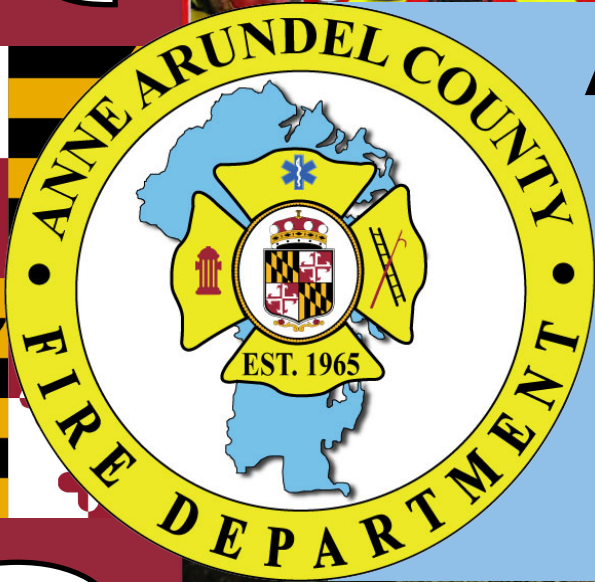




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# Anne Arundel County Fire Department

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# ANNUAL REPORT

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# Message From The Fire Chief

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Welcome to the 2021 Annual Report for the Anne Arundel County Fire Department!

I am excited to share our progress in my third year as Chief of your fire department. Please take a few minutes to review our report and see the enhancements we have made over the last year, including apparatus acquisition and technology. Here are a few highlights from the year that bring me a sense of pride:

**New Paramedics-** In our continuing efforts to improve our Advanced Life Support service to the community, the department enrolled 46 firefighters into the paramedic program at Anne Arundel Community College and other programs. Eight new paramedics graduated from their respective programs in 2021.

**New Apparatus -** The department took delivery of a new rescue engine for Severn, 1500 gallon pumpers for Galesville and Jacobsville, 11 new medical transport units assigned throughout the county, six Expeditions for our Battalion Chiefs and EMS Supervisors, and several other needed support vehicles. Additionally, volunteer companies made significant apparatus acquisitions in Riva, Arnold, and Lake Shore.

**New Stations-** Construction is nearing completion for the Jacobsville fire stations, and we expect occupancy by late spring. We hope to break ground on the Crownsville Fire Station in the fall, and work continues on replacement projects for Cape Saint Claire and Jessup.

The 2021 Annual Report wouldn't be complete without mentioning COVID-19 and the effects of a global pandemic on our community and fire department. The sense of pride and gratitude I feel for all the department members is immense. Thank you for all you have done and continue to do for our community. It has been a challenging year, yet we still have accomplished so much. This report is a testament to why and how we serve.

We are committed to continuing our hard work and dedication to improve our service to our residents and visitors and make Anne Arundel County "The Best Place - For All."

