

2021 Annual Report





Troy Fire Department 2021 Year End Report

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A MESSAGE FROM CHIEF RICHARD RIESTERER



The following information highlights the annual report for the Troy Fire Department for calendar year 2021. It summarizes noteworthy events including various Fire and EMS statistics, and performance indicators for convenient reference.

Calendar year 2021 was busy for the Troy Fire Department. It started with the retirement with the retirement of Fire Chief Dave Roberts. After providing more than 42 years of dedicated service to the community, Dave felt it was time to hang up his helmet. We wish Dave the best during his well-earned retirement.

By design, our community expects the firefighters to respond to requests for assistance, both emergency and non-emergency. The Troy Fire Department responded to over 1100 requests for our services. This includes fires, rescues, and hazardous materials events. The department responded to 59 working structure fires, including 5 requests for mutual aid to our neighbors.

And these services are not limited to our human customers. The TFD responded to several requests to remove animals from harm's way including cats, ducks, and even a raccoon. To meet these expectations for fire and rescue services, the firefighters continued their ongoing education by participating in over 20,000 hours of ongoing education to maintain their skills. This includes those enrolled in the fire academy, regularly scheduled training, officer certifications, and all specialty training programs.

The Troy Fire Department continues to partner with the community, and look for ways to create valuable relationships such as the annual Citizen's Academy; participating in one or more charitable silent auctions for dinner at a fire station; hosting summer campers from Leader Dogs For The Blind; participating in the annual Stair Climb for Air to support the American Lung Association; and hosting the annual children's Shop With A Firefighter Christmas event that supports local families in need, to name a few. COVID 19 may have caused a slow-down for some of these events, but the fire service is committed to supporting these causes whenever possible.

The Firefighter's Memorial Project progressed even as COVID-19 did its best to derail one of the most aggressive recognition projects in the department's history. The fire department's mission statement makes it clear that "The department recognizes that its members are our most valuable resource, and the key to our future." The project will become a cornerstone of recognition, and pay tribute to our past members who are now deceased. With a partial capital funding allocation from the City, and through donations from various organizations and individuals from both inside and outside of the community, we are nearing completion of this project. The original timeline had to be altered as a result of the COVID-19 Pandemic. But through the efforts of many, we are expecting to hold the grand opening ceremonies in June 2022.

Overall, the Fire Department continues to attract volunteers and provide efficient fire suppression and rescue services through a cost effective, well trained, combination-style department, comprised primarily of dedicated volunteer firefighters. The Department also provides proactive fire prevention; fire safety education; and firefighter training services through the use of a small, committed, career staff in order to help reduce the risk of fire loss within our community. The fact that the Troy Fire Department is the largest combination-style fire department in Michigan, and the largest municipal fire department in Oakland County, yet operates at 1/2 to 1/3 the cost of comparably-sized career fire departments throughout the region, cannot be overstated and should not be overlooked.



Troy Fire Department 2021 Year End Report

As has always been identified in past reports, I would like to take this opportunity to express our appreciation to the Troy City Council, the many City departments with whom we work, and to the community for their continued support. I would also like to recognize and thank our members, both volunteer and career, their spouses and families; the local businesses who allow their employees the necessary time to volunteer with us; the Troy Firefighters Community Fund; the Troy Police and Fire Benevolent Association; and the Troy Fire Explorer Post 911. Each of these groups has a special role in supporting the Troy Fire Department as we proceed through our 82nd year of serving the community.

Sincerely,

Richard Riesterer
Fire Chief



Troy Fire Department 2020 Year End Report

FIRE STATION INFORMATION



Fire Station No. 1

1019 East Big Beaver

Apparatus: (2) 1,500 GPM Engines, (1) 100 ft. 1,500 GPM Aerial Platform Ladder, (1) Mobile Command Post truck



Fire Station No. 2

5600 Livernois

Apparatus: (1) 1,500 GPM Engine, (1) 100 ft. 1,500 GPM Aerial Platform Ladder, (1) 4x4 Grass Truck, (1) Boat



Fire Station No. 3

2400 West Big Beaver

Apparatus: (2) 1,500 GPM Engines, (1) 100 ft. 1,500 GPM Aerial Platform Ladder, (1) Air Tender truck



Fire Station No. 4

2117 East Maple

Apparatus: (1) 1500 GPM Engine, (1) 65 ft. 1,500 GPM Ladder, (1) Heavy Rescue truck



Fire Station No. 5

6399 John R

Apparatus: (1) 1,500 GPM Engine, (1) 75 ft. 2,000 GPM Ladder, (1) Utility truck



Fire Station No. 6

5901 Coolidge

Apparatus: (1) 1,500 GPM Engine, (1) 75 ft. 2,000 GPM Ladder



The Fire/Police Training Center

4850 John R

Apparatus: Special Teams vehicles



Administrative Offices

500 West Big Beaver

Staffing:

(1) Fire Chief, (2) Assistant Fire Chiefs, (8) Staff Lieutenants, (1) Administrative Assistant, (1) part-time Administrative Aide, (4) part-time Staff Assistants



Administrative Offices

Located in City Hall

Organization:
Administration
Fire Prevention
Operations



Troy Fire Department 2021 Year End Report

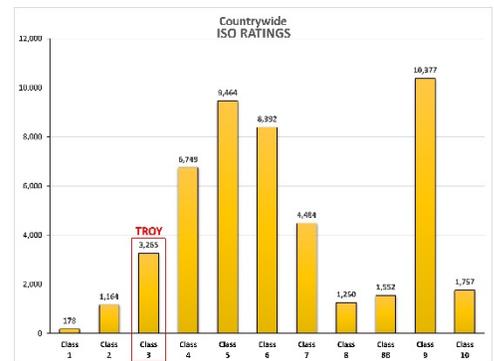
OPERATIONS DIVISION REPORT

The Troy Fire Department is comprised of six fire stations strategically located throughout the City. Firefighters, who are highly trained and certified by the State of Michigan, are on-call 24 hours a day to respond to requests for service such as fires, rescues, and other emergencies. The Troy Fire Department is unique in that staffing consists of an authorized strength of 180 volunteer members and 12 uniformed career staff members.

