

Mequon Fire Department 2021 Annual Report



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OFFICE OF THE FIRE CHIEF

January 1, 2022

Mayor Wirth
City of Mequon Council Members
City of Mequon Administrator William Jones

In 2021 the Mequon Fire Department responded to 2,543 fire and emergency medical calls, an increase of 327 calls from 2020. August was the busiest month with 266 fire and EMS calls. This report highlights the many emergency and non-emergency activities of the Mequon Fire Department in 2021.

The biggest accomplishments in 2021 was the hiring and onboarding of the three newly created Battalion Chiefs positions. Each Battalion Chief works a 24-hour shift and has several areas of responsibility within the fire department operations.

Staffing continued to be an ongoing problem in 2021. The number of community members who want to serve the fire and EMS department has steadily declined in recent years and the amount of time current members can offer has also declined. In 2021 the fire department needed to cover 52,560 of on call time with its Paidon-call staff. Despite hiring 18 new POC members in 2021 approximately 20% of the on-call shifts went uncovered.

Moving forward into 2022, the fire department will continue to strive to deliver the highest level of service to the community in the most efficient manner with the resources available. The department will maintain, as its highest priority, the safety of both the residents and department members.

Respectfully Submitted,

David L Bialk

Mequon Fire Chief

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VISION STATEMENT

The Mequon Fire Department will prepare members to competently perform all duties of the job to serve the community. Each member will be well-trained in the most current practices of firefighting and emergency medical services as well as personal safety and health.

The Mequon Fire Department will provide consistent, reliable, and efficient emergency services to the community.

The Mequon Fire Department will serve the community by working as partners with businesses to provide fire code enforcement assistance and pre-planning to reduce the chance of loss of life and property.

Mequon Fire Department members will serve the community through education by sharing fire safety information, injury prevention messages and act as positive community role models.

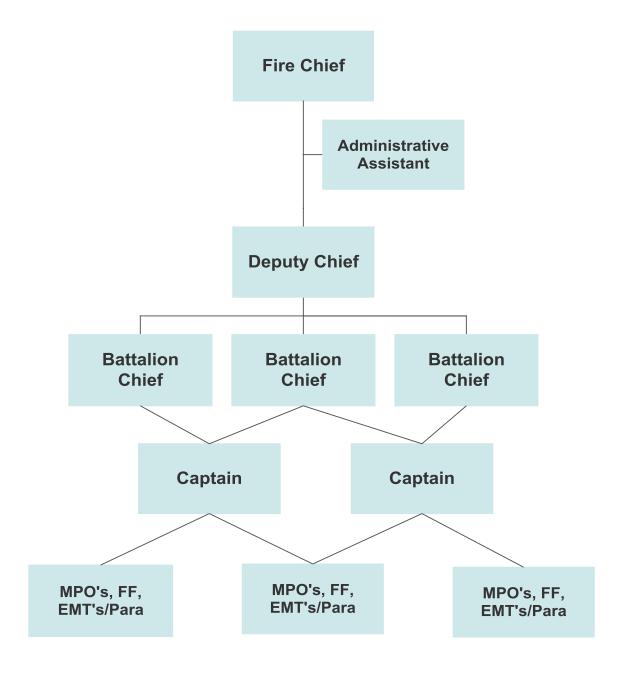
Each member of the Mequon Fire Department will pass on their training and experience to other members, thereby improving the ability and effectiveness of the department to serve the community.

Members of the Mequon Fire Department will treat membership on the department with honor and respect by appreciating that it is a privilege and not a right.

Established 1933

ORGANIZATIONAL CHART

The Mequon Fire Department provides fire prevention, fire suppression and emergency medical services to an estimated 24,000 residents who reside within the 47 square miles of the City.



CHIEF'S REPORT

Operations

January

- The Chief met with the Wisconsin Public Policy Forum to review information from Ozaukee County fire departments to create a report on the fire and EMS services in the County.
- Members of the fire department started receiving their first dose of the Covid 19 vaccine.
- Advertisements were published for the position of Battalion Chief for the City of Mequon.
- An audit was done of all EMS reports from 2020 to check for compliance with the State of Wisconsin required National Emergency Medical Services Information System III (NEMSIS III). Reports that were found to be noncompliant were amended and used as a platform for training going forward.

February

- A meeting was held with the Wisconsin Public Policy Forum to review the draft report of the phase I feasibility study of consolidated fire and EMS services.
- Members from Mequon, Thiensville and Cedarburg met to discuss sharing of services.
- The application process was closed, and candidates were reviewed for the position of Battalion Chief for the City of Mequon.

March

- The fire department reached its seven-year anniversary of staffing one part-time paramedic around-the-clock to ensure 24/7 coverage of advanced life support calls. The department utilizes 15 members certified at the paramedic level to cover the 8,760 hours a year. This was the first year the Deputy Chief or Battalion Chief needed to fill in for the paramedic because no member paid on call member was available.
- The Public Policy Forum presented their findings of fire and EMS services to the Mequon Common Council. The PPF report can be found here: https://www.ci.mequon.wi.us/sites/default/files/fileattachments/fire/ambulance/page/22921/wisconsin_policy_forum_full_report_-_3.8.21.pdf

- The Chief participated in a virtual meeting with the City's insurer to discuss workers comp injury prevention and ways to mitigate claims.
- The Fire Chief attended the Wisconsin State Fire Chiefs Spring Education Conference in Madison.

<u>April</u>

- The fire department hired its first of three Battalion Chiefs approved in the 2021 budget. Matthew Schneider was hired as the BC in charge of Emergency Medical Services. Matthew Schneider was hired from the North Shore Fire Department.
- A meeting was held with the fire chiefs and city administers from Mequon and Thiensville to discuss sharing services as outlined in the Public Policy Forum report.
- The fire department continued to received shipments of personnel protective equipment from the Strategic National Reserve. The equipment included N95 masks, surgical masks, Tyvek suits, cleaning supplies and hand sanitizer.

<u>May</u>

The second of the three Battalions Chiefs were hired. Christopher Ackley was hired as the BC in charge of training. Christopher came from the Beaver Dam fire department where he was a Captain.

June

- The Mequon Fire Department renewed its Paramedic license with the State of Wisconsin.
- The third Battalion Chief was hired to fill the position of Community Risk Reduction. Brandon Boettcher was recruited from the South Shore fire department.
- An audit was conducted of the controlled substances Mequon utilizes for the paramedic program.

July

- A kickoff meeting was held with city staff to discuss strategic planning for the city of Mequon.
- The Future of our Fire Department made its final recommendation to the City Council regarding facilities and equipment, ending the committee's tasks.

<u>August</u>

- Improvements at both the east and west side fire stations begun.
- The three Battalion Chiefs were sworn in a ceremony held at station 1.

September

- Four new candidates were selected as interns from students enrolled in the Fire Protection Technician Associate Degree program at MATC. Interns must maintain a 2.5 or greater GPA, pass the fire department agility test and pass both a background check and medical screening. The interns live in the fire station and respond to emergency calls just like the Paid-on-call members and participate in community education, fire prevention, training and other assigned duties. The interns are paid a \$500 per month stipend for their participation. Training for the interns include, EMT, Firefighter Level II, Driver Operator Pumper and if they sign on for two years, paramedic training is paid for.
- Over the summer months the Fire Chief and City Administrator met with representatives of all 14 communities within Ozaukee County to discuss the Phase II study of consolidated fire and EMS services.

October

During the budget process the Common Council reallocated money used to pay Paid on Call salaries to create three fulltime firefighter/paramedic positions. Due to the staffing shortage facing the fire department it became necessary to create the positions. The hiring of the three fulltime firefighter/paramedic will not solve the departments staffing shortage but it will shift resources to where needed.

November

- The chief attended the annual meeting of the Ozaukee, Washington, Milwaukee, and Waukesha County Fire Chiefs to update all box alarm cards for their respective cities. A box alarm card is the template used to garner additional resources from other communities in the event of an emergency. Most departments design their box cards to request the closest units(municipalities)to the emergency. The box alarm cards are also designed to utilize resources from additional counties and across the state if needed.
- The paramedic program requires the fire department to maintain a stock of Schedule 1 (Class 1) Narcotics. Every year the narcotics are audited and inventoried. An audit was performed of the medications used for EMS and was found to be in compliance with all State and Federal regulations.

