



# 2020 ANNUAL REPORT



Ellen Taylor, Fire Chief

Antonio Macias, Assistant Chief







# AUBURN HILLS

Fire Department



Auburn Hills Fire 1899 N. Squirrel Road, Auburn Hills, MI 48326

## 2020 Year-End Report

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### FIRE CHIEF'S COMMUNICATION

Although this past year's COVID-19 pandemic has affected our department's services and community outreach programs drastically, it is a pleasure to report that the department performed extremely well. There were many accomplishments and we continued to grow and progress towards our department's overall objective of lowering community risks to all who live, work, and play within our City limits. A few of the department's biggest accomplishments this year were:

- Developed and implemented a five year strategic plan incorporating input from all our department's personnel,
- Procured and installed the newest and best technology on viral/bacterial ultraviolet lighting and disinfectant systems within our apparatus and fire stations, protecting our patients and personnel,
- Cleaned up and updated all the City's occupancy data in preparation of implementing a compliant fire safety inspection program in the future,
- Worked closely with the County and implemented a fire Geographic Informational System (GIS) application to allow responding firefighters direct access to site plan information including hazardous material details,
- Improved to continue fire public education, community risks and community outreach,
- Developed specifications and procured two new ambulances and one new fire engine,
- And was accepted into a Federal medical service program to provide better medical services to our community.

Due to the State of Michigan's 'Stay at Home' COVID-19 Pandemic Executive Orders affecting the City's normal activities, visitors, work commuters and such for most of the year, the department's 2020 incident data and statistics should be viewed as very unique and not utilized as normal trending patterns. Emergency 911 was only called for high priority emergencies during the pandemic.

The fire department personnel responded to 3,585 service calls this past year compared to 3906 in 2019. Emergency medical rescue calls accounted for 2590 incident or 72.2 % of the total calls. Of these medical emergencies, 611 of them can be related to COVID-19 or presenting COVID-19 symptoms. The number of Cardiac Arrest incidents increased by 20% from last year. Medical service revenue increased slightly from \$703,364 to \$704,870 even with the drop of overall incidents decreasing.

The department's fire incidents also decrease in number with sixty-three fire incidents in total. The fire occurrences included twenty-one (21) structural fires, twenty (20) vehicle fires, thirteen (13) outdoor rubbish fires, five (5) natural vegetation fires and three (3) fires categorized as 'other'. The department responded to 182 outdoor burn complaints, a forty-one (41%) increase from last year's 129 complaints.

The department relied on mutual aid assistance on seventy-one (71) occasions and provided mutual aid fifty-four (54) times. The department responded to 1,064 concurrent calls, equaling 29.67% of the department's entire 3,585 annual run number.

The Fire Prevention Division performed 472 inspections and 152 plan reviews which was a 45% drop in both activities. Our department's overall goal is to be a self-reliant, progressive, and proactive leading organization that collaborates closely with internal and neighboring agencies in delivering the most effective and efficient emergency services. Lastly, I would like to thank all the dedicated department members who contributed to the following annual report.

Ellen S. Taylor

Fire Chief

City of Auburn Hills Fire Department



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## Fire Department



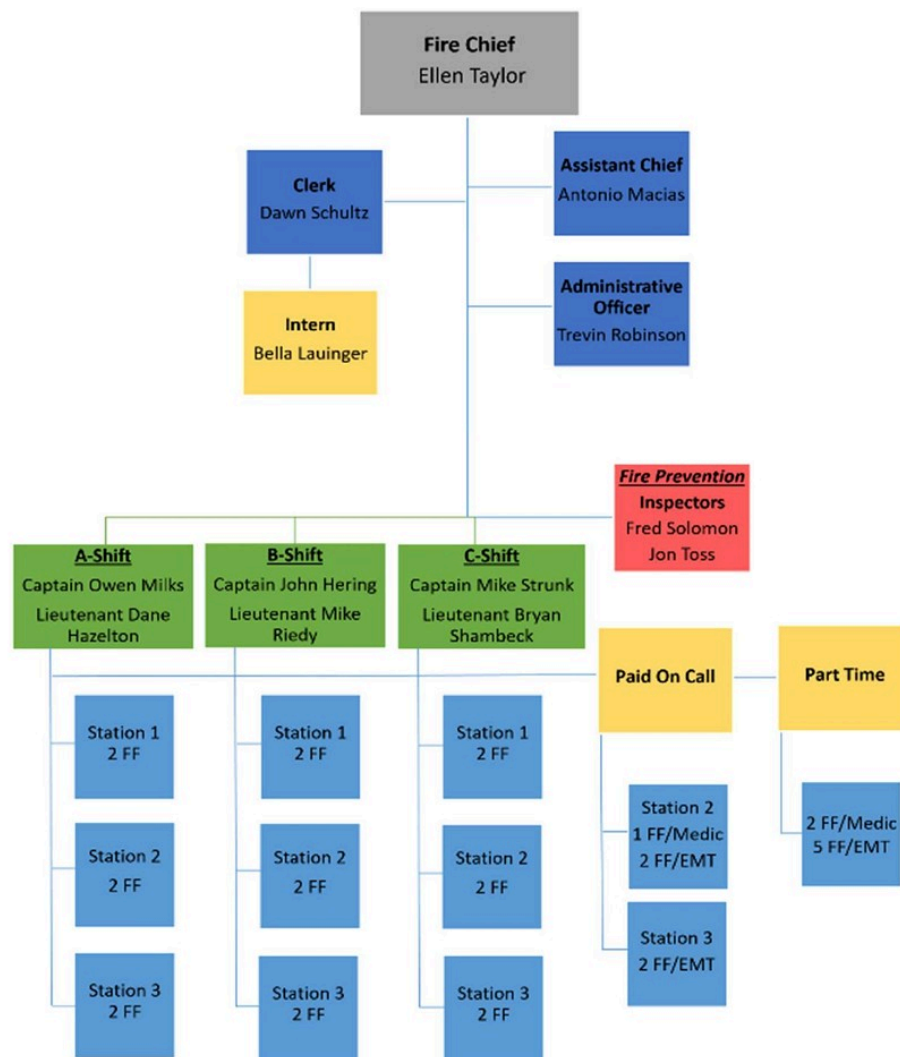
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### DEPARTMENT OVERVIEW

With the commencement of 2020, the Auburn Hills Fire Department (AHFD) employed a total of forty-two (42) employees. Of these employees, there are four (4) administrative personnel, two (2) prevention division fire inspectors, one (1) fire department intern, twenty-four (24) full-time suppression division personnel, eight (8) part-time employees, and five (5) paid-on-call employees. A total of twenty-two (22) paramedics are on staff at AHFD resulting in over half of all personnel having their paramedic license; another five (5) employees are also attending paramedic courses, working to obtain their paramedic licenses in becoming more knowledgeable and experienced first responders.

### Organizational Chart



During each shift there are eight (8) personnel on staff, AHFD also relies on part-time and paid-on-call employees to compliment the full-time personnel in filling in one additional firefighter slot throughout the year giving the department the capability of nine (9) personnel serving the community every day. On January 6<sup>th</sup>, 2020, seven (7) individuals of the department were promoted to three (3) new positions: Administrative Officer, Captain, and Lieutenant. With these promotions, AHFD gained increased leadership capabilities, a better structural organization, and better lines of communication and command within the entire department. To the left is AHFD's updated organizational chart to represent the structure of the department, including the 2020 newly added positions:





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### Fire Station Locations

The Department consists of three (3) fire stations dispersed within the city to cover 17.4 square miles and 26,544 citizens (SEMCOG).

#### Station 1: 3483 Auburn RD



Station 1 is located in Downtown Auburn Hills in the Southern end of the City. This station is also where large Public Education events are held such as the department's annual Fire Prevention Open House.

#### Station 2: 1899 N Squirrel RD



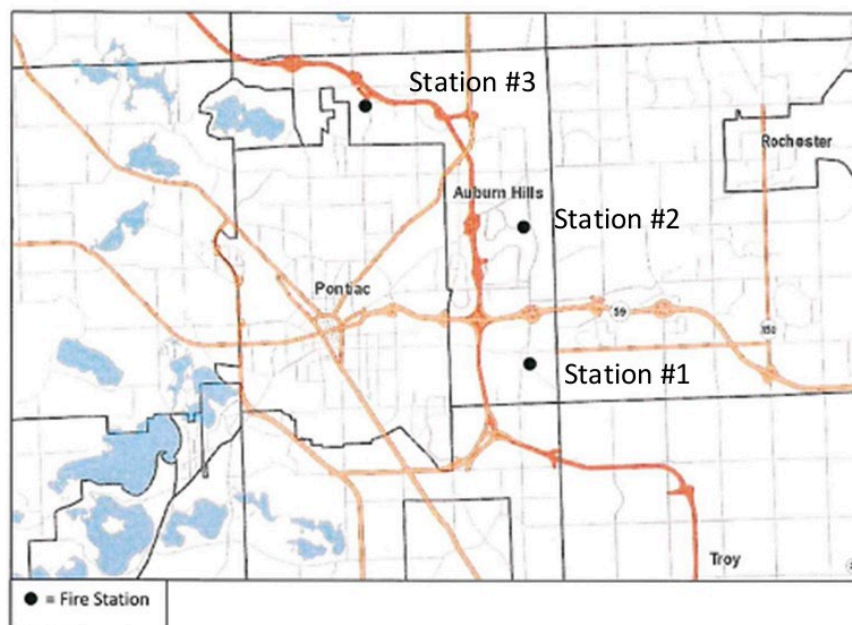
Station 2 is located directly across Oakland University's (OU) campus. This station hosts all administrative personnel and duties while covering the Central area of the City as well as OU's entire campus.