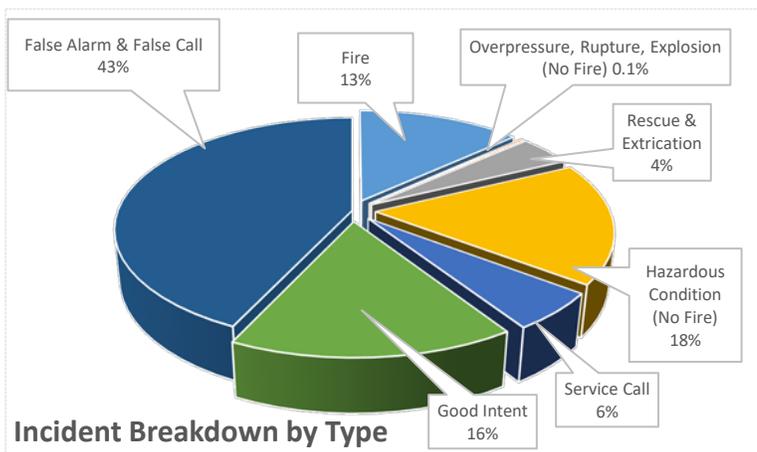
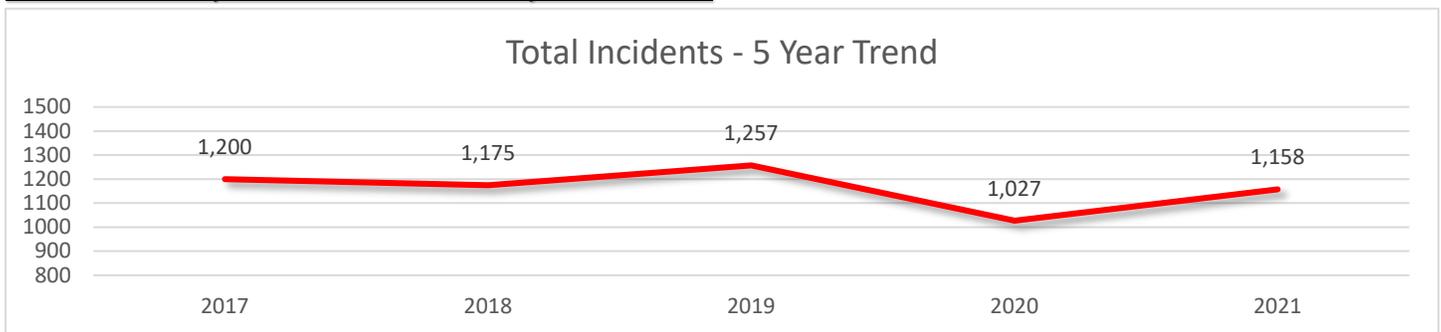
The Operations Division is led by Assistant Fire Chief Peter Hullinger, and is responsible for all matters related to fire suppression, training and resources. This includes responding to fires and other emergencies, the investigation of all fires, developing and providing training, conducting fire safety educational programs, and developing specifications for, as well as the acquisition and maintenance of apparatus, equipment and facilities.

ISO Property Protection Classification

The dedication of the fire department members and staff, along with the strategic location of facilities and purchase of equipment results in the fire department achieving a current ISO Property Protection Classification of 3. This rating is within the top 6% of all fire departments, career as well as paid on call / volunteer, in the United States. This rating is an independent evaluation, and provides residents as well as business owners a financial savings in property insurance.



Incident Response Metrics - Departmental



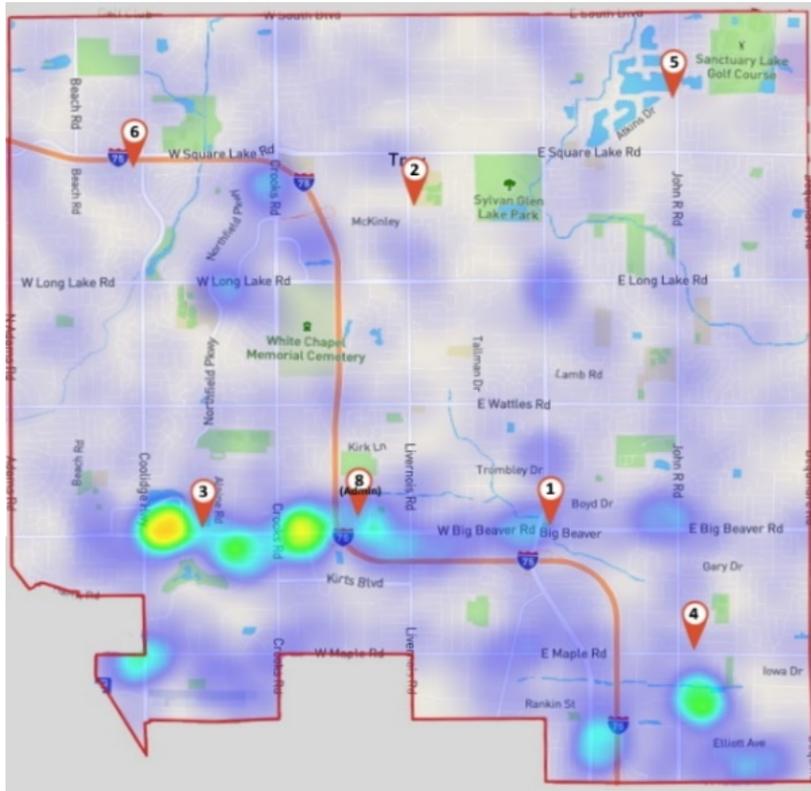
Nationwide, the fire service has seen the continued trend of an increase in call volumes year after year. As can be seen in the graph above, 2021 was back on trend for the Troy Fire Department, primarily due to the return to work from previous COVID-19 “stay-at-home” orders. The total number of incidents responded to by the TFD increased by 13% to 1,158; up from 1,027 in 2020. It is essential to note as well, that the incident volume does not include EMS incidents in the City of Troy.

