will be financially responsible for Motorola's portion of the work. Public works and road department radios will be at the agencies' expense.

Hotbox Deployments

Telecom maintains \$82,000 worth of equipment ready for pre-planned or rapid emergency deployment. Long-duration incidents like searches or mutual aid calls like structure fires are typical uses for hotboxes. We can give Warren County-programmed radios to outside agencies who may otherwise not have the appropriate talkgroups to communicate with our agencies. Kits contain radios, batteries, chargers, headsets, and even battery packs for mobile devices. Our partners can reserve these resources from Telecom or emergency request from Dispatch. An on-call Telecom team member can deliver to you or you can pick up from Justice Dr. In 2023, we had (5) hot box deployment requests for Franklin City Fire, Mason Fire, EMA and Wayne Township Fire.

Radio System



Pictured Above: the Communications Unit working on Tower Site Maintenance. This helps maximize the lifespan and financial investment of the radio system

Pictured Above: Public Safety Radios that the Board of County Commissioners Invested in 2022

AuxComm Upgrades

Auxiliary Communications (AuxComm) is comprised of volunteers Jason Shatto and Greg Santaromita. The AuxComm unit supports the Emergency Operations Center (EOC) as needed for communications outside of our Public Safety Radio System. To make that more reliable, as well as expand its coverage, new equipment was purchased and installed at tower sites across Warren County. The two members of AuxComm worked with the Communications Systems Unit to test the new equipment and install it at the tower sites. The vast knowledge that these two individuals bring to the county made the transition, from the old system to new, seamless.

Radio Distribution for Law

As part of the radio replacements purchased by the Board of Commissioners, the Communications Systems Unit replaced 60% of the old Law radios that were in use. Prior to being deployed, the new radios were aligned, assigned, programmed, keyed, and tested. After a firmware malfunction was discovered, production slowed down. Luckily, this issue has been addressed by Motorola and radio distribution resumed back-up.

Direct Current (DC) Power Upgrades at Tower Sites

Paul Kindell, Telecom's Director, has worked with one of our vendors to address the DC back-up power systems at the county's tower sites. This power, used in the event that commercial power is not available, keeps the site running until a generator can take over or commercial power can be restored. At four of our tower sites, Zoar, Hatfield, Manchester, and Snider, these systems were in need of an upgrade. The equipment was purchased and installed, ensuring that the tower sites can keep essential functions running.



Radio System

One Radio Network Operations Center (RNOC) provides the prime site control of the radio system and the interface to the State system. In the event that we lose contact with Columbus, the Radio NOC takes over and Warren County can operate in Site Trunking across our 9 tower sites, still maintaining local talkgroups. Each equipment rack is fed by two UPS power supplies, offering a high level of redundancy.

Pictured: Telecom CHARLIE Team—Steven Jennison and Alex Mokrycki programming radios.

- 687** voice pagers
- 3** modified templates
- 3 million** push-to-talks
- 2,950** radios
- 163** new templates
- 5.1** seconds average call time
- 14** radio repairs
- 401** maintained templates
- 175.78** days cumulative talk time
- 525** aligned radios
- 5** Hot Box deployments
- 2.53%** system usage
- 31** alias changes
- 880** programmed radios

With the Board of County Commissioners investment in replacement of Public Safety Radios, the Communications Systems Unit programmed 408 more radios in 2023 (than in 2022). The Communications Systems Unit programmed all Fire (minus Massie Twp) and Mason PD replacement radios in 2023, continuing to program remaining Law replacement radios in 2024.

Did You Know?

Telecom keeps in stock various radio parts and accessories for the ease of our partners to purchase and replace! But if you opt to buy independently, please refer to our Recommended Accessories Reference Sheets for XTS2500, XTS5000, and APX radios to ensure you're buying the most appropriate equipment.

NOTE: county supplied XTS2500, XTS5000 will be replaced with APX prior to July 2024.



Radio System

Building Distribution Amplifiers (BDA) Improves Indoor Coverage—

Schools and businesses are installing BDAs or “Building Distribution Amplifiers” that pull signal from the County radio towers into the building, improving first responder safety and communications!

Correctly installed BDAs have internal batteries in case power to the building is cut off. Because the BDA operates on the same frequencies as the County towers, the building owner must obtain permission from the County to operate the BDA. Further, the Federal Communications Commission (FCC) requires all BDAs be [registered](#).

For new BDAs, the Authority Having Jurisdiction (AHJ) (fire department) must inspect the BDA and deem its adherence to Ohio Fire Code. The installer must supply Warren County Telecom with the test results of the BDA conducted under the watch of the AHJ. Telecom can then issue a letter permitting the building owner to operate the BDA. Because the BDA is a life safety device, all BDAs should be included in the fire inspection process and the batteries replaced every 5 years. Because the signals from BDAs can be harmful to the County radio system, it is important that 24/7 emergency contacts be obtained during the registration process in the event a BDA is causing interference to the radio system and needs to be turned off / repaired.

Radio Training

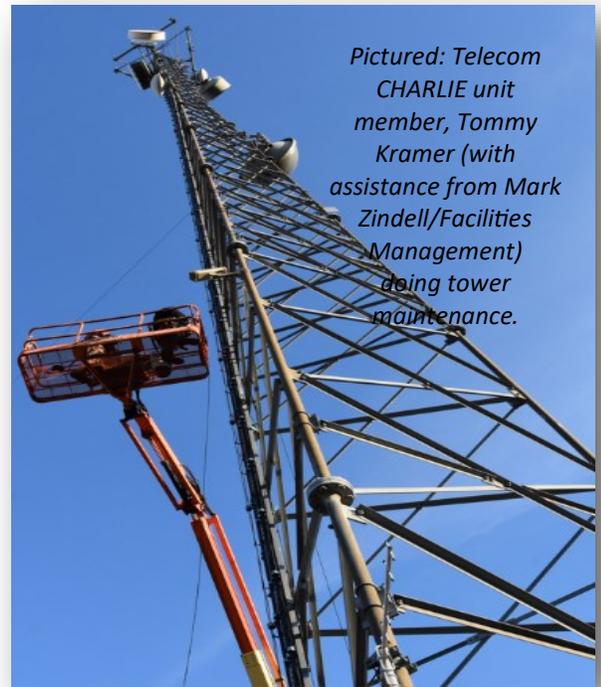
Radio is our most popular training topic, which is done by our Communications Systems Team.

Other team members are happy to showcase their knowledge like Communications Systems Manager Josh Moyer, who enjoys teaching to each new batch of Emergency Dispatchers or New Chiefs. **We encourage our partners to send their new hires to Telecom for a 90-minute radio class which includes a tour of Telecom and the Emergency Communications Center.**

Departments that utilized our radio training in 2023 included the Warren County Sheriff's Office, Mason Police, Mason Fire, Turtlecreek Township Fire, Wayne Township Fire and Army Corp of Engineers.



Pictured: Corey Burton, Communications Team Unit Leader, doing radio training for a LAW agency.



Pictured: Telecom CHARLIE unit member, Tommy Kramer (with assistance from Mark Zindell/Facilities Management) doing tower maintenance.

Tower Site Maintenance

You drive right by them... our (9) towers. Most known for providing radio system coverage to our **3,100** radio users, these 180-500' giants also provide connectivity for water department facilities and other countywide infrastructure. In the spring, we completed our annual Preventative Maintenance at each site, realigning and testing the equipment to ensure optimal performance on the State of Ohio MARCS system. We also completed generator maintenance and load test certifications.

- Checked generator mechanical + engine systems
- Changed generator engine oil,
- Checked generator cooling systems,
- Checked engine electrical and control systems,
- Ran generator at full output for two hours into a calibrated 'load' system that documents the actual capabilities of the generator under emergency conditions.

Weekly, we conduct a 30-minute load test to ensure that each generator is capable of supplying full AC power to its tower site, keeping our public safety radio communications available at the push of a button. All of the tower site generators have enough connected fuel to run continuously for 9 to 10 days in the event of power outage.

Telecom has the ability to remotely start our generators just prior to severe weather. This prevents lightning damage from entering via the power lines, and keeps the radio system stable during the most intense part of the storm.

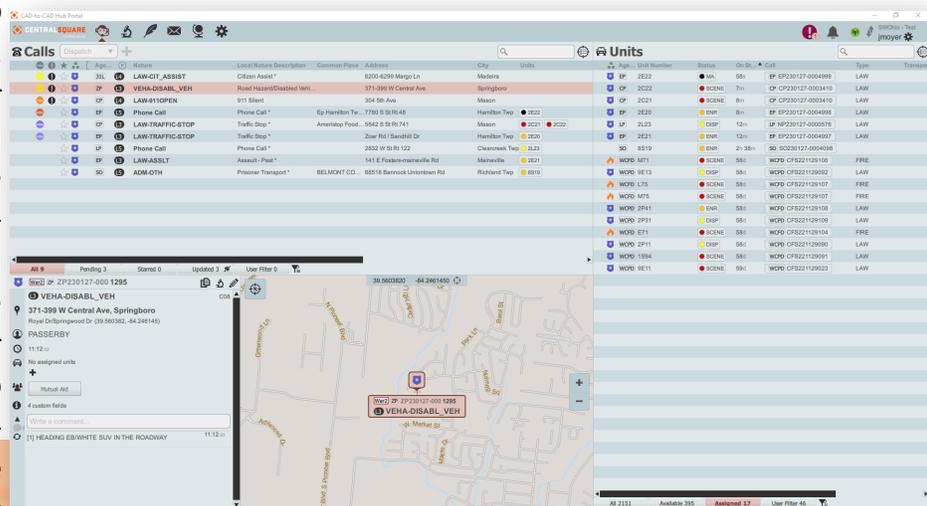
In 2023, the Communications Systems Unit had the Tower Top emergency repair at Lytle tower.

Dispatch Center Technology

Telecom *does not* staff the Warren County Emergency Communications Center, but we are responsible for maintaining the technology and equipment that feed the room, operate within the room, or leave the room. Director Melissa Bour and her amazing Emergency Services team are a high priority partner of ours, with Telecom's Public Safety Systems Manager (PSSM) responsible for ensuring the room, its systems, and its people can function at the highest level possible.

CAD Computer-Aided Dispatching (CAD) is a key component of public safety communications, where calls for service are created and maintained. It bridges the gap between the citizens, hundreds of first responders, the Warren County Communications Center, Police and Fire agencies, offering real-time updates to all. Telecom works with Emergency Services staff on a regular basis making adjustments to improve the workflow of the Emergency Communication Operator's (ECO). Public Safety System Manager (PSSM) Joshua Moyer also spend regular time in the Communications Center observing the CAD in action to see if there are any other adjustments that can be made to improve the ECO's workflow. PSSM Joshua Moyer also meets with both Law and Fire agency CAD representative to constantly test, review and adjust their settings in CAD to make sure their residence get the best possible response. He is also in charge of reviewing every new release for CAD ensuring we are up to date and that any issues we have found are reported to Central Square and fixes are applied as soon as we get them.

CAD-to-CAD Telecom has continued to work with West Chester Twp, Hamilton County, Cincinnati and Central Square to get the four CAD Systems connected. Our connection with West Chester will be the first Central Square Enterprise to Central Square Pro CAD connection; therefore, we have been working through several issues with that connection. We have been working with each agency to finalize their MOUs and get them signed. Our hope it to Go Live with these connections in Q2 of 2024. Telecom is open to connection to any PSAP in the region that would like to connect. If an agency or PSAP is interested in hearing more about CAD-to-CAD they can reach out to PSSM Joshua Moyer.



Pictured: Josh Moyer, PSSM, with Tommy Kramer, reviewing CAD-to-CAD information after a meeting, on how this point-to-point dispatch service will work.

Dispatch Center Technology

HipLink allows *First Responders* to receive call for service information and alerts via text message, email, or within the secure HipLink app. Telecom maintains the recipient list, interface, and vendor relations for this product, while Dispatch and CAD are the main information senders. At year's end, we had 1511 receivers. 746 Groups. 53 Mobile App Users. We had 997,209 pages sent in 2023. The Average Delivery Time to Carrier was 1.696 seconds. In 2023, the Warren County Commissioners also implemented a CAD Incident Paging policy to protect the sensitive Incident Information.

