



## **2017 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.



### Department Staff:

Matt Prough—Information Technology Manager

Eric Kersten—Network Administrator

Katie Evers—Information Technology Support Specialist

Pauline Xiong—Information Technology Support Specialist

Stan Howard—Law Enforcement Data Analyst

JD Yim—Information Technology Intern

## 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, 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.

# 2017 Major Projects

## Overview of 2017

2017 was an incredibly busy and challenging year for the entire I.T. department. A number of large, complex projects all came together in the first half of 2017 which stressed the workload of the I.T. department and I.T. staff. In addition to the substantial workload, the Department was short-staffed due to an FMLA leave for 14 weeks, most of which was during the implementation of the new phone system and West Fire Station completion.

### Phone System Implementation



2017 saw the implementation of a new phone system at most City buildings. This project kicked off in 2016 with a needs analysis and RFP process before culminating in April 2017 with the go live of the new phone system.

The new phone system was procured through a competitive RFP process, and the I.T. department was assisted by a telecommunications consultant who helped create the RFP. Enterprise Systems Group was the low-bidder that met the City's needs and installed a Mitel VOIP phone system.

The Mitel phone system replaced an existing PBX that was installed during the original City Hall construction, and the project included replacing all telephones throughout the City Hall, Library, and Maintenance Facility buildings. Additionally, the project was implemented in conjunction with the schedule for the Marketplace Fire Station to ensure that new building was part of the City telephone system rather than having a separate phone system.

The new phone system is a state of the art system that provides many additional features beyond what was available in the old PBX system. Additionally, the City now has a secondary phone system for redundancy at the Marketplace Fire Station, providing backup capabilities that did not exist with the PBX.

### Police Squad Car iPhones

The I.T. department, at the request of the Police Department, replaced existing basic phones in each squad car with iPhones. The new iPhones provide many additional functions over the old basic phones and are designed to make officers more efficient.

The iPhones are intended to replace the existing point and shoot cameras in each squad, and the phones can both take pictures and also upload directly to the internal police network. Officers can also use the phones to dictate reports and look up a variety of information via various apps installed on the phones for their use.



# 2017 Major Projects

## Door Access System Replacement

Another major project that was accomplished in 2017 was the replacement of the door access control system. The existing system was approximately 7 years old and was no longer supported by the vendor. There had been a number of issues with the system over the last year.

The I.T. Department managed a project in late 2016 and into early 2017 to procure a new door access control system which resulted in a RFP process in early 2017. A local vendor, Integral Building Systems, Inc. submitted the lowest cost bid that met the needs of the City.

The installation of the new door access system began with installation at the new Marketplace Fire Station to ensure that facility had functioning door access control when it opened, and the system was later installed at the City Hall, Library, Maintenance Facility, and Fire Station #1 buildings.

In a later phase of the project the door access system was also installed at the new Huegel Jamestown park shelter.



## Marketplace Fire Station Implementation



While working on the phone system and door access replacement projects the I.T. Department also had to coordinate the installation of the City computer network and related technology systems at the new Marketplace Fire Station.

The work required at the new fire station included the installation of fiber optic equipment necessary to link the new building to the existing City network, as well as the installation and configuration of the network switches necessary to support the computers, phones, WiFi devices, surveillance cameras, and other network equipment.

I.T. also moved all computer equipment from the old Fire Station #2 to the new building during the move-in process and made sure all technology was functional at the new building.

## Computer Replacement

2017 saw the replacement of 50 computers used in a variety of departments including Police, Fire, Assessing, Public Works, and Clerks. The ongoing replacement of old computer equipment is part of the I.T. department long-term plan to ensure all City Staff have the computer equipment necessary for them to efficiently and effectively perform their jobs. Ever-changing software requirements make it necessary to keep computer equipment up to date in all departments to ensure necessary software runs effectively and as required.



# 2017 Major Projects

## OnBase Projects



The I.T. Department continues to enhance the City's OnBase content management system to utilize more of the system. In 2017 I.T. staff worked with the software vendor to perform our first major upgrade of the system, from the 2015 version to the 2017 version.

During 2017 I.T. staff also assisted the Clerk's Department with a project to implement a scanning system for City documentation. I.T. worked with the vendor and the Clerk's office staff to implement the necessary configuration and equipment so that Clerk staff could begin the process of scanning all existing paper documentation in the City vault into OnBase for future retrieval. This is a significant and long-term process that began in earnest in 2017 and is expected to continue into 2018.

## Meeting Laptop Replacement

For the first time since they were introduced, the meeting laptops were replaced at the end of 2017. The meeting laptops are supplied by the I.T. Department for use by Council, Committee and Commission members during public meetings.

The meeting laptops are utilized to view the large documents that accompany the meeting agendas, and these documents can often be hundreds of pages containing reports, maps, spreadsheets, and other documents. The meeting laptops make it unnecessary to print these large documents while also providing tools to search and zoom inside the documents.

## Video Surveillance System—Huegel Jamestown Park Shelter

The I.T. department assisted the Parks Department in deploying video surveillance cameras at the new Huegel Jamestown park shelter. This is the first project where we've extended our network and systems to a location outside one of our major buildings and it required a unique and creative solution. The cameras are on the City video system and can be viewed by both Parks and Police staff. The intention of the cameras was to deter vandalism and other crime at the newly completed park shelter.



## 2017 Major Projects

### Police Body Worn Camera Implementation

In anticipation of the 2018 deployment of body worn cameras in the Police Department, I.T. staff had a significant amount of work to do to prepare for the new cameras.

While the I.T. department has hosted the necessary storage for the squad video cameras for many years, the addition of body worn cameras is expected to substantially increase the amount of data storage necessary to house the video. In 2017

I.T. purchased a new storage unit to house all police video and implemented that on a new server, along with transitioning the current squad video system to that same storage. The new storage provides more than 100TB of storage in a redundant system to ensure there are always two copies of the data at two different buildings.



