

# Muscatine Fire Department



2019

Annual Report

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## From the Chief



On behalf of the men and women of the Muscatine Fire Department it is my pleasure to present our Annual Report for 2019. The purpose of this report is to offer our residents a snapshot of the activities in which their fire department is involved. Within this report you will find many interesting facts, response statistics, data, pictures telling stories, and division reports. We invite you to explore the information and take a glance at the comprehensive services we provide to our residents, businesses, and visitors 365 days a year.

In 2019 we responded to 5,238 calls for service, which is a new record high. As a comparison, twenty years ago we responded to 1,446 calls for service. These calls for service include all types of fires, medical emergencies, ambulance transports and inter-facility transports, car accidents, hazardous material incidents, water rescues, and rope and technical rescues.

When not engaged in emergencies our focus is geared towards on-going training, preparedness, prevention and education activities. Our members can be found training almost daily on topics such as EMS, hazardous materials, fire sciences, and other specialized training. The community has become safer, healthier, and more economically viable because of these services and activities.

Each year we are able to meet the challenges ... because of the motivated and dedicated professional firefighters

Each year we are able to meet the challenges of an increased demand for emergency services because of the motivated and dedicated professional firefighters that strive to serve you each and every day. I would like to personally thank all our personnel for their continued commitment of going “above and beyond” making the Muscatine Fire Department truly an exemplary organization. We certainly hope you never find yourself in need of our services, but we are proud of what we do and want you to know we are here when you need us.

Demand for fire and EMS service continues to climb mainly due to our ambulance services we provide to our city and surrounding communities. In order to continue to provide those services we will be increasing our staffing levels and adding an additional ambulance to our fleet in order to meet the demand and needs of public safety services. The additional staff and equipment to do our jobs would not be possible without the support of our citizens, Mayor, Councilmembers, and City Administrator.

In closing, thanks for the support, cards, letters, and kind words throughout the year. All of these are shared with staff in our monthly newsletter. Remember our station doors are always open so feel free to stop by and visit, ask questions or simply request a station tour. We are here, always, to serve you.

Sincerely ,

**Jerry Ewers– Fire Chief**



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**FIRE DEPARTMENT**

## Mission, Core Values & Philosophy

### MFD Mission Statement

It is our mission as members of the Muscatine Fire Department to safely provide quality emergency services to the community through the protection of life, property, and the environment from the effects of medical emergencies, fires and other hazards and to reduce these threats through fire prevention and public education.

### MFD Core Values

**Members:** We promote an atmosphere of trust and respect that encourages individual growth, participation, creativity and acknowledges the achievements of our members.

**Organization:** We support an organization built on a foundation of initiative, collaboration and commitment to efficiency, consistency and results, while attaining the goals of the organization.

**Customer Service:** We are dedicated to providing superior customer service.

**Strategic Management:** We plan for change and develop management strategies to meet the challenges of our future.

**Regional Cooperation:** We promote, encourage and participate in partnerships that provide all communities and organizations with the highest level of service and training.

### MFD Philosophy

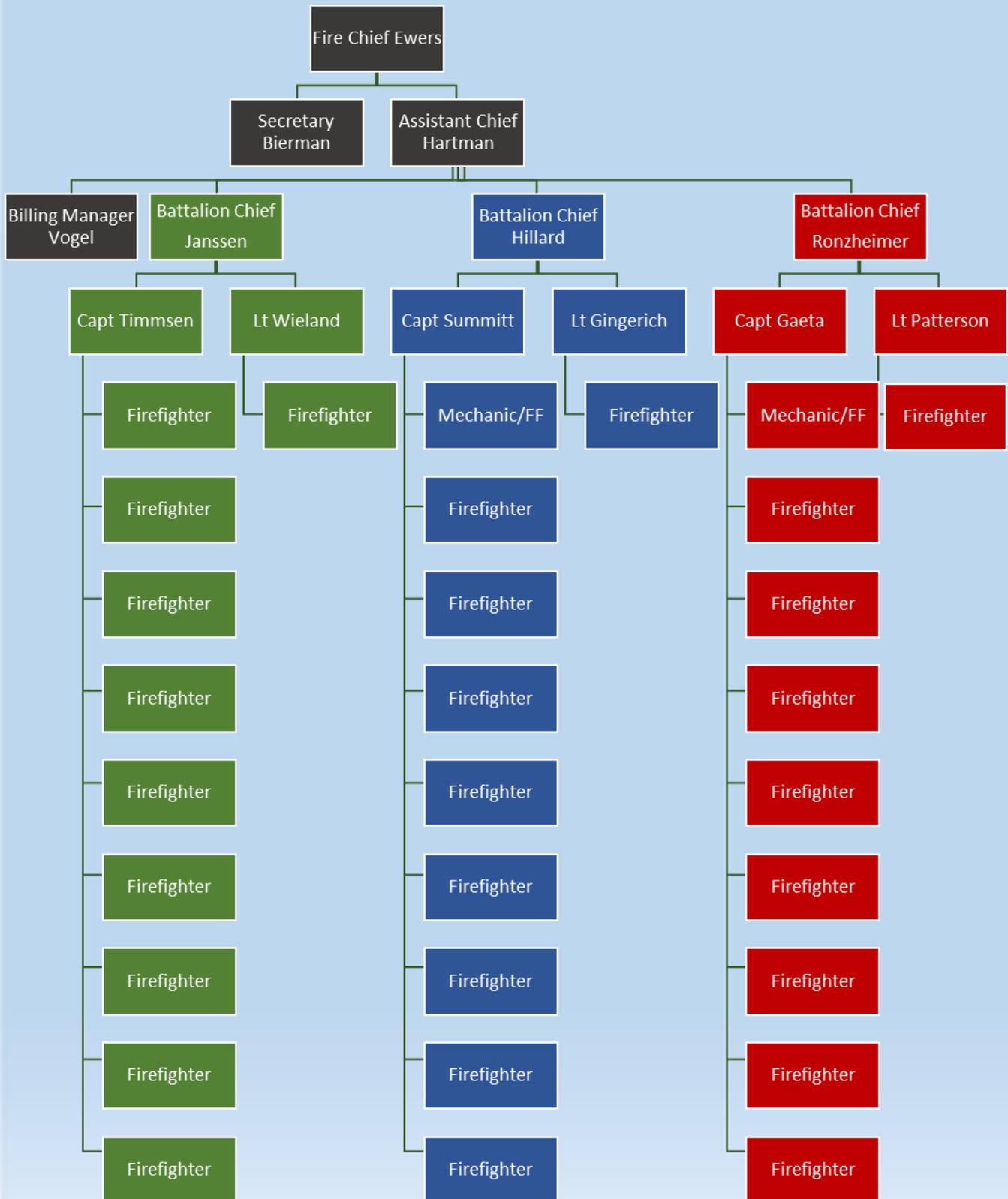
Service and protection with Pride, Honor, Loyalty, Courage, Compassion, Respect, Teamwork, and Safety.

We Accept:

- Great personal risk to save another person's life
- Moderate personal risk to save another person's property
- No personal risk to save what is already lost

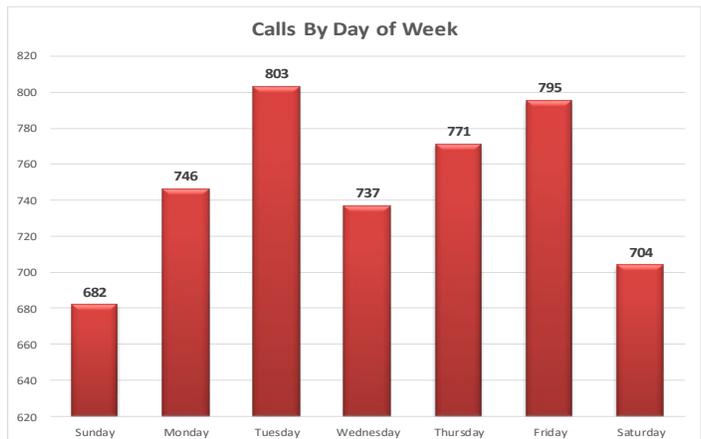
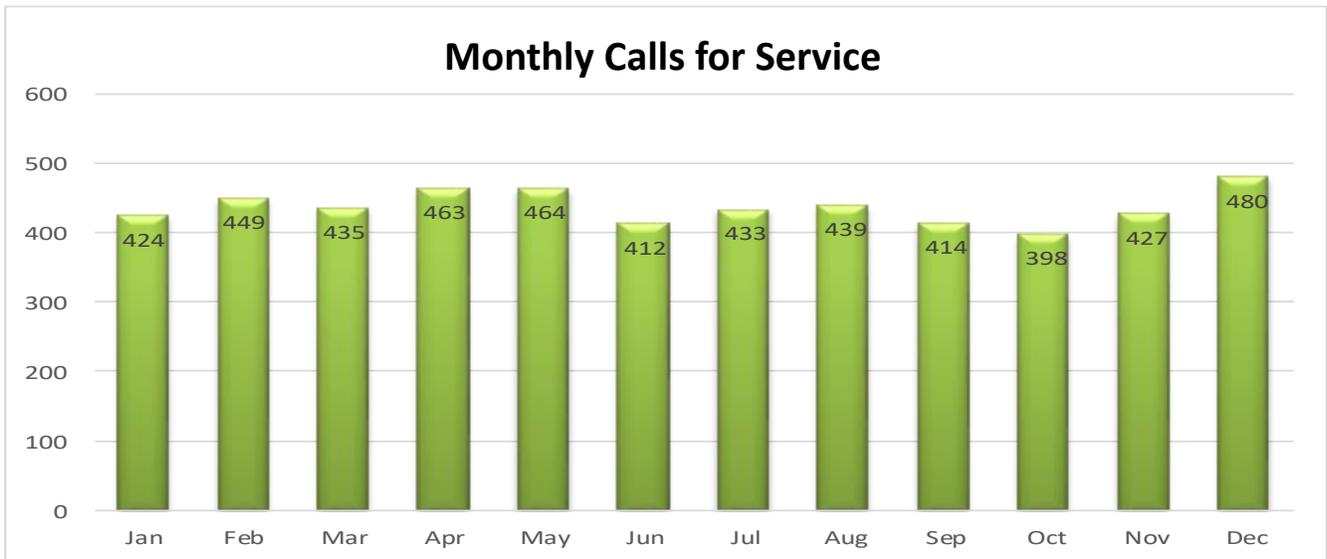
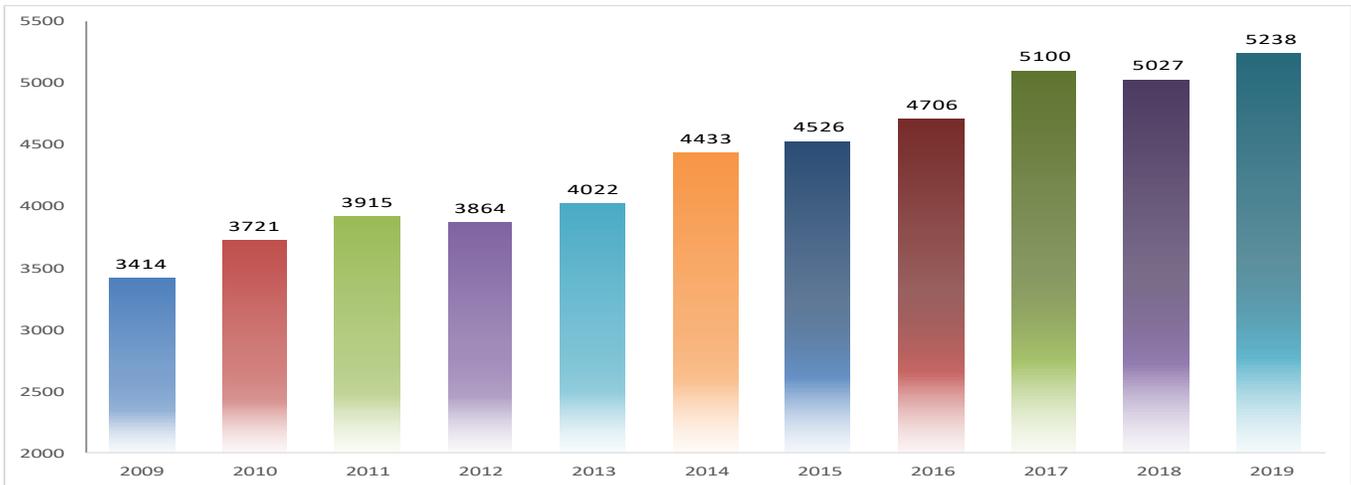
**"I remember Muscatine for its sunsets. I have never seen any on either side of the ocean that equaled them" — Mark Twain**