Mapping Telecom maintains the source map used by CAD and Mobile computers which directs CAD to the appropriate responding agencies, aids in address verification, and is customized for Public Safety use. The map on Mobile also gives first responders the ability to get turn-by-turn directions to a location. With the use of Address Points this goes one step more than Google or Apple Maps by getting responders to the door of the location. Including strip mall and duplexes, where we have address points for each business, apartment, and residence. We continuously work with local addressing authorities such as the Warren County Engineers office and other regional partners receiving subdivision, building footprints and city boundary updates. If agencies ever come across missing GIS data, they simply email our help system (help@wcoh.net) and we get them added to the CAD and mobile map as soon as possible.

In 2023, David Shiverdecker, has added 1,321 address points which brings our total to 118,669, as well as created 213 street segments for a total of 18 miles of new streets!

PSAP/9-1-1 PSAP/9-1-1 A Public Safety Answering Point (PSAP) is a call center responsible for answering calls to an emergency telephone number (9-1-1) for police, firefighting, and ambulance services. The Board of County Commissioners, via Emergency Services, provides PSAP services to all communities except two that choose to operate their own communications centers (Lebanon and Franklin.) The Board of County Commissioners, via Telecom, provides 9-1-1 services and support to all communities in Warren County. In 2023 telecom worked with our vendors to switch our ANI/ALI feed over to a new, more detailed format so the dispatch center has more location information at their fingertips. Warren County 911 Coordinator Paul Kindell and PSSM Joshua Moyer attend regular state and regional meetings to ensure we are in the know as 911 technology changes.

Radio Dispatching Telecom builds new console configurations as necessary. The Radio Team's daily Keep-the-Lights (KLO) on responsibilities include checking all communication lines that run between the ECC and prime site (9-1-1, radio), various other sub-systems and the connection with MARCS which ensures we stay connected to the State radio system.

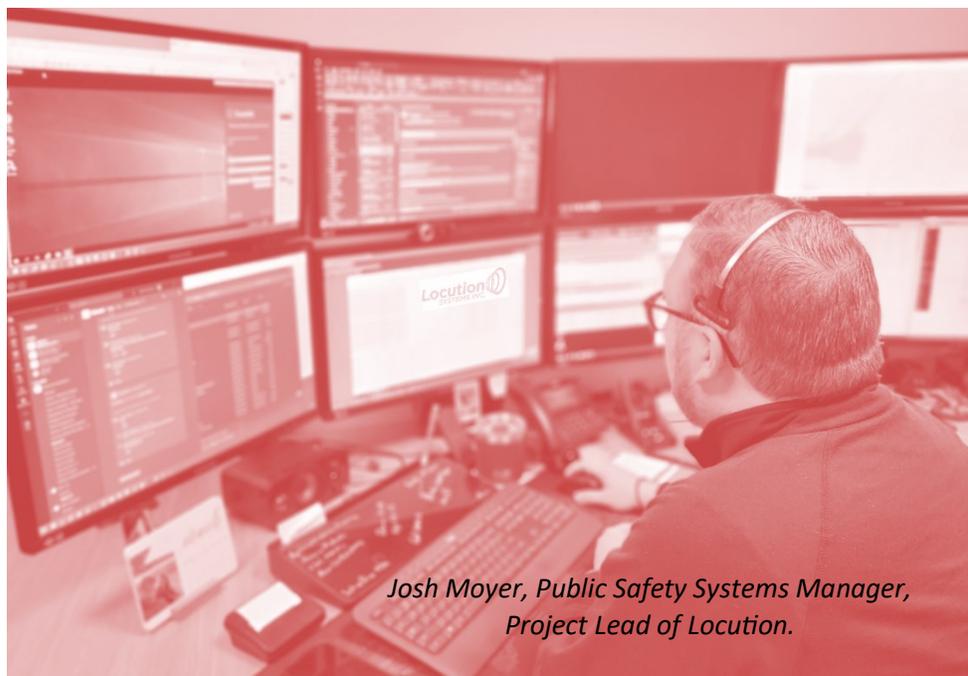
(Above) David Shiverdecker, Application Analyst 1, and Tim Simpson, Technologist working on mapping. (Right) David Shiverdecker working on street segments.



Dispatch Center Technology

Automated Voice Dispatching In 2021, the BOCC approved Telecommunications to begin the process by publishing a Request for Proposal (RFP) for an Automated Voice Dispatching (AVD) system and Fire Station Alerting (FSA) system for Emergency Services and the Fire Departments we serve. Imagine being suddenly woke up in the middle of the night from a deep sleep by loud sudden alert tones and then trying to understand where you need to go and for what. AVD and FSA systems take into consideration the health and safety of emergency responders by providing ramped up tones which start out at a lower volume and steadily ramp up becoming louder. AVD also provides consistent rate of speech, tone of speech, and order of wording for consistent and easy to understand voice dispatches. This allows the responder to be woke up slowly and hear a slow steady consistent voice telling you where to you need to respond to. This also frees up the fire dispatcher to focus on other aspects of their job. FSA systems provide faster alerting of departments by being able to dispatch multiple stations or units at the same time for different incidents rather than one dispatcher having to pull-up the information, read the information to understand what it is saying, and then voice dispatch the call. With AVD and FSA, as soon as the call-taker sends the information to the queue to be dispatched, the system will automatically activate the tones, send the page, voice dispatch the call, and alert the station all without the dispatcher having to do any of this like they currently do.

Telecom released the Request for Proposal in 2022, and Locution Systems Inc was selected out of five vendors that submitted proposals. Several counties around us already use Locution, so there were several other aspects that made Locution the best choice for Warren County.



*Josh Moyer, Public Safety Systems Manager,
Project Lead of Locution.*

Josh Moyer lead many meetings, presentations and testing in 2023. Locution is currently On-The-Air in the testing and configuration phase as we continue to review the thousands of streets, premises, address points, and units that all needed to be recorded for our system. We are also working on troubleshooting and configuration updates with Locution to ensure our system works the best it can for our partners. Five of the thirteen departments in Warren County have implemented Locution Station Alerting Systems with a few more planning to

do so in the coming years. The FSA systems at the stations are optional and were the responsibility of the individual departments to purchase and install. We hope to be live with the whole system in the 2nd or 3rd quarter of 2024.

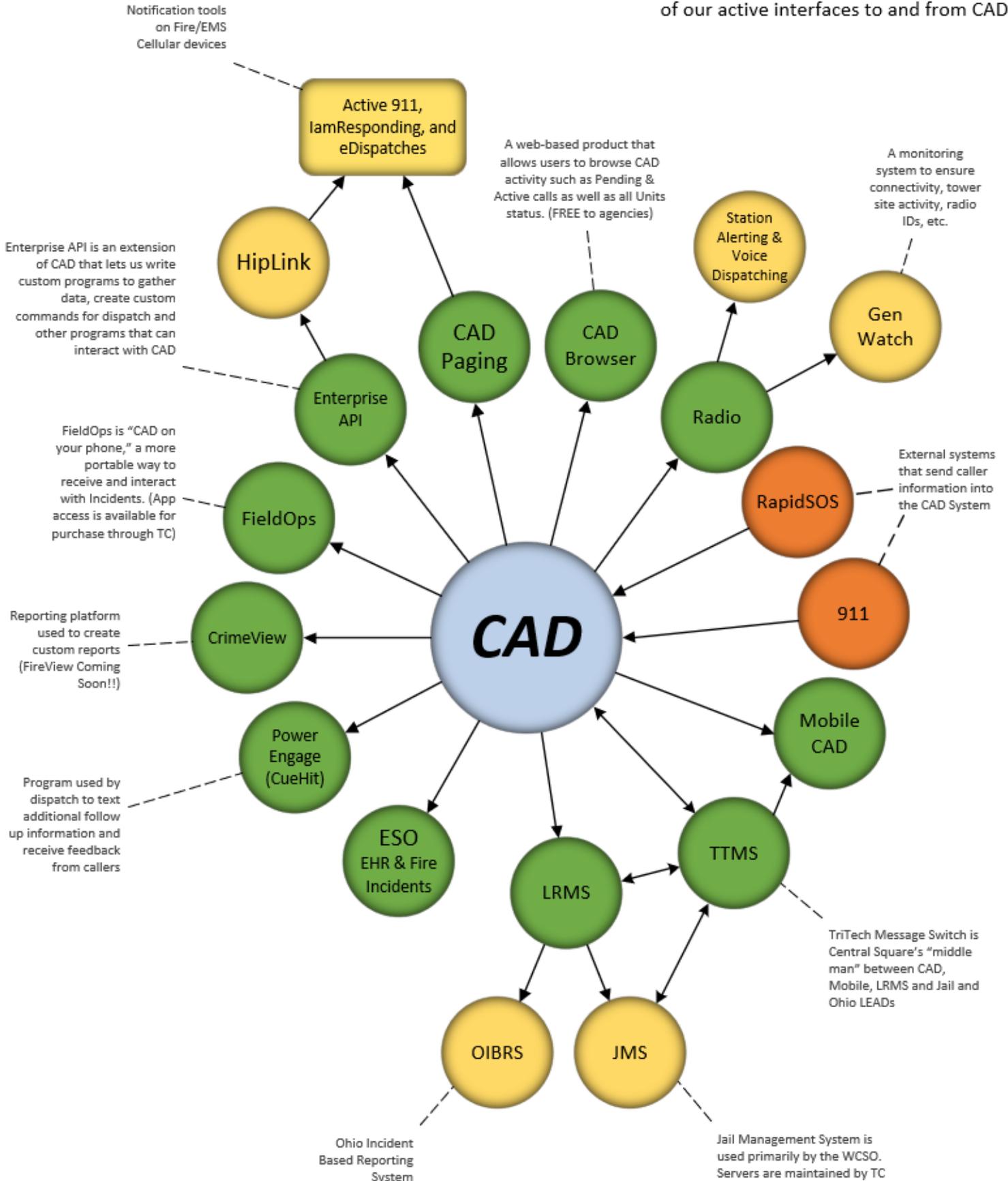
Dispatch Problem Reports (DPRs)

A 24/7 open line of communication between the Emergency Communications Center (ECC) and Telecom. Dispatchers submit any problem, big or small, and our team members receive email alerts. If urgent, one or more of Telecom's 4-person on-call team will be paged out to troubleshoot and escalate if necessary. PSSM Joshua Moyer is also tasked with monitoring the DPRs as they come in and ensuring they are getting the attention they need.

469 DPRs
submitted
in 2023

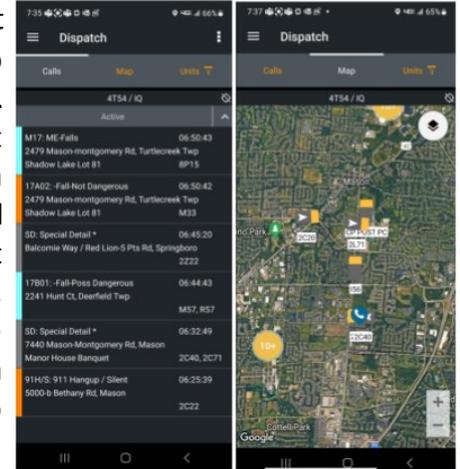
CAD Interfaces

Are pipelines between two or more systems allowing information to flow between them. Below is a diagram of our active interfaces to and from CAD.