 Fire department personnel trained and recertified every City employee in Cardiopulmonary Resuscitation and use of the Automatic External Defibrillator.

Administration

- The fire department received its Fund Assistance Program (FAP) Application from the State of Wisconsin in January. Every year the fire department is eligible for FAP money from the State of Wisconsin. Funds are distributed to applicants based on a formula which includes a base sum plus a factor for run volume, service area, population and EMT roster size. In 2021, the fire department received \$6,549.44 of FAP money from the State of Wisconsin. The money may only be spent on EMT-Basic training and the purchase of EMS equipment.
- The fire department stopped performing inter-facility transports in July due to a lack of staffing.
- In July, the fire department received its 2% dues disbursement from the State of Wisconsin totaling \$189,529. The department is eligible for the money by performing fire inspections of every public building once a year, providing fire prevention education activities and providing fire training for its members.
 - The Fire Department Dues Fund is funded through fire insurance premiums paid in Wisconsin. The Insurance Commissioner's Office collects two percent of the annual premiums for the Fire Department Dues Fund. Money in the fund is distributed to municipalities based on a formula of equalized assessed value.

101.573 Fire dues distribution.

No city, village or town maintaining a fire department under this section may use any dues received under s. 101.573 and this section for any purpose except the direct provision of the following:

- 1. The purchase of fire protection equipment.
- **2.** Fire inspection and public education.
- **3.** Training of fire fighters and fire inspectors performing duties under s. 101.14.
- **4.** To fund wholly or partially fire fighters' pension funds or other special funds for the benefit of disabled or superannuated fire fighters.
- There were 507 burn permits issued in 2021 compared to 519 burn permits issued in 2020. Burn permits can be renewed via the internet.
- All fire department Standard Operating Guidelines were reviewed and updated.

- The fire department updated its website with the department goals and objectives and added local training material for members.
- The City's burning ordinance was taken to the Public Welfare Committee for review and new ordinance drafted. The new ordinance will take effect in early 2022.
- In 2021 the fire department responded to 92 false alarms, 16 which were billable.

2021 Incidents

1/12/21 The fire department responded to Davis Road for a garage on fire. Upon arrival the department found a 40' x 60' metal garage with fire coming from the roof. The fire was in a non-hydranted area and a tanker shuttle operation was started using neighboring departments. The fire appeared to start in a wood burning unit used for heating

1/15/21 Mequon's special operations team responded to Grafton to assist with a bluff rescue at the Lion's Den Gorge Nature Preserve. A hiker fell down the bluff and needed assistance up.

1/18/21 The fire department responded to another garage fire on Davis Road. On arrival the department found a large barn with smoke coming from the building. Upon investigation, the owner was using a wood burner in the barn to burn trash and the material around the wood burner caught fire.

1/22/21 A pedestrian was struck in the 11000 block of Port Washington Road. The subject was transported to St Mary's for non-life threating injuries.

1/30/21 A wood burning stove started a garage fire at 11743 N River Road. The homeowner noticed the side of the garage on fire and called 911. The response coincided with a snowstorm. The fire department had preemptively staffed personnel in the station, thus was able to get a fire engine on scene quickly.

1/31/21 A homeowner on Grace Avenue called the fire department on a snowy night when he noticed three car detached garage was on fire. The fire department coped with below zero temperatures to extinguish the fire. The fire appeared to start in appliance used to heat the garage.

2/7/21 The fire department responded to a chimney fire at 11050 N River Road. The fire was confined to the fireplace and there was no extension to the structure.

2/7/2021 The fire department assisted a kayaker out of the Milwaukee River while the kayaker was attempting to rescue a goose frozen in the ice. The kayaker was assisted out of the river and the goose was safely removed from the ice and taken to the Ozaukee Humane Society.

3/10/21 A grass fire in the 11000 block of I-43 required the freeway to be shut down shortly while the fire was extinguished.

3/10/21 A small cooking fire required the response of the fire department to extinguish and ventilate the home.

4/6/21 A single vehicle accident on I-43 required the driver of a van to be extricated. The van was tangled in the wires between the north and south bound lanes making the extrication challenging.

5/5/21 A dumpster next to a home caught fire in the 4100 block of Highland. The fire was extinguished before the flames impinged on the home.

5/25/21 A two vehicle head on accident in the 8700 block of Mequon required extrication on two vehicles to remove three victims.

6/6/21 A fire in a garage on Grace Avenue caused moderate damage to the two-car garage.

6/29/21 A medical emergency led to a one car rollover accident on Cedarburg and Sherwood. The patient needed to be lifted out the vehicle through a door that was removed.

7/10/21 One person was extricated from a single vehicle accident in the 12800 block of I-43.

7/14/21 A home was checked after being struck by lighting on Shorewood Drive.

7/19/21 A boater was assisted by the fire department after their boat ran aground on the Milwaukee River.

7/25/21 A kitchen fire had to be extinguished by the fire department on Fairfield Road.

7/26/21 A pile of oily rags caused a garage fire at 13603 Martin Way. The garage was located under the home with a large attached storage area. The fire caused extensive damage to the contents of the garage.

8/10/21 A severe thunderstorm generated 16 calls for service for the fire department. The calls ranged from downed power lines to homes being struck by lightning.

8/16/21 A fire in a three attached garage caused extensive damage to a home on Windpoint Court. Two autos and a motorcycle were also destroyed the in the fire.

8/16/21 The fire department responded to smoke coming from an RV on El Rancho Lane. A passerby noticed the smoke and called 911. The RV was found to have a short in its electrical wiring.

10/2/21 A two car accident required extrication in the 6300 block of Mequon Road. Two people were transported to St Mary's with non-life threating injuries.

11/25/21 A fire in a fireplace extended into the wall of a home on Evergreen Road. The homeowner put the last log on the fire about 10pm and woke at 6am to smoke throughout his home.

12/28/21 The fire department responded to a chimney fire on Center Lane. The homeowner noticed smoke coming from the chimney and called 911.

COMMUNITY RISK REDUCTION REPORT

The Mequon Fire Department is mandated by State Statute Chapter SPS 314 (13)(b) 1. `General.' The Chief of the Fire Department shall be responsible for having all public buildings and places of employment within the territory of the Fire Department inspected for the purpose of ascertaining and causing to be corrected any conditions liable to cause fire, or any violations of any law or ordinance relating to fire hazards or to the prevention of fires.

- 2. `Determining the buildings that are to be inspected.' The Fire Chief shall be responsible for determining those public buildings and places of employment that are to be inspected, for each municipality for which the fire department has responsibility.
- 3. `Scheduling of inspections.' Fire prevention inspections shall be conducted at least once per calendar year, or more often if ordered by the Fire Chief, in all territory served by the Fire Department.

Creating a safe environment for people to live and work in is a goal of every fire department. Education is one way of improving safety. In Mequon, we educate the community with programs unique to our city through the support of Fire Inspectors, the business community, the school district and community groups.

Annual fire inspections provide an opportunity to promote goodwill and education about the Fire Department's role with business owners and employees. This contact reaffirms their joint responsibility to fire prevention. The inspection program also provides firefighters the opportunity to gain firsthand knowledge of building layouts, contents, and construction in the city.

2021 proved to be a year of progress at the Mequon Fire Department. The department met a multiple year goal of introducing and incorporating electronic fire inspection software into daily operations. This software proves more efficient in completing inspections as well as record keeping and data access. It has also proven beneficial during every day calls for service because personnel are now able to access critical building information on any electronic smart device when information is needed quickly. The program has many capabilities and we look forward to growing and further incorporating it into our operations.

