



Marshalltown Fire Department

Annual Report 2020

Table of Contents

Message from the Fire Chief	2
Organizational Structure	3
Administrative Staff & Officers	4
Incident Breakdown	5
Distribution of Calls	6
Fire Call Breakdown, Injuries, Fatalities, & Loss	7
EMS Call Breakdown	7
Fire Photographs	8
Operations	10
Overlapping Calls	11
Times by Day of Week	12
Times by Hour of Day	13
Training & Activity	14
Training Photographs	15
Fire Prevention, Inspections, & Investigations	17
Employee & Shift Information	18
Department Update	19
Derecho Photographs	20



Message from the Chief

The members of the Marshalltown Fire Department are pleased to offer you this annual report for the year 2020. This working document addresses your fire departments daily activities and accomplishments. It is our goal to offer the highest level of service possible for the citizens and to the business community of Marshalltown.

2020 was a year many people would like to forget. Between the COVID 19 pandemic and the August 10th Derecho the City of Marshalltown faced many challenges and obstacles. Unlike the tornado of 2018, the Fire Department experienced significant damage to the station, emergency vehicles, and training facility. Fortunately, no department members were injured.

In 2020, the Marshalltown Fire Department experienced a 4.8% increase in calls for service (2,834 vs. 2,705), much of which can be attributed to the Derecho in August.

The Fire Department could not function without the support of dedicated employees, the community, and the City Council. The words of encouragement, thanks, and food received after the Derecho and during the holidays were certainly not expected, but greatly appreciated! With every challenge encountered this year our staff has stepped up and met them head-on, while continuing to provide the services our community has come to expect. Lastly, the Marshalltown City Council continued to show its support of the department by approving the purchase of two new fire apparatus, a decision that will save the City money in the future. Delivery of the new equipment is tentatively scheduled for late July, 2021.

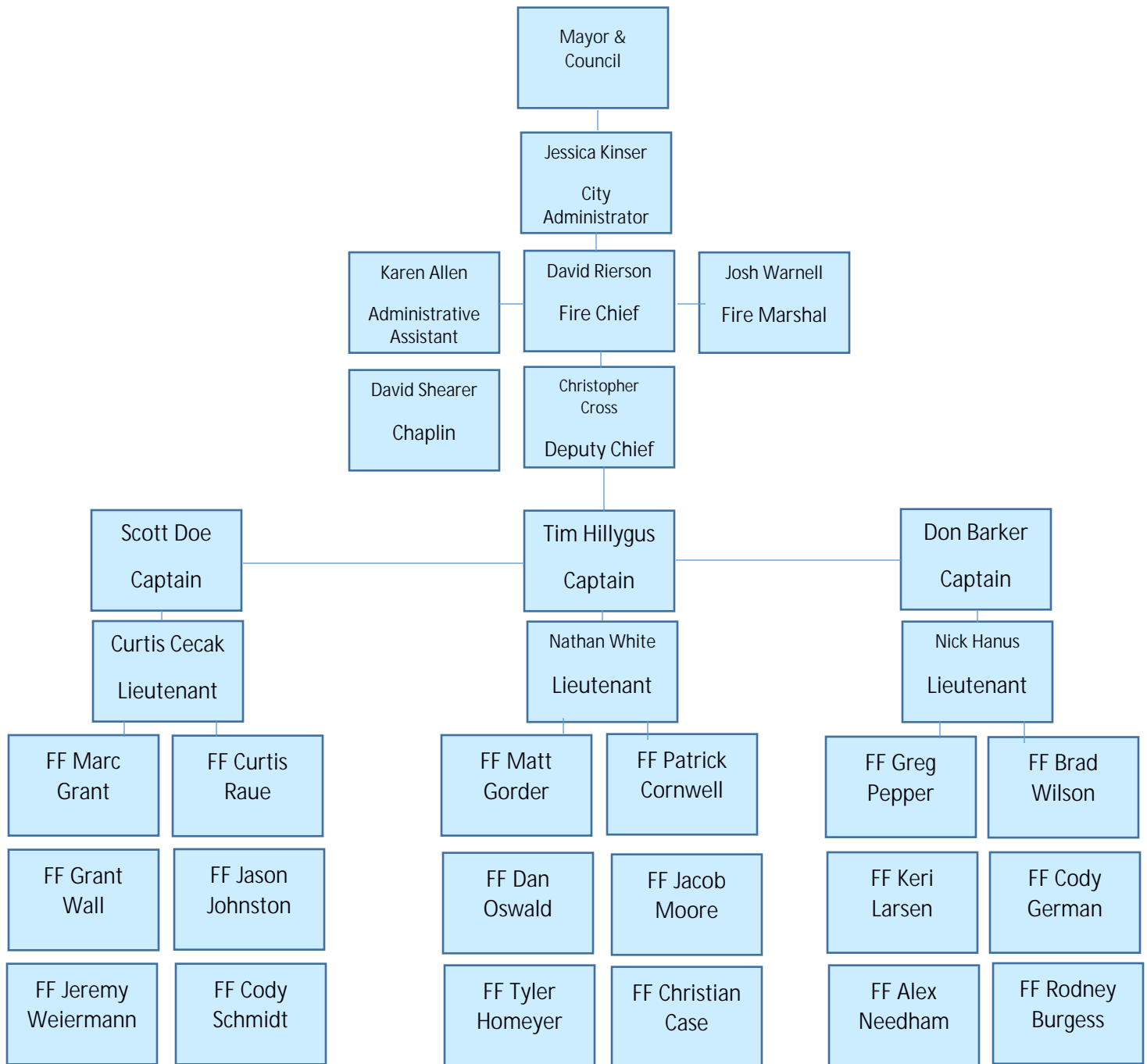
It is our hope that 2021 brings about the control of COVID 19 and a return to a more normal routine and activity level.