Mobile Systems for Field Users

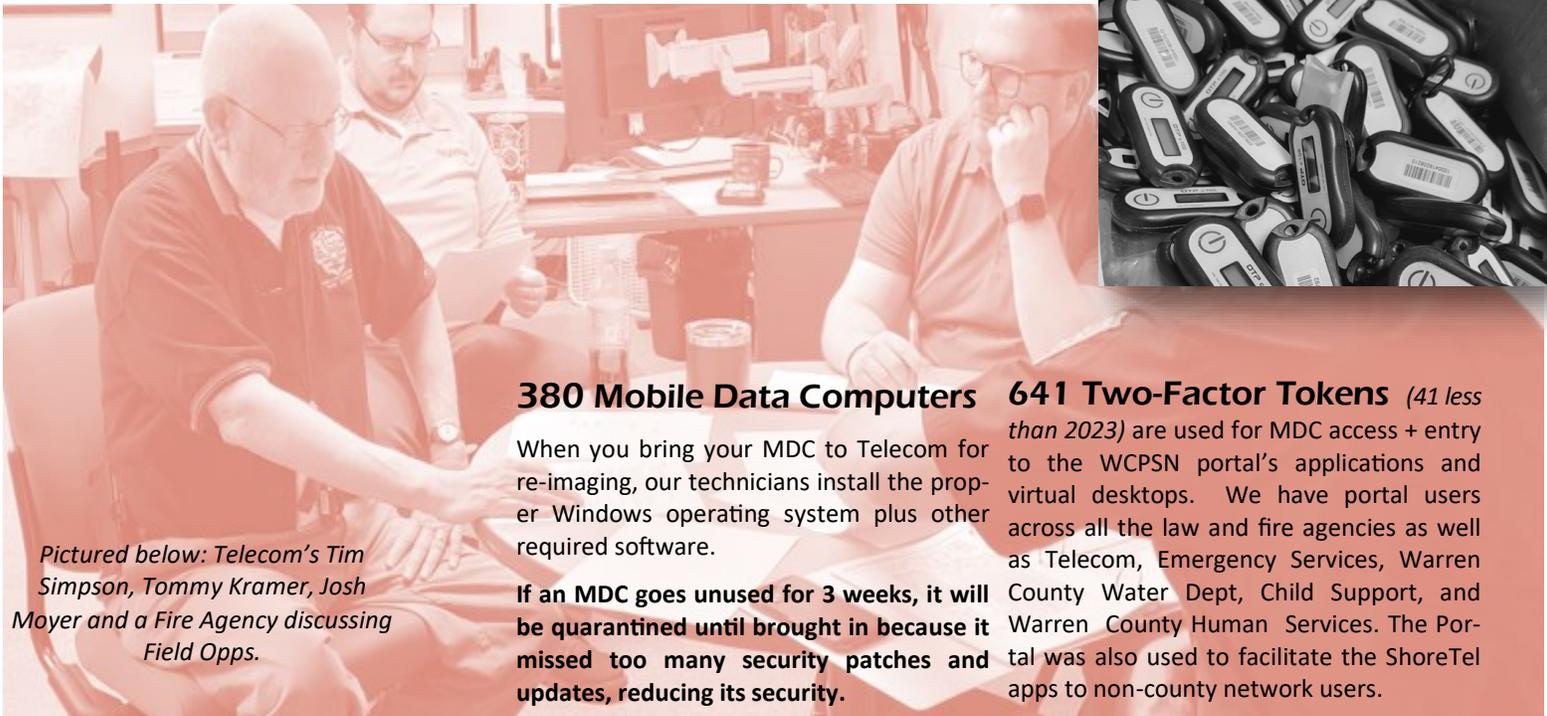
Field Ops is an extension to the Enterprise Mobile product that “puts CAD at your fingertips.” We currently have 76 Field Ops users from Several agencies who have purchased licenses and are taking full advantage of the application’s features. Although Central Square has not added additional features to the application, it has proven to be a valuable resource to those who have purchased it. This is a great tool for Department Officers to monitor not only their department’s calls and unit statuses, it also allows them to monitor the rest of the county. Some highlight features of the app are, View Incidents and Incident Information, Update Status, View Unit Statuses, and mapping. Agencies have the option of purchasing a license for Field Ops for \$120 annually. One license can be used for up to two devices for a single user. If you are interested in seeing more about Field Ops or would like to get more information on purchasing a license, contact PSSM Joshua Moyer.



In 2023, select TC and partner users have started testing Central Square’s new BETA Field Ops app. We are providing regular feedback and reporting issue as CST continues to develop the app.

HipLink App HipLink App is different than HipLink messaging in that it is a mobile application that allows users to receive and send messages through the Warren County HipLink system. All messages sent to and from the HipLink app are Encrypted. When receiving messages from within the app, users can easily confirm or refuse pages, notifying the sender of their response. Users can setup specific alerts for different priorities of messages so they can be alerted when getting paged. These alerts also have the ability to override a phones Do Not Disturb function. If enabled, the app also allows other users of the app to see your location for better incident awareness.

Did You Know? Verizon Mobile Data coverage is billed back to public safety agencies while Telecom manages the consolidated account. Agencies include Clearcreek Fire District, Carlisle Fire, Deerfield Twp Fire, Franklin Twp Fire, Hamilton Twp Fire, Harlan Twp Fire, Mason Fire, Massie Twp Fire, Salem-Morrow Fire, Turtlecreek Twp Fire, Union Twp Fire, Wayne Twp Fire, JEMS, Carlisle PD, Franklin PD, Hamilton Twp PD, Harveysburg PD, Mason PD, Morrow PD, Springboro PD, Waynesville PD, Emergency Services, Telecom, and Warren County Sherriff’s Office.



380 Mobile Data Computers

When you bring your MDC to Telecom for re-imaging, our technicians install the proper Windows operating system plus other required software.

If an MDC goes unused for 3 weeks, it will be quarantined until brought in because it missed too many security patches and updates, reducing its security.

641 Two-Factor Tokens

(41 less than 2023) are used for MDC access + entry to the WCPSN portal’s applications and virtual desktops. We have portal users across all the law and fire agencies as well as Telecom, Emergency Services, Warren County Water Dept, Child Support, and Warren County Human Services. The Portal was also used to facilitate the ShoreTel apps to non-county network users.

Pictured below: Telecom’s Tim Simpson, Tommy Kramer, Josh Moyer and a Fire Agency discussing Field Ops.

Infrastructure Systems

Task Unit Bravo Buzz Words

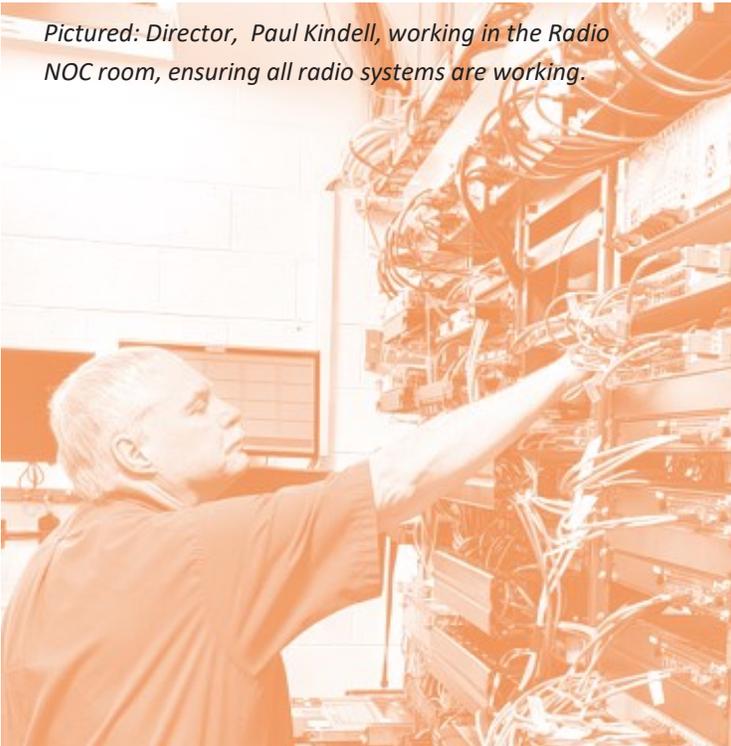
- ❑ CPU Utilization— a computer's usage of processing resources.
- ❑ DNS / IP Filtering— Domain Name System filtering is a technique of blocking access to certain websites, webpages, and IP addresses.
- ❑ Ethernet— Your everyday interaction is most likely via an Ethernet cable, the cable plugged into your router.
- ❑ Firewall - a network security device to establish a barrier between your internal network and incoming traffic from external sources (such as the internet) in order to block malicious traffic like viruses and hackers. East-west traffic (internal) vs North-south traffic (external).
- ❑ Interface - the point of interconnection between a computer and a private or public network.
- ❑ Layer 3 switch core — combines the functionality of a switch and a router. It acts as a switch to connect devices that are on the same subnet or virtual LAN at lightning speeds and has IP routing intelligence built in to double up as a router.
- ❑ Network— a set of connected computers. The connection between computers can be done via cabling, most commonly the Ethernet cable, or fiber optic cable. Connections can also be wireless (wi-fi via radio waves.) Connected computers can share resources like access to the Internet, printers, file servers, and others.
- ❑ Ping— Packet Inter-Network Groper allows a user to verify if a particular destination IP address exists / is operating.
- ❑ Port— a physical docking point for an external device to be connected to a computer.
- ❑ Subnet—a network inside a network; traffic can travel a shorter distance without passing through unnecessary routers.
- ❑ Switch— connects devices within a network (e.g. local area network, or LAN) and forwards data packets to and from those devices. Unlike a router, a switch only sends data to the single device it is intended for, not to networks of multiple devices.
- ❑ Web proxy—a computer on the internet with its own IP address that your computer knows. The proxy server then makes your web request on your behalf, collects the response from the web server, and forwards you the web page data so you can see the page in your browser.



Pictured: Infrastructure Systems analyst, Tyler Blair, doing his daily “keep the lights on” checks in the frame room.

DID YOU KNOW? We just surpassed the 7 year anniversary of our 9-1-1 System Cutover, during which we seamlessly transitioned systems with no interruption to our citizens or communications center. Go Live on Indigital Solacom Guardian 9-1-1 was on 7-7-2016 so coming up on 8 years in July 2024.

Countywide Participation Telecom is the point-of-contact any time a 9-1-1 call cannot be completed within Warren County, at any of the (3) Public Safety Answering Points (PSAPs) for Warren County, City of Franklin, and City of Lebanon. Through our troubleshooting, we determine if the problem resides within the 9-1-1 system or if it is due to a phone carrier having issues. If an issue escalates, we submit a help ticket with the responsible company (AT&T, CenturyLink, INdigital, Verizon, etc.)



Pictured: Director, Paul Kindell, working in the Radio NOC room, ensuring all radio systems are working.

Primary System Our standard mode of connectivity is fiber; but should that go down, microwave will continue 9-1-1 services for our citizens.

Secondary System Housed at our disaster recovery site, it is online at all times. Should the primary system go down, the secondary system picks right up. It also provides connectivity to our secondary connection to the telephone company in the event that the primary system goes down. A call in progress gets reconnected in the event it switches to back-up.

Third System In the event of multiple equipment or connectivity failures, Telecom makes use of MEVO Phones to completely bypass the 911 system and directly connect to Indigital in Indianapolis. 6 permanently installed MEVO Phones allow Dispatch to answer 911 independent of all systems in Telecom short of the internet. The MEVO Phones use the internet to VPN back to the Indigital NOC.

9-1-1 Coordinator Paul Kindell is the county's 9-1-1 Coordinator. Josh Moyer assists with the 911 coordinator duties. Josh confirms coverage areas with cellular providers, verifying address points, and ensuring the proper PSAP gets the initial 9-1-1 call. In 2023, Josh Moyer attended the monthly meetings and gathered information for the 911 yearly report.

