

**CITY OF MADISON  
FIRE DEPARTMENT  
MADISON, WISCONSIN**



**2017**  
ANNUAL REPORT

FIRE ADMINISTRATION  
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FIRE



EMS



EDUCATION  
& PREVENTION

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# A MESSAGE FROM FIRE CHIEF STEVEN A. DAVIS

Welcome to the City of Madison Fire Department 2017 Annual Report.

The department faced many challenges throughout the year. Sadly, we experienced a civilian fire death early in the year, in mid-February. Although undeniably tragic, Madison still ranks as one of the most fire-safe cities in the country. Based on national statistics, a community the size of Madison usually reports 5-7 fire fatalities during any given year; last year we had one and in 2016 we had zero. This is a testament to how well our Fire Prevention and Community Education units function. It also is confirmation on how well the department is staffed. We manage to get the appropriate number of responders on scene in the appropriate amount of time. The combination of the two—prevention and suppression—working together helps make Madison one of the safest communities in which to live, work, and play in the Dane County.



The MFD had other challenges--and successes--in 2017. We were able to secure funding to design and start construction on Fire Station #14 on the city's southeast side. This station is due to open its doors for business in late 2018. We also were awarded the funds to staff the station with a fire engine through the FEMA Staffing for Adequate Fire and Emergency Response (SAFER) grant. We hired 18 firefighters who started employment in January of 2018 so that when the new station opens, we will have firefighters to staff it. As Fire Chief I would like to give a big shout out to the Mayor, Common Council, and the community for supporting this much overdue resource on that side of the city.

I hope you enjoy the pages that follow. I believe you will find this report to be very informative and enlightening regarding the activities the City of Madison Fire department manages on a day to day basis. When we capture an entire year's work in a single report, you get a picture of how truly busy the department is day in and day out. We function extremely efficiently thanks to the 400+ women and men who dedicate their careers to serving the residents of Madison every day.

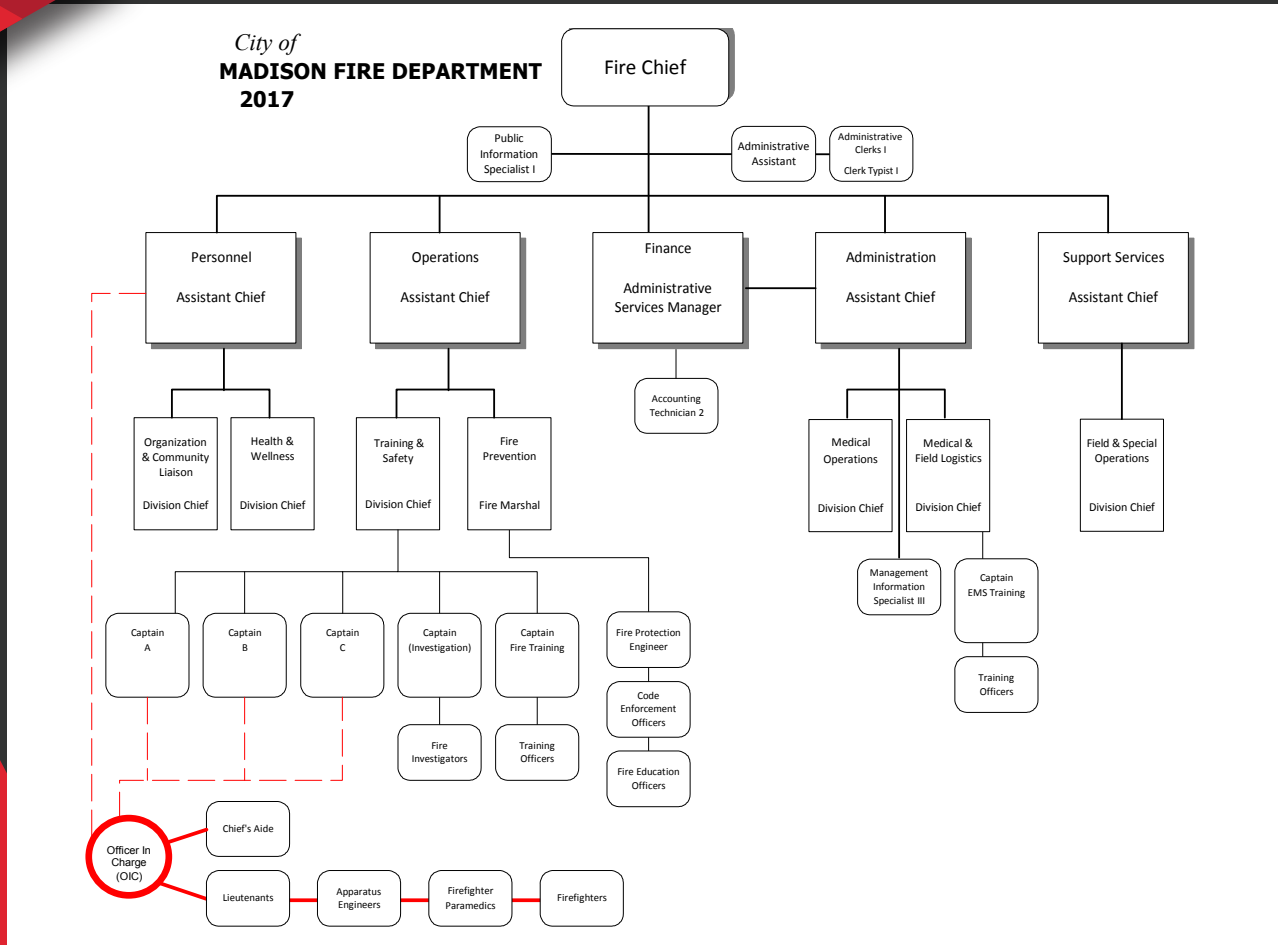
Lastly, I am your Fire Chief; if you have concerns or issues you would like to discuss, please feel free to reach out and contact me.

Stay Safe!

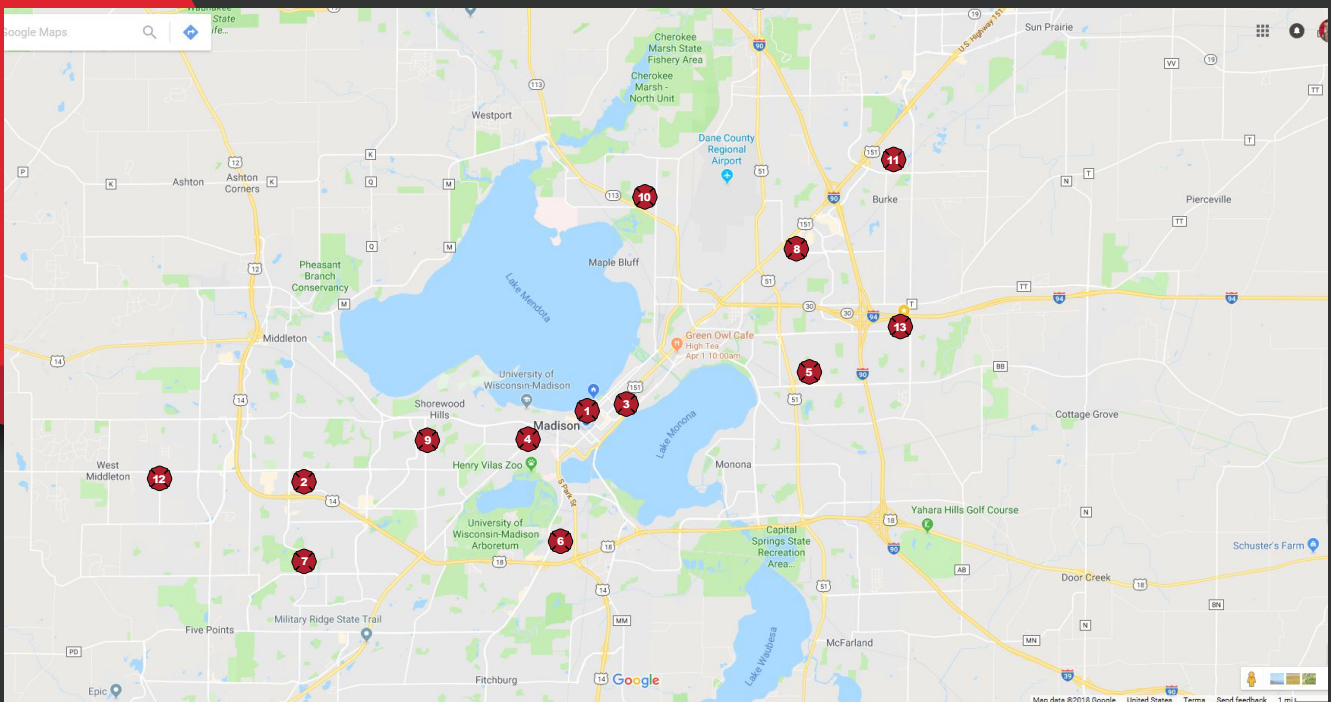
A handwritten signature in black ink that reads "Steven A. Davis". The signature is written in a cursive, flowing style.