# 2019 Department Organization



# Calls for Service Report

In 2019 we had another busy year, with a record breaking number of total of calls for service. We expect our call volume will only continue to increase. Here are some visuals that represent our call volume this past year:

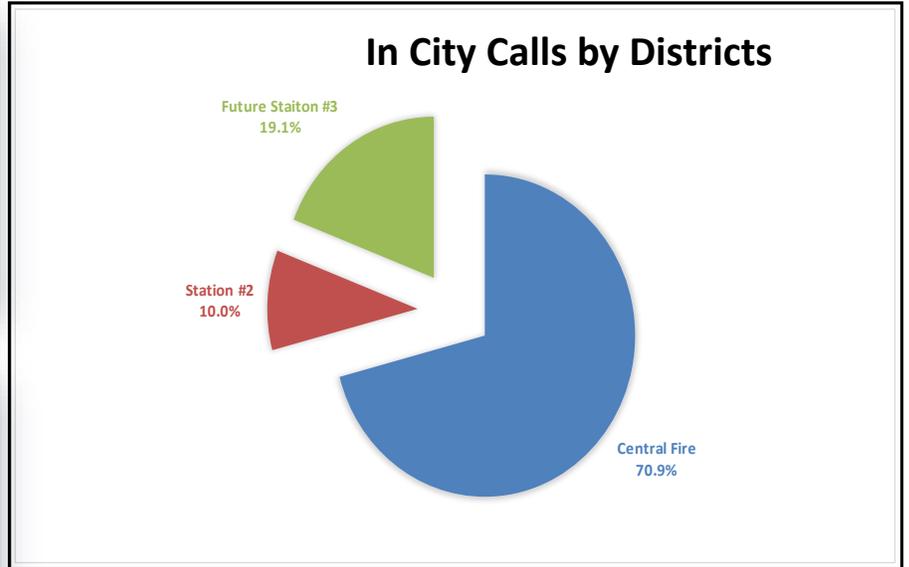




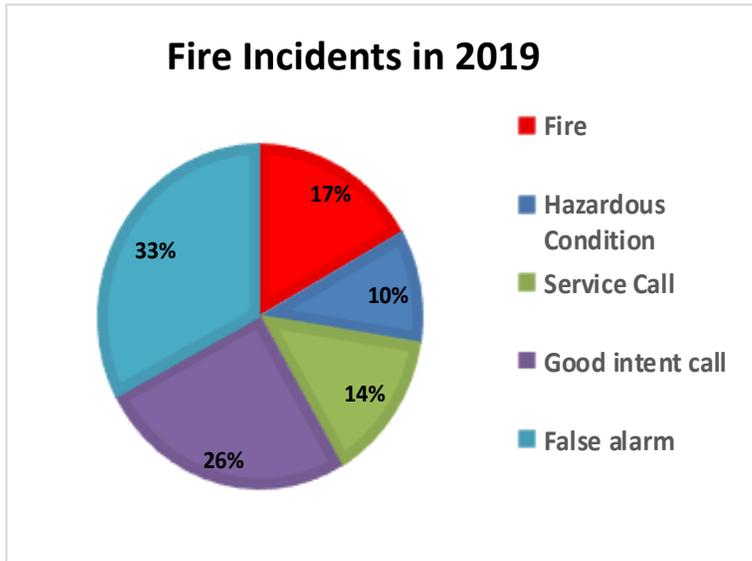
**Public Safety Building**



**Station #2**

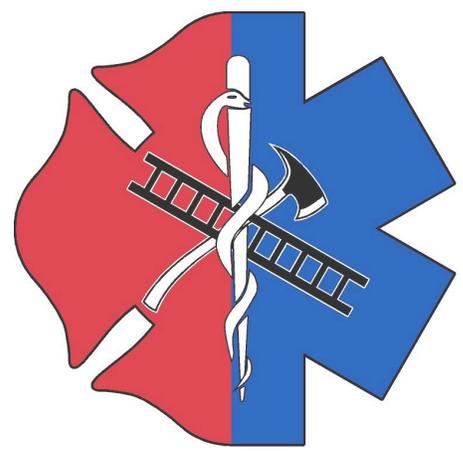
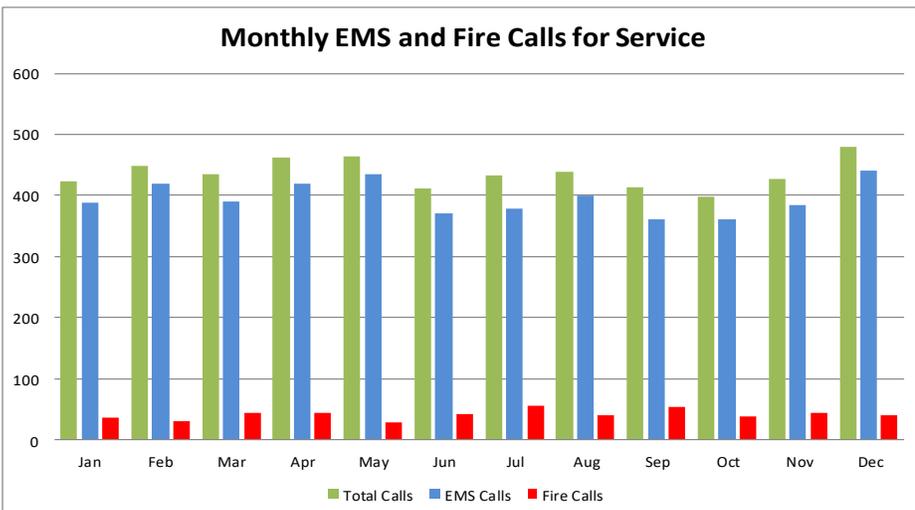


