

Waterford Regional Fire Department



2019 Annual Report



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FIRE DEPARTMENT

ADMINISTRATION

Matt Covey
Fire Chief

25 Years of Service



Ann Ostrom
Administrative Assistant

34 Years of Service



Carl Wallace
Deputy Fire Chief

21 Years of Service



Diane Beedle
Account Clerk

25 Years of Service



FIRE SUPPRESSION AND EMS OPERATIONS

Steve Bridger
Battalion Chief
29 years of Service



Blake Nelson
Battalion Chief
22 years of Service



Josh Dorman
Battalion Chief
17 years of Service



FIRE PREVENTION DIVISION

John Phebus
Fire Marshal
29 years of Service



Mark Trager
Lt. Fire Inspector
32 years of Service



Wayne Peruski
Lt. Fire Inspector
24 years of Service



FIRE DEPARTMENT TRAINING DIVISION

Jim Cooper
Capt. EMS Coordinator
EMS Academy
17 Years of Service



Josh Dorman
Fire Training Coordinator
17 years of Service



FIRE DEPARTMENT CHAPLAINS

Linda Living-Hawley



Ron Rayner





Waterford Regional Fire Department Mission Statement

The mission of the Waterford Regional Fire Department is to protect the lives and property of the residents, businesses and visitors of **Waterford Township**, the **City of Pontiac** and the **City of Lake Angelus** through:

Public education in fire safety and hazard recognition

Aggressive fire suppression and rescue

Professional emergency medical treatment of the sick and injured

Efficient pre-incident planning and emergency management

Hazardous materials control and mitigation

From the Fire Chief's Office...



It is my honor and privilege to serve the residents of Waterford Township, The City of Pontiac and the City of Lake Angelus. I work alongside 107 well-trained and highly skilled professional firefighters, paramedics, fire officers, inspectors, chiefs and office staff. Together, we provide incredible emergency services in a regional, multi-jurisdictional setting. There are over 130,000 residents and 60 square miles in our first response area. The pages of this 2019 annual report is full of important information, statistics and photos highlighting the various aspects that make up the Waterford Regional Fire Department. The service and dedication on display each and every day by all our fire department personnel is represented in this annual report.

The big impact items in 2019 were the purchase of two new fire trucks with an expected delivery in mid-2020; additionally, we ordered two new fire investigation vehicles and two remounted transporting rescue-ambulances. These accomplishments were possible with funds from our newly voted in Special Assessment District. We are greatly appreciative the continued support of our community.

In September of 2019 the 3 years 2015 SAFER grant through the United States Department of Homeland Security, that provided 39 firefighters expired and reduced our staffing from 141 firefighters to 107 firefighters. The Special Assessment District added 5 budgeted firefighter positions.

The Special Assessment District has made a positive impact the Fire Department as a portion of the funding is used to support five firefighter positions, fund fire apparatus, equipment and other operating expenses.

2019 calls for service totaled 13,813 a 1.6% increase over 2018, 9,860 or 71% of those calls were for EMS, traffic accidents and other rescue calls, that number is 2.9% over 2018. Fires, hazardous situations, and other calls accounted for 28.6% of the 2019 calls. Fire calls as a whole were down 15.5%, with structure fires seeing a decrease of 19.27% from 2018 total fire calls were 337 which a 176 structure fire calls were residential and multi-residential structures, 78 vehicle fires, 16 grass fires, 28 refuse fires and 38 other fires. The fire department transported 5,174 patients in 2019.

Our fire units responded nearly 24,000 times during the year. Response times for priority calls were at 5 minutes and 25 seconds for 2019. Out of the nine fire stations that we operate out of, the busiest fire station was station #3 with 2,822 calls. The busiest fire engine and rescue were both out of Fire Station #3 with Engine 3 responding to 2,867 calls and Rescue 3 responding to 2,422 calls.

This document as it does every year serves as a historical account of our department. We hope everyone who reads this will find it informative and enlightening to the diverse responsibilities that we handle every day.

A handwritten signature in black ink that reads "Matthew J. Covey". The signature is fluid and cursive, with a slight flourish at the end.

Matthew J. Covey
Fire Chief

Deputy Fire Chief Carl Wallace

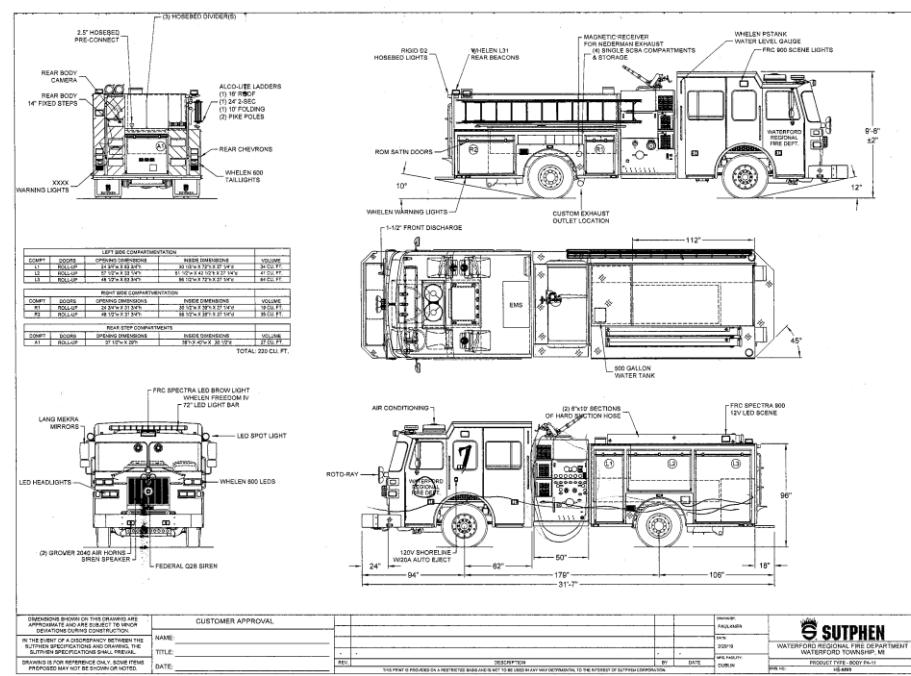


As Deputy Chief of the Fire Department, I oversee the operations of the Fire Department as we serve 130,000 residents in three communities and our mutual aid communities. I have three Battalion Chiefs, the Fire Training Officer and EMS Coordinator that report directly to me. Our firefighters serve 24 hour shifts on three platoon units. There are approximately 34 personnel on duty every single day operating out of 9 fire stations in Waterford and Pontiac. In 2019, I was kept busy with new vehicles, building updates and upgrades and many other projects vital to the operations of this fire department.

Purchase of 2 Fire Engine in 2019

With assistance of the Township Board the Fire Department has ordered and finalized the purchase of two fire engines from Stephen Corp in 2019. We look forward to the delivery of these 2 new vehicles in August 2020. Both of these vehicles are desperately needed and will go into Service at Fire Station 3 and 2.

Shop drawings of the new Fire Engines



Purchase and remount of 2 new rescue/ambulance from EVP+ Wheeled Coach

The Fire Department purchased 2 new rescue/ambulance. This again was a greatly needed truck as they are replacing aging vehicles with high millage. This remount process has the manufacturer take the ambulance box or EMS Area off an old ambulance and places it back on a new Chassis after repainting and repairing the EMS Box.



Ordering of 2 fire inspector-fire investigation units

The Fire Department expects delivery of 2 new 2019 GMC 1500 pickup Trucks in February of 2020. These trucks will be driven by the Fire Marshal and a Fire Inspector and will carry specialized equipment for fire investigations and inspection.



Promotional Testing

Testing and promotional list for Fire Chief and Deputy Fire Chief were established. The testing procedure involves a written test and oral interviews. We thank Arlene Ward at HR for her assistance.

Fire Cadet Program

During 2019 the Waterford Regional Fire Department had 7 high school students from within Oakland County attend our program. These students work with our firefighters and training division on a daily basis. The program goal is upon successful completion of the cadet program that they leave with the knowledge, skills and experience necessary to pursue a career as a professional fire fighter and give them an advantage in becoming a success in whatever their life's endeavor.

This program was originally created at the Fire Department in the 1970's, intended to offer local area high school seniors the opportunity to experience first-hand what a career in the fire service was like. It was designed to prepare young, ambitious students for a career as a fire fighter. Since then many of the cadets that have participated in the program have gone on to become professional fire fighters with fire departments around the country. One former cadet became a smoke jumper battling the enormous wildfires in the western United States while others have chosen to enter the EMS field or the medical profession. Several fire fighters currently employed with the Waterford Regional Fire Department are former cadets.

Fire Academy Sponsorship

The Waterford Regional Fire Department sponsored 3 students to the 2019 Oakland Community College Fire Academy. These individuals were supplied personnel protective clothing (turnout gear) and self-contained breathing apparatus (air packs). This option had zero out of pocket expense to the fire department but offered a huge discounted rate for these 3 individuals.



Purchase of 10 sets of turnout gear

The fire department replaced 10 sets of fire turnout gear in 2019. This gear is what protects our fire fighter during emergency runs and fires. It is made up of multiple layers. The outside coat protects against cuts and abrasions, the next layer works as a vapor barrier and the next layer insulates against high temperatures.

Active Shooter Ballistic Protection

Our equipment has steadily been coming in as available and training has been conducted for our members in situations that such equipment is needed with the Waterford Township Police Department. Policies have been written and implemented following the appropriate national standards. All equipment will be on the trucks and our personnel properly trained to assist when needed to better protect the needs of our communities if such a situation should arise.

Future Capital Projects for 2020

With the approval of the 2020 Fire Department budget, we will be working on the following capital improvements and purchases.

- Re-mount 1 rescue truck (ambulance) through EVP+ a Michigan based company.
- Purchase of 1 Fire Engine from Sutphen Corp. to replace fire engine at fire station 5.
- Generator upgrade at Fire Station 5
- Bryx 911 fire dispatching software
- Antenna upgrades fire station 1
- Fire Station 1 roof repair
- Fire Station 1 parking lot repair
- Steel columns repair at fire station 4 and 5
- Exterior painting at fire stations 4 and 5
- 10 Sets of firefighter turnout gear
- 4 Positive Pressure Firefighting Fans
- Painting and carpet replacement fire station 2

Future Projects City of Pontiac

We are working closely with the City of Pontiac DPW to complete needed repairs of the fire stations.

Some of the projects for the year 2020 are:

- Fuel tank repair at station 7
- Upgrade to the Bryx system
- Interior door repairs to multiple stations separating living quarters from apparatus floor.
- Exterior and interior painting

Fire Department Promotions

Matthew Covey
Promoted to Chief
25 Years of Service



Carl Wallace
Promoted to Deputy Chief
21 Years of Service



Fire Department Retirements

Chief John H. Lyman retired with 30 years of service.

A luncheon was held in his honor. His family, friends, firefighters and public figures attended the event.



2019 Recognition and Honors

In January, Lt. Paramedic Larry Carrier, Engineer Jess Coon, Firefighter Alec Marino-Bill, Firefighter/Paramedic Greg Mathiak, Firefighter/Paramedic Keith Larson and Dispatcher Allison Geary were awarded the Silver Life Saving Award by Fire Chief John Lyman at the Charter Townships of Waterford Board meeting. These fine first responders responded to a cardiac arrest. Upon arrival high quality, CPR and Advanced Cardiac Life Support Protocols were initiated. Based on these efforts Pulses were returned and the Patient was discharged from the Hospital and made a full recovery.



On April 13th 2019 fire crews from fire station 3 were dispatched to a Cardiac Arrest at Waterford Mott High School Pool and Fitness Center. Upon arrival to the Pool and Fitness Center firefighter/paramedics found a 72 yr. old pt. that was in cardiac arrest. Fire crews reported that two citizens and three fitness center lifeguards were performing CPR and using the fitness centers Automatic External Defibrillator and had delivered two shocks. Shortly after the patient vitals were checked and the patient had a pulse and was breathing on his own. Prior being transported the 72 year old male patient was awake and talking to the fire department paramedics. We proudly recognized these wonderful citizens for their quick actions that saved a life. Mitzi Amelon, Ann Ward, Jarod Rutnber, Seth Caspers and Frank Gamez.



Waterford Township recognizes the longevity of its employees on an annual basis. Diane Beedle for 25 years of service. These are the last three remaining from the 1980's.



Angela Corliss from Farmer's Insurance for the 3rd year in a row, honored the fire department by her contribution of station supplies to our fire stations.



We honor **Pontiac Firefighter Tracey Williamson** who died in the line of duty 21 years ago. A ceremony at the cemetery with Chaplain Rayner followed by a visit to the downtown location where his life ended during a structure fire and building collapse.



We stand proud of the efforts of all our firefighters for their brave and selfless service
To all the residents that we serve.

Public Events

The Waterford Regional Fire Department proudly participated in multiple public events in Waterford and Pontiac.

Woodward Dream Cruise and the RoadKill Nights

Fire and EMS standby in Pontiac



The **Holiday Extravaganza Parade** in Pontiac. Waterford Township is a sponsor for this event.



Public Events continued...

Memorial Day Parade moving down Dixie Hwy. in Waterford.



Annual Waterford Township Christmas Tree Lighting and delivery of Santa



Fire Department Open House at Fire Department Headquarters

Jim Christopher from Leo's Coney serving up Coney Dogs to our visitors as he does every year for us. Many thanks to Jim for his many years of support and commitment to [Waterford and the Fire Department](#).





Owner Operator of Leo's Coney of Waterford
Jim Christopher and Leanne Christopher
Serving our Residents.