Sincerely,



Trisha L. Wolford  
Fire Chief



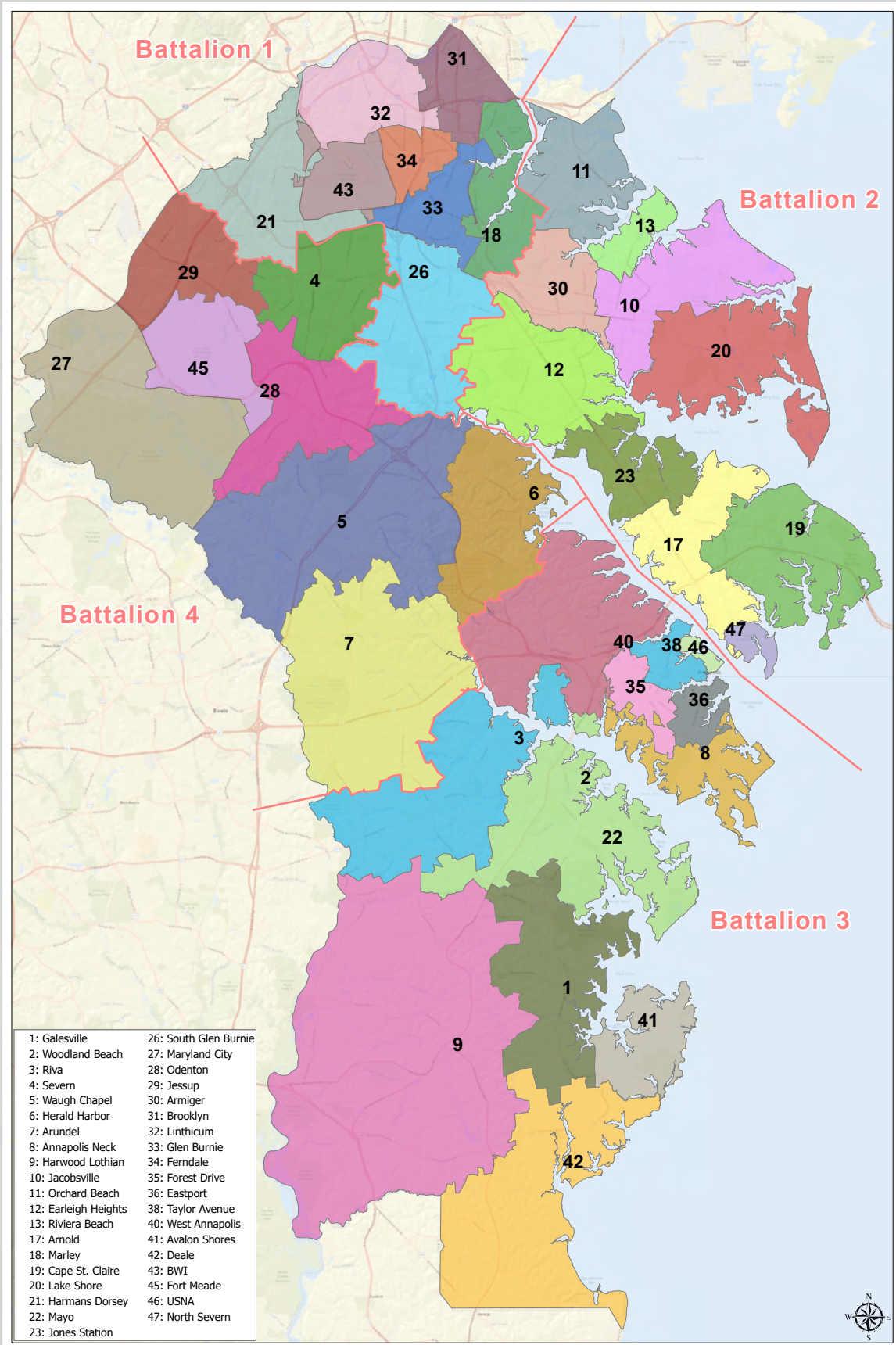
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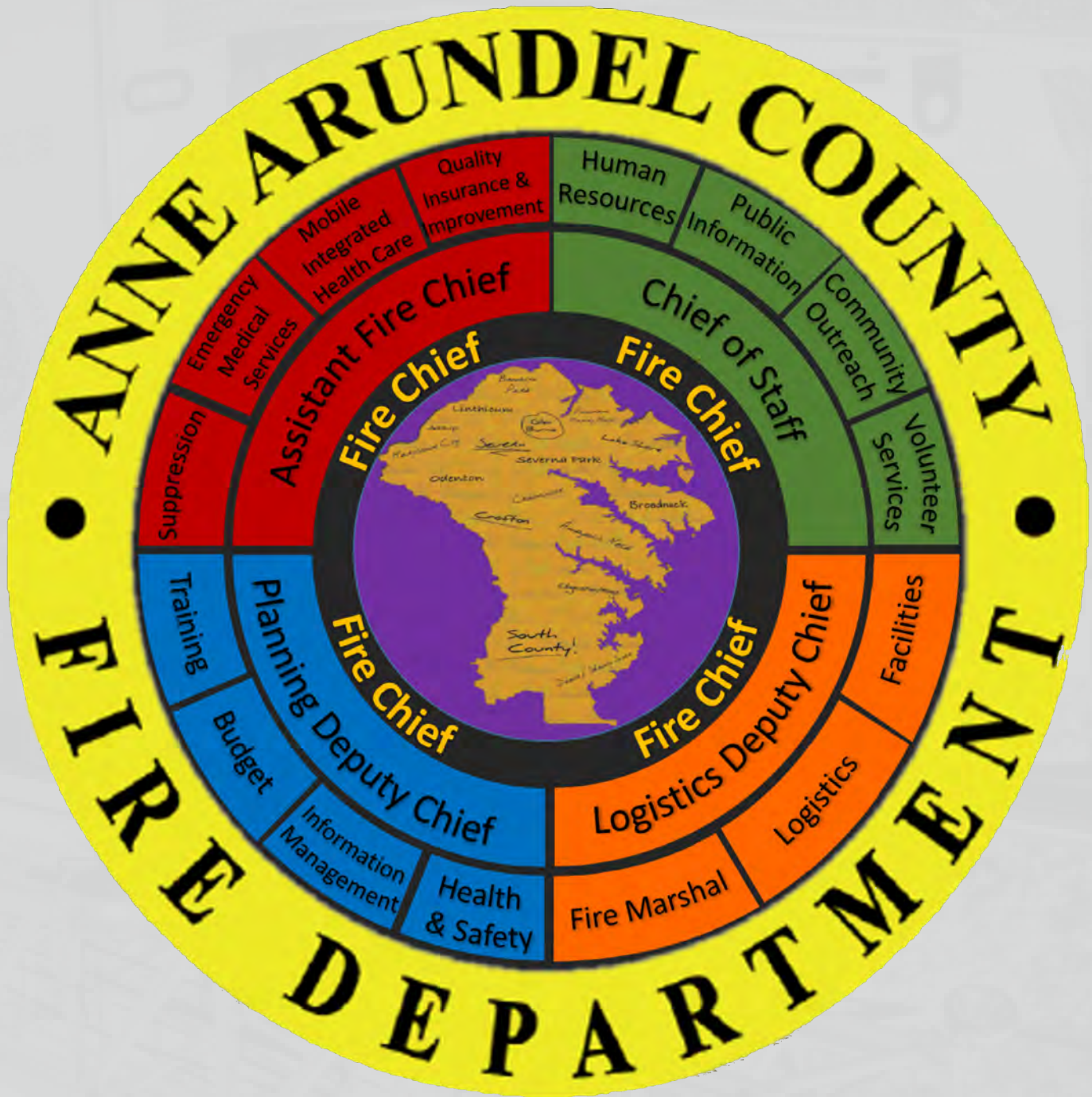
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# Map of Stations & Battalions