**5238 Annual Calls**



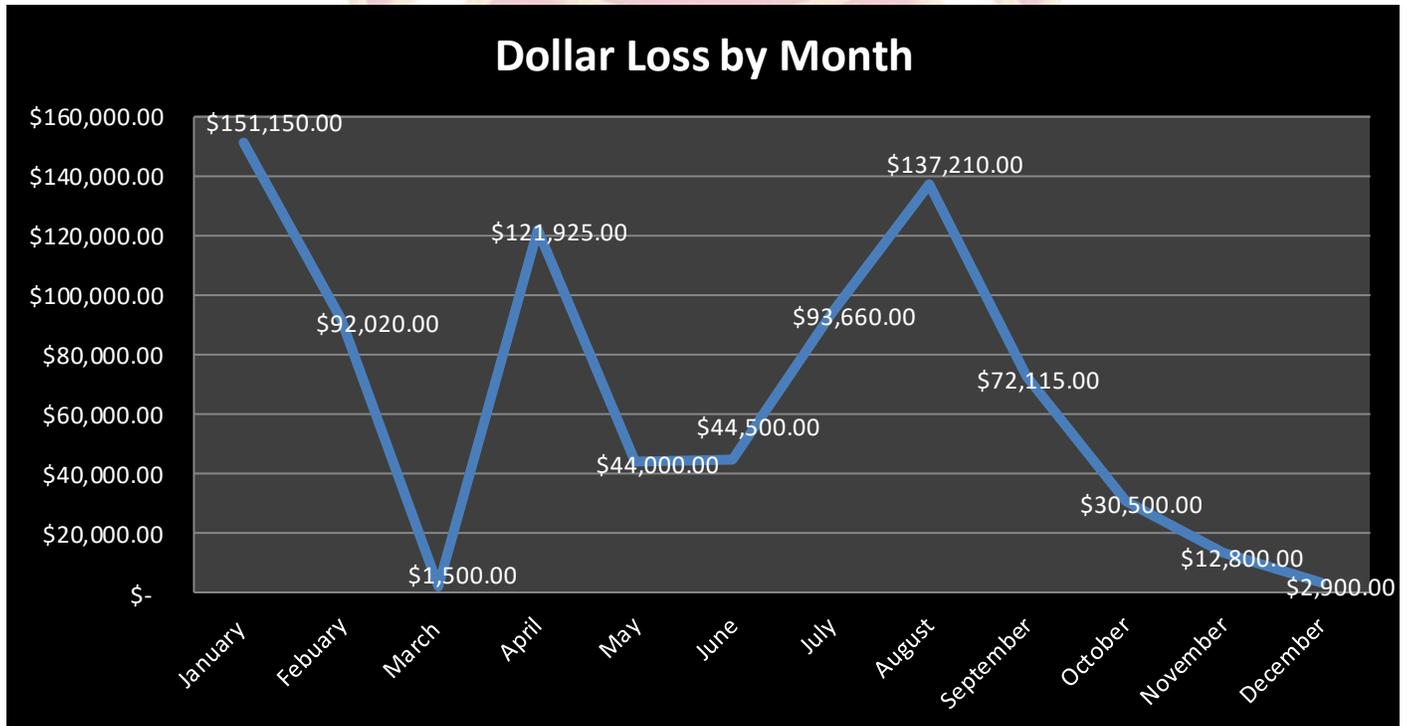
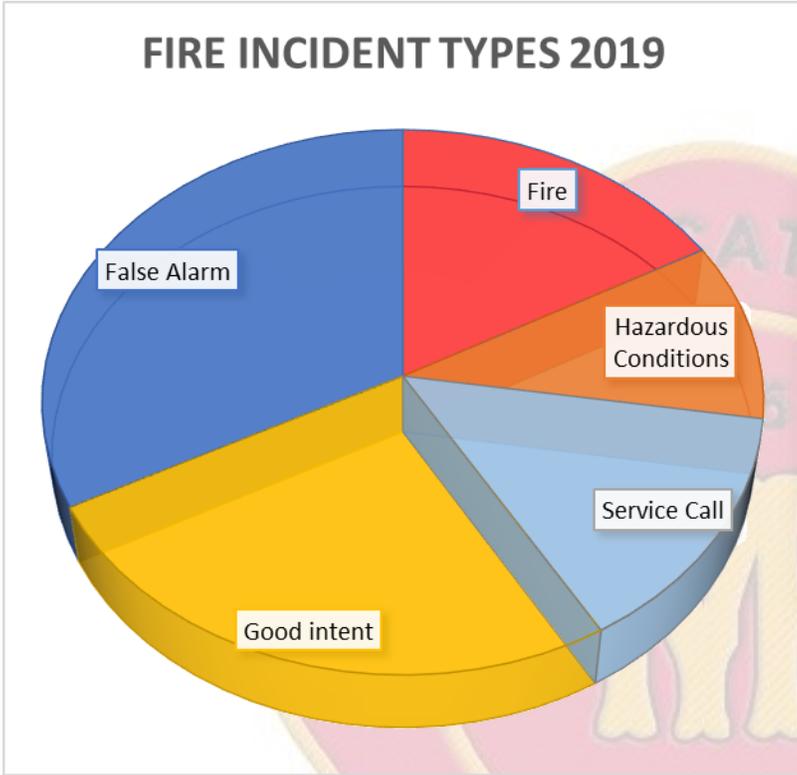
**14.35 Calls/Day Average**

**90.49% of Calls are EMS**



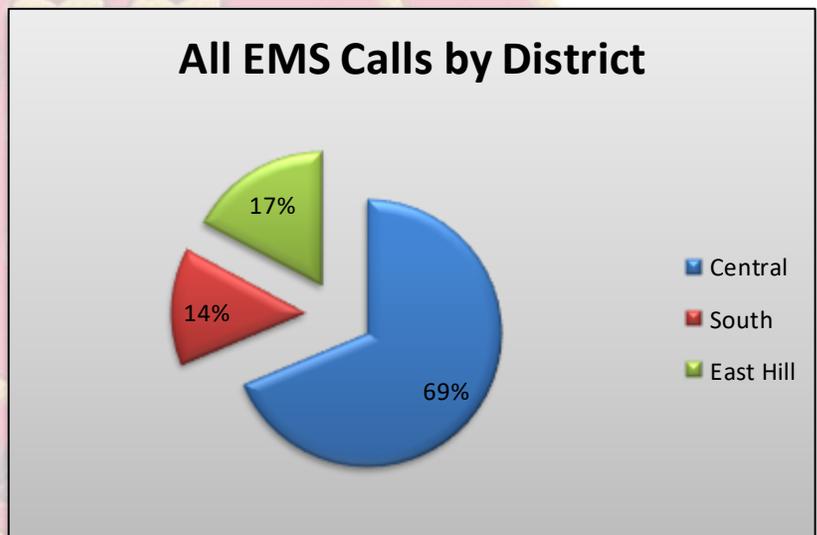
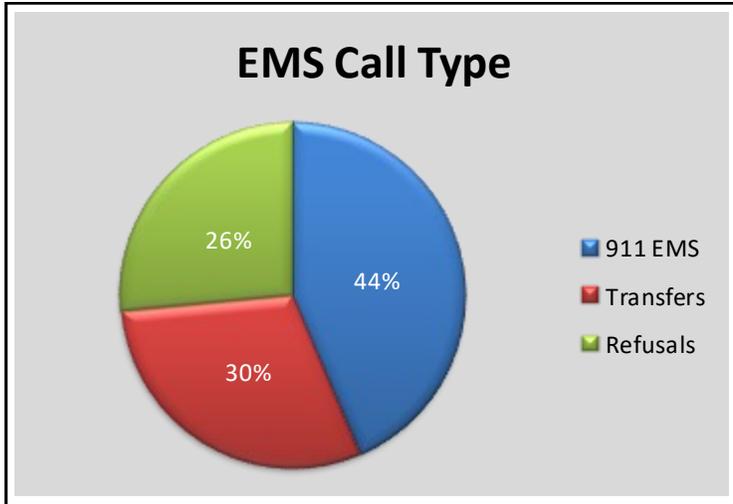
# Fire Response Report

During the year of 2019 the Muscatine Fire Department responded to 462 calls for service that fall into the category of a fire-related response. Of the 119 total fires, 43 were structure fires. The total fire loss for 2019 was \$804,280, as compared to \$888,000,000 in valuations.



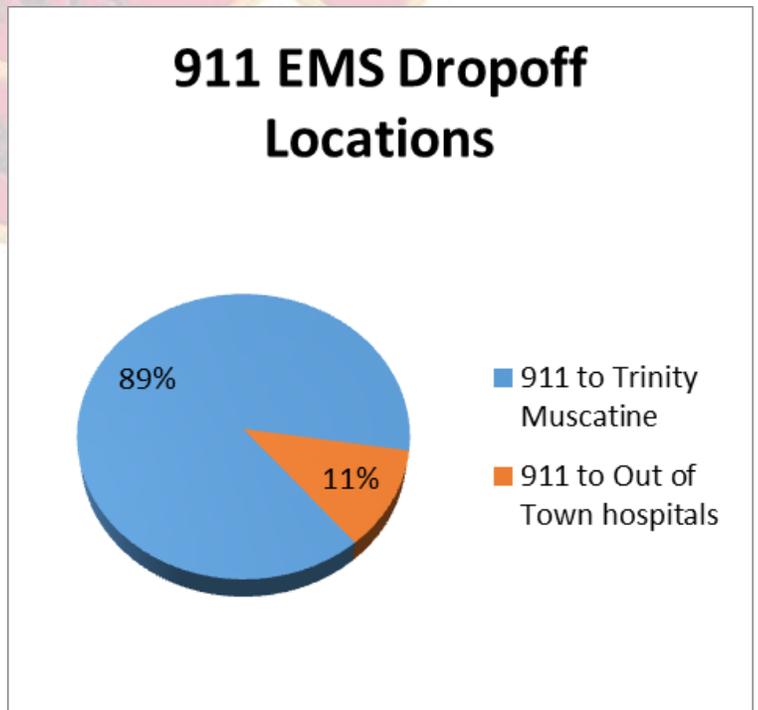
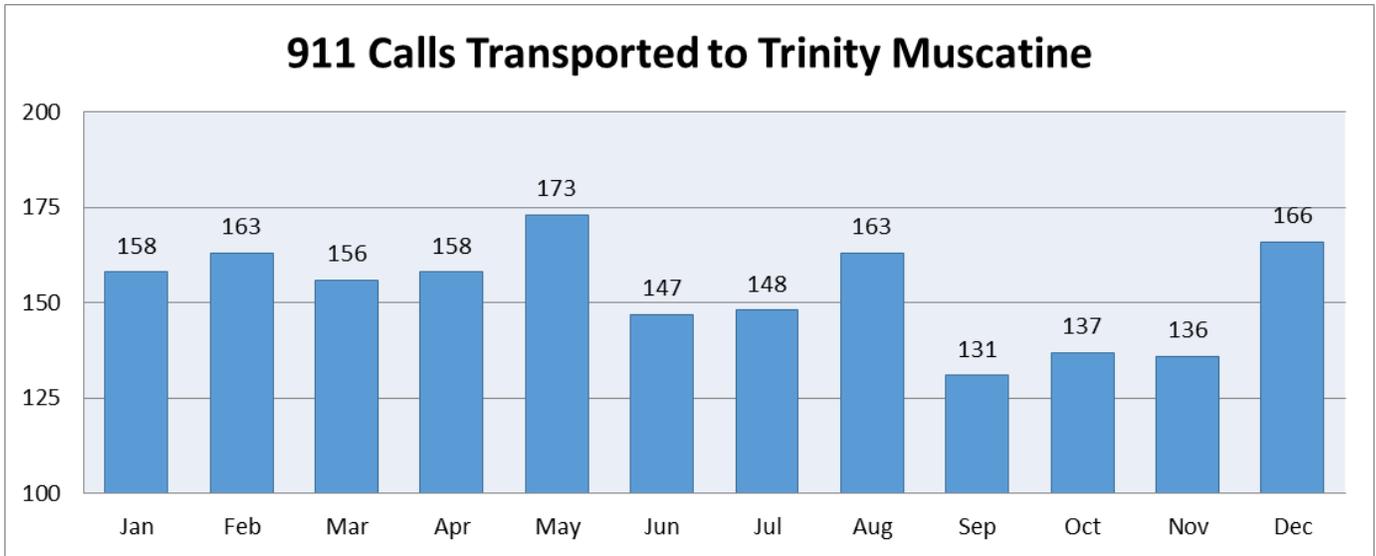
# EMS Response Report

Our EMS calls are broken into three categories: refusals, where a patient decides they do not want transport; 911 calls, which are medical calls that originate with a 911 call; and transfers, where the patient is transported from Muscatine to a hospital in another location. The results of these requests for service are shown here.