Within the City of Troy, fires accounted for 13% of the total call volume, with the majority of calls responded to being false alarms or false calls at 43% of total incidents.

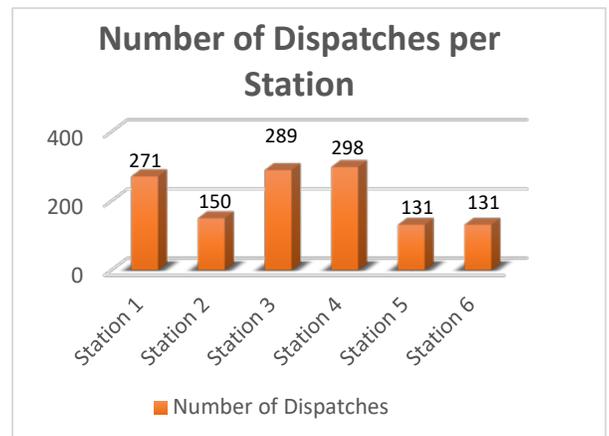


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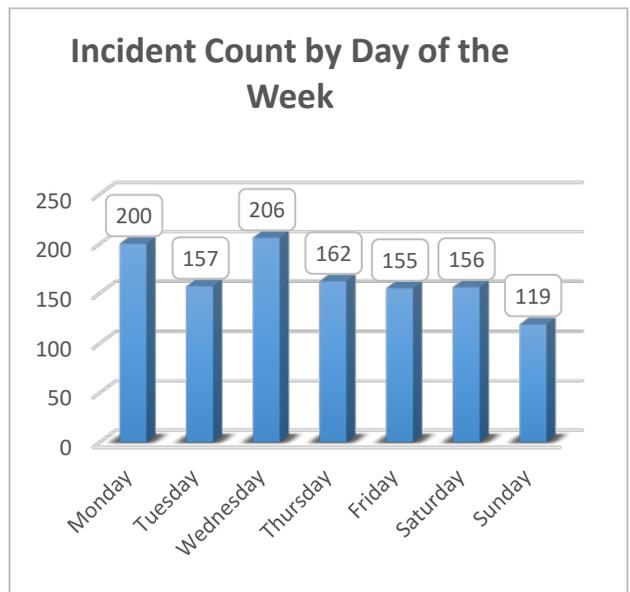
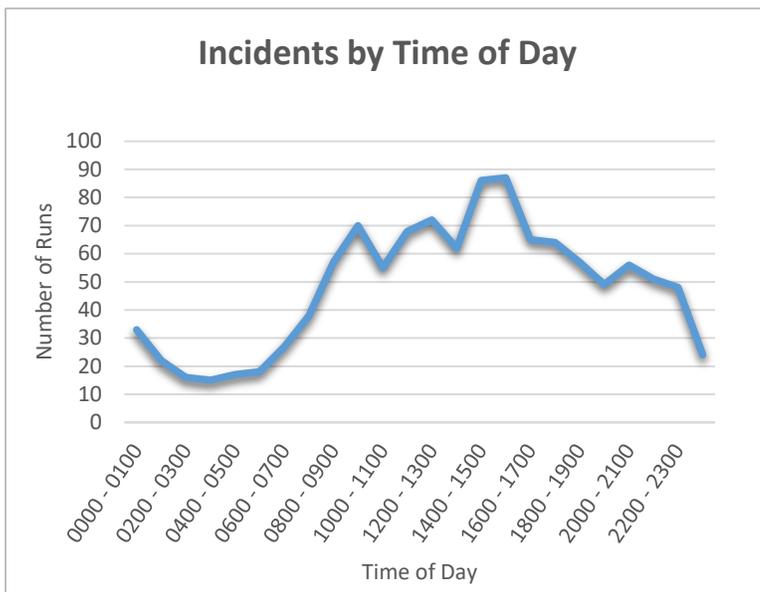
Incident Response Metrics - Stations



Last year Fire Station 4 was the busiest station with 298 dispatched incidents in 2021. The heat map of the City of Troy (left) shows the fire station locations, as well as the areas where the greatest concentration of calls occurred. The graph below shows how many times each station was dispatched, which is different from the total number of incidents responded to, as multiple stations may be dispatched or assigned to a single incident.



As can be seen below, calls for service are generally consistent throughout the week with the highest demand during weekdays, averaging more calls for service per day than weekends in 2021. Our peak hours for dispatched incidents were between the hours of 8:00 AM and 8:00 PM. Statistically, both the weekday and daytime response increase correlates to the substantial rise in the daytime business population within the City, which often doubles the evening resident count.