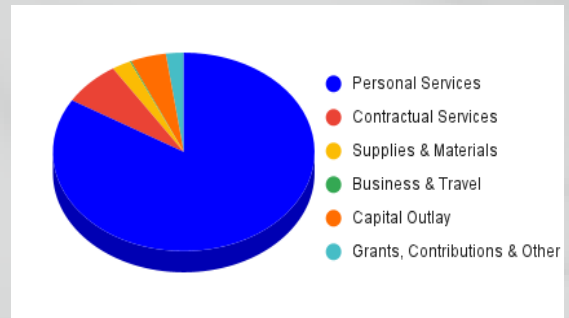
# Organizational Chart





# Budget and Staffing Data

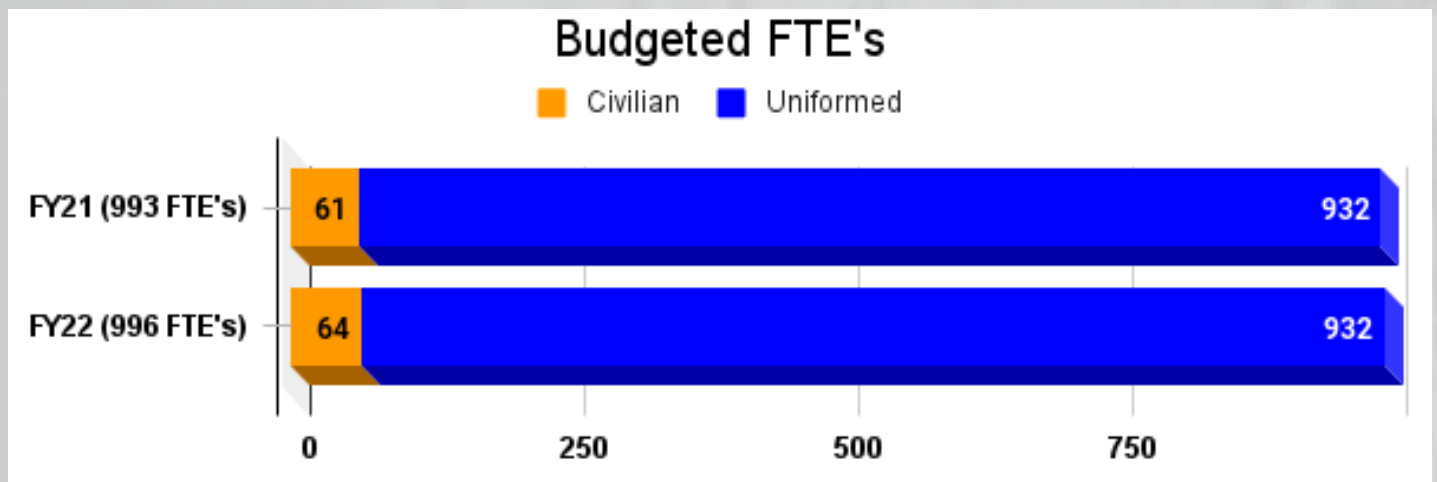
<u>Budget Category</u>	<b>FY2021</b>	<b>FY2022</b>
Personal Service	\$112,141,100	\$125,597,900
Contractual Services	\$10,482,700	\$10,801,200
Supplies & Materials	\$3,118,700	\$3,501,000
Business & Travel	\$224,800	\$263,500
Capital Outlay	\$2,741,300	\$6,598,300
Grants, Contributions & Other	\$1,249,800	\$3,304,700
<b>Grand Total</b>	<b>\$129,958,400</b>	<b>\$129,958,400</b>



<u>Business Unit</u>	<b>FY2021</b>	<b>FY2022</b>
Administration	\$3,180,000	\$3,042,500
Communications	\$5,552,100	\$6,040,700
Fire Marshal	\$4,481,700	\$4,636,200
Health/Safety/QA/QI	\$4,075,200	\$2,858,800
Operations	\$92,172,200	\$105,851,800
Operations Support	\$14,463,300	\$18,428,300
Special Teams	\$600,900	\$854,300
Training	\$2,279,500	\$5,193,600
Volunteer Support	\$3,149,500	\$3,160,400
<b>Grand Total</b>	<b>\$129,958,400</b>	<b>\$150,066,600</b>



The Anne Arundel County Fire Department has 932 sworn uniformed personnel and 64 civilian employees. The majority of our personnel are assigned to the Operations Buearu, responding to calls for service. The remainder are assigned to support operations including the fire marshal's office, communications, logistics, training, health, safety and volunteer support.



# Volunteer Personnel



The volunteer component of the fire department represents an essential part of our combination department. Volunteer members serve in many roles including operational, administrative, and support. These volunteer members supplement many aspects of fire and EMS services as well as carrying on a long tradition of service to members of their communities.

At the end of 2021, the Anne Arundel County Fire Department included 1594 volunteers in 24 different stations. Of these, 692 are operational (riding) members and the remainder consist of administrative and support volunteers. This includes members of the ladies auxiliary and the Anne Arundel Alarmers Association, a group that provides fire ground rehabilitation and canteen units for responders involved in large-scale incidents.



In addition to providing personnel, the volunteer corporations also support the department through the following ways:



- Offer community support of volunteer fundraisers
- Volunteer companies placed the following equipment in service in 2021:
  - The Riva Volunteer Fire Company placed Engine 31 in service, a 2020 Spartan Motors/4 Guys engine with a 1500 gallon per minute pump and 1000 gallon water tank
  - The Lake Shore Volunteer Fire Company placed Rescue Engine 20 in service, a 2019 KME Predator with a 2000 gallon per minute pump and a 1000 gallon tank along with a complement of vehicle extrication tools
  - The Arnold Volunteer Fire Department placed Engine 172 in service, a 2021 Pierce Enforcer with a 1750 gallon per minute pump and a 750 gallon water tank

# What Happened in 2021

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## What Happened in 2021

- Recruit Class 61, comprised of 53 members from Anne Arundel County and six members from BWI Thurgood Marshal Airport Fire and Rescue Department, graduated in December

## New vehicles delivered in 2021:

- E-One Rescue Engine- Severn (\$786,114)
- 2 Pierce 1500-gallon engines- Galesville and Herald Harbor (\$654,193 each)
- 11 Freightliner/Horton medic units- Herald Harbor, Harwood Lothian, Marley, Jones Station, South Glen Burnie, Odenton, Brooklyn, Linthicum, Glen Burnie, Avalon Shores, Deale (\$291,737 each)
- 6 Ford Expeditions- three EMS Supervisors, two battalion chiefs, Shift Commander (\$43,319 each)

## Other enhancements to services:

- The 11 Freightliner/Horton medic units placed in service were all equipped with Stryker Powerload systems to reduce EMS clinician lifting injuries
- Upgraded the Air Shop's Quanti-Fit machines to improve the required annual fit test process

## Operations

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The Operations Bureau is responsible for the daily staffing of thirty-one (31) stations located throughout the County, staffed by over 900 career and 700 volunteer firefighters and EMS personnel. We are proud that all personnel are nationally certified at their rank in accordance with National Fire Protection Association standards.