#### Station 3: 3253 Joslyn RD



Station 3 is located approximately two (2) miles away from the Great Lakes Crossing Outlet Mall. This station covers the Northern area of the City including many industrial complexes.

### Overview of Auburn Hills with Fire Station Locations





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### Department Fleet

[Firefighter/Paramedic Tony Randolph]

AHFD's vehicle fleet includes a variety of vehicles used in the protection of the City of Auburn Hills to mitigate both small and large medical and fire emergencies. At the end of 2020, AHFD own and operate a total of seventeen (17) vehicles which include three (3) administrative vehicles, one (1) command vehicle, two (2) fire prevention vehicles, one (1) utility vehicle, four (4) rescue ambulances, two (2) fire engines, three (3) aerial ladder trucks and one (1) special response vehicle.



### EMS – Rescues

All AHFD's four (4) State licensed Advanced Life Support (ALS) ambulances are equipped to handle Medical First Responder (MFR), Basic Life Support (BLS), and Advanced Life Support (ALS) emergency medical services and transportation.







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### *Suppression - Fire Engines*

One of the most used suppression vehicles that not only transports firefighting personnel to the scene but also carries all necessary tools/equipment to the scene is the fire engine. The Fire Department currently has two (2) fire engines, both of our 2009 and 2015 engines have a 750-gallon water tank, a 30-gallon foam tank and can pump 1,500 gallons of water per minute. Each vehicle carries 1000 ft of 4" large diameter hose, 600 ft of 2.5" hose and 900 ft of



1.75" hose to fight different type of fires and to assist neighboring fire departments. Each engine also has the needed tools to handle vehicle accidents with or without patron entrapments, small spills, and many more rescue emergencies. These engines are also capable of providing BLS medical services

In 2020, AHFD put together a committee consisting of fire personnel to form what is called the Fire Apparatus Committee. This committee had the responsibility to gather information to spec out a new fire engine for the fire department. The committee completed the engine specs and procured new Rosenbauer engine in January of 2020 with the anticipated delivery date of June 2021. This fire engine will significantly add to the complement of fire apparatus at AHFD.





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### *Suppression - Aerial Ladder Trucks*

In addition to the fire engines in the fire department there are three (3) aerial ladder trucks or "Quints" that are similar in nature. Two (2) of the aerial/Quints are 1997's vehicles and have a 500-gallon water tank with a 75-foot extendable/retractable articulating ladder, a compliment of ground ladders ranging from 16 ft to 35 ft, 1,000 ft of 4" large diameter hose, 400 ft of 2.5" hose, 500 ft of 1.75" with both aerials' having the capability of pumping 1,500 gallons of water per minute. The third aerial/Quint is a 2018 with a 400 gallon water tank, a 30 gallon foam tank, a 100-foot extendable/retractable articulating ladder, 950 ft of 5" large diameter hose, the same amount of ladders and smaller diameter fire hoses, and is capable of pumping 2,000 gallons of water per minute.



The fire apparatus committee was again tasked with the gathering of ideas and information to spec out a new aerial ladder truck for purchase. The aerial specs were put out for bid at the beginning of 2021. These designs and specs will be reviewed the first couple of weeks of February 2021. The anticipated delivery date for this vehicle will be in 2022.

### *Suppression/EMS - Special Response*

The Auburn Hills Fire Department has personnel that are trained and certified in technical rescue and hazmat. The personnel with this specialized training and certification belong to a county wide team called the North Oakland County Technical Rescue or Hazmat teams that respond to hazardous material related situations, trench rescue, high and low angle rope rescues, confined space rescues, structural collapse rescues and heavy machine rescues not just in our city but throughout Oakland county and even outside of the







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county. The fire department has a special response vehicle that carries specialized equipment for our personnel to initiate one of the disciplines until the county team can arrive with a larger cache of equipment that will be used to mitigate the situation.

### Budget

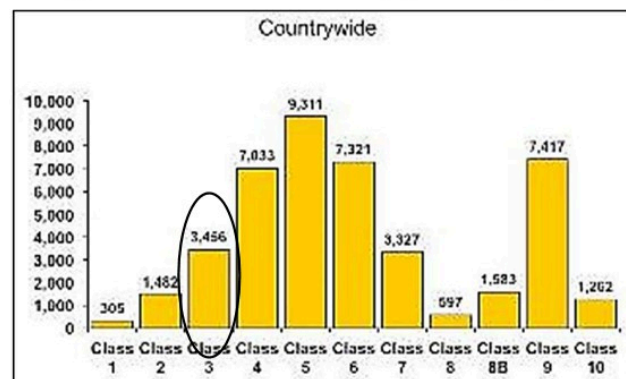
AHFD's 2020 approved and resulting budget is displayed in the table to the right as of February 1<sup>st</sup>, 2021. As you can see, the approved budget depicts the department's total revenues at \$5,822,598 and total expenditures at \$4,955,490. The most recent, but possibly still changing department budget results of 2020, show the department's final revenue at \$5,838,849 and expenditures at \$4,581,167. Even with the COVID effects of inspection, plan reviews, and permit being much

Budget Line Item Description	2020 Amended Budget	2020 Budget Results
Fire Total Revenue	\$5,822,598	\$5,838,849
Fire Total Expenditures	\$4,955,490	\$4,581,167
Administration Division	\$534,380	\$486,355
Suppression Division	\$4,071,651	\$3,773,176
Fire Prevention Division	\$349,459	\$321,636
Revenue/Expenditure Difference	\$867,108	\$1,257,682

lower than budgeted, an unexpected additional \$6,251 was collected in revenues and the department spent \$374,323 less than the amended budget, leaving \$1,257,682 to be transferred back to the City's General Fund. Last year this amount was \$1,304,713.

### Public Protection Classification

AHFD continues to be rated as a Class three (3) Public Protection Classification (PPC) by the Insurance Services Office, Inc. (ISO). ISO assigns PPC grades on a scale of one (1) to ten (10) based on the fire protection capabilities of a department where a class one (1) rating represents an exemplary fire suppression program and a class ten (10) rating indicates that the department's current fire suppression program does not meet ISO's minimum standards.





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AHFD's above average fire protection classification aids in reducing insurance premiums and provides financial savings for property insurance in Auburn Hills. AHFD's ISO rating went into effect July 1st, 2018; Auburn Hills will continue to be ranked as a class three (3) until a future ISO evaluation is attained.

### ADMINISTRATIVE DIVISION

AHFD's administrative personnel have been working tirelessly to work with the community to promote public safety and reduce the effects of the pandemic. During 2020, the seven (7) newly promoted employees in the Lieutenant, Captain, and Administrative Officer positions were given larger responsibilities and roles in the department due to COVID-19. With the onset of the global pandemic, the department has had to modify itself and work continuously to ensure medical personnel safety that included: obtaining, securing, and procuring personal protective equipment (PPE); procuring disinfecting systems and supplies; securing COVID-19 vaccines for the department personnel through the County Health Department; writing and enforcing safe, compliant response protocols; and administering COVID testing for City employees, seniors, and OU athletes; creating and introducing new pandemic trainings; and increasing communications between various inner and outer departments/agencies while dealing with COVID-19. The department played an active role in Oakland County's pandemic planning as well.

Other important areas that the department concentrated on this past year include

1. Completing the department's five (5) year strategic planning,
2. Applying and overseeing the Center of Medicare/Medicaid Services Emergency Triage, Transport and Treatment (ET3) program,
3. Incorporating safe methods of community outreach during the pandemic,
4. Working on fleet replacement processes,
5. Writing, accepting, and administering the department SAFER, AFG, and Regional AFG grants,
6. improving Fire Prevention division incident preplanning, hazardous material tracking, and incorporating Geographical Information System (GIS) incorporation,
7. and beginning fire station remodel specifications with emphasis on firefighter safety and job efficiency.

With each improvement and administrative item being addressed, the Auburn Hills Fire Department is able to effectively support the City, its citizens, and Oakland County.





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## 2020 Year-End Report

### Department Strategic Plan

In order to build a solid foundation and plan for the future, AHFD has developed a five-year strategic plan. This strategic plan addresses the challenges and opportunities that the organization faces today and, more importantly, those that may challenge the department tomorrow. This five-year strategic plan will be reviewed and modified as needed in incremental periods of time. Below is the department's new mission statement, vision statement and goals:

#### **Vision Statement**

Committed to provide a dynamic and properly staffed organization that fosters teamwork and embraces change for the needs of the community.

#### **Mission Statement**

Serve our community with dedication by providing professional compassionate emergency services for all those who live, work, and play in Auburn Hills.

- GOAL 1: Reduce community risk by increasing fire safety and prevention programs and developing key strategic partnerships.
- GOAL 2: Improve the way in which we manage, engage, and support our employees in the area of training.
- GOAL 3: Expand opportunities to improve the wellness of each employee, specifically related to safety, education, mental health, and fitness.
- GOAL 4: Provide leadership and management across the organizations structure which allows us to build a healthy, performance-based culture of success.
- GOAL 5: Invest in technology to drive improved work processes and service levels across all areas of the department.
- GOAL 6: Develop and implement strategies that allow us to recruit and retain professional fire fighters.
- GOAL 7: Implement ET3 services to enhance medical care delivered to the community.

AHFD's administrative staff completed and implemented a five-year strategic plan that was approved by the City Council.

### Emergency Triage, Transport, and Treatment (ET3) Program

The Department applied for the Emergency Triage, Treat and Transport (ET3) program administered through the Centers of Medicare and Medicaid Services (CMS). This is a brand new program that lets EMS personnel provide more personalized care to patients by allowing them to be transported



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to an urgent care to treat their medical condition or participate in a telehealth call where the patient is connected with a physician through a computer. Telehealth treatment allows the patient to receive care from EMS and a physician from the comfort of their own home. AHFD applied to the CMS program and was approved. The department then began preparing an implementation plan for the program.