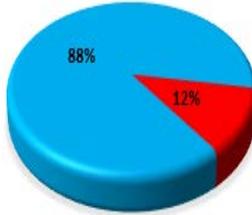


Troy Fire Department 2021 Year End Report

Number of Concurrent Incidents

Instances of 2 concurrent incidents	97
Instances of 3 concurrent incidents	19
Instances of 4 concurrent incidents	7
Instances of 5 concurrent incidents	5
Instances of 6 concurrent incidents	2
Instances of 7 or more concurrent incidents	10

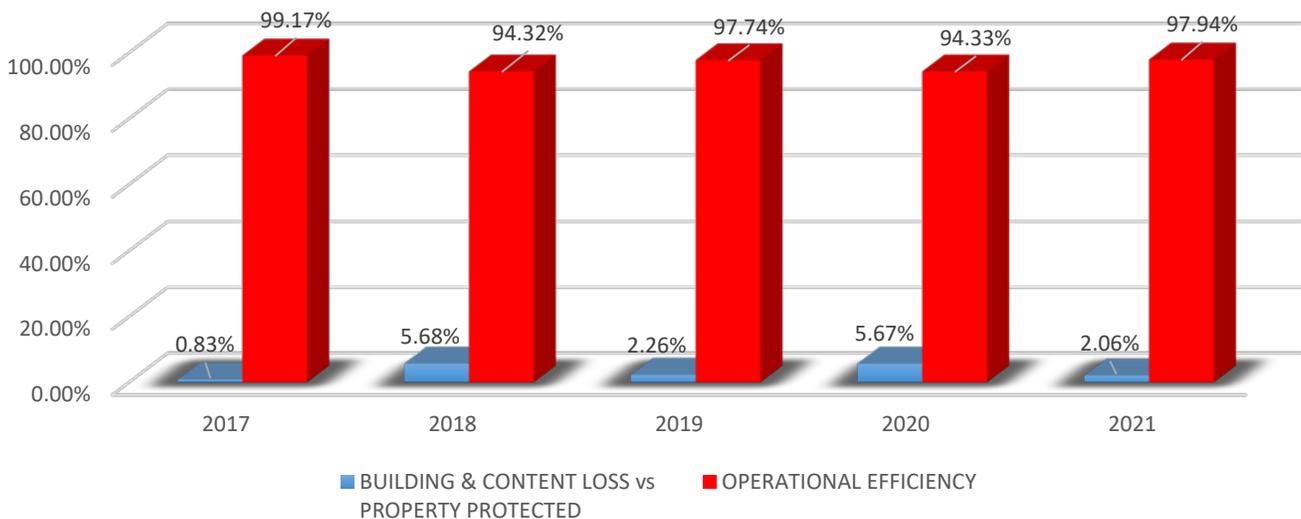
Concurrent Incidents:	140	12%
Total Incidents:	1158	88%



The Troy Fire Department prides itself on the dedication of its firefighters and the ability to handle whatever situation may be presented without relying on mutual aid from another fire department. The table and chart to the left shows the number of times that there was more than one incident ongoing simultaneously. 12% of the time there was a minimum of two incidents happening at the same time, and most impressively, on 10 occasions there was 7 or more calls being handled by the fire department concurrently.

Operational Efficiency

Loss vs. Operational Efficiency - 5 Year



In 2021, an estimated \$111.8M in property value was threatened by fire, while \$109.6M, or 97.94% of estimated threatened property value was protected from fire. Unfortunately, even with the application of effective firefighting efforts, the overall property value lost from fire increased by 16% this particular year. Below is listed some of the fires in 2020 with significant loss. The TFD is proud to report that of the 59 structure fires responded to, many of which were in high life safety occupancies like motels and apartment buildings, the City did not have any civilian or firefighter fatalities, and only 1 civilian injury occurred from fire.

Fires w/ Significant Loss

Location	Alarms	Summary
501 Executive Dr	3	Commercial Building Fire
850 Stephenson Hwy	1	Commercial Building Fire
1440 Madison Dr	1	Single Family Residential Fire
1142 Woodside Trail	1	Multifamily Residential Fire
1186 Woodside Trail	2	Multifamily Residential Fire
2849 Lovington	1	Single Family Residential Fire
200 W Maple Rd	1	Commercial Building Fire

