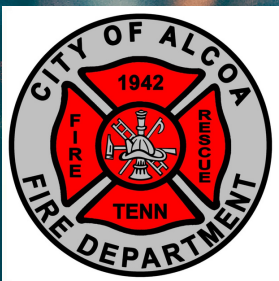




ANNUAL REPORT 2021



ALCOA FIRE DEPARTMENT

Message From The Fire Chief



The City of Alcoa Fire Department is pleased to present the 2021 Annual Report. We trust the information contained within this report will provide a better insight into the day-to-day operations and activities of the organization.

The Fire Department has a great responsibility and commitment to our community. It is our duty to meet and exceed expectations each time we are called upon. Our vision is to serve with **COURAGE, PRIDE and HONOR.**

We continuously strive to find innovative ways to do business and strengthen our department. Our goal is to achieve efficiency and cost-effectiveness for our citizens.

In 2021 the Fire Department responded to 2,458 calls for service. Due to the COVID-19 pandemic we continued to be faced with challenges. Many of our normal practices, both operationally and administratively were adjusted to keep our members and community safe. Through dedication to our mission and creativity we successfully met these challenges and continued to maintain the highest level of service delivery and efficiency.

This past year our department was awarded a prestigious ISO 1 classification. We are one of only two departments in Tennessee that hold Internationally Accreditation status and ISO 1 classification. The City Commission approved and ordered two new Pierce Rescue Pumpers. These will be delivered in July of 2022 and ready to go into service. Promotions for 2021 consisted of 2 shift Captains, 2 Lieutenants, 1 Administrative Captain and 1 Fire Inspector, which was an added position. We also hired 6 firefighters in 2021, due to retirements.

The men and women of the Alcoa Fire Department take great pride in serving the city. Each member is committed to training, fire prevention and community involvement. It is my honor and privilege to serve as the Fire Chief and lead such a dedicated group of individuals.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger Robinson".

Roger Robinson

Fire Chief

Contents

Station Details	4-5
AFD Service Area Map	6
Organizational Chart	7
Accreditation	8
ISO (Insurance Services Office) 1	9
Emergency Medical Services	10
EMS Data and Statistics	11
Operations	12
Operations Data and Statistics	13-14
Training	15-16
Fire Prevention	17-21
Fire Investigation	22-23

Station Details



Administration: **2010 N. Wright Rd. Alcoa, TN 37701**
Built - 2000

Personnel - Fire Chief, Deputy Chief, Fire Marshal, Fire Inspector and Administrative Assistant

Training Room

Added two additional offices in 2007 - Administrative Captain and Extra Office (COA Risk Manager/Safety)

Station 1: **2010 N. Wright Rd. Alcoa, TN 37701**
Built - 1995

Personnel - 12 Firefighters/4 Firefighters Per Shift (Captain, Two Engineers, Firefighter)

Apparatus - Tower 1, Engine 4, Squad 1, HazMat Trailer



Station 2: **271 Joule St. Alcoa, TN 37701**
Built - 1971

Personnel - 12 Firefighters/4 Firefighters Per Shift (Lieutenant, Two Engineers, Firefighter)

Remodeled in 2015

Apparatus - Engine 2 and Squad 2

4



Station 3: 3545 Central Park Blvd. Louisville, TN 37777
Built - 1997

Personnel - 9 Firefighters/3 Firefighters Per Shift (Lieutenant, Engineer, Firefighter)

Apparatus - Engine 3 and Ladder 1 (Reserve)



Training Facility: 725 Universal St. Alcoa, TN 37701
Built - 2011

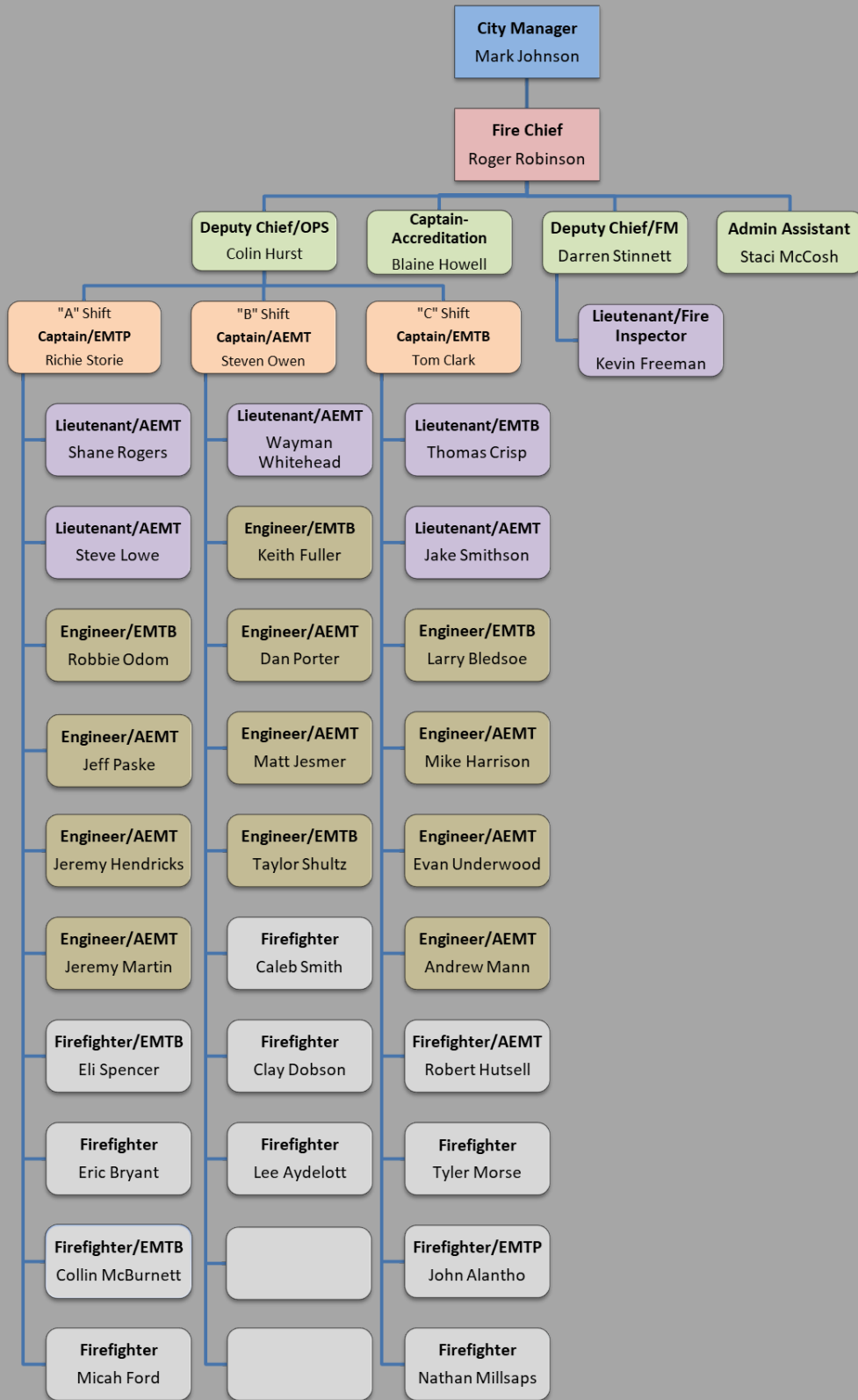
Multi-Story Training Tower: Interior Class A Fires, Search and Rescue, FF Survival, High Angle Training, Pumper and Aerial Operator Training.