This new program required considerable work to be completed before it could be fully implemented. AHFD worked to create partnerships with local urgent care facilities and local hospital emergency centers for telehealth services. Along with forging new partnerships, additional policies, procedures, and protocols were needed. Personnel from Auburn Hills, Rochester Hills and Rochester worked together to create the required protocols.

AHFD personnel lead the process of gaining approval for the newly created protocols. The process began with the Oakland County Medical Control Authority (OCMCA) and after approval at the County level, AHFD personnel presented the protocols to the Quality Assurance Task Force (QATF) in Lansing to gain approval from the State of Michigan. The protocols were then approved by the State and work continues to ensure successful implementation for the program in 2021.

### Fleet Replacement Program

[Firefighter/Paramedic Tony Randolph]

With the continuing increase in medical services, aging and wear and tear on the current rescues the department purchased two (2) new rescues to replace the two (2) oldest and/or problematic vehicles.

In April of 2020, the fire department ordered a 2020 F450 four-wheel drive Wheeled Coach Ambulance from EV Plus in Holland Michigan. The sales representative came back to the fire department with a



proposal of a substantial cost savings on a second vehicle

before production is slowed down by the pandemic. A second new 2020 F450 four-wheel drive Wheeled Coach Ambulance was purchased as well. The Auburn Hills Fire Department took delivery of the first new rescues on January 5, 2021 with the second ambulance soon to follow.







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### Committee Work (Employee Inclusion)

In valuing the department's employees and their input, committees were developed to undertake areas in the department needing improvement.

**Ambulance Committee:** Determines the specific needs of the department for rescue vehicles, designs and selects the best fit vehicle specifications to ensure efficiency.

**Awards Committee:** Votes and influences departmental nominations to the Optimist Club, American Legion, and other departmental awards.

**Engine/Aerial Committees:** Studies the specifications of varying fire engines and aerials to determine the best vehicle for the department and AHFD's specific set of needs.

**Policy Committee:** Creates, reviews, and updates department policies as needed.

**Social Media Committee:** Assists in assuring that communications on department developments, happenings, and educational information are shared with our community members.

**Training Committee:** Handles, directs, and oversees any training events or activities including training at Oakland Community College, the Palace, and around Auburn Hills.

**Uniform Committee:** Utilized to decide upon, order, and handle any uniform related issues and to keep AHFD in the latest uniforms to keep consistency throughout the department.

### Grant Work

[Administrative Officer Trevin Robinson]

**Staffing for Adequate Fire and Emergency Response (SAFER) Grant** – AHFD was awarded a SAFER grant in the amount of \$718,551 in the fourth quarter of 2019. This grant allowed the department to hire three (3) additional personnel who were hired in January. The department has completed its first year under the grant and will continue to utilize this award for two (2) additional years.

**Regional Assistance to Firefighters Grant (RAFG)** - In November, the Auburn Hills Fire Department hosted a Regional AFG Grant that focused on much needed COVID-19 equipment to protect department personnel and surrounding communities during the public health crisis. Auburn Hills, Brandon Township, and the Village of Holly applied for mobile portable decontamination units that can be used throughout each station and integrated into the department's rescue vehicles. AHFD was awarded this grant at the beginning of 2021, with work on the grant to continue throughout the year.



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**Assistance to Firefighters Grant (AFG)** - In the fourth (4<sup>th</sup>) quarter of 2019, AHFD was awarded an AFG grant in the amount of \$144,000 to install new vehicle exhaust capture systems at all three (3) stations in the City. These systems collect the diesel exhaust fumes from vehicles in the bay which is vitally important since exhaust fumes are classified as known carcinogens. In August, the installation of these essential systems was completed and are thoroughly operational.

**FEMA CARES Act Grant** – Since the onset of the COVID-19 pandemic records were kept and grant funds were secured to help cover the COVID-19 costs incurred. This including three separate grant applications through the County, State, and CMS.

### COVID-19 Personal Protective Equipment (PPE)

During March of 2020, Michigan experienced its first two cases of the international virus outbreak of SARS-CoV-2 or COVID-19. With Auburn Hills being located in one of the hardest hit counties in the state, immense action was needed both by the department and the community. With a severely limited amount of personal protective equipment available for purchase at marked up prices, many businesses and residents in Auburn Hills answered. In response to the shortage of (PPE), many businesses and residents stepped up by donating supplies or allowing priority to purchase supplies from their agency for their Front-Line Emergency Responders. Many items have been received including masks, face shields, safety glasses, coveralls, disinfectant wipes, hand sanitizer, soap, and gloves. With ample amounts of PPE donated and purchased, the department was able to properly train, protect its responding personnel; protect their patients, implement station safe practices, and administer COVID-19 testing.



AHFD would like to express its deepest appreciation to ABB Robotics, ACME, Airgas, Alliance of Coalitions, Android Inc., Atlas Copco, BorgWarner, Brose, Concraft, Continental, Costco, Family and Cosmetic Dentistry of Dr. Michael Tobola DDS, Faurecia, Guardian Industries, Hirotech, Home Depot, Knight Global, LXR Biotech, Magneti Marelli/Great Lakes Crossing Mall, Martinrea, Meadowbrook Dental Miller, Vein, Menards, Nexteer, Notre Dame Prep, Oakland County, Prefix Corporation, Resident Tammy Diane, RS Hughes MI, Sam's Club, Shape Process Automation, TI Fluid Systems, Bourns Automotive, Umicore, Valiant, Visioneering, and Unique Fabricating.





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### Suppression Tablets

Several tablets were purchased for the Suppression division to be utilized on departmental apparatus to better handle emergency situations. By using the tablets, AHFD's first responders are able access occupancy, preplan, hazardous material locations, and business data prior to arrival on scene to be better prepared for all emergencies. The tablets are connected to the internet and can be used for field data, emergency management, and documentation during an emergency. This purchase allows for AHFD to mitigate incidents safely and effectively.



### Aeroclave Disinfectant Machines



To help improve station and apparatus disinfection efforts, AHFD purchased and implemented new AeroClave RDS3110 aerosolized disinfection units. Each unit utilizes Vital Oxide cleaning solution which is then converted into a safe fog spray by the machine allowing for quick and efficient cleaning of apparatus and station rooms. AHFD also installed ambulance disinfecting ports (ADPs) on the department's current ambulances and two (2) new ambulances coming in 2021 for the AeroClave to be used with.

### FAR UV-C Disinfectant Lights



AHFD has worked diligently in trying to protect personnel and patients being transported from the virus by implementing stringent health policies along with purchasing and installing Far UV-C lights in departmental ambulances. AHFD has striven in implementing the use of newer disinfectant technologies for the overall protection from not only the COVID-19 virus but many other viruses, bacteria, and toxins.



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### COVID-19 Vaccinations

With less than a year of the pandemic, scientists were able to create an effective COVID-19 vaccination. In partnership with Oakland County Medical Control Authority (OCMCA) and Oakland County Health Department, first responder agencies/department personnel were granted access to the Pfizer vaccine in the State's phase 1A group. A significant amount of AHFD members opted in to obtain the vaccine to shield themselves and others from the virus. By properly participating in social distancing, safety protocols, and wearing the correct personal protective equipment in public, every person can ensure that the spread of COVID-19 is slowed or halted until the vaccines can be widely administered for wide-spread immunity.



### SUPPRESSION DIVISION

AHFD's suppression division is responsible for providing and mitigating any fire, environmental, rescue, vehicle, or other emergency including medical services. The department continues to work on improving emergency services, through better departmental structure, more advanced trainings, equipment/vehicle procurement, and constant strategy improvement.

### Incident Calls by Year

In 2020, AHFD responded to a total of 3,585 calls for service with emergency medical service calls accounting for 72.2% of all calls. From 2019 to 2020, there was a small drop of 321 calls, a decrease of 8.2% of calls. This drop in incidents can be attributed to the State's executive 'Stay at Home' orders and COVID-19 fear which influenced people to stay away from the hospital and medical providers at all cost. Many patients avoided calling 911. Across the country, emergency room visits were down an average of 42% from April 2019 to April 2020 due to this same fear [as reported by the Centers for Disease Control \(CDC\)](#).