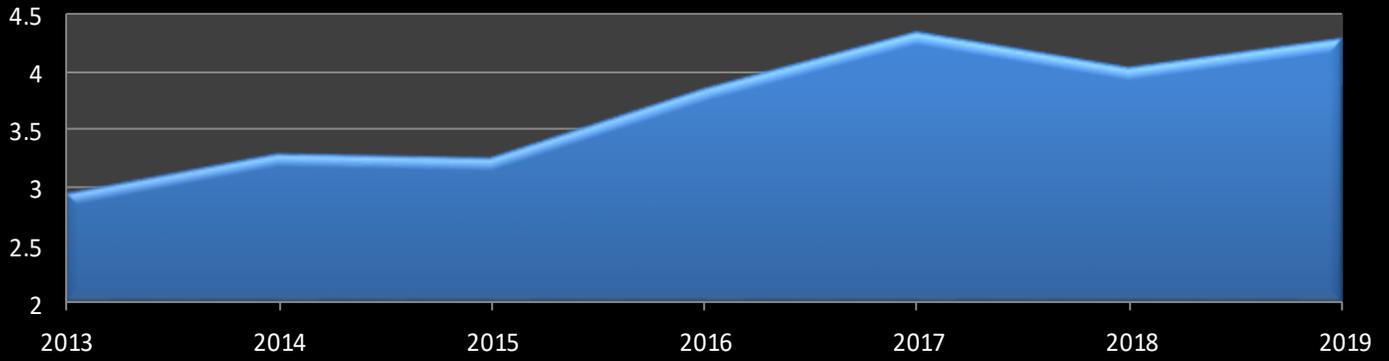


# EMS Transport Report

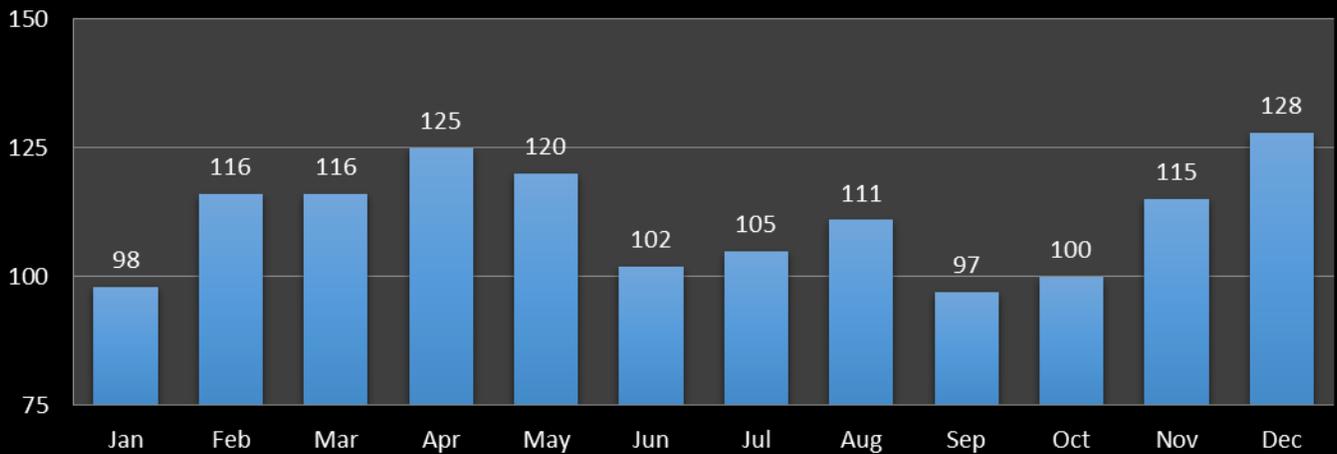
Our patients who call 911 and are in need of being transported to a hospital typically go to Trinity Muscatine unless they need services that are not available in town or if the patient has a special request. One challenge we have with 911 calls where the patient goes out of town is that it makes an ambulance unavailable again until they get back. These calls usually take an ambulance 2-3 hours depending on where they go, how busy the receiving hospital is, and how long it takes to get the patient to the room they are assigned and complete the handoff to hospital staff.



### Average Out of Town Dropoffs Per Day



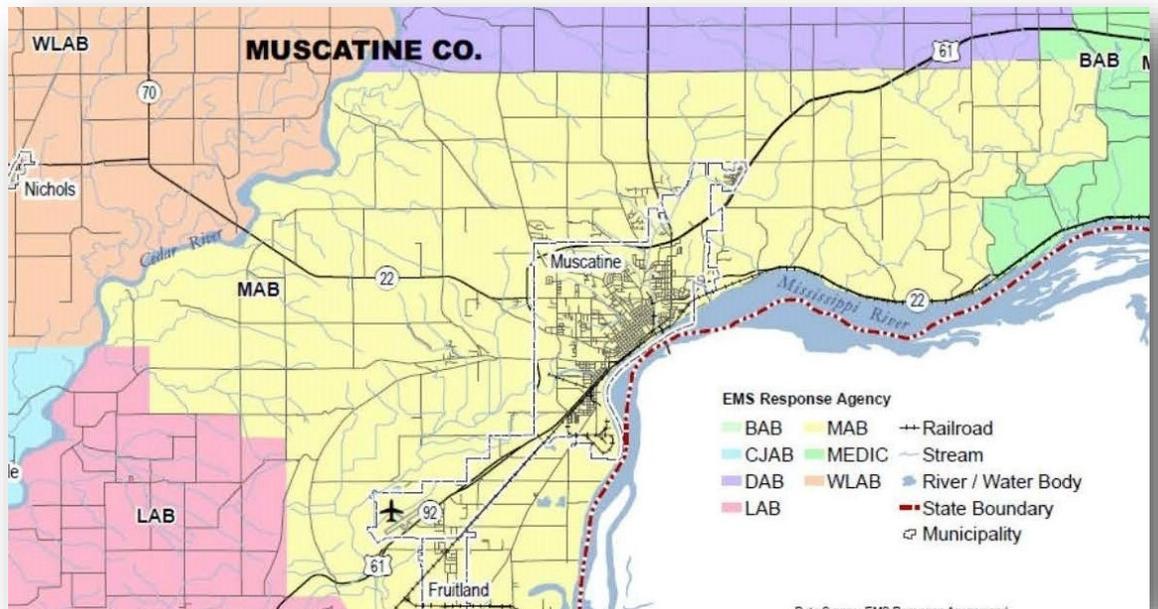
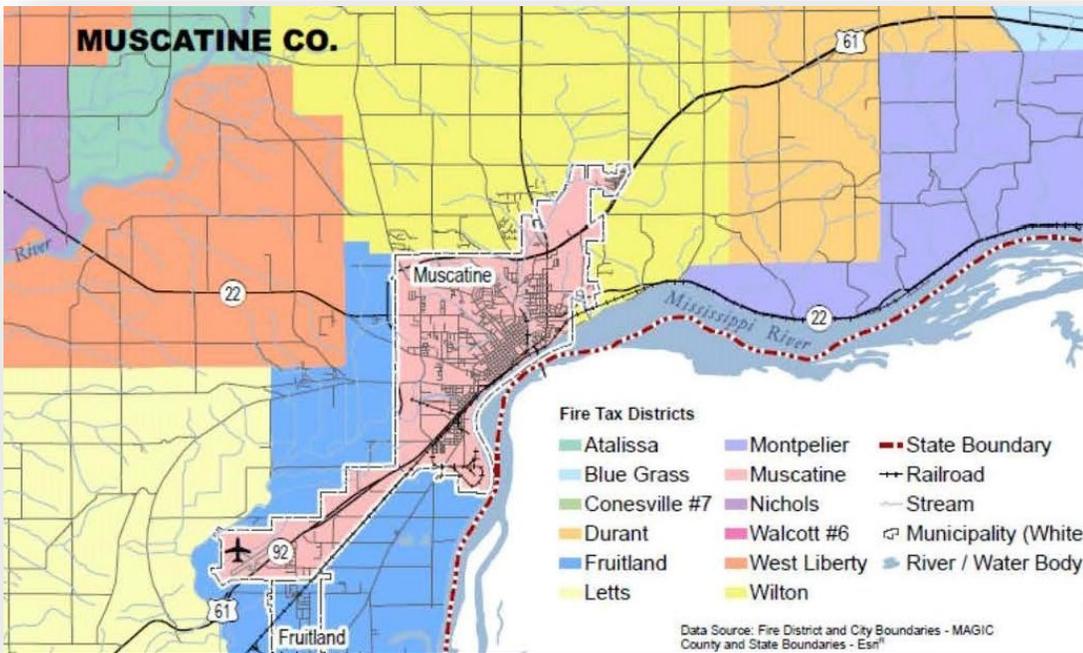
### Total OOT Transfers by Month