Live Fire Field: Container/Dumpster Fires, LP Storage Tank Fires, Vehicle Fires, and Pit Fires (FF Foam Operations)

Apparatus - Safety House Trailer, Rope Rescue Trailer, Trench Rescue Trailer, and Ranger I (Polaris Side-by-Side)

Built 24X30 Storage Building in 2021

Organizational Chart



Accreditation



The Alcoa Fire Department is proud to be one of only 295 internationally accredited fire agencies through the Center for Public Safety Excellence (CPSE). Only 12% of the U.S. population is protected by an accredited agency.

The CPSE accreditation program requires fire agencies to compare their performance to industry best practices in order to:

- Determine community risk and safety needs and develop community-specific Standards of Cover.
- Evaluate the performance of the department.
- Establish a method for achieving continuous organizational improvement.

The accreditation model includes the evaluation of 11 major categories with performance indicators determined by representatives from various facets of government, private industry, military, and academic fields. Peer assessors are used to verify agency performance on site every five years with final review and approval provided by a commission of subject matter experts. The basic tenets of the process are to ensure accountability and transparency to the community being served.

The most recent accreditation award occurred in 2018. The department underwent an exhaustive evaluation by a third-party peer assessment team. The team found the self-assessment completed by the department as well as the Community Risk Assessment: Standards of Cover document to be credible. During this process the team made recommendations to improve department facilities, procedures, and processes.



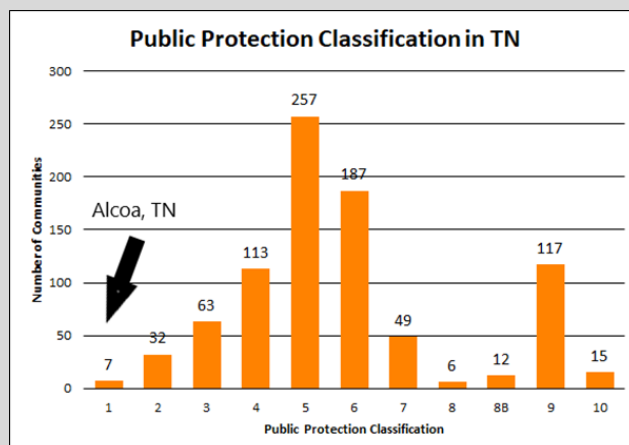
ISO (Insurance Services Office) 1



For a broad spectrum of commercial and personal lines of insurance, ISO provides statistical, actuarial, underwriting, claims information and analyses; consulting and technical services; policy language; information about specific locations and communities; fraud-identification tools; and data processing. In the United States and around the world, ISO serves insurers, reinsurers, agents, brokers, self-insurers, risk managers, insurance regulators, and other government agencies.

Fire remains one of the leading causes of property loss. A community's efforts to mitigate those losses before, during, or after a fire are of great importance to insurers. For more than 30 years, ISO has used the Fire Suppression Rating Schedule (FSRS) to review the firefighting capabilities of individual communities helping to provide the insurance industry with information on a community's ability to suppress and limit fire losses. The FSRS develops a numerical grading; ISO's Public Protection Classification (PPC), to help insurers differentiate the varying levels of fire protection. Class 1 represents the best public protection, and Class 10 indicates no recognized protection.

The City of Alcoa had its last site visit in January 2021 where it was able to elevate its Class 2 rating to a Class 1 rating, effective October 2021. The department is one of only two agencies in the state of Tennessee to be both accredited and hold a Class 1 ISO rating.



Emergency Medical Services

The global pandemic of COVID-19 presented many challenges for the operations of the Fire Department. The Operations Division along with regional Fire and EMS partners were proactive by supplying personal protective equipment (PPE) to responders and developing procedures on responding to emergency calls related to COVID-19.