Chief Davis

# WHO WE ARE



**FIRE STATIONS** (hover mouse over station to see address).



# WHO WE ARE

## Commissioned Employees

Actual  
Occupied  
Positions

### Title

Chief	1
Assistant Chief	4
Division Chief	6
Apparatus Engineer	59
Apparatus Engineer 2 (Chief's Aides)	3
Captain	5
Firefighter	164
Firefighter/Paramedic	49
Firefighter/Paramedic II	24
Lieutenant	60

## Non-Commissioned Employees

Actual  
Occupied  
Positions

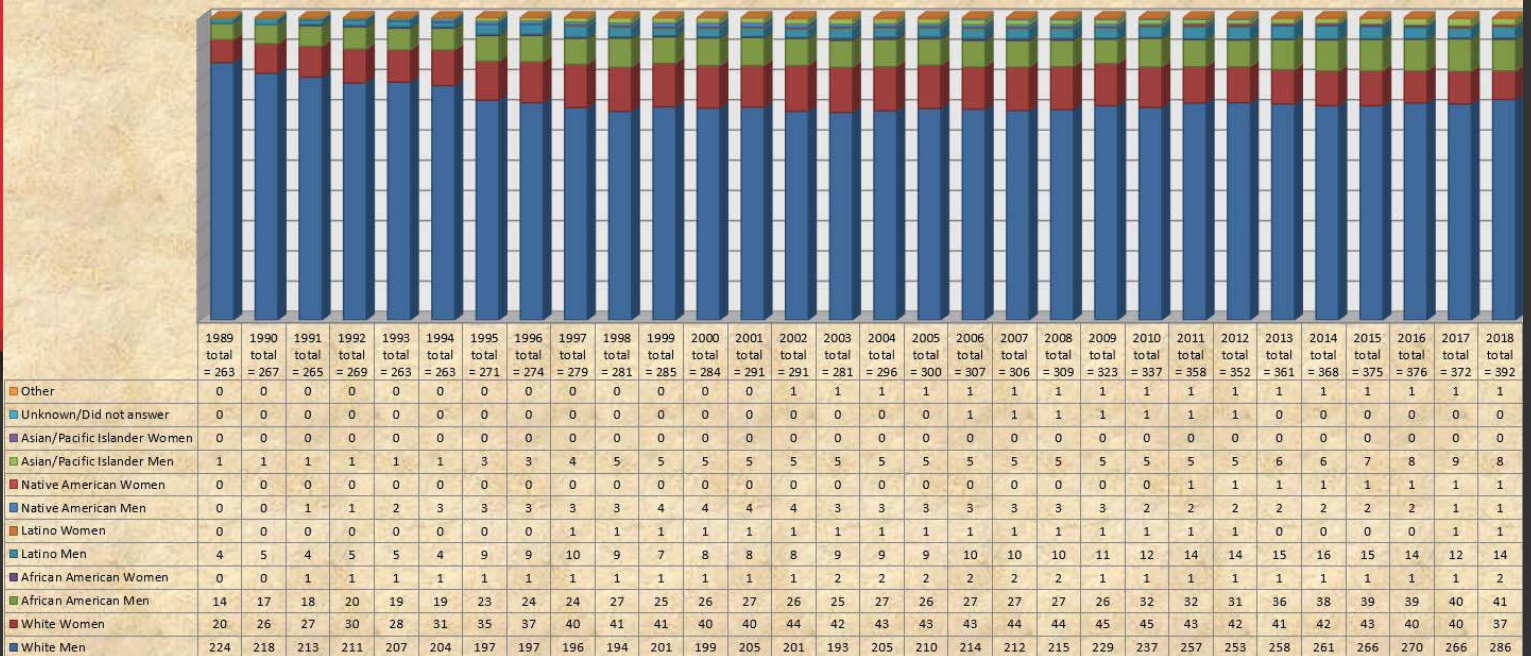
### Title

Administrative Services Manager	1
Administrative Assistant	1
Account Tech	1
Administrative Clerk	4
Clerk Typist	1
Fire Code Enforcement Officer	10
Community Paramedic	1
Elevator Code Enforcement Officer	3
Fire Education Enforcement Officer	1
Fire Marshal	1
Fire Protection Engineer	1
Management Information Specialist	1
Public Information Officer	1

**Total Commissioned: 375**

**Total Non-Commissioned: 27**

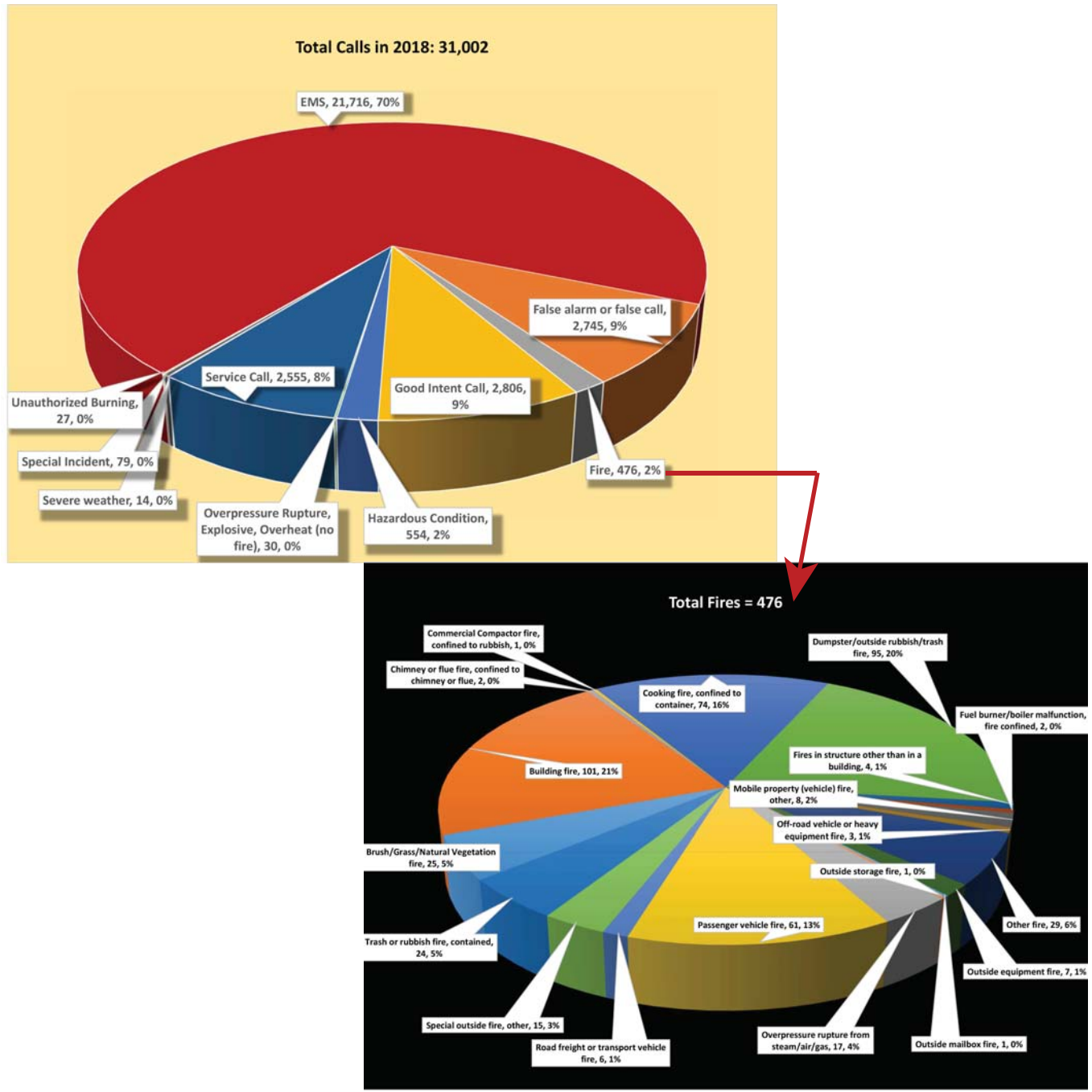
City of Madison Fire Department  
Total Number of Firefighters Employed as of January 1st of Each Year



# SERVICES PROVIDED

The Madison Fire Department (MFD) currently operates out of 13 Fire Stations throughout the City of Madison with a staffing level of 82 on duty each day. This includes 11 Engine companies, 5 Ladder companies, 8 Paramedic units, and 1 Command vehicle in service every day to serve the citizens and visitors to the City of Madison.

