



## **2019 Annual Report**

# Information Technology Division Overview

## Division Overview

The Information Technology department is a division of the Administration Department and currently includes five full time staff and one intern. The department manages a wide variety of information technology systems and services in use throughout the city and in four other area police departments.



Division Staff:		
Name	Title	Years of Service
Matt Prough	Information Technology Director	15
Eric Kersten	Network Administrator	3
Rob Kadonsky	Information Technology Support Specialist	1
Dalton Krupa	Information Technology Support Specialist	1
Stan Howard	Law Enforcement Data Analyst	3
Nick Hoff	Information Technology Intern	New

## Division Responsibilities

The I.T. Division is responsible for the implementation and maintenance of most information and communication technology throughout the City, including at City Hall, the Community Center, Fire Stations, Park Shelters, and the Public Works facility.

On a daily basis the first responsibility of I.T. is to respond to requests for assistance from staff. This response is the primary responsibility of the I.T. Specialists with assistance from the I.T. intern. In addition, all I.T. staff are working constantly on projects to implement new systems and services and to upgrade and maintain existing servers, equipment, and applications. The I.T. Department is also responsible for long-term strategic planning for existing and future technology.

## MPSIS Responsibilities

Along with responsibilities for City technology and communication systems, the Fitchburg I.T. Department also manages and maintains the MPSIS network and services. MPSIS consists of a number of law enforcement technology systems shared by Fitchburg, Middleton, Sun Prairie, Verona, and Monona Police. MPSIS provides funding for the staff time necessary to manage the MPSIS system, and fully funds the Law Enforcement Data Analyst position.

# 2019 Major Projects

## Staffing Changes

Both Technology Support Specialists started in late 2018 or the beginning of 2019, so much of the year was spent acclimating to the City and systems in use. Rob Kadonsky and Dalton Krupa both made great strides in understanding City operations and the technology in use throughout the organization. The department did have turnover with JD Yim leaving after more than two years as an intern with the City. JD's departure was impactful as he was a high functioning member of the technical support staff and will be missed by many throughout the City.



## Fire Station #3

A major project for the I.T. Department in 2019 was the move of Fire Department operations from the Fire #1 building on Lacy Road to the new building on Syene Road. Installing and configuring technology in a new building of this size is a significant project that takes months of planning and effort.

As the building is built the I.T. Department works with planners, project managers, and contractors to develop plans for the implementation of the technology that will be installed in the building. This includes the locations of data jacks to provide access to phones, computers, printers, fax machines, and other equipment. It also includes locations where wireless access points will be installed, as well as other network devices like cameras and door access security systems.

Once the building is ready, I.T. then goes in and installs the necessary equipment. This includes installation and configuration of the network switches necessary to connect the building to other City buildings, and to allow for all devices in the building to connect to the network. It also involves programming and connecting wireless access points, phones, and other devices.

The final phase is to move existing computers and other equipment from the old building to the new, and to make sure all devices are online and functioning properly. Any new building of this size is a substantial project for the I.T. Department.

## 2019 Major Projects

### City WiFi Replacement

In 2019 the City's WiFi system was end of life and due for replacement. The I.T. Department looked at various replacement options that would provide better WiFi access, coverage, and functionality across all City buildings. The end result of this investigation was a decision to purchase and implement a new WiFi system from Cisco Meraki that replaced the previous system that was in use for five years.

The new Meraki system is a significant upgrade from the old system and provides better access with more features. The new system was deployed in City Hall, the Community Center, the Public Works facility, and at Fire Station #2 and #3. It will also be deployed in Fire Station #1 once the remodel is complete in 2020.



While the benefits of the new system are too numerous to mention, several items can be highlighted here. The most important change that the new WiFi system provides is the ability for staff with a City-issued laptop to connect to the same WiFi network in any City building. This functionality is available in all above mentioned buildings as well as on the 2nd floor of the Library, and allows staff to work from any building without the need to reconfigure or reconnect. The new system also provides a much better management process for the I.T. Department. The expected lifespan of the new system is five years, so the next WiFi replacement will be in 2024.