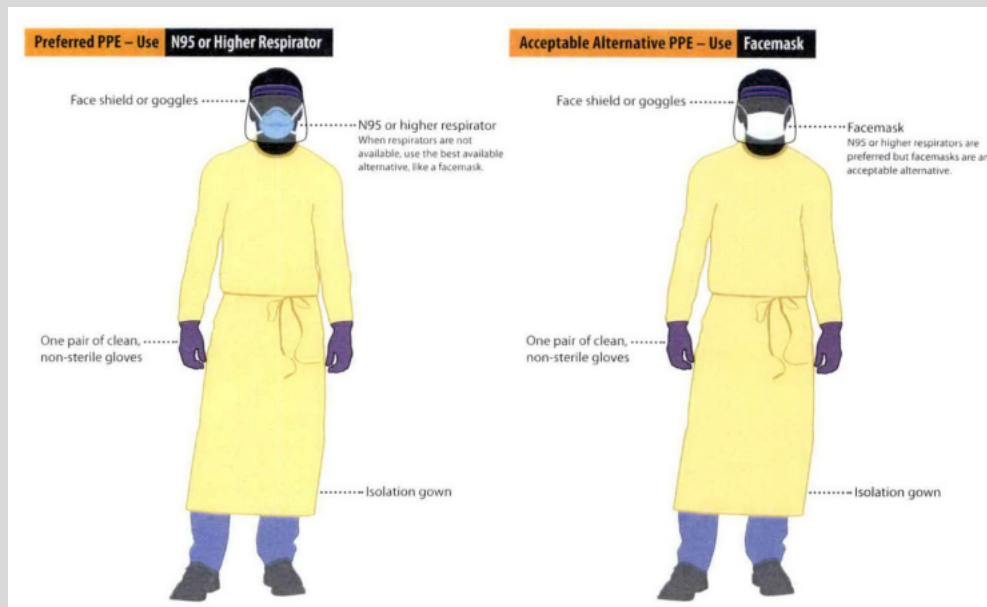
Use Personal Protective Equipment (PPE) When Caring for Patients with Confirmed or Suspected COVID-19

Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

Remember:

- PPE must be donned correctly before entering the patient area (e.g., isolation room, unit if cohorting).
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

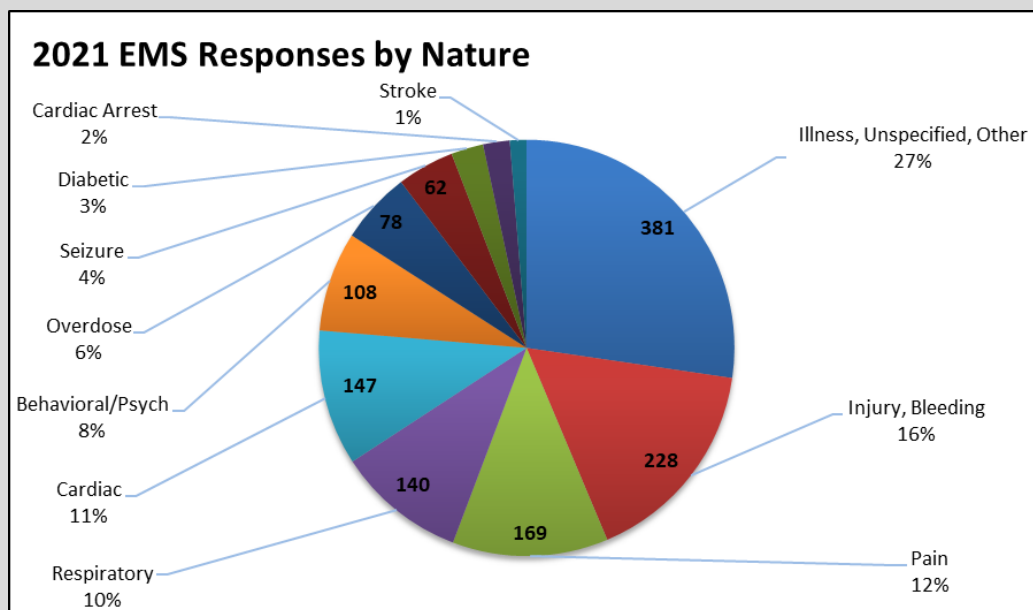


www.cdc.gov/coronavirus

EMS Data and Statistics



Overall, the Alcoa Fire Department responded to 1,395 EMS-related incidents in 2021. The department responded to 24 cardiac arrests during 2021, resulting in seven “return of spontaneous circulation” events, a 29.2% save rate. The department responds in tandem with AMR on all EMS incidents inside the City of Alcoa, providing Basic Life Support (BLS) services twenty-four hours per day, seven days per week. We currently have 2 Paramedics, 19 Advanced EMTs, and 10 Basic EMTs on staff. During each incident patients received the highest quality of care available, and many of our providers have been recognized locally for the life-saving interventions.