2021 Statistics:

While fire inspections were temporarily suspended due to the Governors Emergency Order 22, In March of 2021, Fire inspections continued with a state-set benchmark of completing 75% of what would normally be completed in a normal twelve-month calendar period. Mequon Fire met and exceeded that by

Community Risk Reduction Report (Continued)

completing 675 Fire safety inspections. During those inspections, members found and enforced 466 fire code violations. In addition, members completed many hours performing additional activities such as performing fire protection system plan reviews, sprinkler and alarm tests on new construction or renovated buildings, installing Knox boxes, as well as property owner consultations. In 2021, over 500 burning permits were reviewed and issued by the fire department.

Public education programs provide the department an opportunity to share fire safety education, injury prevention messages, and serve as positive community role models. The Mequon Fire Department now maintains a cadre of twelve American Heart CPR instructors. Our instructors can teach a variety of disciplines to include Heartsaver which is more for bystanders to Advanced Cardiac Life Support and Pediatric Advanced Life Support for those that are medically trained. In 2021, Fire Department personnel conducted training for over 200 people in the Basic Life Support and Heartsaver CPR disciplines.

In 2021, the department added an additional eight American Heart Instructors to bringing our total to twelve. Those added are: Battalion Chief Brandon Boettcher, Battalion Chief Christopher Ackley, Battalion Chief Matt Schneider, Firefighter/Paramedic Heather Krueger, Paramedic Justin Klis, Paramedic Erin Koerner, Firefighter/Paramedic Mackenzie Szeszol, and Firefighter/A-EMT Melissa Bradley.

MFD also participated in over a dozen public education events throughout the year that consisted of birthdays, block parties, school visits, and community events such as the Taste of Mequon. Each event is an opportunity to pass along the messages of safety and prevention. During the Taste of Mequon, Hands Only CPR was continuously taught throughout the duration of the event as well.

The Mequon Fire Department partners with the American Red Cross to install smoke detectors for residents that reside within the city. Last year, Fire Department personnel collectively installed 20 smoke detectors.

EQUIPMENT REPORT

The National Fire Protection Administration has standards for the care and maintenance of fire equipment. The fire department is bound by the State law *Chapter SPS 330 Safety and Professional Services, Fire Department Safety and Health Standards* to perform annual certification test of equipment. Many of the same testing is required by the Insurance Service Organization to maintain our current ISO fire rating. These tests include annual DOT(Department of Transportation) Inspections to make sure all of our vehicles are roadworthy and all of our pumps are tested to make sure they meet the NFPA requirements and to make sure everything is operating correctly. As well, all department ladders, both aerial devices and ground ladders, are tested to make sure they are structurally sound and are without defects and operate effectively. All testing was completed in 2021 by reputable and certified, third-party companies and all apparatus were maintained to the applicable standards.

One of the most important jobs of a fire department is to maintain emergency equipment in a state of readiness. Weekly vehicle checks are assigned to members on a rotating basis to ensure every vehicle is stocked and ready for an emergency response. Each member is responsible for checking equipment on their assigned vehicle weekly. Lieutenants are responsible for holding their assigned members accountable for vehicle checks.

Current Fire Department Vehicle Fleet

Unit	Year	Make	Туре	Age
961	1996	Pierce Quint	85' Aerial with 1500gpm Pump	26
967	1996	Ford	3500 Gallon Tender	26
953	1998	Ford/F350	Rescue / Brush Truck	24
963	2005	Pierce Kenworth	Fire Engine 1500gpm Pumper	17
960	2006	Pierce Ladder Tower	100' Platform with 1500gpm Pump	16
962	2008	Pierce Impel	Fire Engine 1500gpm Pumper	14
956	2009	Chevy/Tahoe	Staff car	13
951	2009	Ford/F350	Ambulance	13
966	2011	Pierce International	3500 Gallon Tender	11
951	2014	Ford/F450	Ambulance	8
964	2015	Pierce Impel	Fire Engine 1500gpm Pumper	7
955	2016	Ford/F59 Van	Special Operations Equipment Truck	6
970	2016	Chevy/Tahoe	Chiefs Car	6
950	2016	Ford/F350	Ambulance	6
958	2017	Jeep Grand Cherokee	First Responder Vehicle	5
958A	2017	Jeep Grand Cherokee	First Responder Vehicle	5

957	2021	Chevy Silverado Pickup	Utility Vehicle with Towing Capacity	1
958	2021	Jeep Grand Cherokee	First Responder Vehicle	1
958A	2021	Jeep Grand Cherokee	First Responder Vehicle	1

Equipment Report

- The department sold a Chevrolet Trailblazer Utility/First Responder vehicle for \$5,000 on a government surplus auction site.
- 2021 Chevrolet Silverado 2500HD placed into service as the department's new utility truck.
- Two new 2021 Jeep Grand Cherokees were put into service as front-line First Responder vehicles. First Responder vehicles are equipped with Advanced Life Support equipment and can be taken home by community volunteers. They respond directly to emergencies and begin medical care.
- Two new Thermal Imaging Cameras (TIC) were placed in service on both frontline fire engines. Thermal Imaging cameras allow personnel to see changes in temperature in austere environments.
- In partnership with Ozaukee County and General Communications, all Mequon Fire apparatus received new dual-band mobile radios.
- Tower 960 received rust/corrosion prevention/mitigation on the frame rails after being discovered during the annual DOT inspection. The frame and underbody were undercoated. New LED lighting and wheels were also installed.
- 961, an 85' Aerial with a 1500 GPM pump was loaned to the Village of Thiensville for a period of six weeks while their Quint was out of service for repairs.
- 956 was repurposed and placed in service by Fire Department personnel along with City Mechanics as Battalion 9. Battalion 9 is staffed by the Battalion Chiefs and is utilized for daily operations. It is configured as a command vehicle and carries a full complement of Advanced Life Support EMS equipment.
- 956, Battalion 9, received a new transmission.
- 959, the Brush Truck, received an all-new emergency lighting/siren package. The new equipment will help preserve the electrical system and provide a safer response and on-scene environment for personnel.
- Five new Physio Control AEDs were purchased and placed on all front-line Fire Apparatus to meet NFPA 1500 requirements.
- New electric Positive Pressure Ventilation Fan was purchased and placed inservice.

Equipment Report (continued)

- New physical fitness equipment was purchased, including a new rowing machine and two stationary bikes.
- A Hamilton T1 mechanical Ventilator was purchased and placed in service. The ventilator can be used on resuscitated patients and while doing inter-facility transports.
- An additional Point of Care Ultrasound machine was purchased and placed in service.
- Two additional IV pumps were purchased. IV pumps are useful tools when Paramedics administer medications.
- The fire department has approximately three-and-a-half miles of fire hose that was service tested by department members in 2021. Hose that fails the yearly service test is replaced or repaired. Three lengths of hose failed during testing.
- The department passed its SCBA breathing air quality testing. Testing is done once per quarter at a third-party testing facility. A test kit is mailed to the fire department; samples are taken of the air and sent back to the lab for testing.

STATION IMPROVEMENTS

One of the keys to a successful combination Fire Department is having a place where members can spend time working out, studying, having access to the internet, watching TV, sleeping and preparing food. Giving personnel an inviting environment is a way to decrease response time to fire and EMS calls because it is more likely there will be personnel in the building when a call comes in. Having members spend some of their free time in the stations provides, at times, full-time staffing. Improving the fire stations not only creates an inviting place for members but creates a sense of pride and ownership of the department. The Mequon Fire Department has proven its commitment to progress and continually evaluates the needs of the Department to help better serve the community. We continue to update facilities and equipment as needed and when fiscally responsible.

Improvements in 2021:

- The West side fire station had the kitchen remolded, carpet added for a new day room, tile floor put in the dorm rooms, new office furniture and workstations were also added.
- The former day room/living area was converted into a Battalion Chief's office, configured to support the needs and operations of the Battalion Chiefs.
- New Kitchen appliances were purchased for Station 1 and a second refrigerator was added.
- Ten new mattresses were purchased.
- Administrative Assistant's office area was reconfigured

TRAINING & RECRUITMENT REPORT

The Mequon Fire Department trains its members using the Vocational Technical College System, in-house, online education, conferences and a variety of seminars. 2021 was another challenging year as some members had both online and in person training as Covid still impacted the department and Ozaukee County with classroom challenges. Weekly training resumed with precautions in place.