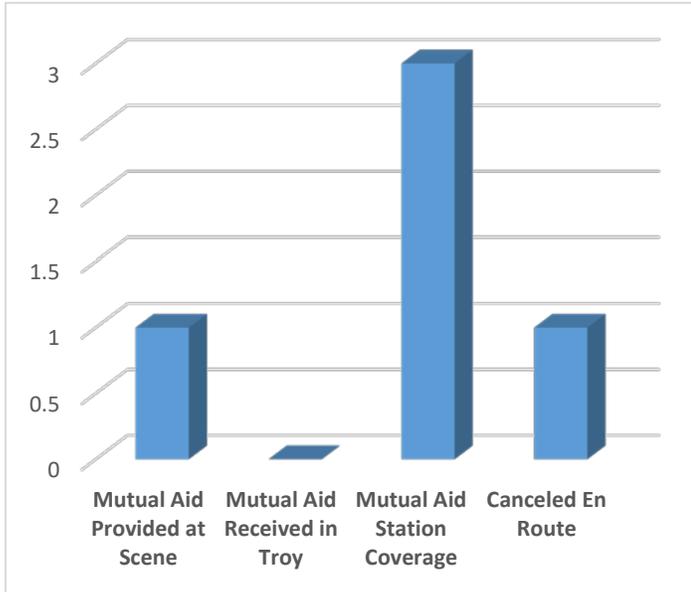




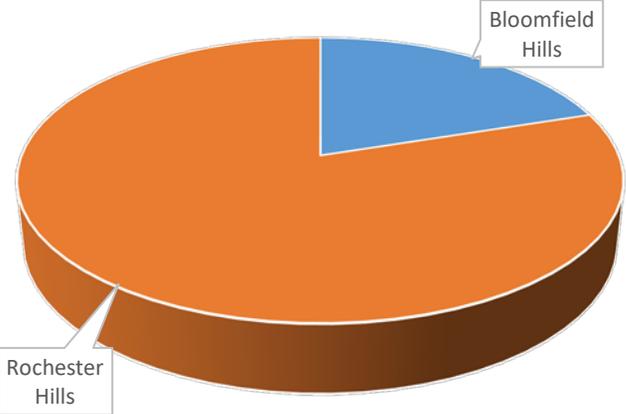
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Mutual Aid

Mutual Aid Agreements facilitate the sharing of fire service resources and ideas to provide members with a trained, equipped, and coordinated response for all hazards. The City of Troy is a member of the Mutual Aid Box Alarm System Division 3201. In 2021 the TFD was dispatched 5 times for Mutual Aid assistance to other communities.



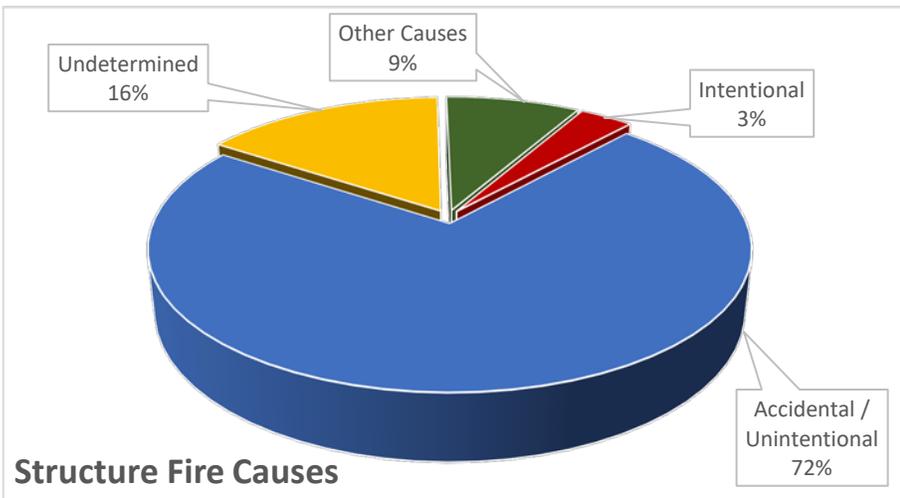
Department & Number of Mutual Aid Provided



Mutual Aid can be provided for a variety of needs. In 2020, 1 of these requests for assistance saw members of the TFD operating on the scene at fires, providing equipment and personnel to other communities. On 3 other occasions, the TFD provided apparatus and personnel to standby at another fire department's station. This is often necessary while that department is committed to a fire, to facilitate backup coverage in the event there are any additional fire dispatches in that community.

Fire Investigation

It is the responsibility of the Troy Fire Department to investigate all fires for origin and cause. If a fire is determined to be accidental, education is provided to the occupants in order to help prevent future fires. If a fire is determined to be intentional, it is pursued through the legal system for prosecution. Fire investigation is comprised of members of the Fire Administrative Staff, and Detectives from the Troy Police Department.



In 2021 structure fires accounted for 39% of all fires the Troy Fire Department responded to. Cooking fires remain as the number one cause of accidental fires within the City of Troy, being the primary cause in 16 of the 59, or 22%, of all structure fires.

With the assistance of the Troy Police Department and the Oakland County Prosecutor's Office, the TFD was able to obtain make one arrest for an intentionally set arson fire.



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Training

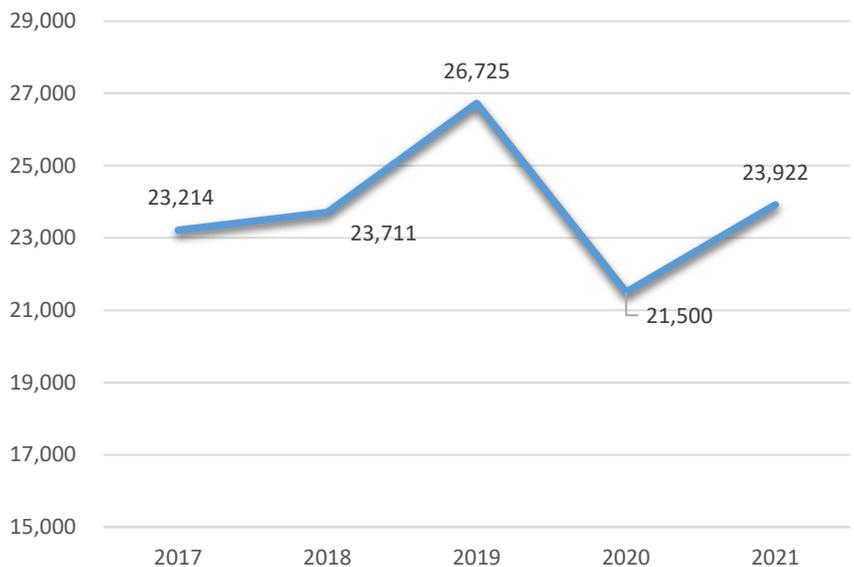
Training is overseen by a Staff Lieutenant who is responsible for developing and coordinating in-house and external training for current, as well as new, firefighters and officers. As in any job, training is a vital part of the organization, and our goal is for firefighters to constantly work on improving their skills so that they are always ready in the event of an emergency.



