

# **ANNUAL REPORT 2019**

**City of Vandalia Division of Fire** 



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## MESSAGE FROM THE FIRE CHIEF



On behalf of the entire City of Vandalia Fire Division team, I am pleased to present you with the Division of Fire's 2019 Annual Report. The information included will provide you with insight into the hard work and dedication that all of the members of the Division put into the organization day in and day out. It is only through a cooperative team effort that we are able to accomplish our "Mission".

I feel that the statistical information included in this report clearly highlights our capability to perform. The report details both the emergency and non-emergency activities of the Division in 2019. The contents truly highlight the amount of time that the Fire Division staff spends dedicating themselves to servicing the needs of our community.

We are proud of our work and what we have accomplished in 2019. We hope that you can identify that pride through this report. We are grateful for the opportunity to serve and for the support provided to the Division by the community, the City Manager, the Mayor, and members of Council. We look forward to your continued support in the years to come.

Thank you for the opportunity to serve.

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Respectfully submitted,

Chad E. Follick, Fire Chief

## "THE VFD WAY"



**The Mission** - "Our mission is to provide superior fire, emergency medical, educational and prevention services to the citizens we serve. By consistently delivering these services in a courteous, safe and professional manner we hope to enhance the quality of life for the citizens of Vandalia."

**The Vision** - "Our vision is to be a progressive Fire/EMS service that provides the highest quality service at the lowest possible cost to our customer."

Our Customer Service Philosophy - The "customer" is formally defined as "one who buys goods or services", and informally defined as "any person with whom one has dealings." Our organization traditionally adopts an informal approach and our organizational vocabulary is "keeping it simple" and informal. The Division of Fire no longer limits its organizational definition of the term "customer" to its formal interpretation. We have expanded our definition to include any person who receives our services, and anyone with whom our members have dealings.

## **CAPITAL IMPROVEMENT PROJECTS 2020**

1. Medic Unit Replacement- the Division of Fire purchased a 2019 International Heavy-Duty Horton Medic Unit (Medic 3). This unit replaces a Ford van style medic purchased in 2008. This purchase completes our transition from medium-duty medics to all heavy-duty Medic units. This transition will hopefully extend the in-service life of our medics by 3 years, allowing us to replace medics every ten (10) years instead of at seven (7) years. There was a slight delay in the manufacturing process, we were supposed to take delivery of Medic 3 in fall of 2019. The new in-service date for Medic 3 is March of 2020. This is a \$275,000.00 project.







Above- Photos of new Medic 3 in production late 2019.

2. Purchase All Terrain Vehicle (ATV) and Trailer- the Division of Fire's Special Operations Group has maintained a John Deere Gator ATV for use in remote areas and at special events since 1998. The Division of Fire was one of the first fire departments in the area to have this type of specialized resource. The Division of Fire upgraded, replacing the 1998 unit in 2019. The Division of Fire purchased another John Deere Gator, this unit is four-wheel drive instead of the six wheel unit we purchased in 1998, which gives us better access to the trails in the Metro Park and along the railroad system. The unit seats four-five personnel plus a victim if needed. Upgrading the seating allows us to deliver 4-5 rescuers, the older unit could only seat 2-3. The replacement was a capital expense purchased using "Safe and Stable" income tax money. The project was budgeted for \$30,000, which allowed us to purchase the unit with the accessories it needed (winch, emergency lighting, and a "med-bed") and an open trailer to transport the unit to emergencies.



The Division of Fire's new ATV giving rides at the Division of Fire's annual Open House 2019.

3. Training Mannequin and CPR Mannequin Upgrades- the Division of Fire is committed to delivering the best available service to our customers. The only way for us to ensure that we are ready to achieve that goal is through practice. Much of what we do in the fire service is based on memorization and or "muscle memory" and when our instructors are training our personnel, the best way to build that "muscle memory" is to provide our staff with copious amounts of practical and/or hand-on training. The Division of Fire looked to technology in 2019 to assist us in improving our ability to deliver that high quality training. The Division of Fire purchased a fully computerized life size training mannequin that can be used in many different formats to provide emergency medical training to our staff, as well as CPR, First Aid, and/or Stop the Bleed Training to other City employees or in our outreach training efforts. In addition to this purchase the Division of Fire upgraded all of its CPR mannequins, which are used in our outreach training, to provide "positive feedback" which is technology that lets the student know if they are performing high quality CPR. This project was budgeted at \$25,000.00.





Pictured abouve (left); the Division of Fire's new training mannequin, fully computerized and automated to provide the most realistic training possible. (Right) several of the Division of Fire's CPR mannequinn upgraded as part of this capital project to provide positive feedback for both the professional and lay rescurer.

- 4. Forcible Entry Trainer- the Division of Fire purchased a forcible entry training prop in 2019. The stand alone, portable unit provides firefighters and police officers an opportunity to practice forcible entry tactics without actually damaging a building. Again, another opportunity for firefighters to build these tactics and build "muscle memory". This project was a \$10,000.00 project.
- 5. **Rescue Equipment Purchase and Upgrades** A reoccurring part of the Division of Fire's capital improvement plan is, the Division of Fire budgets \$25,000.00 every two years to upgrade or enhance our special operations/special rescue equipment cache. The following purchases were made as a part of this capital project:
  - Vehicle Stabilization Equipment (CRIB-ITS)
  - Man In Machine Tool Kit
  - Replaced (3) Rescue Air Bags
  - Dry Water Rescue Suits
  - Water Rescue Protective Clothing Replacement
  - Rope Rescue Hardware Replaced
  - Addition of a Band Saw to Rescue Engine
  - Addition of a Pneumatic Shear to Rescue Engine
  - Addition of a Cutting Torch to Rescue Engine
  - Upgraded Rescue Protective Clothing (Helmets and Lights)
  - 10' Rapid Inflatable Water/Ice Rescue Craft



Above- A firefighter wearing up graded ice and water rescue PPE as a part of this capital project.