Annual Mentors Plus Picnic Lt James Todd, Firefighter Paramedic Eric Mclean and Engineer Owen



OAKWAY and Mutual Aid

Mutual Aid is an essential component of any fire department in keeping its residents and firefighter safe from all hazards. Waterford Regional has been a member of the OAKWAY Mutual Aid Organization since 2000. OAKWAY is comprised of 10 fire departments working together to provide the best in emergency services to over 600,000 residents. Together we have nearly 520 career firefighters that train together to be ready when an OAKWAY Fire Department is overwhelmed and resources exhausted. OAKWAY responses include structure fires, EMS mutual aid and fire station coverage. OAKWAY also serves to provide hazardous materials and technical rescue teams and responses in a collaborative effort. The OAKWAY Chiefs meet monthly at Waterford Regional's Headquarters to discuss matters important to the entire group and to continue to improve relationships between all of our departments, which in turn enhances the emergency services provided to all our communities in Oakway.



Mutual Aid has developed nationally in the several years ago to what is referred to now as the Mutual Aid Box Alarm System (MABAS). OAKWAY and its fire departments, including Waterford Regional are designated by the State as MABAS 3202. OAKWAY member Fire Departments include: Birmingham, Bloomfield Township, Farmington Hills, Ferndale, Madison Heights, Rochester Hill, Royal Oak, Southfield, Waterford Regional and West Bloomfield Township.

In November of 2018, OAKWAY Chiefs approved the addition of two fire departments in, Farmington Hills and Rochester Hills Fire Departments. In 2019, Both Farmington Hills and Rochester Hills officially joined the OAKWAY Group.

We do respond outside of OAKWAY to neighboring fire departments for Mutual Aid as requested. Our adjacent neighboring departments of Auburn Hills, White Lake and Independence called for assistance from WRFD, to which we were very quick to respond.

MUTUAL AID - OAKWAY Fire OPS 101

October 2019 brought OAKWAY Firefighters together to bring the 2nd annual Fire OPS 101 program to our area. This program is designed to bring together elected officials and others leaders in each community covered by OAKWAY Fire Departments. The program planning began early in the year, as the Training Coordinators worked together to put on a quality program. The plan was for 18 participants to experience the day in the life of a firefighter/paramedic. Each participant used full fire gear including SCBA.



They started in a “clean” classroom for an explanation of what they would be experiencing and how the program would work, and then it was off to the hands on classroom. Each participant would experience a car fire, a car accident requiring the use of the Jaws of Life, a house fire and a medical emergency.



Representing Waterford Regional Fire was Trustee Arthur Frasca and Human Resources Director Mark Simlar. Representing Waterford Firefighters Local 1335 was Captain Dan Dumas, Lieutenant Jeremy Grundy, Firefighter Paramedic Steve Meier and Fire Chief Matt Covey.



Apparatus Division – Lee Warded and Blake Nelson



2019 was another challenging year for the Apparatus Division at Waterford Regional Fire Department. However, there is a sliver of silver lining- 2019 marks the first full-year with the new apparatus that was put into service in 2018 and we would also add to that with our first ever, re-mounted rescue truck. By February, we experienced our first major setback when another engine was found to have a hole in the frame. Another setback came in April, when an engine was involved in a traffic accident. We continue to face more and more challenges with an aging fleet, putting excessive amounts of money into vehicles just to simply keep them on the road. Currently, we are responsible for the repair and maintenance of a fleet including: (13) fire engines, (2) 100 ft. aerial trucks, (1) 75 ft. quint, (7) rescues/ambulances, (3) specialized equipment trucks, (6) trailers, (14) staff cars, (3) command trucks, (1) 6x6 Ranger and (1) rescue boat.

With the new apparatus on the road, we decided to focus our efforts on some major repairs, while some reserve apparatus were for sale. Unfortunately, after spending many days repairing engine 209, a leak was found in the fuel tank. While attempting to remove the fuel tank, rust holes were discovered in the trucks frame and forced it to be taken out of service indefinitely. With many good parts on this truck and 6 more almost identical trucks in the fleet, we were able to salvage the good parts and use the engine 209 as a parts truck. In February 2020, we will be sending engine 209 to auction. Additionally, Engine 208 spent the entire year parked and is still waiting on a decision to be made between the City of Lake Angelus and EOne. In April, engine 205 was involved in an accident that should have totaled the truck out because repairs were in accesses of value of the truck. However, MMRMA decided to repair the truck instead of totaling it out. This truck was sent back to manufacture in Wisconsin and was out of service for remainder of the year.

Having one new Rescue and one remount in-service rescue, reliability increased in 2019 with fewer than five days in a row of not having the standard five trucks on the road. For a few days, Rescue 4 was shut down due to the lack of availability of parts caused by the GM strike. The Apparatus Division had to work hard in order to find an alternative solution.

The last major problem for 2019 was Tower 1, a 1991 Sutphen, sat out of service waiting on parts in order to fix the aerial ladder. This particular truck is almost 30 years old, which means parts must be custom made by the manufacture and are currently on backorder.

A trend that we hope will decrease is the high repair cost with our older rescues and staff cars. Both 2009 rescues and several 2009 staff cars, saw repair cost at or above 50% of the vehicles residual value. Unfortunately, repairs must be made in order to keep things status quo. Decommissioning and or remounts, in 2020 should greatly reduce these burdens.

The positive aspects to 2019 are:

The new Apparatus in the fleet worked well in 2019, some minor repairs were made while the truck were in service and regular maintenance intervals, was something we haven't seen in several years. Crews have given great feedback on the new fleet and helped make minor changes to the design of the future apparatus, which was ordered in 2019.

Heated power washer was acquired from DPW to clean under-carriage of apparatus to help with corrosion prevention.

Quint 7 that was for sale for over a year with no bids. Subsequently, it was donated to Oakland Community College in exchange for \$25,000 worth of training.

Going forward, our main focus in 2020, will be to continue with strategic plan to replace the fleet with funding from the SAD, which has been held up in court, an additional remount rescue, and new engine, will be delivered early 2nd quarter of 2020. In March, a pre-build will be done for another additional engine, to be delivered at the end of 2020. Implement a Garage Management Software and upgrade shop equipment to better service new Apparatus. Despite these challenges, we will continue our pursuit of excellence in the maintenance of our fleet and all apparatus needed to protect the citizens and property covered by Waterford Regional Fire Department.



Waterford Regional Firefighters in Action in 2019

Plastic Fire in Auburn Hills



House Explosion Pontiac



Structure Fire Highland Road Waterford



House Fire City of Pontiac



EMS Coordinators Report – Captain Jim Cooper



The Waterford Regional Fire Department Emergency Medical Services has provided Advanced Life Support/Paramedics since the late 1970's, when the first millage was approved by voters. We continue to provide highly skilled and professional pre-hospital care to the residents of Waterford, Pontiac and Lake Angelus which does include EMS Transporting. We have five Advanced Life Support/Paramedic units that respond to calls in Waterford and Lake Angelus. In Pontiac, our fire trucks do respond to EMS calls as Basic Life Support as the City has contracted Star EMS for ALS/Paramedic service.

Photo of very first rescue truck in Waterford



WRFD responded to over 13,813 calls in 2019. Of that total, 9,860 were EMS related. This represents a 2.91% increase over 2018. 71.40% of all calls that WRFD responded to were EMS related. 5,174 transports to area hospitals were logged in 2019.

Career personnel are licensed with the Michigan Department of Health & Human Services – Emergency Medical Services and Trauma System Section, as a Medical First Responder, Basic EMT or Paramedic.





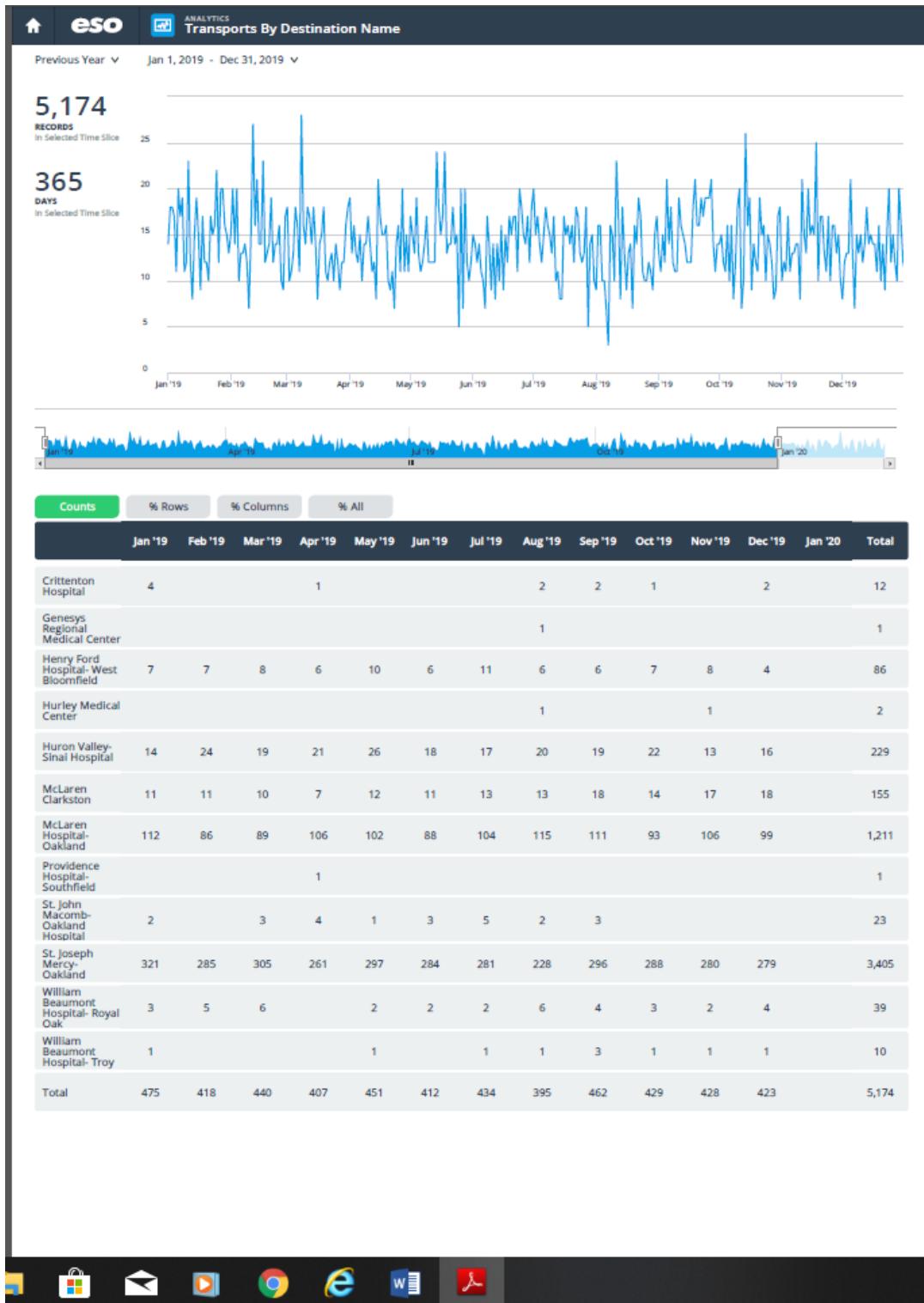
3 - Rescue & Emergency Medical Service Incidents	0	0.0 %
300 - Rescue, emergency medical call (EMS) call, other	104	1.05 %
311 - Medical assist, assist EMS crew	489	4.96 %
32 - Emergency medical service (EMS)	0	0.0 %
320 - Emergency medical service, other	60	0.61 %
321 - EMS call, excluding vehicle accident with injury	8,229	83.46 %
3211 - EMS call, excluding vehicle accident with injury at Senior Living	90	0.91 %
322 - Vehicle accident with injuries	757	7.68 %
3221 - Vehicle accident with injuries and extrication	4	0.04 %
323 - Motor vehicle/pedestrian accident (MV Ped)	21	0.21 %
324 - Motor vehicle accident with no injuries	81	0.82 %
3241 - Vehicle accident with no injuries, with extrication	0	0.0 %
342 - Search for person in water	0	0.00 %
353 - Removal of victim(s) from stalled elevator	11	0.11 %
356 - High Angle Rescue	2	0.02 %
360 - Water & ice related rescue, other	5	0.05 %
361 - Swimming/recreational water areas rescue	1	0.01 %
365 - Watercraft rescue	1	0.01 %
<u>381 - Rescue or EMS standby</u>	<u>3</u>	<u>0.03 %</u>
Total - Rescue & Emergency Medical Service Incidents	9,860	71.40 %

In 2019, The Waterford Regional Fire Transported 5,174 Patient to the hospital

***Percentage of Medical Incidents transported- 52%**

Waterford Regional Fire Department

Destination Location Breakdown 01/01/2019 – 12/31/2019



Career personnel are licensed with the Michigan Department of Community Health – Emergency Medical Services and Trauma System Section, as a Medical First Responder, Basic EMT or Paramedic.

Personnel

1. Medical First Responder	3 personnel
2. Basic EMT	33 personnel
3. Paramedic	99 personnel
	Total
	135 personnel

***Personnel numbers decreased to 107 as of September 25, 2019 due to ending of the 2015 FEMA SAFER Grant.**

All career personnel are licensed with the American Heart Association in CPR/AED as a Basic Life Support Healthcare Provider (BLS). All paramedic are licensed with the American Heart Association in Advanced Cardiac Life Support (ACLS) and have completed mandatory Oakland County Med Control Authority protocol training and testing.

A total of 58 Continuing Education (CE) classes were held for career personnel with 14.0 CE were available for career personnel,

There were approximately 23 BLS classes, 25 CPR classes, 21 First-aid classes and 12 Bloodborne Pathogen classes provided to the public, Waterford Township employees and the Waterford School district teachers. A total of 213 people attended BLS classes, 496 people attended the CPR classes, 381 people attended the First-aid classes and 17 people attended the Bloodborne Pathogens classes for a total of 1,107 people. This is an increase from 1,027 in 2018.



- Two (2) Basic EMT classes in 2019.
- The Basic EMT program had 28 students graduate
- One PEPP Course

McLaren Regional Medical Center remains as our base hospital, with Dr. Tressa Gardner serving as the Physician Medical Director for the Waterford Regional Fire Department and Waterford EMS Academy.

The Waterford Regional Fire Department Emergency Medical Services continued in 2018 to provide skilled and professional pre-hospital care to the residents of Waterford, Pontiac and Lake Angelus.