Troy firefighters logged more than 23,900 hours of combined training hours in 2021, with the average firefighter individually attending nearly 155 hours of training. Each station conducted training weekly. In addition, fire officer training is held monthly. Above the regular department training in 2021, we hosted, advanced engine operator classes, vehicle extrication train-the-trainer, vehicle extrication technician class, and Career Survival & Emotional wellness seminar. We also hosted the North East Oakland Fire Academy, conducting initial required training for new members. Troy Fire Department Training Instructors and members of the Troy Police Department attended a tactical fire company train-the-trainer course. This allowed our departments to train together and better prepare our City for the event of an active assailant incident.



Training Hours by Year



In addition to training in the City of Troy, each of the 6 stations train at the Combined Regional Emergency Service Training facility at the Oakland Community College, Auburn Hills Campus. Training at CREST allows firefighters to train in live fire conditions, where they gain valuable experience in a safe and controlled environment.





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Community Services

Community Services is managed by a Staff Lieutenant and is responsible for the interface of the Troy Fire Department with the community. A primary component of this is Community Risk Reduction, and includes conducting fire safety educational programs and demonstrations to pre-school and elementary students as well as civic, business, and special needs groups. Community Services is also the face of the department's social media presence, as well as a key component in the TFD's charitable endeavors.

2021 proved to be a challenging year for the Troy Fire Department providing Community Risk Reduction and Public Relations to the City of Troy. Due to the COVID-19 pandemic, and in-person gatherings restricted, a number of events, which would normally be hosted, had to be cancelled. These canceled events impacted schools, scouting, community groups, business outreach, and senior living facilities. Safety Town, however, was able to be held with a visit from a firefighter and a fire engine at the Troy Community Center, and several other school and scouting programs were able to be held as outdoor events as a means to get the safety messages to many pre-school and elementary age children.

Community Services continued to expand our social media presence, particularly through Facebook, in order to get our educational and safety messages out to as many community members as possible. The TFD also worked in collaboration with the Troy Police Department's Community Services Section at many community events as well.



The TFD had an active online Fire Prevention Week in October, with the annual Fire Station Open House. 2021 welcomed back an in-person, outdoor event with a strong turn out from the community. Our firefighters were excited to have the public back in the fire stations for this event as well. Demonstrations were presented to the viewers and firefighters provided valuable home fire safety tips. Multiple contests and prizes were awarded to residents throughout the week.





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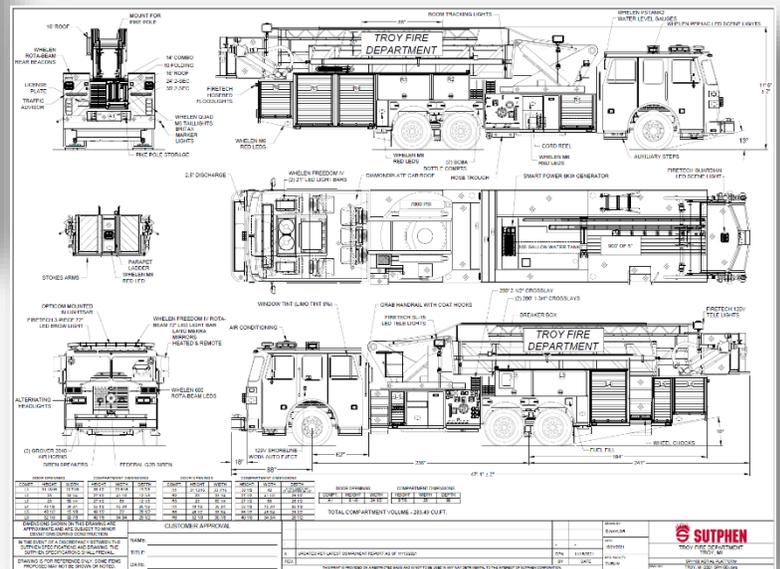
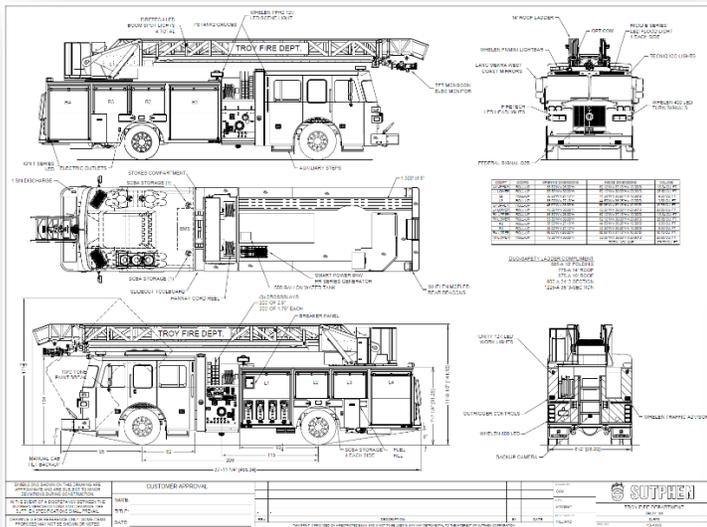
Apparatus, Facilities & Equipment

In the fire service, there is a constant need to ensure that the fire stations, apparatus, and equipment is ready to respond at all times. This is managed by a Staff Lieutenant, and requires regular inspections, certifications and maintenance, as well as a need to evaluate and purchase equipment based on new technologies.