Sincerely,

David Rierson

David Rierson - Fire Chief

Organizational Structure



Administrative Staff & Officers



David Rierson – Fire Chief



Christopher Cross – Deputy Chief



Joshua Warnell – Fire Marshal



Scott Doe - Captain



Tim Hillygus - Captain



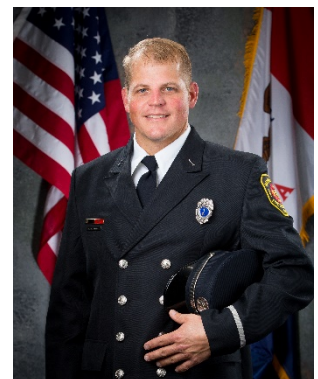
Don Barker - Captain



Nick Hanus - Lieutenant



Curtis Cecak - Lieutenant



Nathan White - Lieutenant

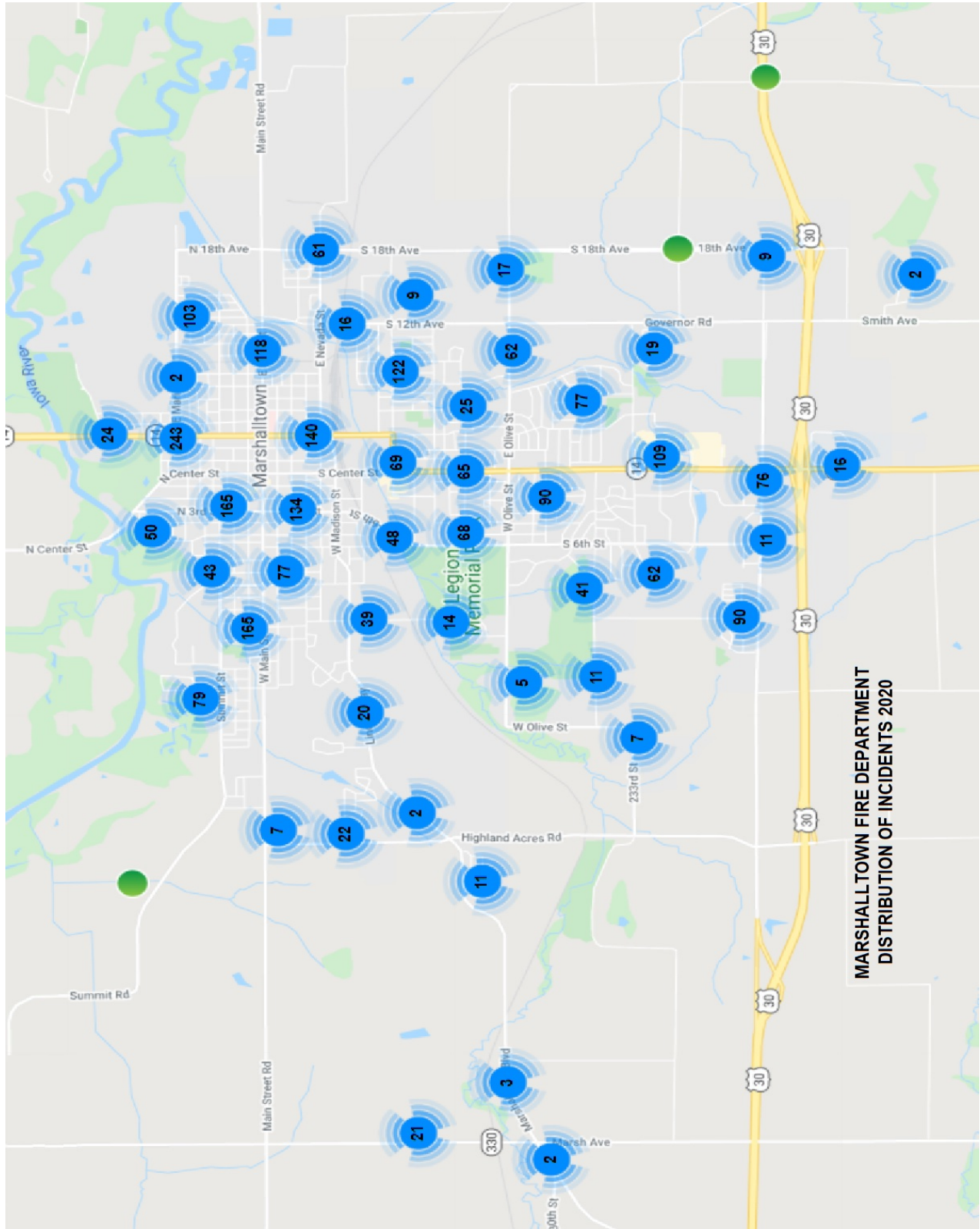
Reports and Statistics

Incident Breakdown

As an all-hazards department, Marshalltown Fire Department responds to emergencies that include fires, emergency medical calls, hazardous materials incidents, water and ice rescue, trench and confined space rescue, and vehicle extrication. In 2020, the department responded to 2,834 requests for service, which represents an increase of 4.8 percent over 2019 (2,705). Listed below are explanations of the categories and a chart breaking down fires by type and other calls for service as well as a map showing distribution of calls throughout the City.

1. EMS: Includes emergency medical calls and extrications.
2. Hazardous Condition-No Fire: Includes hazardous materials spills, arcing or shorted electrical equipment, and electrical wiring issues.
3. Fires: Includes structural, vehicle, brush and weeds, and rubbish.
4. False Alarm: Includes accidental alarm trips.
5. Service Calls: Includes Smoke or odor scares, animal rescues, water problems, and public assistance.
6. Hazardous Materials: Includes release, containment, and mitigation of a hazardous substance.

Distribution of Calls



	Number of Incidents
Private Dwellings (1 or 2 family)	15
Apartments (3 or more families)	7
Public Assembly	0
Other Residential	5
Industry & Manufacturing	0
Stores & Offices	2
Barns, Storage, Garages	4
Outbuildings	2
Total Structure Fires	35
Vehicle Fires	7
Brush/Weeds	5
Dumpsters/Rubbish	11
Other Fires	2
Total Other Fires	32
Total Fires	67

Fire Loss

In 2020, fire loss is valued at \$341,470, which is a 33.4% decrease from 2019 (\$455,570). With a pre-incident value of property involved at \$1,987,120, the department saved \$1,645,650 worth of property.

Fire Injuries/Fatalities

In 2020, we are pleased to report no civilian or firefighter injuries or fatalities.