In 2017, MFD responded to 31,002 calls for service. The largest single type of call, by far, was for Emergency Medical Services (EMS), accounting for 70% of call volume with 21,716 calls.



# OPERATIONS

## Fire Station 14

We selected a design team for new Station #14. The new station will be located at the land purchased at the intersection of Femrite Drive and Dairy Drive on Madison's southeast corner. The station will serve as the initial response station for this area, which is currently served by a combination of stations. The two primary stations that respond to the Southeast area currently are Station #5 on Cottage Grove Road and Station #6 located on Badger Road near Park Street. Both of these stations have difficult responses to this area, due to their respective distances from the area and the extremely heavy traffic going to this area of the city. We received bids for station #14 late in December and are currently on schedule to start, with completion of construction expected in December of 2018. Once completed, we will be staffing the station with a four-person Engine Company. The Engine Company will be primarily financed by a SAFER grant which the MFD applied for and received in 2017 (see *Grants*, page 20). The grant will pay for the bulk of the salaries for the staffing of this Engine for the first 3 years. The design of the facility includes a large Community room which will be available to both the City and private organizations for meetings and departmental training sessions.



*Architect's rendering of future Fire Station 14. (Courtesy OPN Architects, Madison.)*

## Telestaff (Personnel Scheduling)

MFD implemented a new scheduling platform that consolidates and improves the accuracy and efficiency of staffing in the Fire Department. The program was introduced in other City agencies about two years ago. The program includes daily staffing, vacation selections, overtime staffing and emergency call back among other functions.

## Target Solutions

Madison Fire Department implemented a new web-based training platform. The site is the new source for much of the daily EMS and Fire studies and also provides access to many other essential bulletins, guidelines, and policies that are important to the department. This system has made equipment check-offs and other duties more accurate, efficient, and easy to track. That and many other functions are made much easier for the department to accomplish its missions.

# SUPPORT SERVICES

## 2017 Accomplishments

The Department's **security program**, which is intended to provide a safe environment for personnel and property, was completed in 2017. This program provides employee-specific keyless entry, web-based security cameras, and an IP doorbell system. All 13 fire stations and fire administration now have these systems in place.

At **Fire Station #10** on Northport Drive, employees proposed an **updated landscaping design**, which a contractor installed and completed in the fall. Also at #10 a **new station alerting system** was installed to replace the troublesome 35-year-old system.

As part of a City initiative, **Fire Station 12** received an installation of **photovoltaic (PV) panels**, to add to the energy efficiency of the building. (Photovoltaic energy conversion directly converts the sunlight into electricity).



*Above: Station 12, with the new PV panels off to the right.  
Below: Close-up of the photovoltaic panels.*

Fire **Stations #9** on Midvale Blvd. and **#3** on Williamson Street both had new rubber roofs installed, with additional insulation added as well. City Engineering also installed a **new electrical service and hot water radiators** at **Station 3**.

We completed a **full kitchen remodel** at **Station #5** on Cottage Grove Road, which includes new commercial stove hood venting system, new stainless steel cabinets, resurfaced walls, and updated alarm system. Firefighters will finish the project by applying a custom designed backsplash.

**Fire Station #4** on Monroe Street had all original wooden **windows and blinds replaced** by City Engineering staff with high efficiency aluminum windows.



**The future Fire Station #14** on the far southeast side of Madison went through the design and bidding process with construction to start in March 2018 and opening toward the end of the year. (See *Operations* on page 6 for additional information on Station 14).

*continued...*



# SUPPORT SERVICES

## ***2017 Accomplishments, continued...***

Communications funding provided the department with **upgraded vehicle radios and firefighter portable radios** that will continue to provide interoperability within and outside the department.

Fire Equipment funds enabled the department to purchase the following:

- As part of the department's cancer prevention program, **a second firefighting Nomex hood was issued to all firefighters**, which enables one to be clean and serviceable at all times;
- **35 sets of firefighter ensembles** (turnout coats and pants). Each year, under a standard replacement schedule, a number fire coat and pants are replaced at a cost of about \$2,400 per set.
- Two sets of **battery-operated extrication tools** were put into service at **Station 8** and one for **future new Ladder 7**. These will provide a quicker and more efficient ability to render care to the patients involved in vehicle accidents.
- The Department currently operates 13 front line fire engines and 5 aerial ladder trucks. In reserve, Fleet Services maintains 4 engines and in 2018, 4 ladder trucks. In 2017, **Engines 5, 11, and 12 were replaced** and the older apparatus were either sold or put into reserve status.
- The Department operates 8 advanced life support ambulances and currently keeps four in reserve status. In 2017 the current ambulance specifications were reviewed and the department entered into an agreement to purchase **two new Demers vehicles** for delivery in 2018.

Additional vehicle replacement purchases included the following:

- **Brush truck at Station 12** for vegetation fires occurring off-road
- **Large equipment trailer tow vehicle for the HURT at Station 8**
- **Replacement of two command response vehicles** used by staff personnel who respond to emergency incidents
- The MFD has long been involved in a program to have ambulances remounted when they have reached the end of their useful life (3-5 years). Remounting of an ambulance is done by removing the patient compartment from the chassis and refurbishing it, then remounting it on a new cab and chassis assembly. **Three ambulances were cycled in for remounting** and returned to service in 2017.

## **Goals for 2018:**

- Work with the department's labor/management safety committee to identify measures to lessen frequency of vehicle accidents;
- Continue the replacement of fire stations' antiquated alerting systems, which will improve response time and provide a healthier environment for firefighters;
- Review new ambulance and vendor specifications as the department will acquire two new models in 2018;
- In coordination with the department's Apparatus Committee, evaluate other fire engine models and specifications to provide the best service to Madison residents.

# FIELD OPERATIONS

## Hazardous Materials Incident Team (HIT):

The team is comprised of 57 highly-trained members who can respond to any hazardous material emergency that affects life safety, property, and/or environmental conservation. HIT is a part of the State of Wisconsin Regional Hazardous Materials Response Team and is designated as a Level II team responsible for responding to nine counties if requested by local authorities. These individuals train each week on all types of hazardous scenarios. Last year the City of Madison firefighters had over 1,000 combined hours of hazardous material training and responded to 19 major incidents. The City of Madison Hazardous Incident Team is located at Fire Station 7 on McKenna Boulevard.



## 2017 Hazardous Materials Incident Team Highlights

- **Suspicious package delivered, unknown crystal substance** - HIT responded using multiple hazardous material monitors and identified the substance as Methylenedioxyamphetamine hydrochloride (Ecstasy). HIT members bagged the product in sealed evidence bag and turned over to Postal Inspector.
- **Chemical release at a recycling plant, multiple injuries** – HIT responded monitored facility and removed the package from building.
- **Xylene Spill interior of a Hospital** – HIT made entry, monitored area affected by spill, contained the product, and removed it from the structure.
- **In 2017 HIT purchased a new monitor:** the AeraRAE Pro wireless multi-gas, multi-threat detector. This new monitor detects parts per billion and has sensors to detect: LEL, O2, CO, NH3, PH3, Gamma, and RaeMet (wind speed, wind direction, temperature, and humidity). This technology will vastly improve our team's ability to monitor hazardous incidents.



## Heavy Urban Rescue Team (HURT):

Any emergency requiring technical rescue techniques will initiate the response of the City of Madison Heavy Urban Rescue Team. HURT is a specialized rescue team of 57 dedicated firefighters ready to respond 365 days a year. HURT, based at Fire Station #8 on Lien Rd., specializes in five primary rescue disciplines: trench rescue, building collapse, high/low angle rescue, confined space rescue, and grain bin rescue. *(continued...)*

# FIELD OPERATIONS

*HURT, continued...*

## 2017 Heavy Urban Rescue Team Highlights

- **Processing plant explosion** - Five workers were killed and 12 injured at the plant in Cambria in May. HURT was called to assist with search and rescue of this large scale incident. HURT arrived on scene and extricated one victim who was pinned beneath an over turned rail car.
- **Home explosion** - When a natural gas release leveled a home, HURT assisted with stabilizing the scene and assisted with the corresponding investigation.
- Team members took part in a **building collapse training** which was located at the Regional Emergency All-Climate Training Center located at Volk Field, Camp Douglas, WI. Training included recon of the collapsed building, heavy lifting, concrete breaching, shoring and extricating "victims" from numerous types of entrapments.
- **Motor vehicle vs. home** - This crash caused damage to a support header, which carried the load of the second floor of the structure. HURT responded and shored up the supporting beam so no further damage would be done to the home.