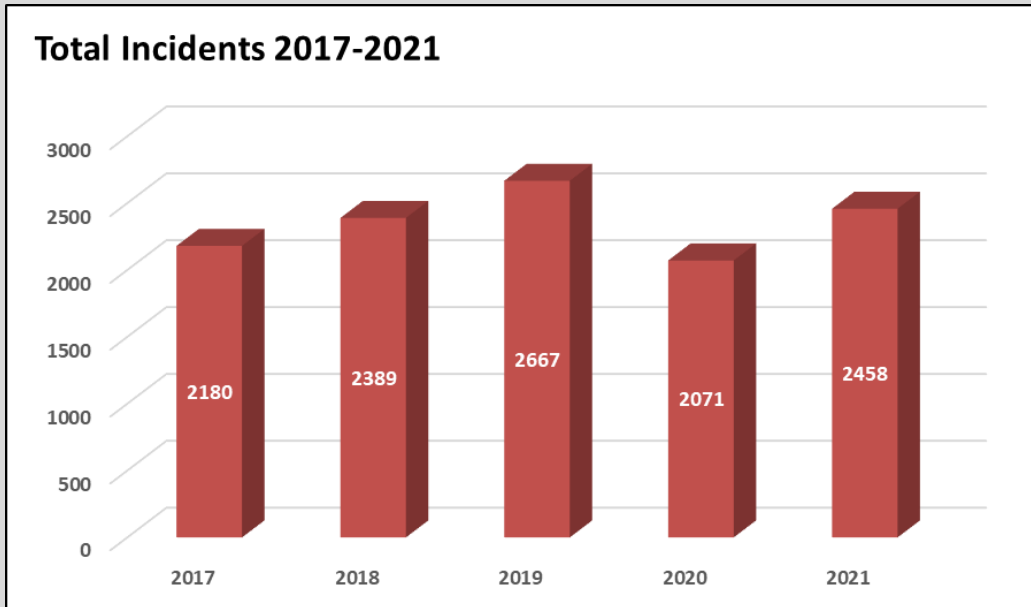


Operations

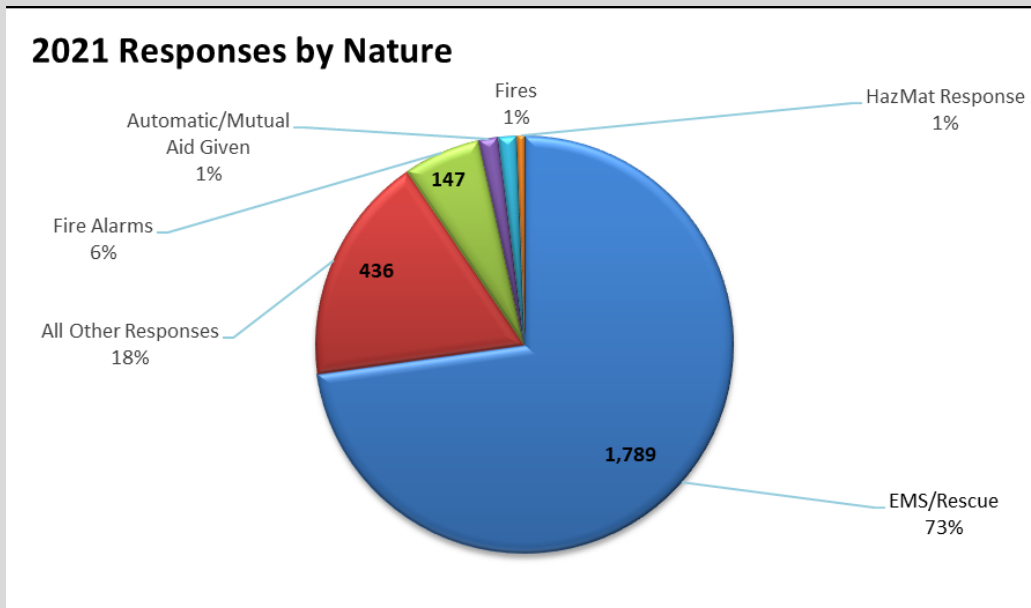
The Operations Division of the Alcoa Fire Department is responsible for the delivery of day-to-day emergency and non-emergency services to our community. Operations provides an all-hazards response including fire suppression, EMS (Basic Life Support), hazardous materials response and mitigation, tech rescue (vehicle extrication, confined space rescue, high angle rescue, and trench rescue) response and oversees a comprehensive and dynamic training program. These services are provided by 33 fire department personnel responding from three strategically located fire stations throughout the City of Alcoa. Currently the department operates 2 squad trucks, 1 aerial platform, 3 pumpers and 1 reserve apparatus. The year 2021 brought many changes to the Operations Division including the promotions of 6 engineers, 3 Lieutenants, and 3 captains. Additionally, 6 new firefighters completed the TN State Fire and Codes Academy 10-week Recruit Class.



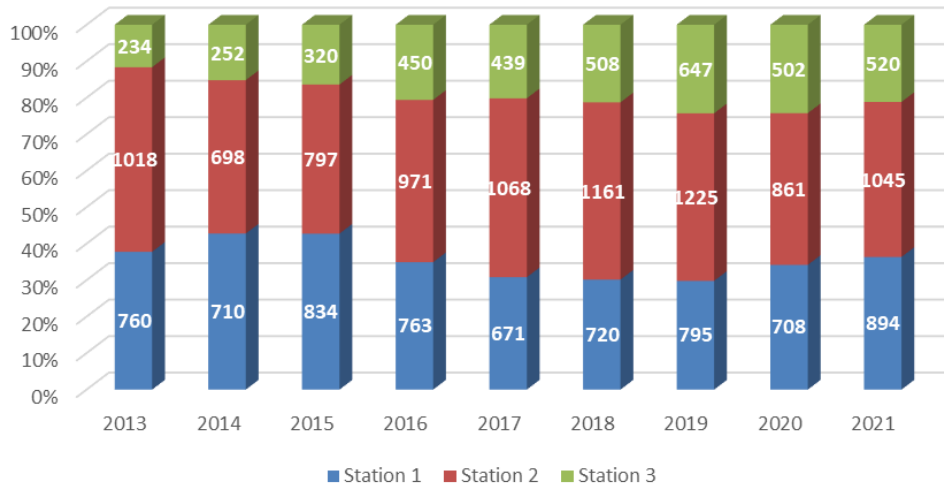
Operations Data and Statistics



After a sharp 22.3% decrease from 2,667 to 2,071 in total incident responses during the peak of the COVID-19 pandemic in 2020, call volume increased by 18.7% to 2,458 in 2021. The department fully expects incident counts to resume the upward trend experienced in the previous five years. Nearly three in four fire department responses are related to calls for Emergency Medical Services.