The fire department provides weekly training on Monday evenings and Tuesday mornings. This training is offered 36 weeks of the year, as well make up training sessions on three Saturday's throughout the year. The average attendance is 30 members per week. Additionally, monthly Dive and Tech Rescue trainings are offered to members who wish to participate in special operations and extra training topic sessions are held four times a year. The fire department offers over 225 hours of training to its members every year.

All members completed training on mandatory Bloodborne Pathogens Policy, proper lifting, use of personal protective equipment, TB awareness, decontamination procedures and sexual harassment.

Ice rescue training was conducted in February for all department personnel.

Nine members went through 20 hours of fire orientation between April and May. Orientation is used to ensure all new members understand Mequon policy and procedures how to use department specific equipment.

All newly certified Emergency Medical Technician EMT-Basic or EMT-Paramedic on the department is given a 24-hour orientation. Orientations are scheduled throughout the year as needed.

All department members were recertified in CPR and AED during October; this is a biennial certification as it expires every two years.

In January, a training schedule was developed. The department views training as the foundation for operating efficiently and safely during all department events. The schedule is modified, as needed, to accommodate members and community needs.

The fire department conducts in-house skills assessments called <u>911</u> <u>Emergencies</u>, <u>High Risk/Low Frequency Events</u>. Four times a year, emergency medical technicians and paramedics must demonstrate competencies in eight high-risk, low-frequency skills by completing proficiency stations. The <u>911</u> <u>Emergencies</u> model is a pass/fail assessment that all EMS providers must pass to be eligible to work on the ambulance or first responder vehicle.

Training & Recruitment Report (Continued)

Nine members completed Firefighter 1: Sarah Baker, Melissa Bradley, Laura Cecil, Jessica Gold, Heather Krueger, Wesley Reimer, Daniel Santiago, Antonio Salerno, and Nico Salerno.

Seven members completed EMT basic: Jessica Gold, Nick Margrett, Steve Plautz, Daniel Santiago, Shelly Joy Schmeltzer, Craig Wheeler, and Emma Van Why.

One member completed Advanced EMT (A-EMT): Caleb Wardenburg.

Four members completed the Motor Pump Operator class: Wesley Reimer, Antonio Salerno, Nico Salerno, and Ryan Spradlin.

Four members obtained their CPR instructor certifications from American Heart Association: Mackenzie Szeszol, Melissa Bradley, Battalion Chief Matthew Schneider, and Battalion Chief Christopher Ackley.

Two members obtained their paramedic certifications: Sarah Baker and Alex Knaus.

Special Operation Teams

The department has two special operation teams: the dive team and the technical rescue team. The dive team and the technical rescue team each train for three hours a month to ensure all equipment is functional and members are proficient when there is a call for service.

Dive Team

The dive team cooperates with other departments in Ozaukee County and the surrounding area to ensure an adequate number of trained personnel is available in the event of an incident.

In 2021, the Dive Team conducted pool dives, open water dives and ice dives. Pool dives are used during the winter months where the team can focus on basic SCUBA skills and equipment maintenance. In the winter months, the team will also conduct ice dives in local waters to work on thin ice and use special equipment to replicate rescuing people who have fallen through the ice. During the summer months, the dive team practices in the Milwaukee River and in local quarries and ponds.

The dive team sent two members to basic dive class: Alex Knaus and Sarah Baker.

The dive team consists eight members and four shore support members.

Training & Recruitment Report (Continued)

Technical Rescue Team

The technical rescue team works in many different environments that may include high angles, trench rescues, building collapses, and in confined spaces. During the team's monthly training, many different scenarios are replicated to ensure each member is proficient in any rescue they may be called to. Hands-on training along with reviewing past incidents is key to ensuring each member knows the equipment and the team's capabilities.

RECRUITMENT

The Mequon Fire Department has an ongoing recruitment process that uses advertisements within the community and a recruitment management program, jointhefireservice.com.

In 2021 137 individuals submitted interest in joining the fire department and of that 137:

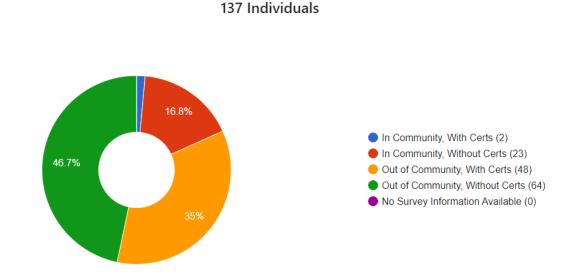
18 joined the fire department.

Three have submitted applications.

14 have continued interested.

102 discontinued interest.

The chart below details the interested individuals based upon residency and certifications.



EMERGENCY MEDICAL SERVICES REPORT

The Mequon Fire Department's Bureau of EMS oversees the prehospital medical care by the department's EMTs and Paramedics.

Emergency medical calls for service dominate the department's operations. In 2021, medical calls accounted for 82% of the emergency responses. With medical calls accounting for most emergency responses, the department must recruit, train, maintain, and oversee highly skilled EMS providers.

Ozaukee County Emergency Medical Guideline Update, 2021:

Mequon Fire Department participates in a committee-based review panel to recommend revisions and updates for these medical guidelines. In 2021, a large guideline update was implemented in collaboration with medical directors from Ascension Columbia St. Mary's Ozaukee and other area fire departments.

Guideline updates were introduced to all EMS providers through several trainings, including assisting service partners with their respective trainings.

Notable updates to the 2021 version of the guidelines include:

- Changes in airway management practices
- Addition of a Rapid Sequence Intubation pilot guideline
- Changes in the management of patients experiencing heart attacks (MI)
- Changes in the management of patients in respiratory failure
- Changes in the management of patients with atrial fibrillation (cardiac dysrhythmia)
- Addition of a guideline for anxiety-mediated emergencies
- Addition of a guideline for the use of a mechanical ventilator by paramedics
- Expansion of a guideline for the use of ultrasound scanning by paramedics
- Updates to administrative code sections

Pilot Program; Rapid Sequence Intubation:

Rapid Sequence Intubation (RSI) is an emergency procedure used to place a breathing tube in an otherwise conscious patient. Patients who get RSI are typically in the hospital emergency room or operating room under the care of a trained physician. In RSI, physicians administer sedatives and paralytic medications, then rapidly place a breathing tube in the patient to support their respirations and protect their airway from imminent compromise.

Mequon Fire Department's EMS Bureau has worked in conjunction with medical directors at Ascension Columbia St. Mary's Ozaukee to develop and implement a pilot program for paramedics to perform this high-stakes and life-saving procedure

in the field. The RSI procedure, by state DHS code, requires two paramedics at the patient side to legally proceed. In the past, this has been a limitation for MFD, only having a single paramedic on-call. With the addition of paramedic Battalion Chiefs in 2021, the RSI pilot program has been made a reality—the first ever in Ozaukee County.

In order to initiate the RSI pilot program, Mequon's command staff attended hours of supervised training in the operating room at Ascension St. Mary's Milwaukee, preforming live intubations on real surgical patients. In addition, all paramedics received in-person, in-depth training from our system EMS Medical Director. Equipment and medications to perform this procedure were acquired and placed on the first-responding ambulance, as well as the Battalion Chief's vehicle.

Paramedic Training; Point-of-Care Ultrasound:

Mequon Fire Department's paramedics utilize point-of-care ultrasound scanners to recognize several cardiac and pulmonary conditions in the critically ill and injured. Training to maintain and expand provider proficiency in this unique skill is ongoing. A second ultrasound probe was purchased in 2021, expanding the reach of our program—the only one in Ozaukee County, and one of only six in the state.

Performance Analysis; Out of Hospital Cardiac Arrest:

Cardiac arrest is a fatal condition that occurs when a patient's heart stops beating. This typically is due to a disease of the electrical system of the heart, though it can occur for various reasons. EMS services are tasked with responding to reports of cardiac arrest victims, attempting to resuscitate, stabilize, and transport them to definitive care—with hopes of achieving recovery and meaningful life.

