

# 2016 Annual Report

## City of Madison Fire Department



## A Message From Fire Chief Steven A. Davis

Welcome to the City of Madison Fire Department 2016 annual report. The fire department functions extremely efficiently due to the nearly 400 women and men that dedicate their work life to serving the City of Madison residents every day.

The department went through many changes, both big and small, in 2016 to help us serve the citizens of the City of Madison even better. One of the major changes was the addition of our Mobile Integrated Health program. The program is known internally as Community Paramedicine. The department was fortunate to receive grants from the Meriter Foundation as well as a grant from the National Institute of Health (NIH) which is managed in conjunction with UW Hospitals. You can read the details of the program in the following pages. The program has been incredibly successful and is a model we will continue to build upon in the coming years. The basis of the program is to intervene with patients who have often needed our services and prevent them from entering a crisis that may require them to call 911. We hope that continued contact with these individuals will help strengthen their own medical control and care without major interventions from medical facilities.

I hope you enjoy this year's Annual Report. I think you will find the report to be very informative as it illustrates all the activities that the City of Madison Fire Department manages on a day-to-day basis. Altogether, the results shows how busy the department is every day. This report also captures how dedicated each and every person in the department is to the quality of life in our city.

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

Stay Safe!



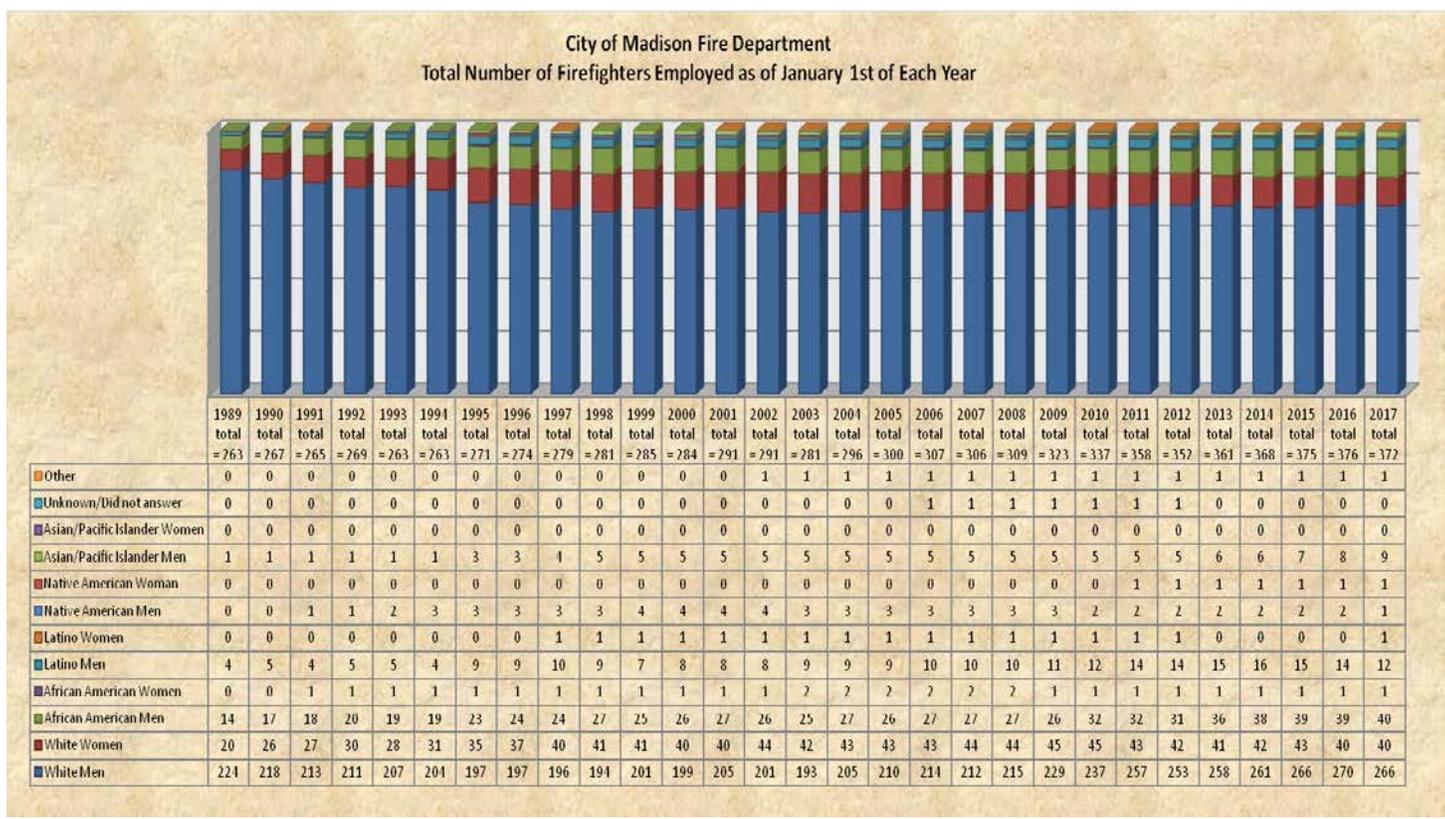
Chief Steven A. Davis  
Madison Fire Department



# Madison Fire Department Annual Report

## Who We Are

Commissioned Employees		Non-Commissioned Employees	
Title	Actual Occupied Positions	Title	Actual Occupied Positions
Chief	1	Administrative Services Manager	1
Assistant Chief	4	Administrative Assistant	1
Division Chief	6	Administrative Clerk I	4
Training Officer	5	Clerk Typist I	1
Training Officer II	5	Code Enforcement Officer I	2
Training Officer III	1	Code Enforcement Officer II	1
Fire Investigator II	2	Code Enforcement Officer III	4
Captain	7	Code Enforcement Officer IV	2
Lieutenant	52	Elevator Code Enforcement Officer I	2
Apparatus Engineer	60	Elevator Code Enforcement Officer II	1
Apparatus Engineer II	3	Fire Education/Code Enforcement II	2
Firefighter/Paramedic	46	Fire Protection Engineer	1
Firefighter/Paramedic II	24	Fire Marshal	1
Firefighter	156	Management Information Specialist III	1
		Public Information Specialist	1
		Community Paramedic	1
<b>Total Commissioned:</b>	<b>372</b>	<b>Total Non-Commissioned</b>	<b>26</b>

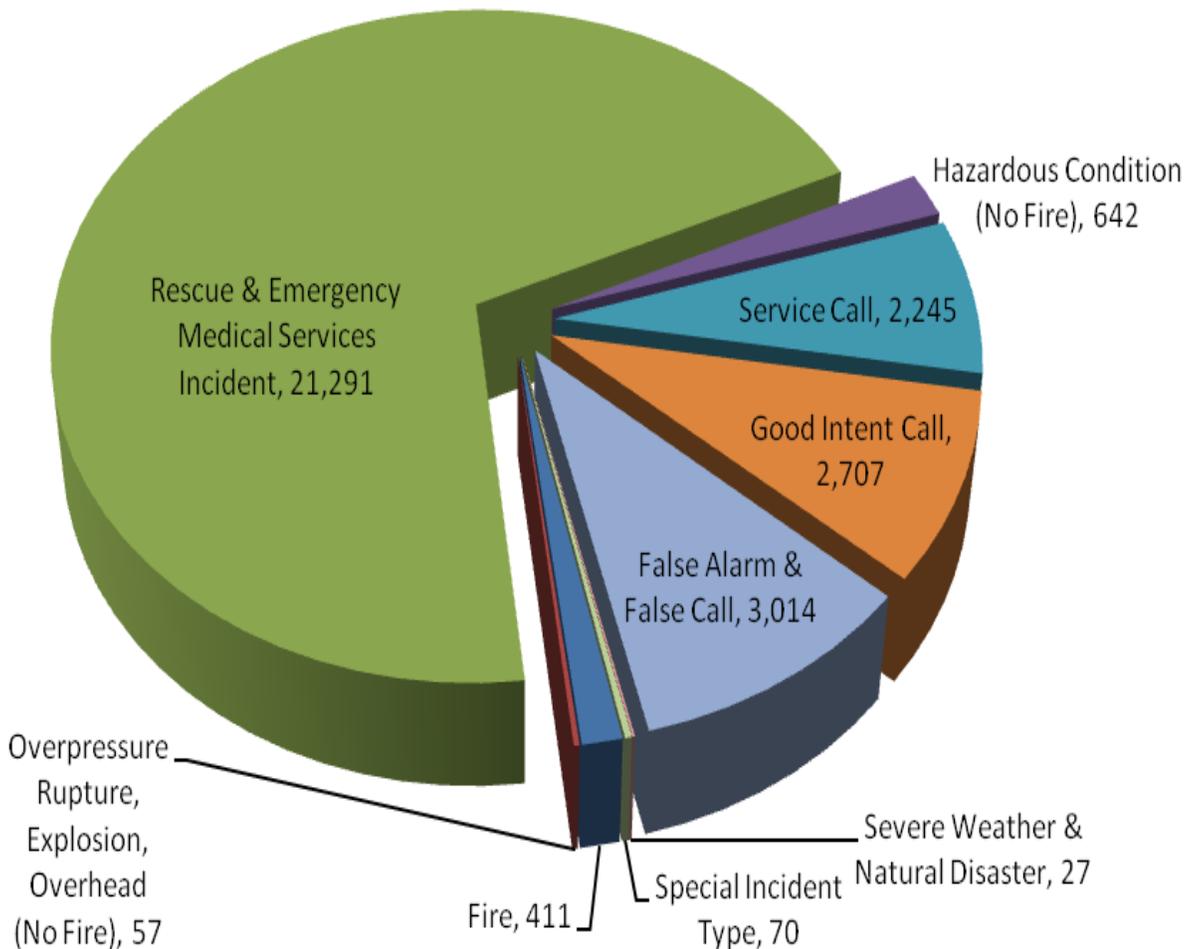


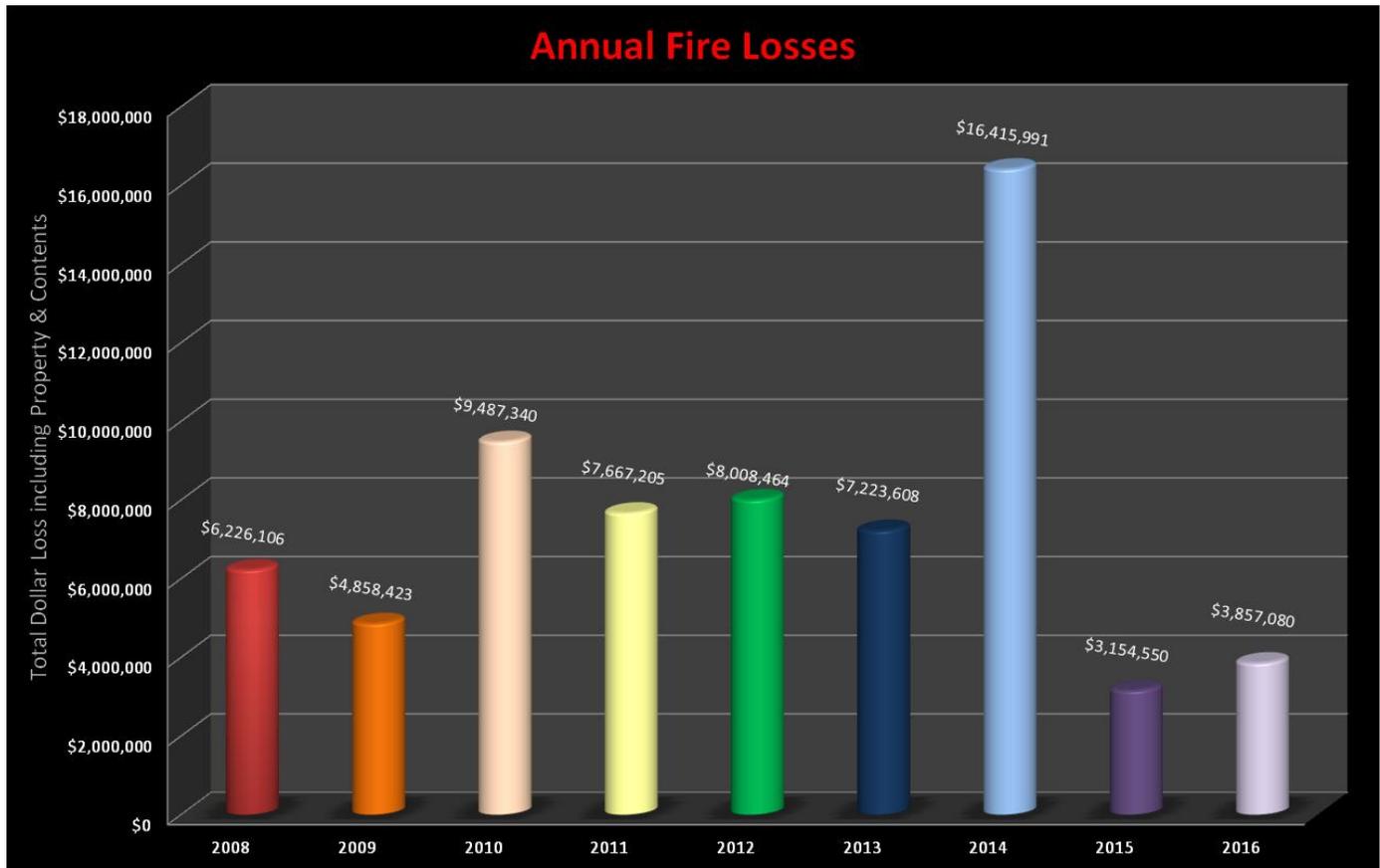
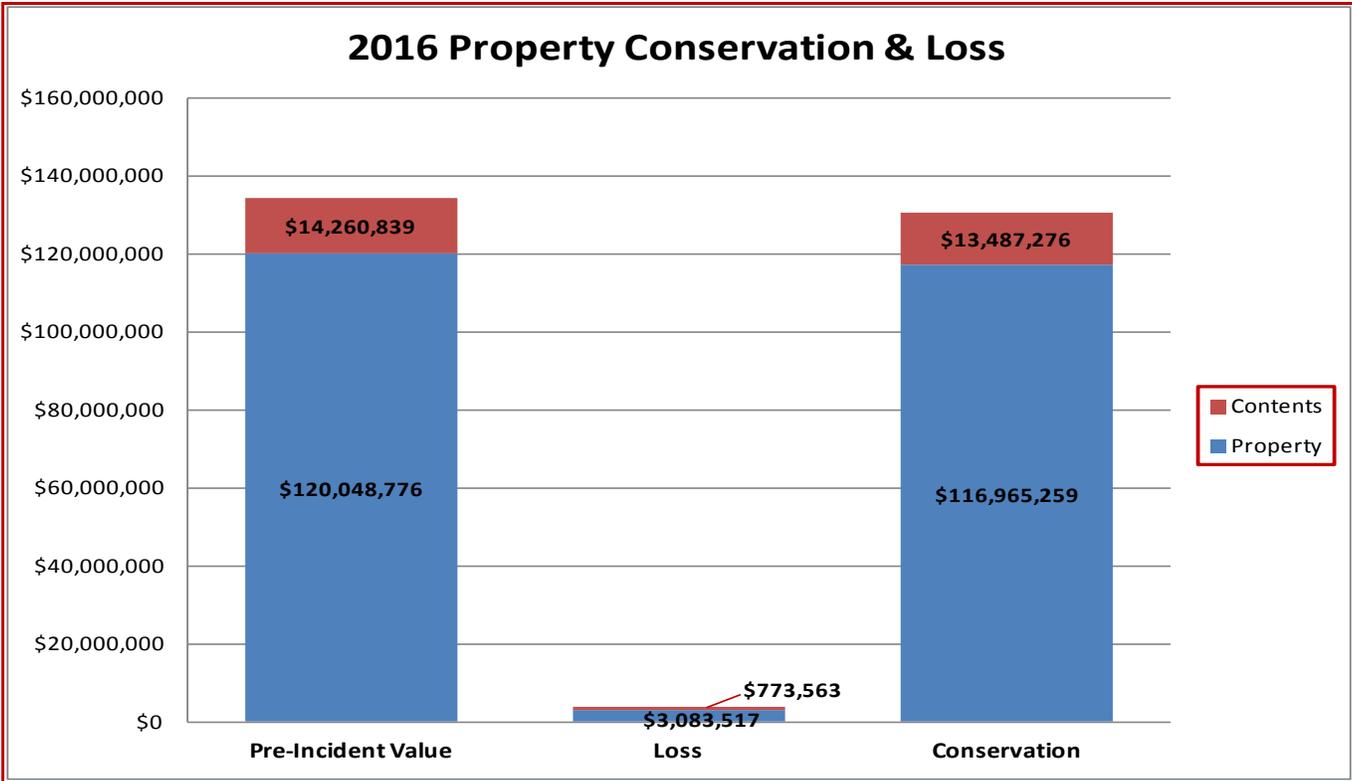
### Services Provided

The Madison Fire Department (MFD) currently operates out of 13 Fire Stations throughout the City with a staffing level of 82 personnel on duty each day. There are 11 engine companies, 5 ladder companies, 8 paramedic units, and 1 command vehicle in service every day to serve the citizens of and visitors to the City of Madison.

In 2016 the City of Madison Fire Department responded to 30,464 calls for service. The largest single type of call was Emergency Medical calls and they accounted for 21,291 of this total (over 69%).

### 2016 Activity for the City of Madison Fire Department





## Emergency Medical Services Division

**Community Paramedicine/Mobile Integrated Health Initiatives:** Throughout 2016, the Mobile Integrated Health pilot program continued to grow momentum. The MFD is participating with the UW Hospital in a grant funded by the National Institutes of Health (NIH) which supports older adults that have been discharged from the Emergency Department. The goal of this program is to study and potentially decrease hospital readmission rates. The Meriter Foundation has also provided funds through grants to allow the program to manage cases for 10 high-service users in the community. Once these patients were identified, the community paramedics focused on why they were calling 911, what their needs were, and (most importantly) what resources were available to help address those issues. With home visits and linking these patients with other resources, we were able to address social, psychological, and medical issues. Statistically, it was clear that this program decreased the number of ambulance transports and reduced the total cost of healthcare for these patients. Due to the success of the Mobile Integrated Health pilot program, the MFD was able to expand its role to include two full-time paramedics that have received special training that focuses on the social determinants of health, illness prevention, health promotion, and other topics.

**Tactical EMS (TEMS):** The need for Tactical EMS (TEMS) was at an all-time high in 2016. This prompted the addition of two more team members, bringing the total number up to twelve current members. Numerous hours of training with Tactical Law Enforcement ensured that the Madison Fire Department TEMS team is capable of assuming dangerous tactical assignments with a high degree of proficiency and expertise. This collaboration enables them to operate efficiently and safely within the inner perimeter during a crisis.

**Special Events:** Madison Fire Department provided emergency medical services for more than 60 events in 2016. These events included the annual fireworks show, Shake the Lake, multiple 5k and 10k runs, half-marathons, full marathons, mini-triathlons, and the Wisconsin Ironman Competition. Many University of Wisconsin sporting events are also covered by MFD including, for the first time, the PGA Champion's Tour Golf Championship held at UW Ridge Golf Course. It was so successful that it will be returning again in June 2017.



**EMS Training and Licensing:** Seven newly-trained and licensed EMT-Basics were released into the field in early 2016 through the Class 4 Fire and EMS Academy. Eight new Fire and Emergency Services Instructors were also added and were instrumental to the success of Class 4. Paramedic class Group 63, consisting of seven new students, also started on September 12<sup>th</sup>. The newly-licensed paramedics from Group 63 will begin practicing in the field in March 2017. Additionally, 20 new CPR instructors were certified. These instructors train many of Madison's other City agencies on how to save lives through CPR.

A new learning platform software called Target Solutions was purchased and is being customized for training in both fire- and EMS-related topics. The program will be the main source for all of the department's training, record keeping, and biannual relicensing activities moving forward.

The entire department went through Warm Zone operations training to prepare for mass casualty and active threat incidents as part of the EMT refresher curriculum. This also served as a beginning for training more closely with area law enforcement agencies.

## Field Operations

### Hazardous Materials Incident Team (HIT):

The City of Madison Hazardous Incident Team (HIT) is located at Fire Station 7 on McKenna Boulevard. The team is comprised of 57 members who are highly trained to respond to any hazardous material emergency that affects life safety, property, and/or environmental conservation. HIT is ready to respond 24 hours a day, 365 days a year. These individuals train each week on all types of hazardous scenarios: Material spills, chemical leaks and/or releases, radiological emergencies, and unknown substances or odors.

Last year the City of Madison firefighters had over 1,900 combined hours of hazardous material training. HIT is a part of the State of Wisconsin Regional Hazardous Materials Response Teams and is designated as a Level II team responsible for responding to nine counties if requested by local authorities.



### **2016 Hazardous Materials Incident Team Highlights**

- ✓ April: Responded with a local fire department to a report of a semi-truck trailer that spilled its contents on the highway over a half-mile distance. HIT strategically placed absorbents to contain the spill, which was collecting in the roadway gutters. Samples were obtained and collected. Test results from equipment found a match of derisoquin sulfate and sodium cyanide. The spill was contained by the Hazardous Incident Team on scene and rendered safe. The Department of National Resources was notified and a private contractor was utilized for final cleanup.
- ✓ August: Responded to a local business for several onsite workers feeling dizzy and light-headed. The business was evacuated and HIT monitored the building for air quality. HIT determined the symptoms were caused by work being performed on the roof by a contractor. R22 refrigerant had been released into the building and circulated through the air handling system. The building was then mechanically ventilated to mitigate the hazard.

## Field Operations, continued

### Heavy Urban Rescue Team (HURT):

HURT, based at Fire Station 8 on Lien Rd., is ready to respond to any specialized emergency, whether it is a window washer trapped on a high-rise building or a utility worker injured in a confined space deep underground. The Heavy Urban Rescue Team is a specialized rescue team of 57 dedicated firefighters ready to respond 365 days a year. These individuals have a minimum 300 hours of training dedicated to 5 specialized disciplines: Trench rescue, building collapse, high/low angle rescue, confined space rescue, and grain bin rescue. In 2016 the HURT team logged over 1,892 hrs of specialized training.



### 2016 Heavy Urban Rescue Team Highlights

- ✓ February: Responded to the Town of Burke when a worker's hand became caught in a commercial trash compactor. Together with Sun Prairie Fire Department, specialized extrication tools were used to free the worker's hand.
- ✓ July: Responded to Iron Ridge, WI for three missing teenagers in an abandoned mine with the Iron Ridge Fire Department, Milwaukee Fire Department HURT, and the Dodge County Sheriff's Office. These departments were given the assignment of searching the mine and surrounding area. MFD developed an Incident Action Plan (IAP) and split into two teams: One team to search the mine and the other to search the surrounding area. The mine has one main shaft with many offshoots and tunnels throughout, which includes pockets of water up to eight feet deep. After being on scene for seven hours and conducting an extensive search in the abandoned mine, the three boys were located deep in the mine and brought out to safety.

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### Field Operations, continued

#### Lake Rescue Team:

Since Madison's several large lakes offer outdoor recreation year-round, we need to be trained in every water rescue contingency, from swimmers and boaters in summer to people falling through the ice in winter. 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 2016 the Lake Rescue Team logged over 2,000 hours of training, including over 300 training dives.

In April 2016, the City of Madison received a new Lake Assault<sup>®</sup> boat which is 24 feet long and powered by twin 150 hp outboards. This boat was christened the *Ralph E Chamberlin II* after the founding member of the Lake Rescue Team. The new Lake Assault boat is equipped with a Lowrance™ navigation system which includes GPS, chart plotting, SONAR, side scan SONAR, and a FLIR infrared camera. Another special tool is a 500-gallon-per-minute fire pump for extinguishing fires on boats, the shoreline, and other fires in hard-to-reach locations on our lakes. Each one of these special features improves the Lake Rescue Team's responses. This is vital when you consider the popularity of water recreation in Madison and the fact that Madison's five lakes comprise nearly 20% of the city's total area. Every second counts, and the new locating tools on the *Ralph E Chamberlin II* will go a long way to ensure successful rescues for many years to come.



#### 2016 Lake Rescue Team Highlights

- ✓ January: Ice fisherman saved after falling through the ice on his ATV on Lake Mendota
- ✓ February: Two people and three dogs assisted back to shore after one person fell through the ice on Lake Waubesa
- ✓ June: Five adults and one child rescued after their boat overturned on Lake Monona
- ✓ July: Children who became stranded while kayaking on Lake Wingra were saved
- ✓ November: Recovered a victim from a car that was submerged near a boat launch
- ✓ December: Two fishermen rescued after falling through the ice on Lake Kegonsa

## Fire Investigation Division

The Fire Investigation Division (FID) is responsible for the investigation of structure fires, vehicle fires, any suspicious fires, outside vegetation fires, rubbish fires, and fires with no identifiable origin and cause. In 2016, FID was involved in the investigation of 176 structure fires, 52 vehicle fires, 69 cooking fires, 103 rubbish/dumpster fires, and 41 unauthorized burning incidents.



**Changes to FID in 2016:** Division Chief Mike Dibble, who led FID for three years, retired in January 2016 after 34 years of service with the department. Chief Dibble was responsible for significant changes in the structure and function of FID during his tenure. Upon Chief Dibble’s retirement, Division Chief Tracy Burrus assumed responsibility of the division.

Additionally, Fire Investigator II Rick Lavold retired in April 2016 after 22 years with MFD, 7 of which were spent in FID. Investigator Lavold was involved in a number of significant fire investigations during his time with the division. Investigator II Mike Egan was transferred back to the field and was replaced by Apparatus Engineer Kara Nelson.

The administrative offices of the Fire Investigation Division were moved from an off-site location to the new Administration Building.

**Follow-Up Investigations/Actions:** During 2016, 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 Madison Fire Department, through the efforts of FID investigators, is a partner in their recovery as well as their overall safety.

**Significant Criminal Cases:** Arson criminal investigations continue to be an important focus of the FID. The close cooperation and communication that FID investigators have with the Madison Police Department (MPD), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Department of Criminal Investigations (DCI), and the District Attorney’s Office, are key when bringing arson crimes to justice. During 2016, FID investigators were involved in multiple criminal arson investigations.



**Noteworthy Vehicle Fires:** In February 2016, fire investigators responded to a suspicious vehicle fire in a local park. Investigators through their investigation and interviews were instrumental in the discovery of a homicide victim, which ultimately led to a suspect being identified and convicted of murder. In another incident, FID investigators responded to questionable a vehicle fire, only to discover that incendiary devices had been placed on the vehicle prior to the discovery of the fire. During the heated political campaign of 2016, another vehicle arson fire was found possibly linked to politically motivated vandalism.

Arson fires to structures include a variety of targets. Investigators were involved in charging a disgruntled motorist with the ignition of uncontained gasoline after he became angry. This ignition occurred immediately adjacent to a gasoline pump at a local service station. In another case, investigators were involved in the conviction of an individual who purposely dispensed flammable liquid at several points of egress from a single family residence. Businesses can also be targeted. In October 2016, multiple tenant spaces in a commercial building were targeted by an arsonist who was apprehended and charged. Apartment buildings were also targeted by arson in 2016. In one case, while investigating a suspicious basement fire, investigators



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identified that an unrelated boiler had been deliberately tampered with. With this discovery, the boiler was powered off and further loss was prevented. In another apartment related arson case, investigators, in cooperation with MPD and ATF, determined the apartment complex had been deliberately targeted when a large exterior fire was purposely set.

### **Juvenile Fire-Setter Program:**

FID investigators continue to concentrate their efforts on intervening when suspicious fires involve juvenile suspects. In 2016, there were several such incidents. This focus is particularly important when these juveniles had no prior fire-setting activity. Intervention efforts allow the option of intervening with juvenile offenders through educational efforts that include the "Children & Fire Program." This effort, coordinated by the MFD Community Education Unit, is undertaken with the belief that such intervention can help 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.

### **Background Investigations:**

FID investigators conducted pre-employment background investigations for all new prospective members of the Department. Each background investigation involves approximately twenty hours of work and includes contacting various law enforcement agencies, interviewing employers and personal references identified by the job applicants, querying numerous databases, and ultimately providing a written report to the Fire Chief for review prior to making offers for employment. In 2016, the FID conducted background investigations on approximately 30 applicants for various positions within the 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, one investigator was invited to attend an "Advanced Arson/Fire Origin & Cause" two-week course put forth by the ATF.

FID investigators also delivered fire training to recruits at the Madison Police Academy as well as recruits at the Madison Fire Academy. Investigators are also responsible for providing 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.

### **2017 Goals:**

- ✓ Focus on obtaining advanced training and certification in the field of fire investigation.
  - Seminars and other training programs
  - Further develop and certify each FID investigator while honing and developing skills to better serve MFD and the community.
- ✓ Increase efficiency by welcoming three new field captains to assist in investigations.



## Support Services

### New Administrative Offices:

The Fire Department moved into its new Administration building at 314 W. Dayton Street in December 2015. This move established new permanent offices for the Command Staff, Fire Prevention Division, Elevator Inspectors, EMS Training, Fire Investigation Division, and administrative support staff. The building also houses a new Command Center, which has been activated for numerous events and is used for training and lectures.

### Station Updates:

- *Future Station #14:* MFD continued to study the need for an additional fire house and apparatus for the far southeast side of Madison in order to better and more quickly serve that area of the city and surrounding areas. The mayor and city council approved the design of the new station in the 2017 budget. The new site was purchased in 2013 and is located near Femrite Dr. and Dairy Dr. Construction is slated to begin in 2018.
- *Station #4:* This station received a new deck off of the kitchen on the second floor, allowing a place for a grill and eating space adjacent to the kitchen. New high-efficiency aluminum windows have also been ordered and will be installed throughout 2017 to replace the 35-year-old original wood windows.
- *Station #10:* This station went through asbestos abatement and the installation of new flooring in the sleeping quarters and part of the office area. The new flooring will allow easier maintenance and is safer. The building has been with the department for nearly five decades and needs numerous upgrades in order to remain a functional fire department building.
- *Security Systems:* Old security systems are being replaced with new systems. In addition to entry systems, new surveillance cameras are being installed. This project is continuing into 2017.

### Equipment Updates:

- *Apparatus:* MFD purchased two new engines. They are the same chassis as previous engines, but have some changes including internal ladder storage, which allows the previous ladder storage space to be used for equipment compartments. Additionally, new valve styles were used, replacing pullout-style valves with lever-style valves. This should eliminate issues that stemmed from the large number of universal joints. Two additional engines were ordered and will arrive in early 2017.
- *Medic Units:* Two medic units were replaced with rebuilt units. By buying a new chassis and then refurbishing and mounting the existing rear compartment of the ambulance, the program saves over \$100,000 per unit compared to buying new.
- *Lake Rescue Boat:* The department purchased a new 24' Lake Assault boat which includes a 5'-wide bow door for dive and rescue access. The new boat is extremely maneuverable while also remaining stable. Read more about the boat's features on page 10.
- *Power Cots:* A project that began in 2014 to replace all manual cots with power cots in front-line and reserve ambulances was completed. The new battery-powered cots help reduce injuries from raising and lowering cots with patients in them.
- *Radios:* New dual-band (800 MHz and VHF bands) portable radios were purchased for front-line vehicles. They replace older models that did not meet current standards and were no longer being supported by the manufacturer. Because they are dual-band, MFD will be able to communicate with other jurisdictions throughout the area and the entire state.



# Madison Fire Department Annual Report

## Training Division

The Training Division supports the needs of the Operations and Prevention Divisions.

The Training Division provides training in four main areas: Recruit academy, incumbent, professional development, and special operations awareness. Department members also receive EMS training from the EMS Training Division, and Special Teams training overseen by the Special Teams chief.

A goal of the Training Division is to develop a comprehensive and balanced all-hazards approach that meets or exceeds federal, state, and local regulations; complies with industry standards; and meets the needs of the City of Madison Fire Department.

Objectives in support of this goal:

- Support employee training and professional development at all levels
- Maintain training records consistent with industry standards
- Support succession planning at all levels
- Administer orientation to all newly-promoted personnel



**Staff:** The training staff consists of the Division Chief of Training, the Training Captain, Shift Captains, and a Training Officer. During the recruit academy, the Training Division Staff expands to include the Academy Coordinator, Platoon Leaders, and Support Staff. In the fall of 2016, Academy Staff were afforded the opportunity to conduct live burn evolutions for Recruit Class 5 at an acquired structure for the most realistic training possible.

**Training Facilities:** The Madison Area Technical College Fire Protective Services building and drill grounds are home base for our Fire Academy and company-level training. The multi-story drill tower provides us with several burn rooms and a smoke simulation system capable of creating smoke conditions on all or specific floors of the tower. The tower can be utilized for ladder operations, engine company operations, and special team operations. Other live fire props include gas, vehicle fire, and residential garage fire.

## Training Division continued

### 2016 Accomplishments:

- New Personnel
  - Recruit Class 5 was held in the fall and 18 new recruits graduated. All recruits earned certification for FFI, FFII, Hazardous Materials Technician, Emergency Medical Technician, and ICS 100, 300, 700.
- Newly-Promoted Apparatus Engineer Orientation Week
  - Seven new Engineers spent a week learning the various aspects of their new role as an Engineer
- Station Libraries
  - Standard Operating Guidelines Manual: All SOGs were reviewed and some were updated as part of an ongoing review process to keep guidelines relevant.
- Technology
  - Target Solutions: Learning Management and Drill Recording Program
- Acting Officer Program
  - Program progress: Initial review of proposed program – labor/management
- New Modular Maze: A new maze was built on the MATC Fire Training Drill grounds in a collaborative effort between MATC and Madison Fire Department. The modular design affords many opportunities to train in SCBA confidence. The modular design will not make it easy for students to memorize the course.
- Some of the Department training hours include
  - Company Training Hours = 4,971
  - Company Drill Hours = 3,318
  - Hazmat Training Hours = 1,395
  - HURT Training Hours = 1,718
  - Lake Rescue Training Hours = 2,071

In 2017, the Training Division will seek to establish a training committee to assist with the development of the annual training plan. Along with the training committee, line and staff personnel will have input on the development, implementation, and overall success of this plan. The training committee will also be instrumental in the Officer Program Development Process. The division will continue to develop and update department training videos, allowing line personnel to readily review equipment, view task level skill steps, etc. The division will also utilize the new learning management/drill reporting program, TargetSolutions, to the fullest extent.



## Information Technology Division

The Madison Fire Department Division of Information Technology has one fulltime staff member responsible for managing and coordinating the diverse technology needs of the Madison Fire Department.

### Technology Changes in 2016

- ✓ Replacement of consumer grade “hot spots” to hard wired vehicle routers continued in 2016. About 1/3 of the fleet was converted over to vehicle routers.
- ✓ Based on user feedback from the pilot program testing a new 2-in-1 tablet for frontline rigs, it was determined the device had great functionality serving as a PC/tablet but was too small and difficult to use.
- ✓ Mobile Data Computers (MDCs) continued to be upgraded.
- ✓ Started replacing Panasonic H2 devices with the new Panasonic CF-20 2-in-1 tablets due to product end of life.
- ✓ Rolled out cell phones for all med units and frontline vehicles, providing crews access to Language Line and other services available through the City.
- ✓ Command Post (CP) at Fire Admin is complete, including intricate video wall to be used for city-wide events and trainings.
- ✓ Assisted in mobilizing and demobilizing Command Post for city-wide events.
- ✓ Implementation of Telestaff scheduling software was completed with a go-live date of January 1, 2017.
- ✓ With the help of MFD staff, City IT, Dane County Emergency Management, and the vendor, MFD successfully migrated ImageTrend Rescue Bridge to ImageTrend Elite in August 2016.



### Technology Goals for 2017

- ✓ Complete outbound calling for scheduling software.
- ✓ Complete replacement of Panasonic H2 tablets with Panasonic CF-20 2-in-1 tablets.
- ✓ Rollout Cradlepoint routers.
- ✓ Remodel Station 1's Training Room.
- ✓ Send GPS from Cradlepoint routers to CAD.
- ✓ Continue to work with City IT and Dane County 911 to enhance connectivity for emergency vehicles and cloud-based applications utilized in vehicles.
- ✓ Rollout of Keyscan access control systems at various stations.
- ✓ Implementation of TargetSolutions training software.
- ✓ Assist in implementation of EMS supply inventory system to assist in managing costs and reorder points.
- ✓ Research of asset management software to assist in tracking tools, equipment, and training items and reduce the time it takes to allow reserve apparatus and equipment to become operational for emergency operations and special events.

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### Community Outreach

For MFD, the majority of fire department-community relations occurs in moments of crisis when responding to fire, EMS or other emergency calls. Our department's community outreach programs serves to build and develop relationships with the neighborhoods we serve in non-emergency situations. In addition, community outreach serves as a recruitment mechanism for the department. Neighborhood events such as picnics, parades, block parties, and other community activities can give potential applicants the opportunity to talk with current fire personnel in an informal setting to learn more about the profession. In 2016, the Madison Fire Department embarked on several community outreach initiatives based on the MFD strategic plan.



**Wanda Fullmore Internship:** This program provided paid training and summer internships with the department for two high school teens. The Fullmore interns worked 20 hours a week for 8 weeks. The purpose of the program is for students to develop valuable leadership and employment skills, and learn about different facets of the fire department. The students shadowed field and office personnel, fire prevention, learned heart saver CPR, and worked on special projects.



#### **Affirmative Action Student Professional In Residence (AASPIRE) Internships:**

The City of Madison's Affirmative Action Division, in concert with City managers, sponsors internships to attract members of Affirmative Action target groups who are engaged in college-level studies compatible with a Public Administration career track. In 2016, MFD was awarded funding for an intern. The intern's project focused on the development of several emergency management plans, researching and drafting a disaster recovery plan, creating framework for donations management and an evacuation plan that is ready for implementation.

**The Madison College/MFD Mentorship Program:** Four students from Madison College Protective Services Program, in partnership with the MFD, were involved in the inaugural mentorship program. This program focuses on developing women, students

of color, and students who would like to work with a diverse workforce in at-risk neighborhoods. The MFD provides mentors, extended "ride alongs," and educational opportunities for the students. The goal for this program is to increase the diversity and cultural competency of all persons involved.

**MFD Community Outreach and Inreach:** The MFD has also increased community outreach initiatives that promote our visibility in neighborhoods by hosting station-based events, block parties, and other community events.

#### **2016 Community Outreach Highlights**

- ✓ Firefighter Fun Day at Fire Stations #5 on Cottage Grove Road and Station #9 on Midvale Boulevard. Attendees received free food, face painting, music, games, and rig and station tours. Each event hosted over 400 persons in attendance.
- ✓ Once a month, Station 10 personnel hosted the Community Action Resource and Education (CARE) Pilot Program for residents of Dryden Terrace. This program in partnership with building management and doctors at the Northeast Clinic provides free blood pressure and blood sugar checks as well as checking on the welfare of patients that have had recent contact with the MFD.
- ✓ Firehouse Storytime in partnership with the Madison Public Library at Stations 6, 7, 10, and 13.
- ✓ Madison Public Schools "Read Your Heart Out Day" at local elementary schools.
- ✓ On September 18, 2016, Station 3 served over 500 neighborhood residents a free pancake breakfast.
- ✓ "Friday Nights at the YMCA" gives the MFD the opportunity to positively interact with teens through basketball and other sports during the summer months. This program is in partnership with YMCA of Dane County and the Madison Police Department.
- ✓ Neighborhood Events at Warner Park, East Madison, Meadowood, Northport, Goodman, Teresa Terrace, Lake Point Drive Community Centers, and the Boys & Girls Club of Dane County.
- ✓ Community Events including: 4<sup>th</sup> of July Parades, Centro Hispano's Fiesta Hispana, Juneteenth Day, Let's Eat Out dinners, Outreach Pride Parade, Girl Scout's CampHERO, Big Brothers Big Sisters Back to School Celebration, 100 Black Men Backpacks for Success, West Fest Community Day, MSCR's Superhero Day, and many more.

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## Hiring and Promotions

**Hiring:** In October 2016, a new academy class began with plans to graduate in January 2017. Another group of applicants also entered the hiring process at the end of the year and will continue through the process in 2017. The hiring process includes a video-based multiple choice test, community member oral board examination, department oral board examination, Fire Chief's interview, physical ability test, background check, and medical evaluation. Candidates who are successful in these steps are placed on an eligibility list with the Police & Fire Commission (PFC). The eligibility list is active for approximately 18-24 months or until it is dissolved by the PFC.



Recruit Class #5

**Promotions:** Several hiring and promotional processes were conducted in 2016, including the new recruit class, Code Enforcement Officers, Account Tech 2, Fire Administration Services Manager, Community Paramedic, and Elevator Code Enforcement Officer hiring processes. MFD also promoted eight Apparatus Engineers.

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### Health and Wellness

#### **Medicals:**

All medical services provided by Dean Health are based on *NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments*.

Medical exams are required for all HIT personnel. In 2016, 54 HIT medical exams were completed. Of those, 47 were at Dean Health Clinic and 7 went to their own doctor.

In addition, Dean Health conducted 21 pre-employment medical exams for 2016. This medical exam is the most thorough process of all the medical services provided by Dean Health and is conducted over two days for new candidates.

Flu vaccinations were offered to both the commissioned and civilian personnel of the MFD again this year. Approximately 141 employees took advantage of the offer and obtained a flu shot.

#### **The Health & Wellness Committee:**

Many crews are now performing 30-minute circuits around the firehouse that incorporate fire ground movements and calisthenics. These circuits begin with a 6-minute active warm-up that improve flexibility and mobility. The active warm-up is then followed with an intense 24-minute interval circuit that usually contains fire ground movements like crawling, sledges, stairs, drags, and core exercises. Crews are finding these circuits improve muscular and cardiovascular strength and endurance. We also have seen improvements in eating habits around the department. Many crews are substituting desserts with fruits and vegetables and offering healthy options for each meal. These are some small steps that are making big improvements in the overall health of the MFD. We are looking forward to continuing this "movement" in 2017.

#### **Fitness:**

Fitness information, workout options, eating guidelines, and fitness challenge rules are all available to all MFD personnel. In addition to specific workout and nutritional information, fitness facilities are also available.



# Madison Fire Department Annual Report

## Fire Prevention Division

Fire prevention services are provided to the citizens and visitors of Madison through four distinct work units. These units are Code Enforcement, Community Education, Fire Protection Engineering, and Elevator Inspections. The Fire Prevention Division also generated more than \$2 million in revenues to add to the City General Fund. This was accomplished through plan review fees, elevator inspection fees, 2% fire dues (paid by the State), the tank inspection program, and miscellaneous other fees.

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

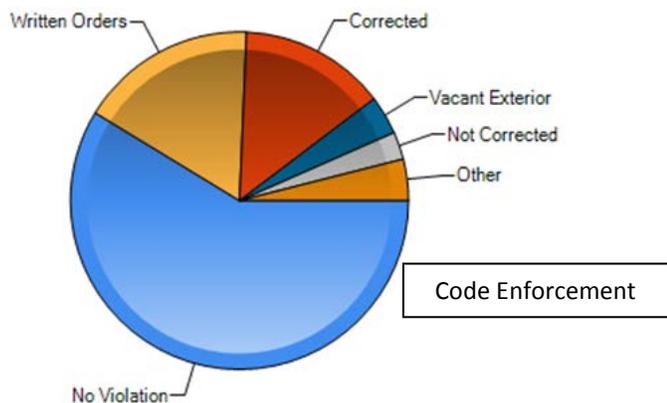
### 2016 Fire Prevention Division Goals (internal and external) Exceeded

- ✓ Continued upgrades to reporting software. This allows for more time spent in the field with customers and coordinating with City agencies.
- ✓ Increased plan review numbers with a five-day average turnaround time, despite today's buildings being larger and more complex.
- ✓ Had prevention personnel in every school in the city – public and private—in October, reaching thousands of children with modern fire prevention programming.
- ✓ Provided above- and below-ground tank plan review, inspection, and approval city-wide.
- ✓ Spread community education throughout the city, allowing for personalized and area-driven results.

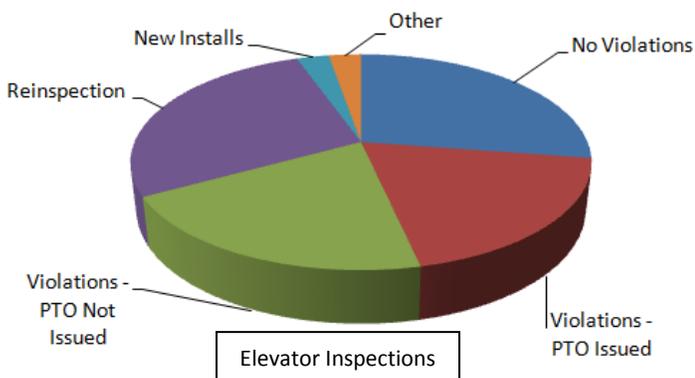
### Code Enforcement Unit

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

The Madison Fire Department performed 24,318 inspections in 2016, an increase of 14% from 2015. The vast majority of inspections performed are state-mandated inspections, with a small percentage being code enforcement or new construction activities.



### Elevator Inspection Unit



The Elevator Inspection Unit consists of three State of Wisconsin Certified Elevator Inspectors. The unit works to ensure the safe installation, alteration, and operation of conveyances, which includes elevators, escalators, chair lifts, and dumbwaiters.

Our primary focus is on timely plan review, accurate and safe new installations, and annual inspections to grant the required permit to operate. 2016 was a year of rebuilding for this unit. Staff worked hard to keep new elevators inspected safely and existing elevators operating properly. The unit provides regular training to firefighters and command staff on safe operation and control over all types of conveyances.

### Fire Prevention Division, continued

#### Community Education Unit



#### 2016 Quick Facts about the Community Education Unit

- ✓ Presentations delivered to 4,600+ men, women and children in workplaces, residential facilities, and with community organizations.
- ✓ 5,800+ children and teachers reached during Fire Prevention Month (October).
- ✓ MFD and Madison Area Safe Kids Coalition co-sponsored 22 car seat checks at fire stations. The partnership provided over 400 low-cost car seats to families in need. Over 380 car seats were checked for proper installation.

Madison Fire Department coordinates with the Madison Area Safe Kids Coalition and other partners to hold programs such as Safety Saturday and Safety Town to reach even more children and teach them about safety.

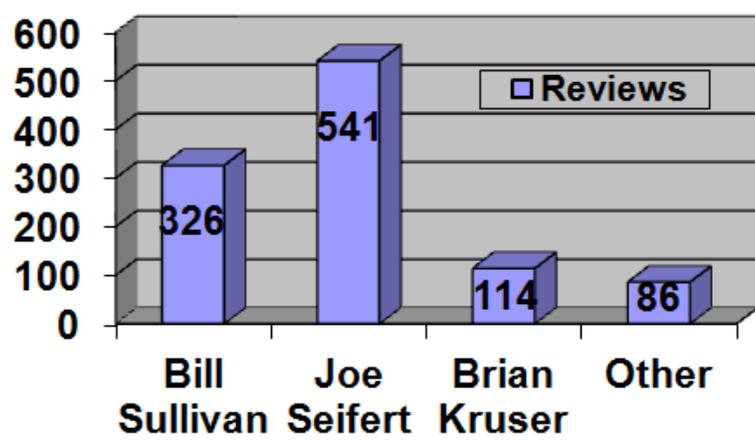
Safety Town is a program designed for children entering kindergarten in the fall and teaches children how to be safe in their communities. Safety Town uses hands-on activities taught in a small-scale city with streets, homes, and sidewalks to teach children about many different aspects of safety and injury prevention.

Safety Saturday is an annual event that educates parents, children, and the general public on making safe decisions, preventing injuries, and using safety devices like seat belts, bicycle helmets, and smoke alarms. Using the remarkable State Capitol Square and Dane County Farmers' Market as a setting, thousands of community members attend Safety Saturday every year.

#### Fire Protection Engineering Unit

The Fire Protection Engineering Unit is responsible for ensuring site development, new construction, and alteration projects comply with the building and fire codes as well as Madison General Ordinances. This is accomplished by working with owners, developers, and contractors in the design phases of projects, reviewing construction documents, and inspecting and testing installations of site access, fire suppression, fire alarm, controlled egress, smoke control, and fire command centers.

In 2016, almost 1,100 plan reviews were performed. Plan reviews are done by multiple staff members of the Prevention Division, showing our multi-disciplinary approach to code enforcement. Our staff not only reviews the plans but also does field inspection and approval on all systems that are reviewed.





**Finance**

<b>2016 OPERATING BUDGET</b>			
<b>AS OF MARCH 8, 2017</b>			
	<b>Adopted Budget</b>	<b>Actual with Encumbrances</b>	<b>Balance</b>
*Permanent & Premium Salaries	\$ 31,406,964.00	\$ 31,417,455.16	\$ (10,491.16)
Hourly wages	7,212	8,391	(1,179)
Overtime Salaries	795,600	1,194,140	(398,540)
Special Duty	72,615	90,746	(18,131)
Benefits	11,746,077	12,664,973	(918,896)
Purchased Services	1,648,702	1,258,995	389,707
Materials & Supplies	1,016,679	1,084,735	(68,056)
Inter-Agency Charges	3,497,828	2,397,068	1,100,760
Capital Assets	-	-	-
Inter-Departmental Billings	(1,500)	-	(1,500)
Revenue	(1,569,915)	(1,516,017)	(53,898)
<b>Net Budget</b>	<b>\$ 48,620,262.00</b>	<b>\$ 48,600,485.32</b>	<b>\$ 19,776.68</b>

<b>2016 CAPITAL BUDGET</b>	
<i>PROJECT</i>	<i>AMOUNT</i>
Fire Equipment	\$ 272,900
Communications Equipment	\$ 239,900
Minor Building Improvements	\$ 50,000
Employee Center & Station 14	-
<b>TOTAL</b>	<b>\$ 562,800</b>