- 6. **Installation of Large Ventilation Fan Fire Station 1** The Division of Fire replaced three (3) smaller residential type ceiling fans in the apparatus room at Fire Station 1 with a larger computerized ventilation fan. This helps to control the climate inside the apparatus room where our sensitive medical equipment and emergency medications are stored. Especially in the summer months where the temperatures in the bay were 80-85'. The fan has proven useful in the colder months as well. With the fan running, not as many of the radiant heaters need to be operating to keep the apparatus room warm and comfortable; which hopefully will equate to low natural gas costs at Fire Station 1. This project was a \$20,000 project, which included the electrical work and installation.
- 7. **Roof Repair at Fire Station 2** In the wet spring and early summer months, the Division of Fire experienced several roof leaks at Fire Station 2 on Brown School Road. Leaks, that despite several attempts to "patch" continued into early summer and caused some damage to the ceiling tiles and flooring on the second level at Fire Station 2. An emergency budget appropriation was approved fall of 2019 by City Council for an \$82,000 repair project at Fire Station 2. Our roofing contractors mobilized shortly after the projects approval and the project concluded in early 2020.

## **TORNADO RESPONSE**

On May 27, 2019, several predicted severe storms began to develop and work their way through the Miami Valley. Several weather warnings were issued and local television stations began to interrupt network television programming to cover the storms live. At approximately 9:48pm a historic outbreak of 15 tornados began with an EF4 tornado that made its initial impact in Brookville and then traveled west impacting Trotwood, Clayton, Harrison Township, North Dayton, and Riverside. This powerful E4 tornado, with a maximum wind impact of 172 mph, was reported by the National Weather Service (NWS) to have been on the ground for 20 minutes and NWS reported that the tornado was up to a mile wide.

At 10:30pm, the NWS issued a Tornado Warning that placed the southern ½ of the City of Vandalia in the direct path of a radar indicated tornado. At 10:31pm the Vandalia 911 Center announced over the police/fire main radio channels that the 911 Center was activating the city's weather warning sirens. Within seconds after that radio broadcast, the city's three weather warning sirens were activated and sounded for a full minute and then every five minutes (for a full minute) beyond the first activation up until the all clear shortly after 11:30 pm. Simultaneously (at 10:31:34), Hyper Reach began sending out the first of three, tornado warnings (by cell/landline call, page, and text). The Hyper Reach system made three rounds of notifications, around 11,000 calls/texts during each round. Each notification going out in just under 36 minutes.

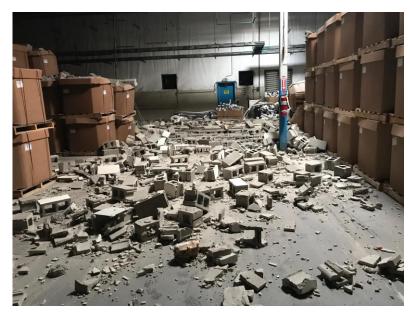
At 11:10pm, the NWS issued a second Tornado Warning for Vandalia. This warning would be upgraded to a Tornado Emergency by the NWS, at approximately 11:15pm.

At 11:15pm, Medic 1 was requested mutual aid to Clayton/Trotwood to assist with a building collapse as a result of a tornado touchdown in that area.

At 11:31pm, the Division of Fire was dispatched mutual aid to Trotwood Fire on the report of a collapsed building. Trotwood requested both a Rescue Engine and a Medic, but due to staffing, the Rescue Engine was the only resource sent. While responding to this incident, the Rescue ran into several areas around Denlinger, Westbrook, and Basore Drive that were impassible due to downed trees, wires, abandoned and/or overturned vehicles. The Rescue Company never reached their original assignment, but made several stops along the way where they were able to make rapid damage assessments, affect several physical rescues from damaged homes, and ensured that there were no injuries before moving on to the next emergency.

At 11:46pm, the Division of Fire received its first "tornado related" response, an automatic fire alarm at Scene 75 on Poe Ave. The on-duty Shift Commander arrived on scene at Scene 75 at approximately 11:51pm and noted that the 84 Lumber building had been completed destroyed and that Scene 75 had substantial damage to its roof. Knowing that there was a significant impact in this area, the on-duty Shift Commander requested additional fire/EMS resources and requested that the Rescue Company return to the city. The Shift Commander requested that the City's Emergency Operations Center/Plan be activated, and that ALL available off-duty fire/EMS personnel be recalled.





Above- Crews making damage assessments at commercial structures along Poe Ave and Stop 8 Road. (left) Significant damage to the roof, structure, sprinkler systems, fire alarm systems, and games/rides within the building at Scene 75. (Right) Significant structural damage, as a wall collapsed within a warehouse on Stop 8 Road.

Shortly after arriving at what we now know as the "west area command post" (at Benchwood Road and Miller Lanes) the onduty Shift Commander began assigning the responding and recalled fire/EMS resources to conduct building searches and survey's, to secure utilities and to provide at least an initial damage report along Benchwood Road, Miller Lane, Poe Avenue, and Stop Eight Roads. Crews were also engaged in assisting Butler Fire/Police with the same assignments on Dixie Drive north of Benchwood Road.



Left- A residence along Benchwood Road that was completely destroyed by a tornado. Crews arrived on the 27<sup>th</sup> to find two adults and a K9 trapped in the entryway to a small basement/crawl space at this residence. No one sustained injuries.