According to the American Heart Association Cardiac Science Journal, the chances of successful resuscitation decrease by 10% for every minute advanced cardiac care from paramedics is delayed. This illustrates the importance of an effective response force arriving on the scene of a cardiac arrest in a very short amount of time.

When evaluating organizational performance in cardiac arrest resuscitation, rates of returned pulses (*Figure 1*) and rates of returned pulses at the hospital destination (*Figure 2*) are evaluated. MFD has above national average performance in both categories, with the American Heart Association reporting a national average of for returned pulses at just 18%. An additional performance metric in cardiac arrest in airway management. MFD has above average performance with first attempt success on 90% of cardiac arrest cases, and 95.5% success after two attempts (*Figure 3*).

Figure 1

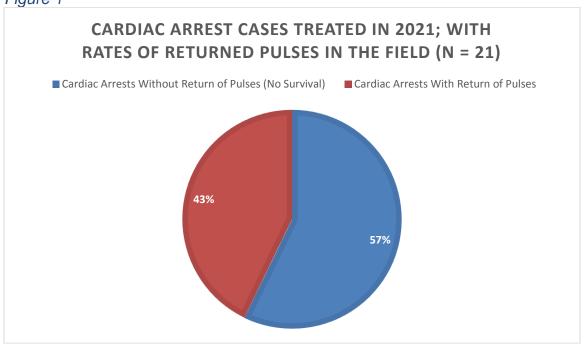
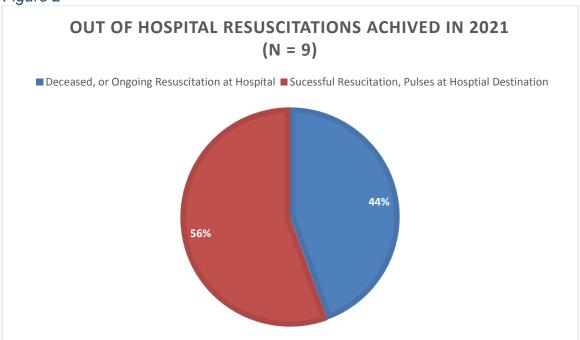
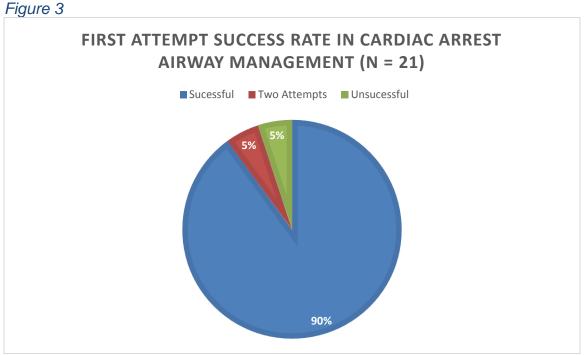


Figure 2



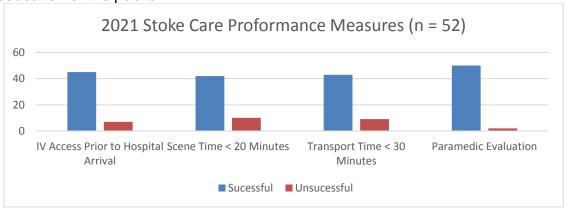




Performance Analysis; Stroke:

Due to the ageing population within Mequon, EMS is seeing increased numbers of age-related conditions with a high morbidity and mortality. Stroke is a common field diagnosis for a critical medical patient in Mequon. These patients require prompt recognition, treatment of life threating cardiac dysrhythmias or airway compromise, and rapid transport to capable stroke center with an ambulance crew of two to three EMS providers.

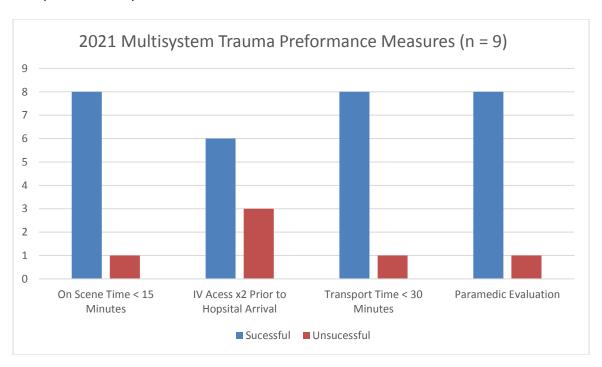
The goal with EMS stroke care is improving outcomes and quality of meaningful life through progressive treatments, recognition, prompt ambulance transport, and education of the public.

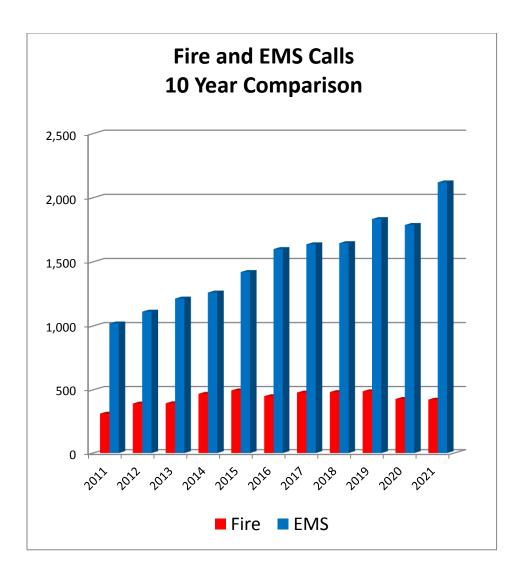


Performance Analysis; Major Traumatic Injuries:

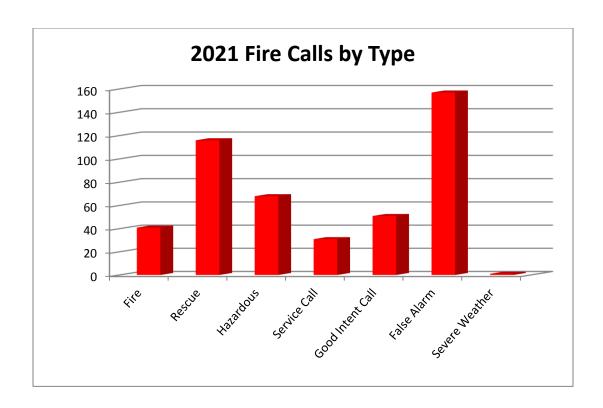
Trauma is one of the leading causes of accidental prehospital mortality. The largest cause of trauma in the City of Mequon is falls from ground or low level. However, multisystem major trauma is of particular interest to EMS because the recognition, management of life-threatening injuries, and rapid transport to a trauma center are all required to improve outcomes and reduce mortality.

Generally, these goals are accomplished by getting a transporting unit to the scene with paramedics as quickly as possible, as well as ensuring the competence and experience of paramedic providers in the management of complex trauma patients.





2011	312	1,020	1,332
2012	392	1,112	1,504
2013	394	1,214	1,608
2014	469	1,261	1,730
2015	496	1,421	1,917
2016	450	1,600	2,050
2017	479	1,637	2,116
2018	483	1,646	2,129
2019	489	1,834	2,323
2020	428	1,788	2,216
2021	423	2,120	2543



Types of Fire Calls

Fire = includes structures, vehicles, dumpsters and grass or brush fires.

Rescue = motor vehicle accident with extrication, rescue or EMS standby, search and rescue on land and water or ice rescue.

Hazardous Condition = flammable liquid spill, gas leak, chemical spill, overheated equipment, power line down and arcing electrical equipment.

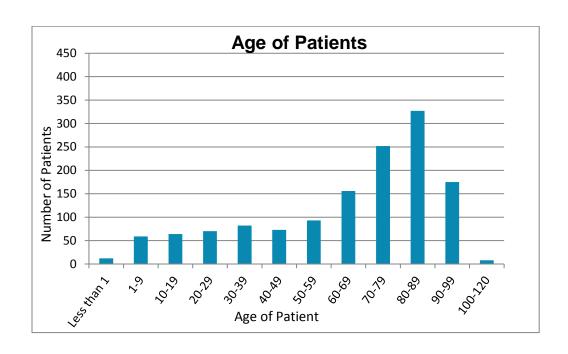
Service Call = water problem, smoke or odor removal, cover assignment for another fire department.