*Clockwise from top: HURT High-Angle Rescue training at Madison Water Utility; High-angle training at the Kohl Center; Trench Rescue training on Femrite Drive.*



# FIELD OPERATIONS

## Lake Rescue Team:

The City of Madison Lake Rescue Team is staffed with 57 Rescue Divers with a minimum of five Rescue Divers each day ready to respond at a moment's notice. Each year the Lake Rescue Team trains on topside, underwater, ice rescues, recoveries, vehicle recovery, and responds to assistance calls from the City of Madison Police Department, Dane County



Sheriff's Office, and other local fire departments. In 2017 the Lake Rescue Team logged over 900 hours of training, including over 250 training dives. This is vital when you consider the popularity of water recreation in Madison year-round and the fact that Madison's five lakes comprise nearly 20% of the city's total area.



*Lake Rescue Team practicing ice rescues on Lake Mendota.*

## 2017 Lake Rescue Team Highlights

The Lake Rescue team responded to 19 incidents in 2017, and each one posed its own unique challenges. Among them:

- Two separate incidents of individuals traveling across a frozen lake when their **ATV went through the ice** and sunk to the bottom, leaving the people clinging to the ice. Lake Rescue personnel responded with the air boat and rescued these individuals, treated them for hypothermia, and transported them to the hospital.
- Multiple rescues of ice fishers who **fell through the ice** while trying to get out on the ice in early winter or getting their last day in before the ice was gone.
- **Catamaran overturned** with two people in the water, LR responded with the Lake Assault boat and assisted with righting the sailboat.
- Individual **injured on the ice**, unable to walk: Lake Rescue and Medic 3 responded and provided care, packaged patient on the ice, moved to land, then transported to local hospital.

# FIRE INVESTIGATION

The **Fire Investigation Division (FID)** is responsible for investigating and determining the origin, cause, and circumstances of structure fires, vehicle fires, any suspicious fire, outside vegetation fires, rubbish fires, and fires with no identifiable origin and cause. Other FID responsibilities include conducting follow-up investigations, pre-employment background investigations, delivering training to the field, as well as remaining current with certifications related to fire investigations.

## FID 2017 Changes:

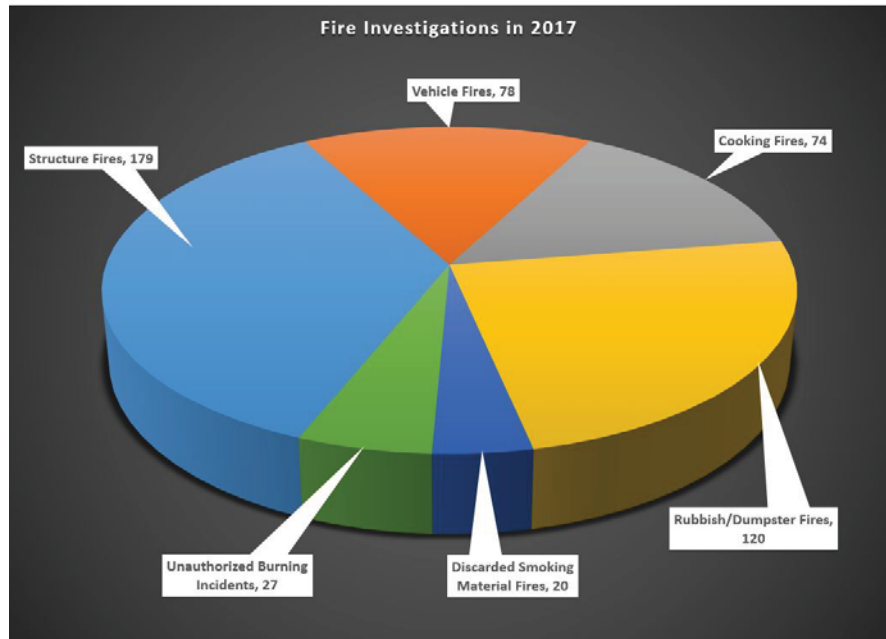
During 2017, FID experienced a number of personnel changes. Captain Todd Steyer led the FID from January 2014 through June 2017, and retired in June 2017 after 30

years of service with the City Madison Fire Department (MFD). Captain Steyer was responsible for implementing changes in the structure and function of FID during his time in investigation. Upon Captain Steyer's retirement, Captain John Fleming assumed responsibility of FID.

## Follow-Up Investigations/Actions:

During 2017, FID investigators conducted hundreds of follow-up investigations regarding minor fire calls or other calls for service. The goal of follow-ups is to review the report completed by the lieutenant in the field, make contact with the community member(s) involved, and offer assistance when needed. Using a problem solving model, efforts are undertaken to educate the involved parties about future preventative efforts they can take to minimize the chances that such an event will occur again. Although prevention and risk reduction are the focus of these follow-up visits, this public outreach is also meant to send a message to the community that the Department, through the efforts of FID investigators, is a partner in their recovery as well as their overall safety.

Reviewing old case files is also the responsibility of FID. In 2017 investigators reviewed a "cold" case from 2003, where a fire resulted in a death. This investigation was performed in conjunction with MPD and included countless hours of case review and re-interviewing of multiple witnesses.






# FIRE INVESTIGATION


## Significant Criminal Cases:

Arson criminal investigations continue to be an important focus of the FID. The close cooperation and communication FID investigators have with the Madison Police Department (MPD), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Department of Criminal Investigations (DCI), Wisconsin State Crime Laboratory and the District Attorney's Office, is key when bringing arson crimes to justice.

During 2017, FID investigators were involved in multiple criminal arson investigations. In one case, an individual purposely dispensed a flammable liquid and ignited it at a point of egress from a single family residence. Diligent investigators not only completed a scene exam and a number of interviews, but also performed several test burns, ultimately resulting in an arson conviction through trial. In another case, it was noted during the scene exam, even though a couch was the area of origin, there were multiple trailers (deliberately introduced fuel used to aid the spread of a fire from one area to another) were discovered throughout the apartment. The apartment was then declared a crime scene and search warrants were obtained through MPD in preparation of an arson charge.



There was one death in 2017 as a result of fire. This fire was likely the result of unattended candles burning, in addition to non-functioning smoke detectors in the unit. Subsequent to this unfortunate event, the Madison Fire Department, with assistance from Local 311 members, the American Red Cross and WisSAFE coalition, installed smoke detectors in multiple buildings within the complex with the hope of preventing any further incidents.



In April, a home owner fabricated a story to investigators that included a home invasion and an intentionally set fire. This residence sustained severe fire damage which eventually caused a partial floor collapse. MFD Heavy Urban Rescue Team (HURT) was brought in to mitigate the water in the basement and to shore up the structure for investigator safety. Through several interviews, over the course of many days, along with fire scene reconstruction and fire pattern analysis, it was determined this fire was actually accidental.

In 2017 FID also investigated two significant explosions, one to a single family residence and one to a commercial structure under construction. A single family residence explosion resulted in a multi-agency response in which an investigation ensued that lasted 6 days on scene. The second explosion involved a commercial property that was in the process of being remodeled which included raising the roof. During this remodel, a worker was in the course of placing new columns to support the roof, when he lost control of a column, which in turn fell and struck an unsecured LPG tank, causing it to rupture. A forklift running in the area ignited the gas from the LPG tank, which resulted in an explosion, significantly injuring the worker. There was minimal fire damage to the structure as a result of this incident.



# FIRE INVESTIGATION



## Juvenile Fire-Setter Program:

FID investigators continue to concentrate their efforts on not only solving fires but also intervening when suspicious fires involve juvenile suspects. In 2017, there were several such incidents in the City of Madison Parks system, causing hundreds of thousands of dollars' worth of damage to playground equipment. Investigators ultimately identified all of the juveniles involved. With the assistance of the MFD Community Education Unit and the Madison Metropolitan School District, the offenders enrolled in the **Children & Fire Program**. The focus on intervention is particularly important when juveniles have no prior fire-setting activity. These efforts, coordinated by the MFD Community Education Unit, are undertaken with the belief that such intervention can help prevent future fire setting behavior and reduce or eliminate dangers to the home and community before involving the criminal justice system.