Crews initially made ten (10) physical rescues; two from a residence on Miller Lane, two (plus K9) from a residence on Benchwood Road, and six from a church on Miller Lane. Crews provided an initial pass securing any of the utilities that they could reach on approximately 45 structures, and performed some debris removal to ensure that the Fire, EMS, Police, and Public Works could get into these areas to provide additional services. A second area command post ("east area command") was established on Poe Ave, to deal with ten commercial structures that had been impacted, including one with hazardous materials storage.



Left- Captain Steve Milliken and Captain Jason Eckert (east area command) discuss a plan of action for conducting search and rescue missions along Poe Ave and Stop 8 Roads.

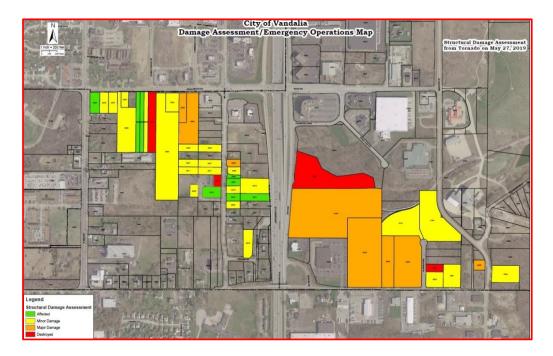
An emergency shelter was activated at Morton Middle School, operated by the Red Cross for almost two full weeks. EMS crews made frequent visits. On four occasions in that two-week period, EMS crews were summoned to assist evacuees with emergency medical problems.

At approximately 5am in the morning, command posts were demobilized, and crews were sent back to the fire stations for rehabilitation and regroup.

The Fire Prevention Bureau teamed up with our City Building Inspectors to conduct more concise damage assessment. Together ensuring that all the utilities (and or fire alarms/fire sprinkler systems damaged) were shut off and that there was a plan to protect the remaining building (shoring, board up, fire watch, fencing, or security needs).

Right- Firefighter, Fire Prevention and Building Inspectors walking the tornado stricken area doing damage assessments and utility controls.





The map above shows the results of damage assessments on May 28th and May 29th. Crews inspected 47 structures; 4 were destroyed, 8 ssustained major damage, 24 sustained minor damage, 8 were simply affected by the tornado/winds, and 3 sustained no damage.





Above- Drone photo of residential structures on Benchwood Road that were completely destroyed. The debris fields stretched for several hundred yards, and included two automobiles, a boat, and two collapsed garages. Areas that rescuers were not able to see on the night of the event. Drone photos and videos helped us to provide a better assessment of damage to structures, to search larger debris fields, and to see damage that we were not able to see from the street.



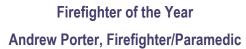


Above- Photos of two residential structures destroyed by the tornado along Benchwood Road, the house on the right is one of the structures crews made a physical rescue from on the night of the 27<sup>th</sup>.



Left - A commercial vehicle that was parked in a parking lot along Stop 8 Road. The truck appears to have tumbled nearly 100 yards, taking down electrical lines and utility poles in its path.

## **ANNUAL AWARDS**





Firefighter Porter has been a member of the Division of Fire since 2012. Firefighter Porter has been a career member of the Division of Fire for just about one year. In that time, Firefighter Porter has served as the Firefighter In-Charge at Fire Station 1, on third platoon. Firefighter Porter's peers wrote in their nomination:

"Andrew is the kind of firefighter/paramedic I would want responding to and/or treating my own family. His dedication to the customer is very apparent. From going the extra mile on a lift assist so the customer is at ease or at the scene of a full arrest in the calmness he displays and the confidence he has in his abilities."

"Andrew has definitely risen to the demands of his new position within the Division of Fire, he works hard to ensure that everything his crew is assigned gets completed and completed right the first time. Andrew is developing as a mentor, he offers to work with and train younger personnel on every shift and he has even come in on his days off to assist with training sessions".

As you can tell, Firefighter Porter gives and receives a great deal of respect to his peers, he has performed well during his probation and continues to mentor to the part-time personnel assigned to his shift. Firefighter Porter is also an excellent student, he is committed to learning his profession and works both on and off duty to obtain as much knowledge and experience as he can. Firefighter Porter also works part-time for the Bethel Township (Clark County) Fire Department as a Fire/EMS Lieutenant.

# EMS Person of the Year Derek Copp, Firefighter/Paramedic



Firefighter/Paramedic Derek Copp has been with the Division of Fire since 2012, serving first as a part-time Firefighter/EMT. In 2018, Firefighter Copp was promoted to a career Firefighter/Paramedic position. Firefighter Copp has worked as the Firefighter-In Charge at both Fire Stations since his promotion, but he is currently assigned to Fire Station 2, on First Platoon. Firefighter Copp's peers wrote in their nominations:

"Derek stepped up this past year in providing training to our staff and has been instrumental in providing in house EMS training in the form of working with our new staff members to get them to a level of competence that allows them to perform as a "Second" on our medics within a time frame that we establish as a team".

"Derek was also instrumental during our budget process, where in my absence, he worked to develop and ultimately present each of my shifts assigned projects to the budget work group. Derek took this responsibility very seriously, spending a great deal of time researching each project, getting competitive quotes, putting written proposals together, and then presenting them to the work group".

"Derek has motivated me to go on and become a paramedic, he has volunteered to work with me to study and mentor me throughout the paramedic training course".

Derek is the first to volunteer for projects and to take overtime, often leaving his other part-time job and/or his wife and son to work when we need additional help.