Fire Radios – **Driver/Engineer/Paramedic Chris Petres**



Radio and Communications Division

2019 Annual Report

The Waterford Regional Fire Department uses a mix of [Harris OpenSky](#) 800MHz digital trunking radios and a [Legacy Analog VHF-HI](#) system. OpenSky is the primary radio system and is provided by Oakland County. Our VHF system is used for tone alerting, state MEDCOM requirements (for ALS rescuers) and as a fully operational backup to OpenSky. This backup design is built with NFPA 1221 and ISO requirements in mind.

RADIO EQUIPMENT	Qty in service	Qty in reserve*
OpenSky portables	129	0
OpenSky mobiles	44	0
OpenSky control stations	12	0
VHF Portables	20	1
VHF Mobiles	11	4
VHF Base Stations	3	-
VHF Control station	1	-
Station Alert systems (Informer)	9	3
Unication dual band pagers	4**	10**
Minitor VHF pagers	5	15
NOAA alert receivers	5	1

*reserve includes ready spare (NFPA required), broken, and not currently used in storage

** New equipment, currently mid-deployment

Station alert systems include a VHF tone activated receiver, OpenSky radios, power supply, battery backup (UPS) and audio amplifiers and speakers. Police dispatch operates our VHF radios via a private phone line link between their consoles and the radio tower site. In addition to dispatch at PD, station 1 has a backup radio with mini-console capable of transmitting tones and includes an instant recall recorder for playback of recent transmissions.

Our radios allow us to communicate on numerous talk groups and channels - departmental and shared. This allows for interoperability with other agencies for larger scale incidents, such as our OAKWAY mutual aid partners.

Notable Accomplishments in Radio Division

Repairs and maintenance is a never-ending job. These typically include replacement or repair of damaged radios, lapel microphones, antennas, batteries, station alert systems, and other miscellaneous parts.

	Complaints	Preventative Maintenance Repairs	Total Repairs
2017	68	No data	68
2018	114	No data	114
2019	79	57	136

*Other smaller, quick repairs not reflected in above.

The radio division is also responsible for training new hires how to use our radios, refresher training for existing personnel, tower site radio updates, attending conferences and meetings, and keeping up to date with regulatory issues involving radios.

All portable radio batteries are tested / conditioned to ensure acceptable runtime and performance. We aim to service each of the estimated 300+ batteries in the fleet at least biannually. This is very time consuming, but seems to have had a positive impact on radio reliability and run time. The number of unsubstantiated radio complaints has gone down, this may be attributed to better battery performance. Batteries deemed substandard, too old, or show questionable performance are replaced. We exchange faulty batteries with the county at no cost to the department.

Staff attended several Oakland County CLEMIS radio / 911 advisory board meetings. Staff also attended the [Southeastern Association of Fire Chiefs tradeshow in Novi](#) and the 2019 Statewide Interoperable Communications Conference in Traverse City.



Training on radio interconnection gateways; used to link users of incompatible systems.

Class held at 2019 Statewide Interoperable Communications Conference in Traverse City.

Modern construction tends to block radio signals. Codes (IBC 510 and NFPA 72, 1212) require building owners to ensure acceptable radio performance within their structures for fire/police/EMS. If needed, this can be through the use of an Emergency Responder Radio Coverage System (ERRCS). Several developers have inquired to inspectors about this, and radio division has assisted when needed.

Obsolete and non-serviceable radio equipment was given to Oakland County Amateur Radio Public Service Corps, a division of Oakland County Homeland Security. While it no longer has any value or use to police/fire, gear has been recycled and is still serving the community. Uses include SkyWarn weather spotters, disaster hospital communications, outdoor siren testing and Woodward Dream Cruise communications.

FCC radio station licensing was renewed and updated. Cost savings were realized doing this in-house.

Staff tested all ALS units prior to the state licensing inspection. Testing revealed a VHF communication failure. Staff determined department equipment was fully functional and in compliance. Staff investigated further and found a problem with hospital equipment. We were able to quickly rectify the issues for them. We have also aided in testing and making repairs to hospital's radios at other times as well.



Radio consolette at hospital.

Radio found inoperable. Staff corrected issue and restored EMS to Hospital communications.



Preventative-maintenance inspections find and fix problems before disruption to service.

Damaged apparatus antenna and station generator failure alarm shown here.

NOAA weather alert radios were purchased, programmed and placed in command officer offices, backup dispatch, and HQ / administration offices.

VHF radios in ALS rescues were reprogrammed for expanded interoperability and to communicate with additional hospitals, both in and out of county.

Ongoing Projects

Staff has created a preventive maintenance program. The goal is to have scheduled quarterly inspections and tests of critical dispatch system components, including tower sites, station alerting equipment, and backup power systems. While this has caused more overtime, it has proven to improve our system reliability, reduce unexpected downtime, and lower costs and hassle associated with unexpected failures. *Since inception of the program there has been a significant reduction in downtime and equipment failures of station alerting.* Quarterly inspection and testing is required for full ISO credits. Notable findings during preventive maintenance include failing / weak UPS batteries, generator alarms, and damaged antennas. These would surely cause a failure at an inopportune time if not caught early. Some apparatus were found to have broken antennas; likely combination of becoming brittle with age and exposure, and falling victim to low hanging branches. Repairs were triaged and all have been replaced over a two-year span. Staff has recently begun differentiating between repairs prompted by complaints vs repairs prompted by preventative maintenance inspections. The division believes it will be important to document the number of problems found and corrected prior to any user noticing and making a subsequent complaint.

Preventative maintenance is critical in keeping equipment operational. Air conditioning unit coils at tower equipment shelter are cleaned with the aid of an engine.

Installation of backup HVAC unit at radio tower site.



New apparatus has kept the division very busy. Staff drafted electrical specifications for factory pre-wiring for radio units. This greatly speeds install of equipment once apparatus is delivered. Radios and Knox boxes were provided for new units. New rescues are now utilizing dual-head radios. This allows one radio to be utilized in both the cab and back patient compartment, saving costs over two separate units. User have previously indicated difficulty communicating on portable radios while inside; this dual head design should aid in ease of communicating. Apparatus mechanic division and County radio/vehicle shop helped greatly with these projects.

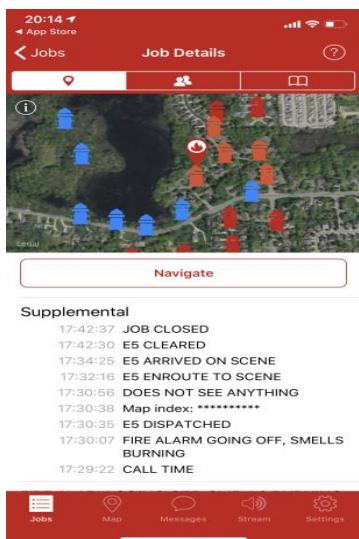


Improvements have been made to the department's radio tower site. HVAC system was cleaned to ensure system efficiency and reliability. Emergency AC was installed due to a primary system failure. This unit will remain as a backup. Backup heating was installed in a prior year. Proper temperature and environmental conditions are critical to keep equipment and batteries above freezing or overheating, prolonging life. Environmental and security monitoring is planned to be upgraded as recommended by NFPA 1221, 72, 731.

The division offers [FirstNet](#), the new public safety wireless broadband system to members. The system provides priority voice and data service to first responders ensuring reliable communications in cases of network congestion, such as large special events or disasters. We have offered subscriber-paid plans to employees, several have joined.

The Division assisted Township IT staff in deploying a new telephone system and township-wide overhead voice paging. This project revealed a data and communications cabling plant in desperate need of modernization and upgrades. All fire stations have or are in the process of receiving updates. This project includes future-proofing for anticipated future needs including station alert systems. The audio and dispatch alert system at HQ has been completely replaced.

Bryx 911 mobile app was implemented. Bryx is a software as a service that interfaces to CLEMIS CAD and allows for call alerting, call mapping and routing, AVL / GPS, hydrant mapping, pre-plan viewing, and other dispatcher added notes. This app was installed on existing apparatus iPads and also available to department members' personal devices. This is a no-cost service for basic functionality. To date 91% of staff have voluntarily adopted this system on their devices. This system offers more information and is more secure than previously used systems. Hydrants and water main sizes within Waterford have been added to the system. Hydrants in Pontiac will be added if water system information becomes available. The vendor has indicated several coming improvements which may be of interest to the department; some of these may be premium options.



Radio division has assisted department IT staff with implementing Bryx station boards. This is similar to the mobile app, but displayed on large screens within the stations. These boards include a turnout timer, route mapping and street view to size up a building prior to arrival.

Special response team leaders have mentioned they would welcome portable radio battery chargers on their units, as they often operate for extended time frames. We were able to outfit the HAZMAT and Tech Rescue apparatus with bank chargers and spare batteries.

New radios were assigned to Marine 1 and Ranger 1. Boat radios were equipped with 'Gear Keeper' retractable lanyard to prevent loss overboard.

The division has begun to replace the Federal Signal Informers with Unication G5 pagers. Dealer and manufacturer support for informers has been lacking and alternatives were evaluated. The new G5 pagers are dual band receivers that will operate now and with the future P25 radio system with a programming update. Custom alert tones can be uploaded and can now be customized to achieve rudimentary heart-saver functions. SAD monies were used for procurement and installation is ongoing.

A Unication G5 pager was provided to PD for dispatchers to verify proper transmission of dispatch alert tones.

Future Plans and Goals

Oakland County is currently in the process of replacing the OpenSky radio system. The county awarded the contract to Motorola in June 2019. The system is a 700MHz APCO Project 25 phase II simulcast system with 31 sites. This system will be a joint venture with the Michigan Public Safety Communications System (MPSCS). Specified coverage includes 97% street-level portable coverage with a standard antenna while on user's hip. In-building coverage is proposed at 95% with same conditions. Coverage should extend 3 miles beyond the county's borders. Radios to be used are the Motorola APX series. Motorola was chosen as the vendor for ease of interoperability with the rest of the state / MPSCS. Current estimate of project completion is 18-24 months. Infrastructure components were delivered to the local vendor in December. We can expect significant man-hours to be devoted to planning, installation, training, and testing of the new system. There may also be incidental costs such as accessories and options not covered by the scope of the project. Some ongoing maintenance costs of this new system will be shifted to member departments, such as replacement batteries. Estimated lifespan of this system is 15 years.

As our OpenSky system ages, we can expect to continue to see an increase in repair and labor costs. Harris officially stopped supporting our portable radios in 2017. We will continue to work with the county to keep our fleet operational; however a shortage may be possible as radios become non-repairable. Luckily, this has not been a problem yet. Used radios have been obtained from online sources to reduce costs of part / repairs.

Uninterruptible Power Supplies (UPS) / battery backups are aging and are the leading cause of failures within our station alert systems. We have experienced several premature failures of recently replaced batteries. Alternative vendors have been found for better quality parts. Additionally, the division is working with Township IT to replace all UPS units with upgraded models. This will include remote monitoring and diagnostic capabilities. In most cases, these units will be shared between radio and IT gear reducing purchase and maintenance costs.

There are some educational conferences / tradeshows within the state that may be beneficial. These include Michigan's Annual Statewide Interoperable Communications Conference in February in Traverse City.

Radios are not just a radio anymore. Many new communication systems are really an IT / IP device with an RF (radio) component. We expect to need to work closely with IT staff on future projects.

FirstNet is still a very new network. We will continue to evaluate it for potential operational and financial benefits to the department as it matures. We plan to obtain demonstration devices to test and evaluate.

Staff will continue to look at station alerting systems, with an emphasis on ‘heart-saver’ features such as ramped tones and lighting. These systems, especially when CAD-integrated, may have the added benefit of reduced ‘received to dispatch’ times, free up radio airtime, allow dispatch to focus on other tasks, provide crews with additional information, mobile apps, and aid in NFPA 1221 and ISO compliance. Staff has had conversations with a few possible vendors. It may be prudent to watch the development of the county’s new radio system before committing to a vendor or design. Bryx support has been very helpful with this and may be easiest to work with. Numerous other area departments have switched to Bryx as well.

The Division would like to continue to work with Township IT staff to enhance physical safety of the township’s networks with improved lighting / surge protection and grounding. Additional physical security measures at the remote tower site would also be welcomed. We may want to add backup control telephone lines between the dispatch consoles found at PD and station 1 which lead to our base stations. This would provide a fully redundant ‘always on’ backup and eliminate a manual switching system which could be a point of failure. The county radio shop indicated this is feasible with existing hardware.

New Special Assessment District funds will aid in enhancement and upkeep of our communications systems. This includes replacing battery backups and improvements to dispatch antenna system at HQ.

Ability to manually open station speakers to hear all radio traffic is a common request. Feasibility of this is being investigated.

Possible additional future improvements may include outfitting all stations with NOAA weather alert radios and/or county emergency alert radios.

NOAA weather radio receives alerts from local National Weather Service office.

Units have been placed in all command offices, backup dispatch at station 1, and admin offices.



Fire Gear – Lt. Eric Steinhebel

The WRFD has 192 sets of turnout firefighting coats and pants in service. There are also 19 new & used different size coats and 32 new & used different size pants in inventory.

In 2018, 94 of our 192 in service sets of gear were inspected and approved for use and all stock gear was inspected as well.

We were able to get most of our gear that needed inspection and re-certification in 2018 done. All the gear can never get done in a year's time. This is because the majority of our personnel only have 1 set of gear and our work schedules don't allow it to happen. Most of our gear gets done every 1.5 years, which is really good.

14 new sets of gear were ordered in 2018. All 14 sets were to replace in-service gear that was over 10 years old or older. 4 additional pair of pants and 2 coats were also ordered and placed in stock inventory.

In May of 2018, we started inspecting our own gear which gave us an estimated savings of \$23,000, allowing us to reallocate those funds for purchase of new turnout gear. Along with that, on January 14, 2019, Tom Hanson and Matt Blom and I will be attending an NFPA 1851 Turnout inspection class certifying us to inspect gear, while being NFPA compliant. This will be done at no cost to the department as it was part of a deal made with First Due Fire Supply and Globe Turnout Gear when we Purchased 10 sets of gear at the end of 2018.