## Product Safety/Recall:

FID investigators continue to work with the U.S. Consumer Product Safety Commission and insurance companies when the specific cause of a fire may have been a faulty appliance or product. The purpose of such collaboration is to not only determine how or why the product may have failed, but also ensure this information is documented to possibly initiate a recall of the product. Dehumidifiers and hover-boards are a few examples of products that were identified as potential ignition sources in 2017.

## Background Investigations:



FID investigators are responsible for pre-employment background investigations for all prospective MFD hires. Each background investigation involves hours of work which includes contacting various law enforcement agencies, interviewing employer and personal references, querying numerous databases, and ultimately providing a written report to the Fire Chief for review prior to offers of employment. In 2017, FID conducted approximately 59 background investigations on applicants for various positions offered within the Fire Department.

## Training and Certification:

FID investigators continue to be very involved in professional organizations that provide continuing education in the field of fire investigation. These organizations include the International Association of Arson Investigators (IAAI), the Wisconsin Chapter of the International Association of Arson Investigators (WIAAI), and the Dane County Arson Response Initiative (DCARI). Investigators attend seminars, presentations and training conducted by each of these organizations throughout the year. In addition, FID hosted **Anatomy of Arson** class for regional investigators, presented by the ATF and DCI. During 2017, two MFD Fire Investigators obtained their Fire Investigation Technician (FIT) certification through the IAAI.

FID investigators also deliver fire training to recruits in the Madison Police Academy as well as recruits in the Madison Fire Academy. Investigators also provided in-service fire investigation and report writing training to newly promoted Lieutenants and Apparatus Engineers. FID investigators also deliver fire investigation training to fire crews at the company level.

## 2018 Goals:

The focus on obtaining advanced training and certification in the field of fire investigation will continue in 2018. We are examining various seminars, training programs and other educational opportunities with the goal of further developing and certifying each FID investigator, as well as honing the skills of each investigator to better serve the City of Madison Fire Department and the community.

# EMERGENCY MEDICAL SERVICES DIVISION - EMS

## Medical Direction

In November, we introduced Dr. Megan Gussick as the new Medical Director for the City of Madison Fire Department. Dr. Gussick started as an EMT in high school working for her hometown volunteer fire department in Campbellsport, Wisconsin. While attending the University of Wisconsin, she obtained her EMT-I license and started working for Oregon Fire and EMS where she continued working throughout undergrad and medical school. Doctor Gussick completed her Emergency Medicine residency at the UW and continued for an additional year to complete an EMS Fellowship. In 2016, Doctor Gussick officially joined the UW EMS Division to work with the prehospital providers in Dane County in many different facets. Doctor Gussick will continue to work shifts at the Emergency Department at UW Hospital, UW East, VA, and on UW MedFlight.



*New MFD Medical Director Dr. Megan Gussick, on board one of MFD's eight Medic Units.*

## PulsePoint Verified Responder

Each year, approximately 350,000 cardiac arrests occur outside a hospital setting in the United States. Nearly 90% of these events prove fatal, and the chance of survival decreases by 10% with every passing minute without CPR. The Madison Fire Department was one of four departments selected in the nation to be included in the Verified Responder Pilot Program. This partnership with the PulsePoint Foundation has allowed off-duty Madison firefighters the ability to respond to cardiac arrest calls in public and private settings. Participating professional firefighters are also certified emergency medical technicians or paramedics. Philips Healthcare donated 100 AEDs to participating Madison

firefighters to ensure that even when off-duty, a professional emergency medical responder can employ the same technology they use when on-duty to restart a heart that has stopped beating.

Richard Price, president and founder of the PulsePoint Foundation states, "Firefighters know all too well that their skills are sometimes needed when off-the-clock. In some ways, PulsePoint Verified Responder simply formalizes the 'always in service' dedication and full time commitment that comes with the badge."





# EMS TRAINING DIVISION

The EMS Training Division continues making the increased needs of the City of Madison its priority. More personnel trained to the EMT and Paramedic level is a necessity. Highlights for 2017 include the end of one initial EMT class and the beginning of another as well as seven brand new Paramedics getting released to the field.

In December, MFD purchased, set up, and implemented a new software program called **Operative IQ**. This cutting-edge program is designed to manage department assets such as consumable supplies, vehicles, tools, and communication equipment. Closely monitoring our inventory of short- and long-term assets will allow us to meet supply demands and be more cost-efficient.

Two members of the MFD Leadership Team traveled to the **Wisconsin Dells Emergency Medicine Symposium** to present a class on Active Threat Warm Zone Operations to over 250 attendees. This class was not only credited to attending medical personnel for continuing education but was instrumental in aiding other Fire, EMS and hospital organizations around our state to start their own operational plans and training programs.



Two new state-of-the-art ambulances were designed and ordered in October of 2017 and will be put into service in April of 2018. This purchase will better serve the community and also increase the number of reserve ambulances the MFD has available.

# FIRE TRAINING DIVISION

The Training Division's focus in 2017 centered on building and assisting field personnel with acclimation to the new department learning management/drill recording system, Target Solutions. One of the main goals for 2018 will be to have all personnel receive and record 100% of their ISO training hours.

The Training Division staff includes a Division Chief and three Shift Captains who are primarily responsible for training development and delivery. For recruit academies and orientation training for newly promoted personnel, the Division expands to allow other field personnel with an interest in training to participate in the development of others.

## 2017 Accomplishments Include:

- **New Personnel**

17 new hires successfully graduated from the Recruit Academy with certification in FFI, FFII, Hazardous Materials Technician, Emergency Medical Technician, and Incident Command System Level 100, 300, and 700.

- **Acting Officer Self-Study Program**

17 newly-promoted Apparatus Engineers were assigned to the **Voluntary Acting Lieutenant's Self-Study Program** in Target Solutions designed to offer training in officer skills over a 6 month period

- **Lieutenant Orientation Week**

Week-long orientation for 2017 Lieutenants promotional process candidates.

- **Training Staff - Shift Captains**

Continuing to integrate Shift Captains within the Training Division to support field company training in annual training plan topics, develop new equipment training, deliver recurring training programs, and assist with coordination of special teams training.

- **New Equipment Training**

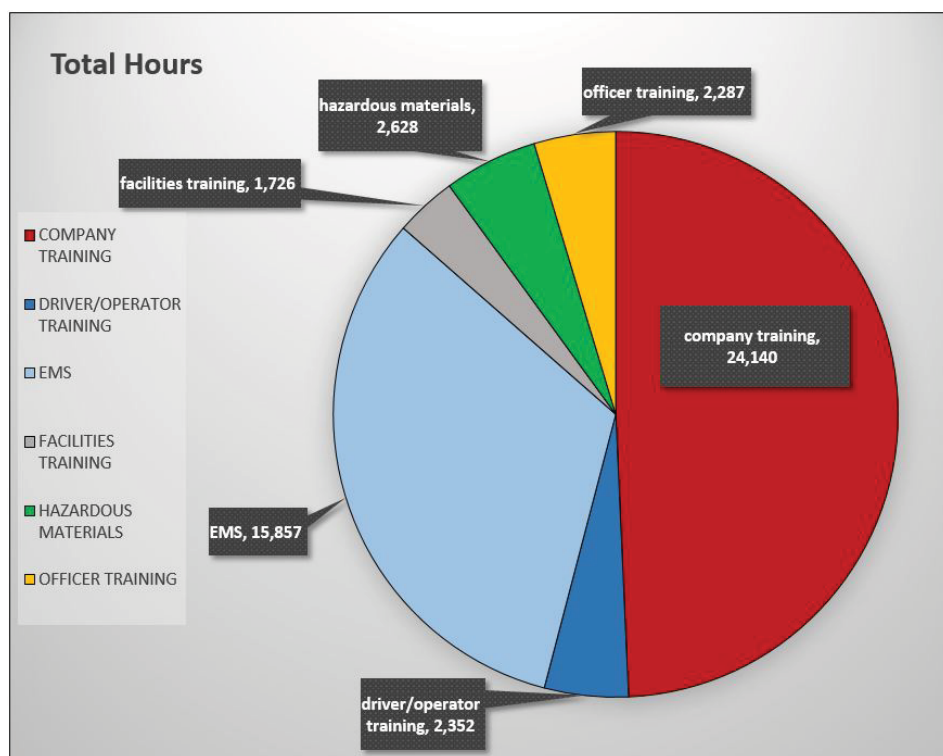
Dual Band Radios  
Tower Ladder 8  
Supplied Air System