#### **Letters of Commendation & Challenge Coins**

- 1. **Fire Marshal Jason Eckert** Recognized for providing "value add" customer service to a local family working to reopen a restaurant. Working thru a significant language barrier, Marshal Eckert worked to assist the family during every phase of the construction, final inspection and opening.
- First Platoon EMS crews- Recognized for the handling of two EMS incidents where victims suffered traumatic injuries. The crews were able to quickly respond, provide initial advanced level EMS care and get to an emergency department in a rapid fashion.
- 3. **Firefighter Fox and Firefighter Waite** Were recognized for going above and beyond in their care for an infant whose mother was experiencing a medical emergency.
- 4. Firefighter Webb and Firefighter Monroe (pictured on the right)-Were recognized for going "above and beyond" their normal duties and returning to the residence of a patient that they had just treated and transported to a local hospital to finish the customer's yard work.
- Firefighter Whitlock- Was recognized for his work with the younger firefighters on his shift. Firefighter Whitlock has mentored several of the newer members of his crew in 2019.
- Fire/EMS Crews- Were recognized for leaving their families while still in their "safe areas" sheltering from the storms and responding back into work immediately following an outbreak of tornados throughout the Valley in May 2019.



#### **Unit Citations**

- 1. **Second Platoon Firefighters** Received a unit citation in recognition of their actions in the immediate wake of a F4 tornado that struck the southern part of the City in May of 2019. Crews responded to several calls for service, affected ten (10) physical rescues, worked to ensure that utilities were off, and that everyone was safe.
- 2. Third Platoon Firefighters- For their response to a reported house fire in April of 2019. Crews were quick, efficient, and considerate of the customer's home and belongings. The customer, despite suffering a fire incident that significantly damaged their home wrote a letter recognizing the crew efforts, and specifically mentioning the caring and compassionate support of Captain Stitzel, the Shift Commander working on that day.

#### **Meritorious Service Medals**

- 1. **Firefighter/Paramedic Mitchell and Buker** Were recognized for going "above and beyond" their job assignments to assist the Division of Fire in the delivery of CPR, AED, and First Aid training in 2019.
- 2. **Firefighter Buttelwerth, Warner, and Schuman** were recognized for their commitment to making the Division of Fire's Fire Explorer's Program the best that it can be. The men have worked to recruit, retain, and train dozens of high school age kids that participate in the Division of Fire's program.







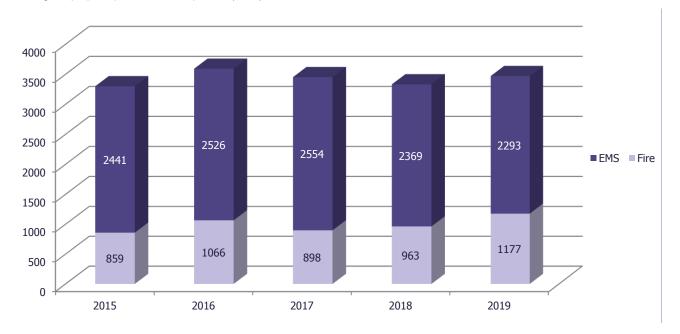
Above- several photos of the Division of Fire's Fire Explorers engaged in training.

## **RESPONSE DATA**

#### **Calls for Service**

The Division of Fire continues to see steady increases in both fire and emergency medical calls for service. The Division of Fire answered a total of <u>3470</u> calls for service in 2019.

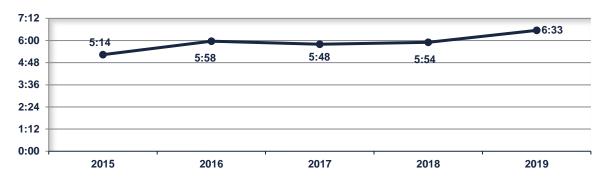
The chart below is a comparison of calls for service over the past five years, the darker purple represents EMS calls (2293) and the lighter purple represents fire responses (1177).



#### **Response Times**

The Division of Fire takes pride on being able to provide efficient and timely service to its customers. This statistic is one of the most closely monitored by the Division of Fire. The Division of Fire is committed to achieving an average target response time of five (5) minutes or less to any dispatched emergency. The response time recommendations of the National Fire Protection Association (NFPA 1710 standard) are slightly higher than those established by the Division of Fire. When asked why, the answer is simple; we feel we can get there faster than the national average (standard).

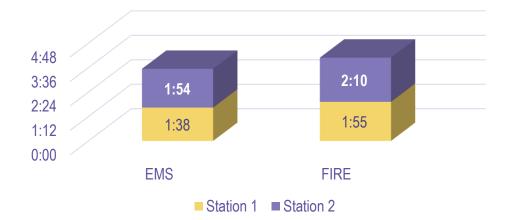
The average monthly response time in 2019 was 6:33, which is a full minute above our target response time of five minutes (5:30). The table below shows a five year "snap shot" of the average annual response time.



Achieving the Division of Fire's 5:30 target response time is a goal that the Division of Fire is focusing on as a part of our 2020-2025 Strategic Plan "roll-out". The Strategic Plan calls for a reduction in the Division of Fire's overall fire/EMS response times, which in the last five years have been consistently higher than our original 5:00 minute response time goal. The Division of Fire is committed to being able to "deliver a first alarm fire/EMS resource to at least 90% of our call for service within 330 seconds (5:30 minutes).

The Division of Fire is taking several steps to address response times; working more closely with our dispatch center to ensure that call handling times meet the national standards, working with City planners to ensure that every intersection in the City has emergency pre-emption (turns the traffic signals to allow emergency equipment to safely proceed through the intersection when running lights and sirens to emergency calls) and finally, working to address extended "turnout" times at each fire station.

Extended turnout times are one of the areas of our total response time that we have identified as something that we can significantly improve upon. Turnout time is the time that it takes firefighters to react to a dispatch within the fire station, get to the apparatus, get dressed in their turnout gear, get on the apparatus (get seat belted), and "get out the door" (respond). The Division of Fire tracks turn-out times for both FIRE and EMS calls for service. Typically, the EMS turn-out times are quicker because firefighters do not have to get dressed in their protective clothing to respond to this type of call for service. We are looking to keep EMS turnout times to under 60 seconds (1 minute) and fire/rescue turnout times to less than 90 seconds (1.5 minutes).