Future Requirements:

Both 2018 R&M account numbers with the additional monies from the SAD should be able to work in 2019. This will help us continue on our NFPA approved safety inspection, cleaning and repair services needed.

Due to a 10 year age requirement, 10 front line sets of gear will be getting replaced in 2019. There will also need to be 6 new sets ordered for our stock to replace aging gear we have. The estimated cost will be around \$1,750 per set for new bunker gear orders in 2019.

Additionally, we have 44 sets of in-service gear that was purchased in 2012. Forward thinking suggest that instead of replacing all 44 sets at the same time in 2022. 10 new sets should be ordered per year up until 2022. This would keep the future safety of our personnel in check and up to date without adding a big drain on the department's future budgets. The added cost for this will be \$17,500 in 2019 with the cost going up every year after that.

Fire Marshal and Fire Prevention Division – **Asst. Chief John Phebus**



The Fire Prevention Division consists of two Fire Inspector/Lieutenants, and one Fire Inspector/Captain and the Fire Marshal. All four employees are certified Fire Investigators and State of Michigan Certified Fire Inspectors. The Fire Marshal and Captain/Inspector are also State of Michigan Public Act 54 Registered Inspectors of Fire Protection Systems and Plan Reviewers of Fire Protection System Plans by the Michigan Bureau of Construction Codes.

The Fire Prevention Division continues to conduct fire inspections, site plan reviews, fire alarm system plan reviews, fire suppression system plan reviews, fire safety inspections, fire investigations, assigns addresses and performs other activities as required. We continue to make our priority assembly occupancies, commercial buildings that have special fire systems, high hazards occupancies, new construction and buildings with occupancies changes.

2019 was a busy year for Fire Prevention with an increase in new building projects in both the Township and the City of Pontiac, which in turn increased the number of man hours dedicated to plan reviews and new construction inspections conducted by our Inspectors. This is a good sign for the economy of both communities. However, at current staffing levels day to day operations limit our ability to be proactive with our Annual Life Safety Inspections. Easing the stress of the increased work load is a good working relationship with both the Waterford Township Department of Development Services and The City of Pontiac Building and Safety Department.

Inspections and Plan Review:

The Fire Prevention Division performed 770 fire inspections, processed and reviewed 327 plans in 2019. These plans include site plans, hood system plans, fire alarm plans, fire suppression (sprinkler) plans and special suppression agent plans. We reviewed and verified inspection reports on various fire safety systems throughout Waterford Township and The City of Pontiac. All acceptance tests are done cooperatively with the building department inspectors. The Waterford Regional Fire Department continues to handle all reviews for fire suppression and fire alarm systems in the Township and reviews/assists in the review process with the City of Pontiac Building Department. The building departments and fire department continue to work well together in the best interest of the citizens of Waterford Township and the City of Pontiac.



Fire Investigation:

Fire Prevention Division personnel were called upon for 66 Origin and Cause after hours Investigations and numerous on duty hours investigations throughout Waterford and Pontiac. Each member is on call one week out of the month for “after hour’s investigations” and is backed up by a second investigator on each fire scene. The Waterford Township Police Department has assigned a Detective to assist with fires within Waterford Township when the assistance of a detective has been required. In addition, The Oakland County Sheriff’s, Fire Investigation Unit was activated on occasion in both the City of Pontiac and Waterford Township. Several of this investigation’s lead to the arrest and conviction suspects.



Addresses:

The Fire Prevention Division assigned 31 addresses in Waterford Township in 2019. The Fire Prevention Division issues and processes all new address throughout the Township to aid in the quick response of emergency services.

Freedom of Information Act: (FOIA)

The Fire Prevention Division processed 169 FOIA requests in 2019. Most of these were for information regarding underground storage tanks or hazardous materials at commercial businesses. This also included requests for information regarding fire reports and fire investigation reports/ files.

Training:

Training has always been a large part of the Fire Prevention Division as it is in all aspects of the fire services. The division must remain current in all disciplines of the fire service in case we are needed for firefighting and EMS activities in addition to our fire inspections and fire investigations work load. All division members are required to attend continuing education classes throughout the year to maintain certifications in the disciplines of Fire Inspection, Fire Investigation, Firefighting and EMS.

Pre Fire Surveys:

Pre Fire Surveys are being conducted by our on duty fire suppression crews when time allows. This is a very important part of protecting not only our citizens and businesses but also allows our personnel to familiarize themselves with building to ensure their personal safety.

302 Sites:

Waterford Township and the City of Pontiac currently have a number of sites designated as 302 sites. These are occupancies that store or use hazardous materials over a specified amount. These facilities must file an annual report to the Local Emergency Planning Committee (LEPC) which is Oakland County in our jurisdiction. These reports are compiled and are carried on each fire apparatus. This “book” (tablet information) is updated when we receive the reports from the LEPC. All fire department personnel have been given “site specific” training. Training is coordinated with our Hazardous Material Team Leader and the Training Division. The Fire Department Operations Assistant also assists with the 302 site program within our communities.

Smoke Detector Program:

When it is discovered that a residence has no working smoke detector, the fire department will provide and install a free smoke detector. These detectors are installed by on-duty personnel or a Fire Inspector. Statistics have shown that having one working smoke alarm in a home will reduce the risk of death in a fire by 50%. We feel this program is a cheap investment for the protection of our residents in all three communities. All eight fire stations have smoke detectors on their front line fire engine and tools to install them. Some of the smoke detectors have been donated to our department by local businesses after hearing of our detector program.

Fireworks:

The Fire Prevention Division reviewed, inspected and supervised all fireworks displays conducted in Waterford Township and the City of Pontiac. All of the shows were conducted following NFPA 1123 standards. The majority of the shows were conducted from the water on barges. This significantly reduced the fallout and danger for the spectators. 2019, we issued five permits with standby's, four in Waterford and one in the City of Pontiac





Fire Prevention Education – Driver/Engineer/Paramedic Kurt Vine

We continue to work hard for the Waterford Regional Fire Department as we represent the department to the schools and community groups in our area. Former Fire Chief John Lyman, Fire Chief Matt Covey and Fire Marshall/Deputy Chief Carl Wallace have allowed us to be very aggressive and creative in our efforts to educate the citizens about the fire hazards that they can encounter in their daily lives.

We are very pleased with the relationships we have cultivated with parents, students and school staff in our communities. Our program is in cooperation with the citizens and school districts of Waterford and Pontiac and numerous private and charter schools within our jurisdiction. It is estimated that over ten thousand children and adults were exposed to our Fire Prevention Education Program in some manner for 2019.

THE FIRE SAFETY HOUSE



THE FIRE SAFETY HOUSE

The Fire Safety House was involved in numerous events this past year and was seen continually and consistently all over the community. This portable training tool made an appearance at every elementary school in both Waterford and Pontiac School Districts this past year. This program is focused toward third and fourth grade students. Inside the Fire Safety House we are maintaining written reports for each use. Weather permitting, we use the months of April, May, June, September, October, November to get this unit to each school. Within the Fire Department, teams of firefighters are trained and responsible for the instruction of our students in both Waterford and Pontiac communities.

- Team personnel Kurt Vine, Chris Webster, Matt Blom, Aaron Lewis
- The Fire Safety House was used in the Waterford Memorial Day parade for 2019



FIRE SAFETY CLASSROOM PRESENTATIONS

Fire safety presentations are done during the winter months while the fire safety house is in storage. Throughout the winter months, Kurt Vine and Matt Blom visited every elementary school in Waterford and Pontiac. These presentations deal specifically with kindergarten through second grade. Children are taught about smoke detectors, the dangers of matches and lighters, escape plans and who to call when they have an emergency. These presentations instill knowledge at an early age how to handle an emergency and teach life safety skills they can share with their parents when they return home from school.



FIRE DEPARTMENT OPEN HOUSE

The Fire Prevention Week Open House was held this year at Station #1. This is an annual event for the communities. Literature, station tours, fire safety presentations, live burn demonstration and the Smoke House were used to educate our citizens. Career and Volunteer firefighters come together to talk with citizens and discuss the message of fire safety to young and old. Our community event was augmented by local businesses: Leo's Coney Island provided food. Stars and Stripes provided mats for Stop, Drop and Roll activities. Genisys Credit Union sponsored face painting and McLaren Oakland provided a bicycle safety station to fit and donate hundreds of bike helmets.

LONGEST BREAKFAST TABLE

This annual event occurs at Fire Station #1. Station tours were given, breakfast is provided and the Smoke House was available for presentations. This event is very popular with the citizens and is a good representation for the Township, Police and Fire Departments. Funds raised are donated to both Departments' respective Benevolent Funds.

HOME DEPOT OPEN HOUSE

In creating stronger partnerships with local businesses, the Fire Safety Team committed several fire trucks and personnel to interact with the public at this event. Fire Safety literature was distributed and tours of the apparatuses were given.

OAKLAND COUNTY SHERIFF'S OFFICE'S 4TH ANNUAL HARVEST

FESTIVAL ANGELS NIGHT

This event was in its seventh year and the Pontiac School District is heavily involved. The Waterford Regional Fire Safety team provided a number of fire trucks, including Engine 7 and Tower 8. On duty personnel provided tours of the trucks and a demonstration of the aerial truck in addition to providing Fire Safety materials to children. This event is attended by hundreds of families in the area and is one of the larger events that fire safety staffs.

AIRPORT OPEN HOUSE

This annual event is the largest attended by the fire safety team. We staff the event with a “display” engine as well as an on duty rescue. Fire Safety literature was distributed and tours of the fire engine were given to the public. The fire engine provided for display remains one of the most popular attractions at the show. It is estimated that near 1,000 people tour the fire engine. Families are allowed to climb into the cab of the truck. It is there that they can take family photos, ask questions and receive fire safety tips from personnel.

FIRE STATION TOURS

We have hosted numerous tours of Station #1 throughout the year with many area scouting, school and other citizen groups. Kurt Vine, Greg Mathiak and on duty personnel were utilized to handle tours from the schools and other contacts. Other tours of the fire station are coordinated between Fire Department secretaries and the Battalion Chief on duty.



SCOUT GROUPS

Numerous scouting groups came to the Fire Department for station tours and fire safety presentations to earn first aid and fire safety merit badges.

PONTIAC NIGHT OUT EVENT

This was our eighth year in attendance at this event which was held at the Oakland County Sheriff's Department substation in Pontiac. On duty personnel attended this event with a variety of fire trucks. Fire Safety informational literature was passed out at this event.

HARVEST HAPPENINGS AT HESS HATHAWAY

This was a large community event to which the Fire Department supplied a Fire Engine for community education on fire safety and to answer any questions the public may have about service or equipment.

SCHOOLCRAFT ELEMENTARY CARNIVAL

This was also our fourteenth year attending this event. A fire engine was sent with Fire Safety team members. Tours of the engine were given and fire hose was taken off the truck for children to spray water.



VARIOUS COMMUNITY EVENTS

The fire safety team attended numerous church events as well as local neighborhood outreach programs. The team spent time at the Salvation Army summer camp answering questions about fire safety as well as teaching them how you can become a firefighter.

SENIOR CITIZEN FIRE SAFETY

Numerous events were held at local assisted care and independent living facilities for senior citizens. The seniors who attended these events were given literature on fire safety. A question and answer session was held to discuss how to handle different emergencies weather related as well as medical.

HOLIDAY FIRE SAFETY EVENT

Greg Mathiak organized a holiday fire safety event at Beaumont Elementary school. This event was held to give adults fire safety tips for the holidays. The event was very successful and we are looking to expand it in 2019.

SPECIAL THANKS

It is truly a pleasure for all of us to be a part of this program. We view ourselves as the “front line” of fire prevention and public relations in these communities. We are so very appreciative of the commitment that the Chief has made to this program, and we are sure that our 2019 programs achieved what the Chief had envisioned for this program.



Training Division – **Battalion Chief Josh Dorman**

The main purpose of the Waterford Regional Fire Department, Training Division is to provide a system of regular structured training programs of sufficient content and duration, designed to keep personnel informed of and proficient in performing the duties associated with their job and to provide training that is required by mandating authorities and current with industry standards. The efficient operation of this department depends on a high degree of skill that can only be maintained by constant practice and professional effort.

Additionally, we are graded by the Insurance Service Office for our ability to put out a fire. The grading has an impact on the insurance rates in the communities that we serve. There are three main categories on which we are graded, of which, training is a large component.

Further, we are required to fulfill state and federal training requirements to ensure our readiness to serve the public. It is imperative that our personnel are trained to a degree of proficiency that keeps them and the public safe. Many lives are riding on our ability to respond to emergencies and there are many requirements that we must meet.

RESPONSIBILITIES

The Training Officer and/or Chief are responsible for monthly on-going educational training programs involving subjects required by law and recognized as national standards, including but, not limited to: fire suppression, rescue, hazardous material, driver training, fire fighter safety & survival, professional development, post-incident debriefings, department policies and guidelines, and new equipment in-services.



Eastern Michigan Fire Command & Staff 2019

2019 GOALS

In 2019 we looked to maintain a high standard for maintaining and improving our professional skill sets. Our goals included: reacting to locally important training topics, active assailant, mutual aid, company level training, hazardous material incidents, emphasis on SAFER grant personnel, and emphasis on meeting state, federal, and ISO standards.

SUCCESES

The goals that we had great success in meeting were all of the following: high risk/low frequency events, disaster preparedness, active assailant, driver training, OAKWAY (mutual aid preparedness), continuing education for leadership, and adjusting to accommodate unforeseen training needs. It is challenging to provide training for a full time professional fire department. We continue to adjust daily to accomplish our training needs. Our personnel do an amazing job of working to be involved and complete all necessary training; specifically, the training we attempt to plan that is required by the state.

The details of our 2019 goals are as follows; we will continue to follow our 36 month training plan based upon MIOSHA part 74 as required by law. The plan guides us in accomplishing our annual training requirements and goals. We will also focus on other incidents that we refer to as high risk/low frequency events.