- **Training Video Production**

Dual Band Radios  
Tower Ladder 8  
Supplied Air System  
LUX Automated Parking System

- **Officer Quarterly Training**

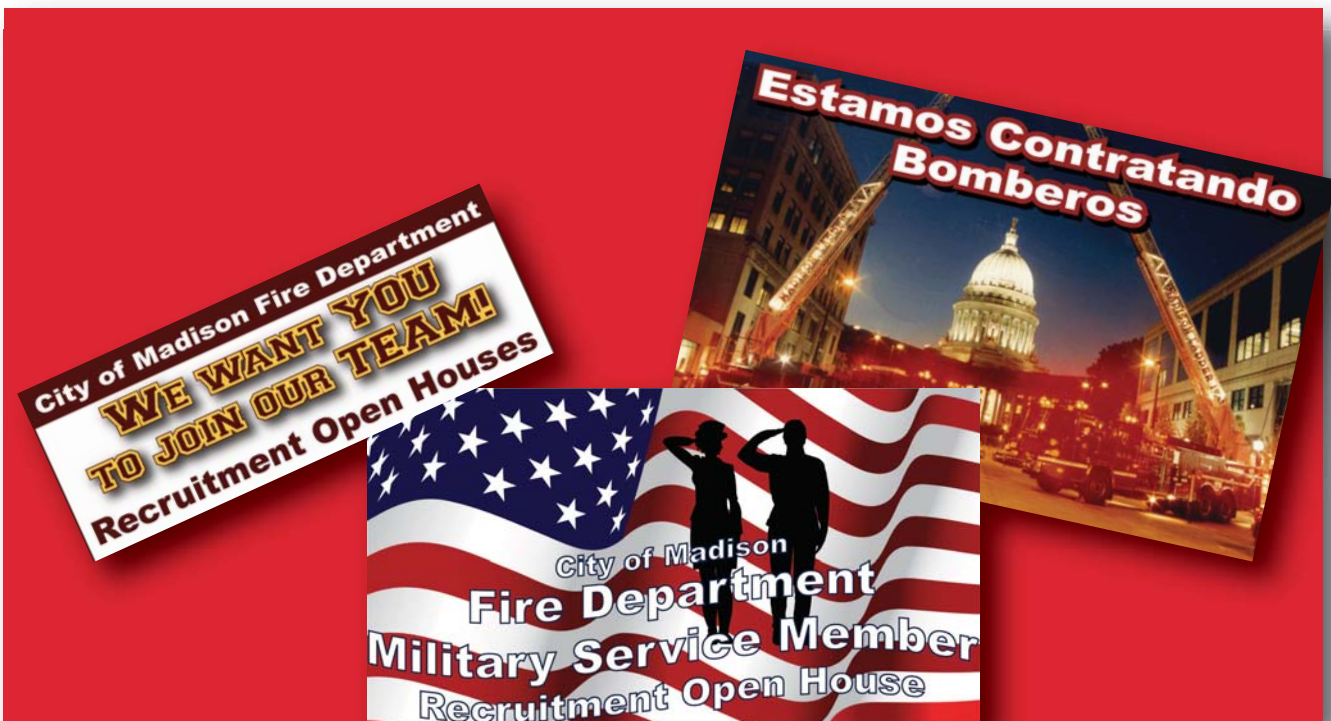
Fire Chief Davis delivered a training that focused heavily on the topic of leadership.



# RECRUITMENT

## 2017 Firefighter Application Process

The MFD Recruitment Committee was busy in 2017, as it was the active year in our biannual hiring process for entry-level firefighter/emergency medical technicians. The members worked tirelessly to promote the hiring process in every way possible, including: hosting four recruitment open houses, staffing a variety of events including career fairs, small and large group presentations, station tours, ride-alongs, individual meetings; advertising extensively online through social media outlets; and going door-to-door to area events and businesses. In addition, Madison was awarded the CrossFit games, which provided new avenue for outreach, allowing members meet and greet athletes and fans in their venue.



## Other special highlights for 2017:

### Winter/Spring:

- Participating in African American, Latino-American, and Asian-American Youth Career and College Fairs at Madison College
- Completing a recruitment survey from all members of our last five hiring classes.

### Summer:

- Hosting 30 Latino middle school youth during the Latino Youth Leadership Academy for a morning of fire related hands-on stations,
- Presence at the Firefighter Fun Day events at Stations #5 and #9.

# RECRUITMENT

## 2017 Firefighter Recruitment, continued...

### Fall:

- Hosting 19 women in CampHERO 4 Women
- A day-long Girl Scout program featuring hands-on evolutions in the areas of police, fire and EMS,
- presence at our Annual Free Pancake Breakfast at Station #3.

### Winter:

- Participating in the first FutureQuest career exploratory program for Dane County middle schools; we specifically reached 300 students during the day-long event where over 5,000 kids came to learn about careers.

The Recruitment Committee is dually invested in the long-term recruitment conversations with youth, as well as adults, as we strive as a department to hire and retain employees who reflect the diversity of the community we serve. Our goal is to develop a diverse pool of applicants from which to hire, and each hiring cycle our diverse applicant numbers fluctuate. This year we accepted 1,615 applications between October 1st and November 30th with our highest total of female applicants thus far. We had 163 women apply to be City of Madison Firefighters, which is 10% of our total applications, up from 8.8% in 2016.

2017	TOTAL		GENDER		
			F	M	ND
Total Applications	1615	100.0%	163	1436	16
			10.0%	88.9%	1.1%

2017	TOTAL		RACE/ETHNICITY							
			AI	A	B	H	PI	O	ND	W
Total Applications	1615	100.0%	15	11	99	104	6	49	21	1310
			0.8%	0.8%	6.1%	6.4%	0.4%	3.0%	1.3%	81.1%

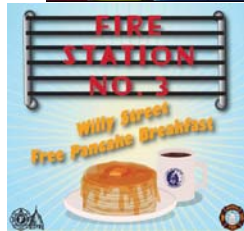
We accomplished this with local and targeted recruitment efforts, such as the four Open Houses we conducted to inform women and people of color about career opportunities with the City of Madison Fire Department.



# COMMUNITY OUTREACH & GRANTS

## Community Outreach Programs:

In 2017, Community Outreach programs continue to help achieve the mission of the City of Madison Fire Department by providing activities during non-emergency situations. We have continued several initiatives such as **Firefighter Fun Day**, **Community Action Resource and Education (CARE)** program, **Pancake Breakfast at Station #3**, and **Friday Nights at the Y**. In the summer months, the MFD participated in the **Wanda Fullmore internship program**. This year a student from LaFollette was selected as our intern. This



student shadowed firefighters at the station and on calls, worked on special projects and learned CPR. The MFD attended over 25 community, neighborhood and block party events including **Junteenth Celebration**, **West Fest at Elver Park**, and **Bridge Lake Point Waunona Neighborhood Summer Party**. In addition to neighborhood events, the MFD had a positive presence in Madison Schools. The MFD participated in **Read Your Heart Out Day**, **AVID TOPS**, classes and career fairs.

## Grants:

In 2017, the MFD received a **Staffing for Adequate Fire and Emergency Response (SAFER) grant** in the amount of \$2,353,476. These funds will be used to staff new Fire Station #14 that will be located on the Southeast side of Madison. This station will improve fire and



emergency response in Madison neighborhoods south of the beltline and Hwy 51/Stoughton Road. In addition to the SAFER grant, the MFD received a small grant from the Walmart Foundation for Community Outreach and a grant from the State of Wisconsin for Hazardous Materials equipment.

# HEALTH & WELLNESS

## Medical Exams and Services

All medical services provided by Dean Health are based on the **NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments**. Medical exams are required for all 57 Hazmat Team members and were completed with Dean Health at their Fish Hatchery Road facility.

Dean Health also conducted 44 pre-employment medical exams for 2017. This medical exam is the most thorough process of all the medical services provided by Dean Health.

We offered flu vaccinations to all commissioned and civilian personnel of the MFD again this year. Approximately 145 personnel took advantage of the offer and obtained a flu shot.