EMS

Marshalltown Fire Department responds with UnityPoint EMS on specific medical calls for service. In some instances, the department arrives on scene prior to the ambulance and begins patient care. Due to COVID 19, the department revised the types of calls responded to with the intent of reducing exposure to employees. EMS calls responded to include cardiac arrest/CPR, difficulty breathing, seizures, diabetics, strokes, and traumatic injuries. Additionally, there are times when the fire department crew, depending on patient condition, help either render patient care in the ambulance or drive it for the EMS crew to the hospital. In 2020, the department responded to 1,678 medical calls, assisted in patient care 21 times (1.3%) and drove the ambulance for the EMS crew 55 times (3.3%). At times, the responding fire crew finds itself waiting on scene for an ambulance. In 2020, responding crews waited on scene for an ambulance for greater than 10 minutes 26 times (1.5%).

Structure Fire Damage





Operations

To fully understand our operation and to ensure the best service delivery possible, specific factors related to our service are analyzed. These factors include response time performance, requests by time of day and day of week, overlapping calls, and calls by month. The definition of “response time” depends on the perspective from which one approaches the data. Response time components include call processing and dispatch, turnout time, and drive time to the scene. Call processing time is measured from the time the 9-1-1 call is received to dispatch of the department. Turnout time is measured from dispatch of the department to the time the apparatus leaves the station. Drive time starts when the apparatus leaves the fire station and stops when the apparatus is on location of the incident. Drive time is affected by traffic patterns, time of day, weather patterns, and distance to the incident. For 2020, our department numbers were as follows:

Average Response Times for EMS Runs: 5:53

Average Response Times for Fire Runs: 11:54

Average Response Time for All Runs: 8:09

Average Turnout Time for EMS Runs: 1:56

Average Turnout Time for Fire Runs: 6:48

Average Turnout Time for All Runs: 3:49

It should be noted that response and turnout times for fire runs were affected by the derecho. Numerous 9-1-1 calls received delayed responses due to the length of the storm, the inability to move apparatus out of the station due to damage, and the number of 9-1-1 calls received. During the first 12 hours after the incident, fire department personnel responded to 133 requests for service. In comparison, turnout time for fire runs in the 4th quarter of 2020 was 2:16.



Overlapping Calls:

Overlapping calls are those times when the department has more than one call for service occurring at the same time. This is an important statistic to track as it could result in either delayed or no response. In 2020, we experienced a 14% increase in overlapping calls (581 vs. 510), which represents 20.5% of our total calls. It should be noted that the spike in August 2020 was due to derecho response. A visual graph of the overlaps is located below.

Calls by Day of Week:

Calls By Hour of the Day:

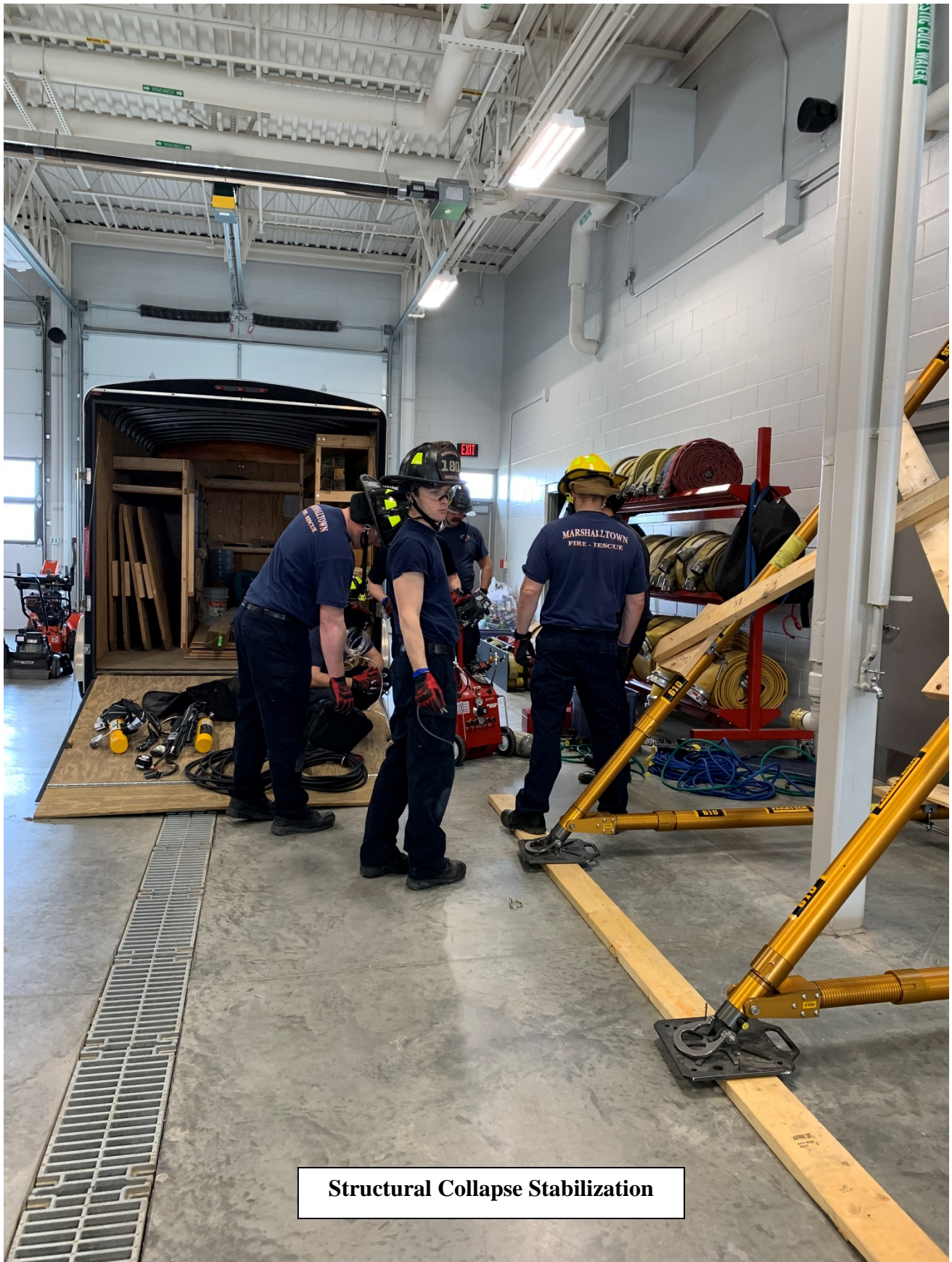
As in previous years, the department remains busiest between the hours of 8:00 am and 8:00 pm.

Training and Activity

As an all-hazards department, training is an important part of our annual activity. Training is provided through a combination of in-house instruction, online classes, and outside classes and training. In 2020, training was significantly reduced due to COVID 19. Group training sessions, both in-house and through outside training entities were cancelled or limited to comply with COVID restrictions. Additionally, technical issues with an online training provider prevented members from completing required OHSA training. 7,527 person-hours were spent training in the areas of EMS, fire, hazmat, OHSA, physical fitness, and specialty (confined space, ropes and water rescue). Additionally, 4,509 person-hours were spent answering calls for service, providing station tours, and maintaining facilities and equipment. Total activity time for 2020 is 12,036 person-hours. Below is a breakdown of the hours.



Rope Rescue Training



Structural Collapse Stabilization

Fire Prevention/Public Education

Fire prevention and public education were also affected by COVID, with almost all activities being cancelled to comply with COVID protocols. During 2020, the department conducted two station tours and 16 public education events.

Fire Marshal's Office

2020 was the year we felt inspections would increase significantly, however, COVID 19 had other plans. As a result, inspections for the year decreased (189 vs. 263). Department affiliation with The Compliance Engine continued in 2020. The Compliance Engine sends notification to property owners who have fire protective systems (sprinklers, hood systems, alarm systems) when service is due, as well as when there are deficiencies in need of correction. In 2020, the Compliance Engine reported 546 system inspections of which 110 were non-compliant (20%). In addition to inspections, Fire Investigators conducted 19 fire investigations of which six were determined to be arson. During investigations, it was determined that in 7 residential fires no working smoke detector was present.