Text-to-911

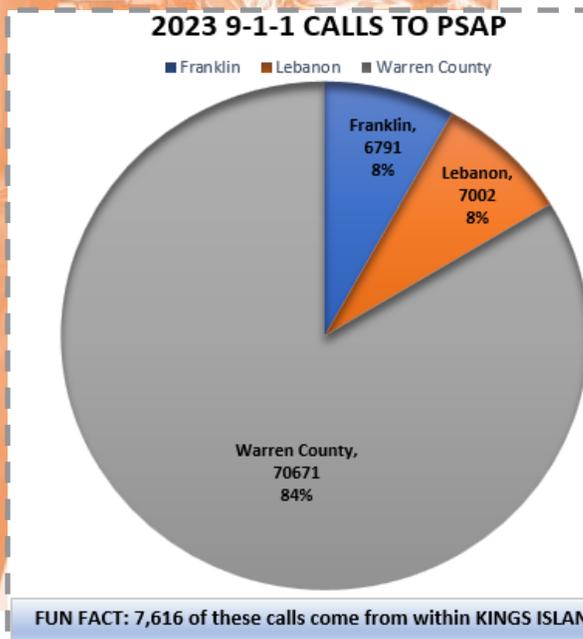
Calling 9-1-1 is the preferred method but when a citizen is hiding, is non-verbal, or needs to remain quiet, texting is a great backup option.

In 2023, 160 texts-to-911 were sent

- 28 texts with Franklin Dispatch
- 23 texts with Lebanon Communications
- 109 texts with Warren County

9-1-1 System Testing

Did you know Telecom ensures redundant and diverse paths for our 9-1-1 system feed? Not wanting to rely on 1 method of transmission, we have connectivity via microwave (through the air) and 3 fibers (underground).



Accounting + Administration



Our Administrative Unit ensures that all bills get paid, mail goes out, equipment gets ordered, purchase orders get tracked (**126 in 2023**), and payroll gets processed on time or ahead of schedule. This four-woman team also maintains our meeting spaces, basement hygiene, handles intake of our help@wcoh.net ticket system, payroll, manages all cellular accounts/Mifi tablets/county desk phones and respective billing, accounts receivables/payables, asset disposables, assist with the budget, engrave accountability tags, manages Department wide procurement process, and the Warren County switchboard (513-695-1000) on behalf of all Warren County departments. In 2023,

**6,377 switchboard calls
were serviced in 2023!**
(This is 646 less than 2022)

Telecom made the purchase of QuickBooks, with a goal to transition over all inventory and finances in 2024.

**20,546 HELP
DESK WORK
ORDERS
COMPLETED IN
2023**

All Telecom team members manage customer service and vendor tasks in the work order system. This ensures no request gets lost in the shuffle and the appropriate team member gets assigned to handle your need.



Pictured above—Jessica Johnson setting up a cell phone and tablet.

Pictured: Kim Mckinney, Kristy Oeder and Debbie Griffith, Administrative Assistants working on budget items.

Supporting Communications: Cellular

2023 VERIZON CELLULAR BILL

Cellular Devices

Telecom manages all County coworkers' cellular phone bills on one account, covering the expense for 46 departments then pursuing cost-recovery from 19 of them. This gets Telecom partners a bigger discount (fiscal stewardship of taxpayer dollars) as we essentially replace a Verizon store. County coworkers come to us for phone upgrades, accessories, and plan changes and troubleshooting.

Commissioner-funded: Auditor, Board of Elections, Building Department, Common Pleas, Court Services, Commissioners, Common Pleas, Coroner's Office, Domestic Relations, Economic Development, Emergency Services, Facilities Management, Garage, Information Technology, Juvenile Detention Center, Juvenile Court, Office of Management & Budget, Prosecutor's Office, Telecom, Veteran's, Clerk of Courts, Warren County Court, WCSO, Workforce Investment Board.



Invoiced to Partner: Safe on Main, Armco Park, Children's Services, Dog Warden, Emergency Management, Engineers, Health Department, Job and Family Services, LEPC, Mary Haven, OhioMeansJobs, OMB Healthcare, Park Board, Planning Commission, Soil & Water, Solid Waste, Title Clerks, Title-Franklin, Water, and workforce investment board.

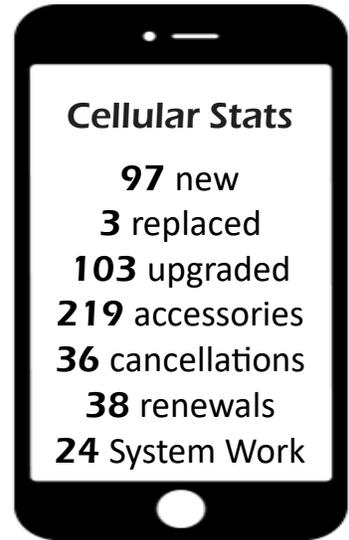
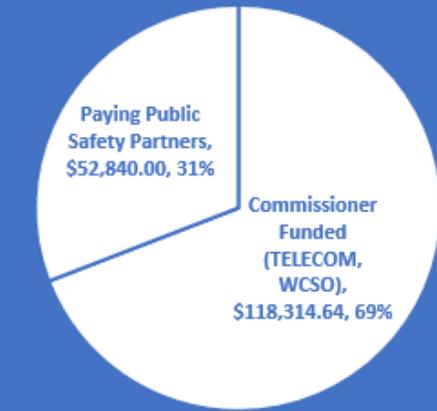
2023 MOBILE DATA EXPENSE

Mobile Data

Also in our consolidated Verizon account are public safety department connectivity devices (cradlepoints, MiFis, etc.) This achieves competitive cellular and data rates and also helps our partners use the correct devices for their job.

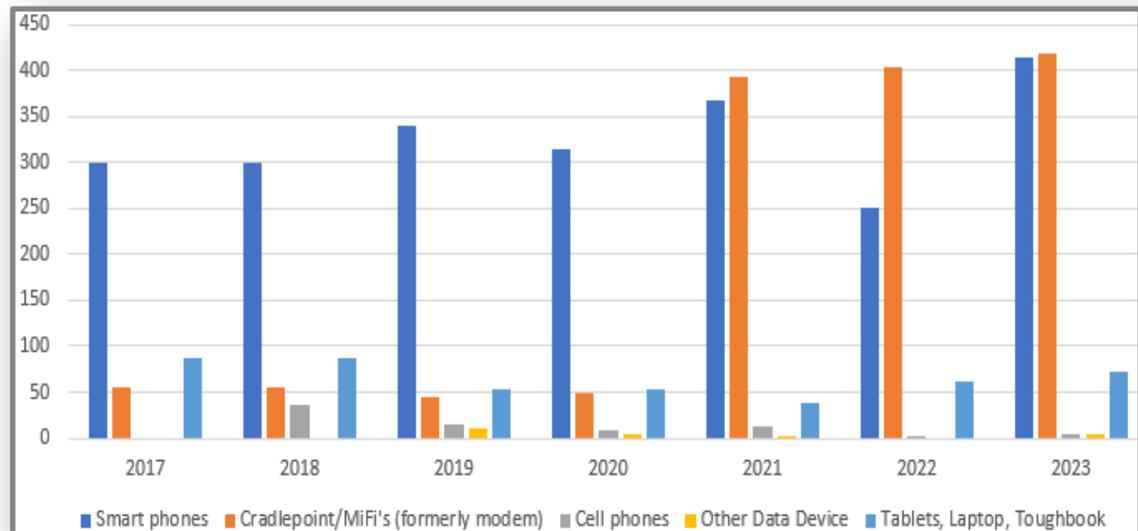
In-Building Verizon Connectivity

Telecom strives to keep connectivity a priority for our employees and county offices by installing Building Distribution Amplifiers (BDAs) throughout the buildings, courtrooms and offices (especially the lower levels) visitors and coworkers can better trust their Verizon and First Net devices to work. Note this does not enhance other cellular provider devices (AT&T, Sprint, etc.).



Enhanced Buildings: 5G tower on Justice Drive, to help boost connectivity for Verizon.

Did you know? We use an outside company that safely removes cell phone batteries before securely crushing them! Phones are not redistributed due to security and privacy issues. County coworkers are eligible to buy-back their cell phone with Department head approval.



Supporting Communications: Desk Phone

Did you know? Telecom got its start in 1985 as one man telling the Board of County Commissioners that he could beat the private companies' telephone service prices and service? Watch the 1.0 trailer video [here](#)

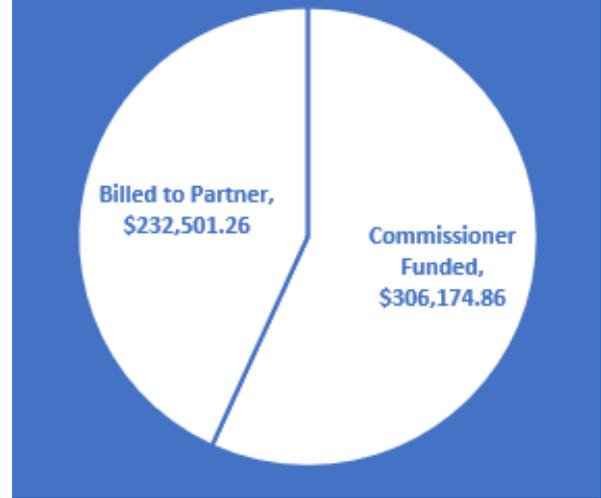
All county departments are on the **VoIP phone system**. A VoIP phone or IP phone uses voice over IP technologies for placing and transmitting telephone calls over an IP network, such as the Internet. This is in contrast to a standard phone which uses the traditional public switched telephone network.

Several departments, including Warren County Community Services, are billed directly by our Administrative team for their Telecom-managed telephone services including Armco Park, Children's Services, Dog Warden, Easter Seals Tristate, Child Support, Emergency Management, Engineers, Grants Administration, Health Department, Humane Association, Job and Family, Law Library, LEPC, Village of Maineville, Mary Haven, Metro Housing, OhioMeansJobs, Open Options, Ohio State Patrol, Park Board, Planning Commission, Adult Parole Board, Educational Service Center/Alternative school, W.C. Community Services, Mental Health Recovery Services, Safe on Main, United Way, Salem-Morrow Fire, Sewer, Soil & Water, Solid Waste, Title office, Turtlecreek Twp Fire, Workforce Investment Board, Water, WCCC Project Search. **In 2023**, Telecom added the Title Office's Franklin location, as a phone system customer.

In addition to maintaining the Emergency Communication Center's 9-1-1 phones, we also maintain their non-emergency "Admin" phones. For citizens or vendors needing to reach the ECC/Dispatch Center staff, 513-695-2525 achieves this without elevating the call to 9-1-1 status. In 2023, the WC ECC fielded 108,660 admin calls with the most on June 19th (452 calls.)

As part of the county phone system, Telecom provides call center functionality to several departments and In 2023, added Children Services.

2023 DESK PHONE EXPENSES



Dustin Flint, Infrastructure Systems Manager, and Jordan Snyder, Infrastructure Systems Supervisor, working in the Data NOC.

1,389 phone users accessing
2,011 phone extensions (+516 from 2022) and
8 conference bridges with
977 voicemail boxes (+170 from 2022) generated
1,945,256 phone calls (-409,908 from 2022), totaling
59,865 hours of traffic (-18,495 from 2022)!

Supporting Communications: Desk Phones + Drops



Pictured: Charles Zugaro and Tyler Blair (both are Infrastructure Systems Analyst 1) working on data drops.

Data Drops

Our Infrastructure team ensures all necessary drops are in place should telephone or computer systems need hooked up. This involves pulling CAT6 cable above ceilings and between walls, then ensuring proper cable management. Did you know if the Emergency Communications Center needs to evacuate, we have 911 drops set up in our Training Room for plug & play connectivity. We also assist Facilities Management in remodels of existing county buildings, relocating drops as offices and walls are rearranged.

Phone Service Now Utilized by Public Safety Agencies

What started as an offer for Fire/EMS agencies is now open to all Warren County-dispatched public safety agencies. For a monthly charge, less expensive than most private sector vendors, partners can get public safety grade phone service with no single point of failure, plus redundancy! Current partners include Salem-Morrow Fire & Turtlecreek Twp Fire.

- Agencies save tens of thousands of dollars PER station!
- Telecom keeps the Voice over iP phone servers patched and updated.
- You must have a reliable and reasonably fast internet connection plus a solid computer network.