## The Health and Wellness Committee

The MFD **Peer Fitness Team** consists of five members who work to improve the health and fitness of the MFD. In 2017, the PFT played a pivotal role in implementing the **Tactical Athlete Health & Performance Institute** program. TAHPI is a consulting firm that helps with rehab case management for IOD (injured on-duty) and TRD (temporary restricted duty, i.e., off-duty injured) personnel. They can work directly with the provider and our worker's comp carrier to ensure the employee is getting the most appropriate treatment in the most timely fashion. This is a completely voluntary program and completely confidential to the employee. The TAHPI program will fully activate in 2018 and should help reduce cost of time-lost wages due to injuries.

The PFTs have also worked this past year to draft **Fitness Standard Operating Guidelines (SOGs)** with plans to implement them in 2018. A big challenge the Fitness team tackled in 2017 was to find a more creative and effective way to disseminate pertinent fitness information and resources. The team now utilizes the Target Solutions platform to provide workout ideas, nutrition tips, and videos that promote fitness for on and off duty. In 2018, the team plans to implement education strategies to help reduce injuries and continue to promote overall health and fitness.

# EMERGENCY MANAGEMENT

Emergency management is often perceived as a response by the police and fire departments. This perception is partially correct. However, emergency management includes many city agencies working together to plan, respond to, mitigate, and recover from natural- and human-caused incidents or disasters. Others see emergency management as something the county, state, or federal government provides for the local units of government. Emergency management is very much a local responsibility. In the event of an incident or disaster, city agencies are the first to arrive and the last to leave.

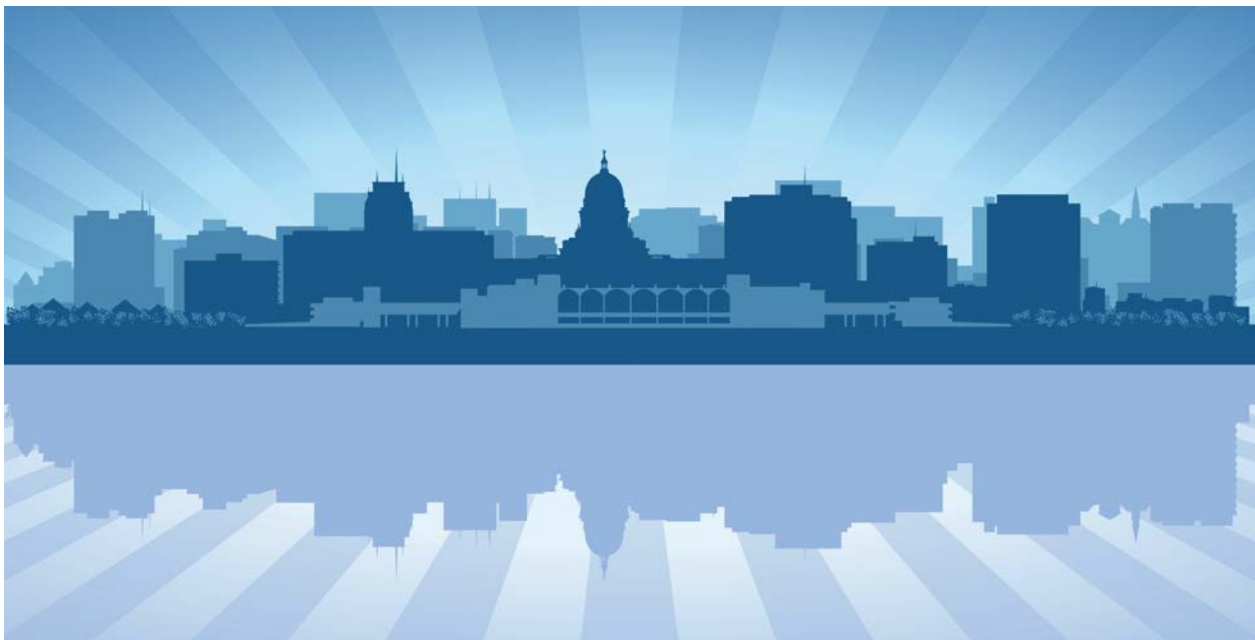
The Emergency Planning Staff Team meets six times a year.

The team includes police, fire, public works, health, mayor's office, local utilities, county governments and others. The team continues to develop emergency management plans.

Recently developed plans include community recovery, large scale evacuation, and donations management. Plans being developed include joint information and debris management.

Another function of the team is to test our plans and response capabilities through tabletop and functional exercises. In 2017, exercises tested unified command, public warning, public information, and coordination of operations. Scenarios for the exercises were based on a west-side tornado and flooding in the isthmus. Each exercise resulted in an after-action report outlining steps for improvements.

In 2018, the team will plan and carry-out a tabletop exercise based on a large-scale incident at a community event.

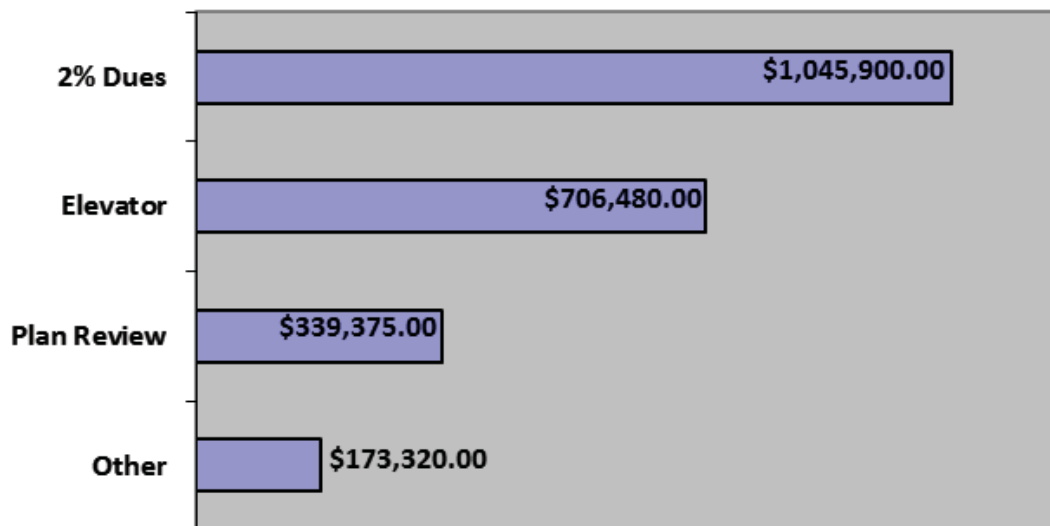


# FIRE PREVENTION

Fire prevention services are provided to the citizens and visitors of Madison, the Village of Shorewood Hills, and the Town of Blooming Grove through four distinct work groups. These groups are Code Enforcement, Community Education, Fire Protection Engineering, and Elevator Inspections.

The Fire Prevention Division works hard to provide high quality services to the citizens and visitors of our great city through a multi-tiered approach to code compliance. This approach makes the City a safe and vibrant place for people to live and work, while providing a high degree of safety for our firefighting personnel.

**Revenue generated by the Fire Prevention Division in 2017**



## Fire Prevention 2017 Accomplishments

The Fire Prevention Division exceeds many goals on an annual basis, both set inside and outside the department. In 2017:

- The department hosted the **Madison Construction Symposium** as a means to connect with builders, design professionals, and property owners. The program included our partner city agencies involved in the design and construction of buildings. Representatives of the Water Utility, Engineering, and Building Inspection, as well as Fire, provided content for the program. Given the number of attendees and positive evaluations, the program will be an annual event.
- A fifth week was added to **Safety Town** to engage underserved kids in the Head Start program. Ensuring that Safety Town has a diverse student enrollment has long been a goal of the MFD and American Family Children's Hospital.
- The Department worked with City Information Technology to streamline our elevator inspection tracking software and processes.



# FIRE PREVENTION

We continue to strive for excellence in all that we do to serve all of our residents and visitors. Our training is the core guiding principal of the work that we do. Working closely with field staff, command staff, the general public, and the local politicians allows us the ability to tailor our fire prevention strategies to the needs of our local responders and citizens.

Future initiatives of the Division align with the department's strategic plan and address some contemporary issues in community safety. Projects for 2018 include the following:

## Promote Fire Sprinklers

Recent developments have paved the way for the installation of more fire sprinkler systems in existing buildings. Some significant achievements put the MFD in a position to advance the idea of installing fire sprinklers in a way that directly benefits building owners and reduces the financial impact of protecting lives, property, and the environment through the installation of fire sprinklers. These achievements include:

- o Federal tax reform in late 2017 allowing owners to write off the cost of installing fire sprinklers in existing buildings. The cost is recovered in no more than five years.
- o The MFD worked with Engineering and the Water Utility to develop a process for owners to increase the size of the water supply to the building during street reconstruction. The savings to property owners can be more than \$20,000 when they increase the water supply during a public works project and install fire sprinklers at a later date.
- o The MFD is working with the Water Utility to find ways to reduce the monthly up-charges for properties with fire sprinklers.