### Security

A focus of the I.T. Department in 2019 was the security of the City's technology and digital assets. As part of this focus, the City was able to take advantage of a State of Wisconsin grant to assign Eric Kersten and Dalton Krupa from the City I.T. Department to the State Cyber Response Team. This team is made up of volunteers who are trained and available to respond to Cyber security incidents affecting public entities throughout Wisconsin. As part of this assignment both Eric and Dalton are receiving significant training in security and response, and are briefed monthly on current threats. It is a really beneficial partnership between State and Local government.

In addition to the Cyber Response Team assignments, staff also spent 2019 working on remediating the issues identified through the network vulnerability test provided by CVMIC, and configuring enhancements to our security posture including the implementation of two factor authentication for our VPN and a notice on every external email message received to be careful of malware.

# 2019 Major Projects

## Fire Truck Modems

The I.T. Department assisted the Fire Department at the end of 2019 with the procurement and replacement of the modems in each Fire vehicle that contains a laptop. These modems provide access to critical software and location services and are essential for Fire Department operations.



## Public Works SCADA System Upgrade

I.T. also assisted the Utility and Public Works Departments with a much needed upgrade of the SCADA system. The SCADA system is the software and hardware used by Utility personnel to manage the water systems including water towers, wells, and other equipment. The upgraded system brings the City onto modern software that provides additional functionality including the ability for Utility staff to monitor the water systems remotely.

## Laptop Replacement

2019 saw the replacement of laptops and tablets used by staff in multiple departments. These devices are on a three to four year replacement cycle, depending on their use, and are proactively replaced to keep current so that the equipment complies with the requirements of software in use throughout the City. The old laptops are repurposed as checkout laptops, devices for interns and summer staff, and other uses where a current model is not necessary. Most portable equipment will be in use for six to seven years before retirement.

## Fire Station #1 Remodel

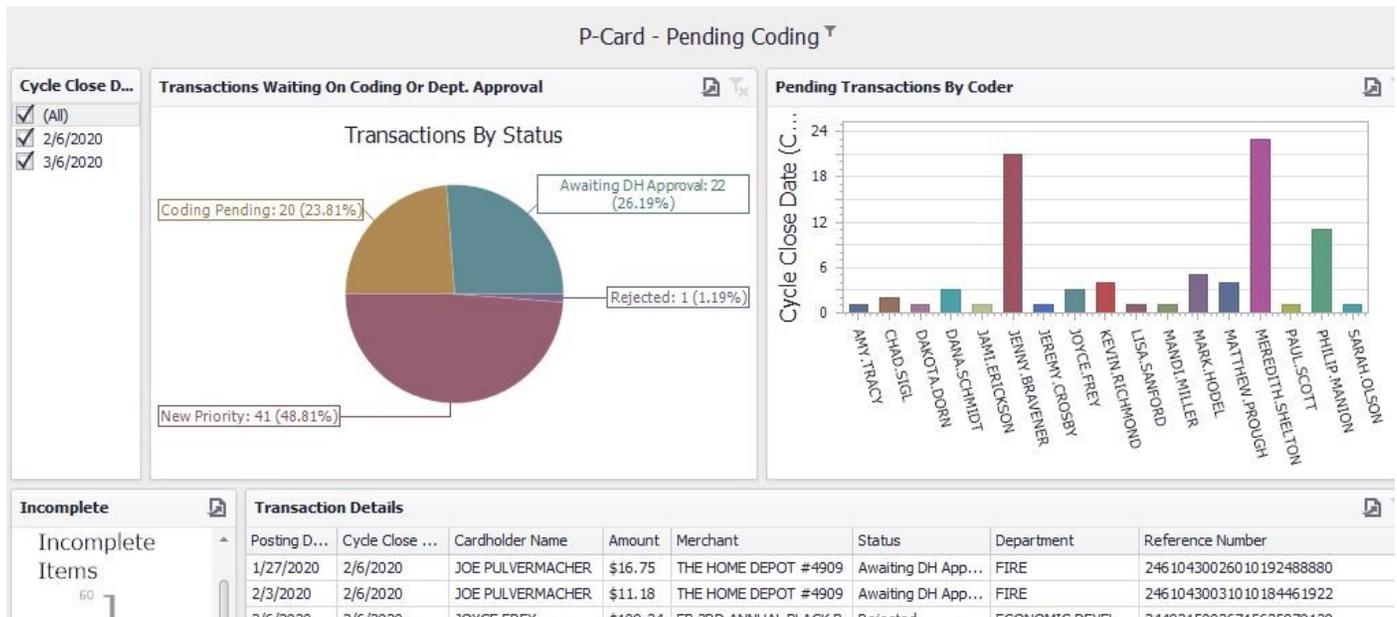
With the move of operations from Fire Station #1 to Fire Station #3, the process to remodel Fire Station #1 began in late 2019. I.T. was involved in the planning process for this remodel as the station is transformed as offices for Fire Department Administration as well as a collaborative use by the City and Dane County Emergency Management as an Emergency Management Center.