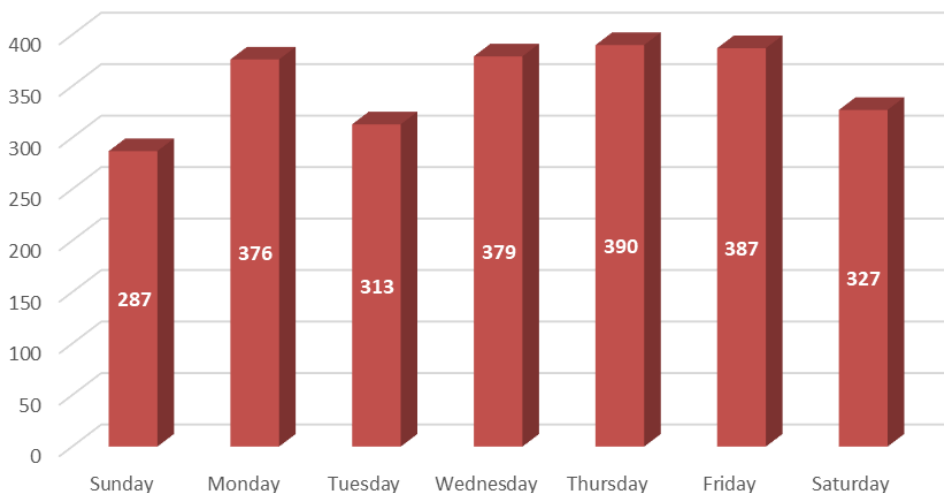


Call Volume by Station 2013-2021



While call volume has increased for the department as a whole over recent years, there has been notable growth in Zone 3, evidenced by both the increase in incidents and the percentage of total incidents. Station 3 responded to 122% more incidents in 2021 than in 2013, with an eight-year high of 177% in 2019. Further, the percentage of total incidents in Zone 3 has doubled from 11% in 2013 to 22% in 2021, with the previous two years at over 24% and quickly returning to pre-pandemic levels.

Incidents by Day of the Week



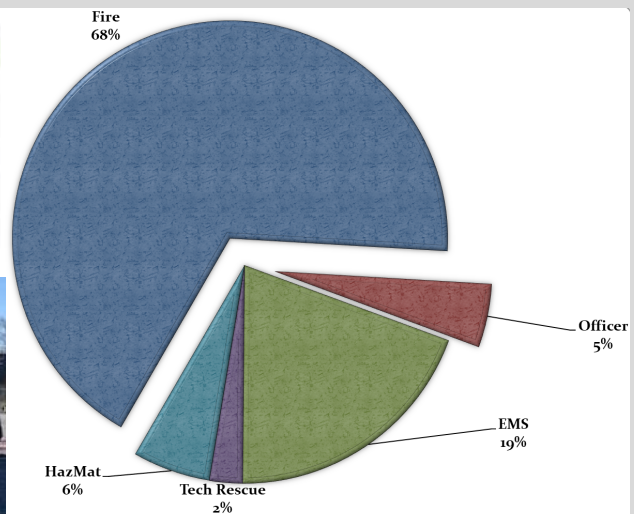
Training

Training leads to success in carrying out the mission of the Alcoa Fire Department. The Training Division conducts, supervises, and coordinates the training program to ensure the department is prepared for all emergencies. The Training Division is led by Deputy Chief Colin Hurst, who is responsible for the overall administration and management of the Fire Department Training Program, which is facilitated by the Department Training Committee. These individuals ensure compliance with applicable federal, state, and local mandates while producing meaningful training sessions aimed at personal and professional development.

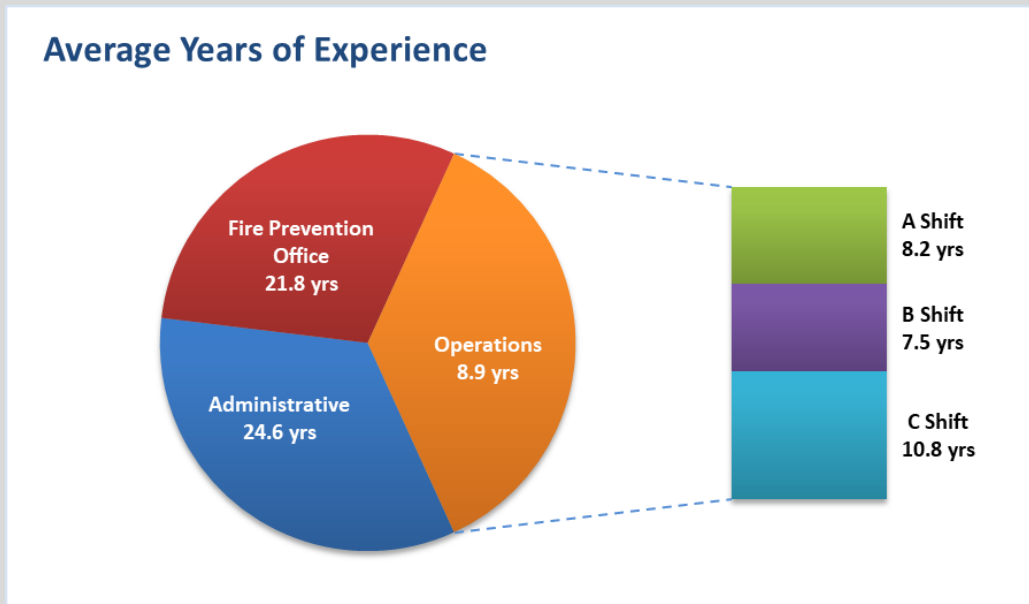
The department was affected by the events of COVID-19 during the year 2021 to some degree in training. COVID-19 altered management of the training program due to strict requirements set forth by the city to prevent the spread of coronavirus. There were 6 personnel sent to attend Tennessee Fire and Codes Academy Recruit Class and the department joined TN Fire Training Online to assist and aid with taking TFACA approved classes. In addition, there were 5 personnel sent to EMT/AEMT school at Walter State Community College.