Recognizing our stated goals, continuing education for our leadership continues to be of major importance for us. In 2019 we updated our 2018 audit of our officer's training records. We then continued to pursue our goal of completing specific state and federally mandated Fire Officer training. The classes include ICS 300 and ICS 400 where officers learn how to handle escalating and large scale incidents. To help with our understanding of local needs as it relates to potential large scale incidents we toured GM Propulsion. The GM facility does research and development and has a large container of hydrogen on site. The amount of hydrogen it contains could be a serious threat to the community and involve multiple agencies if a response were required. In Waterford we worked to maintain the same level of preparedness by doing a site visit of Heat Treat Services of America on Waterford drive. Both of these facilities present their own level of danger. Additionally, we are required to be knowledgeable of both by SARA Title III.

High risk/low frequency events that needed special attention in 2019 were hazardous materials incidents. HAZMAT can be overlooked at times because; it is not necessarily a daily occurrence. Incidents in the Waterford and Pontiac areas usually consist of spills. The picture below is an incident which occurred in Waterford near a waterway: the Clinton River Watershed has many tributaries which lead beyond our borders. This was a small spill which didn't require extensive clean up; several hundred square feet were affected by roughly 50 gallons of oil. However, it did drain toward a small creek and required hours of investigation, mitigation, and manpower by WRFD, WTPD, DEQ, Young's Environmental, and an OAKWAY mutual aid response. Recognizing our need to maintain our skills for hazardous materials responses we updated our foam equipment and spent time training on foam application techniques; foam is used to suppress vapors at a flammable liquid spill. Foam was not needed at the incident pictured below but, is commonly used for spills when there are other threats.



2019 Hazardous Materials Incident in Waterford

CHALLENGES

In 2019 we recognized that we must get our company officers more involved in training due to state, federal, and ISO standards. As in 2018, we identified more ways to incorporate NFPA standards into company level training. This time we highlighted our own Standard Operating Guidelines (SOG) and Standard Operating Procedures (SOP). The annual training plan described in the 2018 Training Report was implemented in the second half of 2019. Each month company officers are expected to review the scheduled SOP and SOG with their crews and submit a training record. This is designed to help increase awareness and compliance with departmental standards.

Another challenge we were facing was the expected change in leadership within WRFD. Fire Chief John Lyman was expected to retire in 2019 and did. He was the main contributor for grant development which helped staff our department for a number of years. Recognizing this possibility in advance two of our department leaders were the first in our organization to attend the Eastern Michigan Fire Staff and Command program. This program creates connections throughout the Michigan fire service and develops leaders in a multitude of ways. The EMU program is recognized as the top program in Michigan for leadership development. In 2020 we are sending two more fire department leaders to the class to ensure our organization develops quality leaders for the future.

An additional area of concern was our lack of a department policy regarding lock out/tag out (LOTO); a procedure identified as required by MIOSHA. The training division developed a new policy for LOTO and provided department wide training on the subject. The most common and dangerous occurrences necessitating LOTO are pulling electrical meters and elevator responses. We already had a policy which discussed meters but, an all-encompassing SOP for any mechanical rescue situation, including elevators, was needed; we respond regularly for elevator rescue in Waterford and Pontiac.

EFFECTIVENESS

The true effectiveness of our training is measured by our performance during emergency response. However, another method to measure our effectiveness is to track our training hours. The total hours of

training captured in 2019 is 6,371 individual hours. Due to our loss of SAFER grant personnel this is a significant decrease in training hours. In 2018 we completed roughly 9,000 hours. We continue to emphasize company level training, as well our personnel's attention to detail in completing training records.

Ultimately our goal is to maintain high level of professionalism and safety during an emergency response. We will do that by encouraging company level involvement, building annual training plans, encouraging post-incident analysis, providing high quality training for high risk/low frequency events, training thoroughly on safety and by educating more instructors to assist the training needs of the department. Our proficiency in our response relies on knowledge, practice, and safety. Our effectiveness is improved immeasurably when we are able to do live evolutions which make training more realistic. Many of the live training events that we put on this year were documented with pictures and are included in this report.

FIRE CADETS

Fire cadets were again part of our public education program. We helped students at several local schools learn about our profession. The program is focused on providing exposure to our profession not necessarily teaching them how to perform it. As personnel are available to assist the program we try to meet the higher standard of providing fundamental firefighter and EMS training. Some of the fundamental training cadets have been part of in 2018 includes: donning and doffing, search and rescue, air emergencies, fire extinguisher use, and emergency response.

Cadets are required to be self-starters and follow an agenda when our personnel are not available to interact with them. Each semester their performance is reviewed according to documentation provided by the school they attend. We also require them to become CPR, First Aid, and Blood borne pathogen certified, all the certifications are provided free by WRFD. The 2019/2020 school year has included up to 8 cadets that are participating in the program. It is our goal to continue to provide young adults an opportunity to be exposed to the emergency services profession.



2019 TRAINING TOPICS

- Active assailant
 - SOG review
- Air management
- After Action Reviews
 - Discussed at OAKWAY command officer's meeting
- Building Construction
- Company Level Training
- Driver training
- Elevator rescue
- Engine company drills
- FEMA/MIOSHA required officer courses
 - Fire officer I, II, III
- Fire command
 - Two members attended Blue Card Command online and practical events
- Fire ground communications
- Fire Scenarios (H.O.T.)
 - First due company operations
 - Saving our own
- Foam application
- Forcible entry
- Hose Testing
- Lake Angelus water supply
- Large scale disaster table tops
 - Metroplex: Pontiac
- Leadership program
 - EMU Staff and Command
- Personal protective equipment
- Pump operator course
- Rapid Intervention Training
 - Certified course
 - Used OCC resources
- SARA Title site visits
 - GM Propulsion
 - Heat Treat Services of America
- Step up and Lead
 - Leadership training event with a nationally recognized speaker
- SOP/SOG company level training
- Technical Rescue
 - Trench operations
 - Confined Space
 - Deployments (OAKWAY)

- Building Collapse
- Rope Rescue
- Truck Company Evolutions
 - OAKWAY training event at OCC Crest Center
- Vehicle Extrication
 - Adler's Towing in Waterford
- Water Supply

2020 Goal

The WRFD Training Division will continue to work to plan and provide high quality training that includes hands on training topics, classroom preparation, and required training. We will continue to make it a collaborative effort that benefits our personnel as well as the communities we serve.

2019 PROJECTED TRAINING TOPICS

- Active assailant joint agency training with WTPD
- Driver Training Refresher
- Elevator rescue
- Emphasis on our 36 month training plan
- Extrication
- Fire Officer Education (FEMA/MIOSHA required)
- Fire pre planning
- Hose Testing
- Lake Angelus water supply practical evolution
- Lock Out/Tag Out
- Officer development
- Operating power saws
- Response areas
- Station 4 area water supply
- SARA TITLE III Occupancy walk-through

DRIVER TRAINING – REFRESHER



TRAININGS – Vehicle Extrication & Saving Our Own



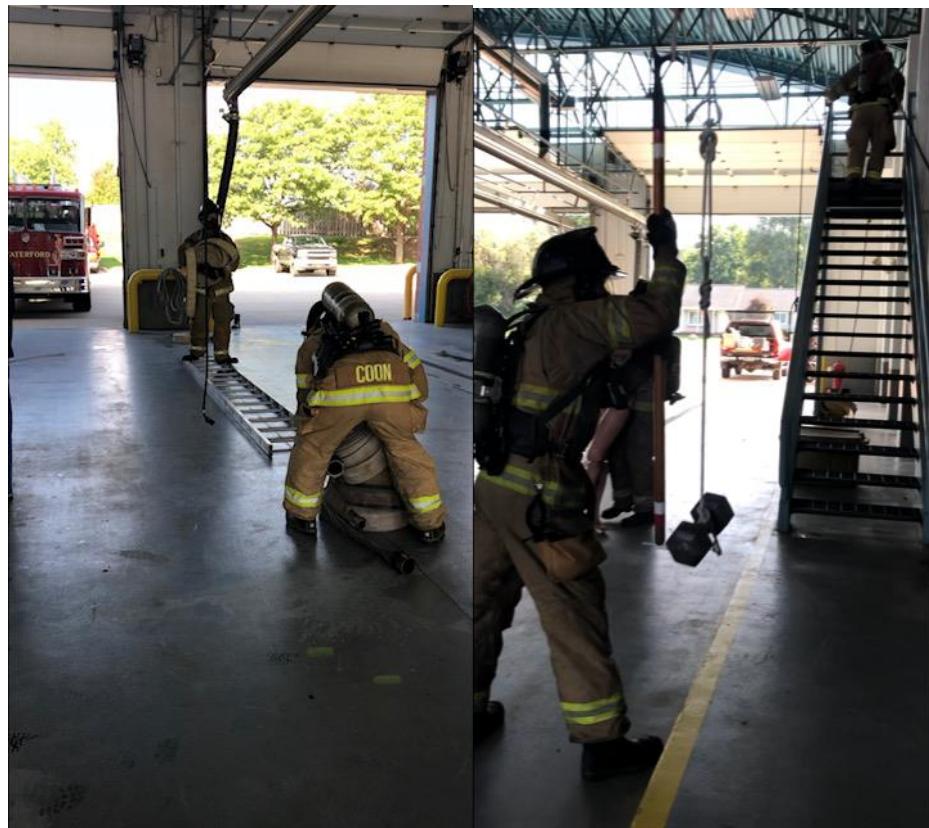
2019-Eastern Michigan Staff and Command Graduates



Hands on Training at 2831 Barkman, Waterford



Air Management



Building Construction



OAKWAY TRAINING – Saving Our Own



TRAINING – Ice Rescue and Bus Extrication

Hazardous Materials Team Report – Lt. Paul Dallas

The Waterford Regional Hazmat team is responsible for providing life safety and emergency mitigation of hazardous material situations. The team is responsible for Waterford Township, City of Lake Angelus, and the City of Pontiac. The WRFD Hazmat Team is part of the Oakland County Hazardous Materials Team South. The South Team has been comprised in the past of 8 area Fire Departments going up and down Woodward Ave and relies on mutual aid with each other for large-scale responses. This past year the cities of Rochester Hills and Farmington Hills have joined our OAKWAY mutual aid pact making our team larger and brings even more resources to our team. The first response area for the Waterford Regional Hazmat team handles smaller scale incidents on their own, in which the coverage area consists of highways, railways, an international airport, residential, commercial, and industrial areas. There are also several SARA Title III sites that have hazardous materials on site at all times. With the volume of truck traffic, rail traffic, and air traffic there is always a high potential for an emergency.



For the year 2019, we sent two more of our existing Ops level personnel on the team to technician school bringing up our total numbers of technicians on our department. Existing technicians have continued to attend all of our monthly trainings in better numbers, held within OAKWAY as well as attended other outside agency classes like rail car classes involving hazardous material mitigation as well as many other classes involving homeland security type issues offered by FEMA and Oakland County. WRFD has the most Hazardous Materials Technicians on the OAKWAY team consisting of almost a 1/3 of the total team roster. With some small changes to the WRFD hazmat team, our roster currently has 20-Hazmat Techs, and 6-Ops level members bringing our team to a total of 26-members. We are continuing to evaluate the needs of the team and the levels of training that the personnel are involved.

As the team leader I am tasked with scheduling trainings, motivation, recruitment of members, finding grants, coordinating with the OAKWAY hazmat team leaders, and other related duties.

The objectives of the 2020 WRFD Hazmat team are to:

- Protect the citizens and responders in Waterford, Lake Angelus, and the City of Pontiac.
- Provide team members with adequate training, and maintain minimum training required for members under OSHA 29 CFR 1910.120.
- Maintain participation with mutual aid agreement, OAKWAY.
- Assist the WRFD Training Division with yearly training for the fire department.
- Properly use allocated funds to maximize objectives of the Hazmat Team.



The goals of the WRFD Hazmat team are to:

- Increase participation among team members.
- Continued search for grants that allow for training, or needed materials.
- Increase participation with OAKWAY by attending monthly trainings.
- Provide hazmat training once every few months to the WRFD personnel to improve first response awareness and efficiency.
- Educate members to a higher level of training as needed.
- Hope to increase the WRFD hazmat budget from 5000\$ to a suitable amount to run the team properly.
- Get all existing team members into Technician school before the SAFER manpower grant expires.

Waterford Regional Fire Department in Action in 2019

CPR Training Captain Jim Cooper EMS Coordinator



Shop with a Hero Waterford Police and Fire



Waterford Regional Fire Department in Action in 2019

Firefighters provided 22 Thanksgiving meals to both Waterford and Pontiac Residents. Thanks to the Leadership from Captain Jim Cooper.



Drivers training



Waterford Regional Fire Department 2019

Trunk or Treat



This is an amazing story this young lady was involved in a serious car accident in the late months of 2018 several of our firefighters were honored by Oakland County Medical Control for their life saving efforts and an amazing outcome.



Information & Technology – **Driver/Engineer Don Claeys**



The Fire Department's Computer & Technology Team continues to work closely with the Waterford Township Information Services Department, to keep the department's complex network of desktops, laptops, mobile devices, printers, projectors, and cellular equipment fully operational.

Having a network environment that is both stable and functional allows the employees to more effectively and efficiently provide the services that the residents have come to expect. This functionality does however come at a cost and this year was no exception. As both internet and intranet expectations increase as far as speed and performance equipment becomes obsolete and incompatible requiring increased service, maintenance and at times replacement.

Most communities' fire stations are satellite centers of local municipal government and require similar access to information. Providing these locations the network security is paramount and requires the use of firewalls. 4 of the 9 fire stations had this equipment upgraded in 2019. While fire walls are an intricate part, other network equipment like routers and switches, computer aided dispatch equipment and monitors were also maintained or replaced.

We continue to enhance the user experience with both, Aladtec, our scheduling software, and CFIRS, county run National Fire Incidents Reporting System or NFIRS. Aladtec, while originally having a very steep learning curve, has proven to be very manageable and diverse. Currently Aladtec is managing our daily schedule including employee information, vacation, sick and comp time, as well as different events on calendar, classroom use, and payroll.