## Community Event Safety

As most residents of the city know, Madison is rich with outdoor community events, concerts, programs and sporting events. The Fire Prevention Division will increase its efforts to ensure public safety during the events. Plans for 2018 include:

- o Host a safety and security summit for event organizers and operators.
- o Easy-to-understand handouts for canopy, cooking, propane, and generator safety.
- o Educate event organizers and operators on how to provide adequate exits and set an approved capacity.

Tragic events in the U.S. and other countries have heightened the need for increased safety at public events. Our goal is to prevent fires and minimize the impact of intentional harmful acts against people at community events.

# FIRE PREVENTION

## 2018 Prevention Initiatives, *continued...*

### Community Education Guidance Team

The Division will implement a **Community Education Guidance Team**. The goal of the team is to provide general direction for the community education services of the MFD. The team will engage stakeholders and solicit input to define and prioritize programs and services. The team will explore community needs, opportunities for collaboration, research other successful model programs and evaluate existing and new programs. Thus far, the plan includes these benchmarks:

- o Stakeholders and community partners in injury prevention will be solicited to determine interest and need.
- o Programs of nationally recognized fire safety organizations will be utilized.
- o Stakeholders will play a significant role in setting priorities.
- o All programs will include some form of evaluation to gauge program effectiveness.

## Code Enforcement

The Code Enforcement Unit of the Fire Prevention Division is made up of 10 Fire Code Enforcement Officers and a hybrid Code Enforcement/Community Education Officer. As a unit, we focus on verifying that all commercial buildings in the City are operated and maintained safely.

Our primary responsibility and focus is on performing fire safety inspections in all multi-unit residential and commercial properties. The field staff (firefighters) assists with many of the inspections, allowing us to be inside the majority of buildings twice a year.

While that is our primary focus, our unit assists in many other areas such as the Occupant Support Unit (OSU), community education, plan review, and many other assigned duties. Along with the additional duties that our unit performs, the number of inspections climbs every year, along with the complexity of the inspections.

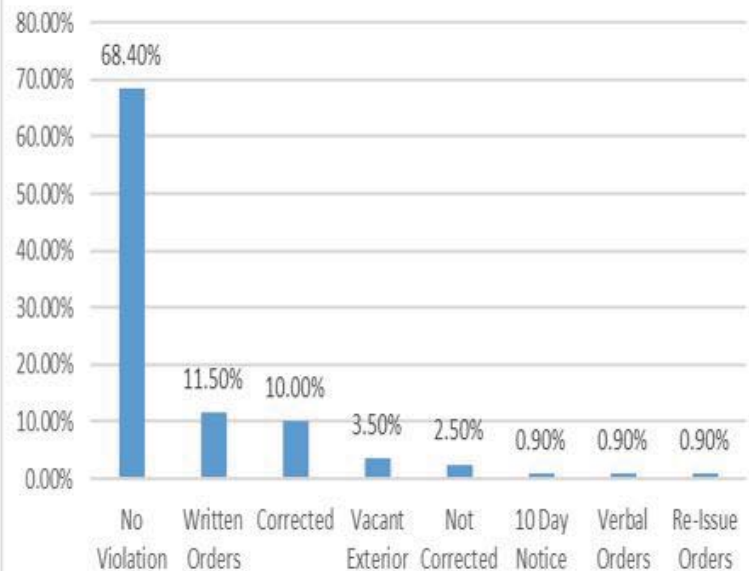


# FIRE PREVENTION

## 2018 Code Enforcement, *continued...*

The Madison Fire Department conducts inspections as mandated by state statutes. Mandated inspections cover all commercial buildings and multi-family residential buildings with three or more units. The inspections cover roughly 16,000 addresses in the inspection tracking system. In addition to routine inspection activities, MFD completed new construction, tank inspections, licensing, and other related inspection activities. Inspection personnel also conduct safety and capacity checks at bars and taverns during peak hours. In all, MFD performed over 25,000 inspection activities in 2017.

2017 Inspection Results



## Community Education

In 2017, our hybrid Code Enforcement/Community Educator worked with our Fire Code Enforcement Unit to deliver safety presentations throughout Madison and surrounding communities. The primary goals of Community Education are to reduce risk factors, educate the public on the dangers of fire, and promote the health and well-being of our citizens.

Our Community Educator engages adults and children throughout the year, and in many different formats. Our activities reached over 37,000 individuals throughout 2017, with over 25,000 of them children. The activities ranged from presentations at schools to station visits to safety scavenger hunts. We trained hundreds of adults on the proper use of fire extinguishers, helping them keep themselves and their families safe. Education on proper cooking techniques and juvenile fire setting education are other large components of our community education unit.

The department assisted in over 20 car seat checks at fire stations throughout 2017. This partnership with **Madison Safe Kids Coalition** provided over 500 car seats, at low cost, to families in need. We also checked hundreds more car seats for proper installation.

In total, our Community Educator spent over 545 hours of contact time with the citizens of our great city in 2017.



# FIRE PREVENTION

## Fire Protection Engineering

The Fire Protection Engineering Unit works with the planning, development, and construction communities to ensure fire and life safety standards are identified and addressed. MFD accomplishes this by offering to sit down with developers and architects during the initial design phase as it is more economical to make adjustments on paper than after installation. The department also works with other City of Madison agencies to resolve conflicts and balance the various goals the City as a whole hopes to accomplish. MFD has a role in the review and approval of development site plans, fire protection system plans, and if necessary, building and fire code variances.



In 2017, the Fire Protection Engineer reviewed approximately 290 projects through the City Planning process and verified that another 262 proposed site plans complied with applicable codes and standards. Also, our Fire Code Enforcement Officers logged over 1,850 new construction inspection activities alone, with plan review generating over \$339,000 in revenue. 2018 looks to be busier yet, as the number of new buildings continues to soar in Madison.

These activities help to verify that fire protection systems are installed correctly and function as expected. The Unit also acts as a code consultant helping contractors understand how and when the codes and standards apply as well as providing direction for those unique situations that are not specifically addressed in the standards.

The Fire Protection Engineering Unit engages in the code development process to influence the standards to meet the needs of the City of Madison and its citizens. State and local agencies continue to look to MFD as experts in our field and ask for assistance and guidance with their projects and processes.

# FIRE PREVENTION

## Elevator Inspection

The fourth public safety service provided by the Fire Prevention Department is the inspection of elevators, escalators, and lifts. Roughly 2800 elevators and other conveyances are inspected annually to ensure the devices comply with the safety standards set by the national, state, and local codes.

In addition to the inspection of existing elevators, the department conducts plan review and acceptance tests of new elevators, lifts, and escalators. Three certified Elevator Inspectors check a variety of interlocks, brakes, limit switches, and other redundant safeties to ensure conveyances are safe for use.



## Elevators by the Numbers for 2017:



# of Inspection Activities



# New Elevators  
(and other conveyances)

# Alterations & Modifications  
to existing Conveyances



# FINANCE

## 2017 OPERATING BUDGET AS OF FEB 1, 2018

	Adopted Budget	Actual with Encumbrances	Balance
*Permanent & Premium Salaries	\$ 32,472,811.00	\$ 31,977,127.00	\$ 495,684.00
Hourly wages	7,212	9,899	(2,687)
Overtime Salaries	1,755,600	1,967,359	(211,759)
Special Duty	86,000	90,746	(4,746)
Benefits	12,804,267	13,121,932	(317,665)
Other Grants/Transfers	150,244	118,278	31,966
Purchased Services	1,406,834	1,094,820	312,014
Materials & Supplies	1,121,194	1,023,407	97,787
Inter-Agency Charges	3,989,012	3,961,408	27,604
Capital Assets	-	-	-
Inter-Departmental Billings	(1,500)	-	(1,500)
*Revenue	(2,013,642)	(1,545,097)	(468,545)
<b>Net Budget</b>	<b>\$ 51,778,032.00</b>	<b>\$ 51,819,878.75</b>	<b>\$ (41,846.75)</b>

\* Includes Grant Funding

## 2017 CAPITAL BUDGET

PROJECT	AMOUNT
Fire Equipment	\$ 877,000
Communications Equipment	293,100
Minor Building Improvements	50,000
Fire Station 14	450,000
<b>TOTAL</b>	<b>\$ 1,670,100</b>