- There were 1,559 hours of training completed during the 2021 Educational Incentive In-service program.
- There were 2,112 hours of training completed by 6 personnel at the TFACA Recruit Academy during 2021.
- There were 240 hours of Automatic Aid training completed in 2021 for the department.
- Quarterly Training - Implemented in 2021 to increase training in areas of EMS, HazMat, and Tech Rescue for a total of 574.5 hours

Training	Hours
Fire	868.4
Officer	602
EMS	2508
Tech Rescue	315
HazMat	739



Due to the rate of attrition over the last half decade there has been a significant decrease in the average years of experience. However, this decrease is predominantly the result of departmental retirements. Focused and intensive efforts are currently being undertaken to bring new recruit's knowledge, skills, and abilities up to levels historically expected of the Alcoa Fire Department.



Fire

- 32 Firefighter I of 38 personnel
- 30 Firefighter II of 38 personnel
- 20 Fire instructor I of 38 personnel
- 1 Fire Instructor II of 38 personnel
- 5 Fire Inspector I of 38 personnel
- 3 Fire Investigator I of 38 personnel

Driver/Operator

- 20 PDO of 38 personnel, or 9 of 12 Engineers

Officer

- 17 Fire Officer I of 38 personnel, or 13 of 13 Officers
- 11 Fire Officer II of 38 personnel, or 8 of 13 Officers
- 10 Incident Safety Officer of 38 personnel, or 10 of 13 Officers

EMS

- 29 Emergency Medical Personnel of 38 personnel

HazMat

- 20 HazMat Technicians of 38 personnel

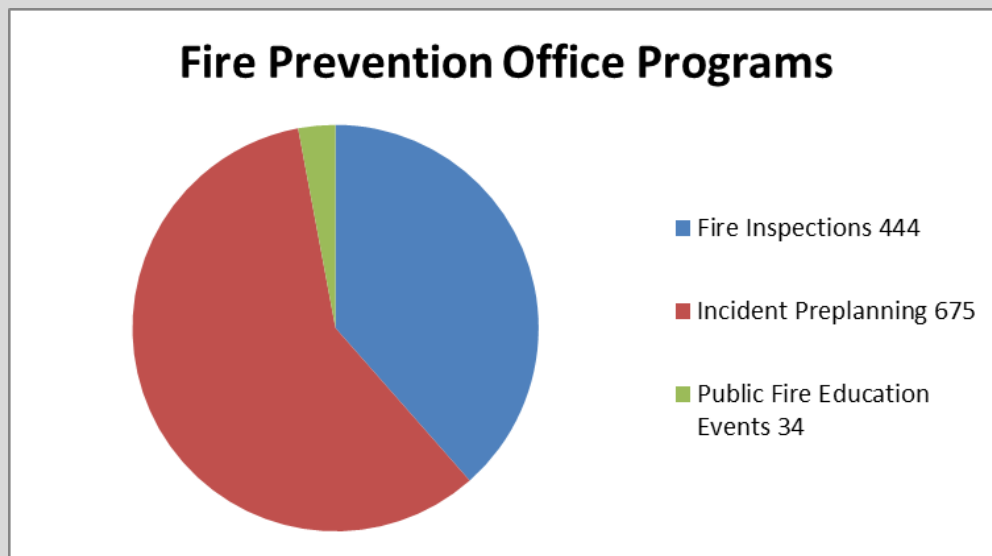
Fire Prevention

Fire Prevention has become a tactical role in saving lives and property. While code enforcement is important, education has proven to be a substantial tool in preventing fires. Educating operations staff is a key piece in the puzzle. Their incident pre-planning and response puts them center stage for interacting with the public and teaching our customers about common fire hazards and lifesaving tips concerning egress and evacuation. **The Fire Prevention Office uses 3 key Programs.**

1. Fire Inspections

2. Incident Preplanning

3. Public Fire Education Events



Fire Inspections

The department has a full time fire inspector who is tasked with prioritizing existing businesses and visiting annually to ensure they are compliant with the International Fire Code standard for life safety. This ensures that we are doing the best that we can to make Alcoa a safe place to live, work and shop.

Top 10 Fire Code Violations

- 1. STREET ADDRESS** must be clearly marked and visible on the building, tenant space/suite numbers (black or contrasting) above the front door and on the rear door.
- 2. HOUSEKEEPING AND STORAGE** must be 2' below ceilings in non-sprinklered buildings, or 18" below the sprinkler head deflector in sprinklered buildings. No storage of combustibles in exit-way, mechanical, electrical, or sprinkler riser room.
- 3. EXIT DOORS** must open readily from the egress side without the use of a key or special knowledge or effort. The only exception is a main storefront door with a sign above that reads, "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."
- 4. AISLES, PATHWAYS, WALKWAYS, AND STAIRWAYS** leading to exits must be clear of obstructions.
- 5. EMERGENCY LIGHTS AND EXIT SIGNS** illuminated exit signs and emergency lights must work properly in both normal and emergency power modes when tested.
- 6. ELECTRICAL OUTLETS, JUNCTIONS BOXES, AND CIRCUIT BREAKER PANELS** must have the appropriate cover plates in place.
- 7. ELECTRICAL EXTENSION CORDS** cannot be used as a substitute for permanent wiring. Approved extension cords are permissible for "temporary use" only. Grounded multi-outlet Power Strips (Taps), with built-in 15 amp circuit breaker, may be used to supply power to computers and related equipment.
- 8. FIRE EXTINGUISHERS** must be visible and accessible, mounted correctly and serviced annually by a qualified licensed contractor.
- 9. FIRE SPRINKLER AND FIRE ALARM SYSTEMS** must be serviced and tested annually by a qualified licensed fire sprinkler or fire alarm contractor, and the systems must be monitored.
- 10. FIRE SUPPRESSION FOR KITCHEN HOODS** must be serviced and tested every 6 months by a qualified licensed fire protection contractor. Cooking appliances, hoods, fans, and ducts must be inspected every 3 to 6 months for accumulations of grease and all components properly cleaned down to the metal surface.