Not only was Aladtec successful in the scheduling, its primary purpose, but it is also being used to manage our different forms including apparatus inspections, apparatus work orders, comp time and overtime forms, absence reports, department SOP's, SOG's, station repair request, and probationary employee evaluations.

CFIRS-NFIRS reporting software has been an ongoing development with the county and shows continued improvement and understanding for our end users. We have also begun to train additional members on the Business Objects software that is used to extract information out of the newly developed CFIRS.

Our patient record keeping software, ESO Suites has been an outstanding addition from 4 years ago with numerous upgrades and enhancements with no significant performance interruptions. While the software functions as a web based program, compatible with computer platforms and devices, our iPads have been the most stable and provide the best area coverage. In their 4th year now we continue upgrading and replacing our older iPads with new units, while continuing to provide our teams with loads of other information needed to mitigate emergencies like Hazmat, Consumers Energy, DTE and our train yard information in ASK Rail.

This year new software “Bryx 911” was pursued as a replacement for an old Rube Goldberg type program that was serving as our CAD monitor and was obsolete. This equipment was unveiled to all of our apparatus and personnel after a test period showing its ability to rapidly disseminate information from dispatch to our devices.

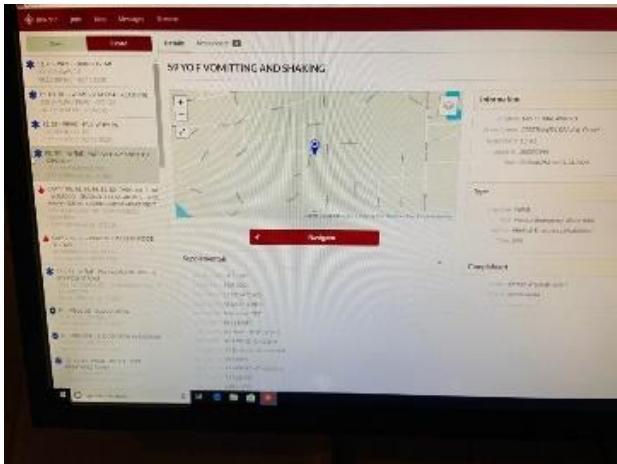
The past year showed a continued improvement as far as our 50+ PC’s were concerned as our scheduled maintenance program limits work slowdowns or stoppages. The IT department continued its contract with Applied Imaging that procures the maintenance and replacement of our printer inventory as well as our ink cartridges and as in the past we completed our annual upgrade of 25% of the department’s computers.

With continued support from the administration I look forward to enhancements in 2020 to our mobile command abilities, enabling our officers to meet the expectations of not only our community but also the neighboring communities that count on us in either high demand or on large scale incidents.

While the financial software that was started 3 years ago provides some records of expenses per apparatus and other cost/expenses, a mechanic or service based software is still of great interest and importance. The mechanics are in search of a program that could take the information from our truck inspection forms and have it automatically trigger the need for maintenance based on mileage or hours, and send this to all parties that are to be notified, thus enhancing the apparatus maintenance with hopes of increased service time and lower overall cost.

We completed the upgrades to all pc’s to Windows 10 and Microsoft Office 2016, and continue to work toward the completion of our phone upgrade that has triggered the revitalization of the computer rooms at all stations. This revitalization has included replacement of old equipment and battery backups, the re-cabling of most of the Waterford district stations as well as improved wifi.

With over 130 pieces of equipment and upwards of 110 personnel in the fire department, the IT department within town hall, should be commended for their due-diligence in the background of the quality programs that we share in and provide to the citizens of this community. We look forward to the continued growth and challenges that each New Year brings.



SCBA Equipment – Driver/Engineer/Paramedic Kevin Fletcher



Lt. Jon Johnson and Engineer Kevin Fletcher serve as our SCBA Technicians. WRFD has over 80 Self Contained Breathing Apparatus used to protect our firefighters when they are fighting any type of fire. We also have 2 air compressors/cascade systems used to fill the SCBA cylinders after use. This team also has charge over our oxygen cascade system used in providing EMS services. Our SCBA Technicians provide training on SCBA for all new hires. As we do every year, all Waterford Firefighters were FIT tested to determine proper SCBA mask sizing to meet NIOSH and NFPA standards. We are also responsible to fit test Waterford Water Department employees annually. In 2019, we provided three students with SCBA and Masks for fire academy

43 MSA Firehawk M-7 SCBA's were flow tested and repaired (as needed) in order to meet NIOSH and NFPA standards. 38 MSA Firehawk M-7XT SCBA's were flow tested and repaired (as needed) in order to meet NIOSH and NFPA standards.

In addition, the following equipment was tested and upgraded as needed for proper certification: Posi-Check for flow and function testing, PortaCount FIT Testing machine.

Air quality tests were done quarterly on the air compressor systems at Station 1 and 7 as required by NFPA standards. Compressor maintenance was performed as needed on both compressors. Cylinder Hydro Testing was performed on SCBA and Oxygen cylinders as needed by NIOSH.

All 8 of our Four Gas Monitors were serviced, including the replacement of oxygen sensors. Three new Four Gas Monitors were purchased.



All fire extinguishers were serviced and inspected. Three CO2 extinguishers were replaced due to age.

Four supplied air tanks were purchased for the Technical Rescue truck

Future Requirements:

- Replacing the supplied air hose for Technical Rescue truck for confined space.
- Bauer compressor class that will allow us to provide service on station 7's compressor
- Start replacing Four Gas Monitors due to their age.
- In 2019 all SCBA cylinders will need Hydro Testing.





Station Maintenance – **Battalion Chief Steve Bridger**

Battalion Chief Steve Bridger watches over all of our buildings. He receives building maintenance requests, schedules the repairs, and makes some repairs himself. He has charge over furniture and fixtures in the buildings as well. This is a big task having nine fire stations, and the barn at FS-8. For the fire stations in Pontiac, Steve works with John Bariant at Pontiac's DPW, as those buildings need repair and maintenance. Pontiac is responsible to pay for R & M at their stations.

Fire station 1: Station 1 had general maintenance throughout the year, we had to have repairs made to the water heater, and some maintenance to the boilers. We had a safety system installed on the bay doors with a red light green light that lets the driver know if the door is fixed in an up or down position. Some painting was done on the administration side along with the carpets being cleaned. We were approved to have parking lot repairs made to the failing concrete. That was pushed off until spring of 2020 due to weather in late 2019.

Fire station 2: Fire station 2 did not have any major repairs made in 2019, the safety door system was installed. We had some minor plumbing issues with drains and had to have some repairs made to the door openers and bay doors. Though it was installed in 2020 it fell under the 2019 budget was a new station generator that will power the entire building and all its components.

Fire station 3: Fire station 3 had had general maintenance throughout the building that includes work done to the bay doors, openers and plumbing repairs. The bay door safety system was also installed. The big ticket item at station 3 was the new generator had to be installed due to the original one failing.

Fire station 4: Fire station 4 had general maintenance throughout building. The generator that was originally installed was under sized and would not power all the stations systems, so it was replaced with a new properly sized generator that now powers the entire building. The bay door safety system was installed on all doors.

Fire station 5: Fire station 5 did not have any major repairs this past year. General maintenance was performed which includes some plumbing issues. The bay door safety system was installed. We had to replace some appliances at the station.

Fire station 6: Fire station 6 had a new boiler installed that replaced the original boiler to the building from the 1950's. The new boiler is a high efficient unit that should save the department a considerable amount of money on utility cost. Station 6 was plagued with numerous roof leaks that had to be repaired. The engine bay was completely painted along with the dorm room and the front office. New flooring was installed in the dorm and office.

Fire station 7: Fire station 7 did not receive any major maintenance in the 2019 year, we did have to have some work done to hvac system for some heating and cooling failures. General maintenance throughout the rest of the building.

Fire station 8: Fire station 8 had a pretty severe roof leak that did damage to the drywall ceiling in the locker room and bathroom. The roof was professionally repaired, and then the drywall was removed and replaced with new and finished off with new paint. The station was tested for mold and air quality after the leak was repaired. General maintenance throughout the rest of the building.

Fire station 9: Fire station 9 also had a new high efficient boiler installed to replace the original 1950's boiler. It will save the fire department considerable operating cost. General maintenance throughout the rest of the building.

Technical Rescue Team Report – Driver/Engineer Mike Moshier

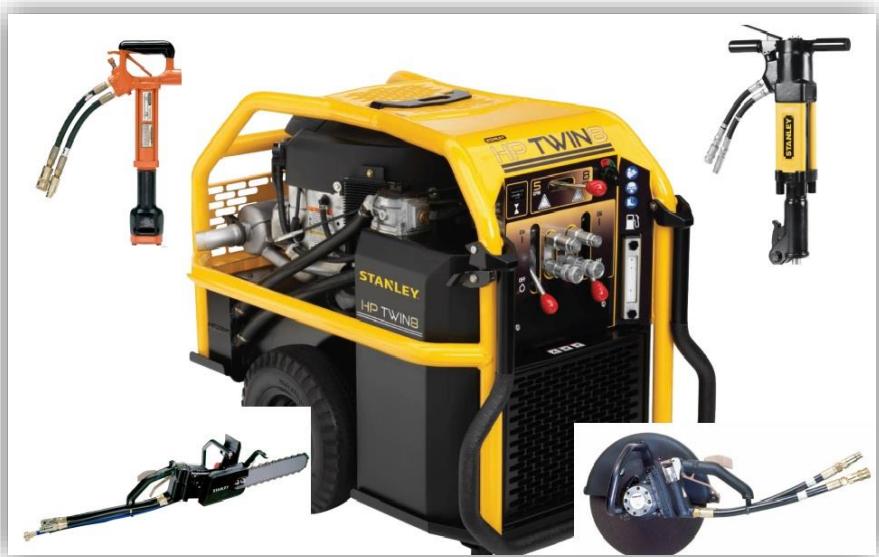


The Waterford Regional Fire Department's Technical Rescue Team (TRT), is responsible for responding to and mitigating dangerous incidents of the following nature: confined space rescue, trench rescue, rope or high angle rescue, structural collapse, and machine rescue. Any incident involving one of these extremely dangerous elements will require a highly trained team of personnel with a large cache of specialized equipment that is not typically found on your standard front line fire apparatus. WRFD's TRT responds in Waterford, Pontiac, and Lake Angelus. The TRT is also part of OAKWAY and will respond anywhere in Oakland County as well as thought out the state of Michigan if needed. Two of the OAKWAY Fire Departments are responsible for maintaining the Heavy Rescues. Those two departments are Southfield and Waterford Regional. With that comes a greater responsibility to maintain a larger cache of equipment as well as maintain a larger number of highly trained personnel. In the event of an incident needing a response from the TRT a small group of qualified personnel from each department in OAKWAY responds and works together to mitigate the hazard and attempt to rescue anyone in danger. The work of the TRT may be low frequency but, is of high risk to the rescuers and high reward to those involved or injured.

The goals for 2018 remained the same as previous years:

- Train as many team members as possible
- Have a good turnout for the training deployments throughout the year
- Respond to any incident that we are called to.

2018 was an overall success considering the goals that were set. We had numerous personnel attend classes for new training. For the training deployments in 2018 we had a total of 8 attend building collapse, 13 attend rope rescue, 7 attend confined space rescue, and 8 attend trench rescue, totaling about 288 hour of refresher training. We had a representative attend all 12 of the monthly Tech Rescue Board meetings in 2018 as well. In 2017 two grants were submitted by Mike Moshier to Oakland County's GAC funding and both were approved. The first was for a Stanley unit with 4 tools that operate off the hydraulics from the Stanley unit (see pictures below) totaling approximately \$25,000. This equipment was received in December of 2018. We also received 18 sets of cold weather gear for the team.



The second grant application was for a new set of medium pressure airbags. This included two sets of air bags, one that will be housed on Waterford's heavy and the other will be placed on another truck in OAKWAY after an assessment is completed. Each set includes all regulators and hoses needed and 3 airbags 1 BK, 1 CK, and 1 DK, totaling approximately \$24,000. We should see this equipment sometime in 2019.



As we look forward to 2019, we as a team are still trying to play catch up from the last 4-5 years where we have seen a number of new members but yet little training prior to 2017. Most of the new team members and many of the previous team members have little to no gear which is a problem we would like to start correcting. We would like to see us increase the number of Rescue Specialists (a rescuer trained to Technician level in all disciplines) in 2019. This would mean sending team members to various different classes. I have begun compiling a list of what classes are needed for what personnel so we can start enrolling in the 2019 classes. We also have a lot of equipment that either needs to be replace or updated. One of the primary needs for equipment is to replace our trench panels. The current panels are not up to the new standards. We hope to start reconfiguring the tech rescue truck in preparation for the new equipment and make better use of space for the current equipment. Now that we have started to receive some new equipment the process of reconfiguring the compartments on the tech rescue truck has begun. We are also looking to get the TRT truck outfitted with lights and sirens in 2019.