### Network Switch Replacement Project

2017 saw the beginning of a multiple year project to replace and update all network switches in use in all City buildings. The network switches are the devices to which every computer, phone, camera, door access panel, and many other items plug into. This is critical hardware that ties all our computers together so they can talk to one another.



This project will, over the next several years, replace every network switch, some of which are more than seven years old. The end result will be a faster and more secure data network to meet the needs of the city well into the future.

### Software Application Upgrades

Each year the I.T. department works with city staff, vendors, and software providers to update enterprise applications and systems to keep them up to date and to provide the most current features and functionality. This is an ongoing process throughout the organization.

In 2017 I.T. installed a major update to the TraCS system which is used by the Police Department to write traffic and ordinance citations and to document traffic crashes. We performed an update to the Police Arbitrator system for squad video recordings, as well as the large OnBase upgrade mentioned earlier. Several other smaller systems were upgraded, and each of these require time and resources from the I.T. department to research the upgrade requirements, perform the upgrade, and then handle any issues that may arise.

# 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 West Fire Station. The helpdesk ticket system is used only to track requests for assistance outside yearly I.T. project work.

2017 saw another increase in the number of tickets submitted for assistance, from 2,257 in 2016 to 2,511 in 2017, an 11% increase year to year. This trend is expected to continue as the City continues to grow and expands the amount of technology used by City departments.

## Tickets By Location

	#	%
City Hall	1139	45.36 %
Evidence Building	1	0.04 %
Fire Station #1	118	4.70 %
Fire Station #2	16	0.64 %
Library	99	3.94 %
Maintenance Facility	38	1.51 %
Middleton	36	1.43 %
Monona	20	0.80 %
Police Department	758	30.19 %
Senior Center	96	3.82 %
Sun Prairie	118	4.70 %
Verona	72	2.87 %
<b>Grand Total:</b>	<b>2511</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 five years ago which results in an organization that supports more than 275 users across five locations.

## CAD System Implementation

2017 saw the implementation of the TriTech Computer Aided Dispatch system in Sun Prairie and Monona, along with the TriTech Mobile software in those locations. The TriTech software replaced the Global CAD and mReach products that were in use for the past seven years or longer.

The long term plan for CAD and mobile software is to move from Global's products to those from TriTech. The TriTech software is supplied by Dane County and offers our agencies better interoperability with public safety providers throughout Dane County. Fitchburg, Verona, and Middleton will be moving to TriTech in 2018.

Also beginning in 2017 is the RMS replacement project which will conclude in 2020 and will replace the shared records management system in use today in the five agencies. Planning for this replacement began in 2017 and will continue for the next several years.

## Fiber Connection To Dane County

The MPSIS project expanded upon the use of high-speed fiber connections by planning for a new fiber connection to Dane County. The existing connection utilizes the public internet and isn't ideal for our use case.

In late 2017 an agreement was signed with Wisconsin Independent Network to provide a private point to point fiber connection between Fitchburg City Hall and Dane County to carry TriTech data as well as other information. This connection will be live in mid-2018.

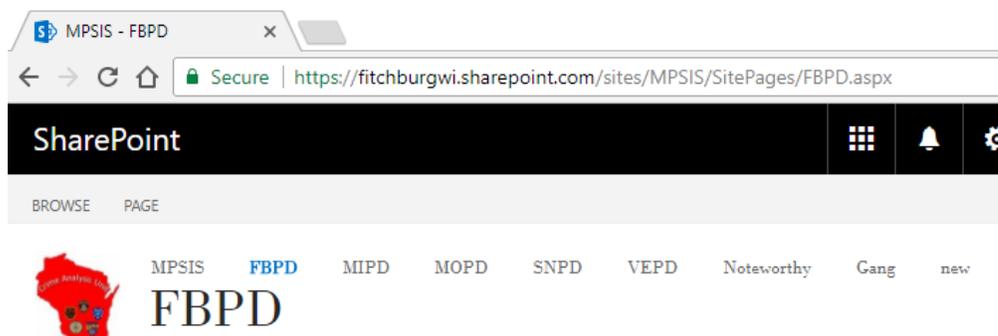
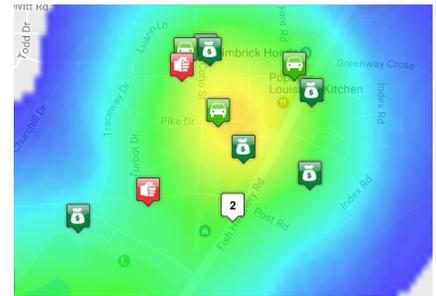


# MPSIS Major Projects

## Data Analyst

2017 was the second year for the MPSIS Law Enforcement Data Analyst, Stan Howard. Stan spent the year working with each department on their data analysis needs. Stan has built databases of information housing law enforcement data from a variety of sources which he then uses to create detailed custom reports based upon the needs of each agency.

Stan is also trained in the extraction of information from cell phones and other mobile devices confiscated as part of investigations. MPSIS purchased the software and equipment used to extract and analyze this information and Stan was certified in it's use by the company, Cellebrite. This service proved very popular and Stan spent quite a bit of time working on cell phone analysis in 2017.



## MPSIS Sharepoint Site

Stan also established a Sharepoint site inside our Office 365 environment for use by all five MPSIS agencies. The Sharepoint site is a central location for each agency to share information both within their own department and with all five agencies. It allows for one location for all types of information and data transfer, and has been very popular with several of the agencies. The intention in the future is to enhance the Sharepoint site with maps and other types of information.

## 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/>

