



2018 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 Manager	14
Eric Kersten	Network Administrator	2
Rob Kadonsky	Information Technology Support Specialist	New
Dalton Krupa	Information Technology Support Specialist	New
Stan Howard	Law Enforcement Data Analyst	2
JD Yim	Information Technology Intern	2

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.

2018 Major Projects

Staffing Changes

After several years of stability, both Technology Support Specialist positions experienced turnover in 2018. After 12 years with the city Katie Evers-Vick resigned to pursue an opportunity as a full-time OnBase developer. Pauline Xiong left after more than three years as an intern and Technology Support Specialist to return to her home state of Kansas.

Rob Kadonsky—Technology Support Specialist



Rob was the first to be hired, coming on board in September. Rob is a Wausau native who relocated to Fitchburg in mid-2018 after working at a consulting firm. Rob has degrees in both Broadcast Journalism and in Information Technology and brings a strong customer service approach to the department.

Dalton Krupa —Technology Support Specialist



Dalton was hired right at the end of the year and also comes to the City from northwest Wisconsin, having relocated from LaCrosse. Dalton's most recent experience was working for a managed service provider and brings a significant amount of experience in I.T. systems support. Dalton has a degree in Network Administration and Engineering.

Network Security Assessment

During the last few months of 2018 the I.T. Department underwent a network security assessment to identify the current state of information security and to identify issues or security risks present within the City's information technology. This assessment was a collaboration between City I.T and the City's insurance provider, CVMIC, each of whom paid 50% of the cost of the assessment.

The result of the assessment was a large amount of information regarding security risks and vulnerabilities found during the assessment. Additionally, the vendor provided recommendations and best practices. The I.T. Department has already begun remediating issues found during the assessment as well as implementing the best practice recommendations that are feasible in our organization. This work is expected to last through the first half of 2019.

2018 Major Projects

Datacenter VMware Upgrade and Host Replacement

The I.T. Department hosts more than 70 servers for the City and MPSIS. These servers are deployed in a VMware vSphere system and comprise the critical backbone in the datacenter that provide applications, file and print services, and all other systems City and MPSIS staff need to do their jobs. The benefit to VMware is that we can run those 70 servers on eight physical machines saving power and space, and can manage the entire system more efficiently and effectively.



In 2018 the entire VMware system was upgraded to the latest edition to obtain higher performance and better security. As part of that process two of the eight physical servers were also updated as part of a rolling update schedule to keep the City systems working properly and under maintenance and support. The VMware system in the City is a critical system that runs almost all of the applications and systems used by City staff on a daily basis.



Datacenter Switch Replacement

In addition to the VMware system, I.T. staff also replaced the main switches that connect everything together in the datacenter. These switches connect the servers to the users, to the internet, and to everywhere they need to go on the network to accomplish their goals.

This project was to replace devices that were more than seven years old, and to consolidate equipment in the server room to save on space and power consumption.

Backup System Replacement

The I.T. Department backs up data every night for all city systems and services, and in 2018 switched to a new backup system. The new system, provided by Veeam, is more easily managed than the previous system and will allow the City to retain backups for longer periods of time.



Each night data is backed up and stored on a network storage server, and those backups are subsequently copied to off-site storage to ensure the City has two copies of its backed up data.

Backup Datacenter

Work continued in 2018 to build out the backup datacenter to house secondary copies of the City data and applications. This is a long-term project that will in the end result in a secondary location that can run all critical city applications in the event of an issue with the City Hall building.

2018 Major Projects

OnBase Finance Department Projects

I.T. and the Finance Department collaborated on two major projects in 2018. First, along with our vendor we built a paperless Pre-Approval process which allows staff to submit pre-approval documents to the Finance department. The process includes electronic workflow and approval and ties in with the existing OnBase Agenda Management solution.



Later in the year the two departments again collaborated to create an electronic payment request process. All requests to pay invoices are now electronic and again include a workflow and approval process.

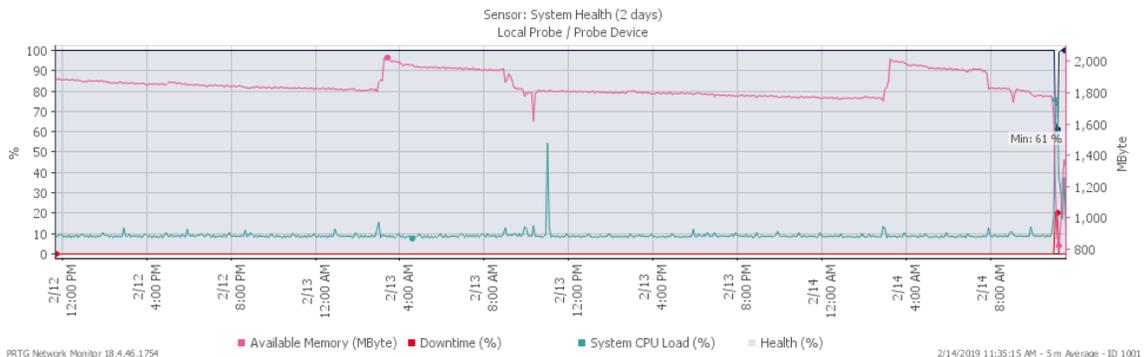
The goal of these two projects was to bring a more efficient and streamlined pre-approval and payment request process that allows for greater efficiency as well as eliminating the use of paper for these workflows. The finance department has been a leader in adopting the OnBase platform to implement electronic processes internally to find more efficient, effective, and sustainable ways to do business.

File Sharing Replacement

The I.T. Department upgraded the City file sharing systems in 2018 as the old product was end of life. This system allows City staff to share very large files with external people and is used by staff in Public Works, Planning, the Clerk's Office, and other departments to more easily share plans, documents, and other data.