## Staff Training

Training plays a critical role in the operation of the I.T. Department as staff must keep up to date with technology to be effective. The City has always been supportive of professional development and it shows in our accomplishments. In 2019 I.T. staff had the opportunity to participate in the following training:

Dell Technology World	OnBase Community Live	AWS Summit
OnBase System Administration	Hacker Tools, Techniques, and Incident Handling	OnBase Workflow Implementation
OnBase WorkView Implementation	Wisconsin VMUG UserCon	CHFI Hacking Investigator

# 2019 Major Projects



## OnBase P-Card Processing System

In previous years the Finance Department had moved pre-approvals submission and review, and payment request submission and review, into the OnBase system. Staff now fill out an electronic form for either process, and those forms are routed electronically for approvals. These processes have greatly streamlined these procedures for staff, saved an immense amount of paper, and provided better insight into the status of these processes.

However, prior to 2019 the p-card process was still paper-based, with staff creating paper packets of information that contained a report listing all charges and all receipts and other documentation attached. The final p-card packet for review was a massive packet of paper that moved from desk to desk.

In 2019 I.T. worked with Finance staff, along with consultants from Naviant, to design, build, and deploy a new OnBase application for p-card processing. The project took more than six months of effort on the part of Finance and I.T. staff, with the end result being an electronic process that handles the entire p-card coding and approval process.

The process begins every Monday when the Finance Department downloads all p-card transactions from the previous week. Staff are notified by email that they have new p-card transactions to code, and they log into the OnBase system to code each transaction with the relevant GL accounts, and attach electronic copies of receipts and other documents. If the transaction is related to a pre-approval form, or to a Travel and Training approval, staff can directly link to those items within the GL coding screen.

Once submitted, the transactions route electronically through the approval process, and once approved are exported directly into the Finance system. Many staff have mentioned the significant improvement this new system brought to these critical Finance processes.

# I.T. Support Operations

## 2019 Summary

While the I.T. department has a number of responsibilities, one major function of the department is to assist staff with technology issues. Each request for assistance is logged in the I.T. helpdesk ticket system to document requests, troubleshooting steps, and resolutions.

Helpdesk tickets are created for a variety of circumstances but are always the result of a request for assistance from staff. Examples of requests received are password resets, new user setups, software issues, and hardware problems. Not included in the ticket numbers is work related to I.T. projects such as computer replacements, implementation of new systems, and projects such as the East Fire Station. The helpdesk ticket system is used only to track requests for assistance outside yearly I.T. project work.

After years of steady increases in the amount of tickets submitted, 2019 saw a slight decrease to 2,342 from the all-time high of 2,511 in 2017. The decrease in ticket numbers can be attributed to better management and control by the I.T. Department of user facing systems with the goal of lowering the need for staff to request assistance. This effort is mitigated by increasing staff numbers as well as greater reliance on technology throughout the organization. Ideally the number of tickets submitted will remain constant over the next few years.