Calls for Service by Type (3-Year)			
Service Call Type	2018	2019	2020
Fire	91	94	63
Overpressure	4	2	1
EMS	2523	2705	2590
Hazardous	120	112	100
Service Calls	285	279	266
Good Intent	401	369	234
False Alarms	308	338	303
Special	1	7	28
<b>Total</b>	<b>3733</b>	<b>3906</b>	<b>3585</b>





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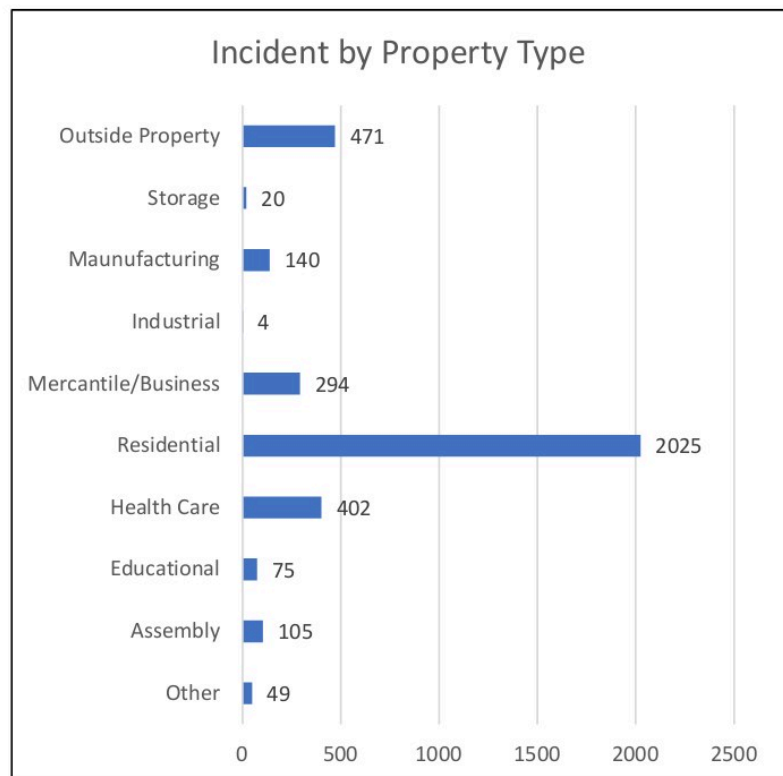
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Below is a five (5) year breakdown of AHFD's service calls broken down into EMS/medical and fire/suppression categories. Another small drop was seen between 2019 and 2020 for the amount of suppression related incidents; this drop can also be accounted for by the strict stay-at-home orders in Michigan where many facilities in Auburn Hills were empty causing very little to no activity and limited traveling.

Five (5) Year Number of Incident Comparison					
Incident Type	2016	2017	2018	2019	2020
EMS/Medical	2212	2566	2523	2705	2590
Fire/Suppression	79	103	91	94	63
<b>Total</b>	<b>3279</b>	<b>3618</b>	<b>3733</b>	<b>3906</b>	<b>3585</b>

### Incident by Property Type

Every structure or area in Auburn Hills obtains a property classification divided into ten (10) various category including assembly, educational, health care, residential, mercantile/business, industrial, manufacturing, storage, outside property, and other. Of the 3,585 emergency incidents that AHFD responded to in 2020, the top three (3) property types were incidents occurring at residential structures at 56.49% or 2,025 incidents; outside properties such as roadways or parking lots at 13.14% or 471 incidents; and, health care facilities such as nursing homes or mental institutions which accounted for 11.21% or 402 incidents.

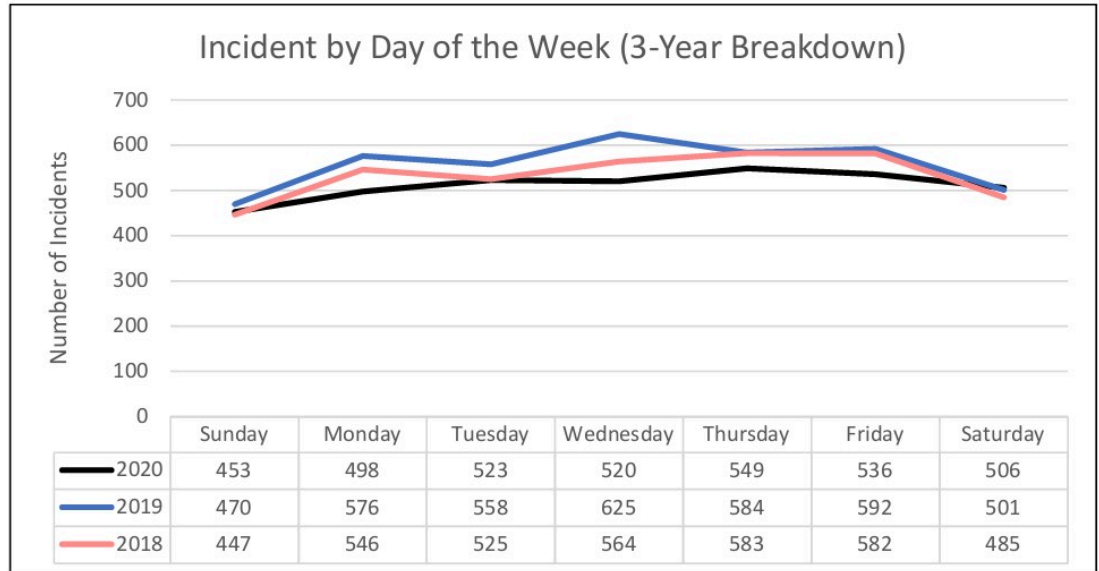




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### Incidents by Day of Week

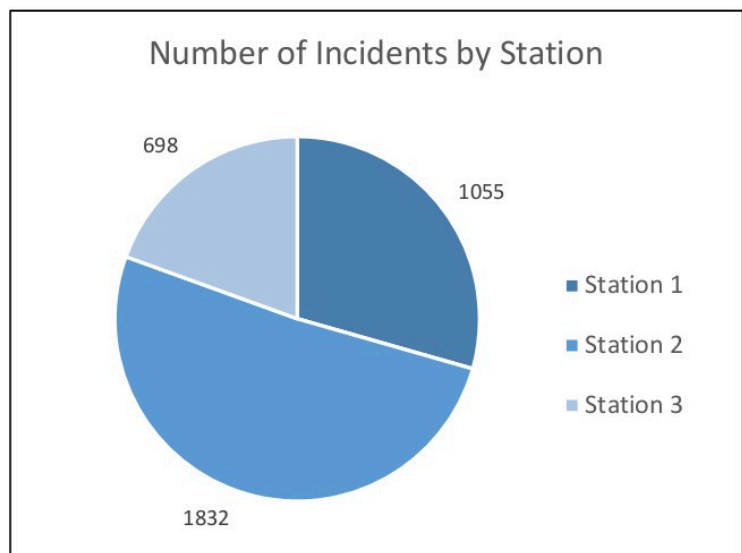
Calls for service are usually quite consistent throughout the entire week; in 2020, AHFD had the highest amount of calls on Thursdays at 549 incidents and the lowest amount of calls on Sundays where 453 incidents occurred throughout the



year. In the past three (3) years, AHFD maintained the same pattern of the least amount of calls occurring on Sundays and the most amount of calls occurring during the later portion of the week on either Wednesday(s) or Thursday(s).

### Incident Volume by Station

Every call for service is classified by which station responded to the incident. Below is a table including both the service call classification and station response district. To the right is a pie chart with each station's incidents throughout the year. In 2020, the majority of calls occurred in the central portion of the City where station 2 is located with a total of 1,832 calls for service. The next busiest station was station 1 located in the southern area of the City which responded to 1,055 calls for service. Lastly, station 3 located in the North-West area of the City responded to 698 calls for service.







# AUBURN HILLS

## Fire Department



Auburn Hills Fire 1899 N. Squirrel Road, Auburn Hills, MI 48326

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With station 2 responding to the highest amount of total calls, it led with a total of thirty-five (35) fire calls and 1,264 EMS calls. Station 1 responded to seventeen (17) fire calls and 795 EMS calls, while station 3 responded to eleven (11) fire calls and 531 EMS calls.

Calls for Service by Station and Type			
Service Call Type	Station 1	Station 2	Station 3
Fire	17	35	11
Overpressure	0	1	0
EMS	795	1264	531
Hazardous	22	60	18
Service Calls	86	138	42
Good Intent	71	122	41
False Alarms	58	198	47
Special	6	14	8
<b>Total</b>	<b>1055</b>	<b>1832</b>	<b>698</b>

### Fire Incident Response Time

Any fire-related incident is classified as either a priority or non-priority call. Priority calls would include active structure fires, calls with visible signs of fire, and any incident in progress whereas non-priority calls would include good intent calls, burning complaints, and public service assistance calls. During 2020, the average priority fire response time was six (6) minutes and seventeen (17) seconds and the average non-priority response time was six (6) minutes and thirty-one (31) seconds.

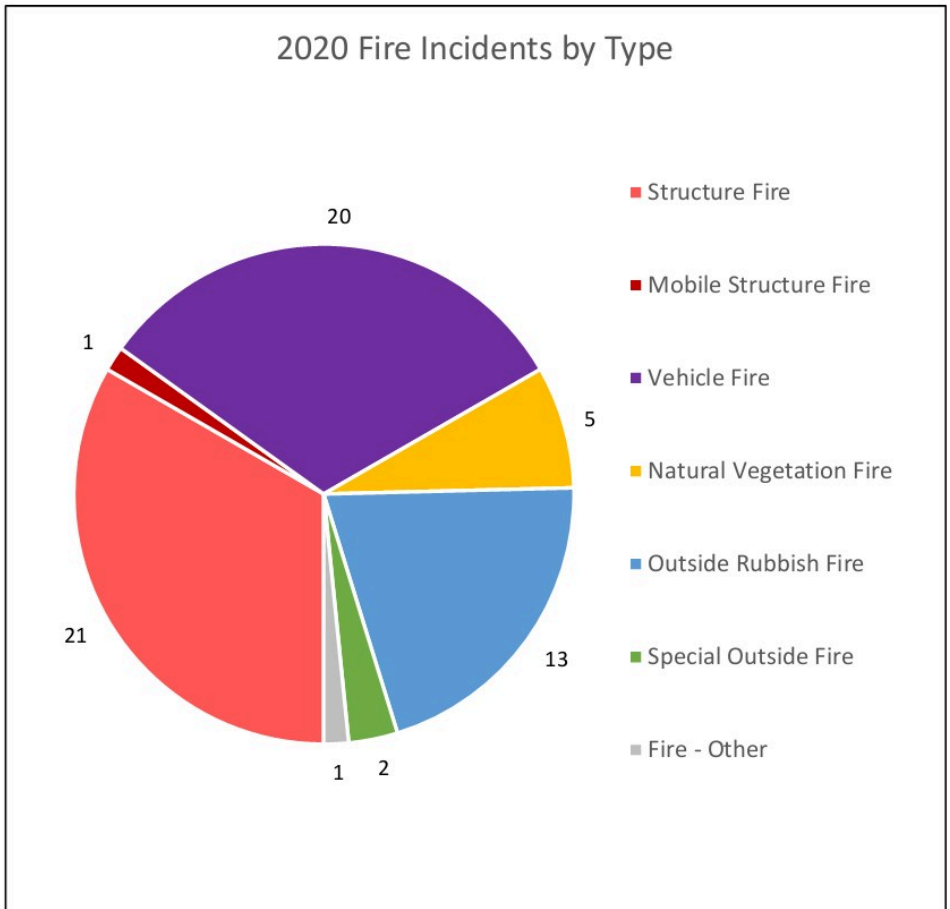
Average Fire Response Time	
Priority	6m17s
Non-Priority	6m31s