Currently, the Department operates twenty-eight (28) Advanced Life Support (ALS) transport units, fifteen (15) Basic Life Support (BLS) transport units, thirty-one (31) engine companies (nine of which are paramedic engines), ten (10) ladder companies and eight (8) squad companies.

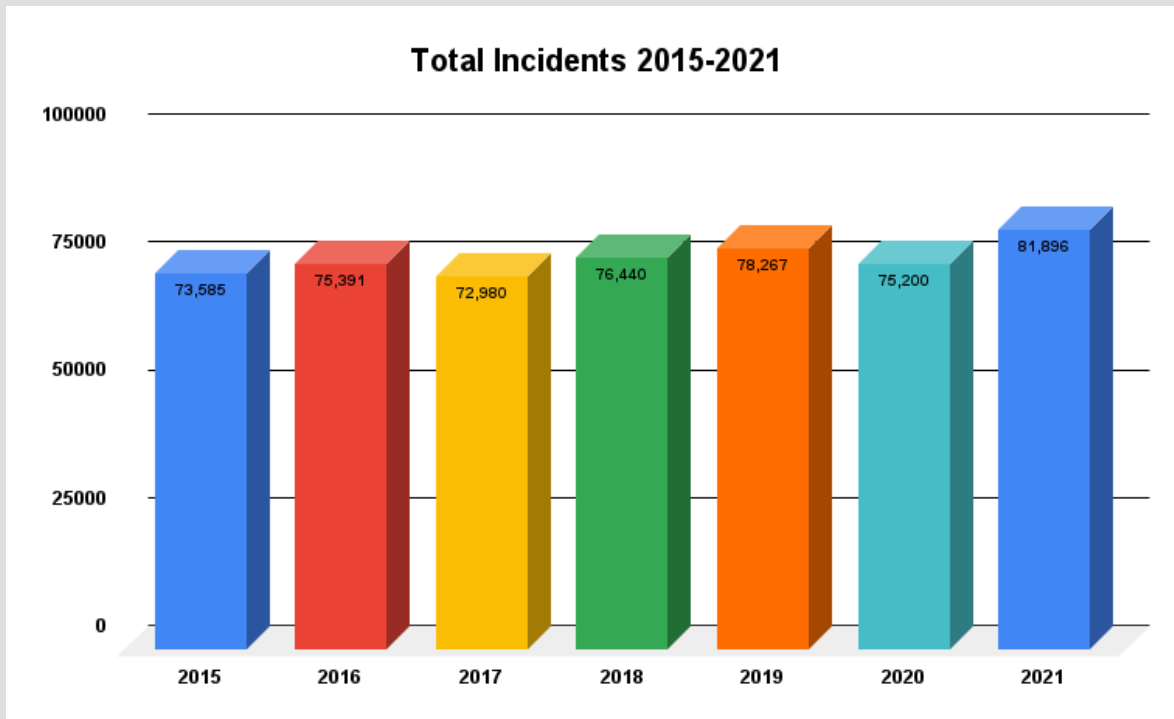
The Department provides fire protection, BLS, ALS, hazardous materials response and mitigation, collapse rescue, confined space rescue, dive rescue, and marine operations. The Department continues to evolve to meet the ever-changing needs of our citizens. We are always looking to the future to reduce risks and minimize the devastating effects of man-made and natural disasters.



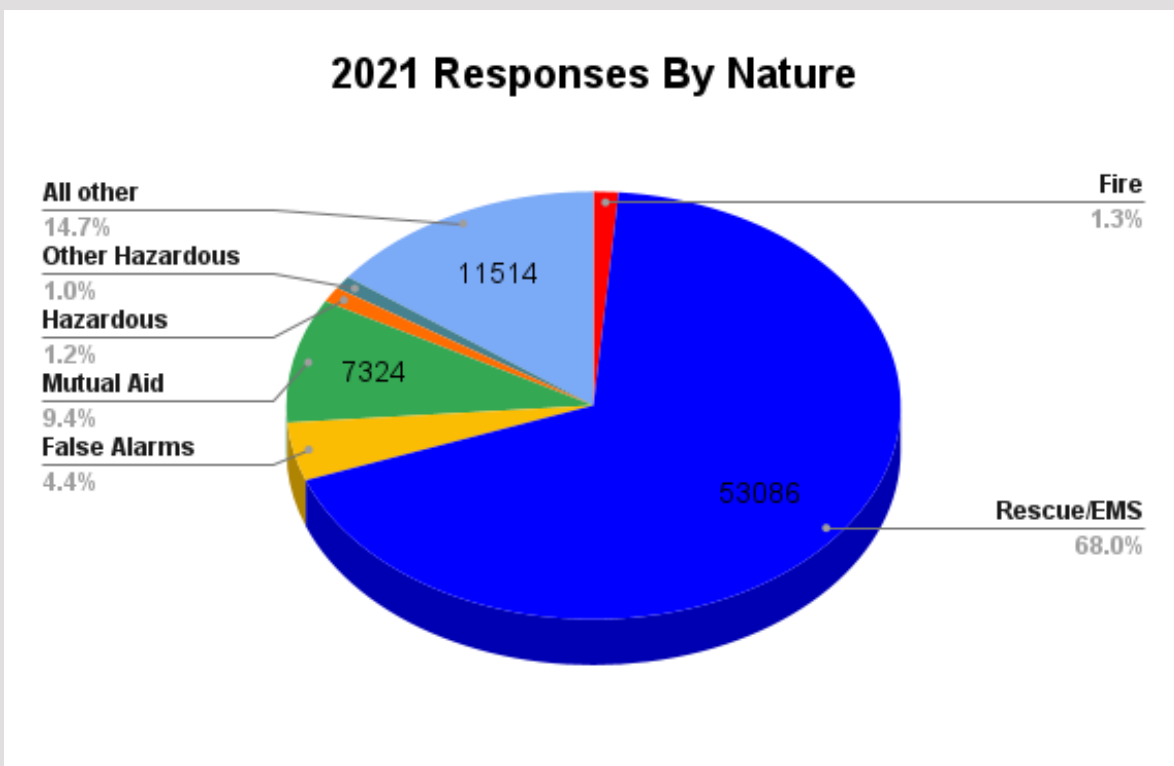
- **Suppression** – Is responsible for responding to calls for service involving fire suppression, medical calls as first responders, and various rescue scenarios.
- **Basic Life Support** – Provides response to medical emergency calls where protocol indicates basic life support and response to major fire incidents to provide medical backup/transportation.
- **Advanced Life Support** – Provides response to medical emergencies where protocol indicates an advanced life support provider and response to major fire incidents.
- **EMS Training and Quality Assurance** – Provides emergency medical training for both career and volunteer personnel and Quality Assurance of all medical providers through the use of EMS Supervisors.