Remote Phone Service

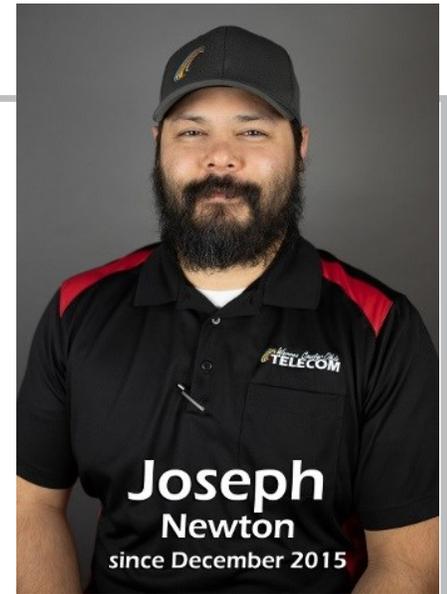
Remote Work - Telecom continued to setup remote work from home phones although the majority of county workers have returned to office.

Records Management

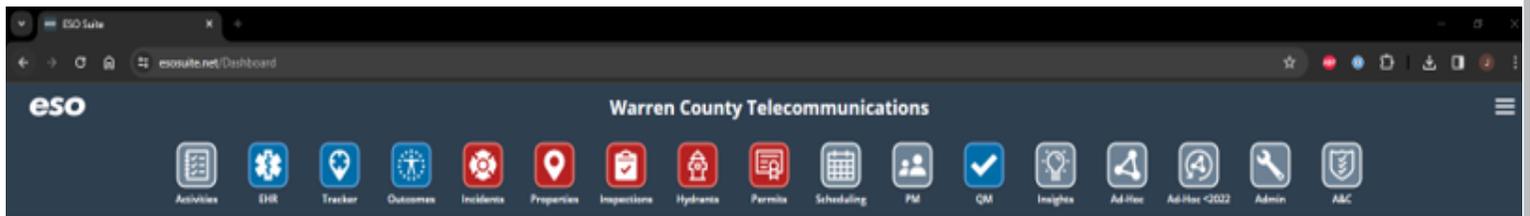
ESO

2023 was Telecom’s first full year using ESO for all of our Fire and Electronic Health Records—EHR. The ESO Suite is a records management solution which includes tools to accommodate our Fire Departments (FDs) with both Fire and EHR reporting. Fire reporting tools include Incidents, Properties, Inspections, Hydrants & Permits. The EHR reporting tools include Incidents, Patient Tracker, Outcomes and Quality Management. Other tools in the suite include Scheduling, Personnel Manager, Assets & Checklists, Ad-hoc & Insights.

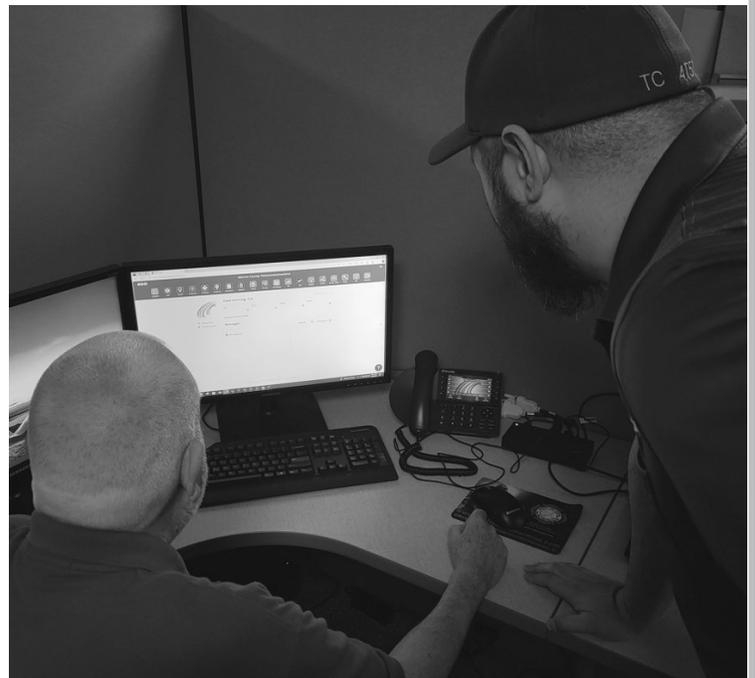
A change from our in-house Zoll environment, which was a shared ecosystem among all FDs, ESO Suite gives each Fire Department the ability to completely customize their suite to their individual needs. The BOCC pays for this entire suite and the FDs can choose which parts of the suite make the most sense for their own FD.



- ❑ **Fire Incidents**—25,393 incidents per Analytics
- ❑ **EHR Incidents**—17,971 incidents per Analytics



In 2023, Newton serviced **165** Work Orders, most related to FRMS & ePCR.



Tim Simpson, Technologist, and Joe Newton, Data Systems Supervisor, collaborating about ESO

Record Management



Response & Crime Analysis The record data we house on behalf of public safety agencies is used to analyze responses and crime statistics.

LRMS Law Records Management System (LRMS) is a function devoted to the life cycle management of law enforcement information - creation to disposition. Led by Analyst Rhonda Bernard, this includes identifying, classifying, storing, securing, retrieving, tracking, destroying, or permanently preserving records. It also entails solutions for incident reporting, data analysis, training, medical records, personnel management, and risk management.

In May 2023, the *Ohio Incident-Based Reporting System (OIBRS)* released a new Submission Specifications Manual. The updates to the manual included removing statutes that had been repealed. The most notable statutes repealed were Wire Fraud, Embezzlement and Under 21 purchase or consumption of intoxicating liquids. However, 97 statutes and subsections were added to OIBRS as reportable!

In having to comply with the mandates from the State, we had to upgrade our Records Management System (RMS) web from 21.2.3 to 22.2.6. Version 22.2.6 was introduced in October. It was released and installed quickly due to the issues that were reoccurring in 21.2. It was not an easy move but had to be completed. The new OIBRS mandates worked without issue for the most part. Several issues with crash reports were quickly identified and most have been fixed.

In 2024 we are hoping for some positive changes. Rehosting our RMS servers and yes, another new release of RMS, 23.1.

The Test and Training environments are available to everyone and we encourage all to use these tools. These environments allow law personnel a safe area to explore the LRMS system without corrupting "live" data. Manipulating the data in a live environment can cause issues with an original report. In the training environments, it does not matter because it is available for what it says, training. We do refresh the training site and you will see the same reports that are in the live version, as always, never rely on the data information in training. It could have been edited, modified, and changed.



*Pictured: the 2023 DELTA Unit
Josh Moyer, Philip Bomer, Tommy Kramer, David Shiverdecker, Jeff Cepin, Rhonda Bernard, Joseph Newton, Jeremiah Marcum and Jeff Boutell*

In 2023, Bernard serviced **472** Work Orders, many related to LRMS issues.

Reports

Reporting Warehouse

Our Database Administrator, Jeremiah Marcum continues to stay busy building a reporting warehouse that can house data from multiple Warren County Public Safety Network systems and blend their data for reports that our users actually need and want. At 2023 year's end, we had **390** users with access to **296** reports thanks to connections with **8** environments with more than **239Gb** of data.

Top 10 Reports and "Times Ran" for 2023

<u>Report Name</u>	<u>Times Ran</u>
Alpha Roster	18,719
Inmate History by Name	12,163
Inmate History by SSN or OLN	10,240
Inmate History	8,538
Court Report	7,351
Student Intervention Program	6,457
Charges Not Filed	5,837
Work Release -Litter Pickup Inmates	6,254
Inmates booked- sorted by Name	3,345
Inmates Released- sorted by Name	1,824

Top 10 total "Report Runs" per user for 2023

<u>User Name</u>	<u>QTY Reports Run</u>
PSN\WCC2895	5,435
PSN\PR10329	5,307
PSN\SO5025	3,391
PSN\WCC066	3,336
PSN\PRO155	2,639
PSN\SO5421	2,430
PSN\SO1209	2,312
PSN\SO5365	1,407
PSN\PR3561	1,320
PSN\wcc9470	574



Pictured: Jeremiah Marcum, Database Administrator

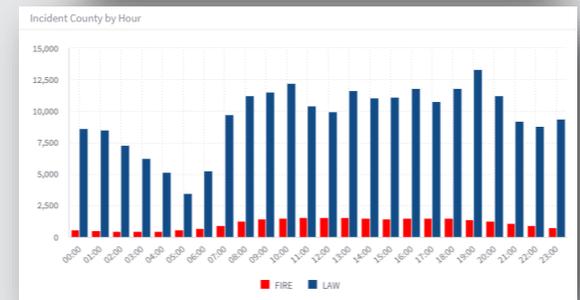
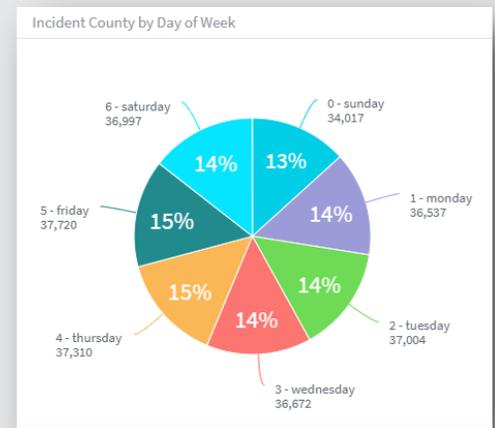
Monthly + Yearly Reports

Each month, Public Safety Systems Manager, Joshua Moyer works to generate several radio & 911-Phone reports to an online retrieval site. Here is a link to those reports.



[Click Here](#)

CAD reports are not currently ran monthly and are more of an on demand requests. We have several tools to aid in running these reports, and if you have any reports that you need run from CAD Data, feel free to contact Joshua and he can assist in getting this ran. These reports are meant to aid agencies in analyzing run counts, common incident types, call volume trends, and radio traffic trends. Some Chiefs rely on these to gauge staffing needs and to support funding requests. We can help with all these needs! Here are some examples of reports we ran for agencies using our CrimeView Reporting tool:

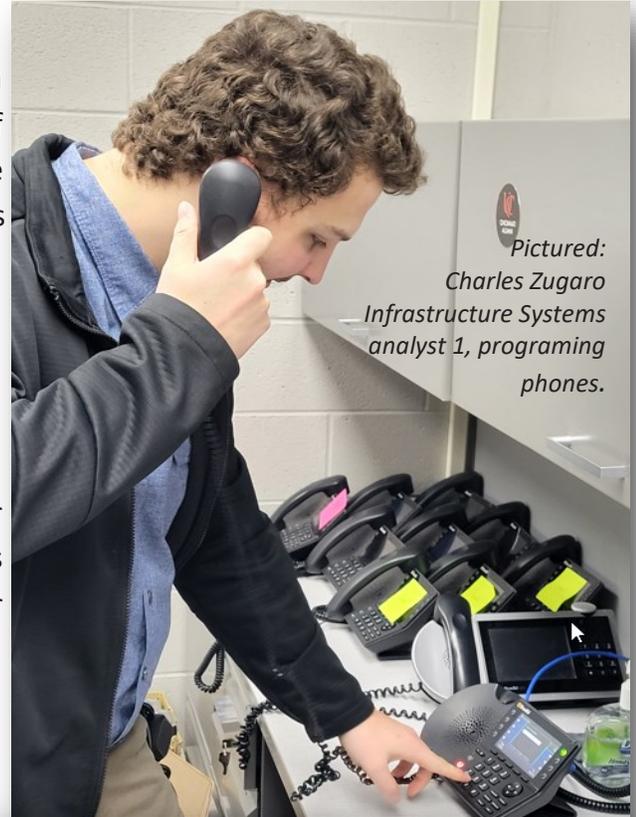


DR is ongoing with the goal of geo-diversely locating our essential systems.

Disaster Recovery (DR)

Disaster Recovery

Disaster recovery planning is defined as the process of creating a comprehensive plan that helps TELECOM resume work in the event of the loss of data or IT equipment due to natural or human-made disasters. Telecom’s disaster recovery plan will make sure that this is done with minimal disruption.