## 2020 Year-End Report

### Fire Incident Breakdown

Whenever suppression crews are needed for fire or fire-related incidents, these events are separated and sorted by type National Fire Incident Reporting System classifications. Many fire incident types are related to the specific area where the fire occurred or what exactly was burned. Of the sixty-three (63) fire-related incidents in 2020, the largest number of incidents were structure fires which accounted for twenty-one (21) incidents. The second largest amount of calls were related to vehicle fires accounting for twenty (20) incidents, and then followed by outdoor rubbish fires which accounting for thirteen (13) incidents.







# AUBURN HILLS

## Fire Department



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## 2020 Year-End Report

### Significant Incidents

During 2020, there were several significant incidents that required specialized response or noteworthy mutual aid from AHFD. Below are incidents that made a lasting impression on the department and community.

#### *Hazardous Spill Mutual Aid – July 11<sup>th</sup>, 2020*

Even during the current pandemic, resources still need to be transported across the country in large semi trucks, trailers, and tankers. While the majority of these trucks successfully make it to their destination without any issues, some devastating accidents still occur to both the vehicle and the environment. On this day in particular, a tanker truck carrying 13,500 gallons of gasoline fuel flipped, crashed, and caught on fire on one of the interchanges of Square Lake Road. The resulting fire and smoke had to be monitored by Hazardous Material agencies to assure air quality safety during the incident so that residents around the area were not exposed to dangerous toxins and vapors. Auburn Hills Fire Department was the first mutual aid department to arrive on scene to assist in mitigating the scene. Other departments dispatched to the incident were Waterford, Southfield, Birmingham, West Bloomfield, Madison Heights, Royal Oak, Ferndale, Rochester Hills, Bloomfield Hills, Troy, Oakland County and



Star EMS. Since gasoline does not dissolve in water and is less dense than water, foaming agent was eventually delivered and utilized by the County Hazardous Material team to smother the flames. With the help of fifteen (15) fire and police agencies, the fire was under control in approximately five (5) hours. Fortunately, the fifty (50) year old male driver of the tanker was able to escape the truck before receiving any serious injuries and before the scene was engulfed in flames. This accident not only caused a significant amount of immediate destruction to the roadway



# AUBURN HILLS

## Fire Department



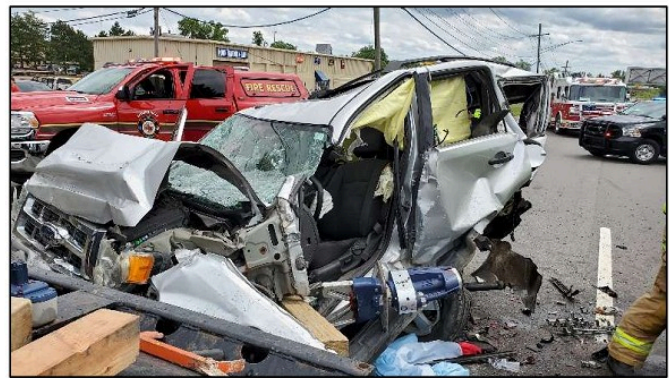
Auburn Hills Fire 1899 N. Squirrel Road, Auburn Hills, MI 48326

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and the surrounding area but will also have lasting effects on the environment. It was estimated that approximately 4,590 square feet of roadway and contaminated soil will have to be removed and replaced by the State of Michigan with a projected cost of at least \$100,000.

### *Three-Car Collision – July 23<sup>rd</sup>, 2020*

In the early evening on July 23rd, a turbulent three (3) car collision took place on Lapeer Road. With the speed limit of fifty-five (55) mph on this road, vehicle accidents can cause severe injuries in a matter of seconds. This specific incident occurred when a pickup truck travelling at high speeds rear-ended a silver Ford Escape with an immense amount of force. The Escape then slammed into the back of a flatbed trailer causing extensive damage and entrapping the driver. All seven of the on-duty personnel were put to work and were paramount in order to extricate, disentangle, and provide advanced life support (ALS) as a team during the incident.



The twenty-three (23) year-old male driver of the crushed vehicle complained of severe back and leg pain. Once the vehicle was stabilized, Paramedics provided the patient medical and pain management care within the vehicle while other firefighters utilized the department's hydraulic "Jaws of Life" tools to extricate the entrapped victim. It took roughly 90 minutes for the incident to be fully cleared by AHFD. Two (2) of the three (3) people involved were transported to near-by hospitals. It was later determined that the driver of the Ford Escape suffered from a fractured sternum and fractured thoracic vertebrae. The drivers involved were very lucky to be alive after the tragedy.





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### *Shimmons RD Explosion – November 9<sup>th</sup>, 2020*

During the early afternoon hours on November 9th, AHFD crews were dispatched to a house explosion on Shimmons Road. Upon arrival, personnel found a home with significant damage including blown-out front windows, bowing walls, and structure instability.

The explosion, believed to begin when an occupant tried to ignite a turkey fryer, but lite flammable vapors believed to have come from basement activities. The explosion caused the entire house to move off its foundation and resulted in a fire. Rochester Hills



FD assisted on scene with medical patient care and fire extinguishment while the City of Rochester FD and Bloomfield Township FD helped with City coverage during the event. The County Sheriff Department and AHPD investigators were also asked to complete an investigation of the scene.

At the time of the explosion, three (3) occupants were in the home; two (2) occupants received insignificant injuries while one (1) occupant, a twenty-nine (29) year old male, received significant burns and was transported to an emergency center. Crews safely extinguished the fire from the exterior due to the unstable structure. Fire scene investigators were also unable to enter the home to complete a full interior investigation. In total, it is estimated that the damages from this incident resulted in \$160,000 in property damage, and \$20,000 in contents lost.





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## Fire Department



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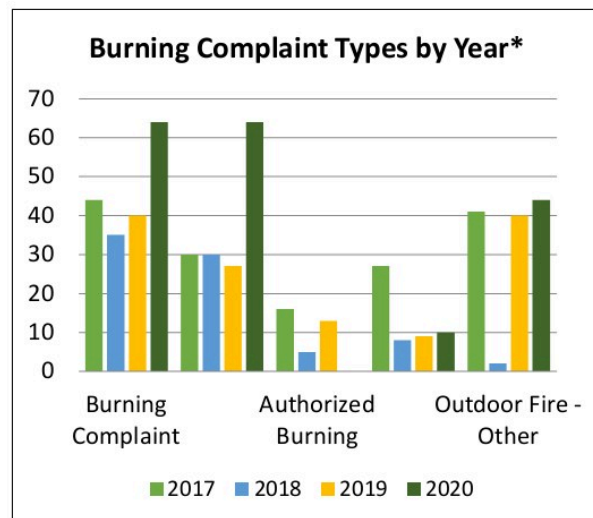
## 2020 Year-End Report

### Outdoor Burning Complaints

[Captain John Hering]

Each year, Auburn Hills permits open burning during two (2) separate timeframes pursuant to the City's Fire Prevention Ordinance. During the Spring and Fall season, residents are allowed to burn small amounts of leaves or brush. The City also allows for residents to obtain a bonfire permit which allows for controlled burning of seasoned firewood with specific regulations for the time, day, spacing, and size. If a person calls 911 to report an uncontrolled fire in the City or witnesses a resident in violation of these guidelines, AHFD is called out to the scene and these incidents are classified as an outdoor burn

Burning Complaint Types by Year*				
Run Disposition	2017	2018	2019	2020
Burning Complaint	44	35	40	64
Unauthorized Burning	30	30	27	64
Authorized Burning	16	5	13	0
Smoke Investigation	27	8	9	10
Outdoor Fire - Other	41	2	40	44
<b>Total</b>	<b>158</b>	<b>80</b>	<b>129</b>	<b>182</b>



complaint. In 2020, AHFD responded to a total of 182 incidents related to outdoor burning, which is approximately 41% higher than the number of incidents recorded in 2019. Of the 182 complaints, sixty-four (64) incidents were related to burning leaves.

During the Spring season, a total of six (6) leaf burning calls occurred, with four (4) being in accordance with the leaf burning ordinance. During the Fall season, a total of fourteen (14) leaf burning calls occurred, with seven (7) being in

accordance with the ordinance. The other forty-four (44) incidents in 2020 were considered "out of season". If the fire was either outside of the ordinance or was considered a nuisance, the residents are asked nicely to extinguish their fire. In the time from 2017 to 2020 (see graph to the right), the total number of burning complaints and unauthorized burning has significantly increased; with the number of burning complaints increasing by twenty (20), and the number of unauthorized burns increasing by thirty-four (34).