# Operations Data & Statistics



Fire department responses continue to increase yearly. The 81,896 responses in 2021 represent a 8.9% increase from 2020 and a 18.4% increase from 2011. Roughly 70% of fire department responses are related to calls for Emergency Medical Services.



# Emergency Medical Services



The Anne Arundel County Fire Department has a robust Emergency Medical Services (EMS) cadre consisting of Basic Life Support (BLS) Emergency Medical Technicians (EMT) and Advanced Life Support (ALS) Paramedics, with over 1000 clinicians throughout the county. The department utilizes a fleet of 28 ALS units and 15 BLS units to transport the sick and injured. In addition, ALS personnel staff nine medic engines equipped with ALS equipment supported by two 24 hour and two day work EMS Supervisors. The department also supports the Anne Arundel County Police Department's Quick Response Team by providing medics trained in Tactical Emergency Medical Care. The department has transported approximately 41,000 patients to regional hospitals, specialty centers (trauma, cardiac, stroke and pediatric) via the departments ground transport units as well as air transport via Maryland State Police Aviation and US Park Police. All transports are based on patient criticality and need with providers using their continuous diligence to providing the highest quality care available.

Our EMT's and Paramedics utilize the latest in medical technology for the various medical emergencies they encounter. If a patient is experiencing chest pain, a 12-lead EKG is acquired with a cardiac monitor which can transmit wirelessly to the ER while transporting to the hospital. In the event of a cardiac arrest, personnel utilize a LUCAS™ chest compression device which provides continuous CPR and develops a level of safety for our providers. Aggressive airway stabilization is provided through Rapid Sequence Induction (RSI) and video intubation equipment, which allows a clinician to sedate a patient and then visualize the airway through a laryngoscope blade and camera. Such practices in both education and technology has allowed the department to be recognized and awarded with such awards as an American Heart Association (AHA) Mission Lifeline - Gold status award-winner for our performance during cardiac arrest and cardiac management cases.



The fire department's Mobile Integrated Community Healthcare Program (MICH) has been successfully operating since 2020. This collaborative effort between the fire department, Anne Arundel County Department of Aging and Disabilities, Luminis Health Anne Arundel Medical Center, and the University of Maryland Baltimore

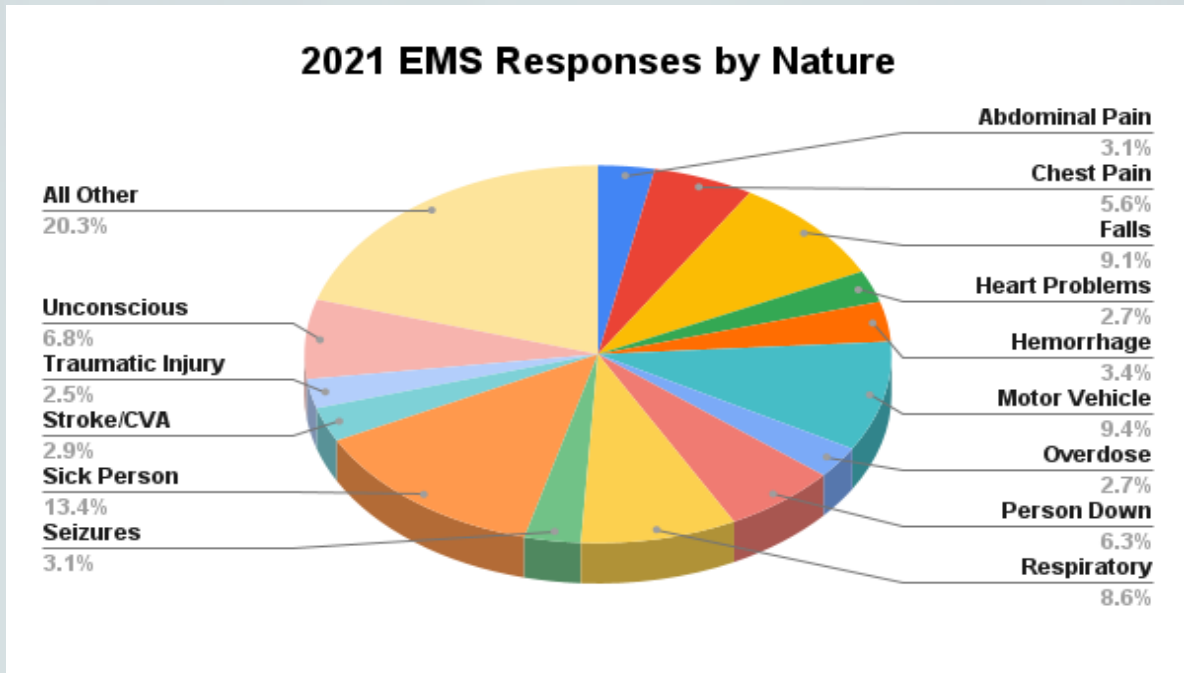


Washington Medical Center decreases 911 utilization and emergency room visits by aligning clients with appropriate resources to manage their healthcare needs better, improve their overall quality of life. Our team operates with a Registered Nurse, a Licensed Social Worker, and a Nationally Registered Paramedic to bring a holistic approach to patient-centered care. Since its inception, the team has provided interdisciplinary case management, home-bound vaccines, remote patient monitoring, disease education, telehealth appointments, and connection to county resources for over 300 individual referrals. This program ensures our citizens receive the proper care at the right place and time, all while reducing 911