Incident Preplanning

Operations employees visit all commercial buildings annually to re-familiarize themselves with the overall layout, configuration and equipment associated with the business to help mitigate any emergency at that location. In the City of Alcoa, we use “Knox Boxes” to access our buildings during an emergency without damaging doors or windows to gain access. We update keys and contact information during our visit. In 2021, 10 new Knox Boxes were added with newly constructed buildings.



Public Fire Education Events

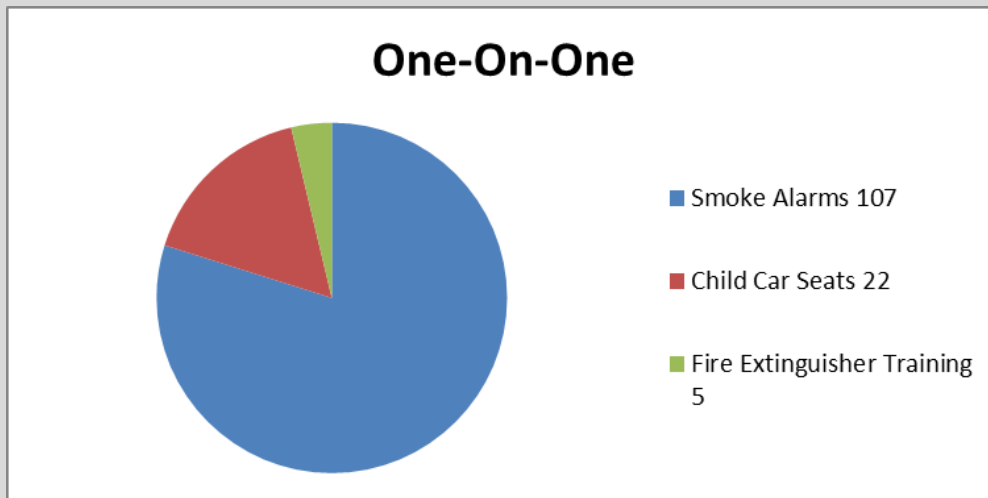
In December, AFD delivered Christmas baskets to families in Alcoa. While delivering the baskets, the department installed 30 smoke alarms in homes that received baskets. This has been a longstanding tradition that the staff and their families take part in every year.



During the pandemic, the department had to get creative with the way we present our public education programs. We teamed up with the State Fire Marshal's office for the “Front Porch Fire Prevention” campaign to speak to people and hand out literature in a socially distanced atmosphere.

It is important that we do not under estimate the “One-On-One” communication that everyone in the department has with the public on a daily basis.

- 1. Smoke Alarm Installation
- 2. Child Car Seat Installation
- 3. Fire Extinguisher Training



Smoke Alarm Installation

This year’s Fire Prevention Week’s theme was all about smoke alarms. The fire department installed 107 smoke alarms in homes throughout Alcoa. We began installing the 10 year smoke alarms in 2012. We have installed 1,454 of the 10 year smoke alarms since receiving the first one. Most homes that we find without smoke alarms have alarms that have a bad battery or no battery. The 10 year alarms have significantly lowered our numbers of non-working alarms.



Child Car Seat Installation

AFD has 5 child car seat technicians who teach the installation of car seats to new mothers, grandparents and care givers. We installed 22 car seats in 2021; while teaching people the proper installation methods used in the type of vehicle they have. This gives us the opportunity to also talk to the public about the importance of smoke alarms. On occasion, we have followed the new mother back to her home in Alcoa and installed smoke alarms.



Fire Extinguisher Training

In 2021, the fire department hosted 5 fire extinguisher training classes. We offer this service to anyone in the city. It's an opportunity for employers to take advantage of qualifying staff in a short period of time. The fire extinguisher is an underappreciated tool and, often times, is our only avenue for putting out a small fire. This can save companies thousands of dollars in water and fire damage for a small fire that can be put out quickly. The training is fun for employees and reminds them that extinguishers are located within 75 feet at all times in the workplace. Creating this awareness is our goal during the training and hopefully persuades people to get them for their homes as well.



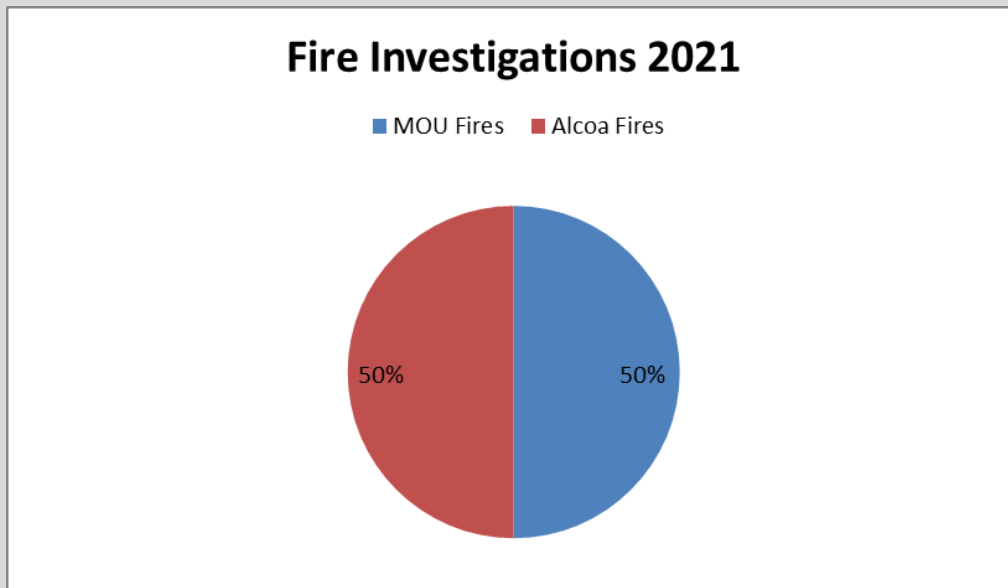
The Fire Prevention Office has an overall goal of saving lives and property by means of education, code enforcement and overall public trust and respect.