# Call Response Districts

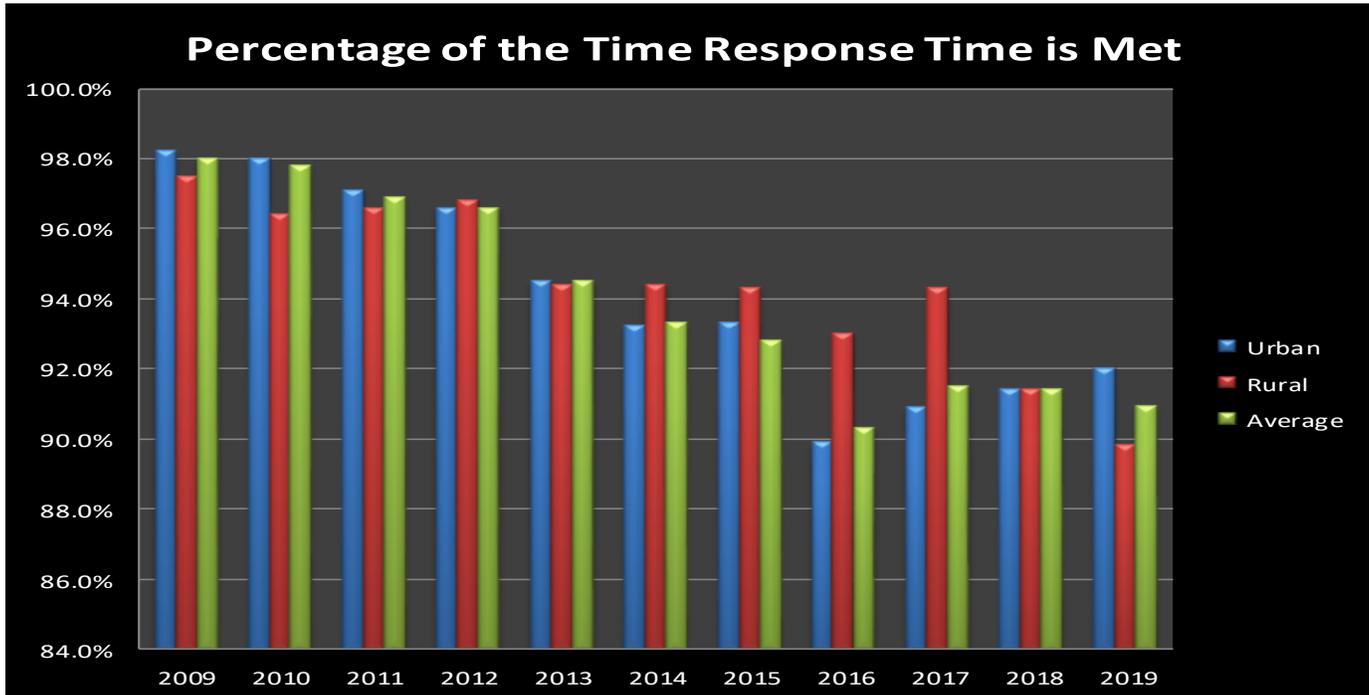
Depending on the service provided, the Muscatine Fire Department has a very large response district. Our fire district is 18.5 square miles and a population of 23,819 people within the city of Muscatine. Our EMS district represents 151.5 square miles with a population of 30,342 people. This area includes some of the townships that surround Muscatine. We also provide Advanced Life Support (ALS) medical tiers in Rock Island & Mercer Counties in Illinois. Additionally, we have ALS tier agreements with several other local ambulance services. We are the Iowa Region 16 hazardous materials team and we cover Muscatine, Louisa, Washington, Henry and Keokuk counties which encompasses 2,455 square miles with a population of 106,684 people.

In the future, the addition of a third station will drastically improve response times to the calls that are in the East Hill districts. Our call volume and response times indicate this is a strong need for the community. A third fire station is listed in the City of Muscatine Capital Improvement Plan.



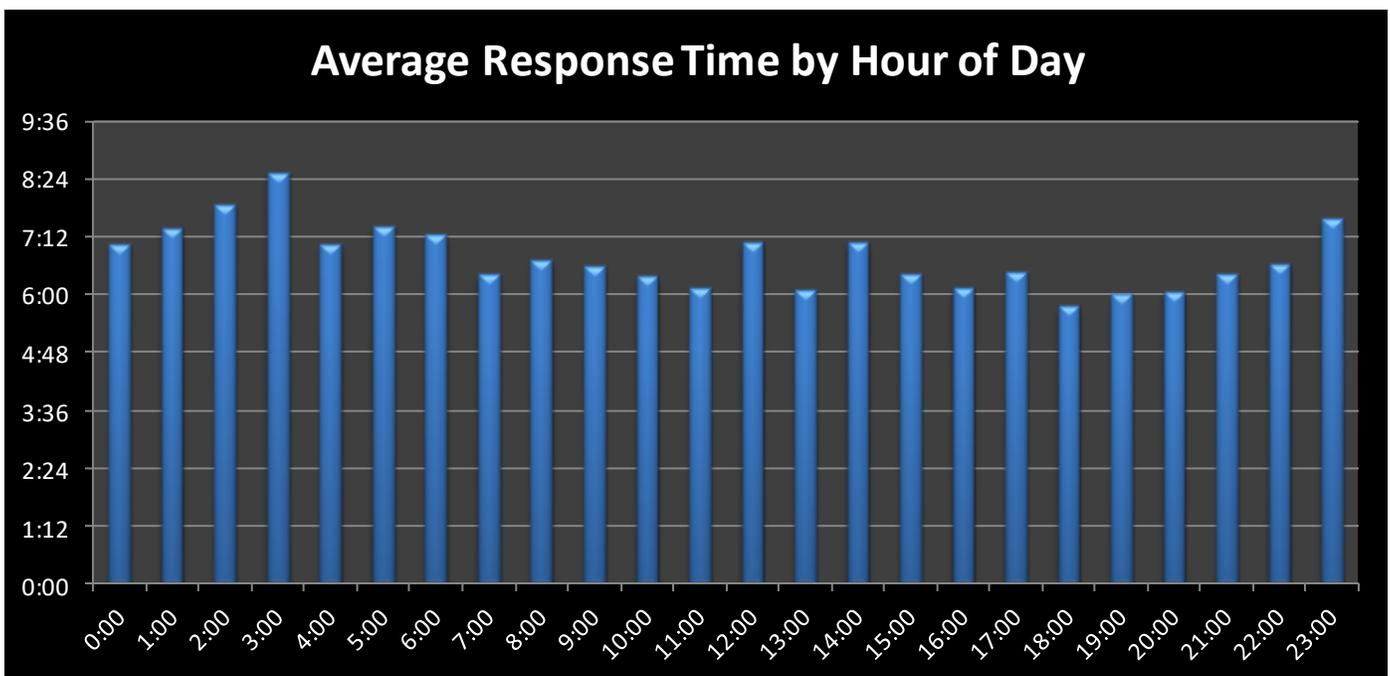
# EMS Response Time Report

The Muscatine Fire Department strives to provide a rapid response that arrives on scene in a safe and efficient manner. Depending on the nature of call and the location of the response, different response time goals are set. A standard followed throughout the nation is to arrive at a call in urban areas (within the City) in less than 9 minutes 90% of the time. For calls outside the City limits the standard set is to arrive in less than 15 minutes 90% of the time. This response time starts from the time of the 911 call and goes until the first unit arrives on scene.



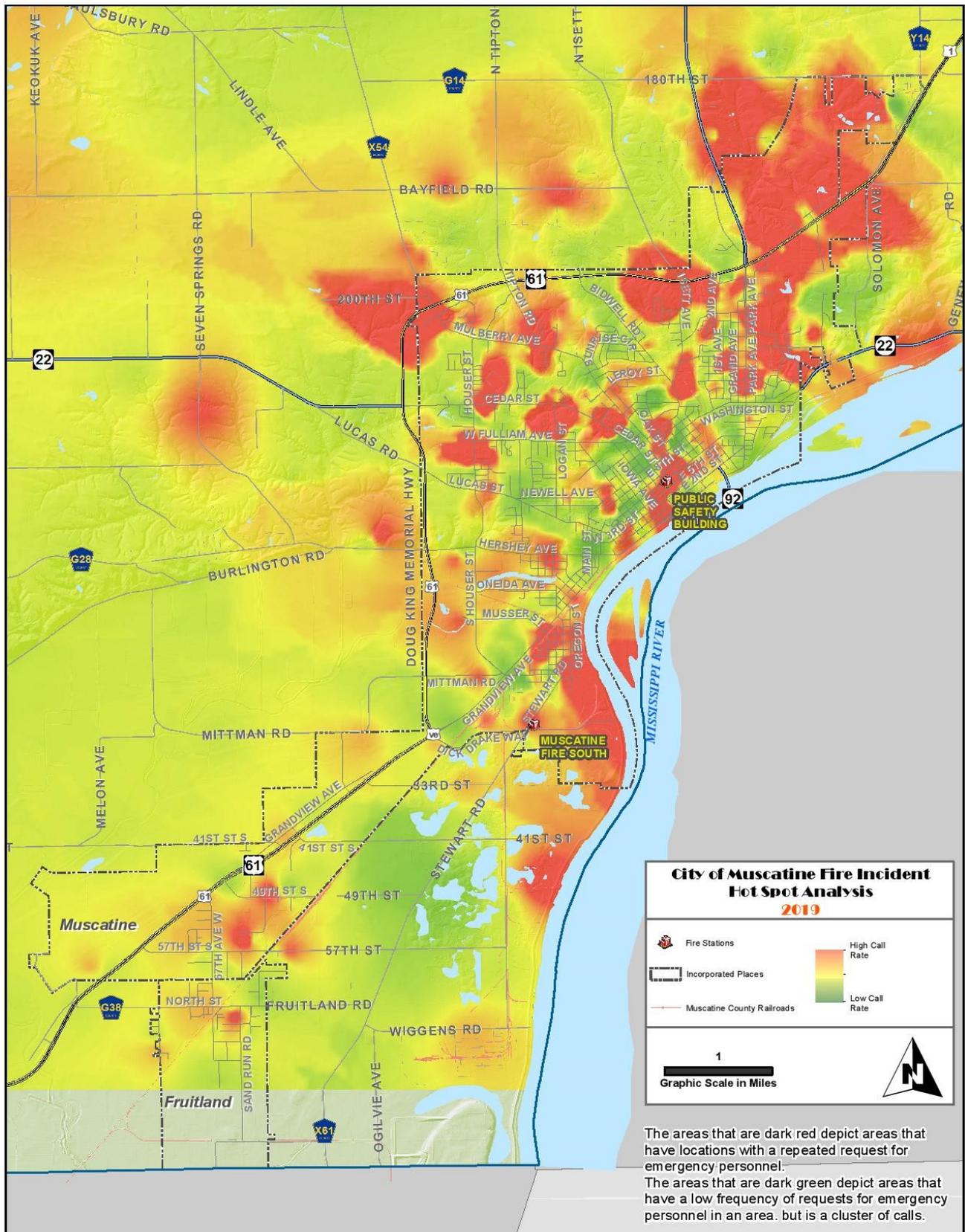
*In 2013 we added a section on the Northeast Corridor of town.*