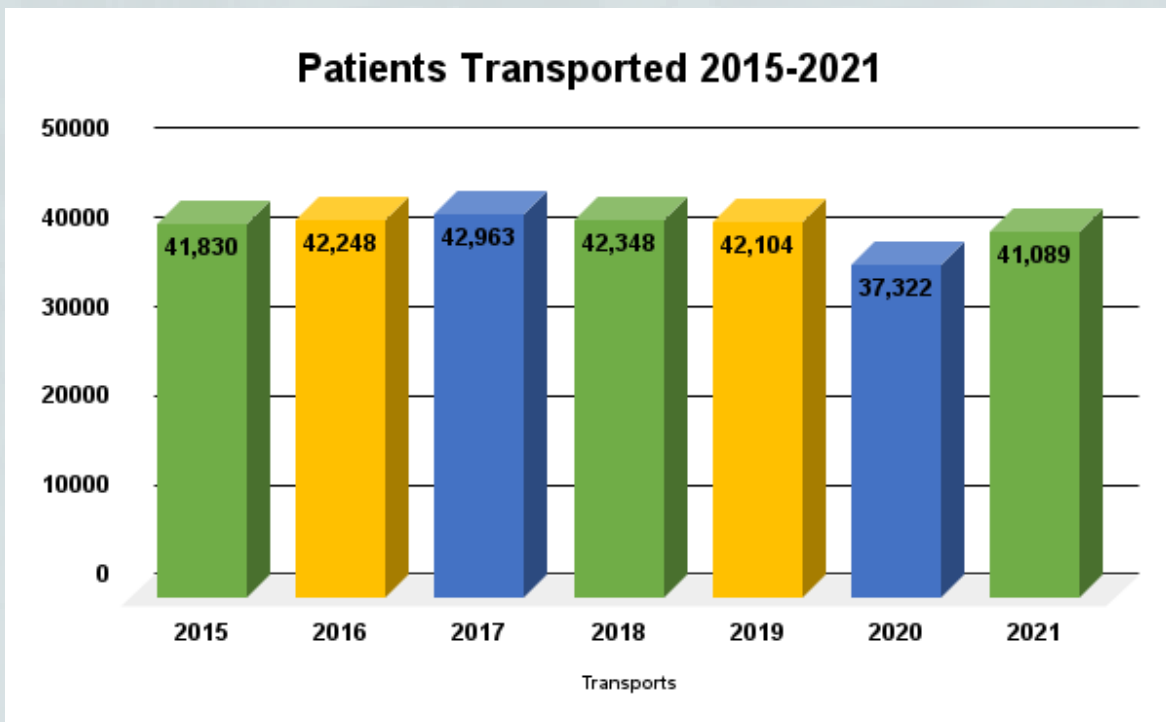
utilization by 70% and quantifying a multi-million dollar cost savings to local resources.



# EMS Data & Statistics



The Anne Arundel County Fire Department responded to more than 64,000 EMS-related incidents in 2021, transporting more than 41,000 patients to local hospitals and specialty referral centers. Transports are based on patient criticality and specialized needs. In some cases, patients are transported to specialty cardiac, stroke, and trauma centers by our paramedic units or by air utilizing the Maryland State Police Aviation Command or United States Park Police. All of these patients receive the highest quality care available and many of our providers are recognized both locally and regionally for their life-saving interventions.



# Professional Standards

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## Office of Professional Standards

The Department understands the importance of cultivating and maintaining a positive and professional organizational culture and standard of beliefs with its members. The Professional Standards Office is responsible for maintaining good order and discipline throughout the Department by delivering various programs intended to train, educate, and bring awareness to all Department members.



## Policies & Procedures

In 2020, the Department made a huge stride in completing the much-needed project of updating its Rules & Regulations and policies. Several hundred work hours and countless discussions were invested into updating the R&Rs, which has resulted in a transition from “Rules & Regulations and Operational Procedural Manuals” to a singular group of “Policies & Procedures.” A new format and cataloging system has been developed and implemented, which groups policies according to subject areas. Capitalizing on PowerDMS, Department’s web-based document management system, we can publish and assign the updated policies and procedures, providing accessibility and accountability to all members.



## Professional Standards Newsletter

This publication is a medium that the Professional Standards Office uses to convey valuable articles, topics, and information to reinforce the expected level of professionalism throughout the Department. Several Department members contribute to this effort by serving as guest writers or contributors of different topics relating to leadership, professionalism, integrity, ethics, etc., to ensure the continuance of a safe, successful, and harmonious work environment.



## Equal Employment Team

The Professional Standards Office oversees the Department’s Equal Employment Opportunity (EEO) team, which consists of 18 uniform, volunteer, and civilian members of the Department committed to excellence and the fair treatment of all. The EEO team continually discusses the Department’s climate and provides recommendations on improving awareness/matters relating to discrimination, harassment, and workplace bullying. Members of the EEO team also work collaboratively with Anne Arundel County’s Diversity Council, appointed to review current policies and practices and identify and recommend opportunities to improve and enhance diversity, equity, and inclusion throughout Anne Arundel County government.



## Investigations

The Professional Standards Office and the EEO team respond to any credible allegations regarding unprofessional behavior or misconduct by fire department members committed both on and off-duty. The Fire Chief may authorize an internal administrative investigation relating to allegations of harassment, discrimination, workplace bullying, or criminal and civil charges which call the member’s character or conduct into question. This may include alcohol or drug-related offenses, assault, restraining orders, and other criminal charges.