Good Intent Call = dispatched to an alarm and canceled en route.

False Alarm = false fire alarm or carbon monoxide alarm due to system malfunction or unintentional transmittal.

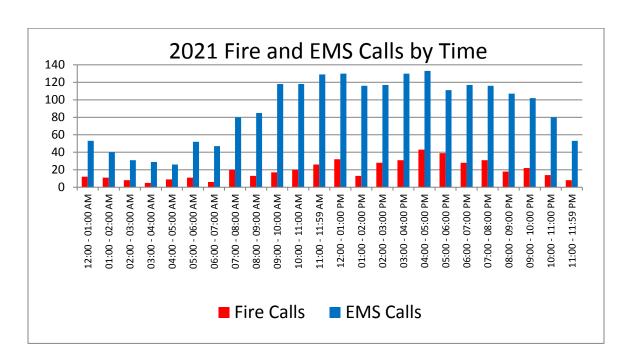
Severe Weather = lightning strike or storm-related

2021 Age of Patients

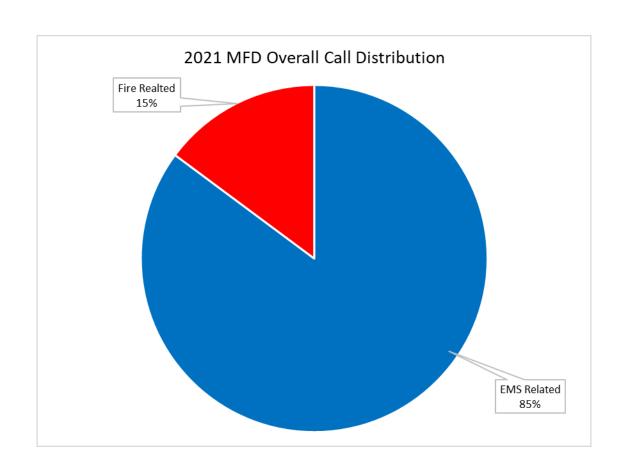


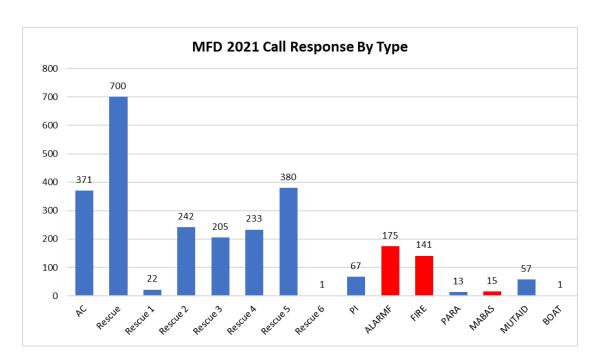
HOSPITAL DESTINATIONS FOR 911 CALLS 2021

Hospital Destinations	
Columbia St Mary's Ozaukee	860
No Transport /Other	838
Aurora Medical Center Grafton	291
Froedtert Memorial Hospital	41
Community Memorial Hospital	35
Children's Hospital	31
St Mary's Milwaukee	13
VA Medical Center	6
St Luke's Medical Center	5
Total	2,120



Time	Fire Calls	EMS Calls
12:00 - 01:00 AM	6	53
01:00 - 02:00 AM	5	40
02:00 - 03:00 AM	3	31
03:00 - 04:00 AM	7	29
04:00 - 05:00 AM	8	26
05:00 - 06:00 AM	9	52
06:00 - 07:00 AM	14	47
07:00 - 08:00 AM	17	80
08:00 - 09:00 AM	19	85
09:00 - 10:00 AM	15	118
10:00 - 11:00 AM	22	118
11:00 - 11:59 AM	25	129
12:00 - 01:00 PM	21	130
01:00 - 02:00 PM	20	116
02:00 - 03:00 PM	18	117
03:00 - 04:00 PM	26	130
04:00 - 05:00 PM	32	133
05:00 - 06:00 PM	25	111
06:00 - 07:00 PM	33	117
07:00 - 08:00 PM	26	116
08:00 - 09:00 PM	24	107
09:00 - 10:00 PM	22	102
10:00 - 11:00 PM	16	80
11:00 - 11:59 PM	10	53





Response Times to Fire and EMS Calls

2021 Call Type Analysis

This section of the report will provide a graphical analysis of the primary types of calls the City of Mequon Fire Department responded to in 2021. The analysis focuses on the number and types of calls, the time it takes the dispatch center to process the calls, and the amount of time it takes for the first fire unit to arrive on scene. The data is presented in the common average format and the more industry specific benchmarking method of 90th percentile.

As an industry the Fire and Emergency Medical Services providers have adopted the use of performance measurement based on the 90th percentile performance of an organization in a specific category over the use of average based measurement metrics. Use of the 90th percentile measure has many analytical benefits in place of an average measurement. The primary benefit is an organization is presenting data that represents how they perform 90% of the time as opposed to the use of an average which in essence shows the performance 50% of the time.

The 90th percentile performance is delivered and is plotted against an average measurement of the same item. By doing so a visualize gap is created between the two benchmarks. In general, the closer the two data points are to each other the better in control a process is and the more predictably repetitive the performance will be in that category. The further apart the average and 90th percentile performance appear from each other the more unstable and unpredictable the performance will be in this category.

As the Mequon Fire Department takes on the task of quantitatively measuring its performance and examining analytically how effective the organization is, the organization can apply that knowledge and focus efforts on improving in specific area where the performance is less than expected. By continually measuring performance and understanding the factors that influence it for better or worse the organization can determine what changes and adjustments are most effective and efficient at improving performance.

What is not presented in this year's report are benchmarks or targets of where the organization would like the performance to be for a given category. The application of benchmarks or targets for improvement are only relevant once an organization understands where they are initially. This first round analysis is the preliminary step in determining where the future benchmarks should be set.

In many cases when organizations begin benchmarking and analyzing their performance in a quantitative manner the organization finds the data collection mechanisms in place are inadequate or are lacking in accuracy or existence all together. This preliminary analysis of the Mequon Fire data pool has revealed that some of those data inadequacies for this organization. Substantial effort going forward will be needed to ensure that accurate performance measurements are

Response Times to Fire and EMS Calls (Continued)

being captured and recorded to ensure the pool of data is accurate and truly reflective of the organization and its performance.

Call Types and Performance Data

Each time the Fire Department is requested the process of responding begins in the dispatch center where a Call For Service (CFS) is generated by the dispatcher within the Computer Aided Dispatch system. When the dispatcher center is alerted to a need for the fire department a specific type of CFS code is entered into the computer and a call is "created". Generally, a call will be Medical in nature and require EMS resources, or the call will require a fire type response, and sometimes both Fire and EMS resources will be needed.

Medical Emergency CFS Codes

Medical Emergencies are most often classified as Rescue Calls in the CAD system and the level of acuity is assigned by the CAD system after the dispatcher asks the 911 caller a series questions designed to quickly find out how severe a medical emergency is. Rescue Calls when most severe and immediately life threatening are coded as Rescue 1 calls. The least life threating calls to 911 are classified as a Rescue 5 level call. In between those two levels are Rescue 2, 3, and 4 level calls.