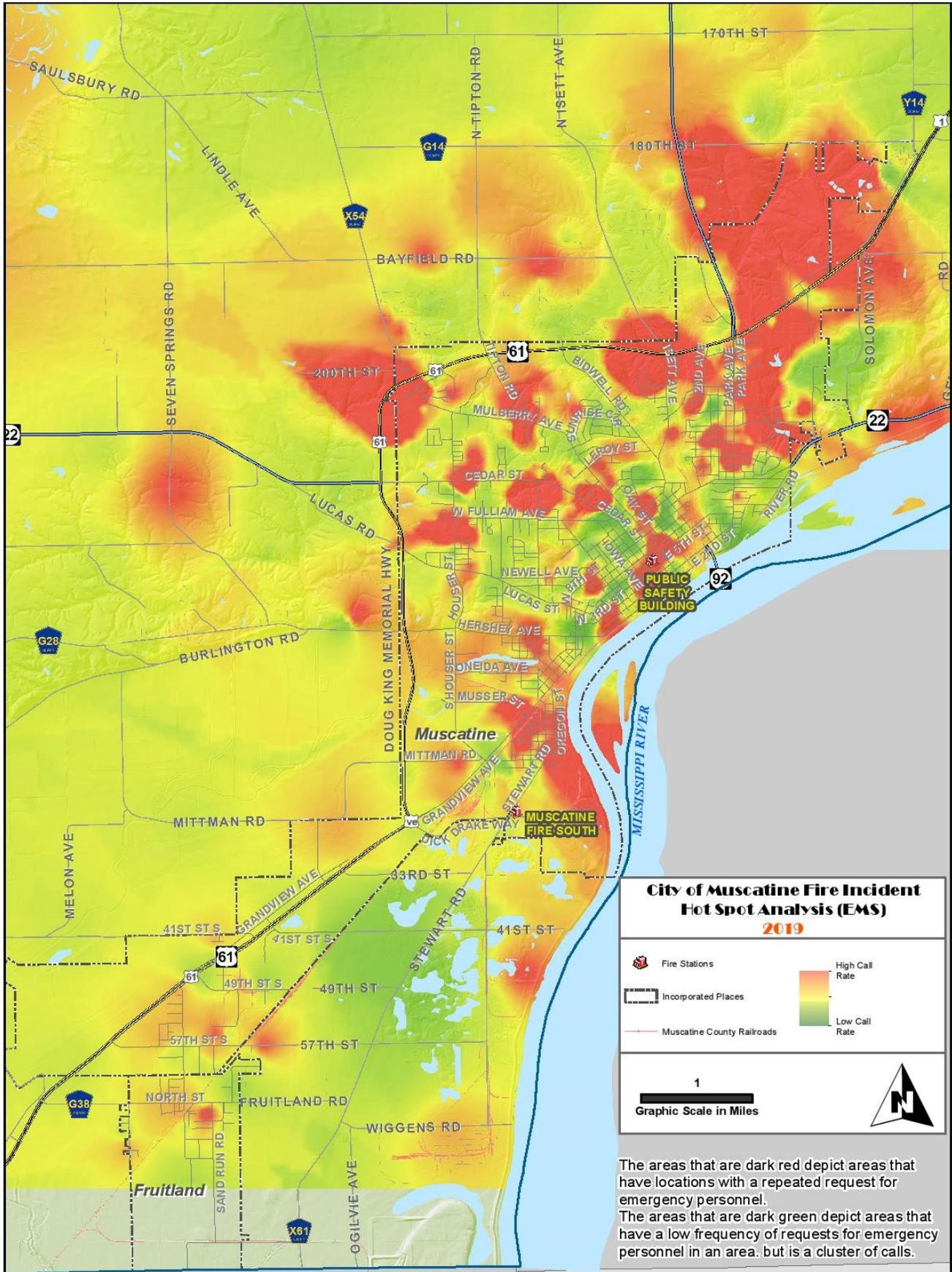
*In 2016 major construction projects slowed response to high call areas, impacting the yearly average.*



# Hot Spot Analysis Diagram

The following diagrams were produced with assistance from the Muscatine Area Geographical Information Consortium (MAGIC). MFD was able to provide the locations of all of our calls for service and MAGIC plotted them to these maps to indicate the busiest locations within our coverage area.





# On The Spot Award

The purpose of this incentive program is to provide “On-the-Spot” recognition to fire department employees and reward them for demonstrating extra effort in the work setting. The program will offer recognition to employees immediately following their extra effort and will also serve as a venue for officers to provide one-on-one feedback to their employees throughout the year, not just during the annual performance evaluation. It is intended that the rules and guidelines for the program be kept to a minimum to encourage maximum participation. This program allows us to personally acknowledge the achievements, contributions, and successes of our employees.

## Criteria

The “On-the-Spot” Award is intended to recognize and reward employees who have exerted extra effort in the course of their job, above and beyond what is normally expected. Examples of such behavior include, but are not limited to, the following:

- ◆ Providing excellent internal and/or external customer service.
- ◆ Volunteering for extra work or duties which are deemed unfavorable by other employees.
- ◆ Putting forth extra effort to complete a special project on time.
- ◆ Compliment from a citizen or end user.
- ◆ Self Improvement (better work habits).
- ◆ Pitching in to help a co-worker.
- ◆ Learning new skills which enhance job performance.
- ◆ Mentoring a new employee.
- ◆ Teaching another employee new skills which will enhance his/her job performance.
- ◆ Doing the right thing even when no one is looking.
- ◆ For a job well done.

## Awards Given To

**FF Brett Becker**  
**FF Craig Chelf**  
**FF Lanny Creamer**  
**FF Zach Diewold**  
**FF Travis Edwards**  
**FF Michael Hoppe**  
**FF Kyle Nickels**  
**Lt Roy Patterson**  
**FF Tyler Willsher**

*These on the spot awards were made possible due to contributions from citizens, businesses, and groups that support the program. If you would like to contribute to this program please contact the Muscatine Fire Department.*