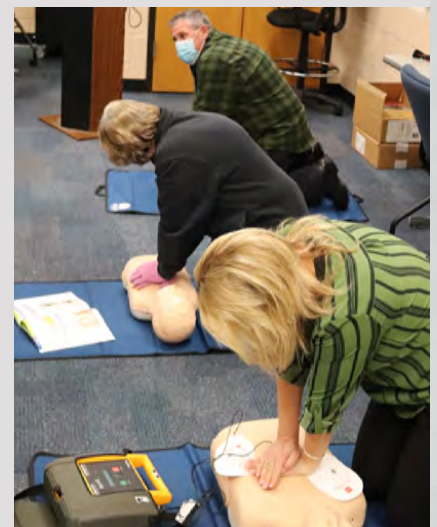


# Training

The Training Academy provides training opportunities for all career and volunteer emergency responders. This includes the initial training of all career fire recruits, continuing fire education for incumbent firefighters, initial paramedic education, Advanced and Basic Life Support continuing education and quality assurance/quality improvement training. Initial training for volunteer firefighters is coordinated by the Training Academy through the Maryland Fire and Rescue Institute.

COVID-19 continues to provide unique challenges as courses have been adapted to accommodate restrictions associated with the pandemic. Recruit Class #61 graduated 59 recruits on December 10, 2021 from Anne Arundel County, and BWI Thurgood Marshal Airport. The program included 603 instructional hours and provided recruits the training to meet nine Maryland Fire Service Personnel Qualifications Board certifications.

The initial paramedic training program saw 14 firefighters enter the program in 2021 and 7 students who entered in 2020 graduate and earn their paramedic licenses. EMS continuing education reached 1,300 students across in-person and online training mediums totaling 33,350 training hours. The Academy also manages a cadre of over 100 CPR instructors who taught CPR to 1,602 students in 115 classes.





# Fire Alarm



The Anne Arundel County Fire Communications Center, better known as “Fire Alarm,” provides fire and emergency medical dispatch communications for Anne Arundel County, the City of Annapolis, BWI Airport and the U.S. Naval Academy. For 2021, the center received and dispatched an average of 251 emergency calls per day, for a total of 91,781 incidents. They also coordinate emergency response with more than a dozen different agencies in the region.

Twenty-eight Fire Communications Operators (FCO) and eight lieutenants staff Fire Alarm on a 24/72 shift schedule. We continue to hire new FCOs to make our team stronger. FCOs receive more than 1,000 hours of initial training, including certification in Emergency Medical Dispatch, and Emergency Fire Dispatch.

# Community Outreach

In July of 2021, Anne Arundel County re-opened to the public and resumed the in-person events hosted by The Community Outreach Office, following the appropriate masking and distancing guidelines. We also conducted a large-scale smoke alarm canvas while partnered with the Red Cross. We targeted 7 Mobile Home Parks, which had 1461 homes. During the canvas, we installed 255 alarms in 180 houses. These alarms will assist 512 individuals and are good for ten years.

The Anne Arundel County Fire Department’s Public Education Office is committed to preventing injury and loss of life through awareness and education. We promote understanding of regulations and available technologies that can improve safety within the homes, businesses, and institutions of our County residents.

To better engage our communities this year, we continued to offer virtual presentations, and we also resumed in-person activities. Between in-person and virtual, we educated 8,327 individuals and attended 118 different events. That is more than double the number of individuals and events from the previous year.





# Operations Support

The Operations Support Division provides support for 31 fire stations, 877 sworn uniformed personnel and 59 civilian employees.

Services include:

- Procurement, warehousing, issuance/delivery of all uniforms, personal protective equipment, medical supplies, office and janitorial supplies, tools and equipment.
- Coordinating all repairs for 22 county-owned fire stations, as well as generator and exhaust removal system service for volunteer-owned stations.
- Approving specifications for all apparatus purchases (county and volunteer) and coordinating the purchase of all county-owned vehicles.
  - Vehicles currently under construction:
    - 1 Pierce 2500-gallon pumper-tanker
    - 1 E-One engine
    - 1 E-One 1500-gallon engine
    - 2 Seagrave/Aerialscope towers
    - 3 Ferrara 3000-gallon tankers
    - 1-International/TechOPS technical rescue pod hauler
    - 3 Freightliner/Horton medic units
- Coordinating all service for the department's front-line and reserve fleets (county- and volunteer-owned), which includes:
  - 65 engines and pumper-tankers
  - 16 trucks, quints and towers
  - 60 ambulances and medic units
  - 8 rescue squads
  - 18 brush trucks
  - 3 specialty vehicles (mobile ambulance bus, mobile command and control unit, technical rescue pod hauler)
  - 7 fireboat and rescue boats
  - 155 support vehicles (vans, pickups, SUV's, & sedans)
- Maintenance and repair of breathing apparatus, breathing air compressors and cascade systems, including air quality testing and filling of cylinder and cascades.
- Maintenance and repair of all firefighting equipment including nozzles, lighting equipment, rescue tools, powered saws and positive pressure ventilation fans.
- Maintenance and repair of all bio-medical equipment including cardiac monitors, Lucas devices and stretchers.



# Fire Marshal | Investigations

The Fire & Explosives Investigation Unit (FIB) is composed of Fire Investigators who are sworn police officers who enforce State and County fire and explosive laws and are responsible for investigating all fires, explosions, or other emergencies within Anne Arundel County with unknown causes. FIB investigates approximately 400 fire incidents and 100 explosive-related incidents annually.

The Fire Investigation Unit is responsible for:

- The enforcement of the fire and explosives laws of the State of Maryland and Anne Arundel County
- The reduction/elimination of arson, bombings, and other fire service related crimes
- The determination of origin and cause of all fire and explosive incidents within the county
- Bring to justice all violators of the fire and explosive laws of the State and County

There are multiple aspects of the investigation, including scene examination, evidence collection, photography, interview & interrogation, and effecting an arrest when appropriate. Multiple investigators, supervisors, and Fire Investigation Units from surrounding jurisdictions may respond to the incident during large-scale or more complex investigations.

The Fire Investigation Unit also operates an accelerant detection canine team. The accelerant detection canine is certified by the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF). Canines can detect minute traces of accelerants often used in fires, and can lead investigators to a specific location where physical samples can be taken, analyzed and confirmed by special forensic laboratories.