The table above shows that both fire stations are quick to turn-out. Station 1 turn-out time is slightly faster on EMS and fire responses than Station 2.

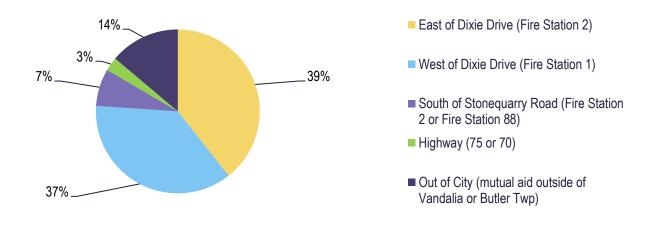
The Division of Fire is working with our employees right now to determine what they feel delays "turnout" times. We are also working to get turnout/response timers installed in each fire station so crews can see where they are in their turnout and response to every call. The response timer begins with the call is announced in the fire station and stops when a crew marks on the scene of an incident. Our employees are committed to working with Fire Administration to identify the steps needed to address response time delays and to assisting us in achieving our response time goals.

#### **Response by District**

The Division is committed to providing the highest quality service in the fastest and most efficient manner possible. The Division of Fire's ideal staffing and deployment strategy puts Vandalia fire/EMS operating from two fire stations, one of which is jointly staffed with Butler Township Fire Department. Our joint deployment plan ensures that the closets most appropriate fire/EMS resource is sent to calls for service no matter the jurisdiction (Vandalia or Butler Township). This strategy is what is best for the customer and is evident in the reduction in the use of outside EMS mutual aid which often delays fire/EMS response time causing customers to wait for an extended period of time for a fire/EMS resource to come from an another jurisdiction (most commonly; Huber Heights, Tipp City or Englewood).

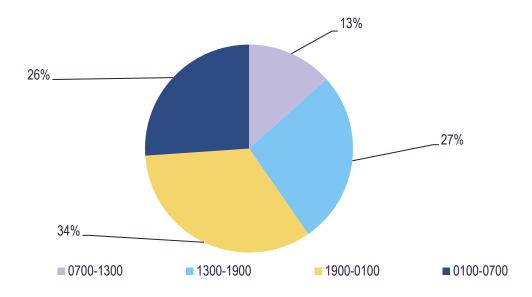
The Division feels that it has a very good handle on where the calls are occurring within the city, however, we continue to assess and "tweak" our deployment strategy. The Division of Fire is committed to responding to a customer's emergency quickly and effectively.

The table below represents the total number of calls for service that were received in each of the Division of Fire's five (5) response zones in 2019.



Response times are definitively one of the primary measuring tools that a customer uses to rate the level of service he/she receives from the Division of Fire. The Division of Fire works very hard to meet our response time goals. But there are other statistics that are just as important to the Division and its vision.

Another area we look at when doing operational assessments is the time of day that calls occur. The chart below represents the time frames that fire/EMS calls were received in 2019.

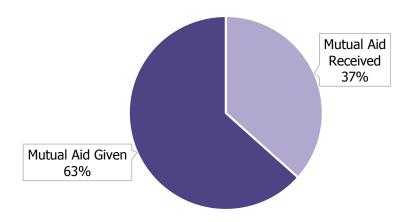


Evenings 1900-0100 (34%) seem to be the busiest of times for VFD crews, followed closely by afternoons 1300-1900 (27%) and lastly, overnights 0100-0700 (26%).

Another interesting statistic is the number of emergency calls for service that occur simultaneously with other emergency calls for service. Just over 40% of our call volume overlaps other calls for service. This means that one fire station is taking a call and within minutes another resource from the same fire station or from another fire station is being dispatched on another call for service. This number has almost doubled from 2018, when only 29% of our calls for service overlapped.

#### **Mutual Aid**

The table below represents an accounting of the total number of Mutual Aid calls that the Division of Fire responded to and/or requested in 2019. The Division of Fire maintains an average number of "Mutual Aid received" type responses. We believe that our staffing and deployment plan affords us the ability to keep City of Vandalia fire/EMS resources in the city and available to our Vandalia customers. The table below provides a summary of the total mutual aid that was both provided and received by the Division of Fire in 2019 (these numbers <u>DO NOT</u> include "joint responses" with Butler Fire, these "mutual aid" responses are tracked separately below).

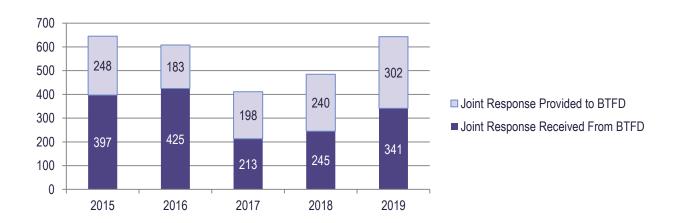


Fire/EMS Department	Mutual Aid Received (1616)	Mutual Aid Provided (1754)
Brookville Fire (57-003)	0	1
Clayton Fire (57-121)	0	8
Dayton Fire (57-011)	1 (Hazmat)	0
Dayton Airport (57-002)	1	2
Englewood (57-001)	25	2
Harrison Fire (57-107)	9	26
Huber Fire (57-125)	35	49
Tipp Fire/EMS (55-027)	13	58
Trotwood Fire (57-121)	1	5
Union Fire/EMS (57-122)	1	2
Totals	86	153

#### **Joint Responses**



The goal of our joint deployment program is to provide customers in both the City and the Township with the best fire/EMS services available to them and to do so at the lowest possible cost to the tax payer. It is clear that both organizations feel that this vision is best achieved through our ongoing cooperative effort. The table below provides statistical data on the total number of fire/ems incidents where the Division of Fire provided a fire/ems response (lighter purple) and the total number of incidents where a "joint response" from Butler Fire was received by the Division of Fire (darker purple).