*Above  
AND  
Beyond*

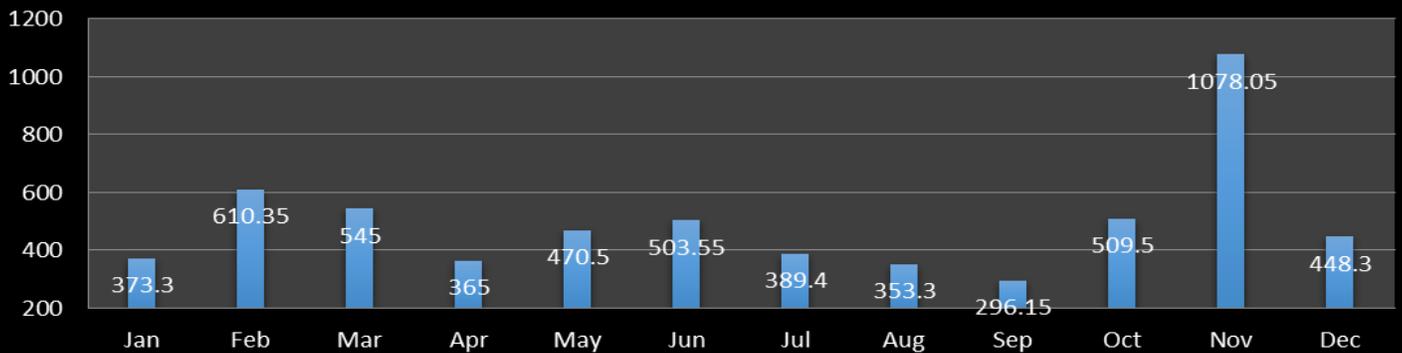


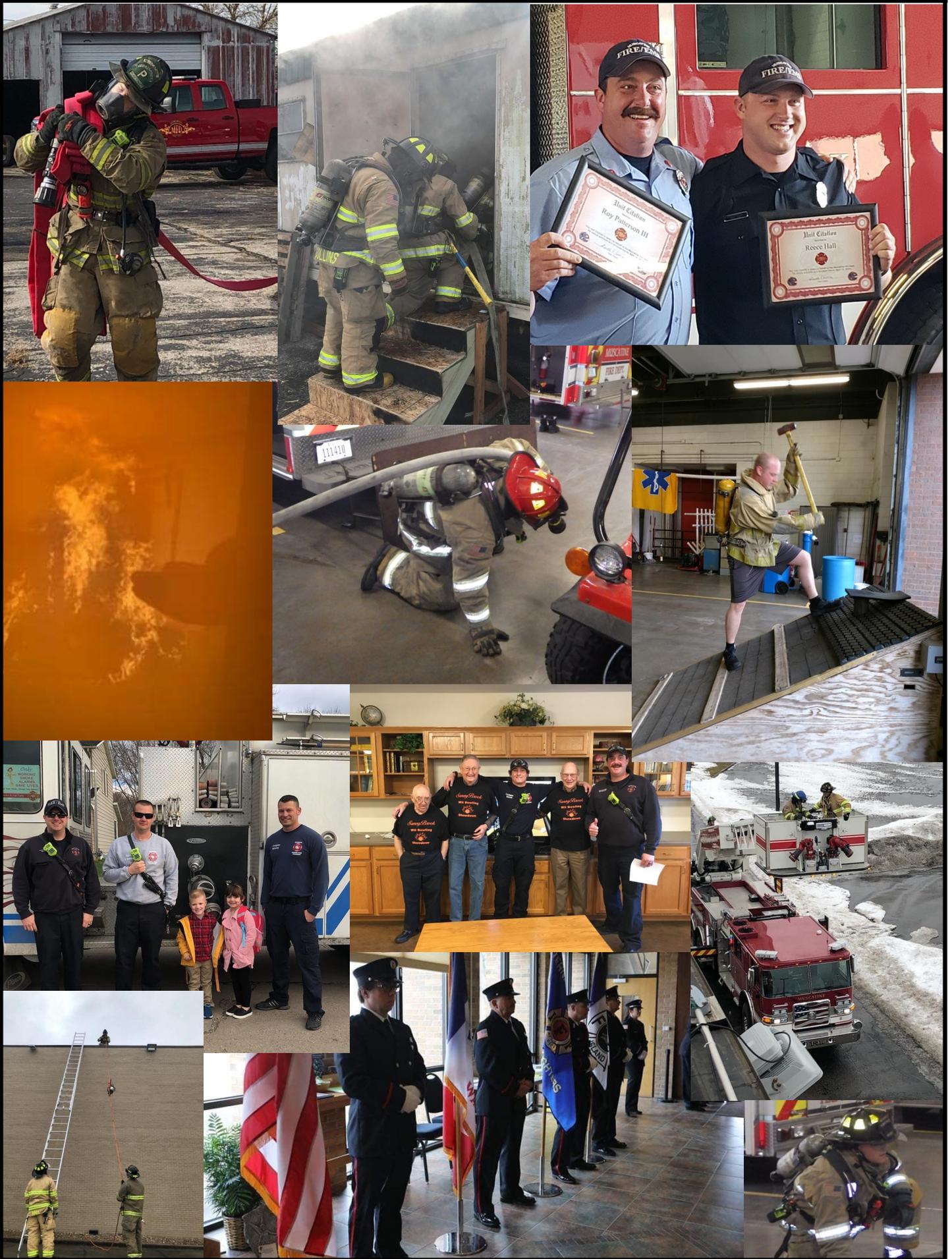
# Training and Certification Report

In 2019 a total of 5,900 hours of training was completed. Our focus this year was on providing the initial training for our new hires. One of the difficulties was to provide a challenging, worthwhile, and safe four week training academy for the new hires; usually using a mixture of off-shift and on-shift personnel, all while still maintaining enough staff available for calls. We met that challenge and provided some of the highest quality initial training in our history. A big thank you to all of our members who stepped up to teach or to help out!



### Training Hours Per Month

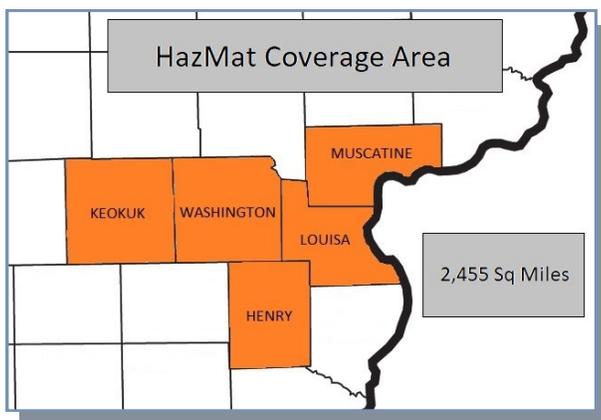
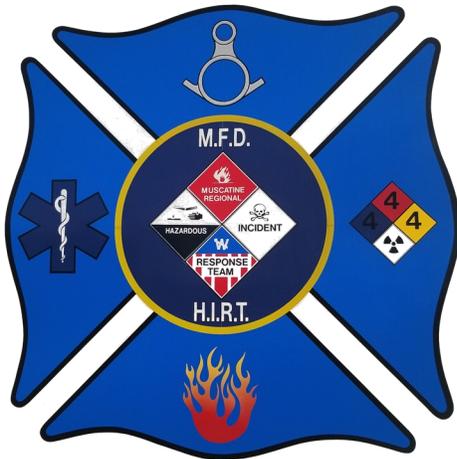




# Muscatine Fire Department Hazardous Incident Response Team (H.I.R.T)

On December 17, 1997 the Muscatine Fire Department revealed its Hazardous Incident Response Team or HIRT. This special response team is a multi-disciplined team that has prepared for serving our citizens in the areas of hazardous materials response, confined space rescue, high angle rope rescue, trench rescue, and any other specialized response as may be needed. This team continues to work to meet the needs of the community.

Given the potential hazards and the increasing need for this specialized response there is an increased emphasis on the HIRT team effectiveness and readiness. We have selected individuals to become HIRT members and increase their knowledge and capabilities for special calls.



The selected individuals are spread throughout the shifts so that we have the expertise available at all times. Everyone on the department is trained to a high level, but the HIRT members act as subject matter experts and provide us with improved capabilities on a daily basis. For larger incidents, the team will provide the main response force and will handle the complexities that large special emergencies create.

To maintain the proficiency needed and the expertise required, the selected individuals are required to attend and participate in additional training - both in house and through other sources. In house training averages 3-4 hours per month, and the outside training is often done at state and national training sites, such as the Security and Emergency Response Training Center in Pueblo Colorado or the Center for Domestic Preparedness in Anniston, Alabama. Because of grant opportunities, both of these facilities are available to our staff at no cost.

Our staff is happy to have this renewed focus and are excited to be able to offer such highly specialized emergency response to our community.



# Apparatus Condition Report

Vehicle	Description	Condition
<b>Ambulances</b>		
Ambulance 351	2018 Ford Medix Ambulance	Good
Ambulance 352	2016 Ford Medix Ambulance	Good
Ambulance 353	2000 Ford Medtec Ambulance with 2011 Chassis (Refurbished Once)	Poor
Ambulance 354	2004 Ford Medtec Ambulance with 2014 Chassis (Refurbished Once)	Fair
Ambulance 355	2012 Ford Medtec Ambulance	Poor
<b>Fire Engines</b>		
Engine 311	2006 Alexis Station 1 Front Line Engine	Fair
Engine 312	2013 Pierce Station 2 Front Line Engine	Good
Engine 313	1988 Smeal Engine – Station 1 Reserve Engine (Refurbished Once)	Poor
Engine 314	1993 Pierce Engine – Station 2 Reserve Engine (Refurbished Once)	Poor
<b>Specialized Apparatus and Support Vehicles</b>		
Tender 316	1978 Chevrolet Water Tender (Tanker)	Poor
Truck 310	2018 Pierce Arrow XT 100' Ladder Truck	Good
Haz-Mat 321	2005 Chevy Duramax C8500 w/ 2004 Mickey 16 Bay Trailer	Good
Chief's Vehicle	2019 Chevy Tahoe	Good
Fire Marshal Car	2018 Chevy Silverado 1500 Crew Cab	Good
BC Command 333	2008 Chevy Tahoe (used police vehicle)	Fair
Truck 331	2018 Chevy Silverado 2500 Ext Cab- With plow attachment	Good
Staff Car-335	2011 Ford Crown Victoria (used police vehicle)	Fair
Mule 350	Side-by-Side Off-road Utility Vehicle (used police vehicle)	Fair
Air Trailer	Three Bank Pull-Behind Air Trailer	Good
Boat 332	2017 Inflatable rescue boat with 25hp Evinrude Outboard Motor	Good

**Good**= No major mechanical or cosmetic defects and in serviceable running condition.

**Fair**= Some mechanical or cosmetic defects and needs servicing but is still in serviceable running condition.

**Poor**= Substantial mechanical or cosmetic defects but able to be serviceable/ End of life.

# New Equipment



Stryker Power Load Cot

Blitzfire Attack Nozzle



Ferno Battery Powered Stair Chair

# Assistant Chief Report

## 2019 Review

In 2019 our department responded to two fatal fires – one in the City of Muscatine and one as automatic aid to Fruitland’s fire district, just outside the City. Two multi-fatality fires. Five lives lost.

The impact these fires have had on the community is palpable. We lost two children and three adults, and it seems like almost everyone I have talked to about fires this year mentioned some connection they have to those who were lost.

Fires like this have an impact on our staff as well. Whether they bring back memories of other fatal fires, foster a sense of regret (“We should have been able to save them”), or just add another negative memory to a fire fighter’s career, these events linger.

Green shift heads up our public education, but it is EVERYONE’S responsibility to spread the word and make sure we cut down on the number of fires. The ‘everyone’ includes you as well – we can’t do it alone. Talk with your family, check your smoke detectors, support your fire department, and use common sense. Please.

There was one detector that worked in these fatal fires, and it was too far from the occupants to impact their response. Practice staying low and exiting - when a fire starts you have about 3 minutes to get out before the room is totally engulfed in flames. Smoke kills – that is definitive. Our main cause of fire still remains carelessness of one sort or another – leaving food on a stove, using extension cords as permanent wiring, smoking – all things we can eliminate. Support and follow Fire Codes – these become Codes because they work, but only if they are followed. Above all, please show your appreciation to our fire staff for what they do. Not only by waving or sending cookies, but by attending and listening during public education events. By helping fire fighters spread the word on fire safety. By being fire safe. By using common sense. By following and encouraging others to follow the rules on fire.

Your fire department is here for you and always ready to help. We are fortunate to have a wonderful staff, with great customer service. So – please rest assured you have professionals available at all times. And if you see one of our staff out and about – go ahead and say hi or thank you; that is one of the biggest things that helps them get through the rough days.



Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Mike Hartman", written over a white background.