The Fire Investigation Unit also conducts new hire background investigations, internal investigations, burn or explosive injury investigations and offers assistance to neighboring agencies requesting fire investigation services.

## Fire Investigation 2021 Stats

- 607 responses
- 192 cases
- 105 cases closed
- 23 cases closed by arrest
- 2 fatalities

## Losses:

- Building: \$5,932,139
- Contents: \$1,801,725





# Fire Marshal | Code Enforcement

The Office of the Fire Marshal, Code Enforcement Division is primarily focused on the protection of the lives and property in Anne Arundel County through the enforcement of adopted fire and life safety codes. The staff consists of one Captain, four Lieutenants, six uniform Fire Inspectors, three Civilian Fire Inspectors, and two administrative civilians. The core responsibilities of the office are divided into four groups; new construction, in-service program, plan review, and administration. Additionally, many other inspections are conducted; day-care, adoptive-care, foster-care, food trucks, fireworks, tents, carnival/fairs, liquor license, multiple dwelling licenses, special events, crowd control, complaint investigations and on-call responses.

The New Construction group completed 2,114 acceptance tests of new sprinkler systems, standpipe systems, fire alarm systems, fire pumps, hood and ventilation systems, fixed suppression systems, underground water-mains, underground drafting tanks, bi-directional amplifiers, and emergency generators.

The in-service group coordinates the fire and life safety inspections of existing businesses. The office distributed 1,488 inspections to field units. An additional 1,764 existing business inspections were completed by Code Enforcement staff.

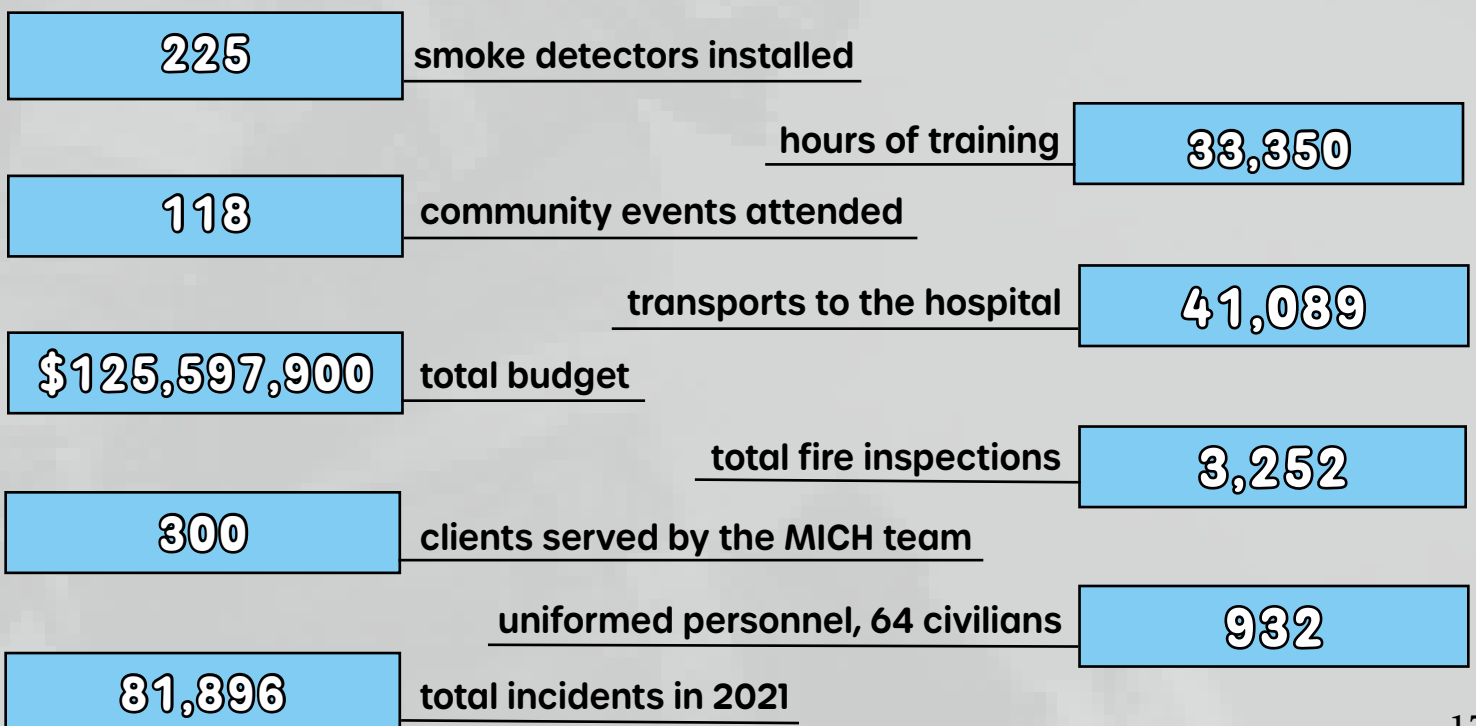
The Plan Review group approves the site development plan for every new commercial building in Anne Arundel County.

These reviews along with variance and modification request totaled 807 in 2021. Additionally, the group performed 100 inspections on Mobile Food Trucks.

The Administration group works to ensure the Code Enforcement Division is prepared to enforce the provisions of the Anne Arundel County Fire Code and the Maryland State Fire Prevention Code, as well as any future challenges facing the people who live, work and visit Anne Arundel County.



## Interesting Facts



“THE BEST PLACE FOR ALL”



We stand ready as an all-hazards organization to assure the safety of our communities. We respond to calls for service, fires, medical and other emergencies as well as promote fire prevention strategies and life safety programs. The Anne Arundel County Fire Department enforces fire code compliance to ensure that buildings and properties are safe.

**Email:** FireChief@aacounty.org

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**Address:** 8501 Veterans Hwy, Millersville, MD

**Connect With Us**

@AACoFD

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Call: 410.222.8337



[www.aacounty.org/departments/fire-department](http://www.aacounty.org/departments/fire-department)

Special Thanks to Kevin Ryer & Mike Hugg Media