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### EMERGENCY MEDICAL SERVICE

[Captain Owen Milks; Lieutenant Bryan Shambeck]

Emergency medical services (EMS) are needed for a variety of incidents. EMS is a complex system of knowledgeable individuals working together to mitigate medical emergencies, transport patients to the hospital, and save lives. EMS incidents can range anywhere from heart attacks and strokes to back pain and headaches. In 2020, EMS accounted for 72.2% or a total of 2,590 calls for service at AHFD.

### Most Common Medical Complaint Types

During 2020, the top 10 medical run dispositions included specific traumatic injuries, convulsions/seizures, psychiatric emergencies, unconscious/fainting patients or those near fainting, unknown problems with a downed person, non-traumatic chest pain/discomfort, traffic/transportation incidents, breathing problems, falls, and general sick persons. Of the 2,048 medical incidents during 2020, the highest dispatch reason was the chief complaint of a sick person at 30% of all medical incidents, followed by falls at 14%, and then by breathing problems at 11%.

Top 10 Medical Run Dispositions		
Call Complaint	# of Calls	Percentage
Traumatic Injuries - Specific	99	5%
Convulsions/Seizures	101	5%
Psychiatric Emergencies	120	5%
Unconscious/Fainting/Near	130	6%
Unknown Problem (Person Down)	159	8%
Chest Pain/Chest Discomfort (Non-Traumatic)	160	8%
Traffic/Transportation Incidents	164	8%
Breathing Problem	224	11%
Falls	281	14%
Sick Person	610	30%



# AUBURN HILLS

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## 2020 Year-End Report

### Cardiac Arrest Incidents

In 2020, there were a total of twenty-five (25) medical emergencies involving cardiac arrest patients. Of these total incidents in 2020, the highest amount of cardiac arrest incidents occurred in the Spring months of April with three (3) incidents and May with three (3) incidents. Despite a small increase during 2019, the average amount of incidents involving cardiac arrest patients has stay around an average of twenty-four (24) incidents per year.

To combat cardiac arrests, the Auburn Hills Fire Department has invested in LUCAS CPR devices, better training for cardiac arrest incidents, and more effective incident mitigation.

Cardiac Arrest Incidents					
Month:	2016	2017	2018	2019	2020
January	1	1	3	0	2
February	1	0	2	2	2
March	2	0	1	1	2
April	1	1	0	4	3
May	1	4	3	1	3
June	2	0	3	1	2
July	1	3	3	3	2
August	3	1	0	4	1
September	3	2	2	3	2
October	2	4	3	2	2
November	1	0	4	5	2
December	3	2	1	3	2
<b>Total</b>	<b>21</b>	<b>18</b>	<b>25</b>	<b>29</b>	<b>25</b>

### Emergency Medical Incident Response Times

When EMS calls are dispatched, they are classified as priority calls or non-priority calls. Priority calls would include strokes, heart attacks, car accidents, traumatic injuries, and life-threatening injuries; non-priority calls would include headaches, lift assists, minor injuries, anxiety, small cuts/bruises, dizziness, and non-life-threatening injuries. In 2020, AHFD had an EMS priority response time of six (6) minutes and fourteen (14) seconds and a non-priority response time of seven (7) minutes and seven (7) seconds.

Average EMS Response Time	
Priority	6m14s
Non-Priority	7m7s





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### Simultaneous (Concurrent) Incident Data

A large amount of simultaneous or concurrent incidents has been occurring and increasing over the years in Auburn Hills. When concurrent calls occur at once, our department cannot handle the emergency call needs and rely on mutual aid from other agencies. In 2020, there were a total of 1,064 concurrent incidents which is a 16.2% drop from 2019 resulting from the overall lowered call volume.

Concurrent Calls by Amount	
Number of Instances	# of Calls
Instances of 2 Concurrent Incidents	777
Instances of 3 Concurrent Incidents	208
Instances of 4 Concurrent Incidents	57
Instances of 5 Concurrent Incidents	16
Instances of 6 Concurrent Incidents	1
Instances of 7 or More Concurrent Incidents	5
<b>Total</b>	<b>1064</b>

### Overall Mutual Aid Assistance

As mentioned previously, when AHFD is unable to respond to an incident due to concurrent incidents or personnel needs, the department utilizes mutual aid. When the department is not responding to incidents and another agency requires aid, AHFD also provides mutual aid.

In 2020, AHFD assisted five (5) different agencies in providing mutual aid and received mutual aid from nine (9) different agencies. AHFD provided or gave mutual aid at fifty-four (54) incidents and

Mutual Aid by Department		
Agency	Mutual Aid Given	Mutual Aid Received
RHFD – Rochester Hills Fire Department	27	25
Star EMS – Privatized EMS	2	17
ROC – Rochester City Fire Department	6	14
ORION – Lake Orion Fire Department	11	0
WRFD – Waterford Regional Fire	0	2
BTF – Bloomfield Township	5	7
WBFD – West Bloomfield	0	0
INDF – Independence	0	5
OAT – Oakland Township Fire	3	1
<b>Total</b>	<b>54</b>	<b>71</b>

received mutual aid seventy-one (71) times. As like the 2019 results, most of our mutual aid activity is with our neighboring Rochester Hills Fire Department (RHFD). This year we received aid at twenty-five (25) incidents and gave aid at twenty-seven (27) calls.



## 2020 Year-End Report

During an incident when mutual aid is required, various classifications are used including mutual aid (MA) received, automatic mutual aid (AMA) received, mutual aid (MA) given, automatic mutual aid (AMA) given, and structure fire mutual aid (MA). Automatic mutual aid is when outside identified agencies in advance are dispatched based on the type of incident classification from the onset of a 911 call for help. Mutual aid is when a department personally requests assistance on the way to an

incident or on scene when there is a need. Mutual aid is also called upon when a department runs out of personnel due to being on incidents and are unable to respond to any additional emergencies. In the event where multiple departments are needed during a single incident, the mutual aid received would only be counted as one (1) mutual aid request instead of a request per department called.



In 2020, there were a total of forty-six (46) mutual aid received instances along with a total of eleven (11) instances where automatic mutual aid was received. AHFD also assisted other departments by giving mutual aid for forty-four (44) instances, along with ten (10) automatic mutual aid incidents. AHFD also tracks another classification of mutual aid received/given for structure fire mutual aid. In 2020, there were a total of nine (9) structure fire mutual aid requests for mutual aid.

2020 Mutual Aid Requests	
Type of Mutual Aid	# of Instances
MA Received	46
AMA Received	11
MA Given	44
AMA Given	10
Structure Fire MA – Given/Received	9

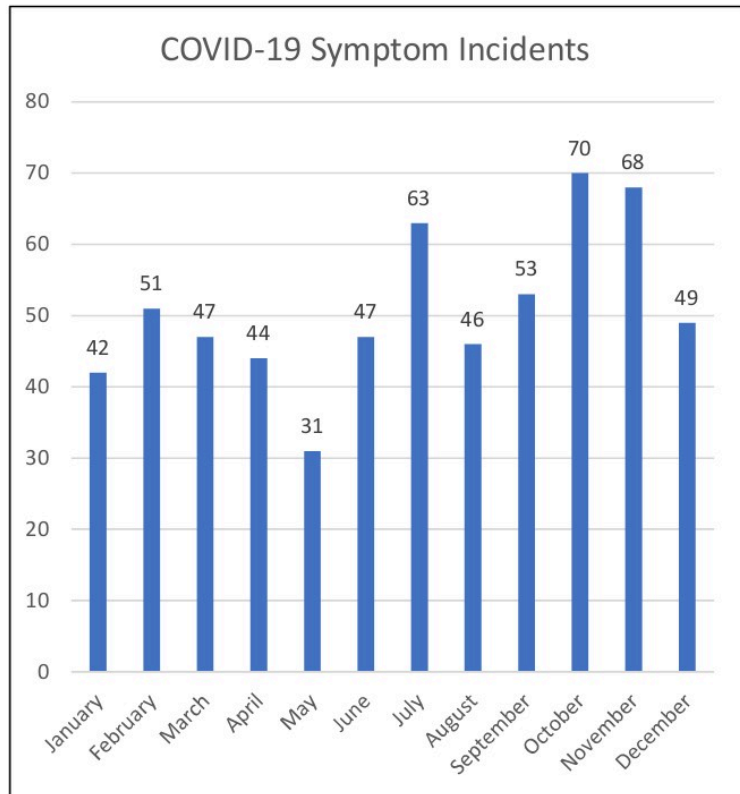




## 2020 Year-End Report

### COVID-19 Symptom Incidents

Throughout the pandemic, a variety of symptoms have been linked to COVID-19. In order to better protect the department's personnel and the citizens of Auburn Hills, AHFD tracked every service call which involved a patient with COVID-19 symptoms. The symptoms that were tracked included shortness of breath, nausea/vomiting, weakness, fever, and respiratory distress. Since many patients requesting EMS did not have a prior COVID-19 test, it has been and continues to be necessary to treat these unknown medical issues as a possible positive exposures to the virus by donning proper personal protective equipment (PPE) and minimize patient exposure if possible.



There was a total of 611 service calls that were tracked as possible COVID-19 cases. The highest occurrences of COVID-19 symptoms and possible COVID-19 positive cases were seen in October which accounted for seventy (70) calls or 11.5% of all possible COVID-19 calls in 2020. The City of Auburn Hills has faced many challenges during the pandemic including worldwide PPE shortages, lack of funding, and continuous virus exposure. During 2020, AHFD tracked approximately 17.0% of all calls to be related to COVID-19 or presenting COVID-19 symptoms.



# AUBURN HILLS

## Fire Department



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## 2020 Year-End Report

### Medical Service Revenue

The total amount of EMS fees billed in 2020 was \$1,051,553 whereas the total revenue/amount collected was \$704,869. The total amount collected increased by \$1,505 as compared to 2019.