Emergency runs by type of incident

Fires Incident	Total and percentage of calls	
100 - Fire, other	33	9.91 %
110 - Structure fire, other (conversion only)	1	0.30 %
111 - Building fire	87	26.13 %
112 - Fires in structures other than in a building	4	1.20 %
113 - Cooking fire, confined to container	52	15.62 %
114 - Chimney or flue fire, confined to chimney or flue	3	0.90 %
116 - Fuel burner/boiler malfunction, fire confined	1	0.30 %
118 - Trash or rubbish fire, contained	25	7.51 %
123 - Fire in portable building, fixed location	1	0.30 %
130 - Mobile property (vehicle) fire, other	1	0.30 %
131 - Passenger vehicle fire	73	21.92 %
132 - Road freight or transport vehicle fire	1	0.30 %
134 - Water vehicle fire	1	0.30 %
138 - Off-road vehicle or heavy equipment fire	1	0.30 %
140 - Natural vegetation fire, other	2	0.60 %
142 - Brush, or brush and grass mixture fire	13	3.90 %
150 - Outside rubbish fire, other	9	2.70 %
151 - Outside rubbish, trash or waste fire	8	2.40 %
153 - Construction or demolition landfill fire	1	0.30 %
154 - Dumpster or other outside trash receptacle fire	10	3.00 %
160 - Special outside fire, other	5	1.50 %
170 - Cultivated vegetation, crop fire, other	1	0. %
Total - Fires	333	2.41 %

RESCUE & EMS INCIDENTS

300 - Rescue, emergency medical call (EMS) call, other	104	1.05 %
311 - Medical assist, assist EMS crew	489	4.96 %
320 - Emergency medical service, other	60	0.61 %
321 - EMS call, excluding vehicle accident with injury	8,229	83.46 %
3211 - EMS call, excluding vehicle accident with injury	90	0.91 %
322 - Vehicle accident with injuries	757	7.68 %
3221 - Vehicle accident with injuries and extrication	4	0.04 %
323 - Motor vehicle/pedestrian accident (MV Ped)	21	0.21 %
324 - Motor vehicle accident with no injuries	81	0.82 %
331 - Lock-in (if lock out , use 511)	1	0.01 %
353 - Removal of victim(s) from stalled elevator	11	0.11 %
354 - Trench/below grade rescue	1	0.01 %
356 - High angle rescue	2	0.02 %
360 - Water & ice related rescue, other	5	0.05 %
361 - Swimming/recreational water areas rescue	1	0.01 %
365 - Watercraft rescue	1	0.01 %
381 - Rescue or EMS standby	3	0.03 %
Total - Rescue & Emergency Medical Service Incidents	9,860	71.40

HAZARDOUS CONDITION

400 - Hazardous condition, other	2	0.30 %
410 - Flammable gas or liquid condition, other	1	0.15 %
411 - Gasoline or other flammable liquid spill	10	1.49 %
412 - Gas leak (natural gas or LPG)	100	14.93 %
420 - Toxic condition, other	1	0.15 %
421 - Chemical hazard (no spill or leak)	9	1.34 %
422 - Chemical spill or leak	1	0.15 %
423 - Refrigeration leak	1	0.15 %
424 - Carbon monoxide incident	123	18.36 %
440 - Electrical wiring/equipment problem, other	17	2.54 %
442 - Overheated motor	5	0.75 %
443 - Light ballast breakdown	1	0.15 %
444 - Power line down	381	56.87 %
445 - Arcing, shorted electrical equipment	15	2.24 %
461 - Building or structure weakened or collapsed	1	0.15 %
463 - Vehicle accident, general cleanup	2	0.30 %
Total - Hazardous Conditions (No fire)	670	4.85 %

SERVICE CALLS

500 - Service Call, other	38	3.04 %
510 - Person in distress, other	3	0.24 %
511 - Lock-out	2	0.16 %
512 - Ring or jewelry removal	1	0.08 %
520 - Water problem, other	3	0.24 %
522 - Water or steam leak	2	0.16 %
531 - Smoke or odor removal	22	1.76 %
540 - Animal problem, other	1	0.08 %
542 - Animal rescue	2	0.16 %
550 - Public service assistance, other	240	19.23 %
551 - Assist police or other governmental agency	102	8.17 %
552 - Police matter	3	0.24 %
553 - Public service	46	3.69 %
554 - Assist invalid	488	39.10 %
555 - Defective elevator, no occupants	1	0.08 %
561 - Unauthorized burning	294	23.56 %
Total - Service Call	1,248	9.04 %

GOOD INTENT CALLS

554 - Assist invalid	488	39.10 %
600 - Good intent call, other	195	19.25 %
611 - Dispatched & cancelled en route	661	65.25 %
6111 - Cancelled Prior to Dispatch	38	3.75 %
611E - EMS: Dispatched & cancelled en route	16	1.58 %
622 - No incident found on arrival at dispatch address	36	3.55 %
631 - Authorized controlled burning	6	0.59 %
650 - Steam, other gas mistaken for smoke, other	2	0.20 %
651 - Smoke scare, odor of smoke	56	5.53 %
652 - Steam, vapor, fog or dust thought to be smoke	1	0.10 %
661 - EMS call, party transported by non-fire agency	1	0.10 %
671 - Hazmat release investigation w/ no hazmat	1	0.10 %
Total - Good Intent Call	1,013	7.34 %

FALSE ALARMS & FALSE CALLS

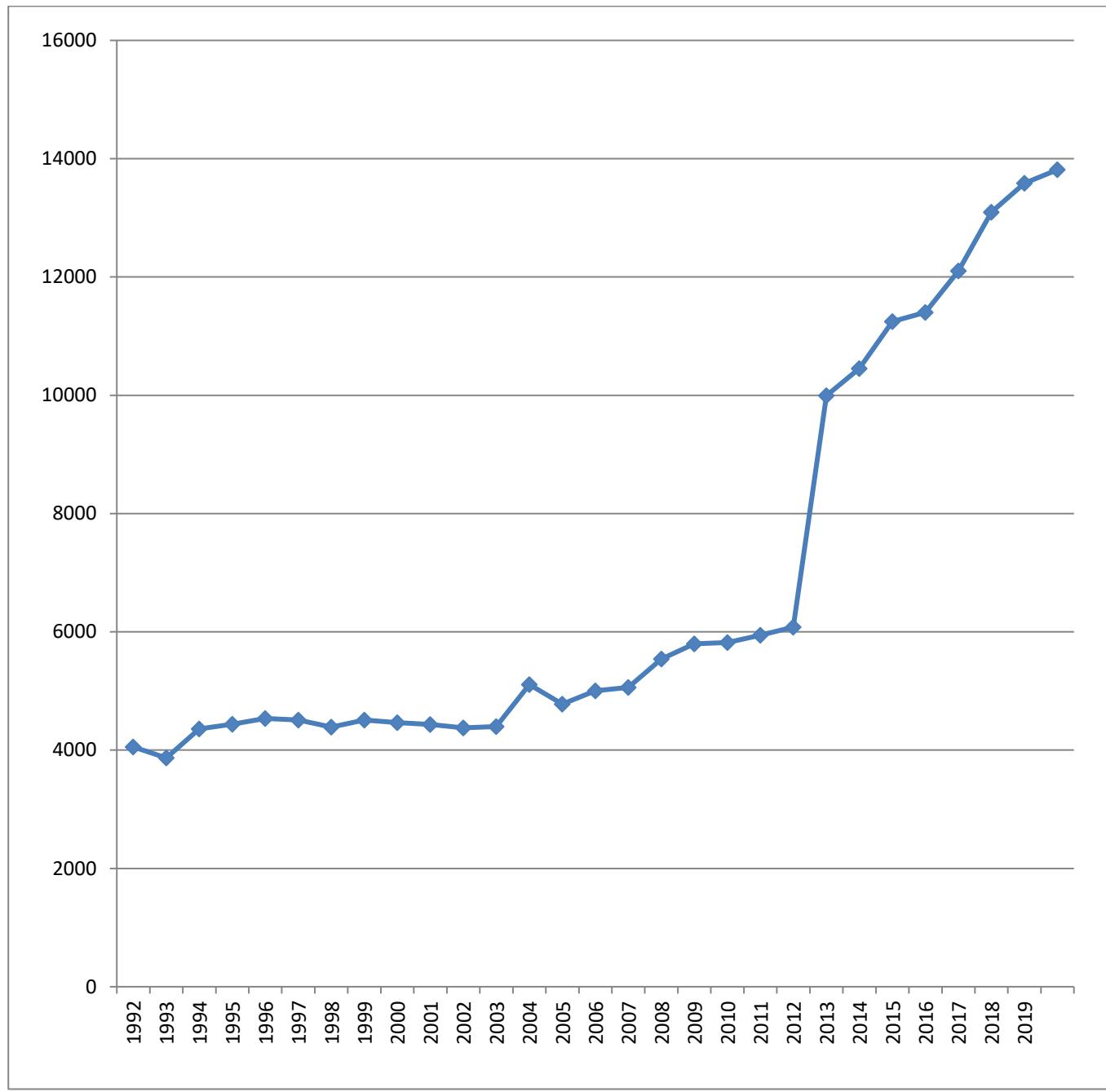
700 - False alarm or false call, other	62	9.13 %
710 - Malicious, mischievous false call, other	2	0.29 %
712 - Direct tie to FD, malicious/false alarm	1	0.15 %
714 - Central station, malicious false alarm	1	0.15 %
730 - System malfunction, other	2	0.29 %
731 - Sprinkler activation due to malfunction	2	0.29 %
733 - Smoke detector activation due to malfunction	5	0.74 %
735 - Alarm system sounded due to malfunction	12	1.77 %
736 - CO detector activation due to malfunction	9	1.33 %
740 - Unintentional transmission of alarm, other	2	0.29 %
741 - Sprinkler activation, no fire - unintentional	3	0.44 %
742 - Extinguishing system activation	9	1.33 %
743 - Smoke detector activation, no fire – unintentional	11	1.62 %
744 - Detector activation, no fire - unintentional	60	8.84 %
745 - Alarm system sounded, no fire – unintentional	445	65.54 %
7451 - EMS Alarm system sounded, unintentional	46	6.77 %
746 - Carbon monoxide detector activation, no CO	7	1.03 %
Total - False Alarm & False Call	679	4.92 %

TOTAL 2019 CALLS FOR SERVICE 13,810 1.67% increase compared to 2018



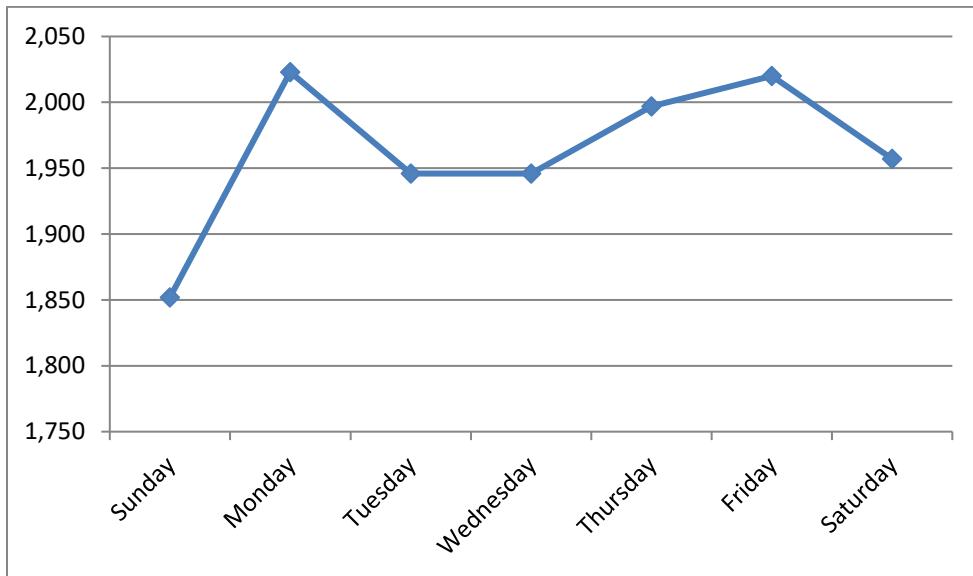
Calls by the Years 1992-2019

Note: 2012 First year as Waterford Regional Fire Dept.



Calls by Day of the Week

Monday was the busiest day of the week and Sunday is the slowest.



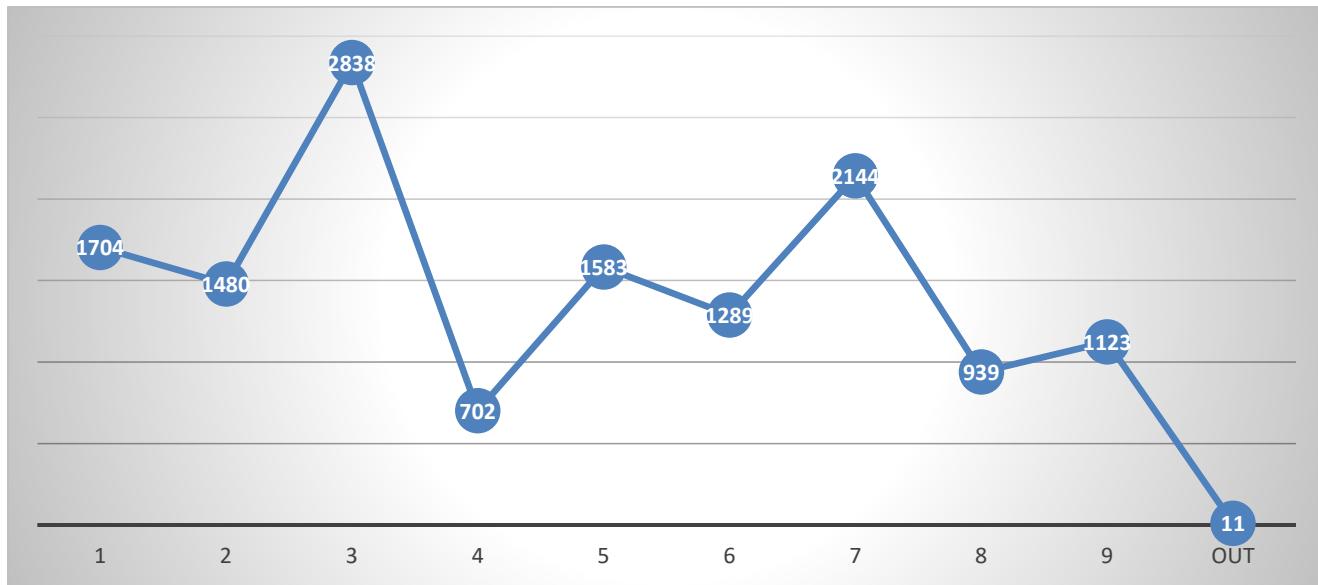
Calls by time of day

1 pm is the busiest times during the day, while 4am is the slowest.