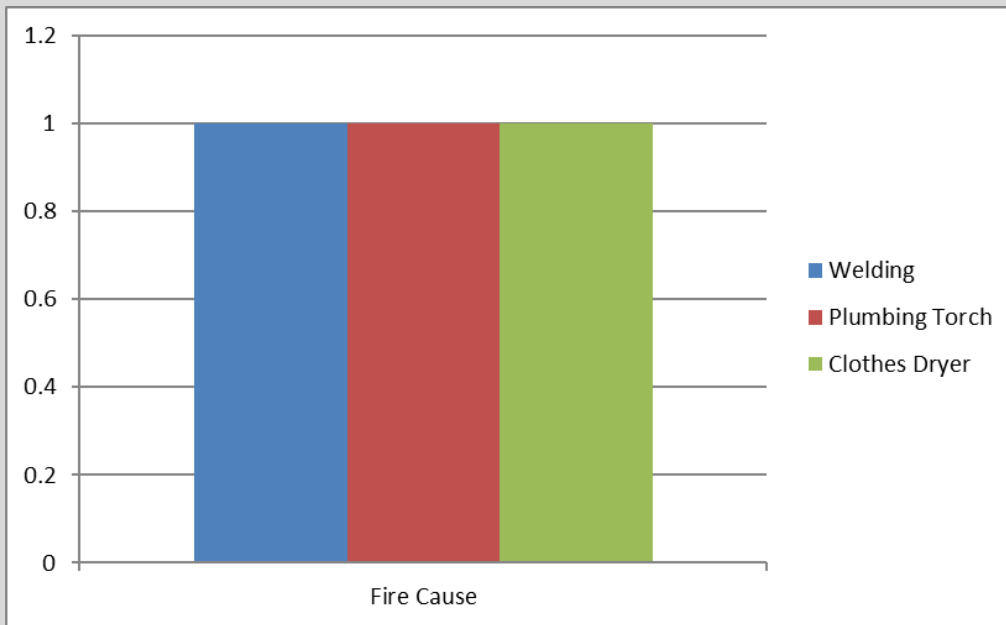
Fire Investigation

Fire Investigations are completed through the Fire Prevention Office and play a critical role in helping determine trends with fire cause. The accidental fire trends help us to target our fire prevention efforts during public education events, fire inspections and general marketing strategies.

Fires that are caused by suspicious origin and/or result in fatalities require a different approach in order to see the investigation through properly. The Fire Prevention office works closely with Alcoa Police during fires of this nature. APD has a detective with a fire investigation certification. Also, a memorandum of understanding was written in 2020 that gives jurisdictions within Blount County the ability to work together during these types of investigations.

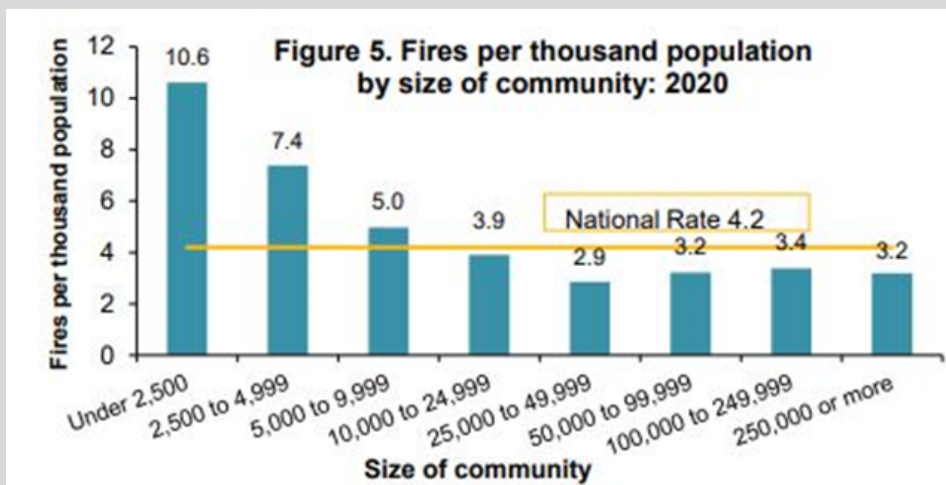
In 2021, the Fire Prevention Office investigated 3 significant structure fires in Alcoa and 3 MOU fires in other jurisdictions. This is in addition to the 40 less significant fires that we consider moderate due to their nature.





Looking back at what caused significant fires in Alcoa for 2021, two out of the three causes were a contractor using tools that created an ignition source. This was accidental, but due to negligence on the contractor’s part. The remaining fire was caused by a dryer vent not being properly maintained. This summation of events gives the department two targets for prevention strategy in 2022.

National Statistics





"Every sunset brings the promise of a new dawn."

-Ralph Waldo Emerson