Network Monitoring System

The I.T. Department also replaced the network monitoring system in 2018. This application monitors all I.T. assets including servers and applications and alerts I.T. staff when there is a problem that needs to be resolved. This application allows the I.T. department to be proactive in managing the technology in use in the City. Department staff can see when servers or systems are down, and can view statistics on memory, CPU, and disk use to proactively resolve issues before staff are even aware they exist.



2018 Major Projects

Police Body Worn Camera Implementation

Due to issues with the Panasonic equipment delivered in 2017 the police body worn camera project stretched into the first part of 2018. I.T. devoted a significant amount of time to configuring and deploying the cameras and reconfiguring the Arbitrator system to accommodate the new cameras and data.

Additionally, the body worn camera system introduced a significant amount of data that must be stored on the network. The I.T. Department is anticipating the video files to take up approximately 30TB of storage due to data retention requirements once all cameras have been operational for 180 days. This presents a long term challenge for the I.T. Department in accommodating this large amount of data.



Telestaff Migration and Update

The police department utilizes a specialized scheduling system provided by Kronos Software called Telestaff. This year the I.T. Department worked with Kronos and police staff to migrate the Telestaff system to a new server and to upgrade it to the most current version.

This was a substantial project that involved building a new server to host the system, migrating the data, and installing and configuring the new system. Also part of this project was the establishment of a DMZ network to provide better security for those services hosted by the City that are accessible from the internet. The newly created DMZ network will be used for all future services that can be reached from the internet.



McKee Farms Park Access Control And Cameras

I.T. staff worked with Parks Department staff to deploy access control and cameras to McKee Farms Park. Access control provides swipe card access to the building and allows the City to provide key fobs for rentals instead of physical keys, making it easier to deal with lost keys. Cameras were also placed at the site to provide a deterrent and also allow parks and police staff to view activity at the site remotely. Seven cameras were installed in the park, including five in the main shelter and two in the splash pad building.



I.T. Support Operations

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, 2018 saw a slight decrease to 2,383 from the all-time high of 2,511 in 2017. The I.T. Department expects these numbers to remain consistent or increase in future years.

Tickets By Location

	#	%
City Hall	1226	51.45 %
Evidence Building	2	0.08 %
Fire Department Maintenance Request	1	0.04 %
Fire Station #1	75	3.15 %
Fire Station #2	21	0.88 %
Library	85	3.57 %
Maintenance Facility	44	1.85 %
Middleton	39	1.64 %
Monona	7	0.29 %
Police Department	707	29.67 %
Senior Center	65	2.73 %
Sun Prairie	60	2.52 %
Verona	51	2.14 %
Grand Total:	2383	

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 six years ago which results in an organization that supports more than 275 users across five locations.

CAD System Implementation

Work continued in 2018 to move the rest of the MPSIS agencies to TriTech CAD from the existing Global product. The Chiefs of Police made the decision in 2017 to utilize the TriTech CAD system hosted by Dane County to provide better interoperability between the Dane County 911 Center and our agencies.

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. Sun Prairie, Monona, and Verona are on the TriTech system today, with Fitchburg and Middleton moving to the system in early 2019.

MPSIS WAN Encryption and Redundancy

I.T. staff completed a project in 2018 to update the connections between the five MPSIS sites. Federal CJIS security policies require that all data sent between law enforcement agencies be encrypted to a certain standard. The encryption standard was achieved by deploying Fortinet firewalls to each location which encrypt the data travelling between sites to the federal standard.

An added benefit to this project was to also add redundancy between each site and Fitchburg. The Fortinet devices are connected to both the primary fiber connection and to the internet. If the fiber connection fails, the devices will automatically fail over to the secondary internet connection to keep traffic flowing between sites.



MPSIS Major Projects

RMS Replacement Project

The I.T. Manager spent the entire year 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.

An RMS Committee made up of staff from each of the MPSIS agencies was created to work through the replacement of the system. The Committee was led by the Fitchburg I.T. Manager and worked through 2018 to identify needs and develop an RFP.

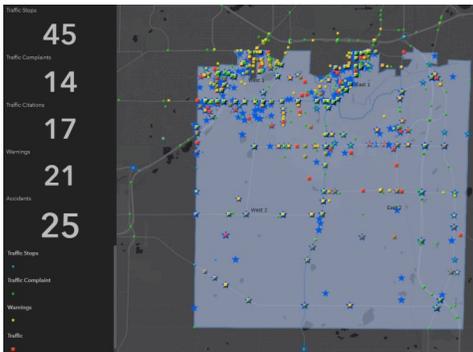


The RFP was advertised in September of 2018 and received six responses. The Committee then evaluated those six responses, chose three finalists, and reviewed demonstrations of each software package. By the end of the year the Committee was ready to make a recommendation to the MPSIS Commission on which vendor to select.

This is a major project for the MPSIS consortium. MPSIS was originally created in 2003 with the goal of purchasing and implementing an RMS for the original three members. The existing software was purchased in 2004 meaning that by the time it's retired it will have served the agencies for 15 years. The goal of this current project is to implement a system that will serve these communities for the next 15 years and beyond.

MPSIS Data Analyst

Stan Howard, the police data analyst, in addition to providing data analysis and reporting to the MPSIS agencies, has also been building an online statistical portal for each agency. The portal is built on ESRI GIS and is intended to be an easy way for staff in each department to review and compare statistics such as traffic stops, crashes, citations, and arrests. The portal is web-based and specific to each agency to allow for focused data. The long-term goal is to provide a similar portal to the public via our web site to allow citizens to interact with the police data to get a better understanding of what is going on in their community.



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:

<https://communitycrimemap.com/>