The Division of Fire answered <u>963</u> fire related calls for service in 2019. Fire related calls accounted for approximately <u>29%</u> of our total call volume.

### **Fire Operations**

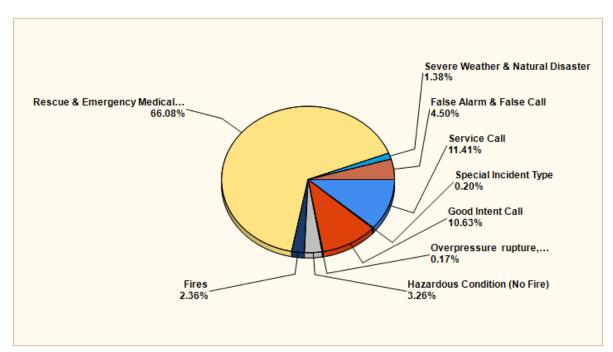
The Division of Fire answered a total of <u>1177</u> fire/rescue related incident, these incidents account for 33% of the Division of Fire's total call volume. Fire/rescue responses account for about 3 calls per day.



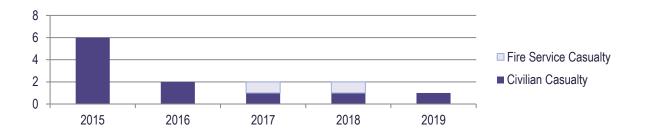




The chart below represents the "Major Call Types" for 2019. Rescue and Emergency Medical Services calls for service represent approximately 66% of our call volume and will be more thoroughly detailed in the EMS Operations section of this report.



MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	82	2.36%
Overpressure rupture, explosion, overheat - no fire	6	0.17%
Hazardous Condition (No Fire)	113	3.26%
Customer Service Call	396	11.41%
Good Intent Call (False Alarm No Emergency Found)	369	10.63%
False Alarm & False Alarm	156	4.50%
Severe Weather & Natural Disaster (Tornado Response)	48	1.38%
Special Incident Type	7	0.20%

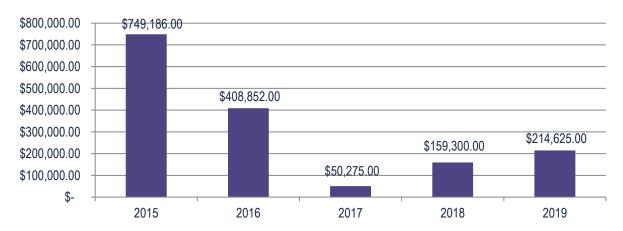


The Division of Fire continues to realize a low number of civilian fire casualties (injuries) in 2019, in fact, the Division of Fire only recorded one (1) civilian casualty, and that injury was very minor in nature. There were no fire service (firefighter) casualties in 2019.

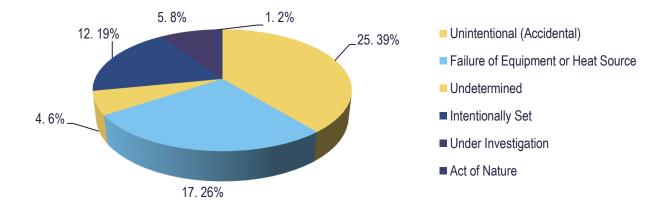
The Division of Fire defines an actual fire as a "dollar loss fire" when the fire causes a tangible property loss. The Division of Fire responded to (24) "dollar loss fires" in 2019. In 2019, the Division of Fire experienced fire losses totaling \$214,625.00.

Incident Type	Total Losses (Property & Contents)
Building Fire (Includes Cooking Fire Damage)	\$117,025
Vehicle (Passenger, Truck, Transport) Fires	\$92,100
Brush/Grass Fires	\$500.00
Smoke Damage to a Commercial Structure	\$5000.00

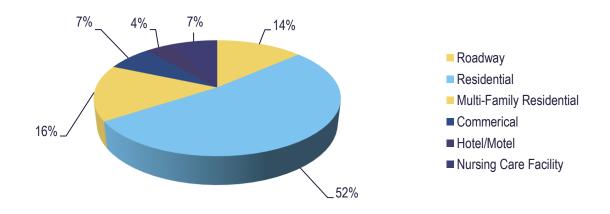
The table below provides a "snap shot" of the Division of Fire's total dollar loss due to fire for the last five years.



An essential part of preventing fires and the injuries (or deaths) that result from these unfriendly fires, is the need for the Division of Fire to understand what causes these fires. Every fire is investigated by the Division of Fire's Fire Prevention Bureau. In some cases, the Division of Fire will enlist the assistance of the Division of Police, and the State of Ohio's Fire Marshal's Office. The table below shows the designated "Cause of Ignition" for the dollar loss fires in 2019.



Just as critical as understanding the how a fire starts, is the understanding of the where, in what kind of occupancies are these fire incidents occurring? The table below highlights the statistical data that represents the type of occupancies that our dollar loss fires occurred.



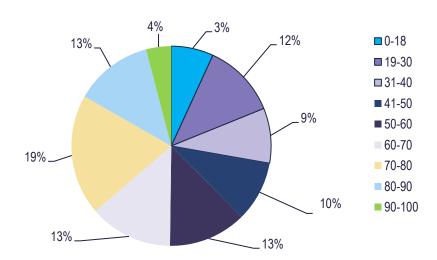
As you can see, the largest percentage of the dollar loss fire in 2019 were fires in residential and multi-family residential dwellings. We continue to focus our fire prevention and risk reduction efforts toward reducing the number of fires in residential (homes) and multi-family buildings as these buildings typically don't have the fire safety systems that commercial buildings do (i.e. automatic fire alarms and sprinkler systems).