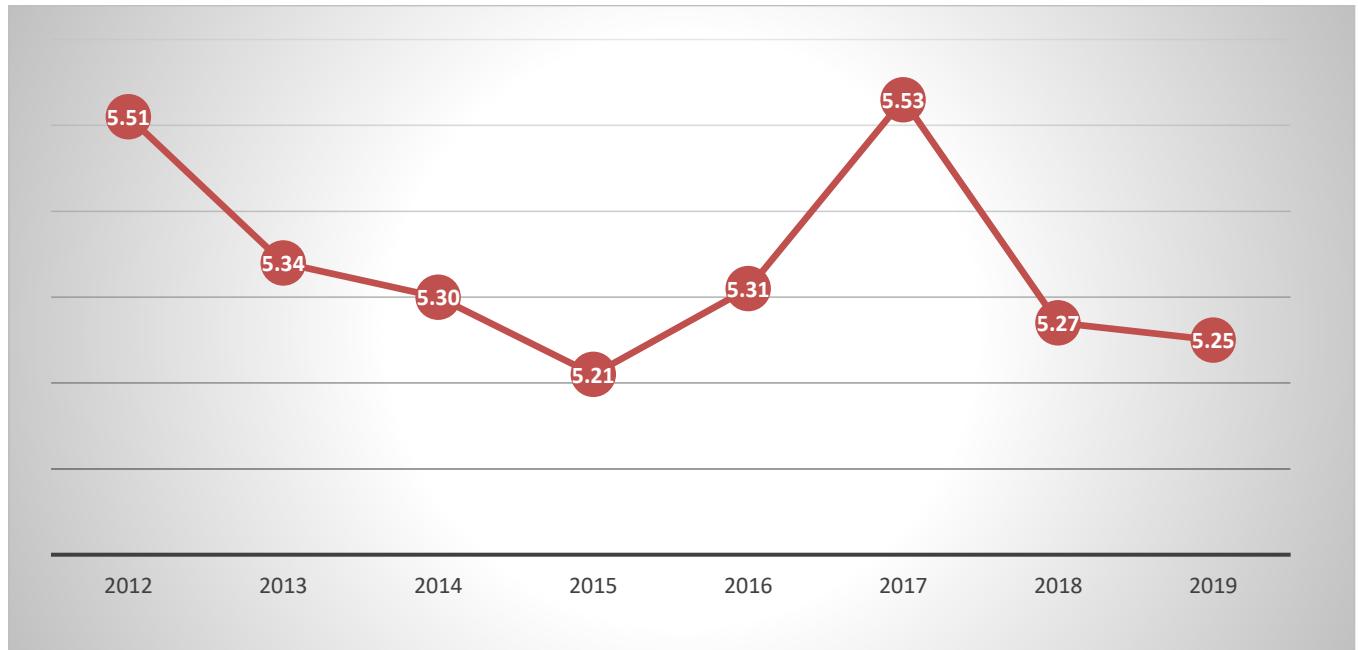
Time of Day	Number of Incidents for the year
00:00:00 to 00:59:59	411
01:00:00 to 01:59:59	367
02:00:00 to 02:59:59	293
03:00:00 to 03:59:59	268
04:00:00 to 04:59:59	251
05:00:00 to 05:59:59	274
06:00:00 to 06:59:59	315
07:00:00 to 07:59:59	429
08:00:00 to 08:59:59	487
09:00:00 to 09:59:59	679
10:00:00 to 10:59:59	742
11:00:00 to 11:59:59	795
12:00:00 to 12:59:59	741
13:00:00 to 13:59:59	842
14:00:00 to 14:59:59	797
15:00:00 to 15:59:59	785
16:00:00 to 16:59:59	777
17:00:00 to 17:59:59	768
18:00:00 to 18:59:59	787
19:00:00 to 19:59:59	703
20:00:00 to 20:59:59	668
21:00:00 to 21:59:59	640
22:00:00 to 22:59:59	540
23:00:00 to 23:59:59	449

Calls by Fire Station

Station #3 is the busiest. Station #4 is the slowest.

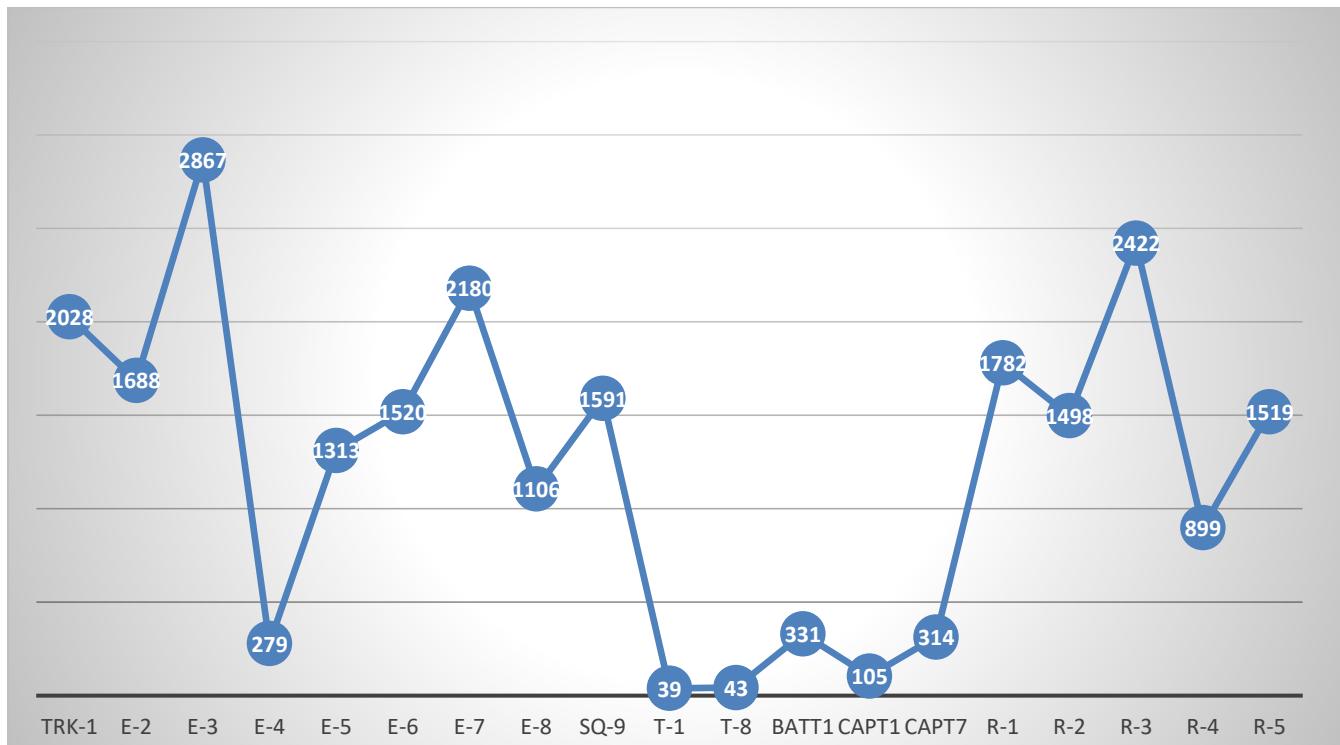


Average Response Times by Year



Calls by Fire Department Unit

Engine 3 is the busiest Engine. Rescue 3 is the busiest Rescue.





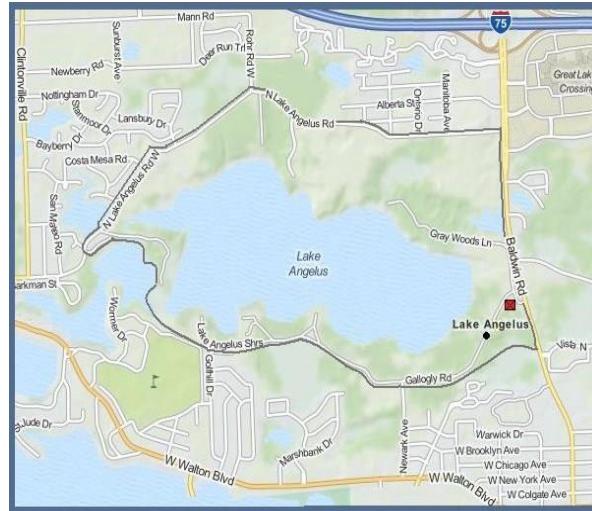
City of Lake Angelus

The Waterford Regional Fire Department provides fire and paramedic emergency services to the entire City of Lake Angelus. Fire Station 2 serves the West portion and Station 6 for the East portion. However, any of our nine fire stations are capable of providing back up coverage and do so as necessary.

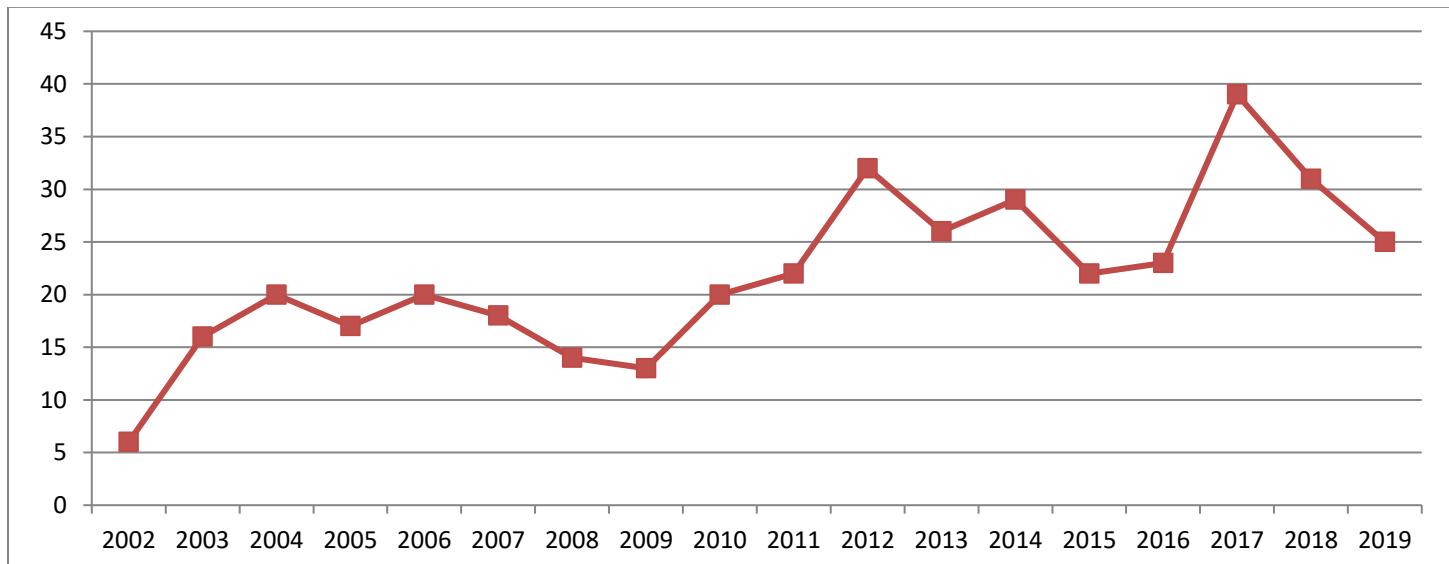
Chief Covey attended a Lake Angelus City Council meeting during the year. The 2018 annual report was presented including a review of the services provided and our commitment to the City of Lake Angelus and its residents.

2018 Call Volume for Lake Angelus

House Fire	0
Car Fires	0
Brush fires	2
EMS Calls	9
Power Line Down	2
Public Assist	5
Cancelled Enroute	3
False Alarm	4
TOTAL	25



Lake Angelus Calls by Year





City of Pontiac

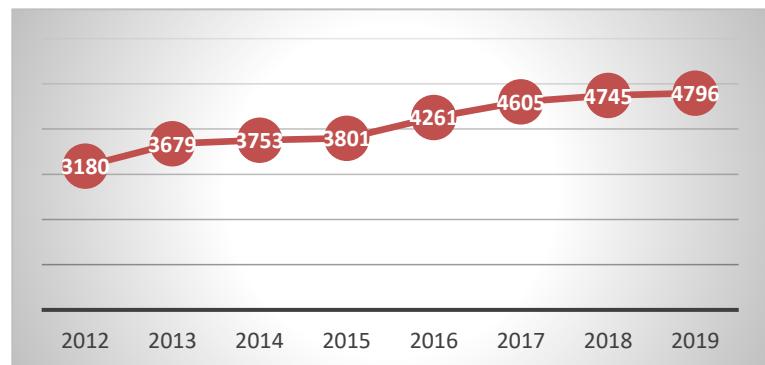
Waterford Fire Department began providing emergency services to the City of Pontiac on February 1, 2012. Four fire stations are staffed 24/7/365 in Pontiac with 13 firefighters. We continue to provide basic life support to the Pontiac residents for EMS calls, working alongside Star EMS and the Oakland County Sheriff's Office.

Total alarms for 2019 were at 4,796, which is a 1.1% increase; fire calls declined by nearly 19.71%. 62 fires were single-family homes, 40 were apartment fires, and 55 were car fires.

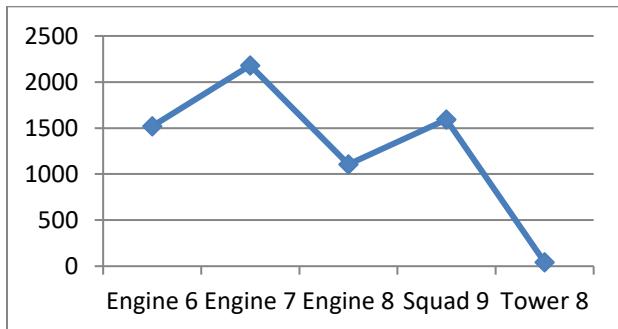
Fire Chief Covey and Deputy Fire Chief Wallace meet with the Public Safety Sub-committee for City council on a monthly basis.

Call Volume in Pontiac by the year

<u>2019 Incident Types in Pontiac</u>	
Fires	219
EMS calls	2954
Hazardous Conditions	347
Public Service	362
Good Intent	532
False Alarms	381
Other - Non Fires	3
Total	4798



2019 Pontiac Fire Units Response Chart



2019 Calls by Pontiac Fire Stations