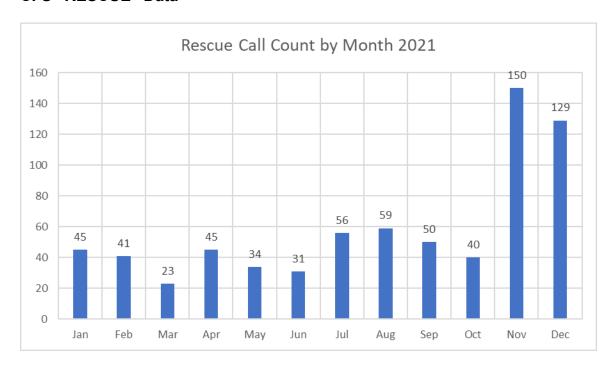
Fire Emergency CFS Codes

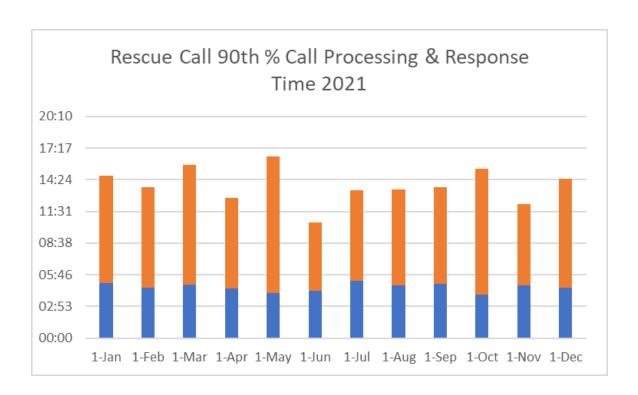
The three most prominent codes are Alarm of Fire, Fire and MABAS. The first, "Alarm of Fire" is just that, the dispatch center has received a notification from an alarm company that an alarm has been activated and the fire department is being requested to investigate the cause of the alarm. The second Fire CFS code is "FIRE" and it is employed any time the dispatcher receives information that there is possibly a fire at a location or there are actually visible signs of an active fire. The other primarily Fire related CFS Code is MABAS which is an abbreviation for a mutual aid system in place between communities.

The "RESCUE" CFS

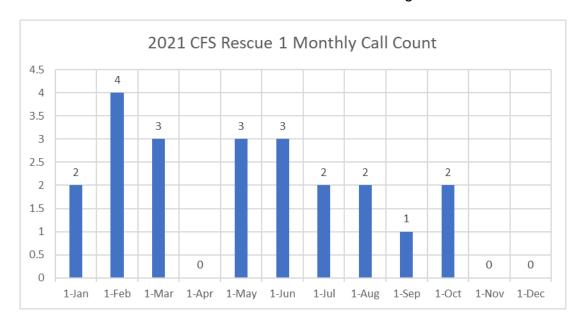
In an ideal set of circumstances, all requests for Emergency Medical Services would be classified in the CAD system by dispatchers in the Rescue 1 – Rescue 6 categories before being transmitted to the Fire Department. This classification 1-6 helps responders define the level of the medical emergency and to know what equipment and resources may be required and at what rate they should be delivered. Unfortunately, this classification is not always able to be performed by the dispatcher and as a result the call remains coded as simply a "RESCUE" CFS in the CAD system. This analysis revealed that energy must be put into ensuring that all reasonable efforts are made by the dispatchers to appropriately code the calls.

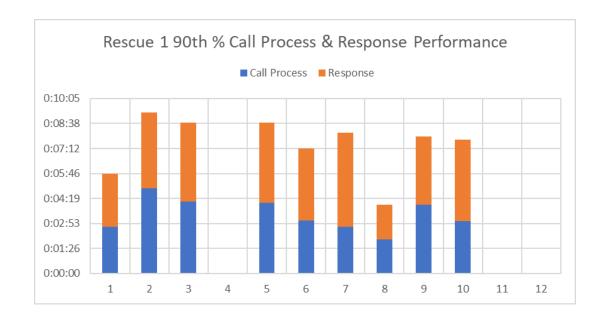
CFS "RESCUE" Data



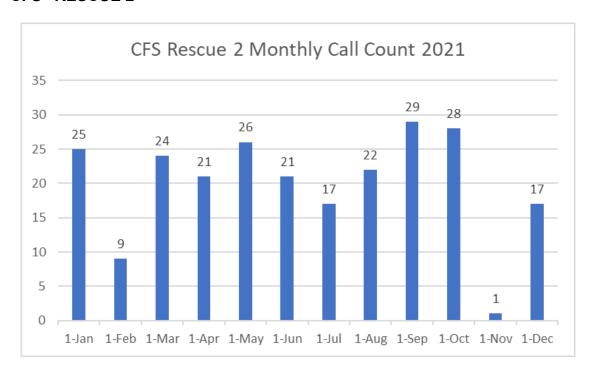


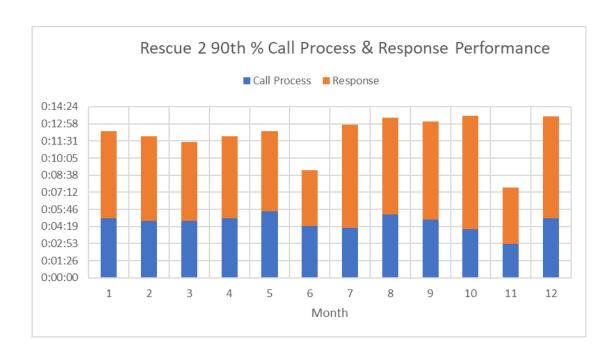
CFS "RESCUE 1" – The most severe and life-threatening medical call level.



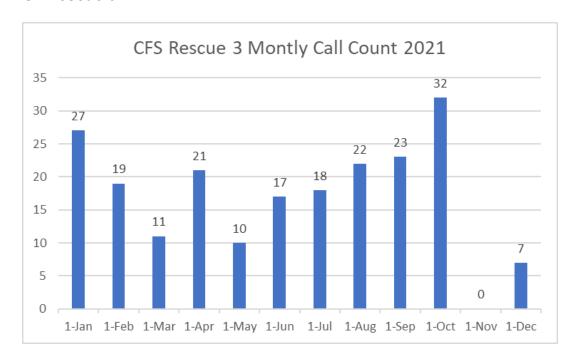


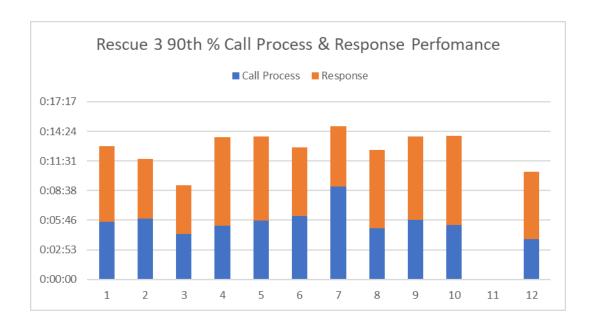
CFS "RESCUE 2"



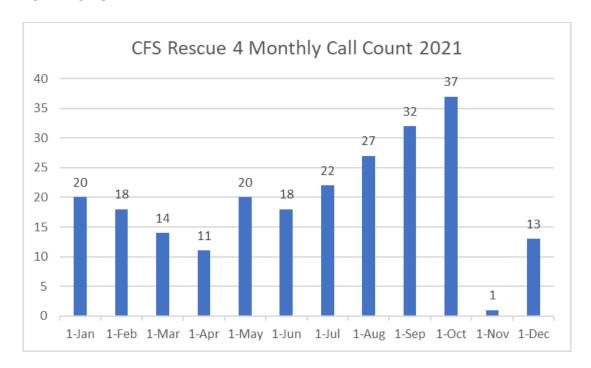


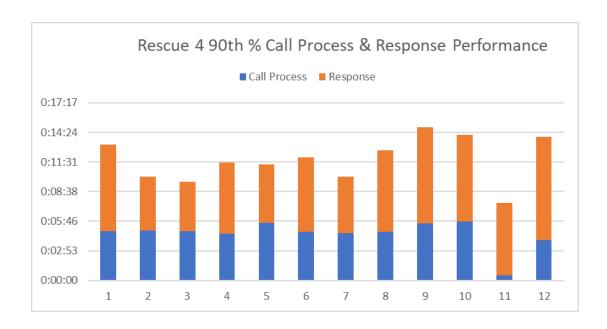
CFS "Rescue 3"