#### **EMS Operations**

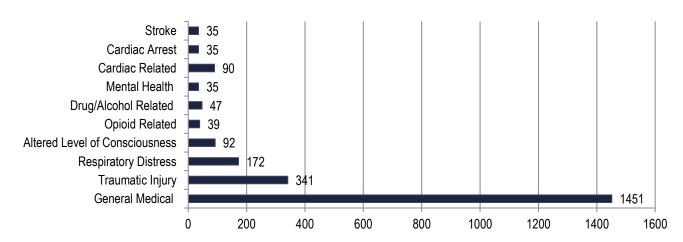
Statistically, emergency medical service (EMS) calls account for approximately 66% of the Division of Fire's call volume. The Division of Fire answered **2293** emergency medical calls for service in 2019.

EMS crews from the Division of Fire answer approximately <u>6.5</u> calls for emergency medical services each day. The goal of the Division of Fire's EMS service delivery system is to provide the highest-level emergency medical care in the fastest and most efficient manner possible. Our continued Vision is to deliver that level of service at the lowest possible cost to the tax payer.

The Division of Fire's emergency medical services are requested by customers ranging in age from several weeks old to 102. The average age of a customer requesting EMS in the City of Vandalia is 54 years old. The table below shows the percentage of customers served in each age range.



The table below represents the most common EMS calls answered by the Division of Fire in 2019.



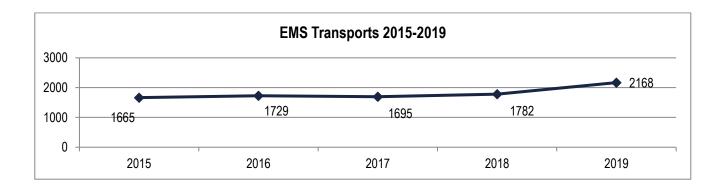
#### **EMS Billing**

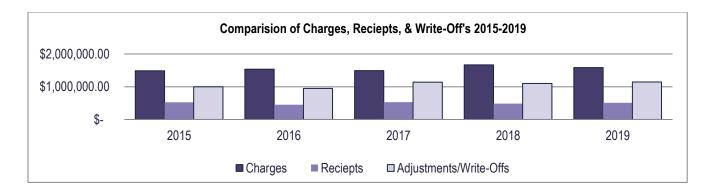
To aid the Division of Fire in creating the "best service at the lowest rates", the Division bills medical insurance companies (inlcuding Medicaid/Medicare) for EMS transports. The Division uses a "soft billing" approach in accordance with the Attorney General's ruling. The Division's third party billing agency submits bills to the medical insurance companies of both residents and non-residents. If the customer is uninsured the Division of Fire makes an attempt to paper bill the non-resident customer, and when there is no ability to pay, the debt is "written off" (forgiven).

In 2019, the Division of Fire transported <u>2168</u> patients, the Division of Fire billed \$961.49 (average)/transport in 2019. The Division of Fire collected \$272.32 (average)/EMS call in 2019.

The Division of Fire billed **\$1,585,495.42** for EMS services delivered in 2019, and collected **\$509,340.28** of that total amount billed in 2019. The Division of Fire adjusted or "wrote off" **\$1,143,472.86** in potential EMS revenue in 2019.

The tables below provides a five year comparison of total EMS transports and revenue.





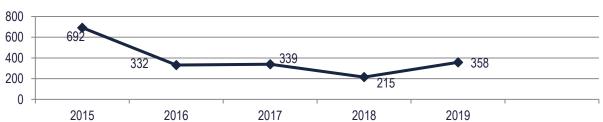
#### **Fire Prevention Bureau**

The mission of the Fire Prevention Bureau (FPB) is to deliver the Division of Fire's fire/injury prevention message. This mission is achieved through an aggressive public education and outreach campaign. The FPB uses fire safety inspections, pre-fire planning visits, public education, and school programming as conduits for disseminating our safety messages.



Annual Fire Safety Inspections - The Division of Fire conducts routine annual safety inspections and pre-fire planning for three reasons; (1) ensuring that buildings where our customers live, work, or play are safeguarded against disasters (fire, weather, chemical releases, and acts of terrorism), (2) to ensure that our first responders are aware of their first due and "target hazard" facilities which greatly enhances their ability to quickly make fire/EMS decisions and to participate in the creation of safe fire/EMS incident operations, and (3) because we are required to by the Ohio Fire Code.

The Fire Prevention Bureau is responsible for providing annual fire safety inspections to nearly 800 occupancies throughout the City of Vandalia. The table below provides a five-year comparison of completed fire safety inspections. The loss of our only full-time fire safety inspector (to retirement) in May of 2018 significantly impacted our ability to provide routine annual fire safety inspections. The Division of Fire hired a full-time Fire Marshal and one part-time Fire Safety Inspector in early 2019, this allowed us to re-engage our annual inspection program.



Fire Safety Inspections Comparison 2015-2019

The Division of Fire's ability to provide fire safety inspection services was significantly impacted by the May tornados. Fire Prevention personnel were reassigned for the first 30 days to assist with damage assessments, resources/volunteer coordination, and follow-up(s) especially in the commercial districts. Beyond the first 30 days, the Fire Marshal has spent much of his days working to assist commercial customers in the tornado ravaged areas as they started to clean-up, demolish damaged structures and fire protection systems. This work continues today, as several of these buildings required extensive repair if not complete demolition and/or reconstruction. Additionally, economic development in the City is alive and well, and we are grateful for the additional support from new and/or expanding businesses. With growth and development comes additional fire prevention work. New construction, expansion of existing buildings, and even significant remodel work requires fire protection reviews, pre-fire planning, and several inspections. This is also a time-consuming process. I commend the Fire Marshal and our Part-time Fire Safety Inspector for working so hard in 2019.