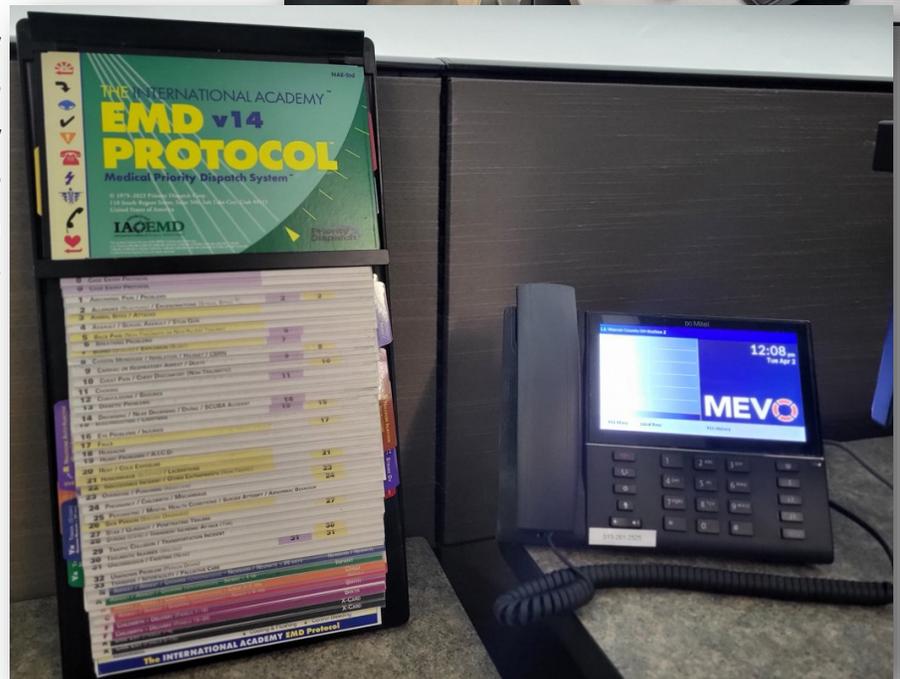


Phone System

In the event that the primary ShoreTel (Mitel) system goes down or we need to perform maintenance, the backup will keep our phones online. The Disaster Recover (DR) site houses a backup for our conference bridge should Telecom’s office be compromised.

MEVO Phones

MEVO phones are critical for Mobile PSAP. They can compliment the equipment and software existing on your PSAP network because they serve as a backup to the 911 system, in the event that it goes down. These phones are in two different spots in Warren County dispatch—the first set is in dispatch, and the other is in back up dispatch.



“The Vault”

In 2023, Telecom streamlined the “back-up” processes to where Team Members make vault runs once a month (instead of several times per week) where backup tapes are securely stored for the purpose of records retention and data recovery. These tapes include data for everything in the Data Center.

Physical Plant

Physical Plant is any location that Telecom is responsible for, and includes buildings, rooms, and structures. Some common components of these locations include:

Buildings the physical structure including doors, roof, rodent control, walls, etc.

Grounds access, driveways, walkways, and grounds control maintained by Warren County Facilities Management.

HVAC Telecom is responsible for ensuring that proper heating, cooling, and environmental monitoring is occurring.

Power (commercial and backup) Power is pivotal to any environment housing Telecom equipment and resources. Telecom utilizes battery, UPS, inverters, generators, and transfer switches as backup power should commercial power fail. This is important because if the local community experiences a power outage, Telecom's lights stay on, and this switch happens seamlessly.

Physical Security of our locations includes doors, gates, fencing, and related systems to make each site secure.

Main Physical Plant Locations

Data Center *see more on the next page*

10 Towers - (3) legacy tower sites were inspected and routine maintenance performed to align them with current tower safety codes. They carry the main radio system, hold the microwave antennas for backbone, and are the last mile equipment in that area. One site doubles as a Verizon platform. We're beginning to use the backbone system to extend the County VoIP phone system to county buildings not on the Justice Drive campus, where it's not feasible to run fiber cable.

15 public safety-grade microwave links for the Data Backbone and System Control, VoIP traffic, voice traffic, radio, and WCPSN data.)

19 Microwave links for Public Works Information Backhaul, handling the data's 'last mile' from our towers to end users (water tanks, wastewater treatment plants, well fields.)





Radio Users

Starting the week of Feb 13th for up to 2 weeks:

Early on February 13th, 2023, Primary talkgroups will be allowed to roam to surrounding counties in the event of Warren County's Simulcast being affected by the new UPS installation.

In the event that your dispatch talk groups do not function in your area, utilize the following talkgroups for primary communications:

- Fire – Use 83 FD Hail
- Law – Use 83 INQUIRY

Fire Paging should continue to function. Dispatch may need to utilize the back-up tones established by each Department.

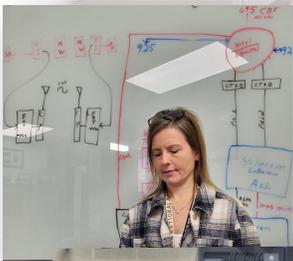
Physical Plant

On Monday February 13, 2023, at approximately 9:30am, Telecom began it's *Uninterruptible Power Supply 1 (UPS1) shutdown and Replacement Project* on one of the two emergency power units that power the Warren County Public Safety Network. It was an "all hands on deck" day for Telecom units, and everyone participated and had a role.

Paul Kindell insured that we had many contingencies in place and provided our agencies with the radio system contingency plan that they could follow should something unexpected, like a system outage.

According to our vendor, the UPS replacement project was scheduled to take 2 weeks to remove the old and install and startup the new.

Because of extensive and proper planning, this replacement went off seamlessly, and the public had no idea that a shutdown occurred.



Telecom's Data Center has redundancy, two power systems, and high availability for both hardware and software. This Center houses data for LRMS, CAD, ePCR, AudioLog, ICS, ShoreTel/Mitel, and HipLink.

Data Center

Connectivity (LAN, WAN, VPN, Internet)

We use multiple connectivity methods to keep systems, applications, and resources easily accessible for our partners. In 2023 Telecom replaced aging internet routers with more secure firewall hardware. Telecom tests for internet failover and redundancy quarterly.

High Availability One of Telecom's goals is to eliminate all possible single-points-of-failure so that in the event of a system failure, our partners continue to operate as normal. With this in mind, many systems are redundant, so that in the event of a failure, resources are still available.

Backups Telecom utilizes several different backup policies and types to ensure that data is backed up for data recovery; and to meet archival requirements. In 2023 Telecom replaced its current back-up solution with a new, more robust enterprise back-up solution that is *now* in production.

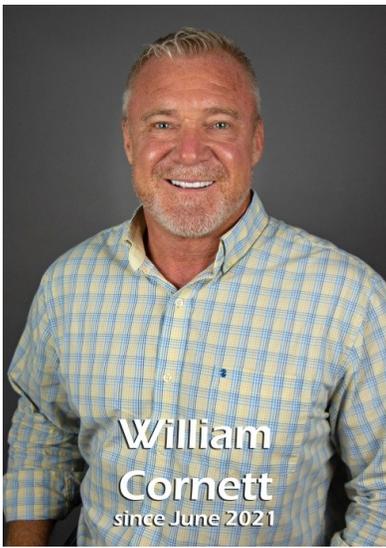
Testing Firewall System Failover, Internet Failover, Mobile VPN Failover, Data Restore, Virtual Machine Restore.

Data Warehouse Telecom made great improvements in our ability to house data, package it, and make it usable by our customers. In the past, there were reports for law and ePCR on our end but jail data was in its own environment. Our data warehouse is now one unified location for all of those reports to reside together.

Security Telecom is held to the standards of CJIS (Criminal Justice Information System), LEADS (Law Enforcement Automated Data System), and CALEA (The Commission on Accreditation for Law Enforcement Agencies.) These drive how we store/retain/protect the data of our customers. We are periodically audited for security compliance and are constantly trying to stay ahead of the latest security risks.

Audits and Assessments In 2023 Power system and HVAC audits began. These audits are necessary to ensure the power system are keeping up to the needs as well as changes in Codes and Standards. We also look for opportunities to combine projects to save labor.





Cybersecurity

In 2023, Warren County Telecom experienced a stabilization of policies and programs established in prior years. The cybersecurity awareness training initiative has resonated well with the staff, yielding positive metrics showcasing the team's readiness to detect, prevent, and report cyber threats effectively. Our security controls program has demonstrated compliance with the Center for Internet Security v8 (CIS v8) framework and the Criminal Justice Information Services (CJIS) requirements.

“Do not get beat by the basics”

“Defenders must be right every time, Offenders only need to be right once”

Cybersecurity Framework

Warren County Telecom has adopted the Centers for Internet Security’s Critical Security Controls v8 framework (CIS v8) as our strategic blueprint for developing and maintaining a highly secure network infrastructure. This comprehensive framework comprises 18 control categories organized into 3 implementation groups, totaling 153 safeguard controls in each group. Additionally, we leverage the NIST SP 800-53 Security and Privacy Controls to further fortify our security measures.

Governance

Governance in network security involves the direction and management of enterprise security protocols by organizational leadership, guided by established policies and procedures. It serves as a perpetual system of oversight to ensure the relevance, implementation, and updating of security processes.

Risk Management

Risk management is the systematic process of assessing, evaluating, and prioritizing potential risks across an organization's operations. It necessitates making prudent choices to control, monitor, and mitigate risks that could pose threats to government organizations. We follow the NIST SP 800-37 Risk Management Framework to guide our risk management strategies.

Compliance

Adherence to industry standards, regulations, and laws is paramount in maintaining operational efficiency and avoiding critical pitfalls. Failure to comply with these standards can result in severe consequences for organizations. Warren County Telecom is committed to implementing robust

technology, policies, and procedures to ensure compliance with industry best practices and security frameworks.

Vulnerability Management

Our organization maintains a proactive vulnerability management program to scan the network for potential vulnerabilities. This specialized software scans for misconfigured devices and software, ensuring that patches are applied promptly after each patch cycle.

Network Security

Endpoint Detection and Response (EDR) is a vital component of our Public Safety Network (PSN) security measures. EDR is designed to identify and counter advanced threats that may bypass traditional defenses. This system provides real-time threat analysis to help IT teams understand and combat security breaches effectively.

Cybersecurity Awareness Training

Recognizing that human error is a significant vulnerability in cyber defenses, we offer engaging and informative cybersecurity awareness training to our staff and partner organizations. Additionally, we utilize artificial intelligence to simulate phishing attacks and provide remedial training for any lapses in judgment.

Incident Response

Following a joint cybersecurity incident response exercise with Warren County Emergency Management, we are enhancing our incident response protocols. By developing robust incident response playbooks and conducting regular tabletop exercises, we aim to fortify our readiness in addressing potential cyber threats.

Cybersecurity

Cybersecurity Conferences

Intro to Cybersecurity for Elected Officials 2023

The Warren County Board of County Commissioners, in partnership with Telecom hosted “Intro do Cybersecurity for Elected Officials. Cybersecurity and data breaches continue to be on the rise and impact organizations of all sizes and sectors—cyber-attacks have been steadily climbing in recent years, with a notable surge in targeting government agencies. The Board of County Commissioners had Securecyber Defense presented about how to make sure the County’s data is safe from attacks from both internal and external bad actors. His teachings encompassed a body of technologies, processes, structures, and practices used to protect networks, computers, programs, and data from unauthorized access or damage. The goal of any cybersecurity strategy is to ensure confidentiality, data integrity, and availability.



Pictured - Event: Secure Cyber Defense “Intro to Cybersecurity for Elected Officials” Event on February 6, 2023

Water Resilience & Emergency Preparedness

Advisor, *Secure Cyber Defense*, invited Telecom’s William Cornett, Cybersecurity Analyst, to join their delegation to Israel and attend a Cybersecurity Conference as well as a Water resiliency symposium. *Costs for this trip were provided by a private sponsor.*



Pictured above (left to right): Shawn Waldman (Secure Cyber Defense) and David Muhlgay (Operations Manager at the Hadera Desalination Plant) and William Cornett (Telecom’s Cybersecure Analyst)



Pictured above: The Hadera Desalination Plant



Maintenance Awareness

Status.io, which is a System Availability Tool. This was in direct response to agencies requesting a way to check the status of a Telecom system they use. Before this, our team members manually sent out Outage and Maintenance emails with PDF attachments and varying recipient groups. Status.io tightens up the consistency and formatting of our outreach.