Assistant Chief Mike Hartman

# Prevention and Education Report

## 2019 Accomplishments

2019 was a steady year for emergency runs made and providing fire safety inspections to businesses. The total number of emergency calls for service was a new department record from the previous record of 5,100. Emergency calls for service have been trending upward the last several years.

Green Shift responsibilities include Fire Department Inspection program and Public Education programs. The intent of these programs are to reduce risk within the community as it relates to fire. This year at the annual Fire Department Open House, which was held on October 20<sup>th</sup>, we successfully demonstrated using a live fire situation how sleeping with the bedroom door closed can significantly increase escape time in the event of a fire in a home with a working smoke detector. A question/answer session was held at the burn cell with citizens after the fire was extinguished.

Listed are some of the highlights/significant events that happened during the year:

- 263 Inspections were performed
- 252 Re-inspections were performed
- 44 Public Education programs presented in 54.75 presentation hours
- Organized and planned the annual open house during fire prevention week
- Installed 20 smoke detectors and inspected 13 child car seats

Many events were attended throughout the year such as participated in EMS Saturday, Trinity's Health Fair and EMS Day on the Hill in Des Moines.



Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Darrell Janssen".

Battalion Chief Darrell Janssen

# Ambulance Operations Report

## 2019 Accomplishments

Our main departmental goal for 2019, was to continue to improve the performance of our EMS system by; reducing fiscal supply costs and eliminating fee's, tracking supplies more closely, implementing consumable supply accountability for reimbursement, adding new and innovative equipment for patient care, safety, and transport. We also continued quality control meetings with nursing home staff and hospital staff to enhance the care and transfer of patients to and from facilities.

In 2019, some new technology was introduced to the Muscatine Fire Department EMS division to help enhance patient care, patient transport, and EMS provider safety. These items include a battery powered stair chair, auto-assist power cot loading system, and ACR child restraint systems. The Ambulance Committee were able to spec out and secure the purchase of a 2019 Medix Type II Ambulance. This is to be delivered in the spring of 2020 and should help provide a smoother ride for long transport distances with injured patients, as well as, a more economical purchase, more efficient fuel mileage and lower maintenance costs compared to the larger modular Type III Ambulances. We were also able to secure a \$20,000 grant from the Community Foundation of Greater Muscatine for the purchase of a Lifepak 15 monitor/defibrillator for transporting patients with the Type II Ambulance.

FF/EMT's attended numerous continuing education classes held in house such as ACLS, PALS, CPR recert, and fire rescue one, while some personnel attended conferences such as FDIC, IEMSA, Critical Care Paramedic, Tri-State Emergency Responder Conference, Iowa's 2019 Trauma Conference, Stop the Bleed Certification, Iowa Leadership Conference, as well as NFA and grant writing conferences. This allows us to maintain a high level of service and stay up on new/cutting edge equipment and medical techniques.



Respectfully Submitted,

Handwritten signature of Ted Hillard

Battalion Chief Ted Hillard

# Training and Fire Operations Report

## 2019 Accomplishments

This last year was a busy year for emergency runs made. Red shift was also busy with the purchasing of new equipment for the department and coordinating training. This year's primary focus on training was in fire operations, but also included a significant amount of training in Emergency Medical Services (EMS). EMS training requires at least 30 hours annually for each Firefighter/Paramedic to remain eligible for recertification. The department also has minimum training requirements in firefighting, Hazardous Materials, and Special Operations. Red Shift is responsible for putting out the annual training plan. This year the department had over 5,900 hours of training completed.

This year the department moved to Station Tracking software to eliminate most of our paper vehicle checks and mechanical work orders. This process will streamline apparatus checks and will create continuity across the shifts. Over the next year we will work towards having every firefighter trained and certified to the firefighter II level. Some of the highlights/significant events that happened during the year include:

- Purchased new fire nozzles including a TFT Blitz nozzle.
- Purchased station and apparatus check software.
- Conducted three Probationary Firefighter Academies training nine new firefighters.
- Hosted a Fire Inspector certification class.
- Purchased and replaced 5 inch supply hose.
- Purchased a new fire hose testing machine directly impacting our time spent on hose testing.
- Eleven firefighters went out of state for grant funded training in various subjects to include command and control of fire incidents and hazardous materials courses.

Respectfully Submitted,



Battalion Chief Gary Ronzheimer



# New Employees



**Firefighter/ Paramedic**  
**Michael McCartney**  
**Hire Date: January 7, 2019**



**Firefighter/ Paramedic**  
**Zachary Howell**  
**Hire Date: January 14, 2019**



**Firefighter/ EMT**  
**Kyle Davis**  
**Hire Date: May 20, 2019**



**Firefighter/ Paramedic**  
**Ryan Amidon**  
**Hire Date: May 20, 2019**



**Firefighter/ Paramedic**  
**Eric Joslyn**  
**Hire Date: May 20, 2019**



**Firefighter/ EMT**  
**Benjamin Barrett**  
**Hire Date: October 21, 2019**



**Firefighter/ EMT**  
**Brockton Frank**  
**Hire Date: October 21, 2019**



**PT Ambulance Attendant  
Paramedic**  
**Rochelle Bonebrake**  
**Hire Date: September 10, 2019**

# Retirements

## Harold Bennitt



Hired: April 1, 1991

Promoted to Lieutenant: November 21, 2009

Promoted to Captain: May 12, 2013

Retired: January 6, 2019



## Rhonda Theobald



Hired: February 4, 2002

Retired: April 1, 2019



## Chris Brase



Hired: September 28, 1990

Promoted to Mechanic: July 1, 2000

Retired June 29, 2019



# Retirements Continued

## Bart Lund



Hired: May 22, 1998

Promoted to Mechanic: December 12, 2006

Retired: December 4, 2019



## Promotions

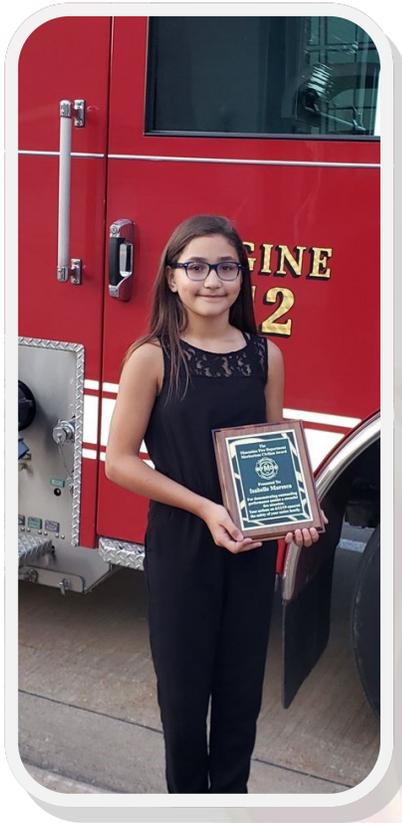


Roy Patterson from  
Firefighter to Lieutenant  
On January 7, 2019



Joe Timmsen from  
Lieutenant to Captain  
On January 7, 2019

# Fire Department Meritorious Civilian Award



At the September 5th city council meeting 10 year old Isabelle Maresca was presented with Meritorious Civilian Award. This stems from a structure fire that Blue Shift responded to on 6/12/2019. While cooking dinner Myrna Maresca (Mother) had accidentally left a burner on the stove that had a pan containing hot grease inside it. The hot grease caught fire when the kitchen was unattended. Isabelle saw the fire when she entered the kitchen, stating that it was about 2 foot high reaching the microwave above the stove. She yelled for her family that the kitchen was on fire and her Mother Myrna came to the kitchen. Isabelle retrieved the fire extinguisher off the wall in the next room and brought it to her Mother, who extinguished the fire before it extended into the cabinets causing more damage to the residence. This quick response not only saved the fire from becoming out of control with a ABC extinguisher but also may have saved the lives of personnel not aware of the fire in the structure.

# Major Activities and Accomplishments

- Saw an increase in run volume of 3.4% over 2018 and 14.8% over the 2015 volume .
- Saw a 11.9% increase in building fires and 27.7% decrease in all fires as compared to 2018; and an increase of 9.3% but decrease of 2.2% respectively in comparison to 2015.
- Continued social media outreach using Facebook and Twitter, which have reached more than 472,000 people in the last year (48.4% increase over 2018), has 'engaged' about 290 people per day on average; and the page presently has about 4,550 'likes' (24.3% increase).
- Held a safety stand-down day to focus on cancer prevention strategies, which included suggestions for improvement. Those suggestions lead to better cleaning procedures, better separation of soiled and clean gear, and reinforced items already being addressed such as improved fire hood purchase and use to decrease exposure.
- Continued cardiac enzyme blood testing and remain the only ambulance service in Iowa with this type of testing capabilities; test results are used to help determine transport destinations for cardiac patients (*Continuous Service Improvement*).
- Implemented strategies to decrease EMS costs, including changes in purchasing and vendors in order to save costs on supplies, and provided no-cost in-house training for Pediatric Advanced Life Support and Advanced Cardiac Life Support.
- Hosted the 10<sup>th</sup> Annual EMS Saturday conference at Discovery Park; this event draws participants from throughout Eastern Iowa as well as serving MFD personnel.
- Coordinated and implemented another successful Public Safety Open House, utilizing the "Close before you Doze" message to encourage participants to close their doors while sleeping and used the live fire 'burn cell' to illustrate this point.
- Transitioned fire inspections to a new program, which will allow easier access to information on fire scenes and serve as a pre-planning document in addition to being better integrated into the department record management system.
- Hosted and instructed State certification training and testing for Fire Inspector I certifications at the IFSAC/ProBoard standard. This was in house with MFD and guest instructors. A total of 10 MFD and 2 mutual aid organization partners took advantage of the training.
- Utilized non-traditional training locations to provide real-world experiences, including on site HazMat at MPW, 700+ hours of training at the old Holiday Inn property, donated (Rich Metals) real vehicles for extrication training, and mobile homes donated (Ripley's) for our use as live fire training aids.

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*We look forward to the challenges and opportunities in 2020 and we wish to thank you for your continued support.*



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**A special thanks to FF Chelf for his work on this annual report**