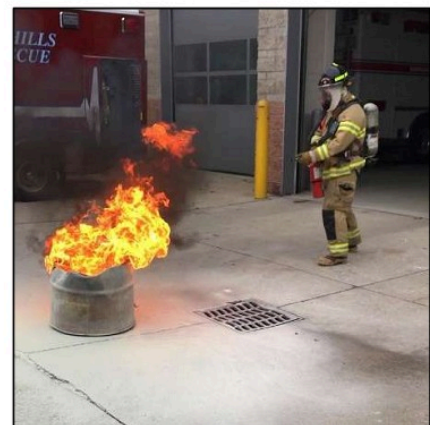
In 2020, the largest amount billed was found in September while the largest amount collected was found in March. The highest amounts billed were \$108,621 in March and \$119,427 in September. The amount billed directly corresponds to the COVID-19 case spikes as seen both in March and September parallel to both the Spring and Fall waves of the pandemic in the United States. Sixty-seven percent (67%) of the amount billed was collected this past year. Compared to last year's medical revenue, the department billed \$75,772 less but collected \$15,506 more in revenue, a .214% increase.

Year:	2020	2019
Billed	\$ 1,051,553	\$ 1,127,325
Collected	\$704,870	\$ 703,364

2020 Monthly Medical Revenue		
Month:	Billed	Collected
January	\$101,487	\$66,536
February	\$86,454	\$54,023
March	\$108,621	\$81,084
April	\$57,375	\$48,451
May	\$59,442	\$36,683
June	\$79,851	\$51,011
July	\$89,450	\$41,477
August	\$70,136	\$56,711
September	\$119,427	\$56,816
October	\$97,088	\$59,980
November	\$81,772	\$78,791
December	\$100,450	\$73,307
<b>Total</b>	<b>\$1,051,553</b>	<b>\$704,870</b>

### TRAINING DIVISION

The Auburn Hills Fire Department is committed to providing the highest level of service to the citizens, businesses, and visitors of Auburn Hills. To accomplish this, AHFD's training division provides the most current and comprehensive fire and EMS training to the members of the department, ensuring that AHFD's firefighters are equipped to perform their duties effectively and efficiently on every call for service throughout the City. Fire and EMS operations require significant annual training to ensure all federal and state regulations are completed. COVID-19 greatly impacted the way in which training







## 2020 Year-End Report

had to be conducted. The traditional method of gathering all stations together to train had to be re-evaluated and modified to comply with COVID-19 restrictions and keep our personnel safe and healthy. New methods were utilized to deliver training content virtually including Microsoft Teams. The information was able to be shared with the group and each station was then able to practice the hands-on skills at their individual stations.



AHFD's training committee continues to flourish creating training exercises, activities, and follow-ups. The Training Committee is tasked with coordinating, planning, and collecting data for AHFD's training division as well as ensuring that all departmental members receive the necessary amount of training to stay proficient in their skills. To further the mission of improving training and to improve the data collection process the committee explored different learning management software platforms available. Many products were evaluated with Target Solutions selected as the platform to best improve our training program which will be implemented in the start of 2021.

### Departmental Training

In 2020 the department participated in 5,933 hours of training across the different divisions. This was an increase of 579 hours despite COVID-19 restrictions. The total number of training hours include hazardous materials, driving, EMS, suppression, and officer



development classes. The department averaged 494 training hours per month. The month of August recorded the most training hours as the Seyburn Mansion was available to the department for training before it was demolished.



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Between the five (5) training categories that department staff attend, suppression training accounts for the most training with 3,500 hours; EMS training is second with a total of 1,333 hours. EMS and suppression calls for service account for the majority of the department's call volume. This makes it essential to continually work towards improving personnel's knowledge in these areas and ensuring that the most up-to-date information is learned.

2020 Training Hours	
Training Type	# of Hours
Driver's Training	521
EMS	1333
HazMat	101
Officer	477
Suppression	3500
<b>Total</b>	<b>5932</b>

### Fire Operations Training

Along with AHFD's regularly scheduled annual training requirements, the firefighters also participated in developing their hands-on skills at various structures within the City. The "acquired structures" that the training takes place at are typically vacant buildings that are scheduled to be demolished and can be used for aerial operations, ladder placement operations, search and rescue, Rapid Intervention Team (RIT) training or pump operations. One such building was the Seyburn Mansion. Through August and September, the department logged over 1,100 hours of training. Most were focused on RIT training which is used to rescue a downed firefighter and incident command communication revolutions. AHFD also invited other departments to participate in this training as we commonly work together on actual fire incidents.



The department participated in training at the Combined Regional Emergency Services Training (CREST) center at Oakland Community College. The training crews were able to work on realistic training scenarios at this location that closely mimic practical hazards or problems they may encounter at actual incidents.

### SPECIALTY TEAM PARTICIPATION

With the department responding to 3,585 calls in 2020, AHFD witness and mitigate a variety of incidents. Through continuous training and practice, AHFD is able to respond, establish effective command, and begin to mitigate specialty incidents with the help of other surrounding agencies





# AUBURN HILLS

## Fire Department



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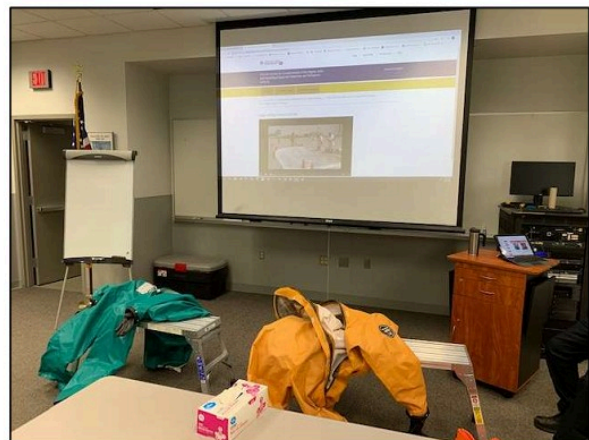
## 2020 Year-End Report

and departments. When an incident requires advanced responses, both the County Hazardous Material Team and/or the Technical Rescue Team can be requested as mutual aid; examples of these incidents include hazardous material spills or incidents, high angle or low angle rope rescues, trench rescues, water rescues, large fires/explosions, and a variety of other challenging responses. AHFD continues to support and provide active membership within these County specialty teams associated with the Mutual Aid Box Alarm System (MABAS). Through the department's MABAS collaboration, AHFD not only receives beneficial mutual aid response but also can aid other departments/agencies through mutual aid. AHFD has two (2) personnel who are an active part of MABAS's 3201 Hazardous Material Team and three (3) additional members who are an active part of MABAS's 3201 Technical Rescue Team.

### Hazardous Material Team

[Firefighter Sumi Dinda]

AHFD has been participating in the Oakland County Hazmat team (OCHMRT) since its formation in 2002. The primary objective of the team is to provide guidance and technical expertise in the mitigation and removal of hazardous substances. The team also performs air monitoring for any incidents for the safety of the fire personal and the citizens of the community. The OCHMRT composed of members of MABAS-3201 fire departments. The team is responsible for responding to all hazmat related calls in Oakland County including: Industrial hazardous material incidents, hazardous materials complaints, suspected terrorist incidents, clandestine drug lab sites, tanker truck rollovers, train derailments, MSP Bomb Squad support and Federal Bureau of Investigation (FBI) terrorism incidents. The OCHMRT consists of a highly trained unit of Hazardous Materials Technicians and Specialists delivering emergency response staffing 24 hours a day. The members are volunteers from all the fire departments belonging to MABAS-3201. Due to the pandemic, mandatory lock down and reducing the COVID infection in 2020, the training schedule was modified and the truck checks were conducted every other month in small groups with social distancing. Firefighter/paramedics Sumi Dinda and Alan Lee from AHFD are serving as team members. Firefighter Dinda is certified as a Hazmat Specialist and is certified by the Fire Training Council of the State of Michigan to teach hazmat awareness and operations to new recruits





# AUBURN HILLS

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at North Oakland County Fire Authority (NOCFA) regularly since 2008. Every year AHFD volunteers to host the hazmat portion for the North Oakland Fire Academy which is a two week course per the State of Michigan Fire Training Council. Due to the pandemic, Firefighter Sumi Dinda taught a whole Hazmat awareness and operations course on-line through Zoom. Firefighter Dinda is also instructing new recruits how to wear Level-A suit via Zoom.

To stay active on the team one has to complete at least 100 hours of hazmat training (in house and outside) in addition to normal fire and EMS training. Team members are trained in the identification and mitigation of hazardous materials associated with Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) substances. The OCHMRT training also includes dealing with hazmat incidents regarding Weapons of Mass Destruction (WMDs) and clandestine drug laboratories. Firefighter Lee is training on mitigating a leak from a liquid propane tank at our quarterly training exercise at Troy's Fire and Police training center in June 2020 (see photos below).







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## Fire Department



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### Technical Rescue Team

[Firefighter Gary Chapman]

AHFD currently has three (3) active members on the MABAS 3201 Technical Rescue Team. Each member is required to train at least five (5) times annually in addition to their yearly required fire and EMS training. Technical rescues include events such as confined-space rescues, rope rescues, collapsed structure rescue, ice rescue, water rescue, trench rescue, and many other major incidents requiring specialized response. The department has yearly scheduled training for many specialized response events including swift water rescue where personnel use cold-water suits and special rope operations to save victims trapped in freezing waters.