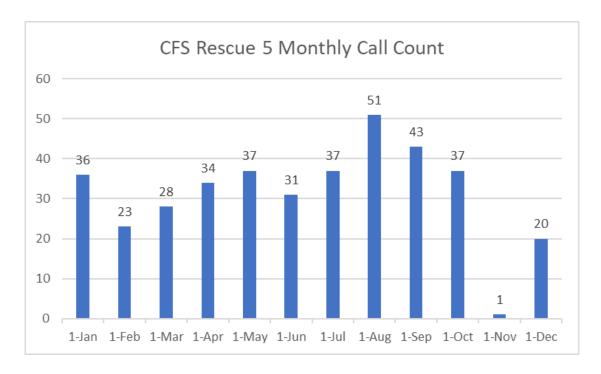


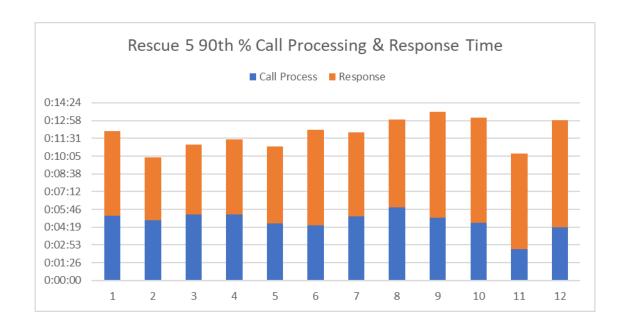
CFS "RESCUE 4"





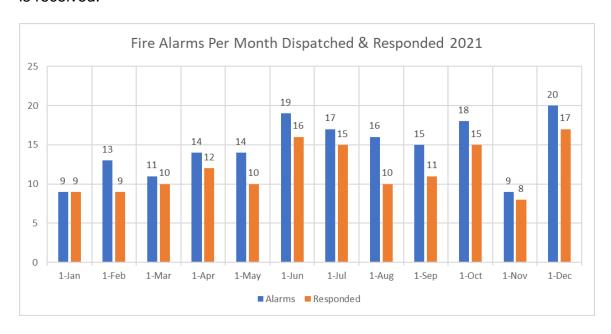
CFS "Rescue 5"



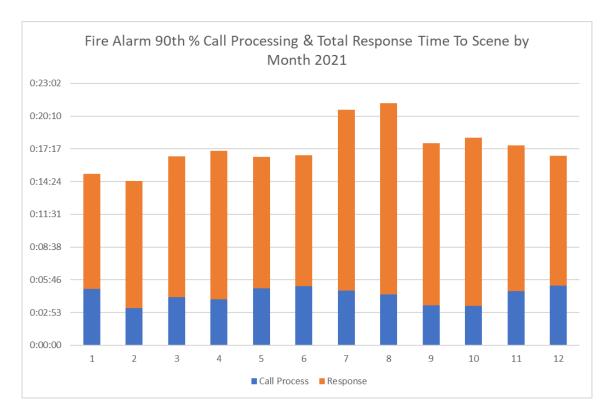


^{*}There is no analysis of the Rescue 6 level calls as there was only one call in all of 2021 coded as a Rescue 6 level.

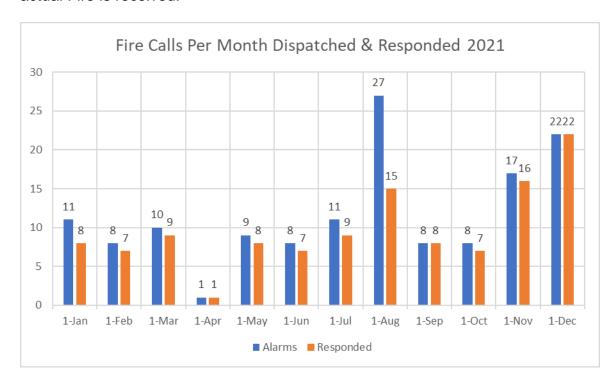
CFS "FALARM" – This is the CFS used when the report of a Fire Alarm activation is received.



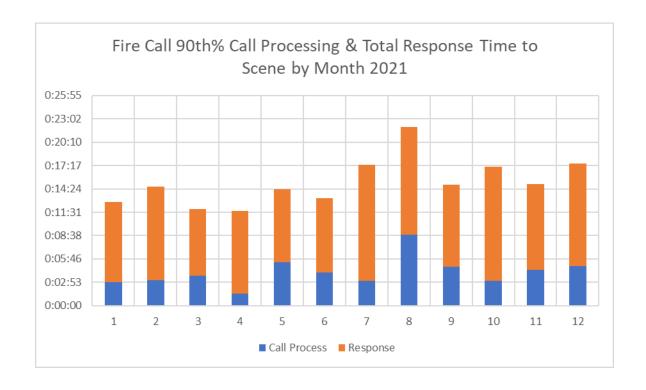
There are two columns for each month because frequently Fire Alarm Calls are cancelled before MFD resources respond to the scene. A police unit can arrive on scene and verify there is no fire or need for MFD resources or the alarm company can call back and cancel the response when they have verified that there is no need.



CFS "FIRE" - This is the CFS used when the creditable report of a possible or actual Fire is received.



As with Fire Alarms, there are occasions when a Fire response is requested, but the response is canceled before any MFD resources respond to the scene.



This analysis revealed that as configured now the MFD CAD system is not able to capture the enroute and arrival times of any responding apparatus beyond the first fire or EMS apparatus on scene. This is a limitation that should be addressed soon to ensure that the department is able to identify and quantify the arrival of subsequent apparatus to the scene of an incident.

Mequon Fire Department - Years of Service Roster

Fire Chief

David Bialk (15)*

Deputy Chief

Kurt Zellmann (2) (P)

Battalion Chiefs

Christopher Ackley (H)(P) Brandon Boettcher (H)(P) Matthew Schneider (8)(P)

Lieutenants

Charles Neman, Jr. (32)* Nicholas Boehlke (18)* Jeremiah Bradley (12)*

Motor Pump Operators

Charles Stegeman (21)* Gregory Gilles (8) (P) Jon Wood (2) Cory Stuettgen (20)* Brian James (8)* Brandon Bogan (5)* Ryan Bialk (14) (P) Wesley Reimer (8) (P) Nicholas Salerno (1)* Josh Lipp (12) (P) A. Diamantopoulos (7) (P) Antonio Salerno (1)* Quantavious Tucker (11)* Rick Lemke (6)* Justin Klis (H) (P) Ryan Spradlin (5) (P) Amy Boll (10) (P) Brian Kendzor (10) Jacob Evaska (3) (P)

Emergency Medical Technicians

Carol Barthel (40)* Erika Christiansen (1)* Erin Koerner (H) (P) Megan Gellert (8)* Ethan Natzke (1)* Caleb Wardenburg (H)* Elizabeth Bart (7)* David Schlageter (1) Craig Wheeler (H)* Bailey Leeson (5)* Shelly Joy Schmelzer (H)* Aaron Sherman (H)* Dean Knauss (3)* Jessica Gold (H)* Nick Margrett (H)* Kim Konkel (2)* Claire Duwell (H)* Emily Van Why (H)* Emily Karls (2)* Madison Eggert (H)*

Firefighters

Samuel Goldner (3)* Steve Klocko (29) Steve Plautz (1)* Bryan Rech (1) Alex Knaus (3) (P) Marco Zach (17) Tyler Youngbeck (9)* Sarah Baker (2)* Eric Baugher (1) Melissa Bradley (8)* Jameson Czarnecki (2) (P) Charles Zelensky (H)* Heather Krueger (5) (P) Laura Cecil (1)* Mackenzie Szeszol (5) (P) Dylan Neman (1)

Interns

Daniel Santiago Brandon Glaeser Mason Petrick
Caden Mallas Kyle Mitchell Kristopher Peters

Retired/Resignations

Deputy Chief David Depies (36)* Captain John Pipkorn (34) (P) Clint King (7)* Scott Krueger (5)* Benjamin Wingers (3)* Caitlin Krieg (3)* Craig Rebello (1) Michael Dietzen (1) Andrew Novak (1) Amber Mustoe (1)* Ernesto Campos (H)* Deonte Pettis(H)* Humberto Hernandez (1)* Moises Reyes (H) 7 Lauren Wolfrath (H)* Ryan Buyeske (H)* Abbey Walter (H) Robert Bell (1) (P) Morgan Kropidlowski (H)*

EMT Certified * Paramedic (P) Hired in 2021 (H)