Retirements, Deaths, New Employees, Promotions, and Anniversaries

For those of us in the fire service, the people we work with become our second families. As such, we celebrate members who have reached milestones in their careers and honor those who are no longer with us. In 2020 the department experienced no retirements or losses. Lastly, the following individuals celebrated anniversaries with Marshalltown Fire Department:

5 years: Cody Schmidt, Alex Needham, and Tyler Homeyer

10 Years: Curtis Raue and Josh Warnell

15 years: Brad Wilson

Activity by Shift

A-Shift: 1,012 calls for service.



Grant



Johnston



Schmidt



Raue



Wall



Weiermann

B-Shift: 922 calls for service.



Case



Cornwell



Moore



Gordor



Oswald



Homeyer

C-Shift: 900 calls for service.



German



Pepper



Larsen



Needham



Wilson



Burgess

Department Improvements/Updates

Between COVID 19 and the derecho the fire department, like other City departments and local businesses, has experienced several challenges that changed the outlook for 2020 from one of continued improvement to a year of maintaining, surviving, and rebuilding. COVID protocols forced changes in our operations, responses, training, fire code enforcement and prevention activities that will continue into early 2021.

On August 10, 2020 the derecho did significant damage to the fire station, apparatus, vehicles and equipment, as well as the training facility located at Marshalltown Community College. Over the last four and one-half months repairs have been ongoing and will continue through Spring of 2021.

In September, the department conducted promotional processes for the rank of Captain and Lieutenant to help prepare for the retirement of two officers in 2021. Promotions will include one Lieutenant and one Captain in February of 2021 and one each in December of 2021. In addition, a firefighter testing process was held in October as the aforementioned retirements and promotions will require the hiring of two entry-level firefighters. These positions are scheduled to be filled in January and November of 2021.

In November, the department initiated the first steps for an Officer Development Program. This process included a department cultural survey and a 360 degree survey of all officers. The surveys are designed to identify strengths and weaknesses for our officers, which is important as areas for improvement will vary between them. It will also allow the department to create and provide a targeted development plan for each officer.

In 2020, the Fire Chief was re-designated as a Chief Fire Officer and Chief EMS Officer by the Center for Public Safety Excellence. Additionally, the Chief was elected to the position of 1st Vice-President of the Missouri Valley Division of the International Association of Fire Chiefs. The Missouri Valley Division includes the states of Iowa, North & South Dakota, Nebraska, Colorado, Wyoming, Missouri, and Kansas.

Lastly, In December of 2020 the Marshalltown Fire Department received a most generous gifting of \$150,000 from the estate of Artis Wansley. Words cannot express our gratitude for this kind act.

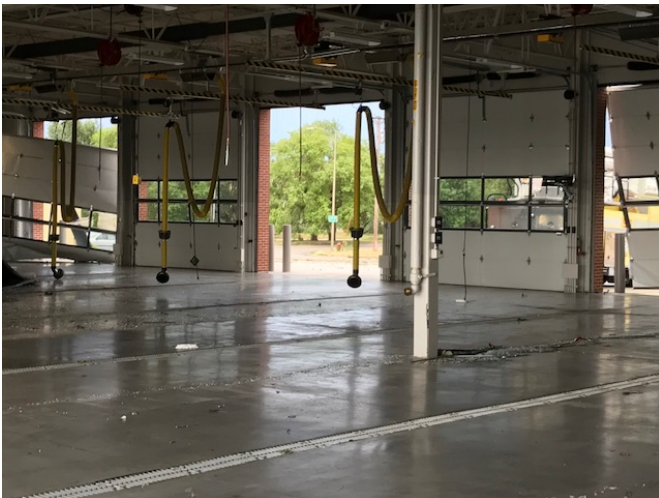
The Future

In 2021, the Fire Department will continue to look for ways to improve services. It is our hope that the COVID 19 virus will be brought under control and we can return to normal operations.

In latter July, the department is scheduled to take delivery of two new fire apparatus that were approved for purchase in July of this year. Additionally, Mobile Data Terminals (MDT) are scheduled to be upgraded in our fire apparatus. MDT's allow the crews to access call information, locate fire hydrants, and pre-fire plans while enroute to calls.

In 2021, each officer will be given a development plan based off the 360 degree surveys that were completed in November and December.

In July of 2021, the Fire Chief will assume the role of President of the Missouri Valley Division.



Derecho Damage & Cleanup