## Tickets By Location

	#	%
City Hall	1299	55.47 %
Community Center	3	0.13 %
Fire Station #1	56	2.39 %
Fire Station #2	13	0.56 %
Fire Station #3	7	0.30 %
Library	97	4.14 %
Maintenance Facility	29	1.24 %
Middleton	7	0.30 %
Monona	3	0.13 %
Police Department	749	31.98 %
Senior Center	63	2.69 %
Sun Prairie	10	0.43 %
Verona	6	0.26 %
<b>Grand Total:</b>	<b>2342</b>	

# MPSIS Overview



## Overview of MPSIS

MPSIS (which stands for Multi Jurisdictional Public Safety Information System) was established in 2003 by the Police Departments in Fitchburg, Middleton, and Sun Prairie to purchase and share a police records management system. From that original goal the system grew much larger, and today includes a number of shared systems including dispatch software, mobile software for the police vehicles, and digital dictation. A major component of the system is the server and network infrastructure required to house the shared systems. The Verona and Monona Police Departments joined MPSIS seven years ago which results in an organization that supports more than 275 users across five locations.

## CAD System Implementation

After moving Sun Prairie, Monona, and Verona to the Dane County TriTech CAD system in 2018, Fitchburg and Middleton followed in 2019. All MPSIS sites are now using the Dane County CAD system.

The CAD system is the software used in dispatch and in the police vehicles to view calls for service. The system provides information on the location and type of call as well as all units responding. The decision to move away from locally hosted CAD systems and onto Dane County's system was in the best interest of public safety as it allows our local dispatchers to interact directly with other dispatchers in Dane County, and provides insight into calls and information countywide.

## License Plate Reader System Migration

For the previous five years the MPSIS consortium hosted a server for the shared license plate reader system. This system is in use in all five agencies with cameras mounted on a squad car. As officers drive through the city the system reads license plates and compares them to a database that contains stolen vehicle, expired plate, and other information. If a plate matches, the Officer is alerted to a possible issue.

In 2019 the MPSIS Commission made the decision to move our LPR systems onto a large shared state system called the Wisconsin LPR Association. At this time more than 70 agencies are connected to the system which provides data sharing and cost savings. I.T. staff worked with each agency to move their systems to the WI Association server.



# MPSIS Major Projects

## RMS Replacement Project

All of 2019 was spent working on the RMS replacement project. Due to a federal mandate to implement Incident Based Reporting by January 1, 2021, and because the existing Global Justice RMS is end of life, the decision was made in 2017 to replace the RMS system.

By the end of 2018 the staff workgroup from all five cities was ready to choose a vendor, and in early 2019 Zuercher Technologies was selected as the next RMS vendor for the Commission. The total cost for purchase and implementation of the new RMS was \$449,410, under the \$500,000 budget.

The implementation phase of the project began in April 2019, and throughout the rest of the year staff from all five agencies worked with Zuercher staff to configure the new RMS system for our use. By late 2019 most of the system was configured. The next step in the process is to review and correct the data conversion, which is the process to take all the data out of the existing RMS and import it into the new RMS so that each agency has their historical data in the new system.

As 2019 concluded the data conversion process had started, and the implementation of major interfaces including the Dane County CAD interface and the State of WI TraCS interface were underway. The agencies expect to begin using the new system live in July, 2020.



## MPSIS Data Analyst

2019 saw the development of a Sharepoint site available to all MPSIS agencies that provides reports and allows collaboration between officers to increase the information and communication between police staff.

Stan also spent a great deal of time working to implement LINx in our agencies, and across the county. LINx is the Law Enforcement Data Exchange which provides a way for agencies to share data. Through Stan's efforts our agencies, the Dane County Sheriff's Office, and the Madison Police Department are all participating which will allow staff from any of those agencies to share data with one another, even though they all use separate RMS systems. This is a great advancement for local law enforcement.

## Community Crime Map

You can view police activity in your city and sign up for alerts when police have been in your neighborhood on the web at:

