

City of Madison **FIRE** Department



2020



ANNUAL REPORT

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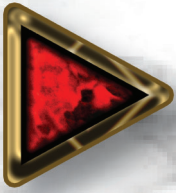
FIRE



EMS



EDUCATION
& PREVENTION

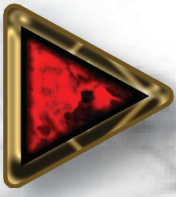


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A MESSAGE FROM FIRE CHIEF STEVEN A. DAVIS

Welcome to the City of Madison Fire Department's 2020 Annual Report



Well, what an interesting year 2020 was for the Madison Fire Department. A worldwide pandemic, a full social unrest/uprising, and an all-out demand for police reform in our communities. There is no playbook for any of the these, let alone all three at the same time. Throughout the year, despite the struggles, Madison Fire Department members continued to provide a very high level of care for everyone in our community. Their dedication and perseverance through the challenges of the year has been more than admirable.

The COVID-19 pandemic caused us to close public access to our administrative offices as well as to all of our fire stations. The department implemented new policies to ensure our members were protected in their work environment. We, along with every EMS agency, began to search for personal protective equipment, as the nation suffered a great shortage of all PPE. We managed to keep pace throughout the year, even during the surges of sick patients that continued locally throughout the year.

Despite these challenges, the MFD forged ahead. The department placed a new airboat in service in February. "Yapper" (named for retired Lieutenant and Lake Rescue Team co-founder Craig Yapp) is designed to be operated on water, ice, and land. This exceptional rescue vehicle really bolsters the capabilities of our Lake Rescue Team, as this airboat can be used year-round during the most dangerous lake rescue incidents.

The department implemented a new Fire Investigation Team (FIT) at Fire Station 11. Labor and Management worked cooperatively to improve the service by placing 4 investigators on duty 24/7 from Station 11 on the east side. The team responds city-wide to investigate and find the cause of fires that occur in our community. The team replaced three full-time investigators who had been in place since 1980.

On November 1, 2020, the City of Madison began providing Fire and EMS services for the residents in the Town of Madison. As part of the agreement, the fire department inherited two Firefighter/Paramedics who joined the MFD staff.

In keeping with the saying "everything old is new again," the department purchased and placed a Tractor-Drawn Aerial (TDA) in service in December—the first in nearly 40 years. The engineering involved in the 107' aerial ladder allows it to access spaces that a normal straight ladder truck could not reach. The department used to utilize a TDA back in the 1960s; however, with current construction and population density, the team decided to go back and employ the old engineering style. The vehicle has been performing remarkably well.

I hope you enjoy the pages that follow. I'm not sure we could capture the full experience of the MFD in the strange year that was 2020, but we are attempting to. As always, it continues to be a pleasure to serve our community as your Fire Chief. My hope is that we all stay safe through the year 2021.

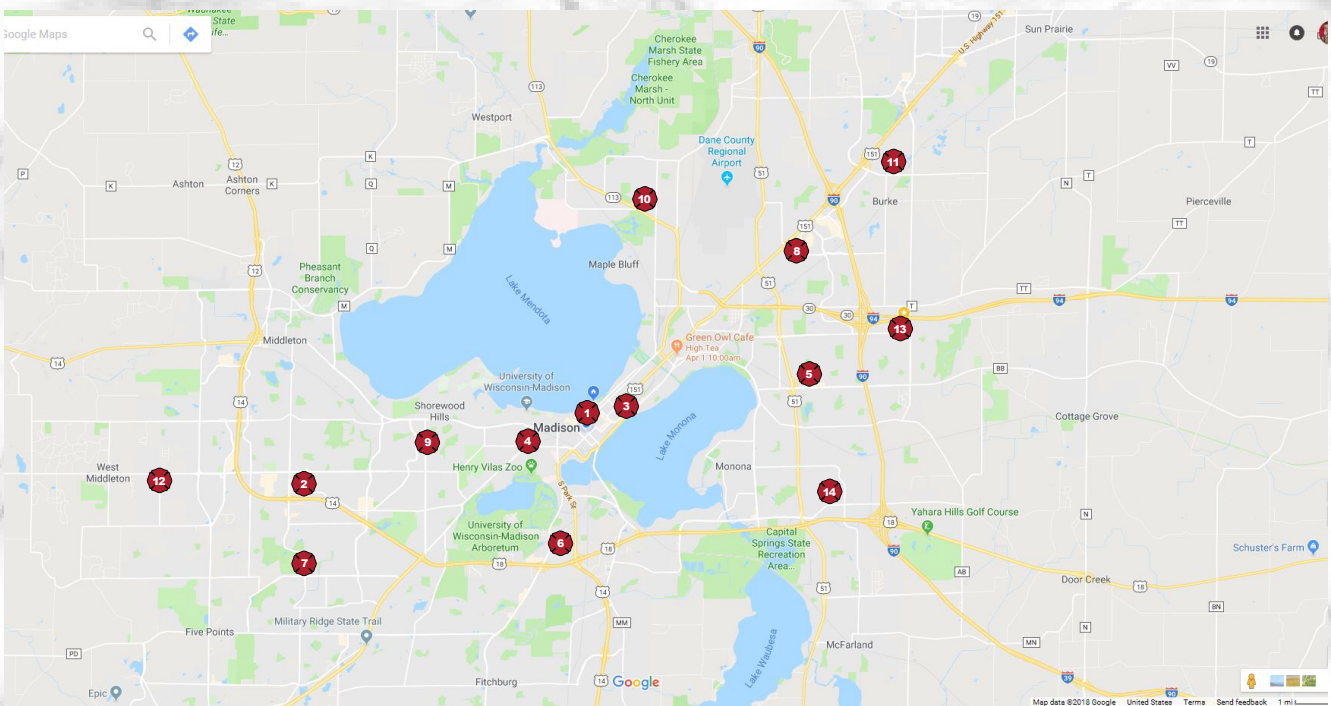
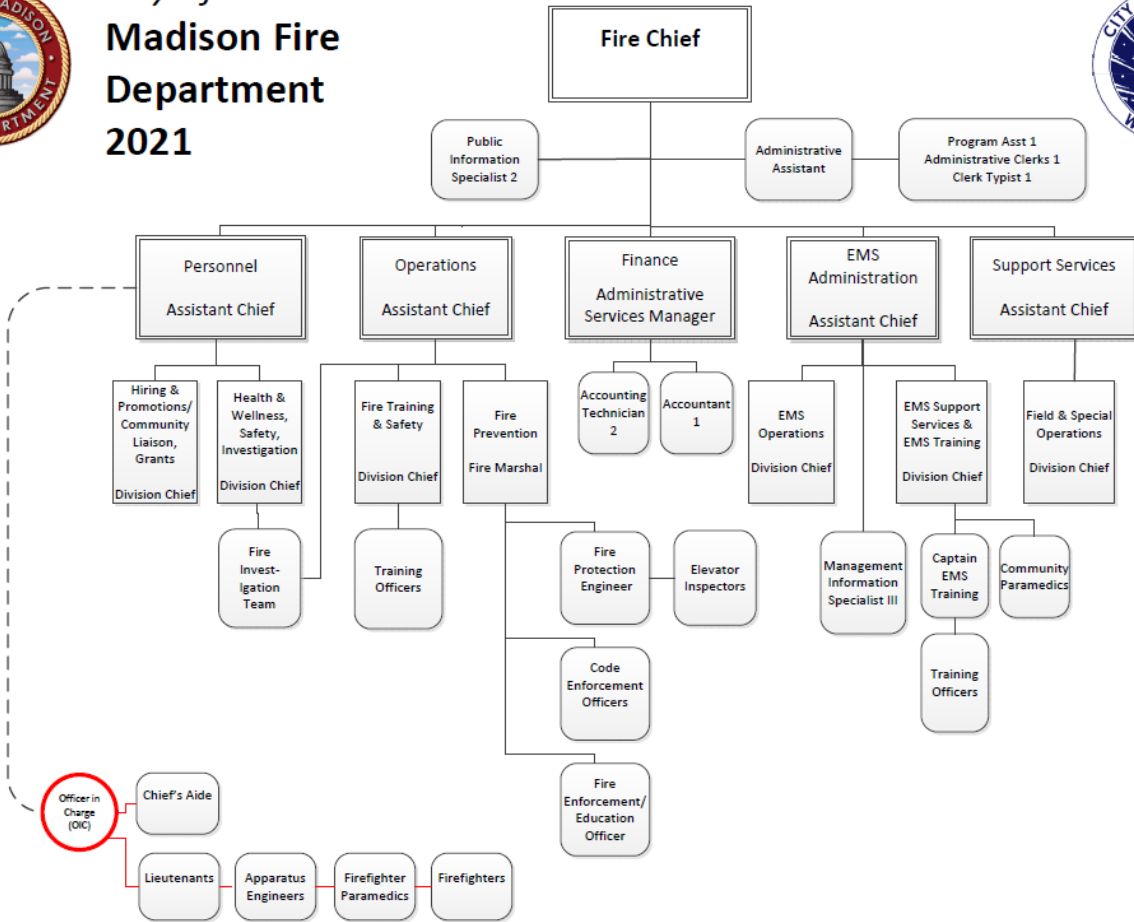
All the best,

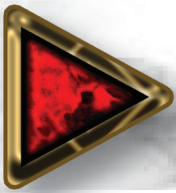
Steven A. Davis
Fire Chief
City of Madison Fire Department

WHO WE ARE



City of Madison Fire Department 2021



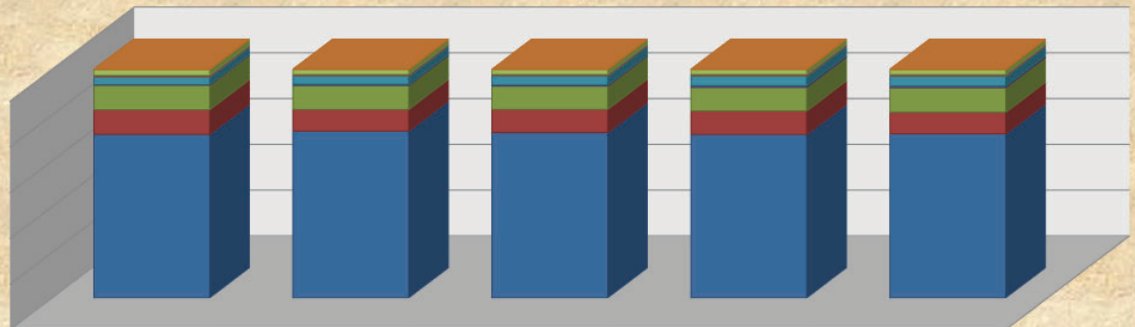


WHO WE ARE

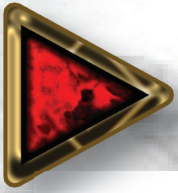
Comissioned Employees		Actual Occupied Positions*	Civilian Employees		Actual Occupied Positions*
<u>Title</u>			<u>Title</u>		
Chief		1	Administrative Services Manager		1
Assistant Chief		4	Administrative Assistant		1
Division Chief		6	Accountant		1
Captain		1	Account Tech		1
Lieutenant		65	Administrative Clerk		3
Apparatus Engineer II (Chief's Aides)		3	Clerk Typist (vacant)		0
Apparatus Engineer		58	Community Paramedic		3
Firefighter/Paramedic II		20	Elevator Code Enforcement Officer		3
Firefighter/Paramedic		69	Fire Code Enforcement Officer		10
Firefighter		155	Fire Education Enforcement Officer		1
			Fire Marshal		1
			Fire Protection Engineer		1
			Management Information Specialist		1
			Program Assistant		1
			Public Information Officer		1
Total Comissioned:		382	Total Civilian:		29

**as of June 30, 2021*

**City of Madison Fire Department
Total Number of Firefighters Employed in Each Year**



	2017 total = 372	2018 total = 392	2019 total = 393	2020 total = 389	2021 total = 382
Other	1	1	1	1	1
Unknown/Did not answer	0	0	0	0	0
Asian/Pacific Islander Women	0	0	0	0	0
Asian/Pacific Islander Men	9	8	8	8	8
Native American Women	1	1	1	1	1
Native American Men	1	1	1	1	1
Hispanic Women	1	1	1	1	1
Hispanic Men	12	14	15	16	16
African American Women	1	2	2	3	3
African American Men	40	41	40	40	41
White Women	40	37	40	40	36
White Men	266	286	284	278	274



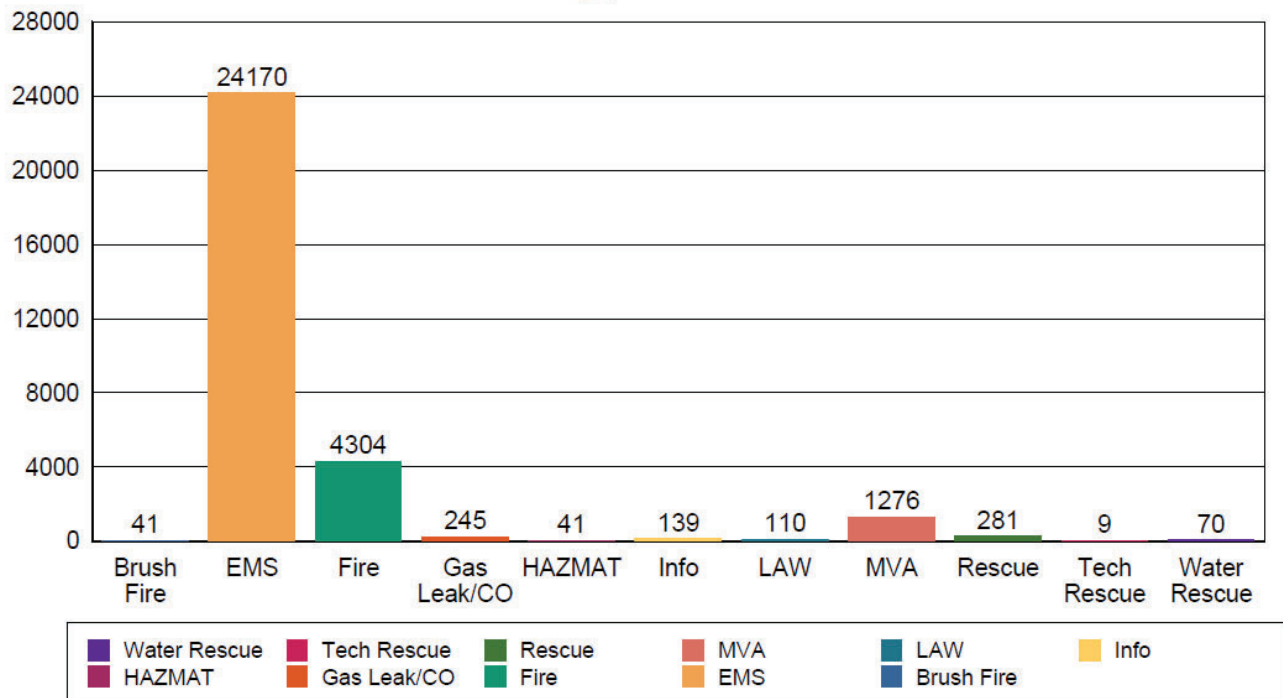
OPERATIONS

Emergency Responses

The Madison Fire Department (MFD) operates out of 14 Fire Stations throughout the City of Madison with a staffing level of 86 on duty each day. There are 12 Engine companies, 5 Ladder companies, 8 Paramedic units, and 1 Command vehicle in service every day to serve the residents and visitors to the City of Madison.

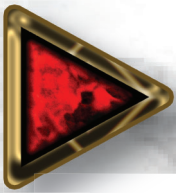
In 2020, MFD was dispatched to 30,686 calls for service. The largest single type of call, by far, was for Emergency Medical Services (EMS), accounting for 78% of call volume with 24,170 calls. The Madison Fire Department continues its push to reduce response times to emergencies. The MFD, with the additions of priority dispatching in recent years for fire, emergency medical services, and other emergencies, continues in its plans to reduce its overall response times. The addition of a new station in the Southeast portion of the City is expected to and will help us to continue in this critically important statistic. This will continue to allow the MFD to improve the ability to save lives and property in the City of Madison.

Incident Type Breakdown



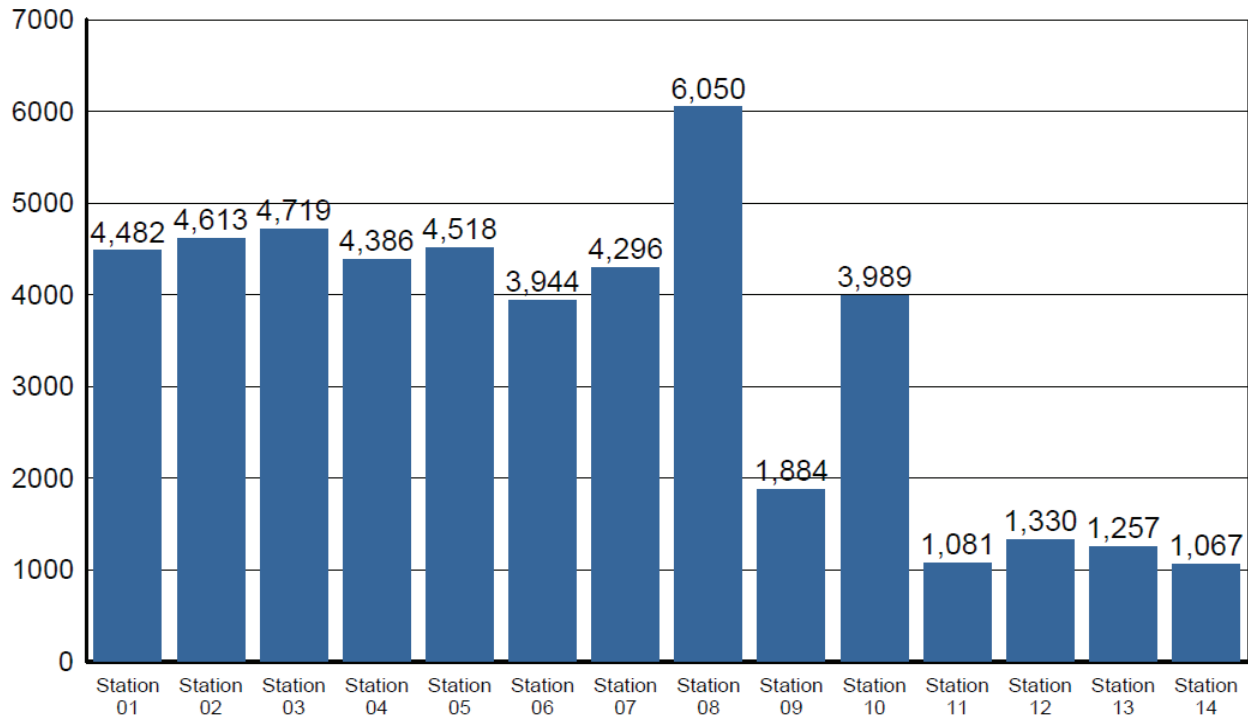
Note: MVA= Motor Vehicle Accident; LAW=Law Enforcement Call

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OPERATIONS

Station breakdown



Number of calls responded to by each station. (NOTE: Many incidents require responses by multiple units from several stations).

Town of Madison

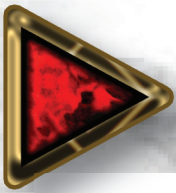
With the intergovernmental agreement and pending annexation, the City of Madison Fire Department will provide comprehensive services for the Town of Madison. Services include, but are not limited to Fire Suppression, Emergency Medical Services, Lake Rescue and other Special Teams, Fire Prevention Services, Emergency Management, and permitting and inspections of new construction. The MFD will provide all of the necessary services to protect life, property and the environment in the Town of Madison.

Telestaff (Personnel Scheduling)

MFD continued the implementation of the new scheduling platform that consolidates and improves the accuracy and efficiency of staffing in the Fire Department. The program includes daily staffing, vacation selections, overtime staffing and emergency callback among other functions. The system continues to grow and increase efficiencies for the MFD.

COVID-19 Directives & Staffing

Our strict guidelines on symptom monitoring, mask wearing, distancing, and disinfecting our common work areas helped us to minimize the effects on staffing levels so we could maintain the level of services we provide for the City of Madison.



SUPPORT SERVICES

2020 Accomplishments

EMS and Fire Apparatus

The department continued its ambulance fleet upgrade with the purchase of **four additional ambulances**, replacing several that had components over 20 years old. The new rescues provide a safer and more economical vehicle for members and patients. The department operates eight front line ALS ambulances and six to date have been replaced in the last two years.

After several months of hands-on training the MFD's **tiller ladder truck** was put in service at Fire Station #1 downtown. The tiller has already proven to be a valuable asset with its outstanding maneuverability and equipment storage capabilities.

Two Pierce Enforcer fire engines were designed by the apparatus committee and will arrive in early 2021. The Enforcer chassis will be replacing the long used Pierce Quantum model and new units will be placed at FS 4 and FS 9.



New Medic 2 on Grand Canyon Dr.



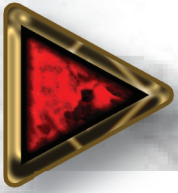
The new tiller ladder truck, based downtown at Fire Station 1 on West Dayton St.

Four of the eleven **command vehicles** were replaced in 2020 with the Ford Explorer, Interceptor model. The vehicles, which provide 24/7 response capabilities and are a hybrid model, which will offer much better fuel economy.

Additionally, **two ladder trucks** have been designed with input from the apparatus committee. With a focus on better fuel economy and increased operational ability the department will be ordering the Pierce single axel Enforcer with a 107' aerial ladder.

As the new **CARES team** becomes operational in 2021, a new vehicle will continue to be specced out for the team's use. More about the Community Alternative Response for Emergency Services Team to come in 2021!

continued...



SUPPORT SERVICES

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A review of vehicle accident data for 2020 indicates that accidents involving ambulances and fire apparatus remained about the same from 2019 to 2020. In 2020 there were three incidents involving ambulances and seven with fire engines, ladder trucks and support vehicles. Several were preventable incidents by department members and some were caused by inattentive citizens unaware of emergency vehicles. The most predominant accident type was an apparatus being struck while in emergency mode.

Building and equipment upgrades

Fire Station # 9 on Midvale Blvd underwent a remodel of its kitchen and dining/training area. Old and nonfunctioning cabinets were replaced, stove hood suppression system and sprinkler system was upgraded.

City Engineering and the department conducted an all-station assessment to determine the long term needs of the 14 stations and Fire Administration. The document will help provide appropriate future funding needed to keep all building resources operational.

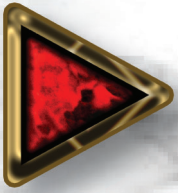


The newly-remodeled kitchen at Fire Station 9, 201 N. Midvale Blvd.

2021 Goals

The Madison Fire Department has received capital funding from the Common Council to remodel **Fire Station #6** on Badger Road. Design is happening in 2020 and the construction will start in 2022. The focus of the remodel is to upgrade HVAC, increase storage and add an automated dispatch system and to provide gender neutral bunkrooms and restrooms. A small scale remodel will be completed at **Fire Station 5** on Cottage Grove Road which will include redesigning the station training and office space. Opening up this area will allow members to work/train on computers while allowing for better isolation distances. **Fire Station 10** on Northport Drive will have the entire roof replaced and add accessibility for maintenance staff. FS 10 will also need the original stone wall rebuilt as it is in serious disrepair. **Fire Station #14** on Dairy Drive is the home of Engine 14 and much of the department's training, including the 16-week Recruit Academy. The department will continue to design and purchase various props to enhance department fire training.

The MFD has applied for an Assistance to Firefighters Grant and requested several **fire gear extractors and dryers** in continued support of our cancer prevention program. Currently, the department is outfitted with the specialized washers and dryers at seven of the fourteen fire stations.



FIELD OPERATIONS

Lake Rescue Team:

MFD's Lake Rescue Team operates out of Fire Station 1 downtown. The team is comprised of 57 Rescue divers certified by the Professional Association of Diving Instructors (PADI). Each individual diver must complete hundreds of hours of training and minimum of 32 certification dives to be an active member of the team. A minimum of six Lake Rescue team members are on duty 24 hours a day, 365 days a year. Having a minimum of six members each day ensures the City of Madison residents and our visitors have a team ready to respond year-round to topside, underwater, ice rescues, recoveries, vehicle recovery, and assistance calls from the City of Madison Police Department, Dane County Sheriff's Office, UWPD Lake Rescue and Safety.

2020 Lake Rescue Highlights:

In February of 2020, the City of Madison Lake Rescue Team received a new Midwest Rescue Airboat. The Midwest Airboat is 20 feet long and powered by 427ci LS7 650hp engine with Holley Dominator EFI system. This boat was christened the Yapper after Lieutenant (Ret.) Craig H Yapp aka "Yapper." Lieutenant (Ret.) Craig H Yapp played a critical role in the leadership and development of the Lake Rescue Team from its inception in 1983. This Midwest Airboat is a proven reliable Multi Mission Capable Platform for use in lakes, rivers, swamps, bays, ice, and mudflats. When you consider the popularity of water/ice 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 Yapper goes a long way to ensure successful rescues for many years to come.

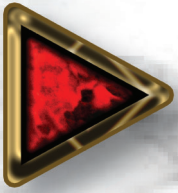


MFD's new airboat, Yapper, out on Lake Monona.

Heavy Urban Rescue Team (HURT):

The Heavy Urban Rescue Team is a specialized rescue team of 57 dedicated firefighters ready to respond 365 days a year. HURT is located at Fire Station 8 on the east side. Each week the team trains to keep their skills sharp on these five specialized disciplines: Trench rescue, building collapse, high/low angle rescue, confined space rescue, and grain bin rescue. These highly skilled individuals have responded to some of the state's most technical search and rescue incidents over the years, including: processing plant explosion, home explosions, rescue of children trapped in an abandoned mine, motor vehicles vs. building collisions, workers trapped in commercial machinery and searching for victims in the aftermath of a tornado.

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FIELD OPERATIONS

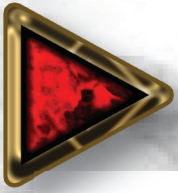
Hazardous Materials Incident Team (HIT):

HIT consists of 57 team members and is located at fire house #7 on the city's west side. HIT members maintain their core competencies through weekly trainings. These training consist of specific hazmat scenarios, site control, identification of product, hazard and risk assessment, information and resources, control measures and decontamination. In 2013 Wisconsin Emergency Management reconfigured the levels and distribution of all the State Hazmat teams. Madison became one of six TYPE II teams (TEAM 6), with primary responsibility for Level A (non-CBRN) responses to the Southwestern quadrant of the State of Wisconsin (17 counties).



In 2020, MFD HIT received a \$170,000 grant for purchasing a Rapid Deployment Kit and Gemini monitor. The rapid deployment kit includes 4 versatile AREARAE Pro monitors that allow for HIT to set up a perimeter around a hazardous material incident and monitor for hazardous toxic chemicals and radioactivity. The Gemini monitor has an integrated Raman and FTIR for chemical and explosives identification. These new monitors greatly increase our team's ability in detecting and monitoring hazardous materials quickly and safely. Without this grant the team would not have been able to purchase these monitors.

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FIRE INVESTIGATION

Investigations

The Fire Investigation Team (FIT), alongside the fire suppression crews, are responsible for investigating and determining the origin, cause, and circumstances of all fires in the City of Madison. In 2020, the FIT was involved in the investigation of multiple structure fires, vehicle fires, cooking fires, rubbish/dumpster fires, vegetation fires, and chimney fires. Working closely with Fire Prevention and the Public Information Officer, Fire Investigation shares information to minimize any threats to public safety and firefighters by getting out information needed to reduce risk.

Training and Certification

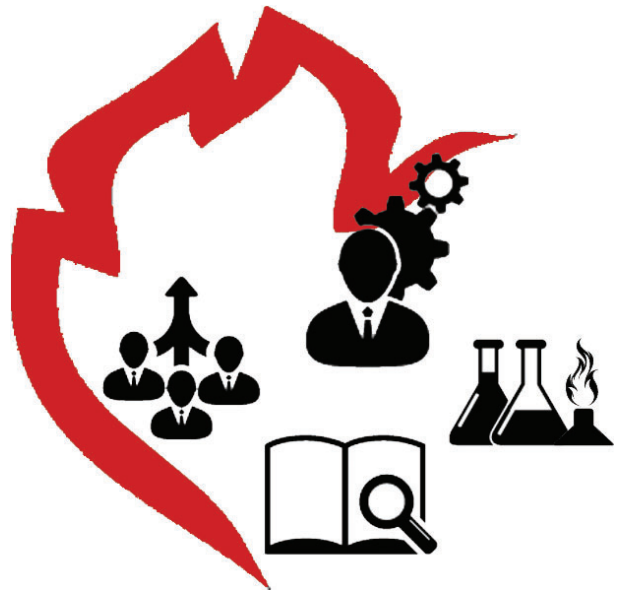
Continuing education is a priority associated with fire investigation. Unfortunately, due to the Pandemic, training has been limited and mostly confined to virtual training through various sources. MFD Investigators continue to be involved in many fire investigation professional organizations and are working toward a more productive hands on training regimen in 2021. Fire Investigators also assist in the training of personnel including; Madison Fire Academy, Madison Police, report writing, and crew training at the company level.

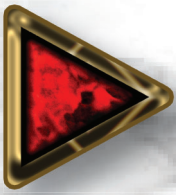
2020 Accomplishments

In January of 2020, Madison Fire changed the dynamic in how the department conducts fire investigations. The change from a 3-person Investigation Division to a more efficient 21-person Investigation Team, has led to several improvements in the way we conduct investigations. By converting Fire Station 11 from a 4-person firehouse into a 4-person firehouse/Investigation Team headquarters, the team has been able to work more effectively, be more productive, and most importantly, has been much safer for the team members than the previous model.

Because of the large influx of personnel to conduct fire investigations, the team started the year with a very aggressive training regimen to get all investigators to a level where they could conduct their work at a comfortable level. No one could predict the level of civil unrest that would occur in the city, but because of all the incendiary fires throughout the city, our investigators certainly had their work cut out for them.

FIT continues to make improvements to this type of investigation model and has been contacted by other cities to duplicate this form of investigation. Due to the dedication of our members in making the Fire Investigation Team a success, the City of Madison Fire Department will be more efficient in processing fire incidents.





EMERGENCY MEDICAL SERVICES DIVISION - EMS

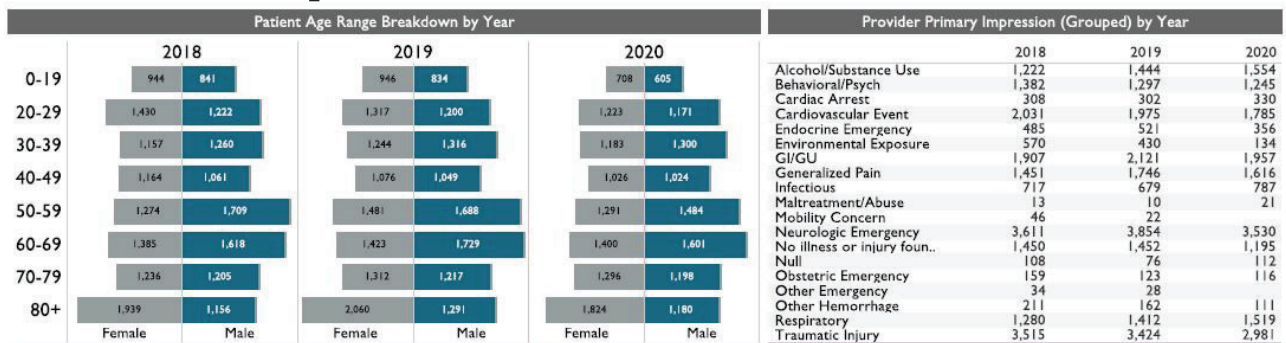
EMS in the Time of COVID

2020 tested EMS in ways we never imagined throughout our city. Due to the unknowns of COVID-19, the Fire Department was forced to adjust throughout the year as we continued to learn more about the virus. Some of our initial concerns were the potential of elevated infection rates to the population, exhausted personal protective equipment (PPE) supply chains, and dealing with significant portions of our workforce being quarantined or sick.

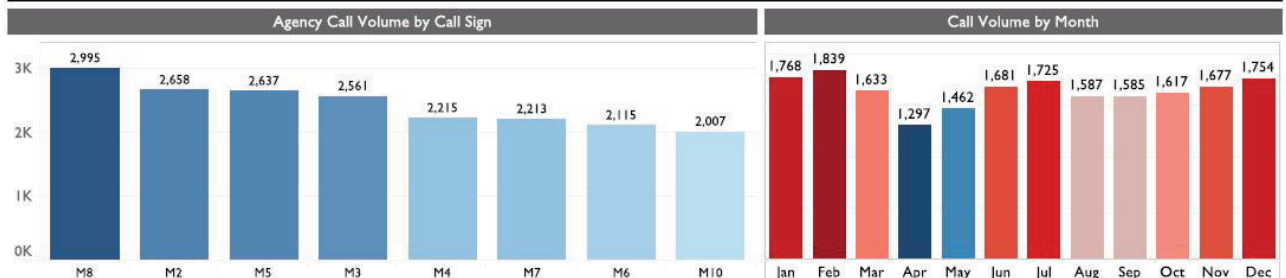
During the pandemic the Madison Fire Department did develop and implement a plan for our PPE. This plan was clearly communicated to staff to reduce stress and limit the serious and very real concerns regarding their health as well as that of their families. Our overall strategy was to extend our existing stock of PPE as we continued to look “outside the box” for additional ways to acquire more supplies. We also attempted to limit exposure by adjusting our EMS operations. The fire department worked with the 911 dispatchers to help identify screening procedures. This allowed crew members to pre-determine the need to have everyone on scene to enter a home in full PPE or just a few. Patients who presented with symptoms such as fever, cough, or sneezing required donning of PPE, but asymptomatic patients were obviously a concern as well. If feasible, every patient is given a mask to wear. MFD crews are currently wearing normal PPE and at least a mask on every call. If a patient is suspected COVID-positive, or when performing high-risk procedures, crews wear a gown, gloves, N95s, eye protection, and a mask. The patient assessment is also initiated at least 6 feet away to create space between responders and the patients.

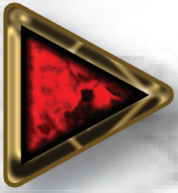
Protocols were placed to focus on hygiene and disinfection. In an attempt to limit outbreak our staff was encouraged to maintain good hand hygiene and our equipment was cleaned following disinfection protocols. The back of our ambulance is an enclosed space that allows concentrations of virus to build up rapidly, so the use of air conditioning, exhaust ventilation, and open windows helped to create a flow of air through the patient compartment. The use of good judgment was encouraged throughout our organization to provide the safest solution for our patients and our employees.

A Snapshot of MFD's EMS Calls



Looking Just At 2020 Incident Dates January 1 - December 31, 2020.





EMERGENCY MEDICAL SERVICES DIVISION - EMS

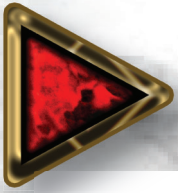
As with the rest of the world, the MFD was hit with the Covid pandemic beginning in February. This meant the need for a flexible and rapid response to the demands of the situation. We had to quickly revise response considerations, patient assessment and care needs, and personal protective equipment. We also had to promptly establish new and revised processes for the disinfection of not only our response equipment, but also our station living quarters. We are proud of the way in which our members adapted to the new environment which was often changing from week to week as new information became available. The one constant that remained was that the MFD was able to respond to each and every call for service from the start of the pandemic and without delay. We modified our patient care procedures and provided ongoing education to our staff, assuring that the most appropriate and up-to-date therapies were being provided. We worked hand-in-hand with our community partners in emergency management, the area hospitals, and public health. Collaboratively, we focused on how best to support one another and to align our services for the best community outcomes possible.

Of course, one of the most challenging aspects of the pandemic was the worldwide shortage of Personal protective equipment. The EMS Division worked day and night, locating and sourcing products from new and existing vendors to assure that we never ran out of cleaning supplies, masks, gowns, face shields, and gloves. Supplies did get alarmingly low at different times, but through the constant process of material sourcing, we were lucky to maintain a usable stock throughout. Some examples of the volumes of materials sourced during the pandemic:

- Surgical masks: 57,000
- N95 masks: 21,000
- Boxes of Gloves (100 each): 4,500
- Gowns: 11,000
- Face Shields: 4,000
- Disinfectant spray bottles for vehicles/equipment: 540
- Disinfectant wipe containers for stations: 1040
- Disinfectant wipe containers for vehicles/equipment: 650

Additionally, our community medics were trained on administering Covid tests, and were able to partner with Dane County Emergency Management and Public Health Madison Dane County. They were able to provide tests to MFD staff after workplace exposures, provided testing to public safety workers throughout Dane County, and provided testing to private workplaces identified by public health as being a potential source of an outbreak. The MFD also partnered with Dane County to assist with the Alliant Energy Center Vaccination Clinic whenever requested.

While the Covid pandemic has led to a 10% overall decrease in the total volume of medical calls in 2020, it has also obviously contributed to a high percentage of our overall workload. As with the peaks and valleys of the Covid statistics in our community, the percentage of Covid suspected calls for the MFD reached as high as 44% of our daily calls on days in March and November. The average impact of Covid on our calls for medical service in 2020 was 13.7%.



COMMUNITY PARAMEDICINE

The Mobile Integrated Health Office (Community Paramedicine) continued their partnership with UnityPoint Health - Meriter's Emergency Department to support, educate, and empower at-risk individuals to improve their overall health and satisfaction with the healthcare system. In the last year with COVID-19, UPH Meriter and Madison Fire have worked together to reach out to members of the community who have been impacted by the COVID-19 virus. The Community Paramedics coordinated care, problem-solved barriers, and picked up groceries and medications for patients unable to get them. Our office also made phone calls on a weekly basis to weigh the needs of each patient and lessen anxiety. The Community Paramedic office met once a month with the UPH Meriter ED staff for a case review of each patient and to link resources. The program graduated 8 members in 2020 and took on new 11 patients over the year.

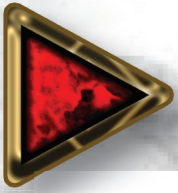
Our community paramedics have a unique situation whereby they reach out to some of the most vulnerable members of our community, no matter where they may be. This is often done by knocking on doors, meeting on the sidewalks, and everything in-between. As you can imagine, this was significantly challenged by the onset of the COVID pandemic. Nevertheless, our community medics were able to persevere and continue to serve their patients via phone calls, telehealth appointments, and limited face-to-face visits. They found ways to navigate through the complications of COVID, to ensure they could continue to assist their patients by any means necessary. Sometimes this meant delivering meals, ensuring there were groceries in the fridge, taking out the garbage, and making sure that all scheduled healthcare visits were well coordinated and followed through.

Our office received well over 50 patient referrals from the field in 2020. We were able to contact over 30. The majority of these patients were high utilizers of 911. Patients were referred to our office due to unsanitary living conditions, addiction issues, poor mental health, and isolation. Due to COVID restrictions most of the follow-ups were over the phone with a few unannounced visits where it seemed most appropriate. Our office was able to refer several patients to Public Health Assistance for hoarding remediation, educate them on the proper use of 911, assist loved ones caring for these patients to find resources and recommend patients to Adult Protective Services when necessary. Our staff has worked countless hours on tracking these patients along with consolidating the reports and correcting name, date of birth, address, and telephone errors within the database.

2020 was our most challenging year thus far as so many of our patients suffer from isolation. We attempted to perform hands-on care only when absolutely necessary and were successful at keeping everyone safe while providing the need at hand. In spite of COVID, and with the help of LOCAL 311 Charities, our office was able to provide food and gifts over the holidays for several of our patients including our first ever single mother with a brand new infant. It is times like these, with the generosity of our Fire brother and sisters that our work is the most rewarding. Our office worked hard on finding new ways to reach our patients in 2020 with the new barriers and look forward to hopefully seeing their faces again soon.

Finally, our office also worked with Public Health and Fire Admin to deliver COVID testing whenever there was a need. We swabbed over 310 noses and delivered these tests to Exact Sciences. We were happy to be able to provide this service!





EMS TRAINING DIVISION

The EMS Training division successfully completed the State of Wisconsin re-licensure for all of our 389 EMTs and Paramedics. This represents the culmination of the last two year biennial education program, whereby we train our members on all aspects of Emergency Medical response, treatment, and transport.

A sampling of the subject areas include: patient assessment, airway/breathing/respiratory complications, cardiology, stroke, trauma, environmental emergencies, high-performance CPR, and infectious disease management. In 2020, we provided over 9,500 hours of training.

In 2020, we also began the development of an in-house paramedic continuing education program. We contract our medical control with physicians from the University of Wisconsin-Madison who historically have provided supplemental continuing education for our paramedics. With leadership from our medical director, Dr. Megan Gussick and Associate Medical Director, Jesse Jamieson, PA, we have been able to launch a robust supplemental training program hosted within the confines of the MFD. Each quarter, our medics take part in a focused area of education to both refresh themselves and to challenge them for growth in their capabilities. They begin with a study packet, followed by hands-on skill sessions with our medical directors, and then finish the quarter with a series of challenging simulations to assure that they are able to perform at the highest level possible. We have seen great early success with this program.

Our medic system has also recently added a new video-based Airtraq airway system, whereby our medics can now place invasive airways through the use of a video system that enhances their abilities with challenging airways. It further allows for a recorded review by our medical directors after completion of the skill. We have spent countless hours training with the roll-out of this device and have already seen great rewards.



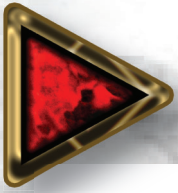
Paramedic Training:

In 2019, we added 6 new paramedics to our staff. They spent 5 months of intensive training in the classroom and simulation center at Madison College, followed by another 2 months of field training on our MFD ambulances. They were challenged by the Covid pandemic which struck our community just at the time they were beginning their field training time. Nevertheless, they were able to navigate this additional hurdle and have now become full-practice medics within the system. We also had another 8 MFD members begin paramedic school in the fall of 2020, and we expect that they will successfully complete their training and be riding on our ambulances by summer 2021.

Quality Assurance:

We are partnering with Dane County EMS in the goal of continuing to provide the highest level of success in pre-hospital survival from Cardiac Arrest. After each of our responses to a cardiac arrest, our crews receive a detailed summary of all of the data on their response to the arrest and their performance as measured against the best of the national benchmarks. By participating in the national CARES registry, we know that the City of Madison has survival rates well above the national average!

We also provide reviews and follow-ups after the placement of every advanced airway and after the administration of each dose of Ketamine. The goal of the quality assurance programs is to provide our medics with every opportunity to deliver care with the highest level of precision possible. We have an amazing group of medics, and we try to provide every possible opportunity for continued high-level success.



FIRE TRAINING DIVISION

The Fire Training Division was very busy in 2020 with a variety of different fire and rescue disciplines. As with all of our divisions throughout the Department, we had to adjust and be creative in order to maintain the amount of hours of required training needed to meet a high level of service for our City. Live video and simulation-based formats were used most often to limit exposures to COVID-19 amongst our personnel. We were also challenged by running a Fire Academy for Recruit Class 10 amongst our personnel. Our training is broken down into 9-week modules that focus on a particular need or time sensitive initiative. These areas of focus are determined by both the Operations Chief's directives and solid communications with Company Officers about their needs. Our Company Officers are at the center of all of our operations and the Fire Training Division's job is to provide them the tools to teach their crews well in order to excel in our profession and service to the people of Madison.

In 2020 we strived to identify and learn from subject matter experts (SME) from Wisconsin and around the nation. Some were from the Seattle Fire Department, the Chicago Fire Department, and right here in Madison. We learned a great deal from those who may fight fires in buildings reflective of construction trends in their location as well as having expertise in a variety of high-risk, low frequency events. These events are the most dangerous threats to loss of life and property.

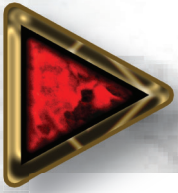
We began the year reviewing the National standards for live fire training as this was what many of our Company Officers stressed the need for. We moved to wildland fire tactics for spring as this is when we see the large majority of brush and wildland fires. Some of the rest of the areas of training we addressed this past year are listed here:

- High rise firefighting operations
- Large building and commercial fires
- Rapid Intervention Team Operations
- Firefighter Survival
- Complex Vehicle Extrication Scenarios

Right: Members of Class 10 training on fire suppression



continued...



FIRE TRAINING DIVISION

2020 Division Highlights

Tiller Truck

The MFD placed a brand new and unique apparatus into service in December of 2020. It is commonly referred to as a tiller truck or tractor-drawn aerial (TDA). Because of the specialized things this vehicle is capable of there are many hours of training needed before it can be operated correctly and safely. Much of this training was centered on just driving it! A TDA has the capability of being steered from the front and the back and over 1,600 hours of training was done by the crews who operate it.



*Right:
The new Tiller Truck in front of the State Capitol.*

*Below:
A new AE in training.*



Training Promoted Staff

Each year the MFD runs promotional processes. In even numbered years it is for the position of Apparatus Engineer or AE. The AE is in charge of the apparatus maintenance, driving to incidents, and operating it at emergency scenes. Once that promotional process is completed the soon to be promoted AE is sent to a 40-hour orientation class to prepare them for operations in the field. The Fire Division is responsible for planning and executing training on administrative duties, water supply, complicated fire scenarios and much more. In 2021 our Division will do the same thing for our new Lieutenants.

As we progress into the coming year we are ready to sharpen our skills on a variety of new topics including working with our surrounding community fire departments on mutual-aid responses and traffic incident management with local law enforcement.

HIRING & PROMOTIONS

Hiring & Promotions

In 2020 the City of Madison Fire Department conducted several promotional processes and hiring processes, which resulted in the following:

New Hires:

Jessica Achterberg, Accountant (February 24, 2020)
Seth Sanders, Community Paramedic (April 6, 2020)
Taylor Frosch, Class 10 Recruit Firefighter (November 2, 2020)
Brennan Woerth, Class 10 Recruit Firefighter (November 2, 2020)

Apparatus Engineer Promotions:

Rebecca Blaschka, Firefighter 4B to Apparatus Engineer (August 9, 2020)
Michael Flores, Firefighter/Paramedic 5A to Apparatus Engineer (August 9, 2020)
Christopher Hahn, Firefighter 8A to Apparatus Engineer (August 9, 2020)
Craig Jones, Firefighter 9B to Apparatus Engineer (August 9, 2020)
Kristopher Kiley, Firefighter 8B to Apparatus Engineer (August 9, 2020)
Joseph Schutz, Firefighter 9C to Apparatus Engineer (August 9, 2020)

Reclassifications:

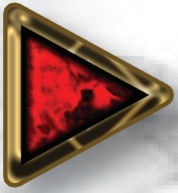
Jen Blair, Code Enforcement Officer II to Code Enforcement Officer III (November 8, 2020)
Scott Strassburg, Code Enforcement Officer III to Code Enforcement Officer IV- Lead worker (December 14, 2020)
Heidi Dewsnap, Administrative Clerk I to Program Assistant I (May 18, 2020)
David Bartkowiak, Firefighter to Firefighter/Paramedic (July 2, 2020)
Stephanie Clary, Firefighter to Firefighter/Paramedic (July 8, 2020)
Sam Coenen, Firefighter to Firefighter/Paramedic (July 2, 2020)
Tyler Prothero, Firefighter to Firefighter/Paramedic (July 2, 2020)
Adam Thimmig, Firefighter to Firefighter/Paramedic (July 2, 2020)
Brian Tremain, Firefighter to Firefighter/Paramedic (July 8, 2020)

Retirements:

We also celebrate the outstanding careers of 2020's retirees:

Michael Grumke, Firefighter (January 2, 2020)
Daniel McCosky, Apparatus Engineer (January 8, 2020)
Peter Kienitz, Firefighter (January 11, 2020)
Lance Langer, Assistant Chief (January 17, 2020)
Thomas Schaller, Lieutenant (February 1, 2020)
Tammy Nelson, Firefighter-Paramedic (February 2, 2020)
Maggie O'Malley, Apparatus Engineer (March 4, 2020)
John Landry, Firefighter (April 1, 2020)
Daniel Storley, Apparatus Engineer (June 14, 2020)
Pete Trilling, Fire Investigator II (September 12, 2020)





PERSONNEL DIVISION

The Personnel Division is responsible for daily administration of the Fire Department and City of Madison personnel rules and Mayor's Administrative Procedure Memoranda. The Assistant Chief of Personnel supervises two Division Chiefs (Health and Wellness, Hiring and Promotions), works closely with MFD Payroll, City Human Resources, and serves as Leadership Team representative with regard to Labor Relations. In addition, the Chief of Personnel meets with and provides a monthly report to the Police and Fire Commission.

The Asst. Chief of Personnel has oversight of the following processes:

- All departmental hiring, resignation, and termination activities
- New hire background checks
- Promotional processes, Personnel Evaluations
- Complaint Investigations
- Assignment and transfer process
- Maintenance of personnel records

Leadership Team Changes (2019 – 2020)

- May 4, 2019 - Assistant Chief Clay Christenson - Operations - Retired
- May 5, 2019 - Division Chief Arthur Price - Hiring and Promotions to Asst. Chief - Operations
- May 5, 2019 – LT Liza Tatar to Division Chief – Hiring and Promotions
- Nov. 3, 2019 – Asst. Chief Che Stedman - Personnel to Asst. Chief – Medical Affairs
- Nov. 3, 2019 – Division Chief Tracy Burrus - Fire Training to Asst. Chief - Personnel
- Nov. 3, 2019 – LT Christopher Carbon to Division Chief – EMS Training
- Jan. 17, 2020 – Assistant Chief Lance Langer - Administrative - Retired

2020 Separations

Fire Investigator Peter Trilling
Code Enforcement Officer Jeremy McMullen
Firefighter Michael Grumke
Firefighter Peter Kienitz
Firefighter John Landry
Firefighter Sarah Fox

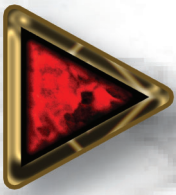
Firefighter Paramedic Tammy Nelson
Apparatus Engineer Daniel McCosky
Apparatus Engineer Margaret O'Malley
Apparatus Engineer Daniel Storley
Lieutenant Tom Schaller
Asst. Chief Lance Langer

2020 Military Deployments

The Madison Fire Department focuses recruitment efforts in several areas to ensure we are successful in communicating to and attracting a diverse group of applicants for hiring processes. Our military recruitment events have been instrumental in affording us the opportunity to recruit several former and active military personnel. 14 MFD members were deployed in 2020 for periods of time ranging from one week to eleven months.

2020 COVID Pandemic

The Personnel Division worked to support the Medical Affairs Division with all personnel-related needs during the pandemic as the Medical Affairs Division was tasked with leading the MFD COVID response through gathering and interpreting Public Health information, procuring PPE/supplies, and providing operational guidance to all Madison Fire Department personnel during the pandemic with the primary goal of keeping our workforce healthy and informed.



HEALTH & WELLNESS

COVID-19 Response

"Health and Wellness" in 2020 was obviously headlined by the COVID-19 pandemic. It was a challenging year for the Madison Fire Department, trying to keep over 400 employees safe during the pandemic. Working closely with EMS/Medical Affairs and EMS Training, the Health and Wellness Division coordinated the tracking of COVID-positive cases within the department and the quarantining of personnel when needed. As of the writing of this report, Madison Fire has accumulated 72 positive cases and has quarantined close to 300 of its personnel since February of 2020. The Health and Wellness Division also assisted with testing of symptomatic employees. Madison Fire collaborated with UW Health/Meriter to have our members tested at their hospital and clinics. By doing this, it allowed MFD to get its members tested more quickly and receive results in a more timely fashion. This allowed us to better care for the station crews, their families, and the citizens of Madison by removing personnel from work where they could possibly expose others.

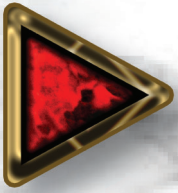


The department truly considers this year's response to the pandemic a success, and it's due to the dedication and cooperation of all Madison Fire employees to provide emergency services to the City of Madison. We've all had to sacrifice certain things during this situation and the health care providers on the front line deserve a ton of gratitude.

Occupational Health Exams

As the department's Occupational Medical provider, SSM Health Dean Medical Group provides MFD with all its medical services based on the NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments. Medical exams are offered to every commissioned member of the department on a yearly basis and most have taken advantage of this opportunity. Dean Medical also distributed over 200 flu shots to department members.





HEALTH & WELLNESS

Peer Fitness

The MFD Peer Fitness Team consists of five members whose purpose is to identify, educate and develop members of the department in the area of Health & Wellness. By promoting a healthy lifestyle and staying fit assists the department in reducing injury costs and lost time wages. Peer Fitness Team members assist in department exercise equipment inventory and the purchase of new equipment. They have also assisted several MFD members with personal workouts and nutritional plans to speed up recovery times for injured personnel. The team utilizes the department's computer training platform Target Solutions to provide a multitude of health related information.

Rebound

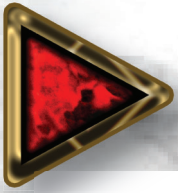
MFD extended the contract with Rebound (formerly known as TAHPI), which is a program designed to assist our members and their families in expediting the medical process associated with injuries that occur unexpectedly. Rebound has been active in the department for almost three years and has made a significant impact on lost wages due to injuries. Working with the City's Risk Manager, Madison Police Department has joined MFD in contracting with Rebound.



Cancer Initiative

Madison Fire continues to support cancer prevention, and along with the Cancer Prevention Committee, strives to incorporate innovative ideas to make our work and living quarters' environment safer. Working with the department, the cancer committee is continuing to add gear washers and extractors to stations and to educate the department about the importance of clean gear and physical fitness.

The Madison Fire Department is steadfastly committed to the health and well-being of its employees to better assist in the care we provide to the City of Madison and its visitors.



EMERGENCY MANAGEMENT

Mitigation, planning, response, and recovery serve as the foundation of a comprehensive emergency management system. Locally we use these four principles to guide the work of the Emergency Planning Staff Team. In 2020, response became the focus for all emergency management activities.

On March 9, the Emergency Operations Center (EOC) was activated to support city agencies as the COVID pandemic reached the Madison community. We quickly developed an incident management system based on FEMA's National Incident Management System (NIMS). The initial challenges included personnel policies, legal considerations, internal and external communications, IT support for working remotely, PPE, and establishing a system to identify and support essential services and functions. As public health concerns changed, the EOC adapted to support city operations through new health concerns and Public Health Orders.

Staff from city agencies were assigned Section Chief roles for Planning, Logistics, Operations, and Finance. Our previous emergency management planning and training prepared them for their new roles and non-traditional tasks. In mid-June we recognized the success of the EOC was based on managers from agencies that are not typically response- or emergency-oriented who stepped up to effectively work in the incident command structure. Teamwork and the willingness to work outside of their normal jobs served as the backbone for a successful EOC.

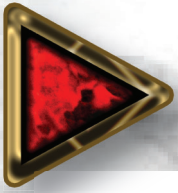
At present, community and economic recovery are the areas where most work is focused. The EOC continues to meet with an eye on maintaining situational awareness and a return to a new normal.

Concurrent to the COVID EOC activation, the EOC was also activated to support MPD and MFD personnel working the protests, civil unrest, and riots. When the Command Post was active, the EOC was staffed, met virtually, or was on stand-by.

For 2021, Emergency Management is planning a series of nine tabletops and one functional exercise based on a large city-wide tornado scenario. The exercises will involve most city agencies, Dane County, local utilities, as well as non-government organizations such as the Red Cross, Salvation Army, and agencies serving those most in need in the community. We vow to break the cycle of tabletop scenarios becoming reality.



City of Madison Emergency Management



FIRE PREVENTION

With a good share of fire prevention work occurring in the community and requiring interaction with people, the work required some very different approaches during the COVID-19 pandemic of 2020. To get the work done, some suggested virtual inspections, others offered self-inspections by tenants, and remote fire safety presentations became an option. Through it all, we were able to meet the needs of the community by adapting to the situation.

New construction continued at a surprising pace. With the construction industry as an essential service, the plans kept rolling in the door for review and approval. Inspections of new buildings, elevators, and fire protection systems continued throughout the year. Inspection staffed donned their PPE and hard hats as they headed out to support the construction industry. For the Inspectors, 2020 was a fairly routine year.

Like other functions in the MFD, Fire Prevention took on the additional workload associated with the Town of Madison agreement. Staff worked to build electronic inspection files and records for the additional 400-600 inspections. Much of the work in 2020 was to prepare for the inspections that began in 2021.

Another interesting task for the year was to support the development of and approvals for the Streatery program. With indoor dining limited by Public Health orders, restaurant owners moved outdoors to serve their customers. Fire Prevention worked with other city agencies to develop a flexible set of rules and easy approval process to safely and quickly set up outdoor eateries. Many of the establishments used public streets for their dining areas. Capacity, fire lanes, and fire access were the primary concerns of the MFD in the review and approval for the Streateries.

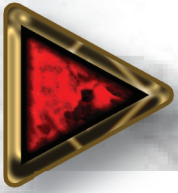
False alarms continue to be in the crosshairs of Fire Prevention. After several years of working to drive down the number false alarms, FPD was able to see some success. Through working with property owners and flexing some enforcement authority when necessary, the number of false alarms dropped by 400. False alarms are unwanted and pose a serious safety concern when building occupants ignore

the alarm signals and do not evacuate to safety. False alarms include malicious acts, smoke detectors in a location that is prone to dust or cooking vapors, alarm testing without the proper notifications and many other preventable causes.

For 2021, FPD will keep working on the backlog of inspections from 2020. The new inspections from the Town of Madison and all of the unique events at the Alliant Energy Center will bring new challenges.



In addition to their regular duties, the MFD Fire Prevention Division was hard at work assembling face shields to be worn by our EMTs and Paramedics on EMS calls. As we continue to face a critical shortage of PPE, we find new solutions through ingenuity and teamwork.



FIRE PREVENTION

Code Enforcement Unit

The Code Enforcement Unit of the Fire Prevention Division is made up of 10 Fire Code Enforcement Officers and 1 hybrid Code Enforcement/Community Education Officer. The Code Enforcement Unit plays an important part in the mission and vision for the Madison Fire Department, where we believe that through education, prevention, and emergency service delivery, we can make the City of Madison one of the safest places to live, work, and play. The Code Enforcement Unit has the primary responsibility to provide the highest possible safety for our citizens, property owners, and visitors by performing quality fire and life safety inspections in all multi-unit residential and commercial properties. The Unit uses a mix of code education, engineering, and enforcement activities to ensure all multi-unit residential, commercial buildings in the city are operated and maintained safely.

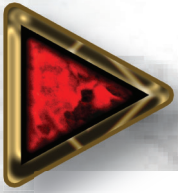
Challenges arose this year with the pandemic affecting many of the ways the unit conducts business, such as performing inspections and face-to-face code education. The Fire Prevention staff adapted and turned to virtual code consultations and meetings to continue the education portion of our responsibilities. The Prevention staff performed their own assigned inspections while also taking over the inspections assigned to the fire stations as well. Fire Prevention staff completed over 7,900 inspections and more than 1,000 compliance related re-inspections over the course of the year. Another challenge was the addition of the Town of Madison's approximately 400-600 fire inspections to our staff's workload. Staff verified more than 500 addresses for compliance with the inspection requirements set forth by the State of Wisconsin. The Prevention Division also performed 86 routine tank inspections, including 23 installs and 19 removals of flammable and combustible liquid storage tanks per Department of Ag, Trade, and Consumer Protection regulations. While quality inspections are our primary focus, our unit assists in many other areas such as issuing special hazard and operational permits, community education, supplementary plan review, and many other assigned duties, such as our occupational services unit (OSU), which assists displaced occupants following a fire.

Top 5 Fire Code Violations found in 2020:

1. Fire Extinguishers needing maintenance
2. Fire Alarm system testing past due
3. Exit signs not illuminated
4. Obstructed exits
5. Miscellaneous violations such as misuse of extension cords and power strips, fire doors held open, etc.



An obstructed exit is one of the most common fire code violations--and a potentially dangerous and deadly one.



FIRE PREVENTION

Community Education Unit

Like everyone else, the Community Education Unit had to adjust to the challenges presented by the COVID-19 pandemic.

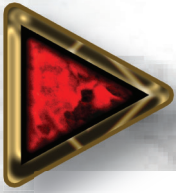
Not being able to meet in person had its challenges, especially because we always pay a visit to our local schools in the fall to promote fire safety and injury prevention. This year we adapted to the needs of the community by providing virtual presentations, live station tours over Zoom, and on-demand station tours on the MFD YouTube channel and social media pages.

Many children were elated when they were surprised by firefighters who drove by their home with lights and sirens to wish them a happy birthday. This made their day extra special!

We continue to find different ways to spread the importance of fire safety and injury prevention. We are ready to meet the challenges and opportunities that 2021 has in store for us.

Stay Safe and Stay Healthy!

 <p>TEACH FIRE SAFETY. SAVE LIVES.</p>	 <p>Hot, Not Hot, or Sometimes Hot: Learn not to BURN!</p>	
 <p>FIRST ALERT CARBON MONOXIDE ALARM DO NOT PAINT</p>	 <p>RESCUE ALARM CONFINE EXTINGUISH</p> <p>PULL THE PIN AIM AT BASE OF FIRE SQUEEZE HANDLE SWEEP SIDE TO SIDE</p> <p>ONE RACE YOU HAVE TO WIN!</p>	 <p>Bedroom, Den, Bath, Bedroom, Living Room, Kitchen, Meet Here!</p> <p>Window Primary Escape Path Secondary Escape Path</p>



FIRE PREVENTION

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.

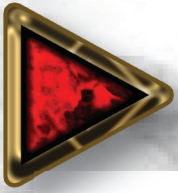
In 2020, MFD saw a decrease in plan submittal for the first time in many years. During the height of the pandemic, plan reviewer and admin support processed plans and maintained an average 8-day turn-around for reviews.

The City of Madison still sees an unprecedented boom of high-rise buildings spread across the landscape. Each one of these buildings represents an enormous amount of work by our FPE, fire prevention staff, and administrative staff. The Fire Protection Engineering Unit works tirelessly to provide safe housing to our residents, while providing the systems necessary to also protect our first responders.

In 2020, intake numbers show 987 plans were submitted for review. 750 of those plans were new construction, alteration, and work permits. Multiple staff members of the Prevention Division perform the plan reviews, showing our multi-disciplinary approach to code enforcement. During COVID-19, prevention staff not only reviewed the plans for compliance, but performed essential field inspections to ensure projects maintained their timelines.



The City of Madison Fire Department continues to emphasize the importance of fire sprinklers. Side-by-side demonstrations like this provide a very convincing visual aid.



FIRE PREVENTION

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 issue the required permit to operate.

2020 was the year of the unusual. The Elevator Inspection Unit staff worked hard to ensure new elevator installations were completed safely and to keep existing elevators operating properly. Like many other city agencies, the Elevator Inspection Unit teleworked. During teleworking, our staff completed reviews of Category 1 and 5 safety tests to ensure elevators are safe and they stop properly for the public. The Unit also worked on rescheduling annual inspections during the State of Wisconsin Safer at Home orders.

In 2020, over 2,200 elevator inspection activities were logged, including 63 new installations. The City of Madison continues to see an increase in new elevators every year. At the end of 2020, the Elevator Inspection Division began providing annual inspection services to the Town of Madison.

Elevator Inspections in 2020

No Violation: 624

Violations – PTO Issued: 637

Violations – PTO Not Issued: 484

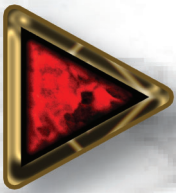
Re-inspections: 376

New Installations: 63

Other: 24



Even during a pandemic, our three elevator inspectors work hard to ensure all elevators in the city are running correctly and safe to use.



FINANCE

2020 OPERATING BUDGET AS OF APR 27, 2021

	Adopted Budget	Actual with Encumbrances	Balance
*Permanent & Premium Salaries	\$ 37,597,257.00	\$ 37,740,008.00	\$ (142,751.00)
Hourly wages	10,000	-	10,000
Overtime Salaries	1,380,613	1,892,692	(512,079)
Special Duty	81,360	33,236	48,124
*Benefits	13,279,078	14,883,600	(1,604,522)
Other Grants/Transfers	1,288,339	1,145,092	143,247
Purchased Services	1,516,473	1,278,939	237,534
Materials & Supplies	1,168,464	947,901	220,563
Inter-Agency Charges	4,432,320	3,843,227	589,093
Capital Assets	-	-	-
Inter-Departmental Billings	-	-	-
*Revenue	(3,785,260)	(3,593,649)	(191,611)
Net Budget	\$ 56,968,644.00	\$ 58,171,046.12	\$ (1,202,402.12)

* Includes Grant Funding

2020 CAPITAL BUDGET

PROJECT	AMOUNT
Fire Equipment	\$ 500,000
Communications Equipment	470,000
Minor Building Improvements	70,000
TOTAL	\$ 1,040,000