Noticeable changes:

- The sender is always TelecomStatus@wcpsn.net
- Targeted communication—only persons and emails listed on your Department Authorization Form (DAF) get notified for systems with a noted liaison. If you did not provide an ‘all staff’ outage notification email, someone listed on your DAF will need to forward any maintenance or incident notices to staff.
- A 24/7/365 status page shows the health of 40+ Telecom systems. Curious if something is down or being worked on? Check <http://status.wcpsn.net>.
- Maintenance History—at the bottom of the status page, you can click ‘History’ to see past maintenances and outages with timestamped progress / discovery updates.
- Want a calendar view? Add this iCAL address: <webcal://status.wcpsn.net/pages/5fc1120ee54e8205402c1091/calendar/all.ics>

Scheduled Maintenance Reminder

Telecom Systems Status

Title: CentralSquare PRODUCTION CAD, Mobile, RMS and Jail Patching

Planned Start: April 17, 2024 05:00 EDT
Expected End: April 17, 2024 08:00 EDT

Affected Infrastructure
Components: AVD - Automated Voice Dispatch ECC, AVD - Fire Station Alerting, CAD to CAD, Credentials / Authentication, Feed to Active 911 or lamResponding, Hiplink Paging, PRODUCTION Environment - CAD - Computer Aided Dispatch, PRODUCTION Environment - MDC - Mobile Data Computers, PRODUCTION Environment - JMS - Jail Management System, PRODUCTION Environment - Field OPS, PRODUCTION Environment - RMS Law - Records Management System, PRODUCTION Environment - RMS Fire - Records Management System - ESO, ProQA - Dispatch Pre-Arrival Instructions

Locations: Telecom

Details:
 Location: Warren County Telecommunications Data Center

Purpose: The patch and Infection Management process requires system reboots

powered by

TELECOM

Warren County · Ohio

Active Incident

Updated a few seconds ago

2

Upcoming Maintenances

5

Days Until Next Maintenance

0

Incidents Last 7 Days

County Phones Operational

Incident Status	Operational
Components	Telephone Systems

January 30, 2024 21:49 EST
January 31, 2024 02:49 UTC

[Monitoring] At this point we believe phone system functionality should be fully restored. Telecom will continue to monitor.

January 30, 2024 11:27 EST
January 30, 2024 16:27 UTC

[Identified] Most phone system services have been restored. Still working with vendor at this time.

January 30, 2024 10:14 EST
January 30, 2024 15:14 UTC

[Identified] System should be returning to normal operation.

January 30, 2024 08:53 EST
January 30, 2024 13:53 UTC

[Investigating] Telecom is still working to determine the issue. The vendor is involved as well. Call Center functions are not working correctly.

January 30, 2024 07:28 EST
January 30, 2024 12:28 UTC

[Investigating] Telecom has discovered a problem with aspects of the phone system. Making and receiving calls should still work. Advanced features on the phone system may not.

us Overhead Paging	Operational
is Panic Buttons	Operational
SECURITY ADVISORY	Operational
als / Authentication	Operational
Telecom and Emergency Services	Operational
tive 911 or lamResponding	Operational
aging / Station Alerting	Operational
ency Remote Access	Operational
nywide	Operational
Safety Network	Operational
rcement Automated Data System - State System	Operational
iren Activations	Operational
ronment - CAD - Computer Aided Dispatch	Operational
onment - MDC - Mobile Data Computers	Operational
nment - JMS - Jail Management System	Operational
ment - Field OPS	Operational
ment - RMS Law - Records Management System	Operational
ment - RMS Fire - Records Management System -	Operational
-ePCR Electronic Patient Care Records - ZOLL	Operational
al Instructions	Operational
t (Bomgar)	Operational
ork Orders	Operational
ter Aided Dispatch	Operational

Partnerships

Telecom is a cradle-to-grave Technology Advisor for the (3) legs of the Warren County Department of Emergency Services.

Emergency Communications Center Organized by FEMA, IPAWS is the Nation’s alert and warning infrastructure. It provides an effective way to reach and warn the public about emergencies. IPAWS is used to send notifications for three alert categories– Presidential, AMBER, and Imminent Threat.

Emergency Management Agency Telecom has assisted EMA with setting up email distribution groups, training for Microsoft 365 products, team member headshots, and more.

Emergency Operations Center Telecom supports all technology in the EOC including their Audio/Visual equipment. (2) 800MHz radio stations to communicate with the State in the event of an EOC activation and for regional communications. Telephones are directly connected to the 911 system. In the event of a widespread storm, need for extra hands, or social distancing, Emergency Services can ship non-emergency calls to personnel in the EOC for call-handling with the simple push of a button on their 911 console.



Warren County Facilities Management and Telecom partner on many projects within the county, as well as maintenance of tower sites and various building cabling. They were also instrumental in some updates to offices in telecom, as well as a point lead for the Warren County ongoing Camera project.

Warren County Sheriff’s Office has been an integral tester and early adopter of our Reporting Warehouse, CentralSquare CrimeView Analytics, and has always been present for our ongoing Camera project needs. Specifically, Larry Sims and Barry Riley and were crucial 2023 partners!



City of Lebanon Division of Fire Telecom gave CAD Browser access to Lebanon so they can view Warren County-Dispatched runs and improve interoperability. In return, Lebanon Fire gave Analyst Josh Moyer a dashboard view of their First Arriving product to demo it for potential countywide usage. The goal is to eventually get a monitor setup in dispatch to display this dashboard feed from Lebanon.

State of OHIO MARCS Our Tier4 partnership provides our users with better portable coverage and expanded statewide capabilities. Plugging into the State saves our tax payers roughly \$250,000 per year in maintenance cost and we have a direct line to the MARCS 24/7 Help Desk.



Warren County Information Technology acts as webmaster for the Telecom website.

Committees & Associations: Telecom is active in Communications Work Group, Warren County Police Chiefs, Warren County Fire Chiefs, SOSINK, State Interoperability Executive Committee, State 911 ESiNet and the Emergency Communications Board. (Our Community Manager is Recording Secretary for The Communications workgroup.)

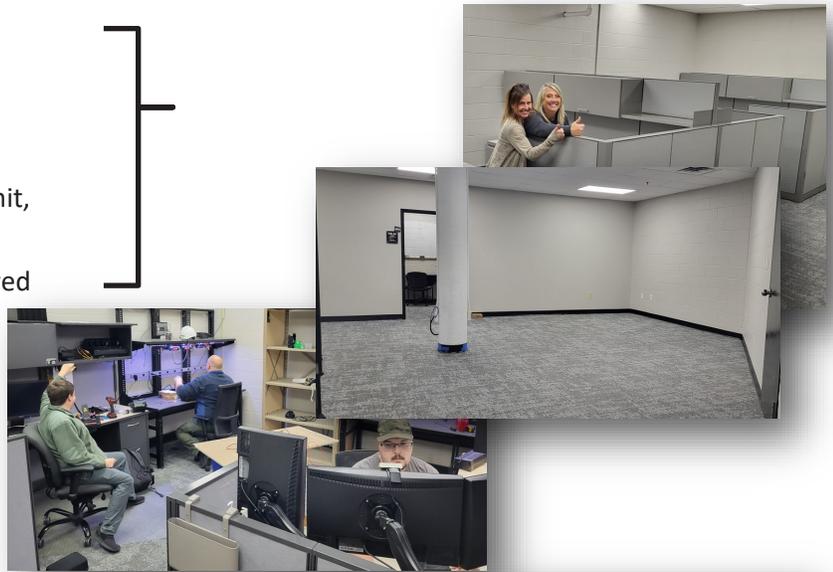
Engraving: of accountability tags, incident status boards, plaques, and miscellaneous signs saves partners (and taxpayers) thousands of dollars per year by not having to pay private companies. **2023 recipients:** Armco Park, Clearcreek Twp FD, Clinton Warren Joint Fire, Common Pleas Court Services, Deerfield Twp FD, Franklin FD, Franklin Twp FD, Hamilton Twp FD, Lebanon FD, Mason FD, Ray Mueller Chief 52, Salem/Morrow FD, Turtlecreek Twp FD, Union Twp Fire Rescue, Wayne Twp FD .

Engraving	2023
Accountability Tags	2150
Passports	32
Other	8
Total	2190

Telecom & Emergency Services: updates and improvements

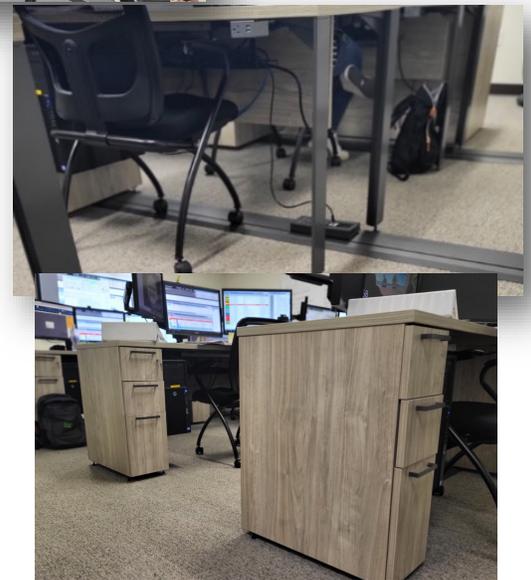
Telecom office updates

Several of our TELECOM offices (Infrastructure Systems Unit, Communications Systems Unit, Data Systems Unit, Cyber Security Analyst and Community Manager's offices) received much needed new paint, carpet and new/refurbished furniture. Facilities Management worked diligently to get the painting and carpet complete in the 3rd quarter of 2023 to prep for the new/refurbished furniture. These updates improved ergonomics, privacy, and productivity in the office.



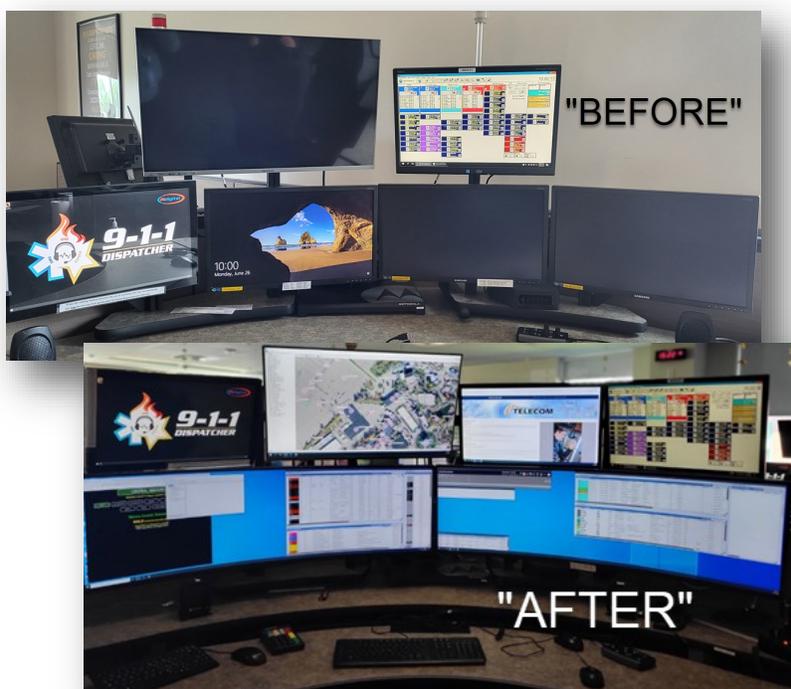
New ECC Training room

The New ECC training room was a joint project with both our Infrastructure Systems and Data Systems Unit. In Infrastructure Systems Unit got each of the new stations network access and online. After the new furniture was installed, the Data Systems Unit then came in, added desktops, evaluated newly installed parts and systems units. All infrastructure was put in place, they were online



Dispatch Monitor Updates

Telecom's Data Systems team installed new monitors in Warren County Dispatch. This project was headed by **Philip Bomer**, Data Systems Technician 2, along with help from of the Infrastructure Systems Unit. They worked with Emergency Services to upgrade and test a new monitor setup for the dispatch center's consoles. This allowed Dispatchers to have more applications, easier IT management, increased capacity, and the new monitor layout that gives them the opportunity to take full advantage of the queue options.