As technology changes and improves almost everything in society, the fire service needs to follow suit. In 2021, all 6 fire stations received additional Hurst EDraulic tool, in the form of a StrongArm Multi-Tip tool, to build upon current systems. These new tools are cordless electric-hydraulic, and have much more power and versatility to be used where needed. These tools give firefighters the ability to respond quicker,

2021 was a challenging year with apparatus, unfortunately, (3) three front line apparatus had catastrophic failures. This included our Air Tender 3, Ladder 4 and Ladder 2. Several of these units were slated for budgetary replacement soon. City management and council were quick to authorize the budget amendments need to get replacement apparatus on order. Delivery for these trucks will be in late 2022 and early 2023.





Troy Fire Department 2021 Year End Report

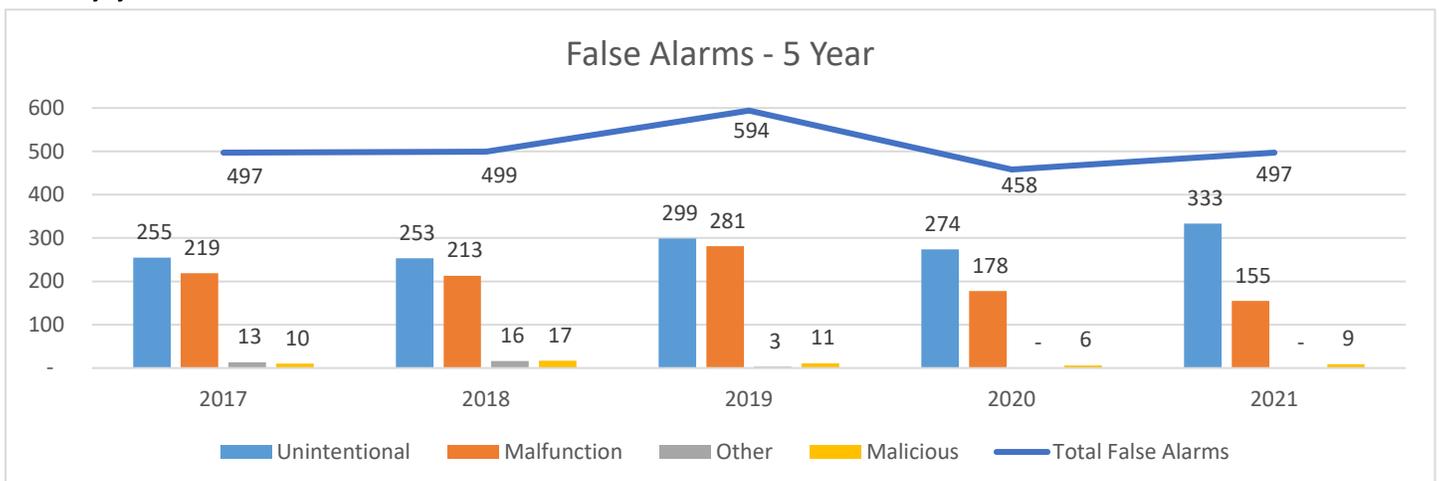
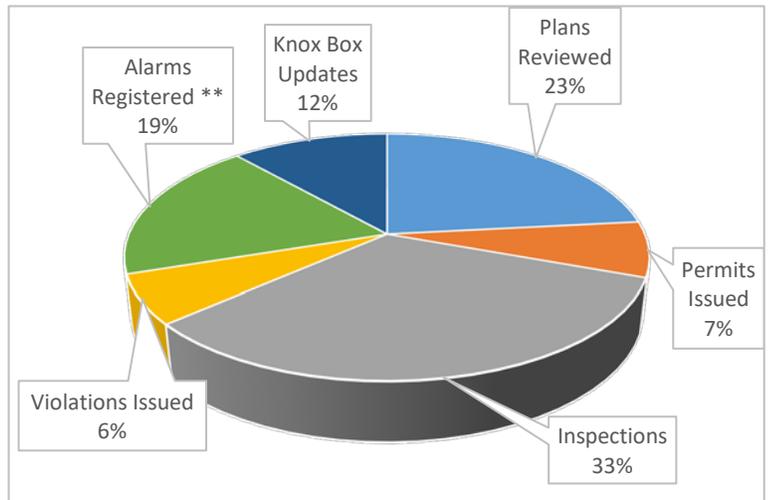
FIRE PREVENTION DIVISION REPORT

The Fire Prevention Division is led by Assistant Fire Chief Paul Firth, and is responsible for all matters related to fire prevention including inspections of new and existing buildings, code and ordinance enforcement, plan review, permitting, hazardous materials reporting, and fire alarm registration.

Fire Prevention Activities

Staff Lieutenants within this division enforce the fire prevention code and related standards by conducting life safety, building and occupancy inspections throughout the community. This also includes inspection and testing of fire protection systems including fire suppression, fire detection and fire alarms. During inspections, site-specific hazards and pre-incident survey information is documented. The documentation is provided electronically to responding firefighters during an incident. The Fire Prevention Staff reviews plans for new building construction, tenant renovations, fire protection systems, site plans, and subdivision plats. They work cooperatively with Building, Planning, Water, Streets, and Engineering Department personnel during the construction of new buildings

and site development. The Fire Prevention Staff reviews plans for the use, manufacture, transport and storage of hazardous materials. This keeps the community safe while maintaining compliance with local, state and federal laws and directives. Inspectors work closely with new and existing businesses to ensure a safe and productive environment for workers, and the community. When a fireworks permit is issued, a member of the fire prevention team reviews the products and the location setup to confirm a safe area is established for discharge of these devices. Their activity includes coordination between the vendor and the fire suppression team to allow for a safe and enjoyable event.