### FIRE PREVENTION

The Fire Prevention Bureau (FPB) consists of two (2) fire inspectors who manage all plan reviews, building inspections, permitting, and occupancy data for the entire City of Auburn Hills. The fire inspectors handle all businesses within City limits, from small occupancies such as gas stations to larger occupancies such as Fiat Chrysler Automobiles or Great Lakes Crossing. The fire inspectors are also responsible for handling hazardous material classification and pre-incident plans for 223 occupancies that exceed regulated quantified thresholds as decided upon by the State of Michigan for all hazardous materials.

### Plan Reviews and Inspections

[Fire Inspector Fred Solomon]

Fire inspectors are tasked with varying types of inspections, permit issuance, and pre-plan operations. In 2020, the total number of inspections decreased by a total of 394 inspections or 45.5% as compared to 2019. The number of annual inspections decreased by seventy-two (72) or 40.9% and follow-up inspections decreased by 230 inspections or 63.8%.

Inspections (Yearly Totals)			
Inspection Type	2020	2019	2018
Annual	104	176	2248
Final Building	67	73	82
Suppression/Detections	125	191	198
Follow-Up	130	360	187
Incident Preplanning	1	8	664
Complaint	5	14	8
Bonfire Permit Issued	22	27	31
Knox Box Updates	18	17	23
<b>Total</b>	<b>472</b>	<b>866</b>	<b>841</b>



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The fire inspectors are accountable for all plan reviews in the City. Plan reviews are required for any new suppression systems, building additions, temporary event plans, pyrotechnic events, and any site plans for new occupancies or buildings. In 2020, the total number of plan reviews decreased by 123 or 44.7% as compared to 2019.

Plan Review (Yearly Totals)			
Plan Review Type	2020	2019	2018
Site	59	94	92
Suppression	55	86	104
Detection	27	76	69
Temporary Event	11	17	18
Pyrotechnic	0	2	0
<b>Total</b>	<b>152</b>	<b>275</b>	<b>283</b>

2020 was a challenging year for the Prevention Division as inspection activities by COVID-19 restrictions throughout the year. The decrease in inspection and permitting activity allowed for both fire inspectors to attend training to improve their certifications and Michigan State Act 154 licensure, such as NFPA Inspector courses, NFPA Plan Review courses and Fire Investigation training. The division also kept busy with administrative tasks including sorting and analyzing occupancy data,



partnering with the ordinance enforcement officers to conduct outdoor storage inspections, and preparing archived paper business files to be scanned and stored electronically. The prevention division also participated in the planning and permitting process of the Palace implosion; has worked with the City's Community Development Division to implement guidelines for the safe use of pop-up tents and/or outdoor dining spaces for bars and restaurants during the pandemic restrictions; and scheduled and hosted an virtual Bureau of Alcohol, Tobacco, Firearms, and Explosive (ATF) explosion training course for dozens of neighboring fire agencies.

### Hazardous Material Disclosures/Firefighter Right to Know

[Intern Bella Lauinger]

On April 7<sup>th</sup>, 1986, the State of Michigan enacted a three (3) bill public health and safety package into law; the three (3) laws included Michigan's







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Right to Know Law, Firefighter Right to Know Law, and Community Right to Know Law to protect employees, first responders, and communities. These laws were created in coordination with the Occupational Health and Safety Administration's (OSHA) hazard communication standard. Every year, any business storing or using substances that are deemed hazardous in Auburn Hills must submit a hazardous material disclosure survey to AHFD to be compliant with Federal Firefighter Right to Know (FFRTK) laws. In the instance of an emergency, these disclosures are necessary to protect all responding agencies and departments in being aware and prepared to mitigate any hazardous substance releases/spills or potential hazardous explosions as quickly as possible.

This past year, the department assured that all known hazardous material sites have been updated and incorporated into a mobile GIS application where our first responders have easy access to this pertinent information to help respond more safely to these dangerous sites.

### Hazardous Material Site Permitting

Once AHFD requests this information, businesses are to complete their hazardous material disclosure, after they complete and return their disclosure, the Fire Prevention Bureau classifies the facility as a "Red", "Yellow" or "Green" site, depending on the types/quantities of the hazardous

Hazardous Material Reporting				
Business Classification	2017	2018	2019	2020
Red	78	80	85	93
Yellow	134	142	146	130
<b>Total</b>	<b>212</b>	<b>222</b>	<b>231</b>	<b>223</b>
<i>Permit Fees Collected</i>	<i>\$65,600</i>	<i>\$68,400</i>	<i>\$71,700</i>	<i>\$72,300</i>

substances on site and whether they surpass thresholds set by the State of Michigan. After classification, each "Red" and "Yellow" business site is charged an annual permit fee. A third category for occupancies classified as "Green", do not require a hazmat permit because their stored materials are considered nonhazardous such as common cleaning supplies or minimal substances. To ensure that the permits are paid and finalized in a timely manner, AHFD updated its fee schedule regarding hazardous material permitting. In accordance with the 2020 Fee Schedule and Ordinance 17-895, Section 38-56, any facility refusing to submit payment after ninety (90) days of the first permit fee invoice notice is also charged a late fee depending on their classification. During 2020, a total of four (4) facilities were charged a late fee.

There were ninety-three (93) "Red" businesses and one hundred and thirty (130) "Yellow" businesses totaling to two hundred and twenty-three (223) businesses storing or utilizing hazardous



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materials. AHFD's hazardous materials program brings in a large amount of revenue for the department, which is used for fire prevention, suppression equipment, vehicle maintenance, and other necessary departmental items. During the past four (4) years, the revenue received from the program has increased by an average of 3.18% or by approximately \$2,233.33 per year.

By continuously working on this program, the department also creates and maintains better relationships with businesses in the City. The hazardous material program continues to grow and allows for many improvements for the prevention division as well as the department wide knowledge of hazardous material sites within the City.

### Public Education/Community Risk Reduction/Community Outreach

Unfortunately, due to the COVID-19 pandemic, much of the department's public education was halted. Despite significant setbacks and cancellations, the Fire Prevention Bureau was able to host socially distanced and safe events for a total of 290 children and ninety-three (93) adults.

During 2020, several events were modified for social distancing to continue. Some of these events included fire extinguisher training, CPR/AED training, first aid training, virtual fire prevention week, and community displays



### Virtual Fire Prevention

The month of October includes two (2) annual fire prevention remembrance time-frames, including fire safety awareness month, and fire prevention week. Fire prevention week falls on the second week of October in commemoration of the Great Chicago Fire of 1871. During this month, it is important for fire departments to provide community education, promote fire safety, and increase fire safety awareness. The Fire Prevention division participated in a COVID-19 safe video to be shown to forty (40) kindergarteners and two (2) teachers.





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The video demonstrated fire safety practices, the ins and outs of fire department vehicles, preventative fire techniques, and what to do in an instance of a fire. The video was posted on YouTube and then was shown to each class over a live WebEx in the comfort of each child's own home allowing the department to follow proper COVID-19 guidelines and still engage in community outreach and public education.



In part with the live video, A question and answer session for both the students and teachers was also held by Inspector Toss on fire safety, fire prevention, and his past twenty-six years of firefighting experience. Goodie bags were also hand packed and provided weekly that included heat changing pencils and rulers, firefighter themed smiley pens, reflective slap bracelets, sticker badges, and plastic junior firefighter helmets for the students.



### *Helping Hands*

AHFD's Helping Hands program is a non-profit managed by several firefighters in the department. This program donates both time and money to in-need citizens in the community. The Helping Hands program is essential in building community relationships between the department and the City while giving aid to those needing it most.

### *2020 Helping Hands Highlights:*

- Provided funding for the holiday Meals on Wheels Program
- Donated food, gift cards, presents, and other aid for thirteen (13) families during the holidays
- Supplied burnout assistance and donated to victims of fire damage
- Provided two (2) \$1,000 scholarships for graduating high school seniors on their way to higher education
- and Collected food/necessities for struggling families through the "Firefighters Against Hunger" program



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### *Meals on Wheels*

Every year during the holiday season, homebound senior citizens need freshly made meals delivered to them. On both Thanksgiving and Christmas days, AHFD prepped and packaged 154 meals. This year's number of meals increased drastically from last year's eighty (80) meals. This is believed to be due to the COVID-19 pandemic. This is the tenth (10<sup>th</sup>) year that AHFD has assisted the Auburn Hills Community Center in providing meals to senior citizens in the City.



### *Spooktacular Participation*

Although, the department's annual fire prevention Open House had to be canceled due to COVID-19 spikes, AHFD still wanted to reach out to the community. Through participation in the City's Spooktacular event, both the department Fire Inspectors were able to safely hand out goodie bags to over 300 children. Each goodie bag contained fire educational resources, AHFD logo apparel, a fire helmet themed water bottle, a handful of candy, and useful school supplies. AHFD would also like to thank the Department's Union for donating eight (8) large bags of candy for this event, two (2) of which were given to the Police Department's cadets to hand out at the event. The event was a large success and allowed for a safe and fun way to enjoy Halloween for both children, teens, and adults alike.







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### *Improvised Community Outreach*



This year to help continue community interaction and outreach, the department improvised by providing birthday and special event apparatus drive-byes. An example is when we helped Lorraine, a citizen of Auburn Hills, celebrate her 93<sup>rd</sup> birthday (picture to the left). AHFD was even

highlighted on Channel 7 Detroit for an apparatus parade and a basket of gifts given to a seven (7) year-old boy returning home from the hospital after being diagnosed with COVID-19.



On November 4<sup>th</sup>, Oakland Christian School invited both the Auburn Hills Fire Department and Auburn Hills Police Department to participate in a social distancing safe truck display event where the students showed their appreciation and respect for first responders. With emergency lights and sirens signaling the departments arrival, over forty (40) children and multiple adults were in attendance. We would like to personally thank Oakland Christian for inviting us out to their school.