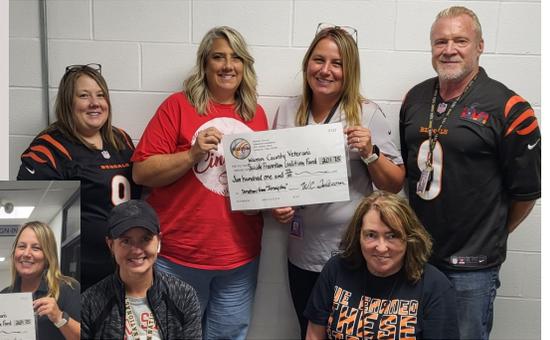


Going Above & Beyond

Bene-FIT Fair Each fall, our Support Services Team spearheads a raffle basket. This year's theme was the "Jackpot Raffle Basket" with a variety of lottery tickets, \$60 Cash, Candy, playing cards and dice games. Along with the other participating departments, the Benefit Fair raised \$4,080.00. Half of the proceeds went to Children Services for their Christmas Program for kids in care and the other half went to the Franklin Food Pantry.



TCMC Committee in 2023! The Telecom Morale Committee (TCMC) planned events such as the Summer picnics, Halloween fun, Friendsgiving, 2 retirement parties and organized all fundraising for 2023, including Jersey day, as a small, once a month, fundraiser to "give back". Team members engage in monthly donations by wearing their favorite sports shirt on "Jersey day". Money raised, over the course of a year, goes to a "foundation" of choice and money collected will go to that charity every July—last year we gave our donations to the Warren County Veteran's Suicide Coalition Fund.



Christmas Child Sponsorship This initiative is led and inspired by Task Unit Alpha's Jessica Johnson, backed by the TCMC. Telecom joined Children's Services again to sponsor a 13 year old girl. Team telecom raised nearly \$300 and collected little girl gifts. This teenager received everything on her Christmas list— so many wonderful new clothes and shoes, with enough money left over to get her two gift cards to get any additional items she may have needed!

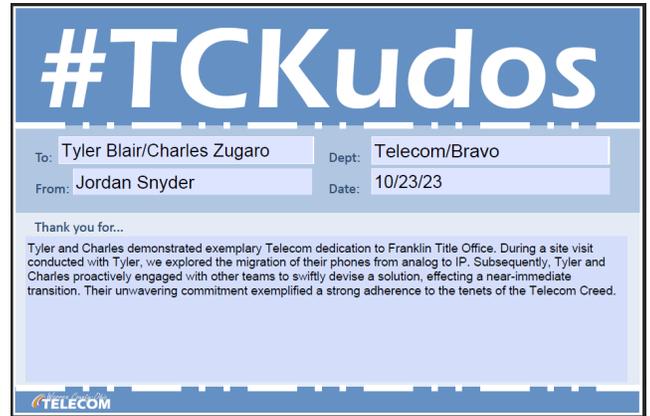


The Annual Team Telecom photo allows us to capture a point in time in our history together. We have many things to be thankful for, so much that Telecom has accomplished together. It is a chance to capture in person our teammates that work remote, those grinding early in their careers and those that have spent their time here and take a piece of Telecom as they move forward in their careers elsewhere.

Community Management: Morale & Media

#TCKudos

is our morale program. In 2023, 24 kudos were written (7 more than 2023) recognizing above-and-beyond efforts by partners, colleagues, and Telecom team members! You can submit a #TCKudos for one of our team members anytime from our [website](#).



#TCChallengeCoin

Truly a team effort, our cache of challenge coins was 100% funded by team member donations. Coins are presented to colleagues and partners who meet one or more of Telecom's Core Values: **Collaboration, Continuous Improvement, Innovation, People, Service, and Transparency.**



Community Photography

The community Manager engages within Warren County to photo document events that impact the community. Some of the events included the Strategic Outlook Breakfast, the 911 ceremony, Policy Chiefs Association Memorial Service and much more!



Social Media Telecom has many avenues of keeping up and staying connected with what we are doing, education opportunities, announcements and what we are staying "involved" in.

Community: Training

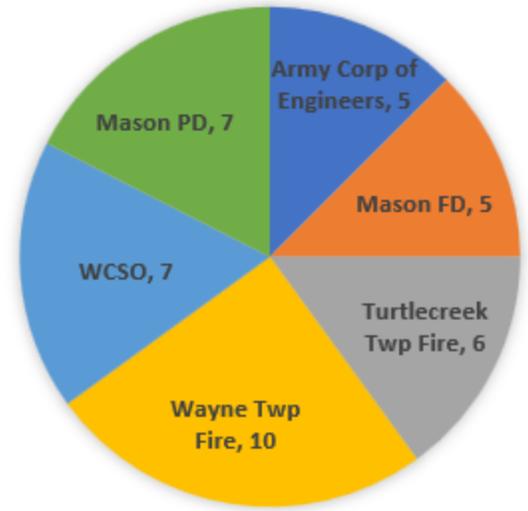
Training: Telecom has offered training since 2006. Josh Moyer, our Public Safety Systems Manager, coordinates all training for our broad audience of partners including county co-workers, schools, public safety, and state/federal agencies. Josh also schedules our Radio training with Corey Burton, our Communications Systems Manager. If needed, the Community Manager, Lisa Hicks, attends training to discuss the Benefit Assessment Report.

Online training videos have been available since 2011 from [our YouTube channel](#) and [website](#). Group or 1-on-1 trainings are conducted during regular hours and in the evening. In partnership with Emergency Services, Telecom takes trainees on a tour of the Warren County Communications Center to see radio, 9-1-1, paging, auto-toning, CAD, and mapping in action! Telecom team members lead the training effort when available, to speak on their product or system's behalf.

New Chief Orientation: we offer a holistic onboarding including sitting with Subject Matter Experts (SMEs), deep diving into a partner's system setups, back room tours, discipline-specific slide decks, and more.

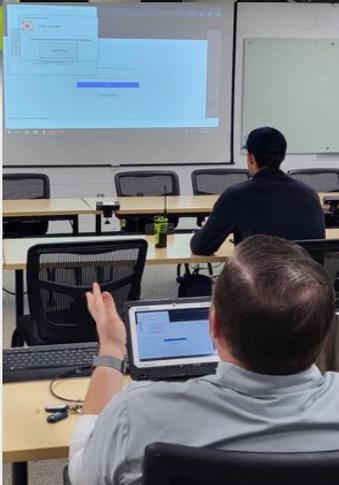
New Hire Onboarding: We strive to 'spin up' new team members in an orderly fashion including first-30-day mandatory reading, meeting with each task unit, radio & phone training, a deep dive into our communication and file management tools, etc. Lisa Hicks, our Community Manager, coordinates all Telecom's New Hire orientation and onboarding.

2023 | # TRAINEES BY DEPARTMENT



Pictured below: Tommy Kramer and Paul Bernard doing Radio Training for a Fire Agency.

Pictured below: Corey Burton, Telecom's Communication Systems Manager, conducts radio training for Fire and Law agencies.



Pictured above and to the left: Public Safety Systems Manager, Josh Moyer, offers training for our Warren County Fire and Law agencies.



Community Management: Reports

This is the 12th consecutive **Annual Report**. This year, it was produced by the new Community Manager Lisa Hicks, in cooperation with the Telecom Team, focusing on an illustrative magazine-style layout.



Warren County Telecommunications Department
500 South Dr. Lebanon, OH 45036 | info@warrentelecom.com | 513.851.4174 (x4357)

Partner Report

for July 2021

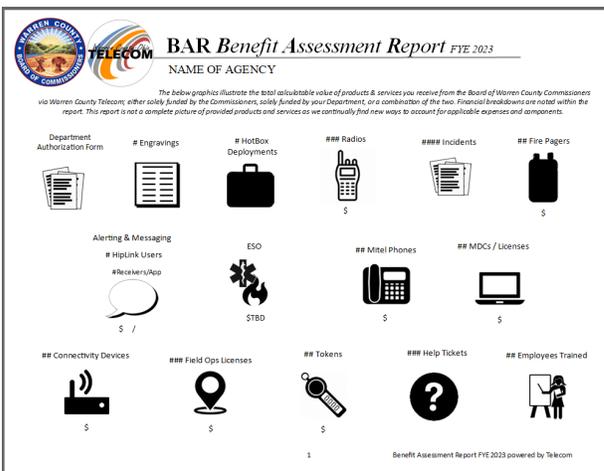
Based on the report are announcements and system-specific notices for all telecom partners.

Contents

- Summary 2
- CENTRAQUARE (Project 1704) 2
- Weekly Status Meeting 2
- Infrastructure (Law Research Management System) 2
- Computer Aided Dispatch / Mobile Enterprise 2
- Field Ops (Currently Proof of Concept) 2
- Chat 2
- Wi-Fi 6E 2
- RADIO SYSTEM 2
- EMERGENCY 2
- MOBILE CONNECTIVITY 2
- 9-1-1 / PUBLIC SAFETY ANSWERING POINT 2
- EMERGENCY ELECTRONIC PATIENT CARE REPORTING (EPCAR) 2
- TELEPHONE 2
- COMMUNICATION & COLLABORATION 2
- MISCELLANEOUS 2

IC Monthly Finance Report 1

Our Partner Report is a quick and easy way to get the latest Telecom updates straight to our *partner's* inbox each month. A supplement to our newsletter, sometimes containing secure content, it outlines key points in hopes of leading to deeper conversation with liaisons and essential personnel from our partners and agencies. Released on the last Wednesday of each month, partners have a jumpstart on the coming month and what's on our radar for everything from CAD and radio to 9-1-1 and phones. Key points of this document are shared at both the Police and Fire Chiefs meeting each month.



BAR + SPUR Telecom released our 5th annual Benefit Assessment Report (BAR) to each police and fire/EMS agency in **2023**. It outlined their rosters and inventories for radios, pagers, tokens, MDCs, HiLink recipients, training, and more. It also attached financial investment where applicable to help agencies see the value of their provided services plus a break-down of Commissioner-funded versus Agency-funded components. Chiefs were asked to review and report back any needed changes so that Telecom's records could be more precise.

We also provided a (SPUR) Services & Product Utilization Report to the Board of County Commissioners (BOCC). It takes BAR data a step farther, compiling it by community (e.g. Mason Fire, Police, Courts, Public Works all together as one City of Mason report). This allows the BOCC to see what they provide an entire community, via Telecom.

NOTE: for the 2024 BAR, we will switch to an EXCEL format for easier auditing.

Community Management: Details

12 issues of
TELECOMatters
were released in 2023



(DAF) Department Authorization Form

In March, we rebranded the Agency Authorization Form and expanded the audience to all Telecom partners. Upon feedback that we were oversharing or reaching the wrong people, this new form now:

- Allows our partners to designate persons with authority over their department staff and equipment changes.
- Ensures we send targeted communications only to a department head's designated liaisons... blank roles are left unfilled.
- Confirms who is authorized to modify personnel and equipment.
- Lets a partner communicate which systems/services they don't want notified for or involved in.
- Feeds our Status.io subscriber list for maintenance notifications.

New WCPSN User Form

In May, we rebranded the PAMR Form (Personnel Account Maintenance Request) to the New WCPSN User Form. With an ever-increasing list of partners, this form now includes Warren County Departments who need access to our systems and services, in addition to the police & fire sections we've always had.

Want to learn more?

www.WarrenCountyTelecom.com