**Note**: The number of inspections above accounts for the total number of routine annual inspections that were completed. There are nearly 100 "open" annual fire safety inspections that inspectors are waiting for corrections to be made, some of these have required multiple visits and or issuance of orders for repair or correction.

As mentioned in the introduction, the FPB is also responsible for keeping up the Division of Fire's pre-fire planning database (*Command Scope*). We were fortunate to have a Fire Prevention Intern this year, Jones Kanak, a 2018 graduate of Vandalia-Butler High School and an aspiring firefighter/medic working in the FPB since June. His primary mission has been to keep the Division of Fire's pre-fire planning program and our Command Scope mobile database up to date. Command Scope provides "real-time" intelligence to responding fire/EMS crews on any structure entered into the system that the Division of Fire is responsible for enforcing the fire code in (commercial, industrial, educational, etc.) and all "target or special hazard" occupancies or locations.

Fire pre-plans are updated during a customer's annual fire safety inspection, at the request of first responders following an incident at a facility where the preplan may need to be updated, when fire permits are dropped to construct, remodel, or add on to a building, or routinely every two years when the FPB has time to review and revise "target hazard" facilities.

<u>Public Education & Community Outreach</u> - Public outreach and message delivery continues to be the best method for preventing fires, injuries and/or deaths from medical emergencies and fires.







In 2019, members of the Division of Fire and our FPB performed <u>855</u> hours of public education/outreach. In these programs, fire personnel came into contact with <u>8550</u> customers.

Fire Prevention "Man Hours" Outreach & Education 2014-2019



**Customer Contacts FPB 2014-2019** 



Approximately 40% of the increase from 2018 to 2019 can be attributed to a significant increase in request for CPR, AED, First Aid and Stop the Bleed Trainings.

The Fire Prevention Bureau's work is sometimes difficult to quantify; for the most part, if fire related injuries/deaths, occurrences, and dollar losses are all down, it is safe to say that the Division of Fire is getting their message "out there".

### **Training**

The Division of Fire and its staff are very much like a championship sports team in the following ways; firefighters/paramedics have to be mentally and physically prepared to play (respond) at game time. There are usually coaches on every call (command officer or firefighter in-charge), and we have a set of plays (operating procedures) for every game situation. The most distinctive way that fire personnel compare to a sports team is that they spend a great deal of time practicing their skills (training) and practice is how you "win" games (save lives and property).

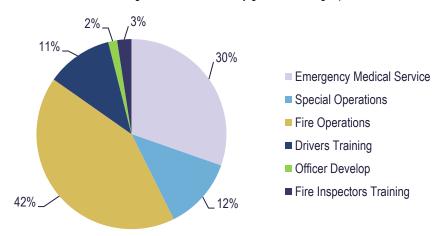






The Division of Fire spent a great deal of time "practicing" in 2019, Fire and EMS personnel logged <u>2230</u> hours of fire, EMS, Hazardous Materials, and Special Operations (technical rescue) training in 2019. That's approximately <u>75</u> hours of training/month or approximately <u>6</u> hours of training per day.

The chart below represents the breakdown of training conducted in 2019 by general training topics.



The Division of Fire's training plan is the key to empowering our employees to effectively deliver our Mission, Values, and most importantly, our Vision. Practice (or training) is essential to ensuring that the level of service provided to our customers is the most efficient, the most effective, and ultimately the BEST service available to them.

#### **Special Operations**

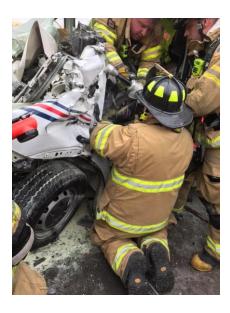
The Division of Fire is considered a "full service" fire/rescue organization. The Division of Fire is prepared to handle a wide variety of emergency situations. The Special Operations Group (SOG) is tasked with special operations (technical rescues); the SOG maintains specialized equipment, conducts special operations risk analysis/pre-planning, and ensures that crews are properly prepared/trained to handle special rescue incidents.







Vandalia firefighters are trained in, and ready to respond to any of the following "special" rescue/operation situations; hazardous material incidents, rope rescues, confined space rescues, trench collapse/rescues, lost person searches, automobile/machinery entrapments, and water/ice rescues.





These "special rescue" incidents are NOT regular occurring calls, so training and keeping crews proficient in these "special" skills sets is critically important to ensuring that crews are ready to deal with these technical/special rescue incidents. The Division of Fire committed 323 hours of training to Special Operations Training in 2019. In addition to receiving instruction on rescue from confined space, the application of rope rescue tools and techniques, water rescue, ice rescue, conducting lost person searches, and response to hazardous materials releases/spills the Division of Fire contracted with an outside firm to provide our crews with an additional 40 hours of machine rescue training.

In 2019, the Division of Fire responded to approximately <u>52</u> "special rescue" incidents where firefighting crews had to employ special equipment, strategies, and tactics to rescue trapped customers.

Type of Rescue Incident	Total Number of Incidents
Rescue of victims from motor vehicles (requiring extrication)	7
Rescue of victims from structural collapse (Tornado Response)	11
Rescue of victims from stuck/stalled elevator	2
Rescue of victims from water/ice	1
Response to hazardous materials incidents	27
Response to lost person(s)	2
Rescue of animal(s)	2
Total Number of Special Operations Incidents	52