False alarms and false calls continue to be the top response category for the Troy Fire Department, making up roughly 43% of all dispatched incidents. This is partly due to the large number of fire suppression systems and monitored fire alarm systems throughout the City, and is a targeted focus area for Fire Prevention.

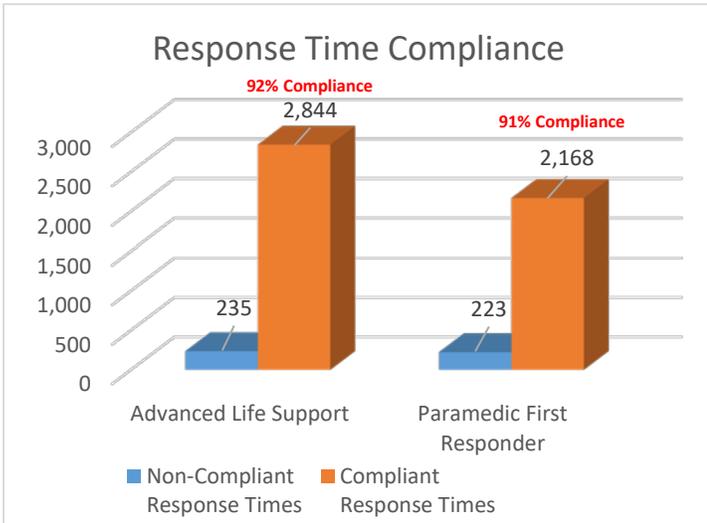


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**All data & statistics regarding EMS provided by AMH*

EMERGENCY MEDICAL SERVICE (EMS)

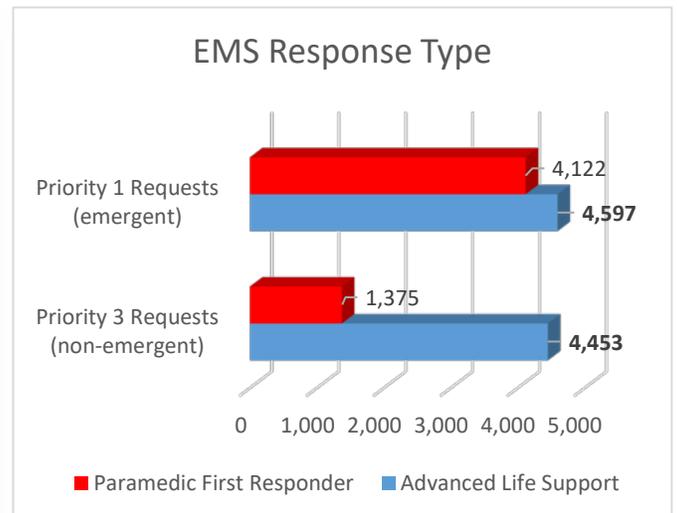
The City of Troy has adopted a proven, alternative method of providing EMS. Unlike many other municipal fire departments, the Troy Fire Department does not provide emergency medical service. Instead, a private provider, Alliance Mobile Health, is contracted to provide EMS via paramedic first responder and advanced life support ambulance service.



Paramedic First Responder units are dedicated to Troy and respond with ALS ambulances as part of a performance-driven service contract. This agreement requires that one of the dedicated PFR units to be on scene of medical emergencies within 5 minutes for 90% of priority calls, and an ambulance to be on scene within 8 minutes for 90% of priority calls.



The City of Troy receives nearly 9,000 requests for EMS annually; it would be difficult to retain volunteers and maintain efficient fire responses with this additional EMS workload. The Fire Department does, however, budget and oversee EMS, as well as provides extrication and physical rescue functions at incident scenes when necessary. In 2021, firefighters were also trained by Alliance Mobile Health to provide first-aid, CPR, and mass casualty procedures, which include triage, tourniquet application, wound packing, and patient handling, in order to assist EMS at a large scale medical incident with multiple casualties.





Troy Fire Department 2021 Year End Report

AWARDS AND RECOGNITION

Promotions

Drew Sackner – Station 1 Lieutenant

Jason Carroll – Station 4 Lieutenant

M.G Shapiro – Station 6 Lieutenant

David Hughson – Staff Lieutenant

Brandon Hall – Staff Lieutenant

Retirements

Eric Caloia – Staff Lieutenant (31 years)

Scott Stoglin – Station 2 Lieutenant (29 years)

Ronald Griffiths – Station 4 Captain (27 years)

Station Member of the Year Awards

Station Asst. Chief Donald Hudson – Station 1

Firefighter Kyle McIntyre – Station 3

Firefighter Adhithya “Adi” Ravishankar – Station 4

Firefighter Michael Sollars – Station 5

Firefighter Paul Chambers – Station 6

***NOTES CITY OF TROY FIREFIGHTER OF THE YEAR**



Troy Fire Department 2021 Year End Report

TROY **FIRE**

NEEDS YOU TO JOIN OUR TEAM!



VISIT TROYMI.GOV/FIRE TO LEARN HOW TO BECOME A VOLUNTEER FIREFIGHTER